CONTINUED OPERATION OF THE PUENTE HILLS LANDFILL

VOLUME II: TECHNICAL APPENDICES A-H FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT

State Clearinghouse Number 2000041066

SANITATION DISTRICTS OF LOS ANGELES COUNTY

Prepared by:

Solid Waste Management Department
Sanitation Districts of Los Angeles County
1955 Workman Mill Road
Whittier, California 90601
(562) 699-7411

June 2001

Cover photo, Typical mature landscaped landfill surface along the entrance road at the Puente Hills Landfill. Groundcover in this area is primarily red fescue. Shrubs and trees present include bottlebrush, bushy yate, California pepper, cypress hybrid, various Eucalyptus species, Crape Myrtle, and

Printed on recycled paper

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1997 Quarterly Puente Hills Landfill Monitoring Reports for Compliance with South Coast Air Quality Management District Rule 1150.1

1998 Quarterly Puente Hills Landfill Monitoring Reports for Compliance with South Coast Air Quality Management District Rule 1150.1

1999 Quarterly Puente Hills Landfill Monitoring Reports for Compliance with South Coast Air Quality Management District Rule 1150.1

1993 Source Tests

1994 Source Tests

1995 Source Tests

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1997 Source Tests

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1994 Puente Hills Landfill Annual Water Quality Monitoring Report

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APPENDIX A

NOP, DISTRIBUTION LIST, AND NOP RESPONSE LETTERS

NOTICE OF PREPARATION

TO:

FROM: County Sanitation District No.2
Of Los Angeles County
1955 Workman Mill Road
Whittier, CA 90601

SUBJECT: Notice of Preparation

Project Title: Draft Environmental Impact Report for Continued Operation of the Puente Hills Landfill.

Project Location: Puente Hills Landfill, 2800 S. Workman Mill Road, Whittier, CA

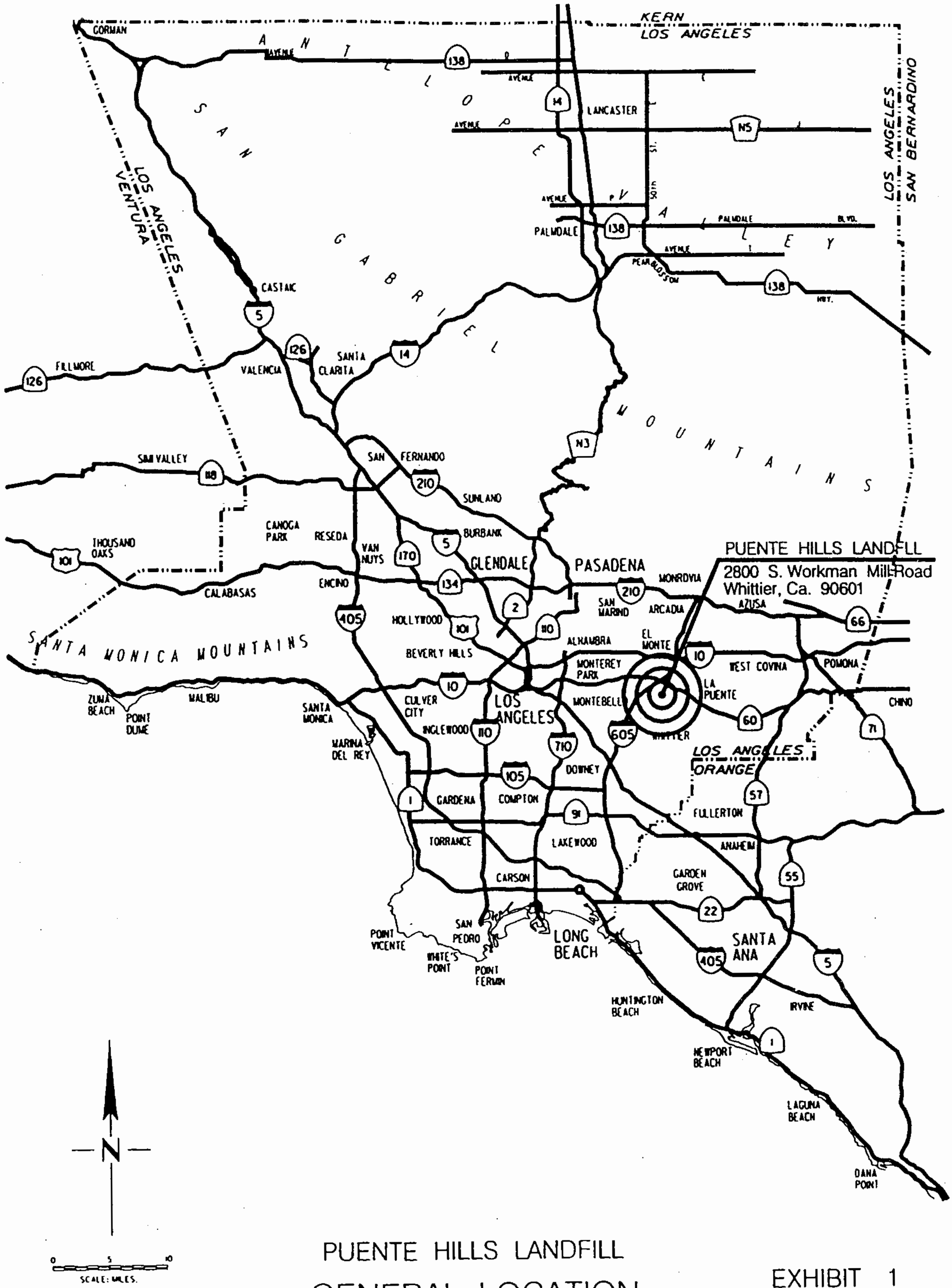
Sanitation District No.2 of Los Angeles County is the lead agency under CEQA for the preparation of a Draft Environmental Impact Report (Draft EIR) which will evaluate potential impacts resulting from the continued operation of the Puente Hills Landfill. The proposed project will extend the life of the landfill approximately 10 years beyond expiration of the current land use permit, and upon completion will exhaust all remaining capacity at the site at which time the site will close.

The proposed project would allow for the continued disposal of non-hazardous municipal solid waste at the existing Puente Hills Landfill; continued funding of the Puente Hills Landfill Native Habitat Preservation Authority; and the recovery of such materials as green waste, asphalt, dirt, tires, and metal appliances through ongoing landfill waste diversion programs. The purpose of this Notice of Preparation is to solicit input from Responsible and Trustee Agencies regarding issues, mitigation measures and alternatives which should be addressed in the Draft EIR. In addition, this notice is being sent to the Puente Hills Landfill Citizens Advisory Committee (CAC). The Sanitation Districts will conduct a separate process with the CAC to solicit their input on the project. Outlined below are the background and purpose of the proposed project, the project description, and associated potential environmental impacts.

BACKGROUND

The Puente Hills Landfill, located in unincorporated Los Angeles County southeast of the intersection of the Pomona (SR-60) and San Gabriel River (I-605) freeways as shown in Exhibit 1, is owned and operated by the Sanitation Districts. The site, originally privately owned, has been an operating landfill since 1957. The Sanitation Districts purchased the site in 1970. The landfill is currently operating under a conditional use permit, administered by the County of Los Angeles Department of Regional Planning, which expires November 1, 2003 (CUP No. 92-250(4)). The landfill accepts only non-hazardous municipal solid waste. The site receives up to 12,000 tons per day, on a six day average. Tonnage accepted is limited by the conditional use permit to 72,000 tons per week, based on a six day week, with a maximum allowable daily tonnage of 13,200 tons. The site is normally open to the public from 6:00 a.m. to 5:00 p.m., Monday through Saturday, unless the daily tonnage limit is reached and the site closes earlier to receipt of refuse for disposal.

The current operation will have provided approximately $34 million to the Puente Hills Landfill Native Habitat Preservation Authority for the purpose of acquiring, restoring, and maintaining open space and wildlife corridor areas in the vicinity of the landfill. Over 800 acres have been acquired to date. The



PUENTE HILLS LANDFILL

GENERAL LOCATION

EXHIBIT 1

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Authority manages and maintains an additional 1,600 acres of open space.

PURPOSE OF THE PROJECT

The purpose of the project is to provide the essential public service of comprehensive solid waste management: diversion and disposal. The specific objectives of the project are to recover and recycle materials through existing landfill waste diversion programs and to utilize existing local, environmentally safe disposal capacity within Los Angeles County. Continued operation of the landfill will also provide for a planned transition to a waste-by-rail system to remote desert landfill sites.

PROJECT DESCRIPTION

The proposed project includes the continued operation of the Puente Hills Landfill, at the existing disposal rates, together with various waste diversion and recovery programs. Approximately 600,000 tons per year of materials are diverted from disposal at this site. The proposed continued operation of the landfill also involves utilizing a remaining topographical capacity of approximately 10 years beyond expiration of the existing land use permit. The remaining capacity at the site is located almost entirely within the current limit of operations. Exhibit 2 is a topographic map of the landfill which shows the property boundary of the landfill and the existing limit of operations.

The specific fill design of the proposed project will be determined as part of the environmental analysis during preparation of the Draft EIR. In 1994, the Los Angeles County Board of Supervisors approved Conditional Use Permit No. 92-250(4) for the landfill, allowing operations within a 20-year design border but imposing a permit term expiring November 1, 2003 and corresponding elevation limits. The Board also imposed a setback distance of 1,750 feet with refuse no closer than 2,000 feet from the eastern property boundary. The Board of Supervisors approved the permit in this manner recognizing that capacity remained at higher elevations for future consideration. The fill design for the remaining capacity will be within the setback limits established by CUP 92-250(4). The proposed maximum daily tonnage to be disposed of in the landfill would be the existing limit of 13,200 tons per day (72,000 tons per week).

Many of the necessary environmental control features have been constructed as part of the existing operation. Among the potential environmental control features that would be necessary as part of this project are groundwater protection systems, drainage structures, and additional gas control systems. Since the proposed expansion would be an extension of the existing operations at the Puente Hills Landfill, primary support facilities, such as the scale house, administrative offices, equipment yards, and utility connections, would already be in place.

POTENTIAL ENVIRONMENTAL IMPACTS

Potential environmental impacts from the proposed project were previously addressed in the EIR for the Puente Hills Waste Management Facilities (1992), the Supplement to the EIR on Water Quality (1993), and the Supplement to the EIR titled "Intermodal Facility and a Waste-by-Rail Disposal System Originating from the Puente Hills Materials Recovery Facility" (1994). At that time, a 20-year fill design was proposed and evaluated, although a 10-year land use permit was issued. The previous EIRs contained a detailed description of the landfill operation and documented the project's potential impacts and proposed mitigation measures. The EIRs concluded that even with all feasible mitigation measures there would be remaining adverse impacts on aesthetic/visual resources, biological resources, transportation/circulation and air quality.

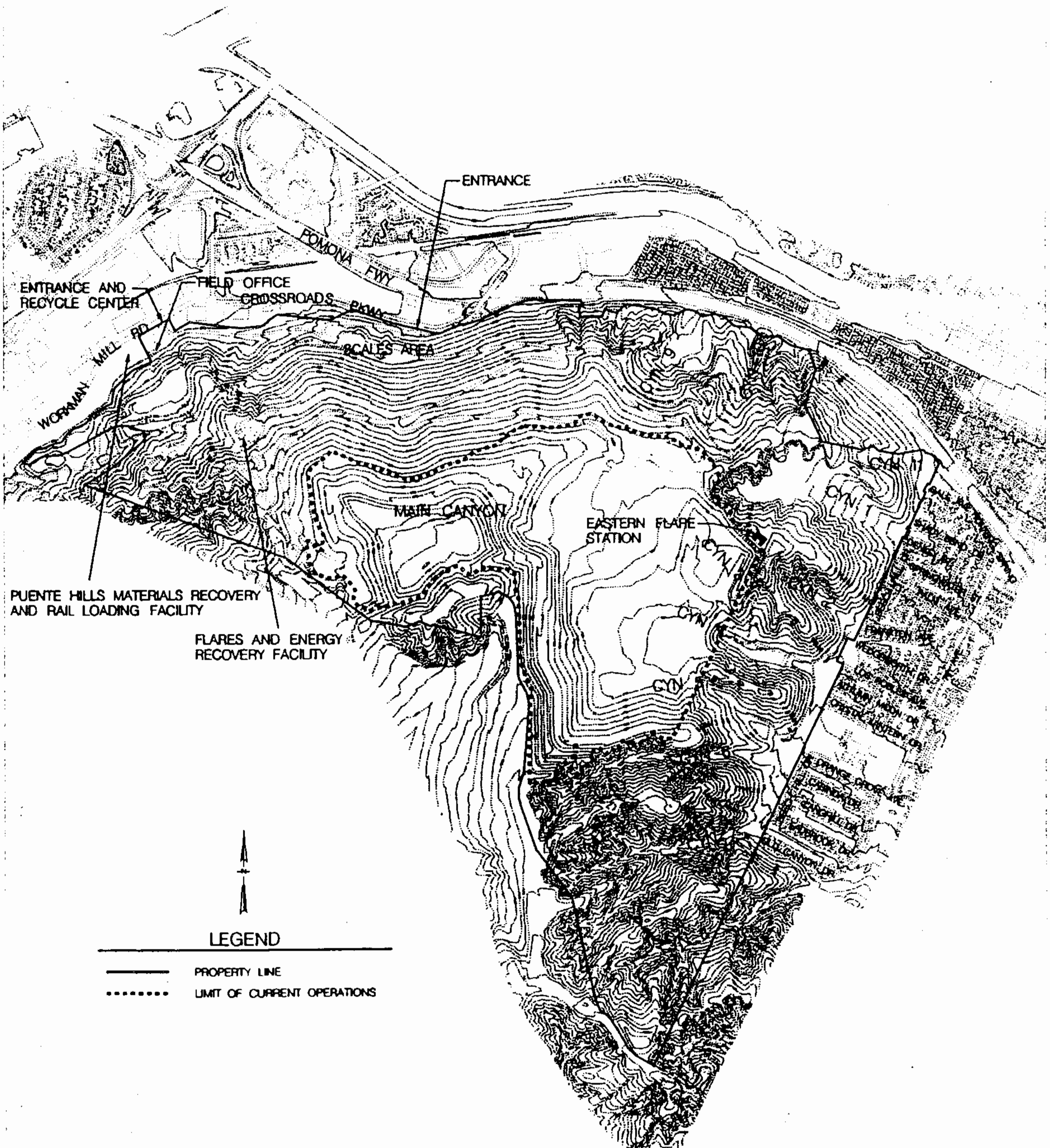

EXHIBIT 2

PUENTE HILLS LANDFILL

SCALE 1" = 2000'

TOPOGRAPHY DATE: APRIL 1999

The Draft EIR for this project will review and analyze as appropriate all potential environmental impacts from the landfill operation at the proposed maximum daily tonnage of 13,200 tons per day, along with consideration of assessments contained in the previous EIRs. The Draft EIR will comprehensively review and evaluate the areas of land use, aesthetics, traffic circulation, air quality, biology, geology, groundwater quality, surface water drainage, noise, litter, public health, public utilities and services, cultural and historical resources, growth inducement, long-term productivity and irreversible changes. The Draft EIR will also evaluate a range of reasonable alternatives to the proposed project. The potential impacts of a "No Project" scenario will be analyzed in detail.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice. Please send your response along with the name of a contact person in your agency to:

Grace Chan

Grace R. Chan, Head
Permitting Section
Solid Waste Management Department
County Sanitation Districts of Los Angeles County
P.O. Box 4998
Whittier, California 90601
(562) 699-7411

4/7/00
Date

Distribution List

Agency List
Certified Mail Receipt #

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Southern Region
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Caltrans - Planning
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Sacramento, CA 95814

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Betty Morrison —549
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County of Los Angeles
Department of Public Works, Planning Department
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Alhambra, CA 918021460

'erwin Chih —547
Los Angeles County
Department of Regional Planning
320 West Temple Street, Room #1348
Los Angeles, CA 90012

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County Clerk
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Norwalk, CA 90650

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County of Los Angeles
Department of Parks and Recreation
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Los Angeles, CA 90020

County of Los Angeles —538
Museum of Natural History
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Los Angeles, CA 90007

Dave Leininger —537
Los Angeles County Forestry
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Commerce, CA 90040

Carol Williams -536
Main San Gabriel Basin Water Master
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Azusa, CA 91702

Jim Sowell -535
MTA
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Los Angeles, CA 90012

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Navigant Consulting Inc.
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Glendale, CA 91204

Steve Smith -533
South Coast Air Quality Management District
21865 E. Copley Drive
Diamond Bar, CA 917654182

Paul Franklin -532
Southern California Edison Company
Planning Dept., Whittier District
9901 Geary Avenue
Santa Fe Springs, CA 90670

U.S. Army Corps of Engineers -531
Environmental Resources Branch, Planning Department
911 Wilshire Blvd.
Los Angeles, CA 90017

Robert G. Berlien -530
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El Monte, CA 91731

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Laura Simonek
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Gail McNulty -527
Native American Heritage Commission
915 Capitol Mall, Room 364
Sacramento, CA 95814

Dennis A. Dickerson -526
Regional Water Quality Control Board
Los Angeles Region
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Laverne Jones -525
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Office of Planning and Research
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Karen Evans -523
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Doris Lo z 415-558-522
US-EPA, Region 9 (Air-2)
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75 Hawthorne Street
San Francisco, CA 94105

Mr. Ron Pilorin -557
Dept. of Toxic Substances Control
P.O. Box 806
Sacramento, CA 95812-0806

South Coast Air Quality Management District

April 13, 2000

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South Coast
Air Quality Management District
AQMD
21865 E. Copley Drive, Diamond Bar, CA 91765-4182
(909) 396-2000 · http://www.aqmd.gov

April 13, 2000

Ms. Grace Chan
Sanitation Districts of Los Angeles County
1955 Workman Mill Road
Whittier, CA 90601

Dear Ms. Chan:

Notice of Preparation of an Environmental Impact Report
Continued Operation of the Puente Hills Landfill

The South Coast Air Quality Management District (AQMD) appreciates the opportunity to comment on the above-mentioned document. The AQMD's comments are recommendations regarding the analysis of potential air quality impacts from the proposed project that should be included in the Draft Environmental Impact Report (EIR).

Air Quality Analysis

The AQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. The AQMD recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analysis. Copies of the Handbook are available from the AQMD's Subscription Services Department by calling (909) 396-3720.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project. Air quality impacts from both construction and operations should be considered. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, that is, sources that generate or attract vehicular trips should be included in the evaluation. An analysis of all toxic air contaminant impacts due to the

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C.W. CARRY

decommissioning or use of equipment potentially generating such air pollutants should also be included.

Mitigation Measures
In the event that the project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures be utilized during project construction and operation to minimize or eliminate significant adverse air quality impacts. To assist the Lead Agency with identifying possible mitigation measures for the project, please refer to Chapter 11 of the AQMD CEQA Air Quality Handbook for sample air quality mitigation measures. Additionally, AQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook contain numerous measures for controlling construction-related emissions that should be considered for use as CEQA mitigation if not otherwise required. Pursuant to state CEQA Guidelines Section 15126 (c), any impacts resulting from mitigation measures must also be discussed.

Data Sources
AQMD rules and relevant air quality reports and data are available by calling the AQMD's Public Information Center at (909) 396-3600. Much of the information available through the Public Information Center is also available via the AQMD's World Wide Web Homepage (http://www.aqmd.gov).

The AQMD is willing to work with the Lead Agency to ensure that project-related emissions are accurately identified, categorized, and evaluated. Please call Dr. Charles Blankson, Transportation Specialist, CEQA Section, at (909) 396-3304 if you have any questions regarding this letter.

Sincerely,

Steve Smith

Steve Smith, Ph.D.
Program Supervisor, CEQA Section
Planning, Rule Development and Area Sources

SS:CB:li

LAC000411-06LI
Control Number

Southern California Association of Governments

April 14, 2000

31-230.70

SOUTHERN CALIFORNIA

ASSOCIATION of GOVERNMENTS

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818 West Seventh Street

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April 14, 2000

Ms. Grace Chan
Sanitation Districts of Los Angeles County
1955 Workman Mill Road
Whittier, CA 90601

RE: **Comments on the Notice of Preparation for a Draft Environmental Impact Report for the Continued Operation of the Puente Hills Landfill - SCAG No. I 20000135**

Dear Ms. Chan:

Thank you for submitting the **Notice of Preparation for a Draft Environmental Impact Report for the Continued Operation of the Puente Hills Landfill** to SCAG for review and comment. As areawide clearinghouse for regionally significant projects, SCAG assists cities, counties and other agencies in reviewing projects and plans for consistency with regional plans.

In addition, The California Environmental Quality Act requires that EIRs discuss any inconsistencies between the proposed project and the applicable general plans and **regional plans (Section 15125 [d])**. If there are inconsistencies, an explanation and rationalization for such inconsistencies should be provided.

Policies of SCAG's Regional Comprehensive Plan and Guide and Regional Transportation Plan, which may be applicable to your project, are outlined in the attachment. **We expect the DEIR to specifically cite the appropriate SCAG policies and address the manner in which the Project is consistent with applicable core policies or supportive of applicable ancillary policies. Please use our policy numbers to refer to them in your DEIR. Also, we would encourage you to use a side-by-side comparison of SCAG policies with a discussion of the consistency or support of the policy with the Proposed Project.**

Please provide a minimum of 45 days for SCAG to review the DEIR when this document is available. If you have any questions regarding the attached comments, please contact Jeffrey M. Smith, Senior Planner at (213) 236-1867. Thank you.

Sincerely,

J. DAVID STEIN
Manager, Performance Assessment and Implementation

Master

Doc# 0221 2000 APR 19 A 9:30 C.W. CARRY

COMMENTS ON THE PROPOSAL TO DEVELOP A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE CONTINUED OPERATION OF THE PUENTE HILLS LANDFILL SCAG NO. I 20000135

PROJECT DESCRIPTION

The proposed Project consists of the continued disposal of non-hazardous municipal solid waste at the existing Puente Hills Landfill; continued funding of the Puente Hills Landfill Native Habitat Preservation Authority; and the recovery of such materials as green waste, asphalt, dirt, tires, and metal appliances through ongoing landfill waste diversion programs.

The Project site is located in unincorporated Los Angeles County, southeast of the intersection of the Pomona (SR-60) and San Gabriel river (I-605) Freeways..

CONSISTENCY WITH REGIONAL COMPREHENSIVE PLAN AND GUIDE POLICIES

The **Growth Management Chapter (GMC)** of the Regional Comprehensive Plan and Guide (RCPG) contains the following policies that are particularly applicable and should be addressed in the Draft EIR for the Project.

3.01 The population, housing, and jobs forecasts, which are adopted by SCAG's Regional Council and that reflect local plans and policies, shall be used by SCAG in all phases of implementation and review.

3.03 The timing, financing, and location of public facilities, utility systems, and transportation systems shall be used by SCAG to implement the region's growth policies.

The **Regional Transportation Plan (RTP)** also has goals, objectives, policies and actions pertinent to this proposed project. This RTP links the goal of sustaining mobility with the goals of fostering economic development, enhancing the environment, reducing energy consumption, promoting transportation-friendly development patterns, and encouraging fair and equitable access to residents affected by socio-economic, geographic and commercial limitations. Among the relevant goals, objectives, policies and actions of the RTP are the following:

Core Regional Transportation Plan Policies

4.02 *Transportation investments shall mitigate environmental impacts to an acceptable level.*

4.04 *Transportation Control Measures shall be a priority.*

4.16 *Maintaining and operating the existing transportation system will be a priority over expanding capacity.*

GMC POLICIES RELATED TO THE RCPG GOAL TO IMPROVE THE REGIONAL STANDARD OF LIVING

The Growth Management goals to develop urban forms that enable individuals to spend less income on housing cost, that minimize public and private development costs, and that enable firms to be more competitive, strengthen the regional strategic goal to stimulate the regional economy. The evaluation of the proposed project in relation to the following policies would be intended to guide efforts toward achievement of such goals and does not infer regional interference with local land use powers.

3.05 *Encourage patterns of urban development and land uses, which reduce costs on infrastructure construction and make better use of existing facilities.*

3.08 *Encourage subregions to define an economic strategy to maintain the economic vitality of the subregion, including the development and use of marketing programs, and other economic incentives, which support attainment of subregional goals and policies.*

3.09 *Support local jurisdictions' efforts to minimize the cost of infrastructure and public service delivery, and efforts to seek new sources of funding for development and the provision of services.*

3.10 *Support local jurisdictions' actions to minimize red tape and expedite the permitting process to maintain economic vitality and competitiveness.*

GMC POLICIES RELATED TO THE RCPG GOAL TO IMPROVE THE REGIONAL QUALITY OF LIFE

The Growth Management goals to attain mobility and clean air goals and to develop urban forms that enhance quality of life, that accommodate a diversity of life styles, that preserve open space and natural resources, and that are aesthetically pleasing and preserve the character of communities, enhance the regional strategic goal of maintaining the regional quality of life. The evaluation of the proposed project in relation to the following policies would be intended to provide direction for plan implementation, and does not allude to regional mandates.

3.18 *Encourage planned development in locations least likely to cause environmental impact.*

3.22 *Discourage development, or encourage the use of special design requirements, in areas with steep slopes, high fire, flood, and seismic hazards.*

3.23 *Encourage mitigation measures that reduce noise in certain locations, measures aimed at preservation of biological and ecological resource, measures that would reduce exposure to seismic hazards, minimize earthquake damage, and to develop emergency response and recovery plans.*

GMC POLICIES RELATED TO THE RCPG GOAL TO PROVIDE SOCIAL, POLITICAL, AND CULTURAL EQUITY

The Growth Management Goal to develop urban forms that avoid economic and social polarization promotes the regional strategic goal of minimizing social and geographic disparities and of reaching equity among all segments of society. The evaluation of the proposed project in relation to the policy stated below is intended guide direction for the accomplishment of this goal, and does not infer regional mandates and interference with local land use powers.

3.27 *Support local jurisdictions and other service providers in their efforts to develop sustainable communities and provide, equally to all members of society, accessible and effective services such as: public education, housing, health care, social services, recreational facilities, law enforcement, and fire protection.*

AIR QUALITY CHAPTER CORE ACTIONS

The **Air Quality Chapter** core actions related to the proposed project includes:

5.07 *Determine specific programs and associated actions needed (e.g., indirect source rules, enhanced use of telecommunications, provision of community based shuttle services, provision of demand management based programs, or vehicle-miles-traveled/emission fees) so that options to command and control regulations can be* *assessed.*

5.11 *Through the environmental document review process, ensure that plans at all levels of government (regional, air basin, county, subregional and local) consider air quality, land use, transportation and economic relationships to ensure consistency and minimize conflicts.*

WATER QUALITY CHAPTER RECOMMENDATIONS AND POLICY OPTIONS

The **Water Quality Chapter** core recommendations and policy options relate to the two water quality goals: to restore and maintain the chemical, physical and biological integrity of the nation's water; and, to achieve and maintain water quality objectives that are necessary to protect all beneficial uses of all waters.

11.06 *Clean up the contamination in the region's major groundwater aquifers since its water supply is critical to the long-term economic and environmental health of the region. The financing of such clean-ups should leverage state and federal resources and minimize significant impacts on the local economy.*

11.07 *Encourage water reclamation throughout the region where it is cost-effective, feasible, and appropriate to reduce reliance on imported water and wastewater discharges. Current administrative impediments to increased use of wastewater should be addressed.*

OPEN SPACE CHAPTER ANCILLARY GOALS

Outdoor Recreation

9.01 *Provide adequate land resources to meet the outdoor recreation needs of the present and future residents in the region and to promote tourism in the region.*

9.02 *Increase the accessibility to open space lands for outdoor recreation.*

9.03 *Promote self-sustaining regional recreation resources and facilities.*

Public Health and Safety

9.04 *Maintain open space for adequate protection of lives and properties against natural and man-made hazards.*

9.05 *Minimize potentially hazardous developments in hillsides, canyons, areas susceptible to flooding, earthquakes, wildfire and other known hazards, and areas with limited access for emergency equipment.*

9.06 *Minimize public expenditure for infrastructure and facilities to support urban type uses in areas where public health and safety could not be guaranteed.*

Resource Production

9.07 *Maintain adequate viable resource production lands, particularly lands devoted to commercial agriculture and mining operations.*

Resource Protection

9.08 *Develop well-managed viable ecosystems or known habitats of rare, threatened and endangered species, including wetlands.*

GOALS AND OBJECTIVES FOR SOLID WASTE MANAGEMENT

The existing Soild Waste goals for the SCAG region are articulated in the state law. (Cal. Pub. Res. Code Sec. 40000 et. seq.) that governs solid waste management. These goals form the basis for solid waste planning at the city and county level and can be summarized as follows:

1. Promote the following waste management practices in order of priority:

    - Waste Prevention
    - Recycling and Composting
    - Safe Disposal or Transformation

2. Minimize unnecessary duplication of effort in solid waste programs carried out by local governments

The regional objectives for solid waste are also identified in the state solid waste law and include the following:

3. Divert at least 25 percent of all waste from landfills by the 1995, and divert at least 50 percent by the year 2000.

4. Ensure that there is adequate, environmentally safe disposal capacity for the remaining wastes

CONCLUSIONS

All feasible measures needed to mitigate any potentially negative regional impacts associated with the proposed project should be implemented and monitored, as required by CEQA.

ENDNOTE

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

Roles and Authorities

SCAG is a ***Joint Powers Agency*** established under California Government Code Section 6502 et seq. Under federal and state law, SCAG is designated as a Council of Governments (COG), a Regional Transportation Planning Agency (RTPA), and a Metropolitan Planning Organization (MPO). SCAG's mandated roles and responsibilities include the following:

SCAG is designated by the federal government as the Region's ***Metropolitan Planning Organization*** and mandated to maintain a continuing, cooperative, and comprehensive transportation planning process resulting in a Regional Transportation Plan and a Regional Transportation Improvement Program pursuant to 23 U.S.C. '134(g)-(h), 49 U.S.C. '1607(f)-(g) et seq., 23 C.F.R. '450, and 49 C.F.R. '613. SCAG is also the designated ***Regional Transportation Planning Agency***, and as such is responsible for both preparation of the Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP) under California Government Code Section 65080.

SCAG is responsible for developing the demographic projections and the integrated land use, housing, employment, and transportation programs, measures, and strategies portions of the ***South Coast Air Quality Management Plan***, pursuant to California Health and Safety Code Section 40460(b)-(c). SCAG is also designated under 42 U.S.C. '7504(a) as a ***Co-Lead Agency*** for air quality planning for the Central Coast and Southeast Desert Air Basin District.

SCAG is responsible under the Federal Clean Air Act for determining ***Conformity*** of Projects, Plans and Programs to the Air Plan, pursuant to 42 U.S.C. '7506.

Pursuant to California Government Code Section 65089.2, SCAG is responsible for ***reviewing all Congestion Management Plans (CMPs) for consistency with regional transportation plans*** required by Section 65080 of the Government Code. SCAG must also evaluate the consistency and compatibility of such programs within the region.

SCAG is the authorized regional agency for ***Inter-Governmental Review*** of Programs proposed for federal financial assistance and direct development activities, pursuant to Presidential Executive Order 12,372 (replacing A-95 Review).

SCAG reviews, pursuant to Public Resources Code Sections 21083 and 21087, ***Environmental Impact Reports*** of projects of regional significance for consistency with regional plans [California Environmental Quality Act Guidelines Sections 15206 and 15125(b)].

State of California, Governor's Office of Planning and Research

State Clearinghouse

April 17, 2000

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse

Gray Davis
GOVERNOR

Loretta Lynch
DIRECTOR

Notice of Preparation

April 17, 2000

To: Reviewing Agencies

Re: Continued Operation of Puente Hills Landfill
SCH# 2000041066

Attached for your review and comment is the Notice of Preparation (NOP) for the Continued Operation of Puente Hills Landfill draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, <u>within 30 days of receipt of the NOP from the Lead Agency</u>. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Charles Boehmke/Grace Chan
Los Angeles County Sanitation District No. 2
1955 Workman Mill Road
Whittier, CA 90601

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan

Scott Morgan
Project Analyst, State Clearinghouse

Attachments
cc: Lead Agency

RF
Jay Yoshi[illegible]

064 2000 APR 24 A 11:25

Document Details Report
State Clearinghouse Data Base

SCH#	**2000041066**
Project Title	Continued Operation of Puente Hills Landfill
Lead Agency	Los Angeles County Sanitation District

Type **nop** Notice of Preparation

Description Continued operation of the Puente Hills Landfill will extend the life of the landfill approximately ten (10) years beyond expiration of the current land use permit, operating in areas previously landfilled or disturbed by landfilling operations maintaining similar operating conditions.

Lead Agency Contact

Name Charles Boehmke/Grace Chan
Agency Los Angeles County Sanitation District No. 2
Phone 562 699-7411 ***Fax***
email
Address 1955 Workman Mill Road
City Whittier ***State*** CA ***Zip*** 90601

Project Location

County Los Angeles
City Whittier, Industry, Hacienda Heights
Region
Cross Streets Pomona Freeway (SR-60) / Crossroads Parkway
Parcel No. various
Township 25 ***Range*** 11W ***Section*** 10 ***Base***

Proximity to:

Highways 60,605
Airports
Railways Union Pacific
Waterways San Gabriel River
Schools 38
Land Use Solid Waste Disposal Facility/A-2-5 and A-1-5.

Project Issues Aesthetic/Visual; Archaeologic-Historic; Air Quality; Drainage/Absorption; Flood Plain/Flooding; Geologic/Seismic; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife; Growth Inducing; Landuse; Cumulative Effects

Reviewing Agencies Resources Agency; Department of Conservation; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Department of Health Services; Department of Fish and Game, Region 5; Native American Heritage Commission; State Lands Commission; Caltrans, District 7; California Highway Patrol; Integrated Waste Management Board; Department of Toxic Substances Control; Regional Water Quality Control Board, Region 4

Date Received 04/17/2000 ***Start of Review*** 04/17/2000 ***End of Review*** 05/16/2000

NOP Distribution List

SCH# 2000041106

Resources Agency

- [X] **Nadell Gayou**
  Resources Agency
  1020 Ninth Street, Third Floor
  Sacramento, CA 95814
  916/327-1722 Fax 916/327-1648
- [ ] **Bill Curry**
  Dept. of Boating & Waterways
  2000 Evergreen Street
  Sacramento, CA 95815-3896
  916/263-4326 Fax 916/263-0648
- [ ] **Elizabeth A. Fuchs**
  California Coastal Commission
  45 Fremont Street, Suite 2000
  San Francisco, CA 94105-2219
  415/904-5200 Fax 415/904-5400
- [X] **Ken Trott**
  Dept. of Conservation
  801 K Street, MS-24-02
  Sacramento, CA 95814
  916/445-8733 Fax 916/324-0948
- [ ] **Allen Robertson**
  Dept. of Forestry & Fire Protection
  1416 Ninth Street, Room 1516-24
  Sacramento, CA 95814
  916/657-0300 Fax 916/653-8957
- [X] **Hans Kreutzberg**
  Office of Historic Preservation
  P.O. Box 942896
  Sacramento, CA 94296-0001
  916/653-6624 Fax 916/653-9824
- [X] **Beth Walls**
  Resource Management Division
  Dept. of Parks and Recreation
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  916/653-6725 Fax 916/657-3355
- [ ] **Pam Bruner**
  Reclamation Board
  1416 Ninth Street, Room 1601
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  916/653-5434 Fax 916/653-5805
- [ ] **Steve McAdam**
  S.F. Bay Conservation & Dev't. Comm.
  30 Van Ness Avenue, Room 2011
  San Francisco, CA 94102
  415/557-3686 Fax 415/557-3767
- [X] **Nadell Gayou**
  Department of Water Resources
  1020 Ninth Street, Third Floor
  Sacramento, CA 95814
  916/327-1722 Fax 916/327-1648

Health & Welfare

- [X] **Wayne Hubbard**
  Dept. of Health/Drinking Water
  601 N. 7th Street, PO Box 942732
  Sacramento, CA 94234-7320
  916/445-2519 Fax 916/327-6092

Food & Agriculture

- [ ] **Tad Bell**
  Dept. of Food and Agriculture
  1220 N Street, Room 409
  Sacramento, CA 95814
  916/653-7643 Fax 916/653-4723

Fish and Game

- [ ] **Joe Vincenty**
  Department of Fish and Game
  Environmental Services Division
  1416 Ninth Street, 13th Floor
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  916/653-1070 Fax 916/653-2588
- [ ] **Donald Koch** (Region 1)
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  601 Locust Street
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  530/225-2363 Fax 530/225-2381
- [ ] **Banky Curtis** (Region 2)
  Department of Fish & Game
  1701 Nimbus Road, Suite A
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  916/358-2898 Fax 916/358-2912
- [ ] **Brian Hunter** (Region 3)
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  P.O. Box 47
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  707/944-5518 Fax 707/944-5563
- [ ] **William Laudermilk** (Region 4)
  Department of Fish and Game
  1234 East Shaw Avenue
  Fresno, CA 93710
  559/243-4005 Fax 559/243-4022
- [X] **Sandy Peterson** (Region 5)
  Department of Fish and Game
  Habitat Conservation Program
  4949 Viewridge Avenue
  San Diego, CA 92123
  858/467-4234 Fax 858/467-4299
- [ ] **Cheryl Avants** (Region 6)
  Department of Fish and Game
  Habitat Conservation Program
  330 Golden Shore, Suite 50
  Long Beach, CA 90802
  562/590-5159 Fax 562/590-5192
- [ ] **Tammy Allen** (Region 6, Inyo/Mono)
  Department of Fish and Game
  Habitat Conservation Program
  407 West Line Street, Room 8
  Bishop, CA 93514
  760/872-1461 Fax 760/872-1284
- [ ] **DeWayne Johnston** (Marine Region)
  Department of Fish and Game
  20 Lower Ragsdale Drive, Suite 100
  Monterey, CA 93940
  831/649-2870 Fax 831/649-2894

Independent Commissions/Agencies

- [ ] **Greg Newhouse**
  California Energy Commission
  1516 Ninth Street, MS-15
  Sacramento, CA 95814
  916/654-5000 Fax 916/654-3882
- [X] **Debbie Treadway**
  Native American Heritage Comm.
  915 Capitol Mall, Room 364
  Sacramento, CA 95814
  916/653-4082 Fax 916/657-5390
- [ ] **Andrew Barnsdale**
  Public Utilities Commission
  505 Van Ness Avenue
  San Francisco, CA 94102
  415/703-3231 Fax 415/703-1184
- [X] **Betty Silva**
  State Lands Commission
  100 Howe Avenue, Suite 100-S
  Sacramento, CA 95825
  916/574-1872 Fax 916/574-1885
- [ ] **Gerald R. Zimmerman**
  Colorado River Board
  770 Fairmont Avenue, Suite 100
  Glendale, CA 91203-1035
  818/543-4676 Fax 818/543-4685
- [ ] **Lyn Barnett**
  Tahoe Regional Planning Agency
  P.O. Box 1038
  Zephyr Cove, NV 89448
  775/588-4547 Fax 775/588-4527
- [ ] **John Rowden, Manager**
  Office of Emergency Services
  11030 White Rock Road, Ste.110
  Rancho Cordova, CA 95670
  916/464-1014 Fax 916/464-1019
- [ ] **Debby Eddy**
  Delta Protection Commission
  P.O. Box 530
  Walnut Grove, CA 95690
  916/776-2290 Fax 916/ 776-2293
- [ ] **Paul Edelman**
  Santa Monica Mountains Conservancy
  5750 Ramirez Canyon Road
  Malibu, CA 90265
  310/589-3200 Fax 310/589-3207

Department of Transportation District Contacts

- [ ] **IGR/Planning**
  Caltrans, District 1
  1656 Union Street
  P.O. Box 3700
  Eureka, CA 95502-3700
  707/441-5812 Fax 707/441-5869
- [ ] **Vicki Roe**
  Local Development Review
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  530/225-3089 Fax 530/225-3271
- [ ] **Jeff Pulverman**
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  P.O. Box 942874 MS-41
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  916/327-3859 Fax 916/323-7669
- [ ] **Jean Finney**
  Caltrans, District 4
  P.O. Box 23660
  Oakland, CA 94623-0660
  510/286-5572 Fax 510/286-5513
- [ ] **Lawrence Newland**
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  50 Higuera Street
  San Luis Obispo, CA 93401-5415
  805/549-3683 Fax 805/549-3077
- [ ] **Marc Birnbaum**
  Caltrans, District 6
  P.O. Box 12616
  Fresno, CA 93778-2616
  559/488-4260 Fax 559/488-4088
- [X] **Stephen J. Buswell**
  Caltrans, District 7
  120 South Spring Street, 1-10C
  Los Angeles, CA 90012
  213/897-4429 Fax 213/897-9210
- [ ] **Mike Sim**
  Caltrans, District 8
  464W. 4th Street, 7th Floor
  San Bernardino, CA 92401-1400
  909/383-4808 Fax 909/383-5936
- [ ] **Robert Ruhnke**
  Caltrans, District 9
  500 South Main Street
  Bishop, CA 9[illegible]
  760/872-068[illegible] [illegible]60/872-0678
- [ ] **Chris Sayre**
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  209/948-7142 Fax 209/948-7906
- [ ] **Lou Salazar**
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  619/688-3140 Fax 619/688-4299
- [ ] **Aileen Kennedy**
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  3347 Michelson Drive, Suite 100
  Irvine, CA 92612-0661
  949/724-2239 Fax 949/724-2592

Business, Transportation, & Housing

- [ ] **Cathy Creswell**
  Housing & Community Development
  Housing Policy Division
  1800 Third Street, Rooom 430
  Sacramento, CA 95814
  916/323-3176 Fax 916/327-2643
- [ ] **Sandy Hesnard**
  Caltrans - Division of Aeronautics
  P.O. Box 942874 MS-40
  Sacramento, CA 94274-0001
  916/654-5314 Fax 916/653-9531
- [X] **Lt. Dennis Brunette**
  California Highway Patrol
  Office of Special Projects
  2555 1st Ave.
  Sacramento, CA 95818
  916/657-7222 Fax 916/452-3151
- [ ] **Ron Helgeson**
  Caltrans - Planning
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  Sacramento, CA 94274-0001
  916/653-9966 Fax 916/653-0001

State and Consumer Services

- [ ] **Robert Sleppy**
  Dept. of General Services
  Environmental Services Section
  1102 Q Street, #5100
  Sacramento, CA 95814-6511
  916/324-0214 Fax 916/445-3556

California Environmental Protection Agency

- [ ] *Air Resources Board*
  2020 L Street (PO Box 2815)
  Sacramento, CA 95814 (95814-2815)
  916/327-5783 Fax 916/322-3646
  - ○ **Rob Rogen** (airport projects)
  - ○ **Ann Geraghty** (transportation projects)
  - ○ **Mike Tollstrup** (industrial projecta)
- [X] **Sue O'Leary**
  Integrated Waste Management Board
  8800 Cal Center Drive MS 24
  Sacramento, CA 95826
  916/255-0663 Fax 916/366-2428
- [ ] **Diane Edwards**
  State Water Resources Control Board
  Division of Clean Water Programs
  P.O. Box 944212
  Sacramento, CA 94244-2120
  916/227-4572 Fax 916/227-4349
- [ ] **Phil Zentner**
  State Water Resources Control Board
  Division of Water Quality
  P.O. Box 944213
  Sacramento, CA 94244-2130
  916/657-0912 Fax 916/657-2388
- [ ] **Mike Falkenstein**
  State Water Resouces Control Board
  Division of Water Rights
  901 P Street, 3rd Floor
  Sacramento, CA 95814
  916/657-1377 Fax 916/657-1485
- [X] **Dept. of Toxic Substances Control**
  CEQA Tracking Center
  400 P Street, Fourth Floor
  P.O. Box 806
  Sacramento, CA 95812-0806
  916/324-3119 Fax 916/324-1788

Regional Water Quality Control Board

- [ ] **North Coast Region (1)**
  Cathy Goodwin
  5550 Skylane Blvd., Suite A
  Santa Rosa, CA 95403
  707/576-2220 Fax 707/523-0135
- [ ] **San Francisco Bay Region (2)**
  Environmental Document Coordinator
  1515 Clay Street, Suite 1400
  Oakland, CA 94612
  510/622-2300 Fax 510/622-2460
- [ ] **Central Coast Region (3)**
  81 Higuera Street, Suite 200
  San Luis Obispo, CA 93401-5427
  805/549-3147 Fax 805/543-0397
- [X] **Los Angeles Region (4)**
  Jonathan Bishop
  320 West 4th Street, Suite 200
  Los Angeles, CA 90013
  213/576-6600 Fax 213/576-6640
- [ ] **Central Valley Region (5)**
  3443 Routier Road, Suite A
  Sacramento, CA 95827-3003
  916/255-3000 Fax 916/255-3015
  - ○ **Fresno Branch Office**
    3614 East Ashlan Avenue
    Fresno, CA 93726
    559/445-5116 Fax 559/445-5910
  - ○ **Redding Branch Office**
    415 Knollcrest Drive
    Redding, CA 96002
    530/224-4845 Fax 530/224-4857
- [ ] **Lahontan Region (6)**
  2501 Lake Tahoe Boulevard
  South Lake Tahoe, CA 96150
  530/542-5400 Fax 530/544-2271
  - ○ **Victorville Branch Office**
    15428 Civic Drive, Suite 100
    Victorville, CA 92392-2359
    760/241-6583 Fax 760/241-7308
- [ ] **Colorado River Basin Region (7)**
  73720 Fred Waring Drive, #100
  Palm Desert, CA 92260-2564
  760/346-7491 Fax 760/341-6820
- [ ] **Santa Ana Region (8)**
  3737 Main Street, Suite 500
  Riverside, CA 92501-3339
  909/782-4130 Fax 909/781-6288
- [ ] **San Diego Region (9)**
  9771 Clairemont Mesa Blvd., Suite A
  San Diego, CA 9212[illegible]-1331
  858/467-2952 Fax [illegible]1-6972

Native American Heritage Commission

April 21, 2000

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-4082
(916) 657-5390 - Fax

April 21, 2000

Charles Boehmke/Grace Chan
Los Angeles County Sanitation District No. 2
1955 Workman Mill Road
Whittier, CA 90601

RE: SCH#2000041066 – Continued Operation of Puente Hills Landfill

Dear Mr. Boehmke/Ms. Grace Chan:

The Native American Heritage Commission has reviewed the above mentioned NOP. To adequately assess the project-related impact on archaeological resources, the Commission reccomends the following action be required:

1. Contact the appropriate Information Center for a records search. The record search will determine:
   - Whether a part or all of the project area has been previously surveyed for cultural resources.
   - Whether any known cultural resources have already been recorded on or adjacent to the project area.
   - Whether the probability is low, moderate, or high that cultural resources are located within the project area.
   - Whether a survey is required to determine whether previously unrecorded cultural resources are present.

2. The final stage of the archaeological inventory survey is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
   - Required the report containing site significance and mitigation be submitted immediately to the planning department.
   - Required site forms and final written report be submitted within 3 months after work has been completed to the Information Center.

3. Contact the Native American Heritage Commission for:
   - A Sacred Lands File Check.
   - A list of appropriate Native American Contacts for consultation concerning the project site and assist in the mitigation measures.

Lack of surface evidence of archeological resources does not preclude the existence of archeological resources. Lead agencies should include provisions for accidentally discovered archeological resources during construction per California Environmental Quality Act (CEQA) §15064.5 (f). Health and Safety Code §7050.5 and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery and should be included in all environmental documents. If you have any questions, please contact Debbie Pilas-Treadway at (916) 653-4038.

Sincerely,

Larry Myers
Executive Secretary

CC: State Clearinghouse

County of Los Angeles, Department of Parks and Recreation

April 26, 2000

COUNTY OF LOS ANGELES
DEPARTMENT OF PARKS AND RECREATION

Rodney E. Cooper, Director

April 26, 2000

Grace R. Chan, Head
Permitting Section
Sanitation Districts of Los Angeles County
1955 Workman Mill Road
Whittier, CA 90607-4998

Dear Ms. Chan:

NOTICE OF PREPARATION FOR AN ENVIRONMENTAL IMPACT REPORT ON PUENTE HILLS LANDFILL

The Department of Parks and Recreation has reviewed the Notice of Preparation (NOP) for an Environmental Impact Report (EIR) for the continued operation of the Puente Hills Landfill dated April 7, 2000. The department is interested in and concerned about the results of the proposed study. As the future operators of the site for recreation opportunities, after closure of the landfill operations, the department supports all efforts to determine if site contains any potential environmental impacts. Our areas of concern will center around aesthetics, biology, hazards and hazardous materials, land use and planning, public health, and recreation.

Please keep the department on your mailing list for any future communications, meeting notifications or publications concerning this site. If you have any questions, please contact Patrick Reynolds, Landscape Architect Associate, at (213) 738-3120.

Sincerely,

Larry Hensley for

Kimel Conway
Chief of Planning

c: Jim Park
Larry Hensley
Patrick Reynolds
Puente Hills Landfill File

pr:SD2ltr

State of California, Department of Health Services

Drinking Water Field Operations Branch

April 28, 2000

STATE OF CALIFORNIA—HEALTH AND HUMAN SERVICES AGENCY

GRAY DAVIS, *Governor*

DEPARTMENT OF HEALTH SERVICES
DRINKING WATER FIELD OPERATIONS BRANCH
1449 West Temple Street, Room 202
Los Angeles, CA 90026
(213) 580-5723
(213) 580-5711/FAX

April 28, 2000

Grace Chan
Sanitation District of Los Angeles County
1955 Workman Mill Road
Whittier, CA 90601

Dear Mr. Chan:

NOTICE OF PREPARATION, PUENTE HILLS LANDFILL

We have received your Notice Of Preparation for a draft Environmental Impact Report (EIR) for Continued Operation of the Puente Hills Landfill. We have reviewed this document and have the following comment:

The groundwater quality should be addressed in detail in the EIR and determine if there are domestic water wells within a 2000-foot radius of the perimeter of the site and particularly downstream of the hydraulic groundwater flow.

If you have any questions, please contact Mr. Abbas Amir-Teymoori, P.E., DEE at (213) 580-5746.

Sincerely,

Vera M. Vecchio

Vera Melnyk Vecchio, P.E.
District Engineer
Metropolitan District

cc: Dat Tran
SDWSRF-Envir. Coordinator
601 North 7th Street, MS 92
Sacramento, CA 94234-7320

Chan → Boehmke
Frazer RF
Yoshida/Hay

065

2000 MAY -1 A 11: 19

County Of Los Angeles, Fire Department

May 1, 2000

COUNTY OF LOS ANGELES

FIRE DEPARTMENT

1320 NORTH EASTERN AVENUE
LOS ANGELES, CALIFORNIA 90063-3294

(323) 890-4330

P. MICHAEL FREEMAN
FIRE CHIEF
FORESTER & FIRE WARDEN

May 1, 2000

Ms. Grace Chan
Sanitation Districts of Los Angeles County
1955 Workman Mill Road
Whittier, CA 90601

Dear Ms. Chan:

SUBJECT: NOTICE OF PREPARATION -- DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE CONTINUED OPERATION OF THE PUENTE HILLS LANDFILL FOR THE CITY OF WHITTIER -- (EIR #856/2000)

The Notice of Preparation of a Draft Environmental Impact Report for the Continued Operation of the Puente Hills Landfill, has been reviewed by the Planning, Subdivision and Forestry Divisions of the County of Los Angeles Fire Department. This project is located at 2800 S. Workman Mill Road in Whittier. The following are their comments:

DESIGN AND CONSTRUCTION:

The fire protection systems that are already in place are sufficient at this time. Maintain all access and fire protection systems to all structures as required by code. There are no additional requirements regarding this project.

Should any questions arise regarding design and construction, and/or subdivision, water or access, please contact Inspector Michael McHargue (323) 890-4243.

OTHER ENVIRONMENTAL CONCERNS:

The statutory responsibilities of the County of Los Angeles Fire Department Forestry Division include erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones or Fire Zone 4, archeological and cultural resources and the County Oak Tree Ordinance

Under the Los Angeles County Oak Tree Ordinance, a permit is required to cut, destroy, remove, relocate, inflict damage or encroach into the protected zone of any tree of the Oak genus which is 25 inches or more in circumference (eight inches in diameter), as measured 4½ feet above mean natural grade.

Boehmke

Oak trees (Quercus genus) are known to exist in the proposed project area. Further field studies should be conducted to determine if the proposed expansion will impact the Oak resource beyond the allowances granted by CUP/OTP #92-250 and #92-251.

If an additional Oak Tree Permit is required, the Oak Tree Permit and Report, recommended conditions of approval and mitigation measures should be included in the Draft Environmental Impact Report.

The flora and fauna analysis should address any rare, endangered and/or sensitive species that exist on the project site. The preservation, relocation and/or construction impacting any of these species should be fully explained in the Environmental Impact Report (EIR).

If Los Angeles County is the lead agency, this project will require an EIR fee deposit of $1,000 payable to the Los Angeles County Fire Department at the time the DEIR is submitted for review (see enclosed).

If you have any additional questions, please contact this office at (323) 890-4330.

Very truly yours,

David R. Leininger

DAVID R. LEININGER, ACTING CHIEF, FORESTRY DIVISION
PREVENTION BUREAU

DRL:jmb

Enclosure

LOS ANGELES COUNTY FIRE DEPARTMENT
ENVIRONMENTAL REVIEW FEES & DEPOSITS

Effective September 11, 1991, whenever a review for impact on the fire prevention, natural resources, and/or fire resource allocation responsibilities of the Fire Department is required, as part of the environmental review process, the applicant shall pay a minimum deposit fee of $1,000 from which actual costs shall be billed and deducted. Additional deposits may have to be made if actual review costs exceed 80% of deposited funds. A larger deposit may be made for more complex projects to ensure prompt continuation of environmental review efforts. All unused funds shall be refunded to the applicant.

All Environmental Review Deposits should be made payable and sent to:

Los Angeles County Fire Department
1320 North Eastern Avenue
Los Angeles, CA 90063-3294
Attn: Fiscal Services Division, Room 225

If you have any questions regarding the Environmental Review Fee or Deposit amount, please call the Forestry Division at (213) 881-2481.

If you have any questions regarding your Environmental Review Deposit status, please contact the Fiscal Services Division at (213) 881-2322.

EIRFEES/B-10/WP
Issue Date: 02/25/92

Hacienda Heights Improvement Association, Inc.

May 1, 2000

HACIENDA HEIGHTS IMPROVEMENT ASSOCIATION, INC.

POST OFFICE BOX 5235 • HACIENDA HEIGHTS, CA 91745

May 1, 2000

Ms. Grace R. Chan
County Sanitation Districts of Los Angeles County
Post Office Box 4998
Whittier, CA 90607-4998

Dear Ms. Chan,

The Hacienda Heights Improvement Association, while not formally on the circulation list for the Puente Hills Landfill Notice of Preparation of a Draft Environmental Impact Report for future expansion of the landfill, has reviewed copies sent to members of the Landfill Citizens Advisory Committee. We believe, as representatives of the community most severely impacted by the current and future landfill operations, that HHIA should be directly included in the NOP distribution list and hereby request that HHIA be placed on distribution for future correspondence on this expansion.

We wish to provide the following comments on areas we believe should be specifically addressed in the DEIR:

1. Landfill-related odors have been a continuing problem since the landfill expanded into canyons next to Hacienda Heights. Approximately 30 Notices of Violation have been issued by the South Coast Air Quality Management District for widespread odor incidents in Hacienda Heights in the past few years since landfill expansion took place. This impact was not addressed in the June, 1992 DEIR, issued for that expansion. The new DEIR should fully address this problem, including sources of these odors. Interaction with afternoon wind patterns, typically from 2:00 pm to 8:00 pm should be addressed, as well as distortions of current wind patterns resulting from topographic changes. This pattern is a result of regional off-shore wind flows and should be addressed as a specific wind phenomenon, rather than splitting this time period between two intervals, as was done last time. Since the odors are often associated with landfill gas, according to reports of residents and AQMD inspectors, a complete listing of landfill gas constituents should be included along with estimates of health impacts from harmful gases. Air-borne dust rising from the work area should also be thoroughly addressed. Cumulative air quality impacts should be considered, including increased truck traffic proposed for the Pomona Freeway as part of the Alameda Corridor East Project and operation of the Quemetco lead smelter.

NO

Chan

Yoshida

2. Since this expansion is the final expansion of this facility, per commitments made by CSD, the EIR should fully describe plans for final closure, including capping, landscaping, and proposed facilities for ultimate park use. It is requested that alternative closure configurations be described for public comment.

3. The DEIR should contain a full description of alternatives to further landfilling at this site, including feasibility of implementing waste-by-rail without further filling at Puente Hills, using transformation technologies for non-recoverable products, and reliance on existing and new MRF's at sites distributed around the wasteshed rather than concentrating facilities at Puente Hills. Use of the landfill top deck as a composting facility for green waste to be ultimately disposed off-site should be addressed as an alternative to expansion. It is clear that technologies available world-wide can eliminate the impacts our citizens have been forced to bear, and these alternatives should be thoroughly explored, along with options for expansion that would phaseout use of this site over a much shorter duration and substantially lower tonnage than contemplated in the NOP, with this expansion volume placed at a much greater distance from our community. A comparison of landfill diversion should be made using such progressive technologies versus the relatively low total (600,000 tons per year) described in the NOP.

4. A landfill configuration alternative should be described that does not include any further removal of the ridge between former Canyons 5 and Canyon 6.

5. A full assessment should be provided of performance of existing leakage barriers in all areas of the landfill proposed for future filling. Both previous analyses have described Barrier 1 as keyed into impermeable bedrock, whereas recent investigations have shown its eastern half rests on permeable conglomerates and is incapable of functioning as it has been previously described. An assessment of safety of the San Gabriel River aquifer from landfill contamination should be provided in light of the much higher permeabilities obtained for the formations underlying the unlined portion of the landfill during investigations of these formations done subsequently to the latest permit process. Leakage potential from the unlined landfill should be addressed. The long open questions of background water quality information should be addressed, particularly in light of these same issues being raised by the State Water Quality Control Board following the last expansion.

6. Operational problems that have prevented full operation of the eastern flaring station, and caused unanticipated neighborhood impacts, should be addressed in light of the full capacity required for gas flow from the expanded landfill.

7. It is expected that no further facilities or landfill operations will be required outside the existing operating area which has already been disturbed by landfilling, or in locations closer than 2,000 feet to Hacienda Heights. If any such facilities or operations are contemplated, the EIR should fully describe all such facilities and their impacts on the site and its neighbors, contrary to the practice employed with the current expansion, where major earthwork operations within 150 feet of residences were not analyzed.

8. Gulls are frequently observed among the filling operations during winter months. A full assessment should be provided, based on actual site data taken during the winter of 2000-01, of number of gulls that visit the landfill, what attracts these birds, why they are not deterred by current mitigation practices, and where they go when they leave the site in the evening.

9. Past seismic evaluations for the landfill have generally ignored the presence of blind thrust faults which have caused several recent earthquakes in southern California. In addition to the assessment of landfill impacts from known faults, an assessment should be provided based on shaking intensity produced at sites where damage has been experienced as a result of previously unknown faults.

HHIA believes these and other issues should be discussed with the Citizens Advisory Committee during regular meetings held during the period of preparation for the DEIR. We believe each major DEIR section should be reviewed in some depth, including each area requiring impact assessment. It is possible, depending on the length of time involved, that additional meetings may be required to accommodate this effort. We also request that CAC comments be fully documented to the satisfaction of committee members providing the input, to assure that there is complete understanding of this input.

HHIA remains hopeful that this last expansion, if necessary, can occur in a manner that will address and avoid impacts to our residents. If we can be of further assistance in clarifying information of importance to members of our community for this DEIR, please contact me at (323)582-7401.

Sincerely,

Michael D. Hughes,
President

cc: Supervisor Don Knabe
Governor Gray Davis
Senator Hilda Solis
Assembly Member Martin Gallegos
Mr. Winston Hickox, Secretary, Cal EPA
Mr. Daniel G. Pennington, Chair, CIWMB
Ms. Mishal Montgomery

California Regional Water Quality Control Board

May 2, 2000

01-0/01401 44

California Regional Water Quality Control Board

Los Angeles Region

Winston H. Hickox
Secretary for Environmental Protection

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640
Internet Address: http://www.swrcb.ca.gov/~rwqcb4

Gray Davis
Governor

May 2, 2000

Charles Boehmke/Grace Chan
Los Angeles County Sanitation Districts No. 2
1955 Workman Mill Road
Whittier, CA 90601

Response to Puente Hills Landfill Notice of Preparation (NOP), SCH No. 2000041066, Whittier, California

Dear Mr. Boehmke/Ms. Chan:

We appreciate the opportunity to comment on the NOP for the continued operation of the Puente Hills Landfill. For your information a list of permitting requirements and Regional Board Contacts is provided in Attachment A hereto.

The project site lies within the San Gabriel River, which is listed as being impaired pursuant to Section, 303 (d) of the Clean Water Act. Constituents causing impairment in the San Gabriel River include pesticides, metals, nutrients, trash, and coliform (see Attachment B hereto for a complete listing). The Los Angeles Regional Water Quality Control Board will be developing Total Maximum Daily Loads (TMDLs) for the watershed, but the proposed project is expected to proceed before applicable TMDLs are adopted. In the interim, the Regional Board must carefully evaluate the potential impacts of new projects that may discharge to impaired waterbodies. Please provide the following additional information for both the construction and operational phases of the Puente Hills Landfill project.

1) For each constituent listed in Attachment B hereto, please provide an estimate of the concentration (ppb) and load (lbs/day) from non-point and point source discharges;

2) Estimates of the amount of additional runoff generated by the project during wet and dry seasons;

3) Estimates of the net change in cubic feet per second of groundwater and surface water contributions under historic drought conditions (as compiled by local water purveyors, the Department of Water Resources, and others), and 10-year 50-year, and 100-year flood conditions; and

4) Estimate of the amount of increased or decreased percolation due to the project.

Master
Closs 5.4.00
031

While we do not expect project applicants to complete regional impact studies, we do require sufficient supporting information so that we may evaluate the potential impact of the project to the entire watershed.

If you should have any questions, or need additional information please contact Rod Collins at (213) 576-6808.

Sincerely,

Melinda Merryfield-Becker

Melinda Merryfield-Becker
Chief, TMDL and Standards Unit

rc:mmb

Attachments (1)
cc: State Clearinghouse
file

ATTACHMENT A

- ✓ If the proposed project is subject to a **federal license or permit**, and will result in a **discharge (dredge or fill) into a surface water**, including a dry streambed, the project may require a *Section 401 Water Quality Certification*, or waiver thereof. For further information, please contact:

  Alex Puglisi at (213) 576-6786, or Anthony Klecha at (213) 576-6785, Nonpoint Source Unit

- ✓ If the project involves **inland disposal of nonhazardous contaminated soils and materials**, the proposed project may be subject to *Waste Discharge Requirements*. For further information, please contact:

  Rodney Nelson, Landfills & Cleanup Unit, at (213) 576-6719

- ✓ If the overall project area is **larger than five acres**, the proposed project may be subject to the State *Board's General Construction Activity Storm Water Permit*. For further information, please contact:

  Wayne Chiou, Los Angeles Inland Unit, at (213) 576-6664:
  Los Angles County watersheds draining to Long Beach and San Pedro

  Carlos Urrunaga, Los Angeles Coastal Unit, at (213) 576-6655:
  Los Angeles County watersheds draining to Santa Monica Bay and Palos Verdes Peninsula
  Ventura County watersheds draining to Malibu Creek watershed

  Mark Pumford, Ventura Coastal Unit, at (213) 576-6657:
  Watersheds draining to Ventura County coastline

- ✓ If the project involves a facility that is proposing to discharge storm water associated with **industrial activity** (e.g., manufacturing, recycling and transportation facilities, etc.), the facility may be subject to the State Board's *General Industrial Activities Storm Water Permit*. For further information, please contact:

  Robert Tom, Nonpoint Source Unit, at (213) 576-6789:
  Watersheds draining to Los Angeles County coastline

  Mark Pumford, Ventura Coastal Unit, at (213) 576-6657:
  Watersheds draining to Ventura County coastline

- ✓ If the proposed project involves any construction and/or groundwater **dewatering to be discharged to surface waters** or storm drains, including dry streambeds, the project may be subject to *NPDES/Waste Discharge Requirements*. For further information, please contact:

  Wayne Chiou, Los Angeles Inland Unit, at (213) 576-6664:
  Los Angles County watersheds draining to Long Beach and San Pedro

  Mazhar Ali, Los Angeles Coastal Unit, at (213) 576-6652:
  Los Angeles County watersheds draining to Santa Monica Bay and Palos Verdes Peninsula
  Ventura County watersheds draining to Malibu Creek watershed

  Mark Pumford, Ventura Coastal Unit, at (213) 576-6657:
  Watersheds draining to Ventura County coastline

- ✓ If the proposed project involves any construction and/or groundwater **dewatering to be discharged to land or groundwater**, the project may be subject to *Waste Discharge Requirements*. For further information, please contact:

  Jau Ren Chen, Los Angeles Coastal Unit, at (213) 576-6656:
  Watersheds draining to Los Angeles County coastline

  Mark Pumford, Ventura Coastal Unit, at (213) 576-6657:
  Watersheds draining to Ventura County coastline

- ✓ The proposed project shall also comply with the local regulations associated with the applicable **Regional Board stormwater permit**:

  <u>Los Angeles County and co permittees</u>:
  NPDES No. CAS614001
  Waste Discharge Requirements Order No. 96-054

  <u>Ventura County and co-permittees</u>:
  NPDES No. CAS063339
  Waste Discharge Requirements Order No. 94-082

Attachment B

San Gabriel River Watershed
Constituents Causing Impairment

Parameter	Units
Ammonia	mg/l
Arsenic	mg/l
Bacteria (coliform)	organisms/ml
Chlordane	μg/l
Copper	mg/l
DDT	μg/l
Dissolved oxygen	mg/l
Lead	mg/l
Mercury	mg/l
PCBs	μg/l
Trash	lbs
Odor	threshold units
pH	pH units

County of Los Angeles, Department of Health Services

Solid Waste Management Program

May 3, 2000

COUNTY OF LOS ANGELES - DEPARTMENT OF HEALTH SERVICES
ENVIRONMENTAL HEALTH
SOLID WASTE MANAGEMENT PROGRAM
2525 Corporate Place, Room 150, Monterey Park, CA 91754 • (323) 881-4151

May 3, 2000

Grace R. Chan, Permitting Section Head
Solid Waste Management Department
County Sanitation Districts of Los Angeles County
P.O. Box 4998
Whittier, CA 90607-5422

Dear Ms. Chan:

NOTICE OF PREPARATION FOR AN ENVIRONMENTAL IMPACT REPORT ON
CONTINUED OPERATION OF THE PUENTE HILLS LANDFILL

The Los Angeles County Solid Waste Management Program is satisfied that all areas of concern relative to this project will be addressed in the Draft Environmental Impact Report (DEIR). We look forward to receiving a copy of the DEIR upon its completion.

If you have any questions regarding this matter, please contact me at (323) 881-4151.

Very truly yours,

Betty Morrison

Betty Morrison, Acting EHS IV
Solid Waste Management Program

Royall K. Brown

May 3, 2000

2153 AROMA DRIVE
WEST COVINA CA. 91791
May 3 2000

Grace Chan
Sanitition Districts of Los Angeles County
1955 Workman Mill Road
Whittier, California 90601

Reference: Notice of Preperation for an Environmental Impact Report on Continued Operation of the Puente Hills Landfill

The preperation of the referenced EIR at a minimun must include the following efforts at educating the decision makers and the public.

The Puente Hills Landfill has had a series of leachate movements past barriers below the canyons that existed before the landfill accepted garbage. In the neighborhoods north and west of the landfill the extent of offsite leachate movement needs to be determined. I request there be drilled in the public street every one hundred feet parallel to the landfill face a series of obervation wells. All these wells should be drilled to bed rock and sampled monthly to determine during the year the background history of the native ground water. The history of native water quality would be included in the EIR document.

Along the east side of the landfill similar wells should be drilled on district property at the same one hundred foot intervals plus in each of the first street adjacent to the landfill there should be at the same interval a second series of wells to determine the native ground water situation over a one year duration and be included in the new EIR referenced.

Very truly yours,

Royall K Brown

Royall K. Brown

045 2000 MAY -5 A 10:26

Main San Gabriel Basin Watermaster

May 8, 2000

MainSanGabrielBasin
WATERMASTER

May 8, 2000

Ms. Grace Chan
Sanitation Districts of Los Angeles County
1955 Workman Mill Road
Whittier, CA 90601

RE: Notice of Preparation of a Draft Environmental Impact Report on Continued Operation of the Puente Hills Landfill

Dear Ms. Chan:

Thank you for furnishing the Main San Gabriel Basin Watermaster with a copy of the Notice of Preparation of a Draft Environmental Impact Report on Continued Operation of the Puente Hills Landfill. To assess and mitigate actual and potential groundwater contamination, Watermaster requests that the draft EIR address proposed programs for monitoring and reporting of groundwater levels/qualities and measures for mitigating contaminant migration from the landfill. In addition, please note that all parties to the Judgment must contact Watermaster prior to drilling or destroying of any groundwater extraction wells and to report all production to Watermaster.

If you have any questions or need additional information, please contact me at (626) 815-1300.

Sincerely,

MAIN SAN GABRIEL BASIN WATERMASTER

Carol Williams

Carol Williams
Executive Officer

CW/snc

State of California, Department of Fish and Game

May 8, 2000

DEPARTMENT OF FISH AND GAME
South Coast Region
4949 Viewridge Avenue
San Diego, California 92123
(858) 467-4201
(858) 467-4235 FAX

May 8, 2000

Grace Chan
Sanitation Districts of Los Angeles County
1955 Workman Mill Road
Whittier, CA 90601

Comments on the Notice of Preparation of a Draft Environmental Impact Report for the Continued Operation of the Puente Hills Landfill in Los Angeles County (SCH#2000041066)

Dear Ms. Chan:

The Department of Fish and Game (Department) appreciates this opportunity to comment on the above-referenced project, relative to impacts to biological resources. To enable Department staff to adequately review and comment on the proposed project, we recommend the following information be included in the Draft Environmental Impact Report (DEIR):

1. A complete assessment of the flora and fauna within and adjacent to the project area, with particular emphasis upon identifying endangered, threatened, and locally unique species and sensitive habitats.

    a. A thorough assessment of rare plants and rare natural communities, following the Department's May 1984 Guidelines (revised August 1997) for Assessing Impacts to Rare Plants and Rare Natural Communities (Attachment 1).

    b. A complete assessment of sensitive fish, wildlife, reptile, and amphibian species. Seasonal variations in use of the project area should also be addressed. Focused species-specific surveys, conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, are required. Acceptable species-specific survey procedures should be developed in consultation with the Department and the U.S. Fish and Wildlife Service.

    c. Rare, threatened, and endangered species to be addressed should include all those which meet the California Environmental Quality Act (CEQA) definition (see CEQA Guidelines, § 15380).

    d. The Department's California Natural Diversity Data Base in Sacramento should be contacted at (916) 327-5960 to obtain current information on any previously reported sensitive species and habitat, including Significant Natural Areas identified under Chapter 12 of the Fish and Game Code.

2. A thorough discussion of direct, indirect, and cumulative impacts expected to adversely

affect biological resources, with specific measures to offset such impacts.

a. CEQA Guidelines, § 15125(a), direct that knowledge of the regional setting is critical to an assessment of environmental impacts and that special emphasis should be placed on resources that are rare or unique to the region.

b. Project impacts should be analyzed relative to their effects on off-site habitats. Specifically, this should include nearby public lands, open space, adjacent natural habitats, and riparian ecosystems. Impacts to and maintenance of wildlife corridor/movement areas, including access to undisturbed habitat in adjacent areas, should be fully evaluated and provided.

c. The zoning of areas for development projects or other uses that are nearby or adjacent to natural areas may inadvertently contribute to wildlife-human interactions. A discussion of possible conflicts and mitigation measures to reduce these conflicts should be included in the environmental document.

d. A cumulative effects analysis should be developed as described under CEQA Guidelines, § 15130. General and specific plans, as well as past, present, and anticipated future projects, should be analyzed relative to their impacts on similar plant communities and wildlife habitats.

e. If applicable, the document should include an analysis of the effect that the project may have on completion and implementation of regional and/or subregional conservation programs. Under § 2800-§ 2840 of the Fish and Game Code, the Department, through the Natural Communities Conservation Planning (NCCP) program, is coordinating with local jurisdictions, landowners, and the Federal Government to preserve local and regional biological diversity. Coastal sage scrub is the first natural community to be planned for under the NCCP program. The Department recommends that the lead agency ensure that the development of this and other proposed projects do not preclude long-term preserve planning options and that projects conform with other requirements of the NCCP program. Jurisdictions participating in the NCCP program should assess specific projects for consistency with the NCCP Conservation Guidelines. Additionally, the jurisdictions should quantify and qualify: 1) the amount of coastal sage scrub within their boundaries; 2) the acreage of coastal sage scrub habitat removed by individual projects; and 3) any acreage set aside for mitigation. This information should be kept in an updated ledger system.

3. A range of alternatives should be analyzed to ensure that alternatives to the proposed project are fully considered and evaluated. A range of alternatives which avoid or

otherwise minimize impacts to sensitive biological resources should be included. Specific alternative locations should also be evaluated in areas with lower resource sensitivity where appropriate.

a. Mitigation measures for project impacts to sensitive plants, animals, and habitats should emphasize evaluation and selection of alternatives which avoid or otherwise minimize project impacts. Off-site compensation for unavoidable impacts through acquisition and protection of high-quality habitat elsewhere should be addressed.

b. The Department considers Rare Natural Communities as threatened habitats having both regional and local significance. Thus, these communities should be fully avoided and otherwise protected from project-related impacts (Attachment 2).

c. The Department generally does not support the use of relocation, salvage, and/or transplantation as mitigation for impacts to rare, threatened, or endangered species. Department studies have shown that these efforts are experimental in nature and largely unsuccessful.

4. A California Endangered Species Act (CESA) Permit must be obtained, if the project has the potential to result in "take" of species of plants or animals listed under CESA, either during construction or over the life of the project. CESA Permits are issued to conserve, protect, enhance, and restore State-listed threatened or endangered species and their habitats. Early consultation is encouraged, as significant modification to a project and mitigation measures may be required in order to obtain a CESA Permit. Revisions to the Fish and Game Code, effective January 1998, may require that the Department issue a separate CEQA document for the issuance of a 2081 permit unless the project CEQA document addresses all project impacts to listed species and specifies a mitigation monitoring and reporting program that will meet the requirements of a 2081 permit. For these reasons, the following information is requested:

a. Biological mitigation monitoring and reporting proposals should be of sufficient detail and resolution to satisfy the requirements for a CESA Permit.

b. A Department-approved Mitigation Agreement and Mitigation Plan are required for plants listed as rare under the Native Plant Protection Act.

5. The Department has responsibility for wetland and riparian habitats and opposes any alteration of a natural watercourse that would result in a reduction of wetland acreage or wetland habitat values. Alterations include, but are not limited to: conversion to

subsurface drains, placement of fill or building of structures within the wetland and channelization or removal of materials from the streambed. All wetlands and watercourses, whether intermittent or perennial, should be retained and provided with substantial setbacks which preserve the riparian and aquatic values and maintain their value to on-site and off-site wildlife populations. A formal wetland delineation following U.S. Army Corps of Engineers (ACE) protocol may also be necessary prior to any construction in wetland or riparian habitats. Results should be included in the EIR. Please note, however, that wetland and riparian habitats subject to the Department's authority may extend beyond the areas identified in the ACE delineation.

a. The Department may require a Lake or Streambed Alteration Agreement, pursuant to Section 1600 *et seq.* of the Fish and Game Code, with the applicant prior to the applicant's commencement of any activity that will substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank (which may include associated riparian resources) of a river, stream or lake, or use material from a streambed. The Department's issuance of a Lake or Streambed Alteration Agreement for a project that is subject to CEQA will require CEQA compliance actions by the Department as a responsible agency. The Department as a responsible agency under CEQA, may consider the local jurisdiction's (lead agency) Negative Declaration or EIR for the project. To minimize additional requirements by the Department pursuant to Section 1600 *et seq.* and/or under CEQA, the document should fully identify the potential impacts to the lake, stream or riparian resources and provide adequate avoidance, mitigation, monitoring and reporting commitments for issuance of the agreement. A Streambed Alteration Agreement form may be obtained by writing to The Department of Fish and Game, 4949 Viewridge Avenue, San Diego, CA 92123, or by calling (858) 636-3160.

The Department holds regularly scheduled pre-project planning/early consultation meetings. To make an appointment, please call our office at (858) 636-3160.

Thank you for this opportunity to comment. Questions and comments regarding this letter should be directed to Warren Wong at (858) 636-3167.

Sincerely,

William E. Tippets

William E. Tippets
Habitat Conservation Supervisor

Attachments

cc: Department of Fish and Game
File
San Diego

U.S. Fish and Wildlife Service
Carlsbad

U.S. Army Corps of Engineers
Los Angeles

State Clearinghouse
Sacramento

State of California
THE RESOURCES AGENCY
Department of Fish and Game
May 4, 1984
Revised August 15, 1997

GUIDELINES FOR ASSESSING THE EFFECTS OF PROPOSED DEVELOPMENTS ON RARE, THREATENED, AND ENDANGERED PLANTS AND PLANT COMMUNITIES

The following recommendations are intended to help those who prepare and review environmental documents determine when a botanical survey is needed, who should be considered qualified to conduct such surveys, how field surveys should be conducted, and what information should be contained in the survey report. The Department may recommend that lead agencies not accept the results of surveys that are not conducted according to these guidelines.

1. Botanical surveys that are conducted to determine the environmental effects of a proposed development should be directed to all rare, threatened, and endangered plants and plant communities. Rare, threatened, and endangered plants are not necessarily limited to those species which have been "listed" by state and federal agencies but should include any species that, based on all available data, can be shown to be rare, threatened, and/or endangered under the following definitions:

   A species, subspecies, or variety of plant is "endangered" when the prospects of its survival and reproduction are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, over-exploitation, predation, competition, or disease. A plant is "threatened" when it is likely to become endangered in the foreseeable future in the absence of protection measures. A plant is "rare" when, although not presently threatened with extinction, the species, subspecies, or variety is found in such small numbers throughout its range that it may be endangered if its environment worsens.

   Rare plant communities are those communities that are of highly limited distribution. These communities may or may not contain rare, threatened, or endangered species. The most current version of the California Natural Diversity Data Base's Outline of Terrestrial Communities in California may be used as a guide to the names and status of communities.

2. It is appropriate to conduct a botanical field survey to determine if, or the extent that, rare, threatened, or endangered plants will be affected by a proposed project when:

   a. Based on an initial biological assessment, natural vegetation occurs on the site and it is unknown if rare, threatened, or endangered plants or habitats occur on the site; or

   b. Rare plants have historically been identified on the project site, but adequate information for impact assessment is lacking.

3. Botanical consultants should possess the following qualifications:

   a. Experience conducting floristic field surveys;

   b. Knowledge of plant taxonomy and plant ecology;

   c. Familiarity with the plants of the area, including rare, threatened, and endangered species; and

   d. Familiarity with the appropriate state and federal statutes related to plants and plant collecting.

4. Field surveys should be conducted in a manner that will locate any rare, threatened, or endangered species that may be present. Specifically, rare, threatened, or endangered plant surveys should be:

   a. Conducted in the field at the proper time of year when rare, threatened, or endangered species are both evident and identifiable. Usually, this is when the plants are flowering.

      Additionally, field surveys should be conducted with sufficient number of visits spaced throughout the growing season to accomplish a floristic survey of the site (see 4.b.).

ATTACHMENT 2

Sensitivity of Top Priority Rare Natural Communities in Southern California*

Sensitivity rankings are determined by the Department of Fish and Game, California Natural Diversity Data Base and based on either number of known occurrences (locations) and/or amount of habitat remaining (acreage). The three rankings used for these top priority rare natural communities are as follows:

S1.- Less than 6 known locations and/or on less than 2,000 acres of habitat remaining

S2.- Occurs in 6-20 known locations and/or 2,000-10,000 acres of habitat remaining

S3.- Occurs in 21-100 known locations and/or 10,000-50,000 acres of habitat remaining

The number to the right of the decimal point after the ranking refers to the degree of threat posed to that natural community regardless of the ranking. For example:

S1.1 = very threatened
S2.2 = threatened
S3.3 = no current threats known

Sensitivity Rankings (February 1992)

Rank	Community Name
S1.1	Mojave Riparian Forest
	Sonoran Cottonwood Willow Riparian
	Mesquite Bosque
	Elephant Tree Woodland
	Crucifixion Thorn Woodland
	Allthorn Woodland
	Arizonan Woodland
	Southern California Walnut Forest
	Mainland Cherry Forest
	Southern Bishop Pine Forest
	Torrey Pine Forest
	Desert Mountain White Fir Forest
	Southern Dune Scrub
	Southern Coastal Bluff Scrub
	Maritime Succulent Scrub
	Riversidean Alluvial Fan Sage Scrub
	Southern Maritime Chaparral
	Valley Needlegrass Grassland
	Great Basin Grassland
	Mojave Desert Grassland
	Pebble Plains
	Southern Sedge Bog
	Cismontane Alkali Marsh

Upper San Gabriel Valley Municipal Water District

May 11, 2000

UPPER SAN GABRIEL VALLEY
MUNICIPAL WATER DISTRICT

May 11, 2000

→ Boehmke

Ms. Grace Chan
Sanitation Districts of Los Angles County
1955 Workman Mill Road
Whittier, CA. 90601

RE: Notice of Preparation of a Draft Environmental Impact Report on Continued Operation of the Puente Hills Landfill

Dear Ms. Chan:

The Upper San Gabriel Valley Municipal Water District (USGVMWD) is in receipt of the Notice of Preparation (NOP) of a Draft Environmental Impact Report on Continued Operation of the Puente Hills Landfill, dated April 7, 2000. In a transmittal letter dated January 12, 1999, the USGVMWD sent comments on the Proposed Corrective Action Program (CAP) and off-site contamination in monitoring wells as prepared by our consultants Stetson Engineers Inc.

The draft Environmental Impact Report (EIR) should address the following concerns:

1. If natural attenuation of VOC contamination is to be considered for off-site areas, the effectiveness should be demonstrated and monitored for individual constituents exceeding the MCLs or the basin plan objectives. Additional shallow monitoring wells should be constructed downgradient of affected wells (M04A, M05A, RMW6, M10B, and M31A).

2. The CAP should include a contingency plan in the event the proposed corrective measures fail.

This District is concerned with the potential impacts which the continued operation of the Puente Hills Landfill may have on the Corrective Action Program and off-site contaminant monitoring.

We appreciate the opportunity to provide comments to the NOP and look forward to reviewing the draft EIR.

Very truly yours,

Robert G. Berlien

Robert G. Berlien
General Manager

11310 VALLEY BOULEVARD • EL MONTE, CALIFORNIA 91731
PHONE: (626) 443-2297 • FAX: (626) 443-0617

County of Los Angeles, Department of Public Works

May 15, 2000

To: Chan, G.

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100

HARRY W. STONE, Director

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

IN REPLY PLEASE REFER TO FILE: P-2

May 15, 2000

Ms. Grace Chan
Sanitation District of Los Angeles County
1955 Workman Mill Road
Whittier CA 90601

Dear Ms. Chan:

RESPONSE TO A NOTICE OF PREPARATION (NOP) - CONTINUED OPERATION OF THE PUENTE HILLS LANDFILL

Thank you for the opportunity to provide comments on the NOP for the proposed Continued Operation of the Puente Hills Landfill. We have reviewed the NOP and offer the following comments:

Environmental Programs

As projected in the Los Angeles County Countywide Siting Element (CSE), which was approved by a majority of the cities in Los Angeles County in late 1997, by the Los Angeles County Board of Supervisors in January 1998, and by the California Integrated Waste Management Board on June 24, 1998, a shortfall in permitted daily landfill capacity may occur in the County within the next few years. A number of landfill closures (BKK, Spadra, etc.) have been experienced in recent years and more closures are expected to occur in the near future. The CSE recognizes the need for in-County waste management facilities, and includes a policy to support expansion of existing landfills in Los Angeles County, including Puente Hills Landfill, as long as it is environmentally and technically feasible.

The subject facility requires a Finding of Conformance from the Los Angeles County Integrated Waste Management Task Force. This is in accordance with the Los Angeles County Countywide Integrated Waste Management Plan (ColWMP) which was approved by the California Integrated Waste Management Board on June 23, 1999. The CSE, which is an element of the ColWMP, requires that all new and expansion of existing solid waste disposal facilities be consistent with its requirements.

Magnon → Boehmle 5.18.00

0211 2000 MAY 18 A 9:17 C.W. CARRY

The draft EIR should include a discussion on the type of landfill gas migration detection and control measures that will be used to minimize, to the maximum extent possible, subsurface lateral migration of landfill gas beyond the perimete of the landfill.

The draft EIR should include a discussion on the type of leachate treatment system proposed for the collected leachate (i.e. on-site or off-site) and how the treated leachate and effluent will be finally managed.

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If you have any questions regarding the above comments, please contact Mr. Carlos Ruiz at (626) 458-3562.

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We believe the proposed project may have the potential to significantly impact the County roadways and intersections in the area. We would like the opportunity to review the DEIR upon its completion. The County criteria should be used when evaluating County and/or County/City intersection and roadways. A copy of our Traffic Impact Analysis Report Guidelines is enclosed.

We recommend the State of California Department of Transportation and adjoining cities review this document for significant impacts/mitigations within their jurisdictions.

If you have any questions, please contact Mr. Vicente Cordero of our Traffic Studies Section at (626) 458-5909.

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The proposed project may impact Workman Mill Road, which is classified as a major highway on the Los Angeles County Highway Plan. The applicant should dedicate 50 feet right of way from the centerline for this road plus any appropriate slope easements. The centerline alignment for Workman Mill Road is delineated on CSB 2605-2.

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The Sanitation District No. 2 of Los Angeles County has designed and constructed two desiltation basins as part of the southeast expansion into Canyons Nos. 3, 4 and 5 (Attachment A) to attenuate peak storm water flow and remove sediment prior to discharge to downstream channels.

The proposed continued operation of the landfill will utilize all remaining topographical capacity of approximately 10 years beyond expiration of the existing land use permit. Therefore, the existing desiltation basins, inlets, and access roads should be fully functional throughout the extended life of the landfill. If the tributary watersheds or areas to these basins are altered, the capacities of the basins should be upgraded accordingly.

If you have any questions, please contact Ms. Jeanet A. Babaura at (626) 458-6175.

If you have any questions regarding the environmental reviewing process of this Department, please contact Mr. Scott Schales at the address on the first page or at (626) 458-4119.

Very truly yours,

HARRY W. STONE
Director of Public Works

T. Scott Schales

For: DAVID YAMAHARA
Assistant Deputy Director
Planning Division

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Enc.

Traffic Impact Analysis Report Guidelines

January 1, 1997

Prepared by the County of Los Angeles
Department of Public Works

Harry W. Stone
Director of Public Works

Table of Contents

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JHC:mcp
T-2/ACCESS2
(11/26/96 Rev.)

I. Introduction

The County of Los Angeles Department of Public Works has established the following Guidelines for the preparation of Traffic Impact Analysis (TIA) reports. The purpose of these Guidelines is to establish procedures to ensure consistency of analysis and the adequacy of information presented and timely review by County staff. It is strongly recommended that the applicant's traffic engineer consult with County staff before beginning the study to establish the scope and basic assumptions of the study and any deviations from these Guidelines to avoid unnecessary delays or revisions. For assistance in the TIA scoping process, the Traffic and Lighting Division, Traffic Studies Unit, can be contacted at (818) 458-5909.

II. Requirements

Generally, the Department staff is concerned with adverse impacts on traffic if,

1. Traffic generated by a project considered alone or cumulatively with other related projects, when added to existing traffic volumes, exceeds certain capacity thresholds of an intersection or roadway, contributes to an unacceptable level of service (LOS), or exacerbates an existing congested condition.

2. Project generated traffic interferes with the existing traffic flow (e.g., due to the location of access roads, driveways, and parking facilities).

3. Proposed access locations do not provide for adequate safety (e.g., due to limited visibility on curving roadways).

4. Nonresidential uses generate commuter or truck traffic through a residential area.

5. Project generated traffic significantly increases on a residential street and alters its residential character.

A traffic report must be prepared by a registered Civil or Traffic Engineer. A traffic report is generally needed if a project generates over 500 trips per day or where other possible adverse impacts as discussed in the Analysis and Impact Section (see page 4) of these Guidelines are identified. Before a full review is conducted, the County staff will check the completeness of the TIA report using the attached check list (Exhibit A). If the report is missing any of the check list items, it will be returned for revision.

shown. Each report shall include appendices providing count data used in the preparation of the report. The source and date of the traffic volume information shall be indicated. Count data should not be over one year old. Since peak volumes vary considerably, a ten percent daily variation is not uncommon, especially on recreational routes or roadways near shopping centers; therefore, representative peak-hour volumes are to be chosen carefully.

All assumed roadways and intersections or any other transportation circulation improvements must be identified and discussed. The discussion should include the scope and the status of the assumed improvements including the construction schedule and financing plan. It should be noted that all assumed roadways and intersections or any other transportation circulation improvements will be made a condition of approval for the project to be in place prior to the issuance of building permits. If assumed improvements do not get built on time due to an unforeseeable condition, traffic conditions for a different assumed highway network or other mitigation measures will be considered if a traffic study is submitted with a different assumed network or other measures are recommended to mitigate the traffic impact in question.

C. Analysis and Impact

The following information is required.

1. Trip Generation Analysis

Tabulate the estimated number of daily trips and a.m. and p.m. peak-hour trips generated by the proposed project entering and exiting the site. Trip generation factors and source are to be included. The trip generation rates contained in the latest edition of the Institute of Transportation Engineers Trip Generation manual should generally be used, except in the case of condominiums/townhomes when the following rates should be used per unit.

		A.M.-Peak	P.M.-Peak
	ADT	Outgoing/Incoming	Outgoing/Incoming
Condominiums/ Townhomes	8.0	0.48/0.06	0.26/0.47

The County of Los Angeles Department of Regional Planning (DRP) and other public agencies (if necessary) should be contacted to obtain the latest listings. A table and a map showing the status, project/zone change/conditional use permit/parcel map/tract number, and the location of each project must be provided. For a computer printout of the listing of all filed projects within the County, Land Development Management Section of the DRP, at (213) 974-6481 can be contacted.

4. LOS Analysis

If it appears that the project's generated traffic alone or together with other projects in the area could worsen the LOS of an intersection or roadway, a "before" and "after" LOS analysis is necessary. The Intersection Capacity Utilization (ICU) or Critical Movement Analysis are two methods often used to assess existing and future LOS at intersections.

If the ICU planning method is used, a maximum of 1,600 vehicles per hour per lane should be used (2,880 vehicles per hour should be used for dual left-turn lanes) and a ten percent yellow clearance cycle should be included. Intersection LOS analysis and calculation work sheets, as well as diagrams showing turning volumes shall be included in the report for the following traffic conditions.

(a) Existing traffic;
(b) Existing traffic plus ambient growth to the year the project will be completed (preproject);
(c) Traffic in (b) plus project traffic;
(d) Traffic in (c) with the proposed mitigation measures (if necessary);
(e) Traffic in (c) plus the cumulative traffic of other known developments; and
(f) Traffic in (e) with the proposed mitigation measures (if necessary).

The project's impact on two-lane roadways should also be analyzed for all of the above traffic conditions if those two-lane roadways are used for access. LOS service analysis contained in the Highway Capacity Analysis, Chapter 8, Two-Lane Highways, should be used to evaluate the project's impact. For simplified analysis, use the established significant impact thresholds for two-lane roadways as shown on page 7.

6. Analysis Discussion

Discuss conclusions regarding the adverse impacts caused by the proposed project on the roadway system. If the cumulative traffic impact of this and other projects require mitigation measures, such as traffic signals, then estimate the percent share using the project percent share formula given in the Section III D of the TIA Guidelines. When the proposed project and other nearby developments are expected to significantly impact adjacent roadways, the developer may be required to enter into a secured agreement to contribute to a benefit district to fund major roadway and bridge improvements in the region. Also, for all recommendations to increase the number of travel lanes on a street or at an intersection as a mitigation measure, the report must clearly identify the impacts associated with such a change such as whether or not additional right of way will be required and whether it is feasible to acquire the right of way based on the level of development of the adjacent land and buildings (if any).

Discuss other possible adverse impacts on traffic. Examples of these are: (1) the limited visibility of access points on curved roadways; (2) the need for pavement widening to provide left-turn and right-turn lanes at access points into the proposed project; (3) the impact of increased traffic volumes on local residential streets; and (4) the need for road realignment to improve sight distance.

Projects which propose to amend the County's General Plan Land Use and substantially increase potential traffic generation must provide an analysis of the project at current planned land use versus proposed land use in the build out condition for the project area. The purpose of such analysis is to provide decision makers with the understanding of the planned circulation network's ability to accommodate additional traffic generation caused by the proposed General Plan Land Use amendments.

D. Traffic Models and Model Generated TIA's

Computerized traffic models are planning tools used to develop future traffic projections based on development growth patterns. The Department currently operates two traffic models, one for the Santa Clarita Valley and another for the Ventura Corridor area. The Department can test proposed development project traffic impacts for the public in these areas for a fee. For assistance i the traffic modeling, the Planning Division, Transportation Planning/Assessments Section, can be contacted at (818) 458-4351.

F. Mitigation Measures

The following information is required.

Identify feasible mitigation measures which would mitigate the project and/or other related projects' significant impacts to a level of insignificance. Also, identify those mitigation measures which will be implemented by others. Those mitigation measures that are assumed to be implemented by others will be made a condition of approval for the project to be in place prior to issuance of building permits. Mitigation measures may include, but are not limited to, the following.

1. <u>Traffic Engineering Techniques.</u>

a. Locate access points to optimize visibility and reduce potential conflict.
b. Design parking facilities to avoid queuing into public streets during peak arrival periods.
c. Provide additional off-street parking.
d. Dedicate visibility easements to assure adequate sight distance at intersections and driveways.
e. Signalize or modify traffic signals at intersections.
f. Install left-turn phasing and/or multiple turning lanes to accommodate particularly heavy turning movements.
g. Widen the pavement to provide left- or right-turn lanes to lessen the interference with the traffic flow.[1]
h. Widen intersection approaches to provide additional capacity.
I. Prohibit left turns to and from the proposed development.
j. Restrict on-street parking during peak hours to increase street capacity.[1]

2. <u>Contribute to a benefit district to fund major capital improvements</u>

a. Construct a grade separation.
b. Improve or construct alternate routes.
c. Complete proposed routes shown on the Los Angeles Highway Plan.
d. Improve freeway interchanges (bridge, widening, modifications, and etc.).

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[1] Physical roadway improvements to improve capacity should be considered before considering parking restrictions.

- Caltrans must also be consulted to identify other specific locations to be analyzed on the State highway system.

If, based on these criteria, the TIA identifies no facilities for study, no further traffic analysis is required.

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T-2/ACCESS
(11/20/96 Rev.)

Attach.

EXHIBIT A
TRAFFIC IMPACT ANALYSIS REPORT CONTENTS CHECK LIST

Note: Before a full review is conducted, the County staff will check the completeness of the Traffic Impact Analysis report. If the report is missing any of the items listed below, it will be returned for revision.

CONTENT	YES/ NO	COMMENT
Site Plan •Access locations •Interior circulation		
Trip Generation Rates •ITE trip generation rates •Documentation for alternate rates		
Trip Distribution •Regional •Local project (am/pm) •Local related projects(am/pm)		
Traffic Counts •Taken within one year •Date/Time		
Discounting •Internal trip discounts for mixed use developments •Pass-by trip discounts for commercial/retail developments •Backup		
Level of Service Calculations •ICU or CMA •10% yellow clearance for ICU planning method •1600 vpl; 2880 vpl for dual left turn lanes for ICU planning method •Calculation sheets •Scenarios as required per Guidelines •Existing/Future lane configurations		
Signal Warrant Analysis •Peak hour/ADT per Caltrans standards		
Mitigation Measures •Project impacts •Cumulative developments impacts •Projects % share of the cost to mitigate cumulative development impacts		
Congestion Management Program Analysis		

JHC:mcp
T-2/ACCESS3
11/26/96

To: Chan, G.

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100

HARRY W. STONE, Director

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

May 15, 2000

IN REPLY PLEASE REFER TO FILE: P-2

Ms. Grace Chan
Sanitation District of Los Angeles County
1955 Workman Mill Road
Whittier CA 90601

Dear Ms. Chan:

RESPONSE TO A NOTICE OF PREPARATION (NOP) - CONTINUED OPERATION OF THE PUENTE HILLS LANDFILL

Thank you for the opportunity to provide comments on the NOP for the proposed Continued Operation of the Puente Hills Landfill. We have reviewed the NOP and offer the following comments:

Environmental Programs

As projected in the Los Angeles County Countywide Siting Element (CSE), which was approved by a majority of the cities in Los Angeles County in late 1997, by the Los Angeles County Board of Supervisors in January 1998, and by the California Integrated Waste Management Board on June 24, 1998, a shortfall in permitted daily landfill capacity may occur in the County within the next few years. A number of landfill closures (BKK, Spadra, etc.) have been experienced in recent years and more closures are expected to occur in the near future. The CSE recognizes the need for in-County waste management facilities, and includes a policy to support expansion of existing landfills in Los Angeles County, including Puente Hills Landfill, as long as it is environmentally and technically feasible.

The subject facility requires a Finding of Conformance from the Los Angeles County Integrated Waste Management Task Force. This is in accordance with the Los Angeles County Countywide Integrated Waste Management Plan (CoIWMP) which was approved by the California Integrated Waste Management Board on June 23, 1999. The CSE, which is an element of the CoIWMP, requires that all new and expansion of existing solid waste disposal facilities be consistent with its requirements.

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0211 2000 MAY 18 A 9:17 C.W. CARRY

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Very truly yours,

HARRY W. STONE
Director of Public Works

T. Scott Schales

For: DAVID YAMAHARA
Assistant Deputy Director
Planning Division

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Enc.

California Integrated Waste Management Board

May 24, 2000

State of California

California Environmental
Protection Agency

MEMORANDUM

To: Scott Morgan
State Clearinghouse
P.O. Box 3044
Sacramento, CA 95812-3044

Charles Boehmke/Grace Chan
Los Angeles County Sanitation District No. 2
1955 Workman Mill Road
Whittier, CA 90601

Date: May 24, 2000

From: William L. Ishmael
William L. Ishmael
Environmental Review Section
Permitting and Inspection Branch
Permitting and Enforcement Division
CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD

Subject: **SCH #2000041066:** Notice of Preparation (NOP) of a draft environmental impact report (DEIR) for the revision of the solid waste facility permit (SWFP) at the Puente Hills Landfill (SWFP # 19-AA-0053) in Los Angeles County.

California Integrated Waste Management Board (CIWMB) Environmental Review Section (ERS) staff received your Notice of Preparation (NOP) requesting Responsible Agency review and comments related to the preparation of this proposed DEIR for proposed changes in operation and revision of the SWFP at the Puente Hills Landfill (SWFP # 19-AA-0053) on April 24, 2000.

ERS staff, have reviewed the environmental document (ED) cited above, and offer the following project description and assessment of the proposed ED based on our understanding of the project described in the ED, and supporting documents. If the CIWMB project description varies substantially from the project as understood by the Lead Agency, ERS staff request that the Lead Agency notify ERS staff of any significant differences prior to local approval of the project.

PROJECT DESCRIPTION

The Los Angeles County Sanitation District #2 (LACSD), acting as Lead Agency, has prepared and circulated this NOP to prospective Responsible Agencies in order to help identify and evaluate potential environmental impacts and/or other Responsible Agency concerns that could occur with the approval of the proposed project. The proposed project will require revision of the Solid Waste Facility Permit (SWFP) cited above, and may require other state and/or local approvals.

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The Puente Hills Landfill (PHL) is located on at 2800 Workman Mill Road in Whittier, California, and is owned and operated by the LACSD (also Lead Agency).

Existing Facility

According to the existing SWFP (#19-AA-0053), dated January 4, 1995, the facility is currently permitted for:

Hours and days of operation:	Landfill and Ancillary Operations	6:00 a.m. to 9:00 p.m.
	Receipt of Refuse	6:00 a.m. to 5:00 p.m.
	Receipt of Clean Soil	9:00 a.m. to 3:00 p.m.
	Equipment Maintenance	5:00 a.m. to 9:00 p.m.

Maximum daily tonnage permitted for receipt: 13,320 tons per day (tpd) solid waste

Types of Materials: Non-hazardous Refuse and Sludge

Number of incoming waste vehicles permitted per day: not specified

Maximum height of landfill: 1,025 feet and 850 feet MSL (see SWFP Condition C-5)

Total Permitted Landfill Area: 1,365 acres

Permitted disposal footprint area: 433 acres

Estimated closure date: 2003

Design capacity: 69 million cubic yards (cy)

Proposed Changes

The **proposed project** will require revision of the SWFP in order to implement changes in design and operation at the facility that, according to the NOP, **will allow continued operation of the PHL at the existing disposal rates for approximately 10 years beyond the estimated SWFP closure date and expiration of the land use permit in 2003**. This proposed continuation of operations, upon completion, will exhaust all remaining capacity at the site at which time the site will close. According to the NOP, the proposed continuation of operations will utilize a remaining topographical capacity of approximately 10 years beyond expiration of existing land use permit and is located almost entirely within the current limit of operations.

Continued operation of the landfill is also expected to provide for a planned transition to a waste-by-rail system to remote desert landfills. The project will also require extension of the existing environmental control features, including groundwater protection systems, drainage structures, and gas control systems.

The NOP indicates that potential impacts for the proposed project were also addressed in the 1992 EIR, and the 1993 and 1994 Supplemental EIRs for this facility for a 20-year fill design even though only a 10-year land use permit was issued. According to this NOP, the previous EIR and Supplements identified unmitigatable significant impacts in the areas of Aesthetics/

Visual Resources, Biological Resources, Transportation/ Circulation, and Air Quality. The NOP does not indicate whether or not the current project may result in unmitigatable significant impacts, or if those previously identified are expected to continue.

CIWMB ROLE AS A RESPONSIBLE AGENCY

The CIWMB will be a Responsible Agency for the environmental review of this proposed project, and for concurrence on the required SWFP revision. The CIWMB operates in cooperation with local government to assure protection of the public health and environment from the potentially detrimental effects of improper solid waste management. The CIWMB concurs in the issuance, revision or modification of a SWFP with Local Enforcement Agencies (LEAs) to assure that a solid waste facility operates in a manner consistent with all applicable laws and regulations.

CIWMB CEQA REVIEW

CIWMB staff's review and comments on ED are intended to assist the Lead Agency in developing an ED that will be as complete and adequate as possible for use by the Lead Agency and all Responsible Agencies. CIWMB staff comments are intended to help decision-makers 1) identify potential impacts from proposed projects; 2) determine whether any such impacts are significant; and 3) ascertain whether significant impacts can be mitigated to a level of insignificance in compliance with the CEQA statutes and guidelines.

When evaluating the adequacy of an ED for purposes of SWFP concurrence, CIWMB staff must compare the project as described and evaluated in the ED with the design and operation of the facility as specified in the proposed SWFP. In order for CIWMB staff to evaluate whether or not the ED is adequate for use in the CIWMB permitting process, the proposed project must be described in sufficient detail for ERS staff to understand and evaluate the proposed project, the potential environmental impacts, proposed mitigation measures, and findings.

In the review of an ED for CIWMB concurrence purposes, the first question ERS staff must ask is: does the CEQA document clearly describe all phases of the project and assess the potential primary and secondary impacts to the environment and/or public health and safety that could occur if the project is implemented? The second question asked when the proposed SWFP is received is: does the CEQA project description, evaluation, and mitigations in the ED support the requested specifications, revisions, limitations, and/or conditions of the proposed SWFP? For instance, does the ED describe and assess the potential traffic, noise, dust, vector and other health and safety impacts that can be associated with a significant increase in permitted throughput tonnage, or other facility expansion requested in a SWFP? When this type of information is included and addressed in the ED, the SWFP concurrence process is greatly facilitated.

After comparison of the CEQA document with the proposed SWFP, ERS staff will make a recommendation to the CIWMB regarding the adequacy of the CEQA document for CIWMB SWFP concurrence purposes. The CIWMB makes the final determination of the adequacy of the CEQA document and SWFP concurrence as required in CEQA Guidelines, CCR Section 15025.

CIWMB STAFF COMMENTS AND QUESTIONS

As a Responsible Agency for SWFP concurrence, CIWMB staff will conduct an environmental analysis for this project, using the DEIR developed by the Lead Agency, in accordance with CEQA Guidelines (CCR), Section 15096. To assist in our review of the DEIR for SWFP

concurrence purposes, CIWMB staff request that the following comments and questions be considered and addressed in the DEIR, if applicable. These questions and comments are:

Comparison of ED and SWFP

In addition to, or as part of, any good CEQA analysis, it is especially helpful to the CIWMB staff environmental analysis of the ED if the Lead Agency would describe and consider in the ED those design and operational features and/or proposed changes that are particularly pertinent to information required in a SWFP. For a disposal facility/MRF these are typically: owner name, operator name, facility address, type of facility, types and quantities of materials accepted, acreage (total facility and waste footprint), site capacity (total and remaining), average and maximum daily tonnage, maximum number of vehicles per day, maximum elevation and depth, hours and days of operation, estimated site life, and any special waste handling procedures required. For further information regarding SWFP specifications and requirements please contact Mr. Richard Hanson of the County of Los Angeles, Department of Health Services. His agency is the solid waste Local Enforcement Agency (LEA) for Los Angeles County and he, or members of his staff can be reached at telephone number (323) 269-4327.

Proposed Physical Changes

The 1995 SWFP indicates that the existing waste disposal footprint consists of 433 acres; that the maximum elevation is 1,025 ft. and 850 ft. for the existing site and the expansion area (respectively); and that the design capacity is 69 million cubic yards. The NOP states that "...the remaining capacity at the site is almost entirely within the current limit of operations." The DEIR should clearly explain any proposed changes in design or operation intended to allow the continued operation of the landfill; or indicate by document number, page number, and section where this information and related evaluations can be found in existing documents referenced in this DEIR.

The potential environmental impacts of all proposed changes should be described and considered in this DEIR, or referenced in another ED, or this DEIR should indicate that a future CEQA analysis will be conducted prior to implementation of the changes.

SWFP Issues

For CIWMB concurrence purposes in the revision of a SWFP for a landfill, the DEIR should include a discussion and impact evaluation of any applicable proposed changes to:

- Setting and adjacent land uses.
- Permitted landfill waste disposal footprint and/or over-all acreage.

- Permitted maximum landfill height or excavation depth.
- Permitted landfill waste capacity and/or design capacity.
- Processing or landfilling procedures.
- Equipment.
- Projected closure date.
- Proximity of residences or other sensitive receptors.
- Permitted average and peak daily tonnage anticipated at the facility.
- Types and sources of waste material to be received.
- Types and numbers of vehicles that will access the site daily.
- Permitted hours and days of operation for the facility.
- Design and operation of the facility to prevent impacts from litter, odor, dust, noise, glare, vectors, vehicle queuing, drainage, and public health and safety.
- SWFP conditions or findings.
- Other permits and approvals that will be required for the project.

New Impacts/Conflicting Findings

Will the proposed extension of the site life cause impacts not considered in the previous environmental evaluations, or conflict with previous findings that were based on a required or expected closure date? Were any previous environmental findings predicated on the requirement or assumption of facility closure in 2003. If so, those issues should be discussed thoroughly in the DEIR.

Acceptance of Waste From Outside the County

Will the continuation of the landfill operation involve receipt of waste from outside the County? If so, the DEIR should describe this part of the project and consider the potential impacts from the transportation of waste from other areas (i.e., traffic, roadways, air quality, noise, aesthetics, etc.).

Alternatives

Will the DEIR describe and consider any alternatives other than the "no project" alternative mentioned in the NOP?

Transportation of Waste

If the proposed project includes transportation of out-of-County waste to the landfill, part of a complete CEQA review should consider potential impacts to traffic, noise, air quality, and roadway traffic and safety from the transportation of that waste as part of the proposed project.

Overburden Pressure

Will the project require increases in permitted landfill elevations? If so, the analysis in the DEIR should include consideration of overburden pressures when raising the landfill elevation over in-place waste. Will the field capacity of the existing waste be decreased to the point where leachate generation is affected, especially in unlined portions of the landfill? Are in-place structures such as gas collection and monitoring system designed to withstand the extra weight?

CEQA Baseline

CIWMB staff are of the opinion that the baseline for consideration of potential impacts should be the currently permitted design and operations for the facility.

Excavation of Buried Waste

The DEIR should consider whether or not the installation of roads, liners, or landfill gas and leachate recovery and monitoring systems involve the penetration of existing waste cells? If so, the DEIR should describe project features or mitigations intended to protect workers and the public from dangers involving the release of landfill gases and/or other potential hazards related to the excavation of buried waste.

MITIGATION REPORTING OR MONITORING PROGRAM (MRMP)

If the project does require mitigation measures, as required by Public Resources Code Section 21081.6, the Lead Agency should submit a MRMP at the time of local adoption of the Final Environmental Impact Report (FEIR). This should identify the environmental impacts associated with the proposed project, identify mitigation measures to reduce impacts to a less than significant level, identify agencies responsible for ensuring the implementation of the proposed mitigations, and specify a monitoring/tracking mechanism. The MRMP is also required to be made a condition of project approval. Recent changes to this Section (AB 314) also require that "A public Agency shall provide that measures to mitigate or avoid significant effects on the environment are fully enforceable through permit conditions, agreements, or other measures." ERS staff suggest that the final environmental document establish enforcement procedures and penalties, as well as develop conflict resolution provisions.

The FEIR should also indicate that agencies designated to enforce mitigation measures in the MMRP have reviewed the MMRP and agreed that they have the authority and means to accomplish the designated enforcement responsibilities.

SUMMARY

ERS staff thank the Lead Agency for the opportunity to review and comment on this proposed project in the early stages of development. ERS staff hope that this comment letter will be useful to the Lead Agency in carrying out their responsibilities in the CEQA process.

ERS staff requests copies of any subsequent environmental documents including, copies of public notices, MRMPS, Notices of Determination (NODs), and any Statement of Overriding Consideration required for this project. If the document is certified during a public hearing, ERS staff request prior notice of this meeting. If the document is certified without a public hearing, staff request prior notification of the date of the adoption and project approval by the decision-making body.

If you have any questions regarding these comments, please contact me at (916) 255-3305.

Sincerely,

SIGNED AND SENT

William L. Ishmael, Integrated Waste Management Specialist
Environmental Review Section,
Permitting and Inspection Branch
Permitting and Enforcement Division

cc: Bill Marciniak
Permitting and Inspection Branch, Region 3
Permitting and Enforcement Division
CIWMB

Richard Hansen, Chief
County of Los Angeles
Department of Health Services
2525 Corporate Place, Room 150
Monterey Park, CA 91754

APPENDIX B

SPECIAL SCOPING MEETING SUMMARIES

Summary of Puente Hills Landfill
Citizens Advisory Committee Meeting

June 13, 2000

Members in Attendance:	Robert Frame (WMA), Alfred Garcia (WMA), Bob Isaacson (HHIA), Donna Steinmetz (HHIA), Bud Welch (PHCC), Jeff Yann (HHIA)
Staff in Attendance:	Chuck Boehmke, Grace Chan, Connie Christian

Note: Text material written in ***bold italics*** indicates follow-up information.

Grace Chan explained that the next few meetings will be recorded in order to fully document in detail the input from the Committee on the Draft EIR in the meeting minutes. The cassette tapes will be saved and filed. Transcripts will not be prepared. Discussion at these meetings will continue to be summarized in the meeting minutes. Jeff Yann agreed that the meeting minutes in the current format should provide adequate detail on the Committee's input.

I. Approval of Meeting Summary

The Committee approved the Summary of May 9, 2000.

II. Staff Report

A. Sequencing and Projects

Connie Christian reviewed the ongoing and upcoming projects at the site.

Drainage Facilities. Bids for the Canyon 4 drainage facilities project were received on June 6. Construction will begin in mid July.

Gas System. The installation of the gas trenches did not begin on June 8 as anticipated. Instead, the project will start on June 15 and will last approximately ten working days.

Reclaimed Water Project. The Notice to Proceed for the reclaimed water project was issued on June 9. Construction is expected to begin in late July or early August. During construction, the trail will be closed from 7:00 a.m. to 5:00 p.m., Monday through Friday, and will be opened every day after 5:00 p.m. and at all times during the weekend. Yann asked why the current grading activity is necessary. Christian explained that the proposed reclaimed water tank will be situated on the current access road; therefore, a new access road needs to be constructed. The grading will provide the base for the new access road. Christian added that although the grading activity is part of the project, it is being completed by onsite personnel instead of the contractor.

The plaque for the guard shack will be ready for installation in mid July. Christian proposed that the ceremony be held on July 20. Bud Welch suggested a morning ceremony to avoid the summer heat. The Committee decided on July 20 at 10:00 a.m. Yann said that he will inform the Hacienda Heights residents at the next HHIA meeting. Invitations will be sent out for the event.

Chan explained to the Committee that the guard shack is wrapped in plastic to allow the anti-graffiti paint to cure. Based on prior incidents of vandalism at the Nike Site, Chan recommended that the guard shack remain wrapped in plastic until the day of the ceremony. The Committee concurred.

Miscellaneous. At the last meeting, the Committee discussed sandblasting as a method to remove graffiti at the site. Subsequent to the meeting, the Districts' mailed a letter notifying area residents that this work will commence by June 19. The work has since been delayed. The Districts plan to send a letter to the residents notifying them of the delay and the new start date when the information is available. ***(The letter was mailed on June 27, 2000, indicating that the work will take place between July 3 and July 20.)***

B. Green Waste/Odor Update

Christian reported that the Districts received one odor complaint in the month of May. When the Districts' technician responded to the complaint, he noticed a trash odor from a large puddle in the street, apparently spilled from a refuse collection truck earlier that day. The technician noted that the spilled liquid may have contributed to the odor incident.

The site increased the amount of offsite green waste hauling to approximately 350 to 400 tons per day (tpd), five days per week. The material is sent to an Orange County landfill to be used as alternate cover. Yann asked how much green waste the site uses each day. Christian said the site uses approximately 600 to 650 tons of the approximately 1,000 tons of green waste the site receives each day. Welch asked if the site stops accepting green waste when it reaches a maximum amount that can be handled. The Districts do not stop accepting green waste when the amount of green waste exceeds onsite needs. Chan said that the site has a contract in place to haul green waste offsite. In anticipation of the increase in green waste received after the closure of Spadra Landfill, the amount hauled offsite has been gradually increased to the current level.

C. Draft EIR for Continued Operation of the Puente Hills Landfill

Chan introduced the topic by explaining that the main purpose of these sessions is to get input from the Committee. Any input provided by the Committee will be included in the EIR. Chuck Boehmke proposed a schedule for each topic discussion with all the topics being covered over the next three meetings. Yann asked if the topics can be spread out to more meetings because he is unable to attend the meetings in July and August. Chan said that some topics need to be addressed soon to allow the EIR consultant to begin field work. She added that Yann can provide input on these topics at this meeting, at a later date via a letter, or at later meetings. The Committee consented to the timing and areas of the future topics discussion. Chan said that the Committee can continue to meet on a monthly basis even after these topics are covered if the Committee desires. Welch proposed that monthly meetings are needed only to gather input for the EIR. The Committee agreed that once the EIR scoping sessions are completed, the Committee will revert to a bi-monthly schedule.

<u>Project Description</u>
Boehmke stated that the proposed project would allow for the continued operation of the Puente Hills Landfill by utilizing the remaining topographic capacity of the site, similar to the identified capacity in the 1992 permitting process. The site would accept only Class III nonhazardous waste. The tonnage would be limited to 12,000 tpd based on a six-day average, with a maximum of 13,200 tpd. The fill plan would be similar to the 20-year plan proposed in the last EIR and would be almost entirely within the current limit of operations. The new fill plan would differ from the 20-year plan due to the setbacks imposed by the CUP. Other concerns, such as visual impacts, drainage and stability, would also be considered in developing the new fill plan.

Yann asked if the new fill plan would go beyond the existing setbacks from Rose Hills and from Hacienda Heights. Chan said that the setback from Rose Hills could change and that the setback from Hacienda Heights would not change. Disposal operations would move further away from the east as the landfill gets higher in elevation because the fill slopes away from these areas. Boehmke added that the fill plan would also be limited in the south by Canyon 6. Bob Isaacson asked which areas outside the current limit are proposed for operations. Boehmke said that the previously excavated slope area below the Nike Site could potentially be included; however, a specific fill design has not been determined. He then pointed out the location on the aerial photo. Welch inquired about the location of this area and its elevation in relation to the Nike site. Boehmke replied that the final elevation would be determined through the development of the fill plans when issues such as drainage and geologic stability are analyzed. The existing permit allows refuse placement up to 1050 feet, which is 100 feet below the elevation of the communication towers. Yann asked if the refuse will be placed higher than the existing topography along the Rose Hills boundary. Boehmke replied no. Yann asked if there is any other proposed operation or construction outside the current operations area. Chan said that it is not possible to predict every individual construction project needed throughout the project life; however, any anticipated major construction projects will be evaluated and identified in the EIR.

The project description also includes the continuation of the diversion activities for ash, asphalt, green waste, and soil. All diversion activities would take place on top of the fill. Yann asked if the Puente Hills Materials Recovery Facility would be included in the project description. Chan said that the MRF is an approved project with its own operating permits. The EIR will address the interaction of the MRF and the landfill, since the MRF is on the landfill property and both facilities will have a single point of access.

Project Alternatives
The implementing regulations of the California Environmental Quality Act (CEQA) require that an alternative to the proposed project must meet most of the basic objectives of the project, be feasible, and avoid or substantially lessen any of the significant effects of the project. The alternatives analyzed in the previous EIR were: 1) no project, 2) different landfill designs, 3) the use of other in-county landfills, 4) the use of out-of-county landfills, 5) the use of waste-by-rail facilities, and 6) alternative waste management technologies.

Welch inquired about the Districts' plan to divert waste from the landfill to Eagle Mountain Landfill. Chan said that the EIR will include an in-depth discussion on how repermitting the landfill relates to the transition to waste-by-rail. Waste-by-rail will also be analyzed as an alternative to the project. Isaacson and Yann suggested that the EIR address a gradual transition into waste-by-rail as an alternative, where desert landfills would begin accepting small quantities of waste as early as 2003 and the tonnage would increase with time. This scenario would gradually reduce the communities' reliance on the landfill. Isaacson asked if this will be the final expansion, which Chan confirmed.

Chan said that the timing for waste-by-rail depends largely on the cities' ability to meet the recycling goal of a 50% diversion from the landfill. The county disposal need is calculated based on the amount of waste requiring disposal, the level of diversion, and the amount of available disposal capacity in the County. Currently, the countywide diversion is at 38%. If only this diversion level is achieved, then waste-by-rail could be needed as soon as 2006. Yann said that he would like the transition to waste-by-rail to be based on its availability to accept waste rather than based on the county need. Welch asked if the landfill would accept its maximum daily capacity regardless of what the diversion rate is and if the landfill would accept waste from Orange County to meet its maximum daily capacity. Chan explained that the Districts do not control how much or where the waste comes from, although it has an ordinance that prohibits Orange County waste from being disposed at the landfill. Waste disposal in L.A. County is based on a market driven system. For example, a truck from Calabasas would not drive to Puente Hills Landfill due to the higher transportation cost. With waste company mergers in recent years, more haulers have utilized their own landfills which makes it difficult to predict where the waste will be disposed. However, the overall county need continues to be evident and there is a clear need for waste-by-rail or nearby out-of-county landfills when the landfill closes. Welch inquired about the capacity of Orange County landfills. Christian responded that Orange County landfills are permitted to accept more than 20,000 tpd of waste but currently accept approximately 14,000 tpd.

Alfred Gracia asked if the cities will be mandated to take their waste to desert landfills. Christian said that the cities that are currently utilizing the landfill would not be required to use desert landfills when the Districts transition to waste-by-rail. The disposal site selection is at the discretion of the local haulers. Yann said that cities and private companies can negotiate their own contract with the waste-by-rail sites. Chan said that Don Nellor has been working on waste-by-rail issues and could discuss waste-by-rail in detail at the September meeting.

Yann asked that a smaller expansion be evaluated as an alternative. He said that if the site accepted less waste, the waste can be placed further away from the homes and will reduce the potential for odors. Steinmetz added that she noticed that the accumulation of dust in her house increased in the last two weeks. Chan responded that she would contact Operations personnel about increasing dust control.

Boehmke reported that he conducted an initial literature search on alternative waste management technology. The alternative technologies that he found include composting, anaerobic digestion, incineration, and pyrolysis. All of these technologies are in the developmental stage. Yann recalled someone from Ventura County stating at the Rose Institute Conference that Ventura County will move toward pyrolysis. Chan said that the Districts will contact and consult that person and will also look at other new technologies. Yann said that the gasification process, currently operating on a small scale, needs research funding to bring the technology to a commercial level. He said that an organization such as the Districts could be a driving force in developing this technology.

Isaacson recommended that the EIR evaluates a process currently used in the food industry as an alternative technology. The process pulverizes the waste by using a high pressure treatment.

Isaacson requested a status update on the development of pyrolysis, a process which uses heat to break down the molecular structure of the waste. Chan said that she will check into it and bring an update at a future meeting.

Isaacson suggested that legislation be enacted to require waste haulers to collect and recycle all source-separated materials and to require the county to be pro-active in implementing waste reduction programs. Chan stated that the Districts are not authorized to collect waste; hence, do not have the jurisdiction to control waste collection. The Los Angeles County Department of Public Works is responsible for waste management activities in unincorporated areas and can implement waste reduction programs such as a separate collection of green waste without legislation.

Yann asked that turning the landfill into a composting facility should be an alternative to the proposed project. The facility would compost green waste and refuse after plastic and metals are removed from the waste stream.

Closure/Postclosure

In the California Code of Regulations, each landfill is required to prepare a closure plan and a postclosure maintenance plan. These plans described the activities that go into closing a landfill such as placement of the final cover, construction of roads and drainage structures, installation of landscaping, irrigation, and environmental control systems. The plans also include a cost estimate for completing these activities. The Districts have established a fund for each of their landfills to meet the requirements.

Isaacson suggested partial closure such that closure activities could begin in an area that had reached its capacity while landfill operations continue in other areas. Robert Frame asked how the postclosure use of the landfill will be determined. Chan said that the EIR could serve as the first mechanism for the Committee to provide input on specific postclosure uses. However, the EIR will not supersede the County of Los Angeles Department of Parks and Recreation's (Department) master planning process. Generally, a separate EIR is prepared for the master plan where the Department will develop a series of alternatives and solicit community input on them. Frame asked if the final use could be a commercial development such as the one proposed at BKK Landfill. Boehmke said that BKK Landfill differed from Puente Hills Landfill in that BKK Landfill is privately held. The owner of the BKK Landfill wished to develop the landfill to provide income for the company, whereas the Puente Hills Landfill is a public facility and will be turned over to the Department for the purpose of providing recreation and open space. Frame asked if the Department has looked at the range of possible uses of the Puente Hills Landfill. Chan said that the Districts have discussed the possible range of options with the Department. However, this was done solely for the purpose of early discussion about an estimated development cost. In the past, the Department's position has been not to begin the master plan process or develop specific uses if there is a possibility that the landfill will be repermitted. A part of the master planning process is an evaluation of the needs in the areas, and the needs may change with time. The Committee requested that a representative from the Department be invited to a future meeting to further discuss postclosure use.

Yann asked if the Districts could provide more insight as to the final configuration of the site. He would like the ability to review the fill plans as they are developed to review the visual and other impacts on the residents. He added that he would like the front face to be shaped more like a true canyon when it is viewed from the freeway and Hacienda Heights. Chan said that the Committee will not have an opportunity to review any draft materials until the draft EIR is released. However, any input on fill plans and specific landform from the Committee will be addressed and evaluated in the EIR. The Committee will have an opportunity to comment on the proposed fill plans during the public hearing in the EIR process. Yann asked that the ridge between the landfill and Canyon 6 be left undisturbed because it shields the trails from the landfill.

D. Miscellaneous

Condensate Discharge. Christian reported that approximately 100 to 150 gallons of condensate discharged into the storm drain on May 13, 2000. The discharge originated from the condensate treatment facility near the scales area. The spill was a result of several components that simultaneously failed. First, the pipeline that connects the condensate tanks to the air strippers clogged, which raised the liquid level in one of the condensate tanks. Then the main alarm system that notifies personnel when a high liquid level occurs failed. As liquid continued to rise, it began to back feed through a discharge pipe from a sump pump, which is located within the secondary containment area for the air strippers. A site operator noticed that the local beacon light alarm for the air strippers was activated and observed condensate in the secondary containment basin for the air strippers. He immediately notified the on-call site personnel to respond to the incident. When additional site personnel arrived, condensate was overflowing the secondary containment basin for the air strippers and was flowing into the storm drain. The discharge was stopped immediately by placing sand bags over the storm drain inlet. Liquids collected in the sandbagged area and air stripper secondary containment basin were pumped to the condensate tanks for proper treatment. To prevent this from recurring, the obstruction in the condensate pipeline was removed, the alarm system was repaired, and a backflow device was installed in the sump pump discharge line to preclude back feeding into the sump. Water samples were collected from the air stripper secondary containment basin and from the main underground box culvert where the storm drain enters San Jose Creek. The samples were analyzed for volatile organic compounds (VOCs). Low concentrations of VOCs were observed in the condensate from the air stripper secondary containment basin, but no VOCs were detected in the samples collected from the box culvert. All appropriate agencies were notified.

Eucalyptus Trees. Chan said that the wasp which attacks the psyllid is scheduled to be released on June 20. If the wasp is successful in eliminating the psyllid, some improvement can be expected by the end of the summer.

In addition to the standing items, three areas of the draft EIR (traffic, noise and visual resources) will be discussed at the next meeting. The meeting is scheduled for July 11, 2000.

Summary of Puente Hills Landfill
Citizens Advisory Committee Meeting

July 11, 2000

Members in Attendance:	Robert Frame (WMA), Alfred Garcia (WMA), Priscilla Lohff (WMA), Ruth Wash (WMA), Bud Welch (PHCC)
Others:	Mike Hughes (President, HHIA)
Staff in Attendance:	Chuck Boehmke, Connie Christian, Ajay Malik, Don Nellor

Note: Text material written in ***bold italics*** indicates follow-up information.

Don Nellor introduced a new Districts' staff member that will be working with the CAC. Ajay Malik will replace Chuck Boehmke and will work on CEQA and repermitting issues.

Nellor announced that Chuck Carry, Chief Engineer and General Manager, retired from the Districts. Jim Stahl, the former Assistant Chief Engineer and Assistant General Manager, has replaced Carry effective immediately. Steve Maguin, Department Engineer for Solid Waste Management, has replaced Stahl as the new Assistant Chief Engineer and Assistant General Manager.

I. Approval of Meeting Summary

The Committee approved the Summary of June 13, 2000.

II. Staff Report

A. Sequencing and Projects

Connie Christian reviewed the ongoing and upcoming projects at the site.

Drainage Facilities. The contractor received the Notice to Proceed for the work in Canyon 4 and began moving equipment to the site. Construction will begin in late July.

Gas System. The installation of the gas trenches is on hold. The contractor is unable to provide clean gravel that meets the specifications for the project. Bud Welch asked if the specifications call for an unusual type of gravel. Nellor explained that the type of gravel is usually not difficult to find; however, the available gravel does not, at times, meet the size and cleanliness criteria.

Reclaimed Water Project. Operations have nearly completed the initial grading for the reclaimed water project and are now waiting on Edison to relocate an utility line. Once the utility line is relocated, the excavation can be completed. This grading activity will last approximately one week. The contractor is expected to begin construction of the reclaimed water project on August 1.

Commemoration of Guard Shack. Christian stated that the announcement for the guard shack commemoration was mailed to the Committee members and local equestrian groups. Shuttle service to the Nike site will be provided from the Puente Hills Recycle Center on Workman Mill Road. Committee members indicated that they are all in receipt of the announcement. Christian reported that the plaque for the guard shack was shipped on July 6 and the Districts should receive it soon. Welch asked if the plaque will be on display during the ceremony on July 20. Christian confirmed that the plaque will be installed on the guard shack prior to July 20.

Irrigation. An irrigation system was installed at the Nike site and on the Nike cut slopes. A temporary system was installed on the Nike cut slopes. The cut slopes will be irrigated through the summer months. They system will be removed at the start of the next rainy season. Permanent irrigation was installed at the Nike site, which will utilize reclaimed water from the new reclaimed water tank once the project is completed.

Miscellaneous. Sanblasting to remove graffiti in the concrete channel in Canyon 4 and along Frankton Avenue began on July 5 and was completed on July 6.

B. Green Waste/Odor Update

Christian reported that the Districts received one odor complaint in the month of June. A Districts' technician investigated and verified the complaint. The technician traced the odor source to an active trenching operation. Upon consulting the construction inspector for the trenching operation, the technician discovered that a contractor installation error prevented a betterfly valve from rotating properly; hence, the trench was not under vacuum at the time of the complaint. The error was corrected immediately after it was detected.

The site continues to send approximately 350 tons per day of green waste to Orange County landfills to be used as daily cover.

C. Solicitation of Input for the Draft EIR for Continued Operation of the Puente Hills Landfill

Sanitation Districts staff continued scoping discussions with the Committee. The purpose of the discussions is to solicit input on the EIR being prepared for the proposed continued operation of the Puente Hills Landfill. At the previous meeting, the Committee discussed the project description, the project alternatives and landfill closure and postclosure use. This meeting's topics included traffic, noise and visual resources. At the request of the Committee, a South Coast Air Quality Management District's (SCAQMD) representative has been invited to the meeting on September 12, 2000 at which air quality analysis for the EIR will be discussed. Boehmke asked if the Committee has specific topics that they would like the SCAQMD representative to address at the next meeting. The SCAQMD representative asked that the topics be provided to him via the Districts prior to the next meeting to allow him to properly prepare for the discussion.

Traffic

Boehmke informed the Committee that a traffic consultant will conduct an analysis of the traffic system around the landfill. Any new developments such as the permitted Puente Hills MRF will be factored into the evaluation of surrounding streets and freeways. Ruth Wash asked if the study considers only onsite traffic. Boehmke responded that the study will include onsite traffic as well as offsite traffic. Welch asked if the recent closure of other in-county landfills increased the refuse tonnage at Puente Hills Landfill, thereby increasing the number of vehicles using the site. Boehmke said that the number of refuse loads at the Puente Hills Landfill has not changed because the landfill was already accepting its maximum daily tonnage prior to the closure of Spadra Landfill. Welch stated that at one time, the site did not receive its maximum daily tonnage. Nellor confirmed that the refuse tonnage at the site decreased for a brief period when private haulers began diverting all the waste which they collected to their own landfills. However, the site has consistently reached its maximum daily tonnage between 12:00 p.m. and 1:00 p.m. since the Spadra Landfill closed. Nellor added that the only notable traffic increase resulting from the closure of Spadra Landfill is in the number of green waste loads.

Welch asked if the Districts have conducted a study on the relationship between repermitting the landfill and transition to waste-by-rail. Nellor responded that the Districts are committed to make waste-by-rail happen as soon as economically possible by using the Puente Hills Landfill's tipping fee to fund the transition. In comparing the cost of using Puente Hills Landfill for ten years to the cost of using waste-by-rail as an alternative for ten years, waste-by-rail would cost an additional $1.4 billion. Since the increased cost of waste disposal would be passed on to the residents and businesses, the Districts do not want to implement it sooner than necessary. Nellor assured the Committee that the Districts have a realistic and viable program to ensure that the County will have long term disposal capacity when it is needed. Alfred Garcia asked if the disposal rate will increase gradually. Nellor explained that the Districts plan to fund the implementation of rail haul by levelizing the rates at the landfill with the rate at the MRF. He added that he will discuss waste-by-rail in detail at a later meeting. He emphasized that the Districts must operate in an open market system and remain price competitive. Unlike private haulers, the Districts do not control the waste stream nor its final destination. Michael Hughes asked if tipping fees are uniform throughout the county. Nellor said tipping fees vary by site. Puente Hills Landfill has the lowest posted tipping fee in the County. The posted tipping fees for privately owned landfills range from $35 to $38; however, the sites usually provide discounts to haulers that can guarantee to bring a certain amount of waste. Hughes asked if it is accurate that the Puente Hills Landfill can raise the tipping fee $6 - $8 per ton and remain competitive with other private and public landfills. Nellor said that a tipping fee of $24 per ton would be competitive with the published rates at the private sites. The tipping fees at Districts' operated landfills are not uniform because the operating expense at a facility such as Calabasas Landfill is higher than the operating expense at Puente Hills Landfill.

Hughes asked how much traffic the MRF will generate. Boehmke said the facility is permitted to handle an average of 4,000 tons per day which equates to approximately 500 trucks. Hughes asked if the traffic from the MRF will come through the Workman Mill Road entrance. Nellor said that the Workman Mill Road entrance will be closed when the MRF is constructed. All landfill and MRF traffic will enter the site via Crossroads Parkway. Hughes asked if the 500 trucks per day is in addition to the existing traffic. Nellor said that although the traffic will increase with the opening of the MRF, this impact was evaluated in the last EIR and will be discussed in this EIR as such. Welch inquired about the congestion on local streets and freeways associated with the MRF traffic. Hughes suggested that if the operating hours of the MRF differ from the operating hours of the landfill, there will be no overlap in traffic. Nellor said the MRF is not allowed to operate between 6:00 a.m. and 9:00 a.m., or between 4:00 p.m. and 7:00 p.m. Hughes asked if the MRF will operate similarly to the DART facility in Downey, where only clean recyclables from curbside collection will be accepted. Nellor said the MRF will not separate recyclables from curbside programs but will target loads from the commercial sector.

Noise

Boehmke reported that a consultant has been retained to analyze the noise impacts. Noise measurements will be taken at various locations east and north of the landfill and will consider sources from construction, disposal operation, and roadways. The Committee did not have any further input on this topic.

Visual Resources

Boehmke stated that the Districts will work with the EIR consultant to evaluate visual resources. A photographer will take photographs of the landfill from several viewpoints. A compute model will be used to simulate before and after images of the site. Nellor said that computer modeling is the state-of-the-art method to project what the site will look like at the completion of landfill life. Hughes asked if the simulations between the current conditions and the 2013 projection will be included and when they will be available. Nellor said that visual simulations will be included in the EIR and will be available when the draft EIR is released.

Hughes asked if additional trees will be planted on the Nike slopes. He said currently only 20% of the slopes are landscaped and he would like to see more trees and shrubs being planted. Nellor explained that the site would need to look at the proposed fill plan to determine the highest elevation at which refuse will be placed. Trees will not be planted on the slopes below the proposed fill elevation. However, additional planting would certainly be implemented in the areas above the fill line.

Nellor asked the Committee to provide specific points of reference to be used in the visual simulations. In the past, the viewpoints were taken from areas north and east of the landfill. Hughes suggested using viewpoints at Los Robles Avenue in Hacienda Heights, Turnbull Canyon and the Pomona Freeway. Wash added that the site is visible in the Montebello areas near the Operating Industries, Inc. Landfill.

Hughes asked if the face of the landfill would be landscaped as the landfill increases in elevation. Nellor said there is a specific landscaping plan for the east that differs from the landscaping plan for the west. Several landscaping palettes were presented to the Committee and HHIA during the development of the landscaping plan. After an extensive review process, the Committee and HHIA selected a mostly native irrigated palette. The slopes are landscaped according to the landscaping plan as the landfill gets higher in elevation. However, the plants are slow to develop because native plants grow more slowly than non-native plants.

Frame asked how well disposal operations will be shielded from the north when the disposal area rises in elevation. Nellor said that visual berm will be constructed to shield the working area from offsite areas. Hughes asked if there is a specific sequence in which refuse will be placed. Boehmke said that different options are being evaluated at this time and sequencing will be addressed in the EIR. Nellor added that the majority of the capacity is in the east for both the current permit and the proposed project.

D. Miscellaneous

Nellor asked if the Committee noticed that Rose Hills permitted a farmer to grow strawberries in the Canyon 6 and Canyon 7 area. According to site personnel, the strawberry farmer is generating a lot of dust. Hughes said he had asked Rose Hills about the strawberry farm. Rose Hills indicated that it would be an organic strawberry field. Welch said he noticed a lot of equipment being stored in the area. Nellor asked Hughes if HHIA had received any dust complaints from this activity. Hughes was not aware of any complaints but he would contact Rose Hills again on the dust issue.

Nellor informed the Committee that the Puente Hills Landfill Native Habitat Preservation Authority, with the aid of Senator Solis, was pursuing a $1 million grant through the state budget process to construct a culvert across Harbor Boulevard. Unfortunately, the request was vetoed by the governor.

Welch stated that he would not be able to attend the August meeting. Priscilla Lohff suggested that the meeting be postponed due to the number of Committee members that are unable to attend. The Committee concurred. A letter will be mailed to all Committee members notifying them of the cancellation of the August meeting. ***(The letter was mailed on July 18, 2000.)***

In addition to the standing items, three areas of the draft EIR (air quality, cultural resources and biological resources) will be discussed at the next meeting. The meeting is scheduled for September 12, 2000.

Summary of Puente Hills Landfill
Citizens Advisory Committee Meeting

September 12, 2000

Members in Attendance:	Alfred Garcia (WMA), Dennis Hostetler (HHIA), Bob Isaacson (HHIA), Priscilla Lohff (WMA), Donna Steinmetz (HHIA), Ruth Wash (WMA), Bud Welch (PHCC), Jeff Yann (HHIA)
Others:	Michael Hughes (President, HHIA), Steve Smith (SCAQMD)
Staff in Attendance:	Grace Chan, Connie Christian, Ajay Malik, Don Nellor

Note: Text material written in ***bold italics*** indicates follow-up information.

I. Approval of Meeting Summary

The Committee approved the Summary of July 11, 2000.

II. Staff Report

Grace Chan introduced Steve Smith as the guest speaker from South Coast Air Quality Management District (SCAQMD). At the request of the Committee, Smith was invited to the meeting to address questions concerning SCAQMD's role in reviewing the EIR currently being prepared for Continued Operation of the Puente Hills Landfill. As Program Supervisor of the SCAQMD CEQA Section, Smith's responsibilities include preparing CEQA documents for SCAQMD and reviewing CEQA documents prepared by others. Smith explained that SCAQMD is a responsible agency for reviewing the EIR because SCAQMD would have permitting authority for the proposed project. SCAQMD will provide guidance during the preparation of the document and review the air quality analysis in the draft EIR. Chan requested that agenda item II. D., solicitation of input for the Draft EIR, be taken out of order and be the first item for discussion. The Committee concurred.

D. Solicitation of Input for the Draft EIR for Continued Operation of the Puente Hills Landfill

Ajay Malik reiterated that the purpose of this item is to solicit input on the EIR being prepared for the proposed continued operation of the Puente Hills Landfill. The topics for input at this meeting, included air quality, cultural resources and biological resources.

<u>*Air Quality*</u>
Malik provided a brief description of the air quality issues addressed in the previous EIR. Bob Isaacson asked how the EIR would determine the time of day during which potential air quality impacts are evaluated. Jeff Yann noted that there is a shift in the wind direction at noon and the wind pattern remains the same, westerly, until about 7:00 p.m. He said that this time period should be treated as one unit and not be divided into two periods as was done in the previous EIR. Smith responded that the *AQMD Air Quality Analysis Guidance Handbook* describes the methodology and procedures in which an air quality analysis should be conducted. The document, formerly called the

CEQA Air Quality Handbook, has been revised since the previous Puente Hills Landfill EIR was prepared and is currently under another revision. Donna Steinmetz inquired about the changes in the current revision. Smith said the emission factors have changed since the last revision and that the current emission factors are available on SCAQMD's website (http://www.aqmd.gov/). The *AQMD Air Quality Analysis Guidance Handbook* can also be downloaded from SCAQMD's website or can be obtained at SCAQMD Headquarters in Diamond Bar. Smith added that he will provide the Committee a copy of the document via the Districts.

Isaacson asked if a summary of complaints would be included in the EIR. The staff said that the history of complaints would be addressed in the report. Smith said that in their review of the report, compliance with SCAQMD programs would be considered.

Isaacson asked if air emissions and traffic impacts from future projects, such as the proposed work on the Pomona Freeway, will be included in the EIR. Yann explained that Southern California Association of Governments (SCAG) and Caltrans have jointly prepared a study to evaluate the feasibility of adding designated truck lanes on the Pomona Freeway. Chan said that the Districts have met with a representative of SCAG to obtain more information of the Truck Lane Feasibility Study and will discuss the work in the EIR.

Yann asked if SCAQMD planned to conduct any independent dust monitoring around the landfill for this EIR since, in the past, they have conducted dust monitoring along the fence line. Smith said that he is not aware of any plans for SCAQMD to conduct dust monitoring; however, he will look into the issue. Steinmetz said she has complained about the dust problem for the past three years.

<u>*Cultural Resources*</u>
Malik said that extensive studies in the area of archaeology and paleontology were done for the previous EIR. Excavations at the site were monitored and results of the archaeological and paleontological monitoring were reported in the Biennial Reports. The proposed project is not expected to have any significant impacts on cultural resources due to the limited number of foreseeable excavations. Yann asked if there were any significant findings from the previous excavations. Chan said that some fragmented fossils and isolated historical artifacts were recovered but they were not considered significant. Yann asked how much excavation would take place outside the existing footprint in the proposed project. Chan said that the majority of excavation would come from the north facing Nike slopes, which is outside the current operation limits.

<u>*Biological Resources*</u>
Malik stated potential impacts to vegetation and wildlife, wildlife movement corridors, and endangered or sensitive species would be evaluated in the biological resources section. Yann asked if any additional oak trees would be removed in the proposed project. Chan said that there may be oak trees on the north facing Nike slopes, which would be proposed for excavation, but a full characterization of the biological resources for areas to be impacted would be presented in the EIR. Yann asked if oak trees would be removed if the ridge between the landfill and Canyon 6 is excavated. Chan said that some oak trees may be removed; however, the impacts of any oak tree removal in that area have been approved and mitigated as part of the current permit.

Isaacson asked if the site noticed an improvement on the eucalyptus trees since the wasps were released to fight the psyllids. Chan said the wasps were released countywide and not specifically at Puente Hills Landfill. Improvement is not expected until six to twelve months after the initial release. She said a more complete update would be made at the next meeting.

Yann asked if the previous EIR included a baseline survey of the number of species using the site. He would like to see a comparison of the current condition to the baseline. He suspected that the landfill expansion into the east and the additional traffic on the trails have caused a decline in the number of birds using the site. Chan did not know if quantitative analysis were included in the previous EIR but she would review the issue with the EIR consultant.

A. Sequencing and Projects

Connie Christian used the aerial photo to point out the location of the disposal operations, which are currently in the Phase 1B area. Winterdeck construction is approximately 40% complete. She reviewed other ongoing and upcoming projects at the site.

Drainage Facilities. The contractor is currently installing the drainage structures and is preparing to pour the foundation for the energy dissipator. All drainage structures are scheduled to be completed by the end of October. Christian pointed out the location of the V-channel to be constructed and the 30-foot road to be paved in November.

Landscaping: The vegetation in the Canyon 4 front face that is disturbed as a result of the drainage project will be replanted. The Districts have retained a biologist to evaluate the progress of the previous plantings and to recommend ways to achieve the planting scheme previously selected. The biologist has submitted a draft report, which is under review by Districts' staff. Christian said that she will bring the biologist's recommendations to the next meeting.

Per Michael Hughes' request at the last meeting, additional shrubs were planted on the Nike cut slopes. Eighty containers were planted on September 11 and 12, which included toyon, elderberry, coyote brush, coastal sage and giant wild rye. The Committee asked if the slopes will continue to be irrigated. Christian responded that the temporary irrigation system on the cut slopes will be removed in November. Permanent irrigation pipes were installed at the Nike site, which will have a source of water once the reclaimed water project is completed.

Christian reported that the combination of a regular watering schedule and a lack of an establish ground cover has subjected the area south of Orange Grove Avenue to weed invasion. Per HHIA's request, the ground cover, myoporum, was installed only in areas north of Orange Grove Avenue. This provided the residents a chance to evaluate the success and appearance of myoporum prior to extending it to the entire area. In six months, the ground cover appeared to be well established. The Districts proposed to extend the ground cover to the area south of Orange Grove Avenue to minimize weed invasion. Yann said that he would like an opportunity to take another look at the area before he provides any comment. Steinmetz asked how often the area is irrigated. Yann said that he noticed that the monkey flower was very dry. Christian said that she would check the irrigation schedule and include the information in the meeting minutes. Chan said that the Districts will mail a letter to HHIA and area residents to solicit their input on this matter. (***Currently, the area is irrigated in the mornings, five times per week. When the weather cools down, watering will be reduced to three times a week. Letter soliciting input on the ground cover issue was mailed on October 2, 2000.***)

Gas System. Trenches are being installed in the Phase 3 area. The second part of the gas trenches installation began in the week of September 5. The project is expected to last three weeks.

Reclaimed Water Project. The contractor has completed a survey of the area and is preparing the foundation for the pump station and the reclaimed water tank. The project is estimated to take one year to complete. The trail will remain open to the public until the contractor begins the installation of the underground reclaimed water pipes. Signs denoting trail closure will be posted two weeks prior to actual closure. The trail will be reopened every day after 5:00 p.m. and at all times during the weekend. Hughes inquired about the size of the reclaimed water tank. Christian said the tank will hold 800,000 gallons of water. Yann asked for the location of the tank, which Christian pointed out on the aerial photo.

Lower Western Cut (at the location of the proposed Puente Hills MRF): The project will be advertised for bids at the end of September. Construction will begin in December or early January. The project is expected to last nine months. Chan added that there will be impacts to the trail during the excavation. The Districts have worked with the Department of Parks and Recreation, Rio Hondo College, and Bud Welch to realign the trail to provide a continuous trail for equestrians and hikers. Signs will be posted to notify trail users of the detour. Yann asked for the quantity of soil to be excavated. Christian said that the excavation will involve the removal of two million cubic yards of soil and placement of 1.2 million cubic yards of engineered fill for slope stability. Yann requested a copy of the final grading plan and a copy of the most recent topographic map of the site. (***The items were mailed on September 18, 2000.***)

Importation of Soil: Four purchase orders were issued to import approximately 200,000 tons of cover soil to the site. Hauling began in mid-July. Christian stated that the site will continue to issue purchase orders to import cover soil as new sources of materials become available. Yann asked if the Districts are paying for this material. Don Nellor confirmed that due to the projected cover soil shortfall, the Districts are subsidizing the transportation cost of bringing the soil to the site. Isaacson asked if there is a restraint to the hours of importation. Christian said the delivery of soils is only accepted between 9:00 a.m. and 3:00 p.m.

B. Green Waste/Odor Update

Christian reported that the Districts received one odor complaint in the month of July and four odor complaints in the month of August. Districts' technicians responded to all of the complaints and were able to confirm one odor occurrence. Welch asked if the number of complaints received this year has increased when compared to the previous years. Christian said she did not have the information readily available but will bring the information to the next meeting. Hughes asked how far an odor will typically travel. Nellor said that odors are usually very localized. When asked if complaints had historically been received only from the east once operations moved there, Chan responded that the site had occasionally received odor complaints when disposal operations were in the Main Canyon.

Orange County landfills discontinued the acceptance of green waste from non-Orange County jurisdictions on September 11. Some of the green waste from the Puente Hills Landfill is now taken to Chiquita Canyon Landfill in Valencia and other sources in Fontana to be used as alternative daily cover and other beneficial uses.

C. Waste-by-Rail

Nellor reported that the Districts' Board of Directors approved two agreements, for $41 million each, to purchase the Mesquite Landfill and the Eagle Mountain Landfill. Mesquite Landfill is located in Imperial County and Eagle Mountain is located in Riverside County. Both sites are approximately 200 miles from the Puente Hills Material Recovery Facility (MRF). Nellor explained that the agreements will undergo a 90-day due diligence period, in which all paper work will be reviewed to ensure that there are no unexpected problems.

Welch asked what motivated the developers to sell the sites at a time when the sites are finally permitted. Nellor responded that although the sites are fully permitted, the developers had difficulty securing full service contracts. At a time when more cost effective alternatives are available, such as locally available capacity, jurisdictions could not justify the additional cost of waste-by-rail. With waste-by-rail being some years away from implementation, the developers opted to sell the sites for an immediate return.

When the Districts began evaluating the need for an intermodal facility and a waste-by-rail system in 1989, the need for such a system was projected to be as early as 1992. Due to several factors such as the recession in the early 1990s, the implementation of recycling programs through AB 939, and the bankruptcy of Orange County, the need for waste-by-rail corresponding to a projected shortfall in capacity has been delayed. Based on the current amount of waste requiring disposal (36,000 tons per day), the level of diversion (40% to 45% countywide), and the amount of available disposal capacity in the County, the new estimate for the need to implement waste-by-rail is 2006, at the earliest.

The Districts will utilize the Puente Hills MRF to transition to waste-by-rail. The MRF is designed to process 4,000 tons per day, which is equivalent to one rail container. The MRF would target loads from the commercial sector. Dennis Hostetler asked if special technology or container is needed to load the waste into containers. Nellor said that in order to place 4,000 tons of waste into containers, the waste must be compacted.

The initial cost estimate of utilizing a remote site is $55 per ton. This fee includes the cost of processing the waste at an MRF, recovering the recyclables, containerizing the waste, loading the containers onto rail cars, transporting the containers to the remote site, unloading the containers and disposing the waste at the remote site.

Yann stated that a 15% recovery at the MRF would represent a very small diversion in comparison the amount of wastes accepted at the landfill. Nellor said that 15% is the minimum amount of diversion expected and that hopefully, higher rates would be achieved. The landfill recovers an additional 2,000 tons of green waste, soil and other materials for reuse that is not accounted in the daily refuse tonnage.

Nellor explained that once the MRF is operational, the landfill and the MRF together would accept up to 16,000 tons of refuse per day. By accepting 12,000 tons at $18.05 per ton at the landfill, and 4,000 tons at $55.00 per ton at the MRF, the rates can be levelized to 16,000 tons for the entire facility at $27.30 per ton. Nellor presented a graph which demonstrated how rate levelization would partly fund a transition to waste-by-rail and lessen the economic impacts. This will allow waste-by-rail to be implemented earlier than would otherwise be economically viable. He emphasized that the waste-by-rail system must operate in an open market system and remain price competitive. He cited a case where San Diego County raised the tipping fee to $60 per ton to finance the construction of a state-of-the-art solid waste facility. The increased fee prompted the haulers to use cheaper facilities outside the county. With the decrease in tonnage and revenue, the County was unable to maintain the facility and ended up defaulting on the bonds used to finance the facility. The County sold its solid waste system to a private entity to pay off the bond. The Districts must ensure that this scenario would not happen in Los Angeles County.

Yann asked if the MRF would be operational when the Districts transition to waste-by-rail in 2006. Nellor said that the MRF would be operational in 2002. The Committee asked how much would disposal cost increase for the residential sector if the tipping fee is raised to $55 per ton. Nellor said that previously studies estimated a monthly increase of $5 to $6 per month per household. Steinmetz asked why would a ten-year permit be necessary if waste-by-rail would be implemented in 2006. Steinmetz felt that a $5 to $6 increase is not significant and that the impacts to the Hacienda Heights community would outweigh the benefits of continued landfill operations. Nellor said that the monthly increase would impact the entire Los Angeles County. He noted that the Hacienda Heights community would benefit from the land acquisition, funded by the Puente Hills Landfill Native Habitat Authority, for permanent open space preservation.

Alfred Garcia asked which agency has the authority to approve the repermitting of the landfill. Nellor said that the Districts' Board of Directors would vote on the approval of the EIR and the Los Angeles County Board of Supervisors would vote on granting an extension to the Conditional Use Permit.

Nellor described the physical conditions of the Mesquite Landfill and the Eagle Mountain Landfill and discussed the terms of the purchase agreements. He added that both sites face litigation to stop the projects and that the purchases are contingent upon success in clearing the legal challenges.

Garcia asked if there is a priority to develop one site over the other. Nellor said that the choice of a site for development would be determined by the outcome of a detailed economic analysis. Yann requested a copy of the text slides from Nellor's waste-by-rail presentation. (***The presentation slides were mailed along with the excavation plan and the topographic map on September 18, 2000.***)

E. Miscellaneous

Chan informed the Committee that on September 7, the Districts received a call from a resident on Autumn Moon Drive stating that he was able to see refuse disposal operations from the neighborhood. She contacted Operations immediately and drove to the neighborhood to assess the situation. Upon arrival, she confirmed that disposal operations were visible and spoke to area residents about the incident. While operating behind the visual berm, the operators miscalculated the length of the visual berm and compacted refuse beyond the end of the visual berm. The refuse was covered within two hours. Operators attended a refresher training on operating requirements to ensure the incident will not recur.

Yann asked for an update on the Districts' Alternative Daily Cover (ADC) Program. Chan said that it would be included as an agenda item for the next meeting. In addition to the ADC Program and the standing items, three areas of the draft EIR (geology/seismic, water quality, and miscellaneous) will be discussed at the next meeting. The meeting is scheduled for October 10, 2000.

Summary of Puente Hills Landfill
Citizens Advisory Committee Meeting

October 10, 2000

Members in Attendance:	Robert Frame (WMA), Alfred Garcia (WMA), Dennis Hostetler (HHIA), Priscilla Lohff (WMA), Donna Steinmetz (HHIA), Ruth Wash (WMA), Bud Welch (PHCC), Jeff Yann (HHIA)
Others:	Michael Hughes (President, HHIA)
Staff in Attendance:	Grace Chan, Connie Christian, Ajay Malik

Note: Text material written in ***bold italics*** indicates follow-up information.

I. Approval of Meeting Summary

Connie Christian informed the Committee that the September 12, 2000 meeting was not recorded due to technical difficulties with the recording device. Christian suggested deferring the approval of the meeting minutes to the next meeting to provide Committee members additional time for review. The Committee concurred. Any additions or corrections to the September 12, 2000 and October 10, 2000 meeting minutes will be taken at the November 14, 2000 meeting. Grace Chan added that the meeting minutes will be the only official documentation of the September 12, 2000 scoping meeting. She encouraged Committee members to review their notes to ensure the Committee's input on the EIR is characterized correctly in the meeting minutes. Donna Steinmetz said that she would like to clarify a sentence under Air Quality section in the September 12, 2000 meeting minutes. Bud Welch suggested that all changes be taken at the next meeting.

II. Staff Report

A. Sequencing and Projects

Christian reviewed the ongoing and upcoming projects at the site.

Gas System. Installation of gas collection trenches in the eastern canyons was completed on September 30, 2000.

Drainage Facilities. The installation of drainage structures in Canyon 4 is continuing. The energy dissipator has been constructed and connected to the down drains. The area where the water tanks are stored has been paved. The project is scheduled for completion in late December or early January.

Reclaimed Water Project. Although the trail closure sign has been posted, construction along the trail is not anticipated until the end of October or early November. Trail users may access the trail with the understanding that they may be turned back if the work has commenced. Jeff Yann asked if the trail will be opened in the weekends. Christian said the trail will be opened every day after 5:00 p.m. and at all times during the weekend. The foundation of the reclaimed water tank will be poured during the week of October 9-13. Michael Hughes inquired about the quantity of concrete needed for the foundation of the water tank. Christian said that she will include the information in the meeting minutes. (***150 to 160 cubic yards of concrete was poured for the foundation of the reclaimed water tank.***)

Lower Western Cut (at the location of the proposed Puente Hills MRF): The project will be advertised for bids on Thursday, October 12. Construction is expected to begin in mid January. The Committee asked for the duration of the project. Christian said the excavation and the placement of the engineered fill will take approximately nine months to complete.

B. Green Waste/Odor Update

Christian reported that the Districts received five odor complaints in the month of September. Districts' technicians responded to all of the complaints and confirmed four odor occurrences. Some of the complaints appeared to be related to the gas collection trench construction project. Yann asked if rubbish and landfill gas odors are associated with trenching. Christian confirmed that because the gas collection pipes are installed in refuse to be most effective, while trenching, landfill gas and rubbish odors are present. In response to Welch's inquiry at the last meeting, Christian stated that the number of complaints received by the Districts has remained relatively the same over the past three years, with an overall average of about two to three each month.

C. Solicitation of Input for the Draft EIR for Continued Operation of the Puente Hills Landfill

Ajay Malik explained that the similarity and interrelationships of the geology and hydrogeology sections prompted the current approach to combine these sections in the draft EIR being prepared while water quality will be addressed in a separate section. Geology and hydrogeology were presented in separate sections in the previous EIR.

Geology and Hydrogeology

The geology section will address topography, the geologic setting, the stratigraphic setting, and the seismicity at the site. Proposed excavation will also be discussed. Yann asked if new studies on the formations near the landfill will be included. Chan said findings from the field studies during excavations will be incorporated into the EIR. The hydrogeology section will provide background on the regional groundwater system and will discuss the site's subsurface barriers and liquids extraction system. The seismicity section will address probable earthquakes and seismic hazards such as liquefaction, volcanic activity, and tsunamis. Yann asked if the presence of blind thrust faults would be included in the discussion. Chan said that any information gathered since the last EIR, such as new information on known faults in the Puente Hills area, will be included.

Water Quality

The water quality section will address groundwater and surface water issues. The results of the Corrective Action Program will be discussed. Initial water quality data show a stable or decreasing trend of volatile organics compounds down gradient of Barrier 1 and Barrier 3. Yann said that a few people, including the State Water Resources Control Board, raised concerns in respect to the lack of background groundwater quality data. He asked if further testing or data on background groundwater quality have been developed. Yann inquired about any new tests being conducted. Chan said that she is not aware of any new tests; however, if there are new studies, they will be summarized in the EIR. Hughes asked if any new wells were drilled to sample water quality. Chan said that the areas of concern were addressed by the Corrective Action Program and no additional wells have been proposed at this time.

The water quality chapter will also discuss the existing groundwater protection system which includes the liner system, the monitoring wells and the liquids collection and recovery system. Hughes asked if the site has considered testing the integrity of the liner system (LCRS). Chan said that there are laboratory tests where liner materials are tested. However, she is not aware of "in place" tests. She stated that the points of LCRS collection, which are monitored, indicate the system's effectiveness. Yann asked if the liquid below the liner is collected separately from the liner system. Chan confirmed.

Others

Chan asked if there are other issues that the Committee would like to discuss concerning the draft EIR. Alfred Garcia asked when the computer simulations of the site will be available for review. Chan said the computer simulation is part of the draft EIR preparation and will be available when the draft EIR is released. Welch and Yann asked for a detailed discussion of water quality in the EIR. Dennis Hostetler asked if the geological impacts of refuse settlement will be discussed. Chan said that the stability of fill areas under stable and seismic conditions will be analyzed.

Yann asked if this meeting is the final scoping meeting for the EIR. Chan said that this meeting is the last formal scoping meeting but the Committee may provide input at a later date. She added that it will become increasingly more difficult to incorporate new input as time passes. Yann asked what the onsite and offsite alternatives to the proposed project are. Chan said that the specific input from the Committee regarding onsite alternatives included a smaller project and a further setback from the east. Yann suggested that a further setback from both communities which would be most affected, specifically, a setback from the east and a setback from the north, be evaluated. He added that HHIA recommended operating a municipal solid waste composting facility on the top deck as an alternative to the proposed project.

D. Alternative Daily Cover Program

Chan provided the Committee with an overview of the Districts' alternative daily cover (ADC) program. Historically, the landfills used soil as daily cover, which consumed landfill capacity and onsite soil supply. In 1987, the Districts, in conjunction with the County of Los Angeles Department of Public Works, released a report that discussed landfill capacity within the County. The report concluded that there was a projected shortfall in landfill capacity and that green waste constituted 12 percent by weight of the total waste disposed in Los Angeles County landfills. Subsequently, the Districts completed a demonstration program at Scholl Canyon Landfill that showed green waste as a viable ADC.

Green waste and wood waste were the primary targets because the use of waste-derived products would remove waste out of the disposal volume and provide cities with a recycling market and diversion credit for these wastes. Haulers pay a discounted rate for segregated, clean loads of green waste. The green waste is fed into the grinder and the shredded material is mixed with soil for odor control. Approximately twelve inches of the mixture is then placed on the slopes by scrapers. When the green waste program began in 1989, there were few separate residential green waste collection programs. Today, approximately 60 cities and unincorporated areas provide separate residential green waste collection. Currently, the Districts are not using wood waste as ADC; however, the material has been shown to be an effective ADC. The appearance of shredded wood waste resembles shredded green waste.

In addition to waste derived ADCs, the Districts evaluated the use of foam, fibrous slurries, reusable tarp and thermodegradable film. The foam machine is track mounted and compacts wastes as foam is sprayed on the slopes. Generally, four inches of foam are applied to the slopes. The use of foam consumes less volume than waste derived ADC. Although this material meets all ADC performance criteria defined in state and federal regulations, it costs slightly more than thermodegradable film, cannot be used under certain weather condition, and can only be exposed for a short period of time.

Slurries are sprayed on ADC made with recycled fibrous material. This material also meets performance criteria but it has shown to be not as aesthetically pleasing as other ADCs.

Reusable tarp is suitable for smaller facilities such as the Savage Canyon Landfill in the City of Whittier. The tarp is placed over refuse at the end of the day and removed in the morning prior to the start of filling operation. Due to potential odors associated with the removal of the tarp, the Districts opted not to pursue the use of this material.

Aside from green waste, thermodegradable film is the preferred ADC at the landfill. Film consumes minimal landfill volume and is very cost effective. As film is laid on the slope, soil ballasts are dropped from cylindrical drums to hold the film in place. The system has been modified and undergone tremendous improvement since its commencement. The film machine now holds a bigger roll of film that provides more coverage and new drums that deploy soil ballasts more efficiently. In summary, the Districts utilize green waste, foam and film as ADC at the landfills. The ADC program will continue to evaluate any new products that are available and will monitor the success of the products that the Districts are currently using.

Alfred Garcia asked if the Districts have considered developing the desert landfills sooner and bring soil from the desert landfills for use at the Puente Hills Landfill. Chan responded that Districts have discussed the concept of bringing soil from the desert landfills and will evaluate the prospect further after the review of the purchase agreements and permits for the new landfills is completed.

Hughes inquired about the projected shortfall of soil at the site based on the existing supply and consumption. Chan said that the ADC program reduced soil usage for cover by nearly a third. However, the quantity of free soil accepted under this permit has been much less than the anticipated amount. Consequently, the site has been actively seeking contracts to bring soil to the site. The projected soil shortfall is largely dependent on the quantity of soil that will be brought to the site via contracts. Chan added that the hours (9:00 a.m. to 3:00 p.m.) for soil importation limit the site's ability to accept soil. Haulers prefer to start delivering soil in the early morning and work into the evening. Welch asked why the hours of soil importation are limited. Chan explained that during the previous EIR process, AQMD determined that restricting the hours would curtail traffic during peak hours. Ruth Wash asked if the restriction can be changed. Chan said that it will be evaluated in the EIR.

Yann asked if there is any odor associated with the use of film as ADC. Chan responded that film has proven to be an effective suppressant of odors. She stated that odors associated with using green waste as ADC are usually due to the green waste itself and not its ability to cover and suppress refuse odors. Steinmetz commented that foam and film are less likely to generate dust when compared to green waste and soil.

E. Update on Biological Resource Activities

Canyon 4 front face: Christian reported that the Districts are currently reviewing the biologist's recommendations for Canyon 4 front face vegetation. The Districts will likely issue a formal maintenance contract for the management of landscaping on the Canyon 4 front face. The contractor will have expertise in handling native plants and will monitor the growth of the plants. The biologist's specific recommendations for vegetation will be discussed at the next meeting.

Eucalyptus trees: Approximately 2,500 eucalyptus trees have been removed from the site. An onsite grounds maintenance crew will continue to monitor the health of the remaining 10,000 eucalyptus trees. Further removal will be done as necessary. Some of the eucalyptus trees that were removed have reached or were near the end of their life. Hughes asked for a list of replacement plants. Christian said that she will include the list in the meeting minutes. (***The plant palate for the replacement of eucalyptus trees is attached.***)

Riparian Mitigation: The riparian mitigation project completed its third year of the five-year maintenance period in July. The project has exceeded all of the five-year success standards on establishment, height, coverage and diversity, with the exception of a 90 percent native cover requirement in the coastal sage community. Coastal sage has achieved a total cover of 97.5 percent and a 77.5 percent native cover. Although irrigation was discontinued in the summer, the areas are being monitored and the maintenance contractor will provide supplemental watering as necessary.

Eastern Landscaping: The Districts received HHIA's letter that provided input on the landscaping practices along the eastern boundary. HHIA's recommendations were forwarded to the landscape contractor for consideration and/or incorporation. Currently, the plants are watered three times per week. The watering cycle begins at 7:30 a.m. and lasts approximately three hours.

A letter was mailed to homeowners along the property boundary seeking their input on extending ground cover to the area south of Orange Grove Avenue. Yann said that he observed the same amount of weeds in both areas north and south of Orange Grove Avenue. Christian responded that as the ground cover establishes itself, it will reduce bare surface area that prompts the growth of weeds.

Yann expressed concern about the health of the monkey flower. Christian said that the Districts' environmental planner visited the area shortly after receipt of the HHIA letter. The environmental planner confirmed that some of the monkey flowers appeared to be stressed; however, he also observed new growth. The Districts will evaluate the need for replacement plants after the completion of the first year.

Hughes asked if irrigation on the Nike cut slopes has been discontinued. Christian responded that the irrigation system is online and will not be removed until November. Hughes indicated that the slopes appeared to be very dry. Christian said she will check with site personnel to ensure the system is operational. (***The Nike cut slopes are irrigated five times a week in a 10-15 minute watering cycle. The irrigation is turned on manually; hence, the time of irrigation varies.***)

Yann asked for a progress update on the oak tree revegetation program. Chan said that she will ask the Districts' environmental planner to attend a future meeting to discuss biological resources in more detail.

F. Miscellaneous

Christian stated that the plywood placed in the doorway of the guard shack to prevent ponding has been removed. The sprinkler heads that spray water into the guard shack were redirected. A work order to replace the 3/4-inch thick plexiglass with a 1-inch thick glass has been submitted. The glass will be raised above the grade of the concrete slab. Each side of the glass will be grouted to drain water out of the guard shack. Yann asked if the guard shack has been vandalized since its relocation. Christian said no.

In addition the standing items, biological resources will be discussed at the next meeting. The meeting is scheduled for November 14, 2000.

Summary of Puente Hills Landfill
Citizens Advisory Committee Meeting

November 14, 2000

Members in Attendance:	Robert Frame (WMA), John Shubin (HHIA), Donna Steinmetz (HHIA), Ruth Wash (WMA), Bud Welch (PHCC), Jeff Yann (HHIA)
Others:	Michael Hughes (President, HHIA)
Staff in Attendance:	Grace Chan, Connie Christian, Ajay Malik, Nick Morell

Note: Text material written in ***bold italics*** indicates follow-up information.

I. Approval of Meeting Summary

The Committee approved the Summary of the September 12, 2000 meeting with the following corrections:

On Page 1, Item II. D. Air Quality, the third sentence should read "Jeff Yann noted that offshore wind pattern typically starts at 2:00 p.m. and remains the same until about 7:00 p.m."

On Page 2, Item II. D. Cultural Resources, Yann asked Districts' staff to clarify the phrase "the majority of excavation would come from the north facing Nike slopes." Chan responded that although the slopes were previously disturbed, additional excavation is needed to prepare the slope for liner installation.

On page 2, Item II. D. Air Quality, the following sentences should be added "Steinmetz asked if SCAQMD has updated the dust testing procedures with newer, available methods. Smith responded that the dust testing protocol remained unchanged."

No changes or additions were made to the October 10, 2000 meeting summary.

II. Staff Report

A. Sequencing and Projects

Connie Christian reviewed the ongoing and upcoming projects at the site.

Reclaimed Water Project. The construction of the reclaimed water tank will be completed in late November. The contractor will lay pipelines in mid-December or early January, at which point, the trail will be closed from 7:00 a.m. to 5:00 p.m., Monday through Friday. The trail will reopen after 5:00 p.m. and remain open at all times during the weekend. Bud Welch asked if there will be further disruption on the Nike site from excavation. Chan responded that trenching operation during pipeline installation will disturb portions of the Nike site, mainly in the wood mulch-covered area. Yann asked how far the reclaimed water line will extend. Christian pointed out the alignment of the reclaimed water pipeline on the aerial photo, which extends from the Nike cut slopes to the southeast corner of the operations boundary.

Drainage Facilities. All drainage structures were completed. The contractor is currently reconnecting the irrigation system. A trapezoidal channel along an internal access road and a V-ditch along the 30-foot road in Canyon 4 will be constructed in December.

The minimal increase in the Liquids Collection and Recovery System (LCRS) during the October rains showed that the protective membrane installed on the liner is effectively preventing rainwater from entering the LCRS.

Materials Recovery Facility. The MRF is currently in the design phase.

B. Green Waste/Odor Update

Christian reported that the Districts received one odor complaint in the month of October. A Districts' technician responded to the complaint and traced the source of the odor to a landscaping project in the neighborhood.

The site continues to send a portion of the green waste to offsite facilities for beneficial reuse. Robert Frame asked if green waste tonnage has increased due to seasonal changes. Nick Morell said that green waste tonnage usually increases in the fall but the increase is not significant.

C. Update on Biological Resource Activities

Chan introduced Morell, environmental planner in the Districts' Planning and Permitting Section, who has been involved with most of the biomitigation programs since their inception. Morell began the discussion by circulating photos of each program area.

Nike Site: Coastal live oak, pine and acacia were planted on the Nike site in December 1999. Other than evidence of deer scraping on the oaks, the trees have become well established in their first year. Accelerated growth of the Afghan pine trees is expected in their second season. Welch asked how much a pine tree will grow in one year. Morell said pine trees can tolerate wind, heat and drought and have a tendency to grow five-to-seven feet in one year. Acacia is short-lived but will bloom early. In the long run, the oaks are expected to take over the area. Ground cover has established well in the area.

Yann said many of the plants on the Nike slope appeared to have died. Morell explained that 50 containers were planted initially on the slope and 80 additional containers were planted upon request. A combination of toyon, elderberry, giant wild rye and oak was planted. However, a heat spell following the initial planting resulted in high mortality. Additionally, toyon is often eaten by deer and is very sensitive to weather changes. Currently, the slope consists of some native and some weedy species. Species such as tree tobacco, thistle, and mustard will be left in place initially as these species provide fast growth, as well as needed ground cover for erosion and dust control. As time progresses, native plants will become established and allow a better evaluation of which species will thrive under existing conditions. Planting of prickly pear cactus and black walnuts is planned after the reclaimed water project is completed. Both species have demonstrated their ability to establish quickly in the given environment.

Yann asked if coastal sage species were planted on the slope. Morell responded that coastal sage, buckwheat and laurel sumac were included in the seed mix. Generally, coastal sage species require two or more winter seasons to become established. Yann recommended that the Districts work with Dr. Swift of Whittier College, who has experience in several revegetation projects. Morell said that he has met and spoke with Dr. Swift in the past. Yann asked how many oak trees were planted on the Nike site. Morell said that eight five-gallon oak trees were planted. Generally, the oak trees appear healthy, except for one mortality and minor damage from deer scraping. Yann suggested planting black walnut on the Nike site and on the slope. Welch added that walnut trees appear to thrive on north facing slopes. Yann asked if the tree tobacco will be removed from the Nike slope after the native species become established. Morell said the issue will be evaluated after the completion of the reclaimed water project. He added that in some cases, the native species will fill in an area and will out-compete the tree tobacco.

Eastern Landscaping: The eastern landscaping project was developed to create an interface between the riparian area and the property boundary. The objective is to incorporate low fuel native species with a ground cover. Ground cover was planted only on one side of the project area. Although both areas have experienced weed growth, once the ground cover becomes established, it will have an attractive appearance while reducing dust and providing a fuel break between the riparian area and the property boundary. The Districts propose to fill in the gaps in both areas with additional planting of ground cover.

The plants are watered on even days of the month from 7:30 a.m. to 10:30 a.m., on a fifteen minute cycle. Irrigation will be discontinued when the rainy season begins. The objective is to keep the area moist but not wet. This will provide adequate water for the ground cover without drowning out the native species.

Morell noted that some monkey flowers are thriving while others appear to be stressed. He felt that it is a normal cycle which all plants will go through. He estimated a 90% survival of all containers and 100% survival of the prickly pear cactus. Welch asked if the Districts will plant additional containers. Morell said that the first goal is to establish the ground cover and to reduce irrigation. Reducing irrigation will alleviate the stress on native plants. The area will be managed in the future to keep certain species from getting too big. For example, giant wild sunflowers will exceed 15 feet by 20 feet and will become a fuel problem if not properly managed. Yann asked if the ground cover will out-compete the native species. Morell said that the ground cover will grow around the plants. Steinmetz asked who will maintain the area to prevent the plants from becoming a fire hazard. Chan said that the Sanitation Districts or the Department of Parks and Recreation will always maintain the area. Morell added that the goal is to keep the area moist as a fire break area.

Oak Tree Revegetation: The 1993 oak tree permit requires replacement planting at a three-to-one ratio and a five-year maintenance period. Most of the mortality occurred in the first season. The oak trees have become established and irrigation has been discontinued. Supplemental watering was provided once a month during the past summer. Once established, oak trees will draw moisture from the atmosphere at night and do not require supplemental irrigation. Over irrigation may impede the root mass from extending to surrounding areas, which will result in a dwarf tree.

A recent survey showed that there are 150 to 180 mitigation oak trees above the number of replacement trees required by the permit. All the oak trees appear healthy and minimal mortality is expected.

Yann asked if the oak trees planted on the east-facing ridge between Canyon 4 and Canyon 5 are getting too much sunlight. Morell responded that those oak trees are doing well with supplemental watering.

Oak Woodland Understory: The oak woodland understory project involved a combination of container planting and seed planting underneath the oak trees planted in 1984 and 1985. Those trees are very well established and producing acorns and forming bark.

John Shubin asked about previous concerns with planting oak trees on fill slopes. Chan said that the Districts are willing to plant oak trees on fill slopes; however, the oak tree ordinance would require the Districts to apply for permits whenever maintenance activities, such as repairing gas lines, compacting cover soil, and rehabilitating storm drains, necessitate trimming or removal of an oak tree. Morell said the County of Los Angeles is in the process of revising the oak tree ordinance. The Districts have requested that voluntarily planted oak trees be exempt from the ordinance to allow flexibility for maintenance activities. Yann said he would support an exemption for oak trees planted on fill slopes. Morell suggested that HHIA send a letter of support to Regional Planning Commission for an oak tree ordinance waiver for trees planted on fill slopes.

Riparian Mitigation: The riparian mitigation project has met all of the five-year success standards, with the exception of a 90 percent native cover requirement in the coastal sage community. The requirement will be met by removal of the perennial weedy species known as horehound. Yann asked if there is a designated coastal sage shrub area. The coastal sage shrub area can be found along the channel between Canyon 4 and Canyon 5. Yann said that mule fat appears to have crowded out other species along the riparian habitat. Morell said that mule fat becomes very tall; hence, creating a wall of mule fat that is more visible than other species.

Canyon 4 front face: The landscaping efforts on the Canyon 4 front face began in 1997. The front face will continue to be irrigated based on the water needs of the plant species and the gas monitoring requirements. Bob Perry, a landscape architecture professor at Cal Poly Pomona, has analyzed the plants on the front face to determine successes and failures. Perry provided recommendations and suggestions on improving soil structure and nutrient availability onsite, water management, and selection of seed mix and containers. His recommendations were:

- adding agricultural gypsum to help the plants establish their root system,
- using a combination of compost and mycorrhizal fungi to help plants absorb water and nutrients from the soil; and
- changing the water management regime on the lower slopes to let the slope become more dry.

Two concerns associated with a dry lower slope are the potential fuel problem and the difficulty in managing the gas system with a dry slope. Perry suggested altering the plant palette to include native species that will tolerate summer irrigation, such as yarrow. Shubin asked how the mycorrhizal fungi will be placed into the soil. Morell explained that it will be mixed directly into the hydromulch before it is sprayed onto the slope. Shubin asked if toyon and laurel sumac have a higher fuel potential when they are dehydrated. Morell said that laurel sumac has a high oil content and will burn rapidly if it is dehydrated; however, irrigation on the slope will maintain the moisture of the plants.

Perry suggested the planting of toyon, laurel sumac, black walnut, sugar bush and elderberry and giant wild rye, which are successful with a moderate summer irrigation regime. One, five and fifteen-gallon containers of these shrubs will be planted on the newly developed slope and on the areas disturbed by the drainage project.

The Districts are finalizing a Request for Proposals for the selection of a landscape maintenance contractor for Canyon 4 and Canyon 5 front face. The contractor will be responsible for managing the irrigation regime, establishing the desired native plant palette, performing weed control activities and replanting additional containers if necessary.

Eucalyptus trees: Eucalyptus trees removed from the site are ground up and used as mulch onsite. Welch inquired about the number of mortalities. Morell stated that approximately 3,000 eucalyptus trees were removed. An onsite grounds maintenance crew will continue to monitor the health of the remaining 10,000 potentially affected eucalyptus trees. Further removal will be done as necessary. Michael Hughes asked if the psyllid targets a specific type of eucalyptus trees. Morell responded that the psyllid tends to attack the red gum eucalyptus.

D. Miscellaneous

Chan stated that the commemorative plaque will be relocated to a raised platform or a pedestal adjacent to the guard shack.

The Districts have purchased a new burner for the eastern flare station. The purchase agreement guarantees that the new burner will not experience vibrational effects. The Districts will retain an independent consultant to monitor the testing in addition to the monitoring provided by the manufacturer. The date of the testing has not been scheduled. A notification letter will be mailed to homeowners west of 7th Avenue and to CAC members prior to the testing. Shubin asked if the Caltech research has yielded any findings. Chan said that the Caltech team has conducted very sophisticated laboratory testing; however, the team has not identified a specific problem. ***(Testing of the flare station has not been scheduled as of December 29.)***

Chan reported that a federal court invalidated the appraisal that the land exchange between Bureau of Land Management (BLM) and Mesquite Landfill was based upon. However, the purchase agreements with the desert landfills were written to protect the Districts from any adverse rulings on these pending court challenges. The ruling will not impact the planning process being undertaken. Yann asked if a land exchange occurred. Chan confirmed an exchange of land titles.

Recording of the meetings was done especially for the special EIR meetings. Chan proposed to discontinue the recordings now that the special meetings have concluded. Minutes will continue to be prepared from staff's meeting notes. The Committee consented.

Yann asked if there are projects not discussed in the special EIR meetings that will be included in the EIR. Chan said no other major new projects have been envisioned to be evaluated in the EIR along with the proposed continued operation of the landfill.

During the scoping meeting that addressed closure and post-closure issues, the Committee suggested inviting Jim Park from Department of Parks and Recreation to speak at a CAC meeting. Yann reiterated the interest in discussing the closure plan with Department of Parks and Recreation. Chan said the EIR will include a conceptual plan with a range of options for post-closure use. She added that the EIR is not meant to preclude the Department of Parks and Recreation's master planning process. She will contact Mr. Park and invite him to a future meeting.

The next meeting is scheduled for January 9, 2001.

Summary of Puente Hills Landfill
Citizens Advisory Committee Meeting

January 9, 2001

Members in Attendance:	Alfred Garcia (WMA), Priscilla Lohff (WMA), John Shubin (HHIA), Donna Steinmetz (HHIA), Ruth Wash (WMA), Bud Welch (PHCC)
Others:	Michael Hughes (President, HHIA), Jim Park (Los Angeles County Department of Parks and Recreation)
Staff in Attendance:	Grace Chan, Connie Christian, Ajay Malik

Note: Text material written in ***bold italics*** indicates follow-up information.

I. Approval of Meeting Summary

The Committee approved the summary of the November 14, 2000 meeting.

II. Staff Report

Grace Chan introduced Jim Park as a guest speaker from County of Los Angeles, Department of Parks and Recreation (DPR). At the request of the Committee, Park was invited to the meeting to discuss the planning process that will determine the final use of the Puente Hills Landfill. Chan stated that the EIR will describe conceptual final uses of the site and will allow the public to provide early input. However, the EIR will not supersede DPR's master planning process. Chan requested that agenda item II. C., Miscellaneous, be taken out of order and be the first item for discussion. The Committee concurred.

C. Miscellaneous

Park stated that he has 25 years of planning experience with DPR and has worked closely with the Districts on several occasions. Park stated that DPR's goal is to provide four acres of local park for each 1,000. Currently, there are only 650 acres of park land in unincorporated Los Angeles County; hence, DPR considers the potential recreational use of the landfill a valuable resource.

The master planning process will take approximately twelve months to complete. DPR would commence planning efforts if the landfill is not repermitted. DPR would solicit local community input on the ultimate development of the site, evaluate needs in the area and consider previous suggestions, including the potential development of a nature center, golf course, hiking trail, and preservation of Canyons 6, 7, and 8.

Park explained that it is difficult to develop new parks due to inadequate funds available to operate and maintain them once developed. Golf courses are, at times, preferable because they generate revenue that can be used to operate other parks, soccer fields, and playgrounds. He stated that development of a 18-hole golf course requires approximately 150 acres.

John Shubin asked if the master planning process involves the general public, or input only via community groups. Park explained that DPR would likely create a citizens advisory committee that is representative of the overall community. The DPR would also solicit ongoing input from the Districts. The committee's input will be addressed and incorporated into the master plan. The master plan will then be released to the general public for review before DPR submits its final recommendations to the County of Los Angeles Board of Supervisors for approval. Chan added that the Puente Hills Landfill Conditional Use Permit requires the Districts to fund the preparation of the master plan, the development for final use, and operating costs.

Michael Hughes commented that the plan for a golf course at Spadra Landfill was dropped due to public opposition. Park responded that siting a golf course depends on regional needs, the availability of resources and the feasibility. In the case of Spadra Landfill, the students and faculty of the landowner, Cal Poly Pomona, opposed development of a golf course. Donna Steinmetz asked if the Districts will pay for the development of the golf course if DPR recommended it in the master plan. Chan said the Districts would be obligated, under the current permit, to fund the County costs for development. Alfred Garcia asked if funds have been set aside for development. Chan confirmed that funds were set aside to prepare the master plan. The Districts will set up an account for development of the site.

Garcia wanted an update of the repermitting process. Chan said the draft EIR will be released in spring for public review. The report will include two conceptual final uses, encompassing the spectrum from passive recreation to active recreation. The conceptual plan will include an access road to Rose Hills property on the west side. Rose Hills requested an access road to alleviate traffic on Workman Mill Road if the landfill is repermitted. The road would only be utilized after closure of the landfill and would have to be compatible with final use and environmental monitoring and maintenance. Shubin asked if the access road will be routed through Main Canyon. Chan confirmed and pointed out the potential alignment of the access road on the aerial photo. Vehicles will access the road via the existing landfill entrance on Crossroads Parkway. Hughes noted that the road will not have any impacts to the Hacienda Heights community if access is provided through the north side and the road is aligned through Main Canyon.

Shubin inquired about the size of the development area. Park estimated that 400 acres will be available for development. Steinmetz and Hughes asked if the slope will remain as open space. Park responded that the slope will not be disturbed, except for maintenance purposes by the Districts. Development will mainly be on the flat, top deck areas, which Chan pointed out on the aerial photo. Shubin said that as the landfill slope is built, it becomes the final configuration of the site. He emphasized the importance of early planning and the need to enhance topography and landscaping as the landfill develops. He stated that the slopes should be built with a specific final use in mind. Chan responded that the primary purpose of the site is landfill operations. The Districts must work within the constraints, including regulatory requirements and stability issues, while the slope is built.

Garcia asked if DPR will begin to develop the site after the last load of refuse is delivered. Park estimated that development could begin approximately two years after closure. Chan said that the Districts will notify the California Integrated Waste Management Board when the site receives its last load of refuse. The site would then begin closure activities, such as placement of the final cover, construction of roads and drainage structures, installation of landscaping, irrigation, and environmental control systems. The closure activities would take approximately eighteen months to complete. The Districts have established a fund to conduct closure activities and will continue to maintain the environmental control systems after closure. Bud Welch asked if the Puente Hills Landfill will undergo a similar closure process as Palos Verdes Landfill. Park said that circumstances are slightly different in that Palos Verdes Landfill was a Class I landfill.

Hughes indicated that the site would connect the wildlife movement corridor with the San Gabriel River and requested that the site remains a fenceless zone. Welch concurred. Park was confident that good planning would result in compatible active and passive uses, while adding resources to DPR. He believed the site is large enough to encompass a range of recreational activities. Chan added that the site is 1,365 acres; approximately 700 acres will be filled with 400 acres of top deck. Hughes asked how much money is needed to develop a park. Park said that development costs vary on the uses. Shubin asked if trails would be the least costly recreational use to maintain. Park said that open space and other passive recreation are less costly to maintain than a local park with playgrounds and soccer fields. Hughes questioned whether anyone would drive ½ mile to play soccer at a regional facility while Lohff indicated that she thought people would utilize a regional facility. Park pointed out that the master planning process will allow for this type of discussion.

Steinmetz asked if the Committee will play an important role in determining the final use of the site. Chan said that although DPR would make the final decision, community concerns would influence the decision making process. Steinmetz was concerned that DPR will remove trees and shrubs planted by the Districts. Chan said that the current planting program is compatible with recreational use and it is not likely that they will be disturbed. Steinmetz asked if the road on Orange Grove will be used for access. Hughes responded that HHIA would oppose any access to the site through the Hacienda Heights community. Shubin said the site has adequate area to become a multifunction regional park; however, he is concerned about a lighted golf course and its visibility to the Hacienda Heights residents.

A. Sequencing and Projects

Connie Christian reviewed the ongoing and upcoming projects at the site.

Drainage Facilities. All concrete work was completed. The contractor will pave an internal access road during the week of January 15-19. The project will be completed by the end of January.

Reclaimed Water Project. The construction of the reclaimed water tank is complete. The contractor is currently painting the tank, which will take 30 days to complete. The Committee asked what the color of the tank will be. Christian responded that the tank will be tan (desert sands). The tank will be filled with reclaimed water in February and plumbing work will begin in March. The contractor will begin to lay pipelines during the week of January 15-19. In order to maintain a continuous trail on both sides of the road, a 200-foot long retaining wall has been proposed. The Committee inquired the location of the retaining wall, which Christian pointed out on the aerial photo. The retaining wall will be made of treated lumber with concrete footings.

Canyon 4 Tree Planting and Irrigation. A contract was approved to plant trees in the areas disturbed by the Canyon 4 drainage project. Trees to be planted include toyon, laurel sumac, black walnut, sugar bush, elderberry, and giant wild rye. Shubin asked where the trees will be planted. Christian responded that trees will be planted on the entire Canyon 4 front face, except the two upper benches. A separate project for installing an irrigation system on the upper benches is currently advertised for bids. The bids are due on January 30. Trees will be planted on the upper benches once an irrigation system is installed. Shubin inquired about the quantity of each species to be planted. Christian said that she will include this information in the meeting summary. (***The project specifies two phases of container planting for a total of 40 toyons, 40 black walnut, 120 giant wild rye, 50 laurel sumac, 50 sugar bush, and 70 mexican elderberry. Actual quantity may vary based on the topography and footprint of the Canyon 4 front face.***)

Gas Collection System. The next gas trench installation project is in the design phase. Construction will begin in spring 2001.

Eastern Flare Station. The new burner for the eastern flare station was delivered to the site on January 4. The change out will take three weeks to complete, subject to weather delays. Testing may occur in late January or early February. A notification letter will be mailed to homeowners west of 7th Avenue and to CAC members prior to testing. (***A notification letter was mailed on January 23, 2001, but testing has not yet occurred.***)

B. Green Waste/Odor Update

Welch asked for a status update on the Christmas Tree Program. Christian responded that since the Christmas Tree Program began, the site received an average of 700 to 800 tons of green waste per day. Of which, approximately 130 tons per day are Christmas trees. Hughes asked if Christmas tree tonnages are counted as green waste. Chan said that although Christmas tree loads are accounted for separately, the tonnages are counted as green waste. Welch asked if the Christmas tree tonnage has increased. Chan said the tonnage peaked three years ago and has leveled off.

Christian reported that the Districts received one odor complaint in November and no complaints in December. A Districts' technician responded to the complaint and confirmed a green waste odor. Lohff commented that the Christmas tree scent was delightful. Steinmetz indicated that she had noticed faint Christmas tree odors this season; however, the odor has not been as strong as previous years. Hughes concurred that the site appeared to be doing a good job in odor control.

C. Miscellaneous

Chan stated that the draft EIR will be released for public review and comment in the spring. The release date may be shortly after the next CAC meeting. If so, she said more specific information will be given to the Committee at the March meeting.

Shubin, Hughes, and Steinmetz all experienced an increase in dust accumulation in the past two months which they attributed to the strawberry farming activities on the Rose Hills property. The Committee felt that the dust control measures have been inadequate. Hughes requested that the Districts discuss this issue with Rose Hills. The Committee stated that it would be in the Districts' interest to talk with Rose Hills since the landfill activities had not produced significant dust lately and it was possible that the landfill could be blamed for the farming activities. Welch recommended that HHIA send a letter to Rose Hills.

Welch asked the Committee for discussion items at the next meeting. Shubin requested an update on the Eagle Mountain Landfill lawsuit and other developments and progress toward waste-by-rail implementation. Welch suggested an update on the Canyon 4 tree planting project. The next meeting is scheduled for March 13, 2001.

Summary of Puente Hills Landfill
Citizens Advisory Committee Meeting

March 13, 2001

Members in Attendance: Robert Frame (WMA), Alfred Garcia (WMA), Dennis Hostetler (HHIA), Bob Isaacson (HHIA), John Shubin (HHIA), Jeff Yann (HHIA)

Others: Michael Hughes (President, HHIA)

Staff in Attendance: Grace Chan, Connie Christian, Ajay Malik

Note: Text material written in ***bold italics*** indicates follow-up information.

I. Approval of Meeting Summary

The Committee approved the Summary of the January 9, 2001 meeting with the following corrections:

On page 3, Item II. A. Sequencing and Projects, Canyon 4 Tree Planting and Irrigation, the follow-up information should read "The project specifies two phases of container planting. Phase 1 consists of 40 toyons, 40 black walnuts, 120 giant wild rye, 50 laurel sumacs, 50 sugar bush, and 70 mexican elderberry. Phase 2 consists of 60 toyons, 60 black walnuts, 180 giant wild rye, 100 laurel sumacs, 150 sugar bush, and 20 mexican elderberry. Actual quantity may vary based on the topography and footprint of the Canyon 4 front face."

Jeff Yann asked for clarification on the retaining wall location as described on page 3, under Item II. A. Sequencing and Projects, Reclaimed Water Project. Connie Christian said that the retaining wall will be located northwest of the communication towers (toward Rio Hondo College) and pointed it out on the aerial photo.

Yann expressed disappointment over the fact that the meeting's agenda had not specifically stated that Jim Park from County of Los Angeles, Department of Parks and Recreation would attend the last meeting. He said that if the agenda had listed Park as a guest speaker, he would have attended, and he felt he missed the opportunity accordingly. He requested that future guest speakers be listed in the meeting agenda to assist Committee members in determining the importance of the upcoming meeting. Christian explained that Park's attendance was confirmed after the agenda was mailed; however, she will list guest speakers as tentatively scheduled in future agendas.

II. Staff Report

A. Sequencing and Projects

Christian reviewed the ongoing and upcoming projects at the site.

Drainage Facilities. The project is near completion. The remaining work includes pressure-washing the energy dissipator to facilitate installation of armor coating on the concrete and installing a chain link fence around it. Christian added that the fence will not be visible to the Hacienda Heights residents.

Reclaimed Water Project. The project is about two months behind schedule because of the recent rain storms. The estimated completion date is July 2001. The contractor coated the tank with a primer and will apply two additional coatings by the end of March. A reclaimed water pipeline was installed through the Nike Site, which disrupted a portion of the landscaping in the area. This disruption was anticipated and was discussed previously with the Committee. The disruption was limited to the pipeline alignment as specified by Districts' design staff and as presented at a previous CAC meeting. Districts' staff will reseed the area and repair the irrigation system once the contractor has completed all the necessary work in the area.

Christian stated that the alignment of the pipe will extend southward along the Rose Hills ridgeline and eastward along the 60-foot road. John Shubin inquired the size of the pipe and the necessity for the large conveyance. Christian said that the pipe is 18-inch in diameter and will supply irrigation water to the entire Eastern Canyons.

A foundation for the Nike Site commemorative plaque pedestal was constructed. Districts' staff will install the plaque when the cobblestones are delivered.

Canyon 4 Tree Planting and Irrigation. The contractor began planting the containers on March 13. Phase 1 will be completed by March 17. Phase 2 will begin in Fall 2001 following the completion of the Canyon 4 irrigation project, currently scheduled to begin in April. The irrigation project is also divided into two phases. Phase 1 will begin in April and Phase 2 will begin in October. Both phases are expected to last approximately two months.

Rose Hills Ridgeline Irrigation. The Districts will install an irrigation system consisting mainly of pop-up sprinklers along the Rose Hills ridgeline. Currently, the trees along the ridgeline are manually irrigated. Shubin stated that drip irrigation would be more appropriate for watering trees. Christian responded that the project also includes hydroseeding both sides of the trail, which would require a sprinkler system. The project will begin after the reclaimed water pipeline is installed in the summer of 2001.

Gas Collection System. The next gas trench installation project will begin in April and will take approximately two months to complete. Christian pointed out the project area on the aerial photo.

In a continuing effort to upgrade the existing gas collection system, the Districts will construct new gas collection wells in the Main Canyon and Canyon 9. The new wells will have steel casings rather than HDPE or PVC casings. Steel casings have shown to be more durable and less susceptible to damage from high temperature and settlement. These wells will also have pumping capability in the event that liquids are encountered. Occasionally, water accumulates in gas wells due to deteriorating well seals, broken irrigation lines, and/or other potential sources. Bob Isaacson asked if the quantity of gas collected is comparable to the initial gas generation projection. Chan said that gas projection is based on a combination of microbial factors and historical data. Based on these assumptions, she felt that the projection is close to the actual quantity being collected. Isaacson asked if the characteristics of the gas have changed. Chan said that she will include quantity of gas flow and characteristics as a topic of discussion for the next meeting.

Yann inquired if the need for new gas wells in the project area is a result of a decrease in gas flow to the gas collection system. Chan explained that construction and maintenance of gas collection wells are a part of the site's ongoing gas collection system. During continuous monitoring, the site personnel are able to identify areas requiring upgrade or improvement.

The site has been monitoring surface emissions of landfill gas since the implementation of South Coast Air Quality Management District (SCAQMD) Rule 1150.1 in 1989. The program requires monthly sampling of ambient air, integrated surface gas, monitoring probes around the perimeter of the landfill, and landfill gas. The integrated surface gas emissions are measured by taking a continuous sample while a technician walks a specific route holding air sampling equipment three inches above the ground surface. In 1996, the Environmental Protection Agency (EPA) issued new regulations that established federal surface emission monitoring. In March 2000, SCAQMD revised Rule 1150.1 to incorporate the EPA regulations, however, the SCAQMD regulations are more stringent. The revised rule requires slope monitoring and instantaneous surface gas monitoring. The instantaneous surface gas level is measured by placing a probe at a distance of 0-3 inches above ground level. The revised rule specifies that the total organic compounds measured as methane must be less than 50 ppm for integrated surface gas samples and 500 ppm for instantaneous surface gas samples.

As discussed in the May 2000 meeting, site personnel have found localized areas, such as cracks on the ground, that exceeded the compliance level when the measurements were taken at ground level (i.e., zero inches above ground). Site personnel are able to mitigate the exceedances through short-term measures, such as gas well vacuum adjustment, surface soil excavation and compaction, additional soil application and installation of shallow trenches in soil. However, a long-term solution to enhance the gas control system is the installation of new gas wells and gas header lines. Steinmetz asked how often SCAQMD inspects the site. Chan said that SCAQMD conducts spot checks periodically and has been to the site at least two times this year, to check compliance with the new rule.

Chan explained that when an exceedance is detected, the site must bring the area into compliance level with 65 days. Mitigation, at times, requires gas collection enhancement through the construction of additional gas collection wells. Since the Districts are public entities, all projects must undergo formal bidding. This, in addition to sometimes lengthy construction, makes it difficult for the Districts to meet the 65-day SCAQMD schedule. After discussing this dilemma with SCAQMD staff, SCAQMD staff recommended the issuance of a stipulated order of abatement. The abatement order is an agreement that outlines a series of construction activities that the Districts must complete within a specified time line, giving the Districts an extended time limit while ensuring compliance through the Districts' commitment to the activities. Details of the abatement order are currently in negotiation. If an abatement order is issued prior to the next CAC meeting, a notification letter will be mailed to the Committee members. ***(The notification letter was mailed on April 18, 2001.)***

Isaacson asked if methane, being heavier than air, has a tendency to move down landfill slopes and migrate outside the landfill's boundary. Chan is not aware of this phenomenon. She will consult with other Districts' staff and discuss landfill gas in further detail at the next meeting.

Yann inquired if 50 ppm, measured as methane, is the allowable level of methane in air. Chan confirmed that 50 ppm is the allowable level at the surface for integrated route monitoring. She added that the concentration varies dramatically when measured at ground level as compared to 3 inches above ground. Dennis Hostetler asked if gas below ground level is sampled. Chan said that surface and ambient air is sampled, and the flow, quality and temperature of landfill gas are also measured and monitored at the gas collection wells.

A quantitative and qualitative analysis of landfill gas will be included as a topic of discussion at the next meeting. The discussion will include landfill gas projection estimates, landfill gas quality, any changes in the landfill gas quality and characteristics, results of slope and surface monitoring, and an update of the mitigation process for exceedances detected.

Eastern Flare Station. The testing of the eastern flare station has been on hold due to considerations related to the energy crisis. It has been the Districts' policy not to divert landfill gas from power generation during an energy shortage. The testing will begin when the energy situation stabilizes. Yann said if the Districts have a contract to sell power to Edison. Christian said that the Districts have a contract with Edison and the pricing is predetermined in the contract. Hughes inquired if Edison has remitted payments to the Districts. Chan responded that Edison has not paid for electricity since November.

B. Green Waste/Odor Update

The Districts did not receive any odor complaints in January or in February.

Christian reported that greenwaste tonnage has decreased since December 2000. This decrease is consistent with the trend in the past years. Greenwaste tonnage from December to April is generally 100 - 200 tons per day less than the summer and fall months.

Chan said that the implementation of curbside greenwaste program in the unincorporated Los Angeles County areas did not result in a noticeable increase in greenwaste tonnage at the site. She asked the Committee if they feel the collection program is being successful. The Committee responded that they observed high level of participation in the program within their community.

Robert Frame inquired if refuse loads are checked for inclusion of unsegregated greenwaste loads. Chan responded that they were and the site has recently completed a waste characterization study. Hostetler requested that information from the study be presented at the next meeting. Hughes asked if greenwaste loads have the same tipping fee as refuse loads at the landfill. Chan said that customers bringing in greenwaste loads are charged a reduced rate as an incentive for participation in the program.

C. Status of Waste-by-Rail

Chan briefed the Committee on the recent developments with waste-by-rail. In August 2000, the Districts entered into two agreements to purchase the Eagle Mountain Landfill and the Mesquite Landfill. Both agreements are undergoing the due diligence process, which includes an assessment of the site and a review of property titles. Both sites are undergoing pending litigations.

The land exchange between Gold Fields Mining Company, owner of Mesquite Regional Landfill, and the United States Bureau of Land Management was challenged by the Desert Citizens Against Pollution in November 1996. In addition to the litigation, the Desert Citizens sought an injunction on the project. The District Court found that the appraisal used in determining the land exchange was reasonable and dismissed the case and the injunction. The plaintiffs filed an appeal. In November 2000, the Ninth U.S. Circuit of Appeals overturned the District Court decision and ruled that the reliance on the appraisal was invalid. The Appeals Court agreed with the plaintiffs that the land should be appraised based on its value as a landfill instead of as open space. The Appeals Court further instructed the District Court to hold a hearing on the injunction. A tentative schedule for the injunction hearing is April 2001. If an injunction is issued, the land exchange would be nullified. Isaacson asked if it would only be a matter of paying more money for the land. Chan said that if an injunction is issued and the land exchange is nullified, the validity of the current operating permits would be questionable. The project cannot proceed until all litigation is resolved.

Similar litigation is pending for the Eagle Mountain Landfill. The case is scheduled for trial in District Court in the fall of 2001. The development of the Mesquite Landfill litigation may set a precedence for the Eagle Mountain Landfill litigation.

Shubin asked if the purchase of Eagle Mountain Landfill is independent of the purchase of Mesquite Landfill. Chan confirmed that they are two separate purchase agreements. She noted that it took two years for the Mesquite Landfill case to reach the Appeals Court. Since the Eagle Mountain case has not been heard in District Court, the case may not be resolved for a long time.

Yann inquired if all the environmental issues have been settled for both sites. Chan believed that all the CEQA related lawsuits have been resolved. She offered to discuss the chronology of all the lawsuits related to Mesquite Landfill and Eagle Mountain Landfill at the next meeting.

D. Update on Permit Process for Continued Operation of the Puente Hills Landfill

Ajay Malik reported that the draft EIR will not be released for public review and comment prior to the next CAC meeting in May.

The Committee emphasized the need to evaluate the potential danger of an earthquake in the EIR. In particular, the EIR should address the possibility that undiscovered blind thrust faults could be present at or near the site. The EIR should address the stability of landfill during and after an earthquake, the biological hazards of a potential landfill instability, and the operational integrity of the environmental control systems after an earthquake. Shubin would also like an assessment of the subsurface barriers after an earthquake.

A notice of the EIR release will be published in the local newspaper, San Gabriel Valley Tribune. Each Committee member will also receive a copy. Yann requested that 20 copies of the EIR, one set with complete technical appendices and supporting data, be mailed to HHIA.

The EIR will be available for review at various public libraries and the Districts' library. Chan asked the Committee for suggestion regarding the selected libraries. The Committee stated that the libraries used during the previous permitting process would be adequate. Two copies will be placed at each public library, one copy for check out and one copy for reference only. Isaacson asked if the EIR will be published on the Districts' website. Chan said some information, such as the notices and executive summary, will be posted on the Districts' website.

Yann requested a 90-day public review period. Chan said that the Districts were planning to provide a 45-day or 60-day review period, however, she will discuss and consider the request with Management.

A minimum of one public hearing will be held. The Districts will evaluate the need for additional hearings as the review period progresses. Chan asked the Committee for input on the public hearing location. Yann suggested that public hearings be held at Wilson High School.

Shubin asked for a list of project alternatives considered in the EIR. Malik said that the scoping meeting for project alternatives was held on June 13, 2000. The June 13, 2000, meeting minutes and the letter from HHIA can be referenced for more information on the suggested project alternatives. Shubin also asked about how the EIR will treat final recreational use of the site. Malik responded that the EIR will discuss the final use conceptually, but will deter final determination to the future master planning process to be conducted by the Department of Parks and Recreation.

E. Miscellaneous

Christian said that the Puente Hills Energy Recovery from Gas Facility will be shut down for annual maintenance during the week of April 23 to 27.

Plans and specifications for the lower western cut at the location of the proposed Puente Hills MRF were near completion in September 2000. The cut was expected to be extremely costly due to the geoneting and the large engineered fill required to achieve stability. In addition, during final review of the plans, the Department of Public Works required an additional stability system that increased the project cost by $3 million. This increase prompted Management to direct staff to reevaluate the project and investigate all possible alternatives. This directive resulted in a change to the original design concept of keeping the top of cut within Districts' property. A flatter, more stable, slope could be accomplished by moving the top of cut further south and would eliminate the need for geoneting and engineered fill. This new concept would encroach on approximately three acres of Rio Hondo College Property. Chan said that a letter describing the new design, along with an exhibit, would be mailed to Committee members if the project becomes finalized before the next meeting. A site visit could also be scheduled upon request. Frame asked if the construction of the MRF would be delayed by the new cut design. Chan said that MRF operation start date has been delayed by three to six months; however, the elimination of geoneting and engineered fill would lessen the overall time to complete the cut.

Shubin asked if slope stability for a refuse fill has been reviewed by other public agencies. Chan said that she thought that both Department of Public Works and Regional Water Quality Control Board review stability analyses, but this would be confirmed in the meeting minutes. Hughes asked if landfill slopes are landscaped as they are built. Chan said that landfill slopes are landscaped once completed. ***(Slope stability for refuse fill is reviewed by the Regional Water Quality Control Board and the Department of Water Resources.)***

Garcia inquired about the potential traffic impacts resulting from MRF operations. Malik said that the MRF would accept 4,000 tons per day at build-out, or approximately 500 refuse vehicles per day. Garcia indicated that the EIR should evaluate the traffic impacts from MRF operations and from the current construction projects at the strawberry farms on Workman Mill Road. Isaacson added that MRF operations would result in one truck per minute over an 8-hour period. Hostetler said that the

EIR should discuss the vehicle routing. Chan said that all MRF traffic would use the existing landfill entrance on Crossroads Parkway and the Workman Mill Road entrance would be closed to all refuse traffic.

Christian said that the continuous exposure to UV light has damaged some of the liner protective membrane. The site will be replacing the damaged membrane over the next several months. The project may be visible from the Hacienda Heights area.

In addition to the standing items, the following items will be discussed at the next meeting: chronology of lawsuits on the waste-by-rail sites, waste characterization study, status of landfill gas management and abatement order, and update to the repermitting process. The next meeting is scheduled for May 8, 2001.

APPENDIX C

TRAFFIC APPENDIX

Traffic Study for Continued Operation of the Puente Hills Landfill

Prepared for:

County Sanitation Districts of Los Angeles County
1955 Workman Mill Road
Whittier, CA 90601
(562) 699-7411

Prepared by:

Katz, Okitsu & Associates
17852 E. Seventeenth Street, Suite 102
Tustin, CA 92780-2142
(714) 573-0317

June 2001

June 18, 2001

Mr. Ajay Malik
County Sanitation Districts of Los Angeles County
1955 Workman Mill Road
Whittier, CA 90601

Subject: Traffic Study for Continued Operation of the Puente Hills Landfill

Dear Mr. Malik:

Katz, Okitsu & Associates has completed the subject traffic study for continued operation of the Puente Hills Landfill. The study evaluates the traffic impacts of the continued operations of the existing landfill, especially with regard to the impact on the adjacent roadway network. The study has been prepared to comply with the Los Angeles County requirements.

The report is being submitted to you for review and processing. Please contact me if you have any questions about the report, or if you need additional information. If there are any comments that require my response, or revisions required, please notify me as soon as possible for prompt revision.

It has been a pleasure to provide this study to the County Sanitation Districts of Los Angeles County.

Sincerely,

Rock E. Miller, P.E.
Principal

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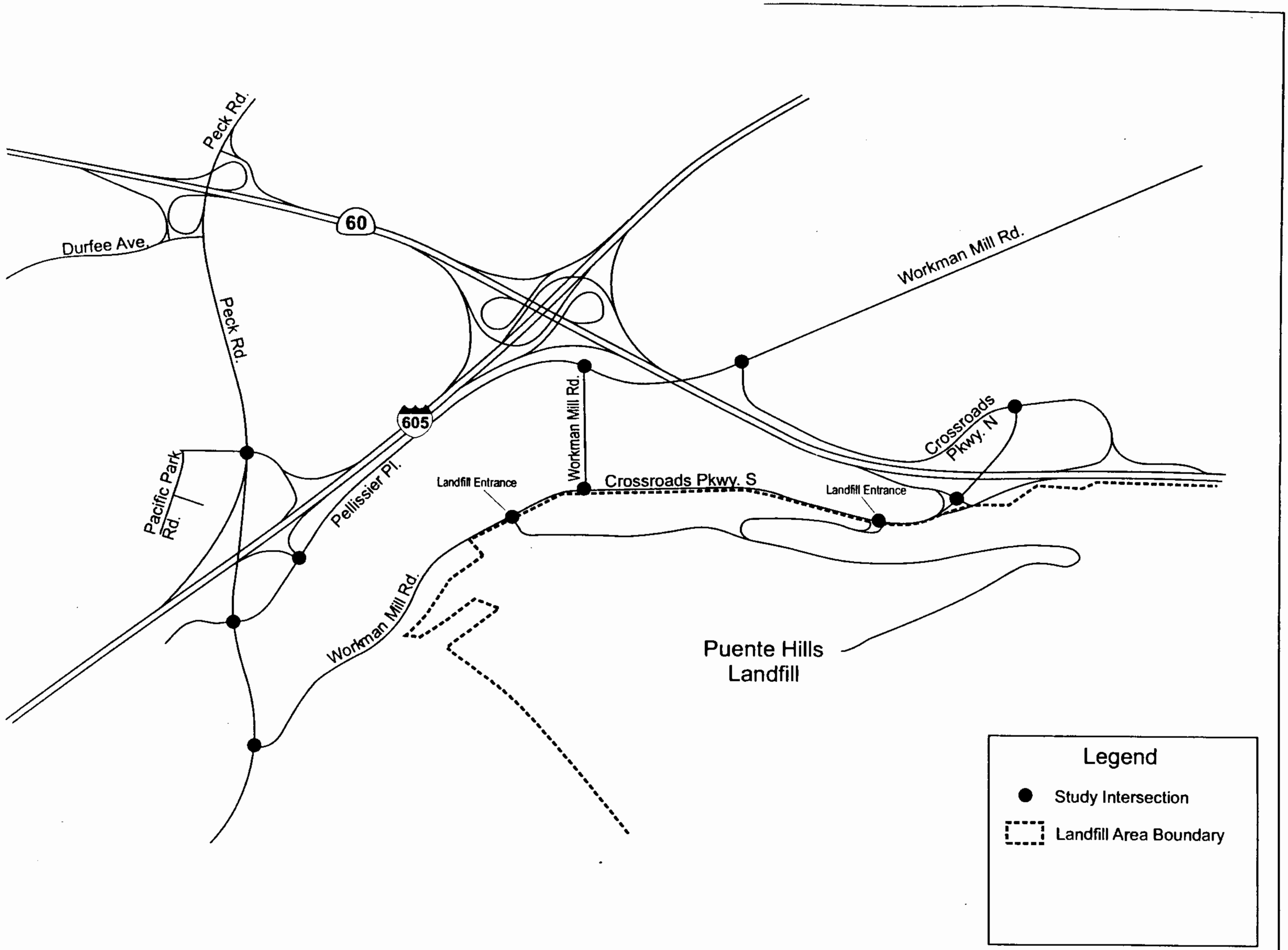
LIST OF EXHIBITS

1. INTRODUCTION

The County Sanitation Districts of Los Angeles County (Sanitation Districts) own and operate the Puente Hills Landfill. The landfill is located in unincorporated Los Angeles County, southeast of the junction of the 60 and 605 Freeways, near the City of Industry. The landfill is currently operating under a Conditional Use Permit (CUP 92-250(4)) that expires on November 1, 2003. The landfill accepts only non-hazardous municipal solid waste in compliance with Federal, State, and local regulations. The site receives up to 12,000 tons of waste per day, on a six-day week average. Tonnage accepted is limited by the conditional use permit to 72,000 tons per week, based on a six-day week, with a maximum allowable daily tonnage of 13,200 tons.

The proposed project will extend the life of the landfill for an approximate 10-year period beyond the expiration of the current permit. After this time, there will be no remaining capacity at the site. Successful repermitting of the Puente Hills Landfill will allow for continued operation under similar conditions for approximately ten additional years.

Exhibit 1.0.1 is a vicinity map showing the location of the project and the surrounding major street system.



Katz, Okitsu & Associates
Traffic Engineers and Transportation Planners

Puente Hills EIR Traffic Analysis

Figure 1.0.1

Vicinity Map

2.0 EXISTING CONDITIONS

The study area is located in unincorporated Los Angles County and the City of Industry. The surrounding land uses within the study area are primarily office, industrial and commercial. The site has very good access to the regional freeway system due to its proximity to the 60 Freeway and to the nearby 605 Freeway.

2.1 Surrounding Street System

Highways and major arterial streets in the vicinity of the project site are shown in Exhibit 1.0.1. Workman Mill Road and Crossroads Parkway South bound the landfill on the north. Rio Hondo College and Peck Road roughly bound it on the west. The southern and eastern sides of the landfill face open hills. Major freeways near the site include the State Route 60 (Pomona) Freeway to the north and the Interstate 605 (San Gabriel River) Freeway to the west.

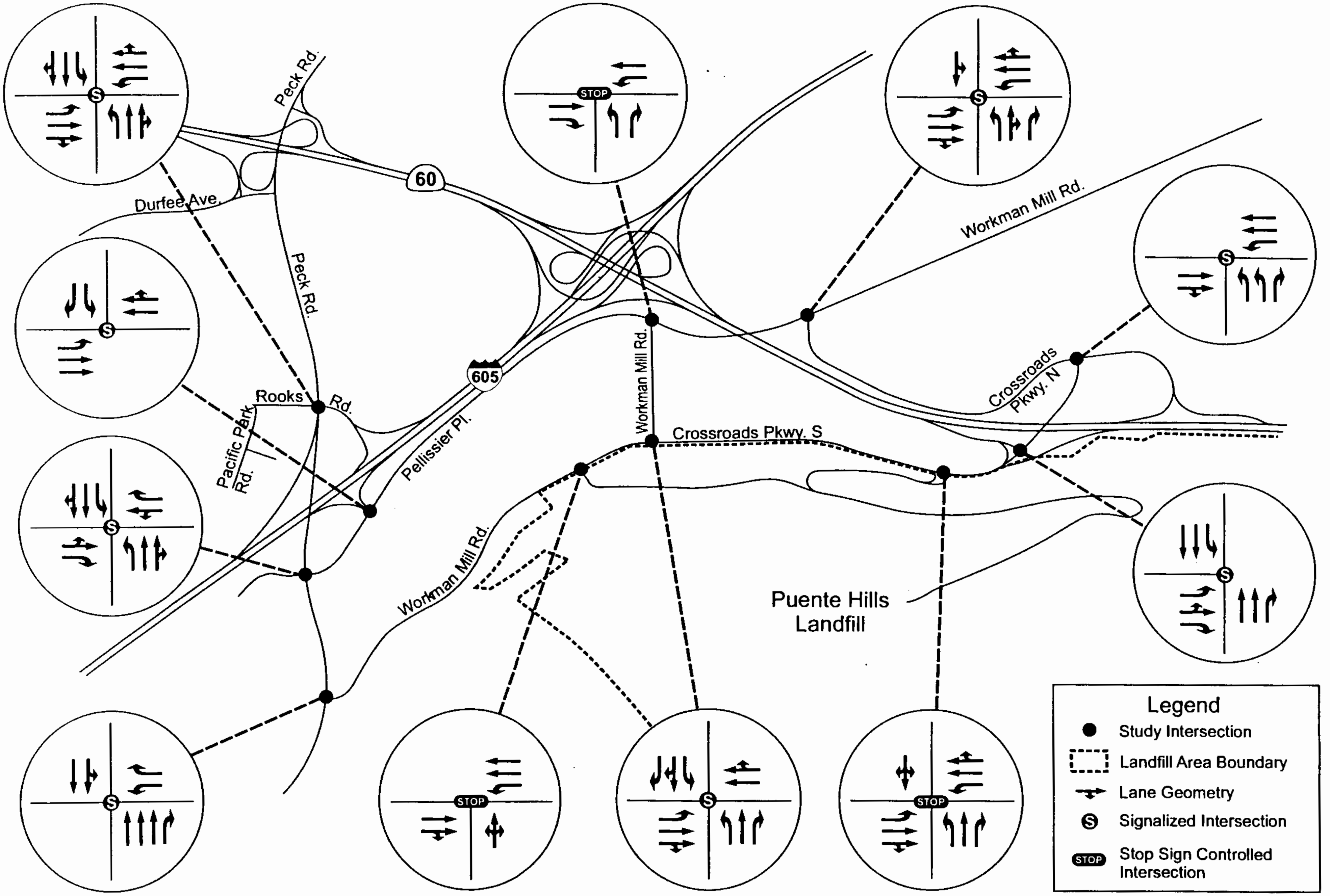
Streets in the site vicinity that could potentially be affected include Peck Road, Workman Mill Road, Pellissier Place, Crossroads Parkway North and Crossroads Parkway South. The intersections of these roadways may also be affected. The characteristics of these streets were observed in the field and are described below. The roadway geometrics are shown in Exhibit 2.1.1.

Crossroads Parkway South is a four-lane divided highway that runs east/west near the north edge of the landfill. The main entrance and access road to the landfill intersects with Crossroads Parkway South about 500 feet west of the 60 Freeway interchange. Crossroads Parkway South provides a full interchange with the 60 Freeway. Traffic is controlled by signals at many intersections along Crossroads Parkway South, including Crossroads Parkway North, Peck Road, Workman Mill Road, and the 60 Freeway ramp intersections. The posted speed limit is 35 mph, and parking is not permitted along this roadway.

Crossroads Parkway North is a four-lane roadway running east/west about ½ mile north of the landfill and across the 60 Freeway. It begins at Workman Mill Road near the Sanitation Districts main offices and ends at the 60 Freeway interchange. Adjacent land uses along this roadway are primarily office park uses, and there is a considerable amount of vacant developable land. The posted speed limit is 35 mph, and parking is not permitted.

Peck Road is a four-lane north-south street traveling along the western boundary of the study area, about ¼ mile from the landfill boundary. It begins about six miles north of the Landfill as Myrtle Avenue in Monrovia and extends south, changing names to Peck Road, Workman Mill Road and Norwalk Boulevard through the Cities of Industry, Whittier, and Norwalk. Fronting land uses on this roadway within the study area are predominantly light industrial. The roadway provides access to the I-210, I-10, SR-60, and I-605 Freeways. The posted speed limit is 45 mph, and no parking is allowed.

Workman Mill Road is generally a four-lane arterial traveling on a northeast-southwest alignment in the study area. There is a short three-lane section near Pellissier Place. The alignment for Workman Mill Road makes several hard turns in the study area. The through route changes street names, while motorists must turn to remain on Workman Mill Road. These include the Pellissier intersection, the Crossroads Parkway South intersection, and the Peck Road intersection.



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Puente Hills EIR Traffic Analysis

Figure 2.1.1

Existing Geometrics

Workman Mill Road is fronted by residential uses, and has a posted speed limit of 45 mph northwest of Crossroads Parkway North. West of the same intersection, Workman Mill is fronted by warehousing and light-industrial uses, and has a posted speed limit of 45 mph. There is a 35 mph zone near the Crossroads Parkway South intersection. At its junction with Peck Road on the west side of the study area, Workman Mill heads south, providing four lanes of traffic.

Pellissier Place is a four-lane undivided roadway located about ½ mile northwest of the landfill site. It serves as a frontage road to the 605 Freeway, and provides access to light-industrial and office uses along the southeast side of the freeway. It has a posted speed limit of 40 mph, with a 25 mph zone near its junction with Peck Road. North of its junction with Peck Road, it provides the main access to the 605 Freeway northbound ramps. Parking is not permitted along this street. The intersection of Pellissier Place and Workman Mill Road is currently unsignalized, however traffic signals are currently being designed together with minor street improvements for the location. It is presumed that these improvements will exist within two years.

60 Freeway is an east/west freeway located about ½ mile north of the landfill main entrance. This east-west freeway links downtown Los Angeles with East Los Angeles, the San Gabriel and Pomona Valleys, and Riverside County. It provides four travel lanes in each direction in the project vicinity. There are full interchanges with Crossroads Parkway and Peck Road. It is also referred to as the State Route 60 (S.R. 60) Freeway or the Pomona Freeway.

605 Freeway is a north-south freeway located about 1 mile west of the landfill. It links the 210 Freeway in Duarte with the 405 Freeway near Long Beach. Within the study area, the 605 Freeway provides four lanes of travel in each direction. A carpool lane is also provided in each direction. The interchange of the 605 Freeway and the 60 Freeway is the predominant feature of the study area. There is also a full interchange at Peck Road that incorporates ramps at Pellissier Road. The 605 Freeway is also referred to as the Interstate 605 or the San Gabriel River Freeway.

2.2 Existing Traffic Volumes

Traffic conditions along urban and suburban roadways and highways are most significant during peak hours corresponding to normal commuting patterns at signalized intersections. Traffic conditions are thus normally analyzed at these intersections during these time periods (7-9 a.m. and 4-6 p.m.), to assess reasonable, worst case traffic conditions. For a specialty use, such as a landfill, an additional peak of the project may be analyzed. For this project, we have analyzed the hour of 10-11 a.m. (referred to as the mid-day peak), which is the peak hour of the landfill.

The intersections analyzed in this report include:

- Crossroads Parkway South and East Landfill Entrance;
- Workman Mill Road and West Landfill Entrance;
- Crossroads Parkway South and 60 Freeway eastbound ramps;
- Crossroads Parkway South and Crossroads Parkway North;
- Crossroads Parkway North and Workman Mill Road;
- Crossroads Parkway South and Workman Mill Road;
- Workman Mill Road and Pellissier Road;

- Workman Mill Road and Peck Road;
- 605 Freeway and Pellissier Road;
- Pellissier Road and Peck Road; and
- Peck Road and Rooks Road.

Morning and evening peak hour traffic volumes were obtained for eleven intersections within the study area. These traffic volumes were obtained from traffic counts taken for this study by the specialty traffic count firm, *Southland Car Counters, Inc.* **Exhibits 2.2.1, 2.2.2, and 2.2.3** present the existing a.m., mid-day, and p.m. peak hour counts respectively.

2.3 Traffic Level of Service Analysis

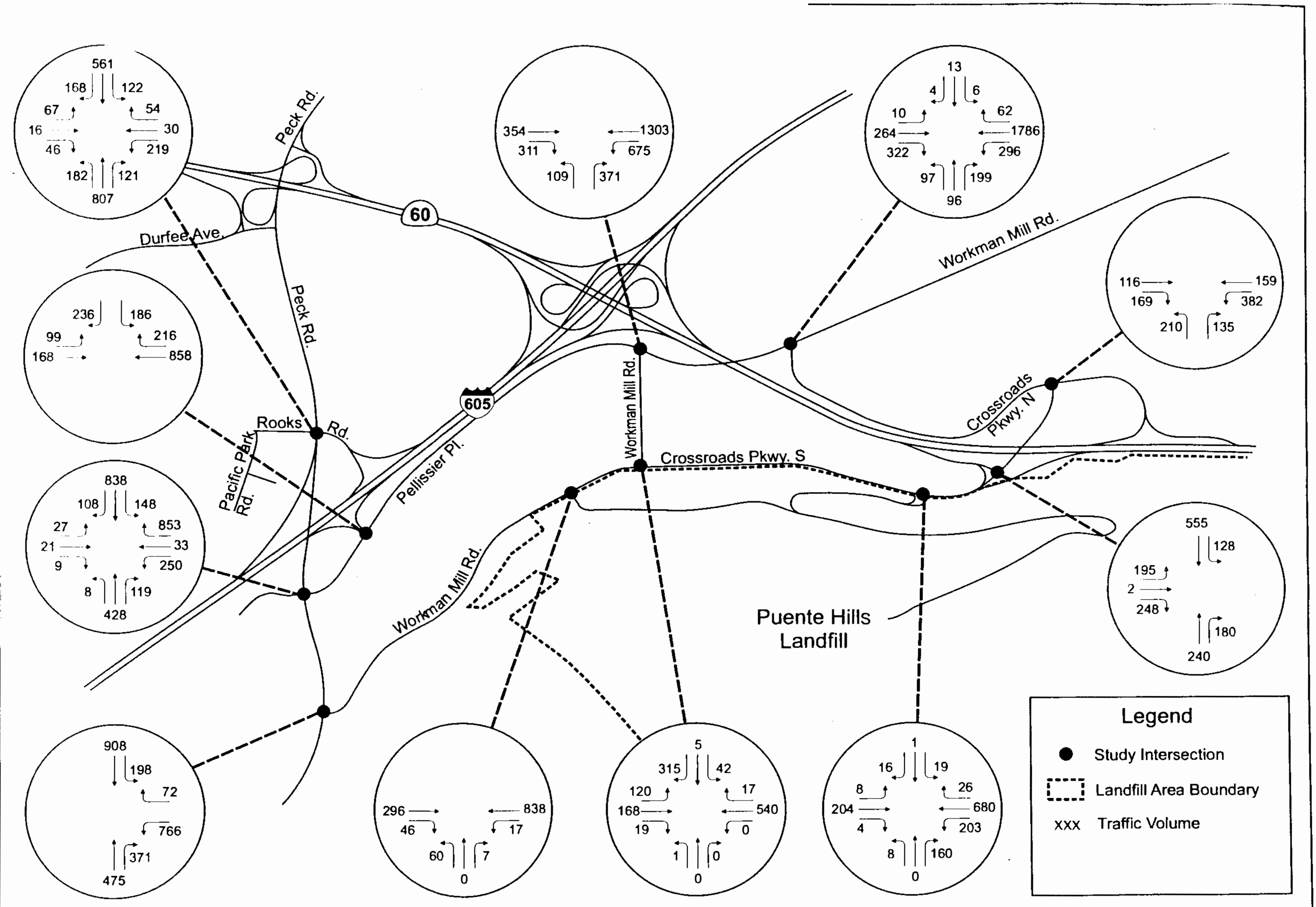
Traffic conditions on most roadway facilities are analyzed using the principles or the specific analysis methods contained in the *Highway Capacity Manual*, 1997 Edition, (*HCM*), a publication of the Transportation Research Board, a branch of the Federal Government. Chapter 9 of the *HCM* is devoted to analysis of signalized intersections. The methodology in this chapter is based upon measurements or forecasts of delay for traffic utilizing all approaches to the intersection. The exact methodology is relatively complex and other simpler methods for analyzing signalized intersections have been developed from the *HCM*.

Traffic conditions in Southern California are normally evaluated during peak hours using a methodology known as the Intersection Capacity Utilization (ICU) method. This analysis is widely accepted and essentially measures the amount of traffic signal "green" time required for the intersection. It is a significant variation from the HCM method; however, it produces results that are generally similar.

All of the methodologies in the *Highway Capacity Manual* and the ICU method are based upon the concept of traffic "Level of Service." This concept is also fundamental to many other forms of traffic analysis. Level of service is a report card scale ranging from A to F which describes the varying conditions on a roadway during a specific time interval of study. Brief definitions of level of service are found below in Table 2.3.1:

Table 2.3.1 – Level of Service Descriptions

Level of Service	*Traffic Description*
A	Excellent, Light Traffic
B	Good, Light to Moderate Traffic
C	Moderate Traffic, with Insignificant Delay
D	Heavy Traffic, with Significant Delay
E	Severe Congestion and Delay
F	Failed, Indicated Levels Cannot Be Handled



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Puente Hills EIR Traffic Analysis

Figure 2.2.1

Existing Traffic Volumes - AM Peak Hour

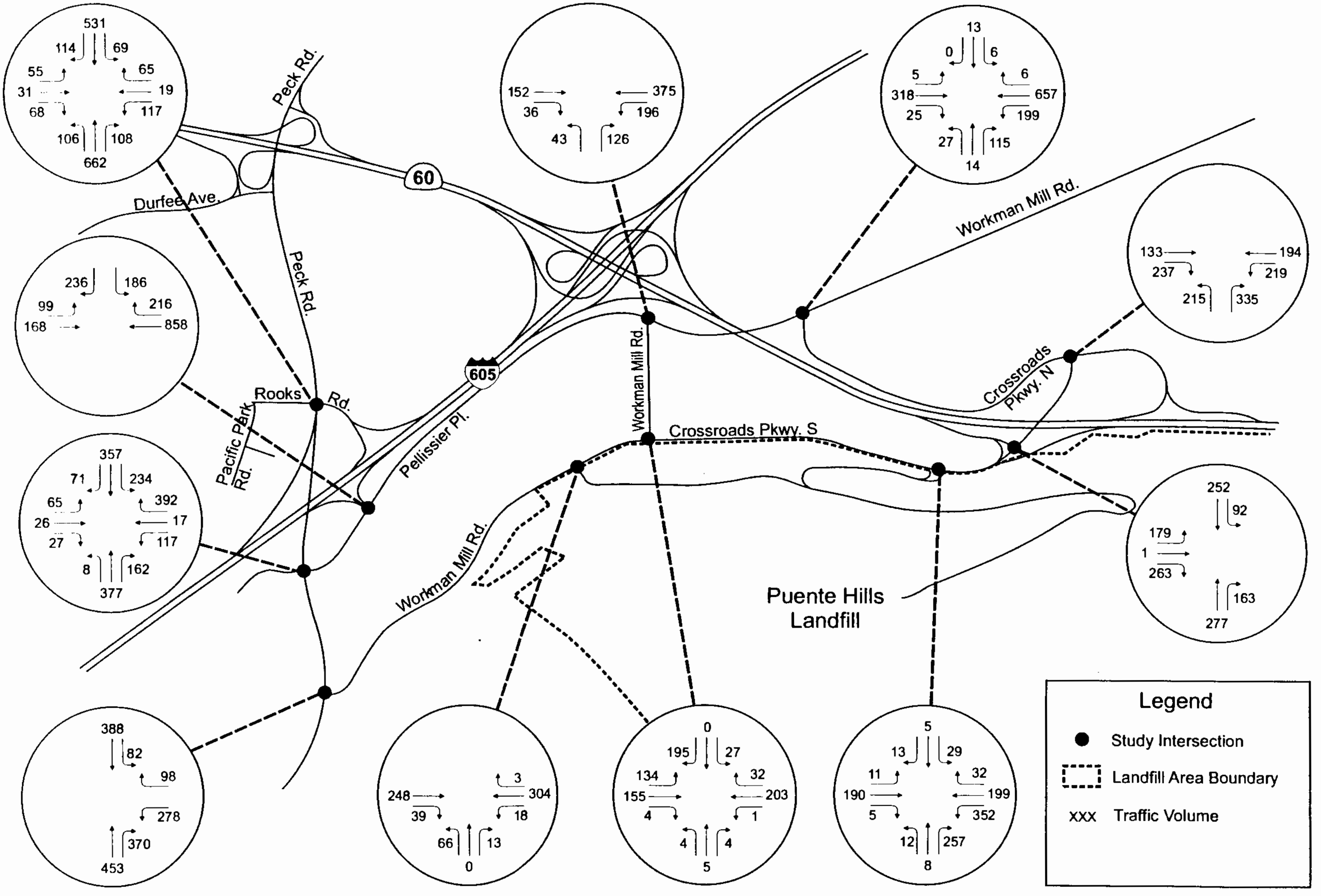

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Figure 2.2.2

Existing Traffic Volumes - Mid-Day Peak Hour

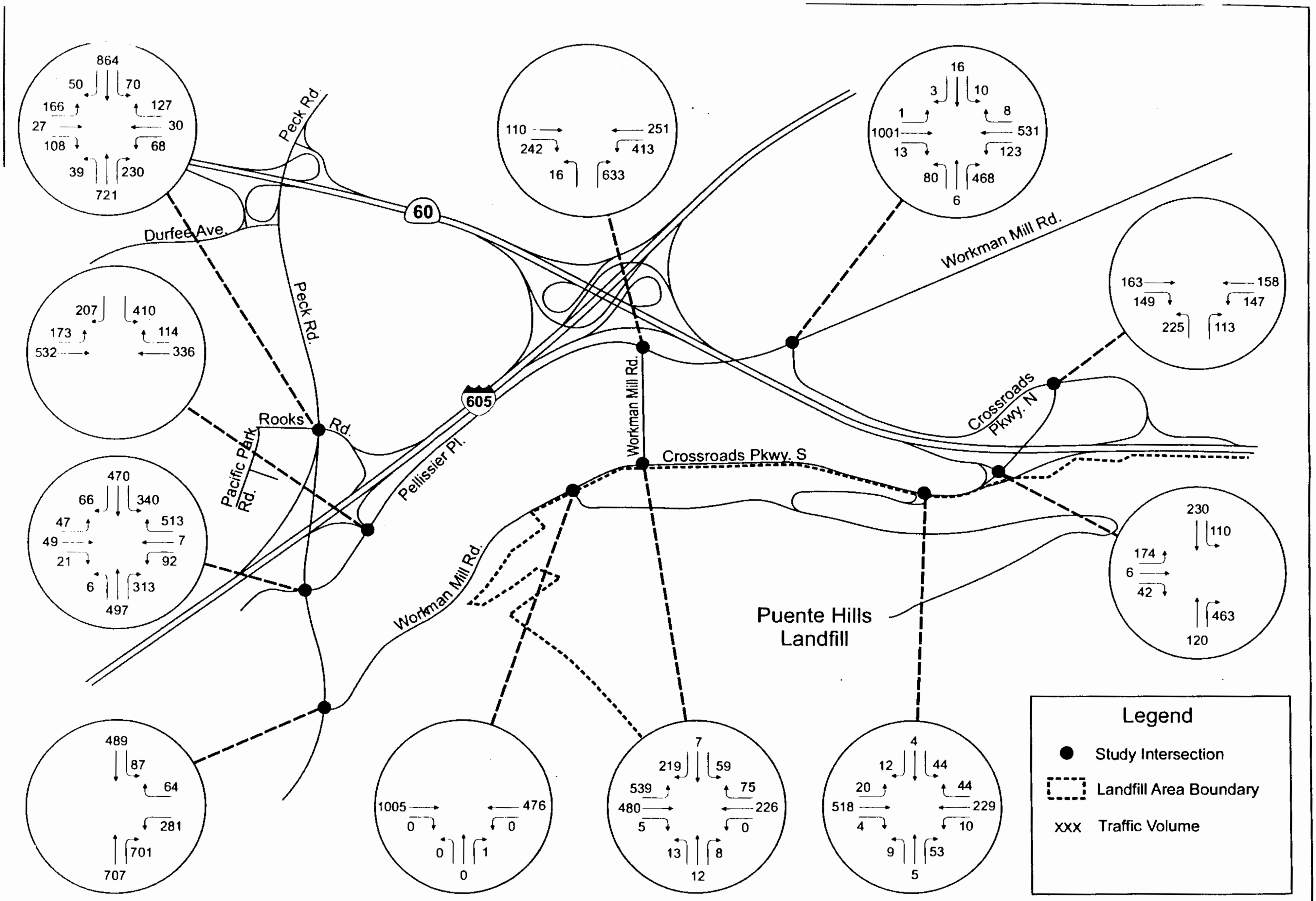

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Figure 2.2.3

Existing Traffic Volumes - PM Peak Hour

Level of service "D" is frequently identified as the minimum allowable "standard" service level during peak hours at intersections. Most arriving traffic will clear the intersection on the first available green cycle under this level of service. Mitigation measures should be considered when traffic conditions are forecast to decline to poorer level of service.

Table 2.3.2 shows the relationship between level of service and the performance measures for signalized and unsignalized intersections.

Table 2.3.2 – Levels of Service for Intersection Traffic Controls

Level of Service	*Stop Controlled Intersection Stopped Delay*	*Signalized Intersection Capacity Utilization*
A	0-5	0.00-0.60
B	5-10	0.60-0.70
C	10-20	0.70-0.80
D	20-30	0.80-0.90
E	30-45	0.90-1.00
F	45 or more	1.00 and up

Note: Stopped delay is seconds per vehicle average

Many agencies have established level of service standards or criteria for intersection performance or for evaluation of traffic related to new developments. The Los Angeles County Congestion Management Plan (CMP) has identified Level of Service E as the poorest acceptable level of service for signalized intersections. Cities must maintain compliance with this standard to be eligible for certain regional funding programs. In the absence of stricter criteria, this would be the recommended minimum acceptable Level of Service. The City of Industry criteria are generally the same as the County CMP criteria, as that City's guidelines are to follow the County CMP criteria strictly. The City indicated that they did not need any additional analysis.

Katz, Okitsu & Associates normally recommends that the poorest allowable level of service in urban areas should be Level of Service D; however, the methodology used for evaluating compliance with the Los Angeles County CMP is somewhat conservative. Other methodologies for evaluating level of service frequently rate intersections to be one grade better than the County's CMP methodology. For this reason, we would endorse Level of Service E as the poorest allowable level of service, where the Los Angeles County CMP evaluation methodology is employed.

Existing traffic conditions for all study area signalized intersections were analyzed using the Intersection Capacity Utilization (ICU) methodology. The ICU calculations were performed for all scenarios using the *Traffix* traffic model. Traffix is a widely-used computerized application program developed by Dowling and Associates of Northern California for analysis of Level of Service and Impacts on arterial street systems. The program evaluates Level of Service for existing and future traffic conditions based upon different land use and traffic growth scenarios. The program can calculate Level of Service using numerous methodologies, including the Los Angeles CMP method, the Highway Capacity Manual Method, and other less-frequently used approaches.

Table 2.3.3 below summarizes the peak hour Level of Service assessments for the study intersections for existing conditions. Signalized intersections are analyzed using the ICU method, while the three unsignalized intersections, Pellissier at Workman Mill Road, and the landfill entrances at Crossroads Parkway South are analyzed using the Highway Capacity Manual Method for unsignalized intersections.

There is currently one intersection operating at Level of Service E during the a.m. and p.m. peak periods. The Peck Road / Pellissier Place intersection operates at Level of Service E during the a.m. and p.m. peak periods. The intersection of Workman Mill at Pellissier Road will also operate below acceptable level of service, at Level F, during the a.m. peak hour. All other intersections operate above acceptable levels.

Table 2.3.3 – Existing Traffic Conditions

Intersection	*A.M. Peak Hour*		*Mid-Day Peak Hour*		*P.M. Peak Hour*	
	ICU or Delay (")	*Level of Service*	*ICU or Delay (")*	*Level of Service*	*ICU or Delay (")*	*Level of Service*
Crossroads Pkwy S/ East Entrance	1.6"	A	3.8"	A	1.1"	A
Workman Mill Rd/ West Entrance	1.6"	A	1.3"	A	0.0"	A
Crossroads Pkwy S/ 60 EB Ramps	0.456	A	0.361	A	0.263	A
Crossroads Pkwy S/ Crossroads N.	0.598	A	0.727	C	0.360	A
Crossroads Pkwy S/ Workman Mill	0.450	A	0.321	A	0.610	B
Crossroads Pkwy N/ Workman Mill	0.788	C	0.384	A	0.658	B
Workman Mill / Pellissier Rd	778.6"*	F	1.6"	A	2.2"	A
Workman Mill / Peck Rd	0.646	B	0.383	A	0.361	A
605 Fwy / Pellissier Rd	0.645	B	0.645	B	0.605	B
Pellissier Rd / Peck Rd	0.964	E	0.717	C	0.946	E
Peck Rd / Rooks Road	0.632	B	0.499	A	0.624	B

Note: ICU = Intersection Capacity Utilization; Delay = Seconds per Vehicle, average. * Extreme delay in the AM peak hour is due to delay experienced by northbound left-turning vehicles; overall intersection operation may not be as poor as indicated

3.0 FUTURE (YEAR 2013) TRAFFIC CONDITIONS WITH THE PROPOSED PROJECT

3.1 Future Analysis Methodology

Several different future analysis scenarios are addressed in this report. Some of the scenarios are "fictional" and only serve to illustrate the effect of the existing landfill operation on study streets. Other scenarios are considered to be likely future scenarios based upon expected plans and committed developments.

The scenarios analyzed are as follows:

Future traffic conditions with Ambient Growth and continuing Landfill Operations
Future traffic conditions with Ambient Growth and Relevant Cumulative Projects and continuing Landfill Operations
Future traffic conditions for the scenarios above with cessation of landfill traffic
Future traffic conditions for the scenarios above with cessation of landfill traffic, with alternate future scenario (golf course and cemetery access).

Since the proposed project would result in continued operation of the landfill until about 2013, this year was identified as the appropriate study horizon for this study. It is traditional to analyze traffic conditions based upon the inclusion of the proposed project, however for this study, the project is already operating and generating representative traffic levels on the street, as reflected in the existing traffic counts. In this section, the future scenarios include the traffic from the project (as it is already included on the streets). In the future without project analysis (sections), traffic for the landfill project is actually eliminated from the study area streets.

By the year 2013, there will also be one intersection configuration and control change. The intersection of Workman Mill at Pellissier Road is currently operating at a poor level of service in the a.m. peak hour. This intersection is currently planned and committed for improvements. The intersection will be signalized and the channelization will be changed in the near future by the City of Industry. Therefore, for all future analysis purposes, this intersection is assumed to be controlled by a traffic signal.

3.2 Background Traffic Growth Assumptions

The Los Angeles County Congestion Management Program (CMP) is a plan that manages and analyzes growth in different areas of the County. The current CMP was adopted in 1999 by the Los Angeles County Metropolitan Transportation Authority (MTA). The CMP defines the annual traffic growth in the San Gabriel Valley as 1%. This growth rate was applied to all scenarios for ambient growth projections.

In order to extrapolate existing year 2000 base data to the future analysis year of 2013, this 1% annual growth rate was compounded over a 13-year period. The resulting 1.14 (1.138 rounded to the nearest hundredth) growth factor was used to increase year 2000 traffic volumes to year 2013 levels. Existing base volumes used in the future scenarios already include landfill traffic, so for this alternative, landfill activity is continuing.

During the 10-year (2003-2013) extension period, there will be an increase in truck traffic to the site related to the need for dirt trucks that will provide cover during operations. Although there will be an increase in traffic for the landfill from dirt trucks, it is assumed that these trips are adequately represented by the growth rate indicated above. It should be noted that most dirt trucks will not be arriving or leaving during the peak hour. In addition, since the daily load tonnage accepted is limited, it is not likely that the number of trips related to landfill activities would increase. Therefore, the growth assumed for the landfill is attributed to the additional dirt trucks.

Exhibit 3.2.1 indicates the resulting peak hour traffic volumes at the study area intersections in the a.m. peak hour based upon ambient growth increases to the Year 2013. **Exhibit 3.2.2** shows similar information for the mid-day peak, while **Exhibit 3.2.3** shows the information for the p.m. peak hour. Table 3.2.1 shows forecasts of future intersection levels of service for this forecast. The intersection of Pellissier Road and Peck Road will operate at Level of Service F in both the a.m. and p.m. peak periods. All other intersections continue to operate at acceptable levels of service.

Table 3.2.1 – Future (2013) Traffic Conditions
For Ambient Traffic Volumes (including Landfill Traffic, without Cumulative Projects)

Intersection	*A.M. Peak Hour*		*Mid-Day Peak Hour*		*P.M. Peak Hour*	
	ICU or Delay (")	*Level of Service*	*ICU or Delay (")*	*Level of Service*	*ICU or Delay (")*	*Level of Service*
Crossroads Pkwy S/ East Entrance	2.1"	A	5.3"	B	1.4"	A
Workman Mill Rd / West Entrance	2.5"	A	1.6"	A	0.0"	A
Crossroads Pkwy S/ 60 EB Ramps	0.507	A	0.397	A	0.285	A
Crossroads Pkwy S/ Crossroads N.	0.667	B	0.816	D	0.397	A
Crossroads Pkwy S/ Workman Mill	0.499	A	0.352	A	0.681	B
Crossroads Pkwy N/ Workman Mill	0.884	D	0.424	A	0.736	C
Workman Mill / Pellissier Rd	0.784	C	0.324	A	0.445	A
Workman Mill / Peck Rd	0.722	C	0.422	A	0.661	B
605 Fwy / Pellissier Rd	0.721	C	0.721	C	0.675	B
Pellissier Rd / Peck Rd	1.084	F	0.803	D	1.066	F
Peck Rd / Rooks Road	0.706	C	0.556	A	0.697	B

Note: ICU = Intersection Capacity Utilization; Delay = Seconds per Vehicle, average

3.3 Cumulative Project Growth Assumptions

A list of pending and approved development projects in or adjacent to the project study area was assembled for developing areas within 3 miles of the project site. This included areas within the cities of Industry, Whittier, Pico Rivera, South El Monte, and unincorporated areas of Los Angeles County. An initial analysis of these project locations determined the projects that could be expected to contribute to traffic increases on the study area roadways in the future.

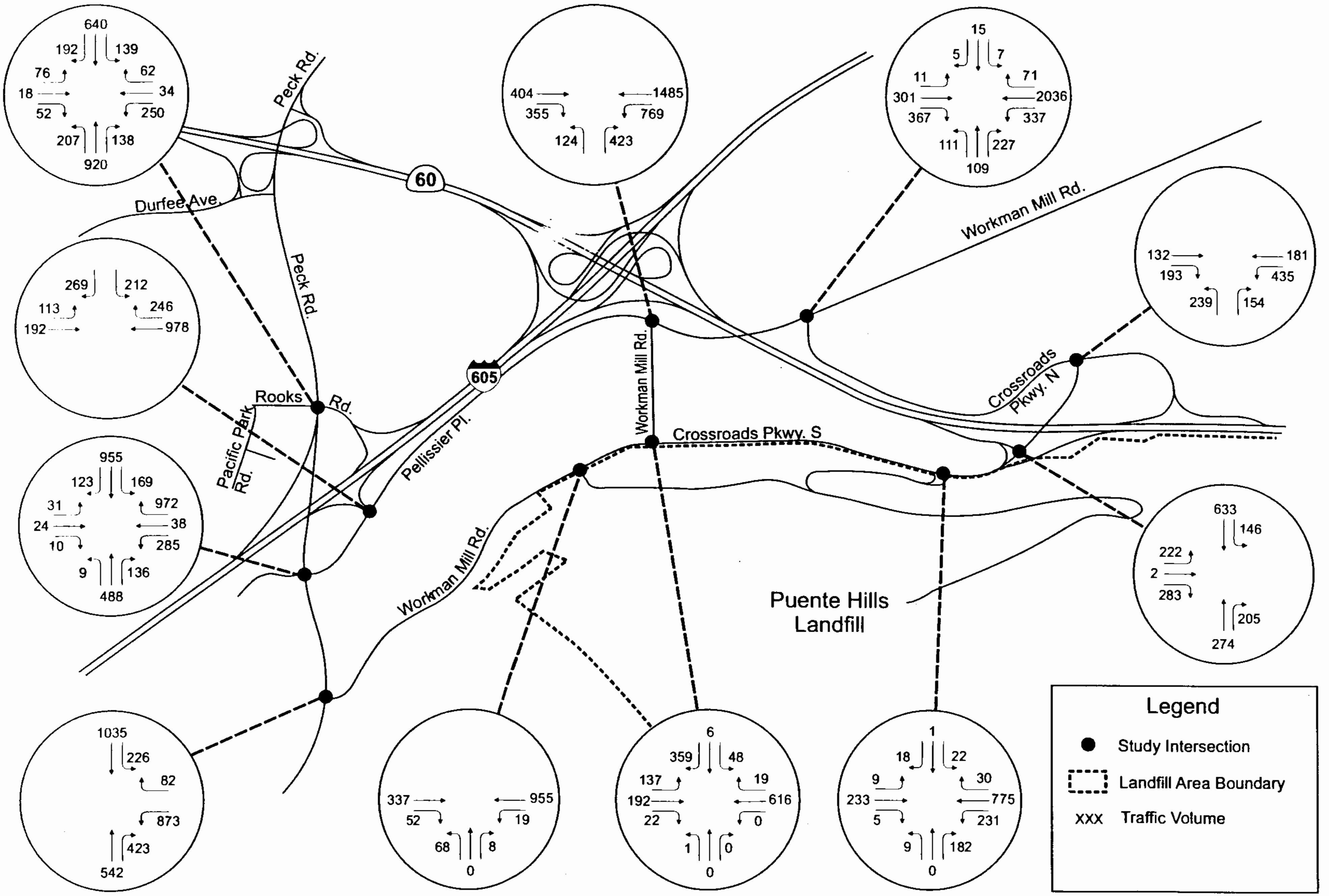

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Figure 3.2.1

Future (Ambient) Volumes with Project - AM Peak Hour

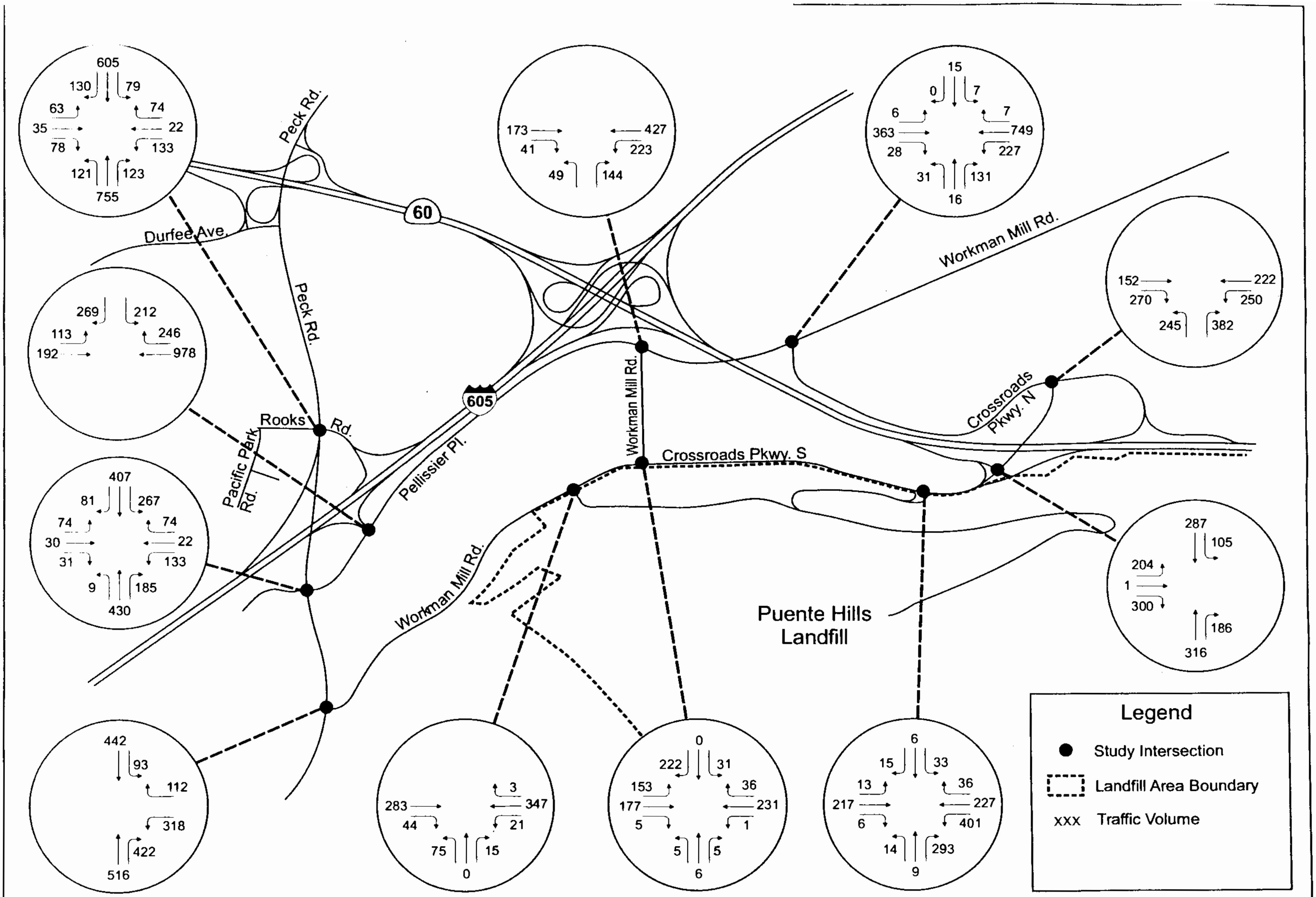

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Figure 3.2.2

Future (Ambient) Volumes with Project - Mid-Day Peak Hour

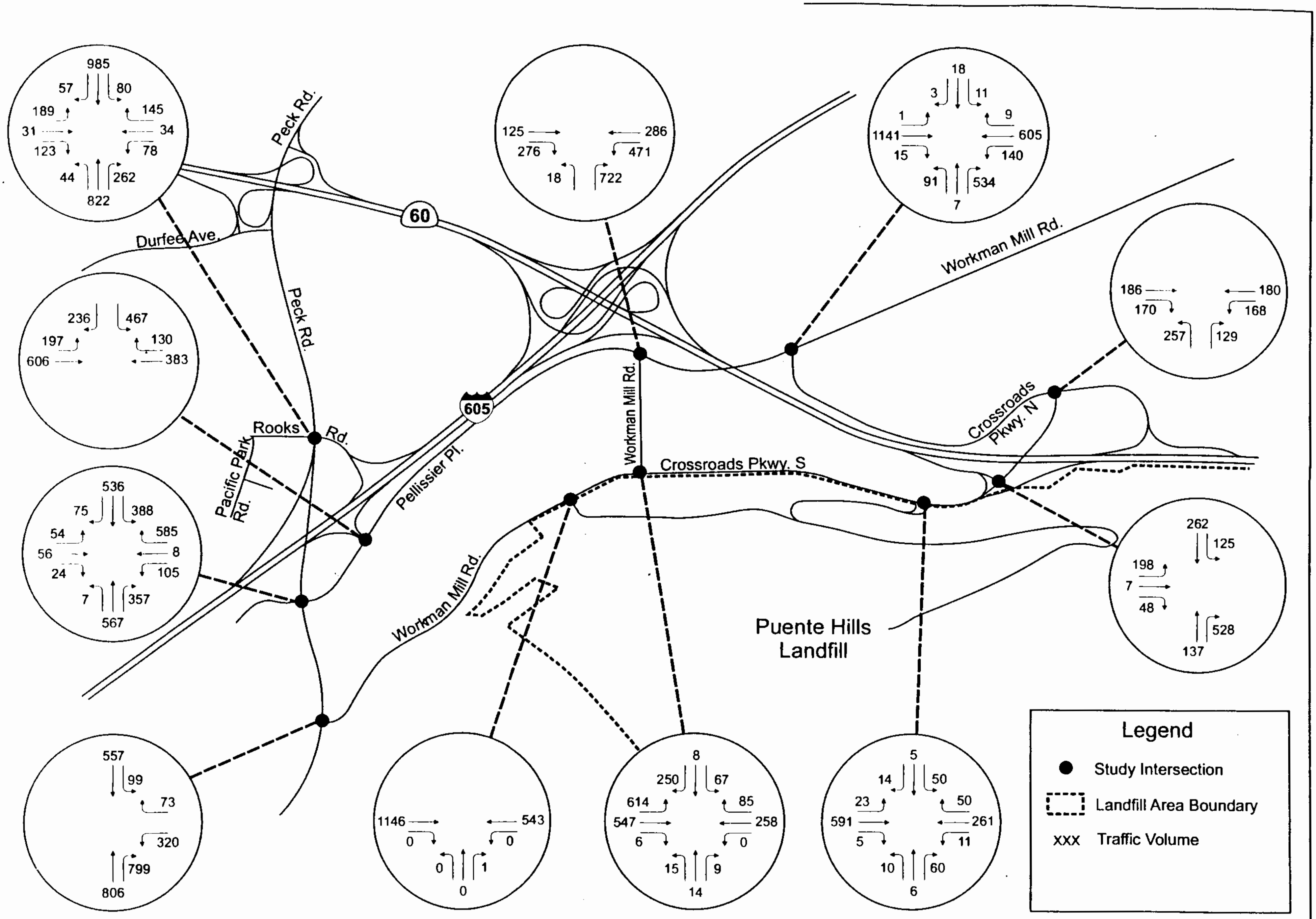

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Figure 3.2.3

Future (Ambient) Volumes with Project - PM Peak Hour

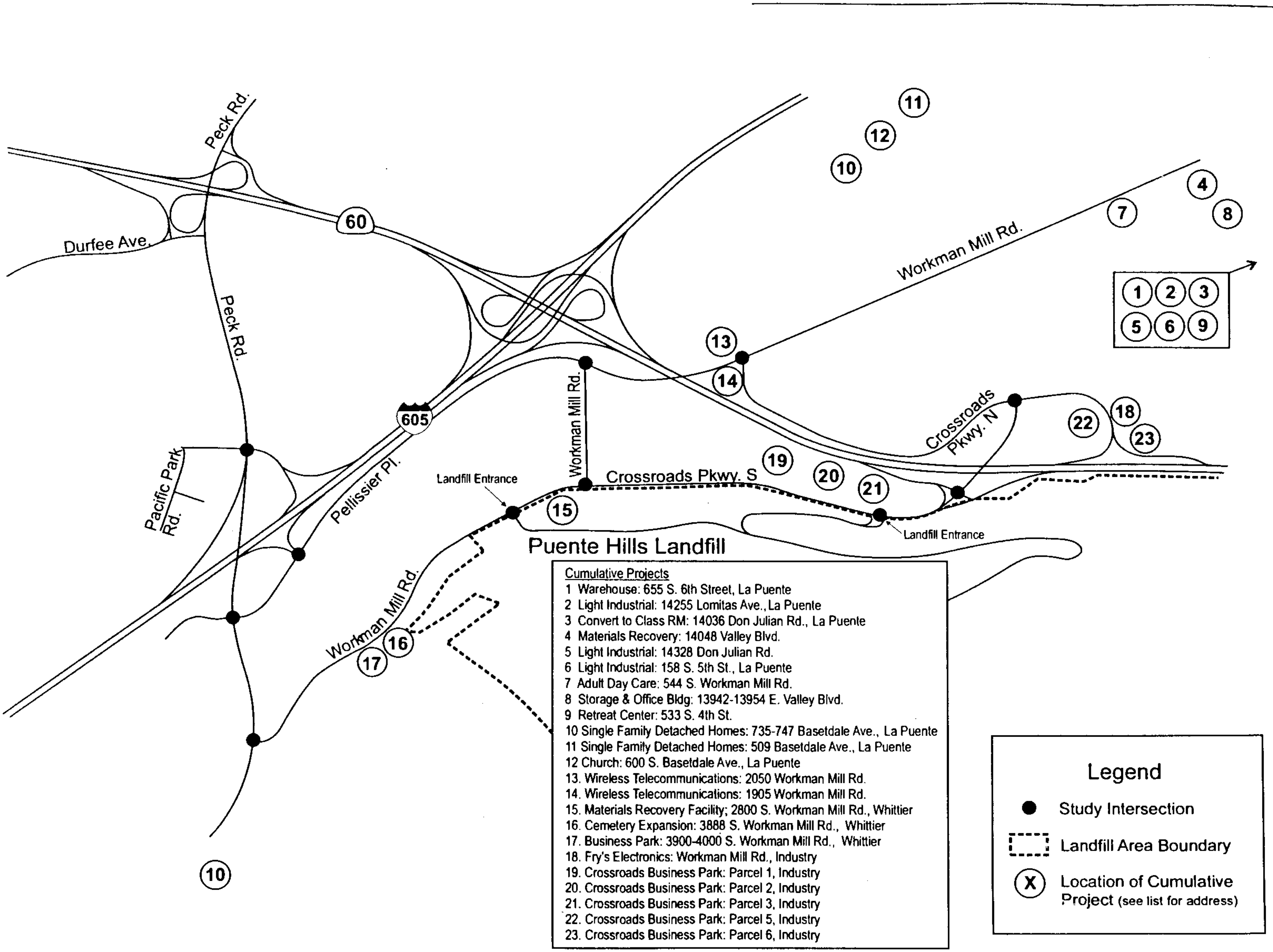

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Figure 3.3.1

Cumulative Project Locations

The trip generation of each cumulative project was determined based upon acreage or square feet of Gross Floor Area (GFA) and use of the Institute of Transportation Engineers (ITE) *Trip Generation* Report. Traffic from each of the cumulative projects was analyzed for probable trip distribution within the study area, and each project's estimated traffic was then assigned to the study area roadway network. The traffic analysis distributed traffic from the cumulative projects onto the study area roadway network, then to destination points within the study area or just beyond its limits. Cumulative project volumes were then added to the turn movement volumes at each study area intersection. Table 3.3.1 shows a list of the cumulative projects that were assumed for this scenario. The locations of each of these projects are shown in Figure 3.3.1.

Table 3.3.1 Cumulative Projects

Land Use	*Address*	*City*	*Size*
Warehouse	655 S 6th Street	La Puente	1 Acre
Light Industrial	14255 Lomitas Ave	La Puente	7.5 Acres
Convert to Class RM	14036 Don Julian Rd	La Puente	6 Acres
Materials Recovery	14048 Valley Blvd		14.28 Acres
Light Industrial	14328 Don Julian Rd		1.25 Acres
Light Industrial	158 S 5th Ave	La Puente	5 Acres
Adult Day Care	544 S Workman Mill Road		0.1 Acres
Storage & Office Bldgs	13942-13954 E Valley Blvd		1.88 Acres
Retreat Center	533 S 4th Ave		5.24 Acres
Single Family Detached Homes	735-747 Basetdale	La Puente	17 DUs
Single Family Detached Homes	509 Basetdale	La Puente	3 DUs
Church	600 S. Basetdale Ave	La Puente	5 Acres
Wireless Telecommunications	2050 Workman Mill Road		2 Acres
Wireless Telecommunications	1905 Workman Mill Road		2 Acres
Materials Recovery Facility	2800 S. Workman Mill Road	Whittier	Separate Analysis
Cemetery Expansion	3888 S. Workman Mill Road	Whittier	1.6 Acres
Business Park	3900 – 4000 S. Workman Mill Road	Whittier	2 Acres
Fry's Electronics	Crossroads Parkway North	Industry	144,000 sq. ft.

The Materials Recovery Facility (MRF) is a previously analyzed development proposed by the Sanitation Districts, but it is not yet constructed, although it has been permitted and analyzed pursuant to CEQA standards. Trip generation from the MRF is included in cumulative project traffic scenarios. As a condition to the MRF approval, landfill access to the west entrance of the landfill will be restricted. Employees and visitors to the landfill may use the west entrance; however, refuse traffic will be assigned to the main east entrance. Therefore, under the cumulative project analysis all of the refuse traffic was reassigned to the east entrance.

This scenario analyzes intersection conditions with 1% ambient growth between the years of 2000 and 2013 and traffic from cumulative projects. **Exhibits 3.3.2, 3.3.3, and 3.3.4** indicate the resulting peak hour traffic volumes at the study area intersections for cumulative projects and ambient traffic conditions through the year 2013 in the a.m. peak hour, mid-day peak hour, and in the p.m. peak hour respectively.

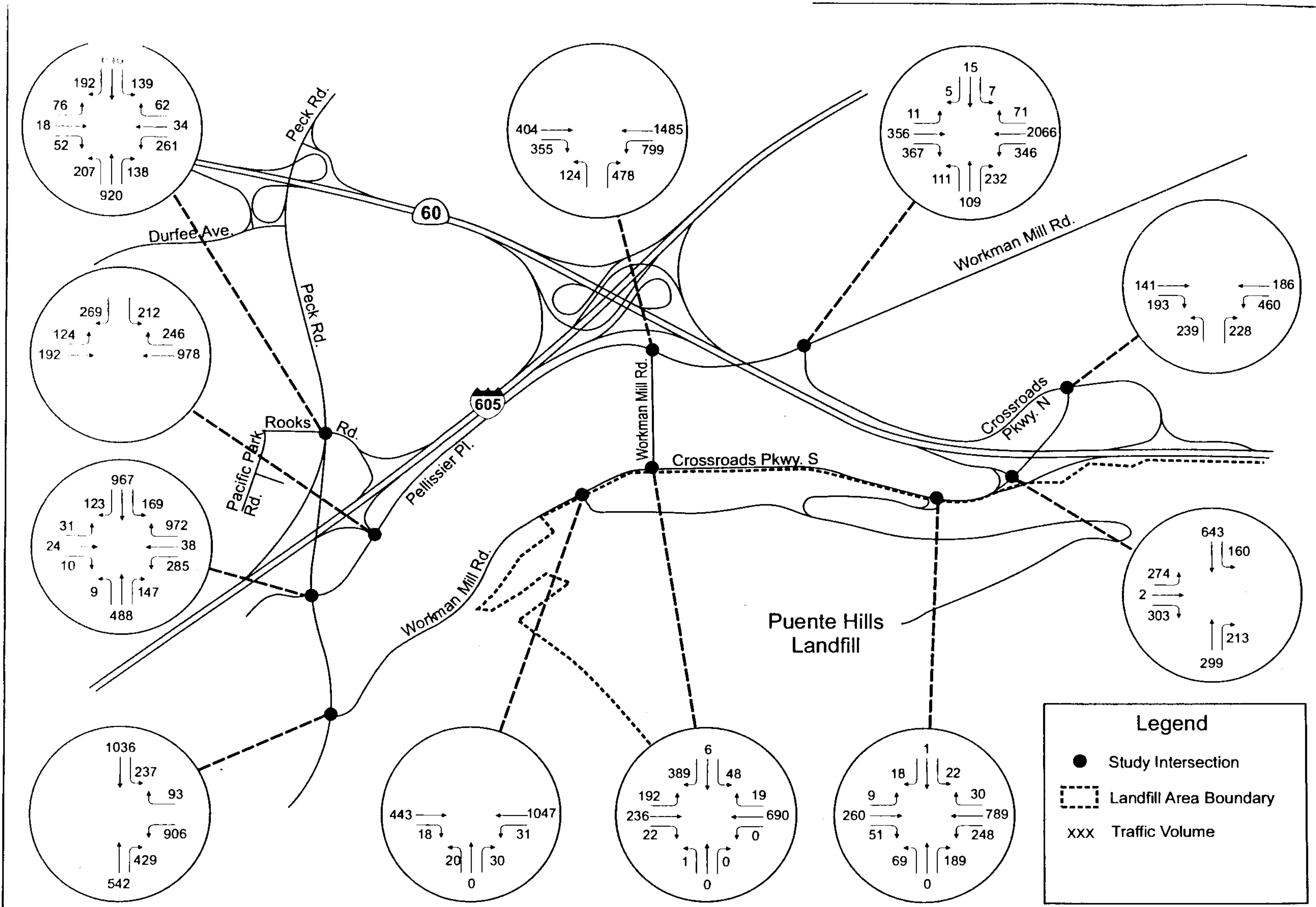

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Figure 3.3.2

Future (Cumulative) Volumes - AM Peak Hour Traffic Volumes

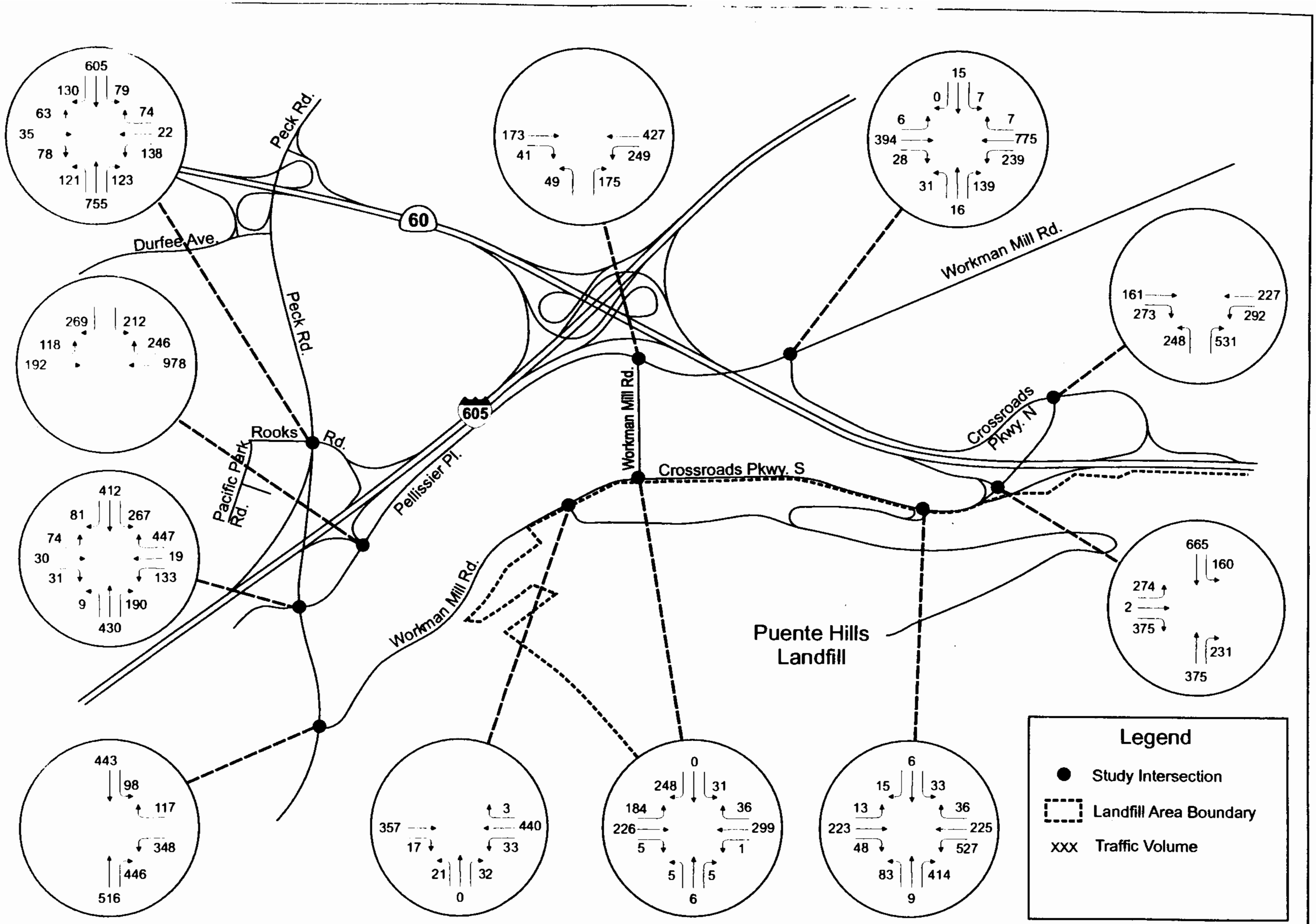

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Figure 3.3.3

Future (Cumulative) Volumes - Mid-Day Peak Hour

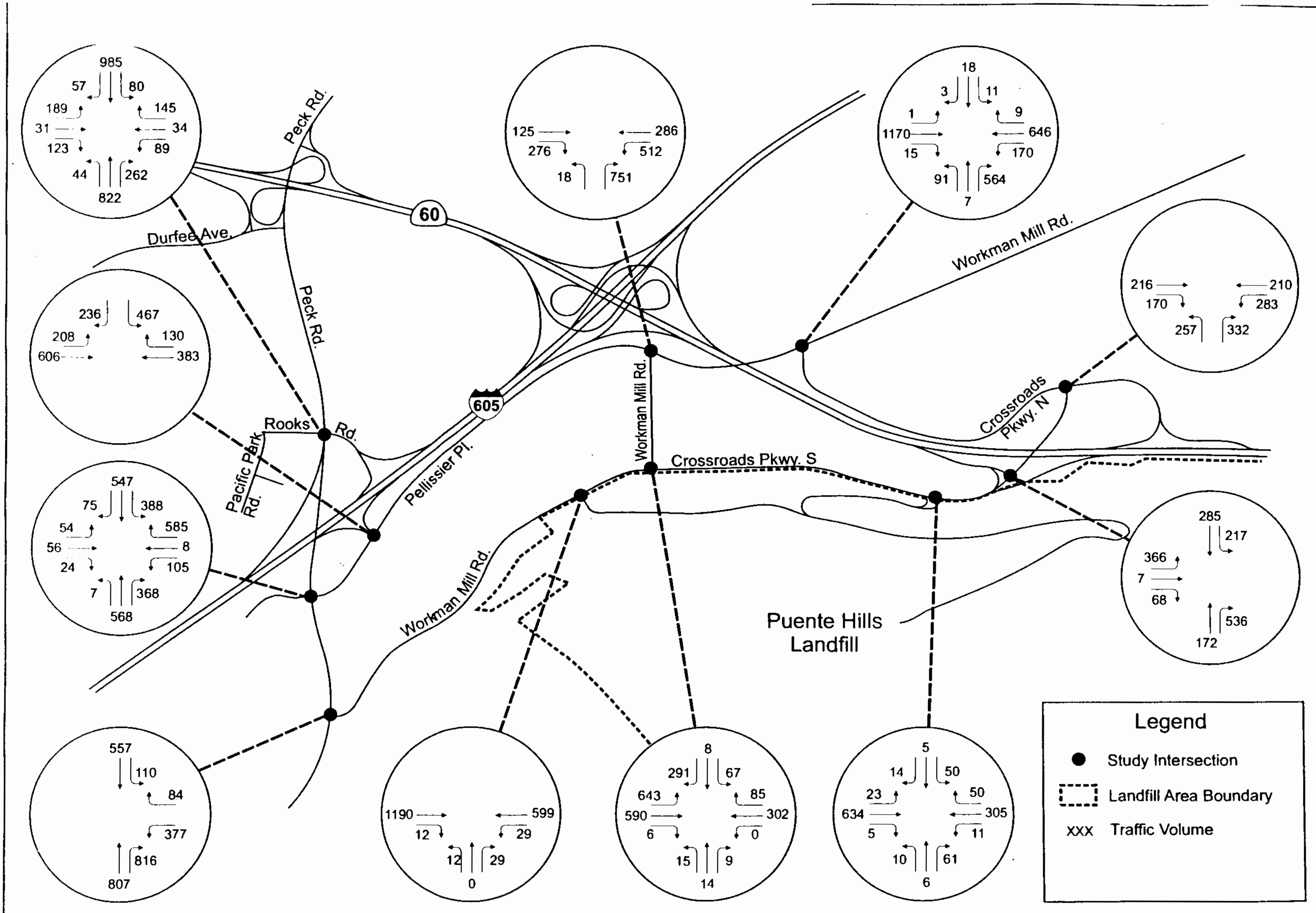

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Figure 3.3.4

Future (Cumulative) Volumes - PM Peak Hour

Table 3.3.2 indicates the Level of Service at the study area intersections for this scenario. Some of the ICU's shown have increased from the background growth scenario, however there are no significant changes in levels of service between this scenario and the background growth scenario. It should be noted that this scenario includes traffic associated with the landfill within the background traffic forecast.

Table 3.3.2 – Future Ambient Traffic Conditions With Cumulative Projects (With Project)

Intersection	*A.M. Peak Hour* ICU or Delay (")	*A.M. Peak Hour* Level of Service	*Mid-Day Peak Hour* ICU or Delay (")	*Mid-Day Peak Hour* Level of Service	*P.M. Peak Hour* ICU or Delay (")	*P.M. Peak Hour* Level of Service
Crossroads Pkwy S/ East Entrance	20.6"	D	123.8"	F	1.4"	A
Workman Mill Rd / West Entrance	0.7"	A	0.4"	A	0.7"	A
Crossroads Pkwy S/ 60 EB Ramps	0.537	A	0.495	A	0.406	A
Crossroads Pkwy S/ Crossroads N.	0.738	C	0.969	E	0.605	B
Crossroads Pkwy S/ Workman Mill	0.557	A	0.437	A	0.726	C
Crossroads Pkwy N/ Workman Mill	0.895	D	0.443	A	0.773	C
Workman Mill / Pellissier Rd	0.803	D	0.340	A	0.470	A
Workman Mill / Peck Rd	0.736	C	0.440	A	0.679	B
605 Fwy / Pellissier Rd	0.728	C	0.724	C	0.682	B
Pellissier Rd / Peck Rd	1.088	F	0.805	D	1.069	F
Peck Rd / Rooks Road	0.713	C	0.559	A	0.697	B

Note: ICU = Intersection Capacity Utilization; Delay = Seconds per Vehicle, average

3.4 Non-Pending Cumulative Project Growth Assumptions

In addition to the pending projects above, there is the possibility of additional projects in the area, even though they are not currently in the planning phase. Specifically, there is a possibility of a large business park, known as the Crossroads Business Park, which may one day be constructed along Crossroads Parkway in the project area. Since this project is still subject to discretionary approval, and there is a likelihood that it will not be constructed to the densities permitted by the City's General Plan, it is analyzed under a separate scenario.

Information on this project was found on the developer's web site. According to that information, the Crossroads Business Park includes five potential parcels, as described below:

Parcel 1A - This 5.83-acre site will accommodate a two-story office/R&D building totaling 100,800 square feet with 4.05/1,000 parking. Zoned MC-overlay in the City of Industry. This site is suitable for companies requiring some warehouse, lab or light assembly areas.
Parcel 2 - This 6.63-acre site will accommodate a two-story office/R&D building totaling 115,200 square feet with 4.05/1,000 parking. Zoned MC-overlay in the City of Industry. This site is suitable for companies requiring some warehouse, lab or light assembly areas.
Parcel 3 - This 4.93-acre site will accommodate a two-story office/R&D building totaling 86,400 square feet with 4.2/1,000 parking. Zoned MC-overlay in the City of Industry. This site is suitable for companies requiring some warehouse, lab or light assembly areas.

Parcel 5 - This highly visible 11.29-acre site is slated for retail development and zoned commercial. Although no exact square footages are currently specified by the project owner, 150,000 square feet of building area is assumed for this parcel.
Parcel 6 - This 13.16-acre site is zoned commercial and available for office or retail development. The site plan highlights a 3 building campus style development totaling 211,500 square feet, with a 4.5/1,000 parking ratio. Other office configurations and retail uses are welcome. This parcel is the site of the Fry's Electronics which is currently under construction. 114,000 square feet of Fry's use is assumed under the cumulative project scenario outlined above, so only an additional 67,500 square feet is analyzed here.

The City of Industry specifications on what exact land uses are included in the MC zoning area are very vague, and include car dealerships, banks, churches, restaurants, and offices. All of these uses create extremely different trips throughout the day. To be conservative, an office park use was assumed for all of the buildings. Office parks are likely to be built in this center, and they have a trip generation on the relatively high side compared to some of the uses that could be built in the MC zone.

This scenario analyzes intersection conditions with 1% ambient growth between the years of 2000 and 2013 and traffic from cumulative projects. **Exhibits 3.4.1, 3.4.2, and 3.4.3** indicate the resulting peak hour traffic volumes at the study area intersections for cumulative projects and ambient traffic conditions through the year 2013 in the a.m. peak hour, mid-day peak hour, and in the p.m. peak hour respectively.

Table 3.3.2 indicates the Level of Service at the study area intersections for this scenario. Some of the ICU's shown have increased from the background growth scenario, however there are no significant changes in levels of service between this scenario and the background growth scenario except at Crossroads Parkway South intersection with Crossroads Parkway North and the project entrance. This intersection is forecast at Level of Service F in the mid-day peak, while it was forecast at Level of Service C in the previous scenario. It should be noted that this scenario includes traffic associated with the landfill within the background traffic forecast.

Table 3.4.1 – Future Ambient Traffic Conditions
With Cumulative Projects Including Crossroads Business Park (With Project)

Intersection	*A.M. Peak Hour* ICU or Delay (")	*A.M. Peak Hour* Level of Service	*Mid-Day Peak Hour* ICU or Delay (")	*Mid-Day Peak Hour* Level of Service	*P.M. Peak Hour* ICU or Delay (")	*P.M. Peak Hour* Level of Service
Crossroads Pkwy S/ East Entrance	81.4"	F	23.8"	D	1.9"	A
Workman Mill Rd / West Entrance	0.8"	A	0.4"	A	0.8"	A
Crossroads Pkwy S/ 60 EB Ramps	0.507	A	0.584	A	0.533	A
Crossroads Pkwy S/ Crossroads N.	0.787	C	1.099	F	0.824	D
Crossroads Pkwy S/ Workman Mill	0.570	A	0.447	A	0.749	C
Crossroads Pkwy N/ Workman Mill	0.897	D	0.451	A	0.787	C
Workman Mill / Pellissier Rd	0.804	D	0.340	A	0.471	A
Workman Mill / Peck Rd	0.739	C	0.458	A	0.686	B
605 Fwy / Pellissier Rd	0.761	C	0.744	C	0.707	C
Pellissier Rd / Peck Rd	1.088	F	0.810	D	1.082	F
Peck Rd / Rooks Road	0.713	C	0.559	A	0.697	B

Note: ICU = Intersection Capacity Utilization; Delay = Seconds per Vehicle, average

The landfill entrance on Crossroads Parkway South in also forecast to operate at a poor level of service. This is due to the increase in cross traffic on Crossroads Parkway South and the lack of a traffic signal at the intersection.

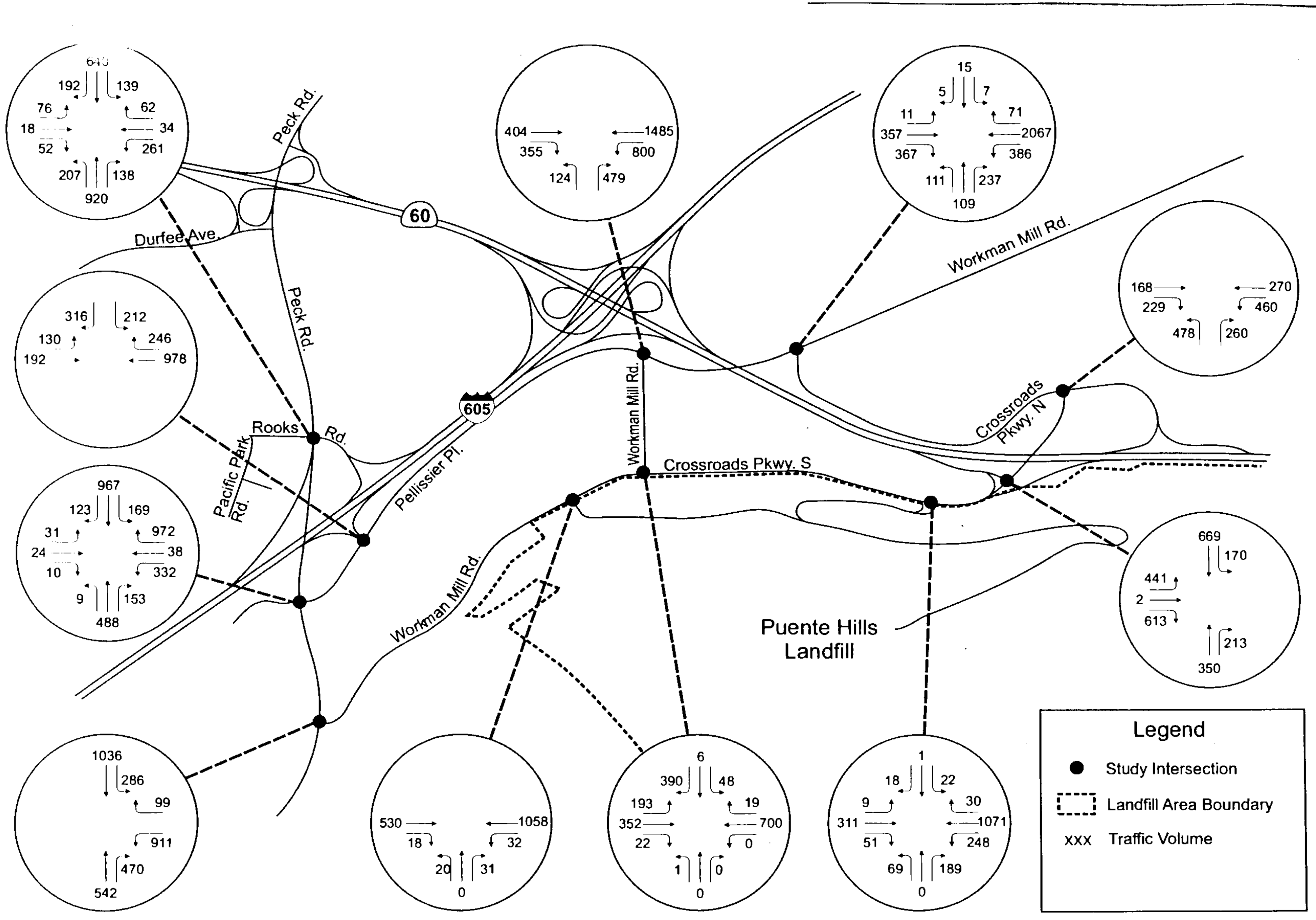

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Figure 3.4.1

Future (Non-Pending Cumulative) Volumes With Project - AM Peak Hour

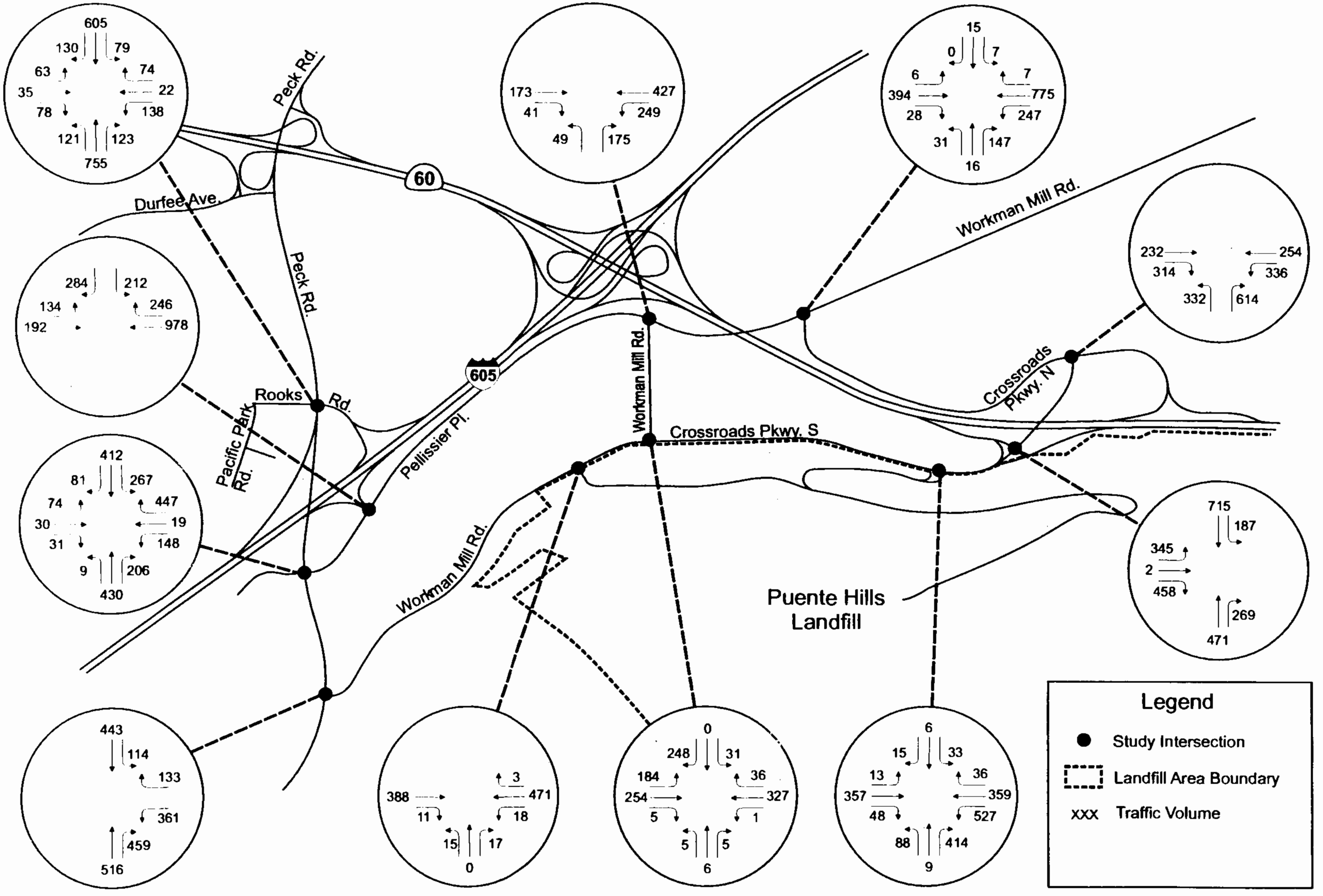

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Figure 3.4.2

Future (Non-Pending Cumulative) Volumes With Project - Mid-Day Peak

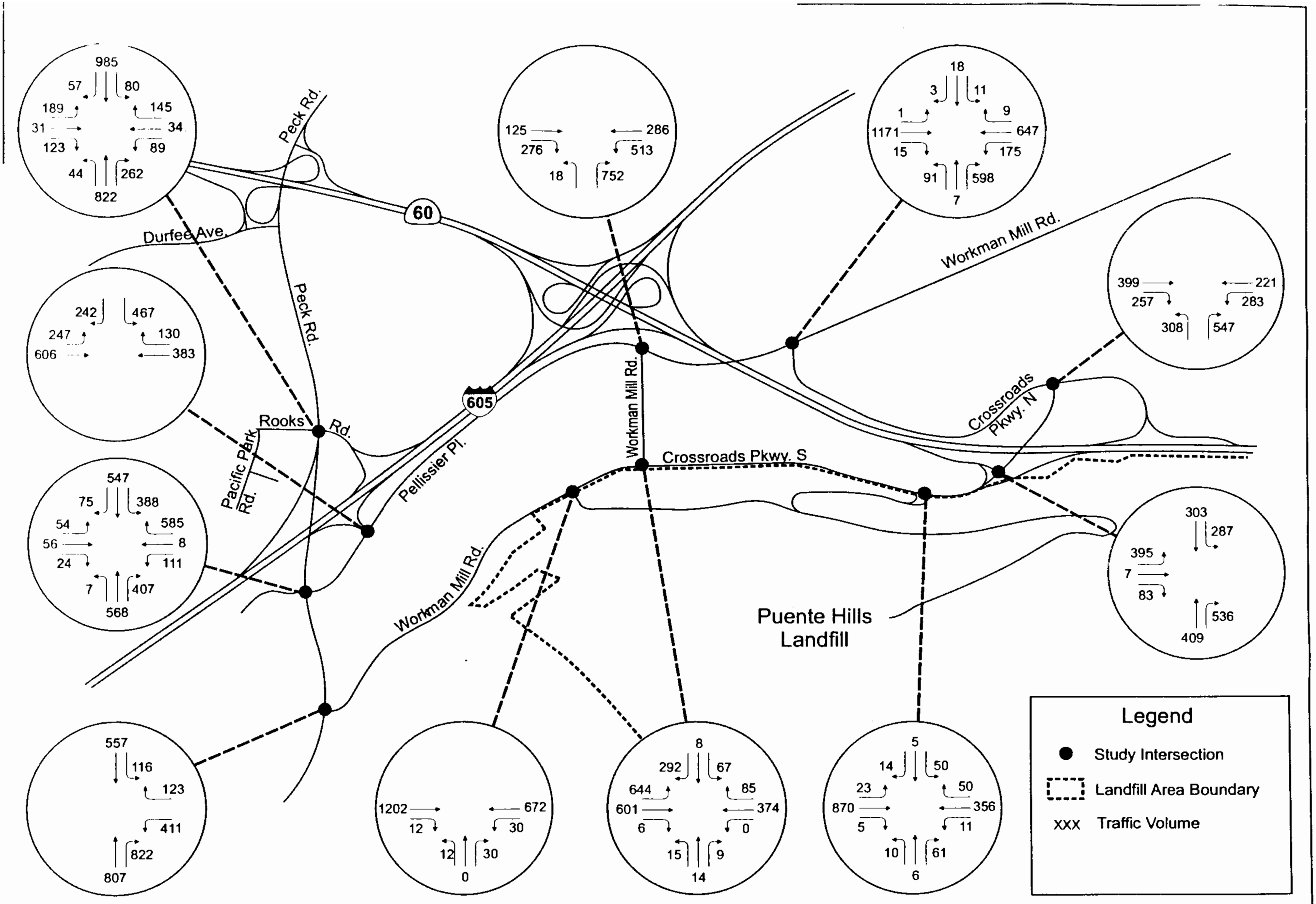

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Figure 3.4.3

Future (Non-Pending Cumulative) Volumes With Project - PM Peak Hour

4.0 PROJECT RELATED TRAFFIC

Project-related traffic consists of trips on any portion of the street system that will begin or end on the project site as a result of the development or expansion of the proposed project. Project-related traffic is a function of the extent and type of development proposed for the site. This information is used to establish traffic generation for the site.

Trip generation is a measure or forecast of the number of trips that will be made to or from the project. It is generally equal to the traffic volume expected at the project entrance.

Trip generation characteristics for projects are normally estimated based on rates published in *Trip Generation, Sixth Edition*, published by the Institute of Transportation Engineers (ITE). This manual is widely used in Southern California and indicates the probable traffic generation rates for various land uses based upon studies of existing developments in comparable settings.

The Puente Hills Landfill is currently existing, and due to the limitations of the operational permit, it has unique trip generation characteristics. A study of the existing traffic levels and utilization of the landfill was conducted for this traffic report.

4.1 Existing Site Access and Landfill Traffic

The main entrance to the landfill is located on Crossroads Parkway South, west of the 60 Freeway ramps, while a secondary driveway is located on Workman Mill Road. The Workman Mill Road access point will be shutdown to landfill traffic, when a Material Recovery Facility (MRF) becomes operational at that location before the end of the study period (year 2013). The Crossroads Parkway driveway would then provide site access to vehicles that currently utilize the Workman Mill entrance. This site geometry will be used to analyze future conditions under the final analysis.

Table 4.1.1 below summarizes the project's trip generation during the study periods, as well as the daily site trip generation.

Table 4.1.1 – Landfill Trip Generation

Period	*Time*	*Peak Period*	*In*	*Out*	*Total*
A.M. Peak	7:30 a.m. – 8:30 a.m.	Street Traffic	295	265	560
Landfill Peak	10:00 a.m. – 11:00 a.m.	Project Traffic	330	320	650
P.M. Peak	5:00 p.m. – 6:00 p.m.	Street Traffic	8	62	70
DAILY	12:00 a.m. – 11:59 p.m.	N/A	2,717	2,829	5,546

The data collection effort documents that the peak period for the landfill occurs between 10:00 a.m. and 11:00 a.m., when 330 vehicles enter and 320 depart the site. This does not coincide with the a.m. peak hour of the adjacent streets that generally occurs between 7 a.m. and 9 a.m. The traffic generation for the landfill is also shown during the traditional a.m. peak hour of the adjacent streets for analysis purposes.

Table 4.1.2 provides an hourly breakdown of traffic at the main landfill entrance at Crossroads Parkway South. It can be seen that after this peak late-morning period, traffic volumes taper off. According to Sanitation District staff, the landfill reaches its daily tonnage limit -- as defined in its current operating permit -- by mid-day or early afternoon. This limit is usually reached during the early afternoon hours, and after that point only ancillary materials are accepted at the landfill. Due to these early closures, there is no discernable p.m. peak period for landfill traffic.

Table 4.1.2 Existing Landfill Traffic Counts
East Landfill Access at Crossroads Parkway South

Time Period	*Vehicles In*	*Vehicles Out*	*Time Period*	*Vehicles In*	*Vehicles Out*
12:00- 1:00 a.m.	3	0	12:00- 1:00 p.m.	181	315
1:00 – 2:00 a.m.	0	0	1:00 – 2:00 p.m.	148	210
2:00 – 3:00 a.m.	0	0	2:00 – 3:00 p.m.	114	174
3:00 – 4:00 a.m.	5	5	3:00 – 4:00 p.m.	66	117
4:00 – 5:00 a.m.	55	34	4:00 – 5:00 p.m.	42	83
5:00 – 6:00 a.m.	147	67	5:00 – 6:00 p.m.	8	61
6:00 – 7:00 a.m.	263	123	6:00 – 7:00 p.m.	5	9
7:00 – 8:00 a.m.	235	183	7:00 – 8:00 p.m.	2	1
8:00 – 9:00 a.m.	290	194	8:00 – 9:00 p.m.	1	0
9:00 – 10:00 a.m.	266	193	9:00 – 10:00 p.m.	1	0
10:00 – 11:00 a.m.	279	234	10:00 – 11:00 p.m.	2	0
11:00 – 12:00 a.m.	258	275	11:00 – 12:00 p.m.	0	0

Table 4.1.3 provides an hourly breakdown of traffic at the secondary landfill entrance at Workman Mill Road. As with the eastern access point, there is also no discernable p.m. peak period at this western access point.

Table 4.1.3 Existing Landfill Traffic Counts
West Landfill Access at Workman Mill Road

Time Period	*Vehicles In*	*Vehicles Out*	*Time Period*	*Vehicles In*	*Vehicles Out*
12:00- 1:00 a.m.	3	1	12:00- 1:00 p.m.	18	28
1:00 – 2:00 a.m.	0	0	1:00 – 2:00 p.m.	15	22
2:00 – 3:00 a.m.	0	0	2:00 – 3:00 p.m.	14	10
3:00 – 4:00 a.m.	0	0	3:00 – 4:00 p.m.	10	11
4:00 – 5:00 a.m.	6	1	4:00 – 5:00 p.m.	2	0
5:00 – 6:00 a.m.	29	2	5:00 – 6:00 p.m.	0	1
6:00 – 7:00 a.m.	30	63	6:00 – 7:00 p.m.	1	2
7:00 – 8:00 a.m.	54	91	7:00 – 8:00 p.m.	2	1
8:00 – 9:00 a.m.	49	62	8:00 – 9:00 p.m.	1	4
9:00 – 10:00 a.m.	51	92	9:00 – 10:00 p.m.	3	2
10:00 – 11:00 a.m.	51	86	10:00 – 11:00 p.m.	2	2
11:00 – 12:00 a.m.	15	75	11:00 – 12:00 p.m.	1	1

Project trip generation for the landfill site was determined based upon daily traffic counts taken at both access points to the landfill, one on Workman Mill Road and one on Crossroads Parkway South. An average of two separate Average Daily Traffic (ADT) counts was used to ensure that the trip generation from a typical day at the landfill was considered. The (ADT) counts were collected on August 23, 2000 and November 7, 2000. The traffic volume at both access points was combined to create a total site trip generation.

Assumptions for future landfill trip generation include additional truck trips for delivering of dirt to the site. A 14% growth rate was added to the existing landfill to produce the additional trucks. These trucks, an increase of 440 (total of 690) each day, were assumed to arrive and depart the site during the hours of 6.a.m. to 5 p.m. This scheduling would generate the daily truck trips over an 11-hour period, overlapping all study periods. The number of trucks arriving each hour was considered consistent, creating an equal number of dirt fill truck trips during each one-hour study period. Based upon information from the Sanitation District, dirt truck traffic is the only tonnage that would increase at the landfill as a result of the proposed project.

4.2 Trip Distribution

Trip distribution is the process of identifying the probable destinations, directions or traffic routes which will be utilized by project traffic. The potential interaction between the proposed land use and surrounding regional access routes are considered to identify the route where the project traffic will distribute.

Since the landfill currently exists, a truck traffic turning movement analysis was conducted to evaluate trip distribution for the landfill. This study measured landfill truck traffic and turning movements at three key locations, the landfill entrance on Crossroads Parkway, at the 60 Freeway eastbound ramp intersection on South Crossroads Parkway, and at the intersection of South Crossroads Parkway and North Crossroads Parkway.

The turning movement study showed the high distribution of traffic from the landfill directly to the SR 60 Freeway. It indicated that landfill traffic represents a very small portion of traffic on most study area roadways, except on Crossroads Parkway South between the landfill entrance and the 60 Freeway ramps.

The anticipated trip distribution for the proposed development is presented on **Exhibits 4.2.1, 4.2.2, and 4.2.3**. This exhibit indicates the proportion of project traffic that will use the street segments.

Exhibits 4.2.4, 4.2.5, and 4.2.6 show peak hour traffic volumes at study area intersections that are associated with the landfill. These volumes must be deducted from previous forecasts of future traffic conditions in order to assess the project impacts.

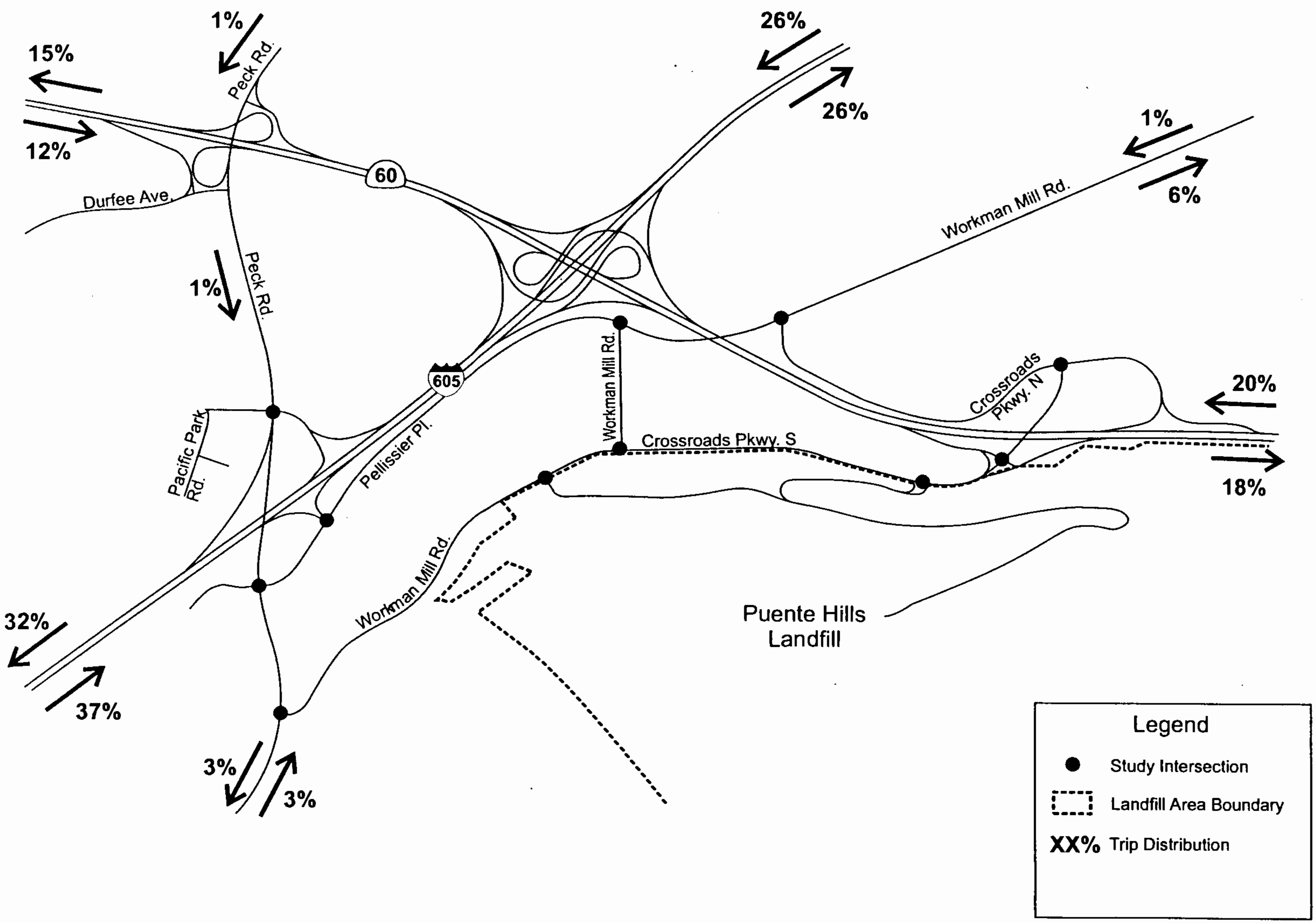

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Figure 4.2.1
Trip Distribution - AM Peak Hour

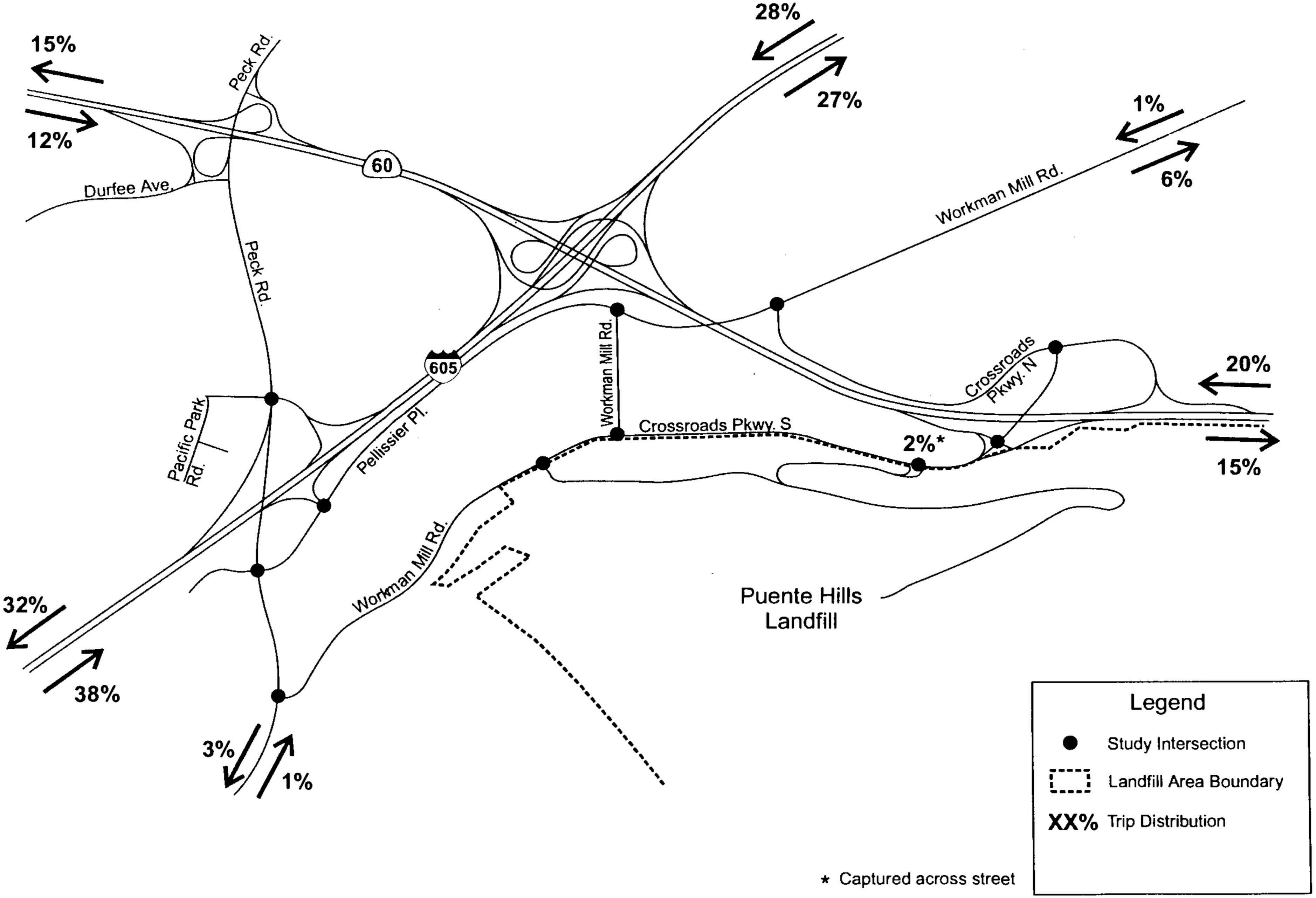

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Figure 4.2.2

Trip Distribution - Mid-Day Peak Hour

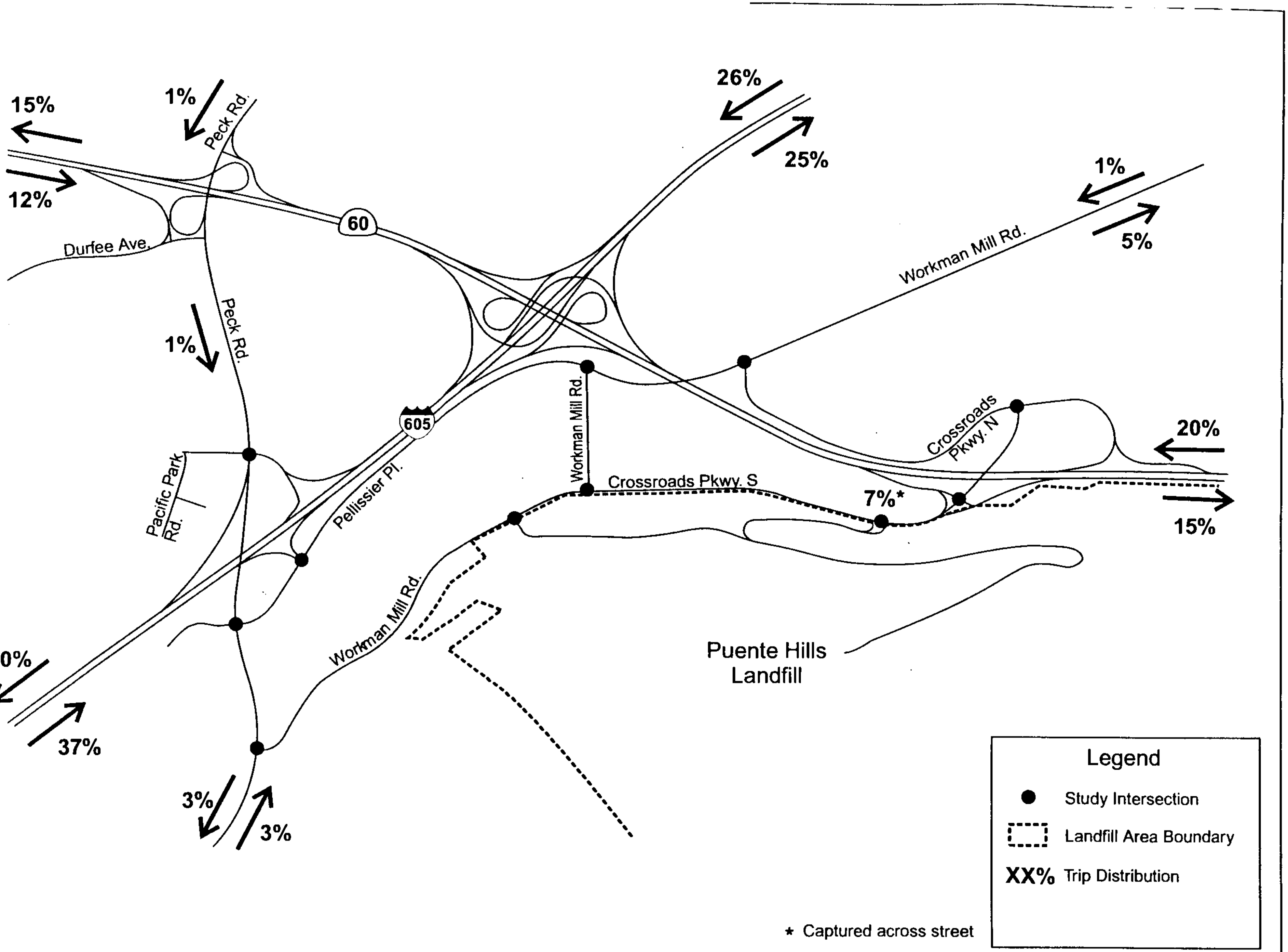

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Figure 4.2.3

Trip Distribution - PM Peak Hour

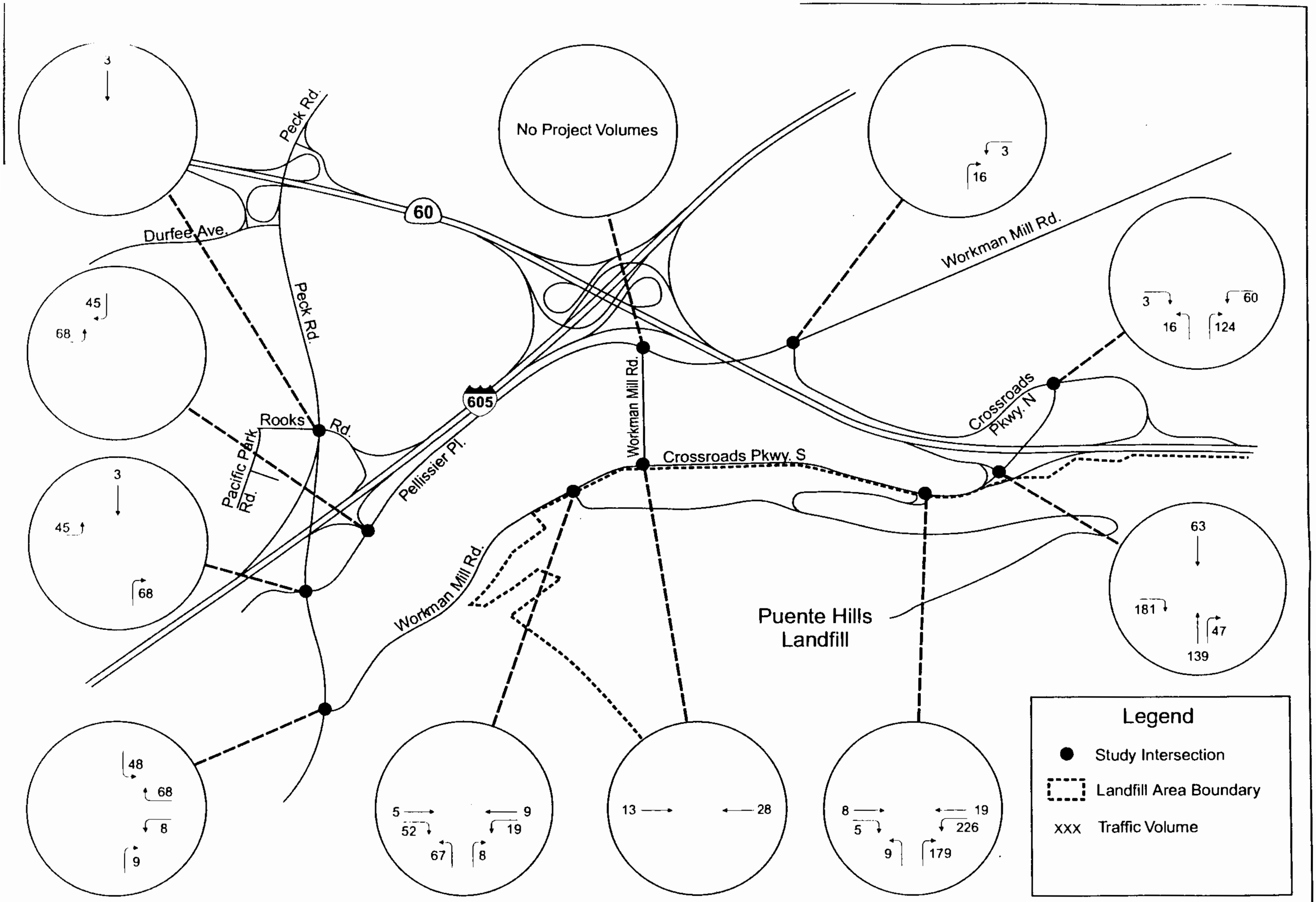

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Figure 4.2.4

Project Volumes - AM Peak Hour

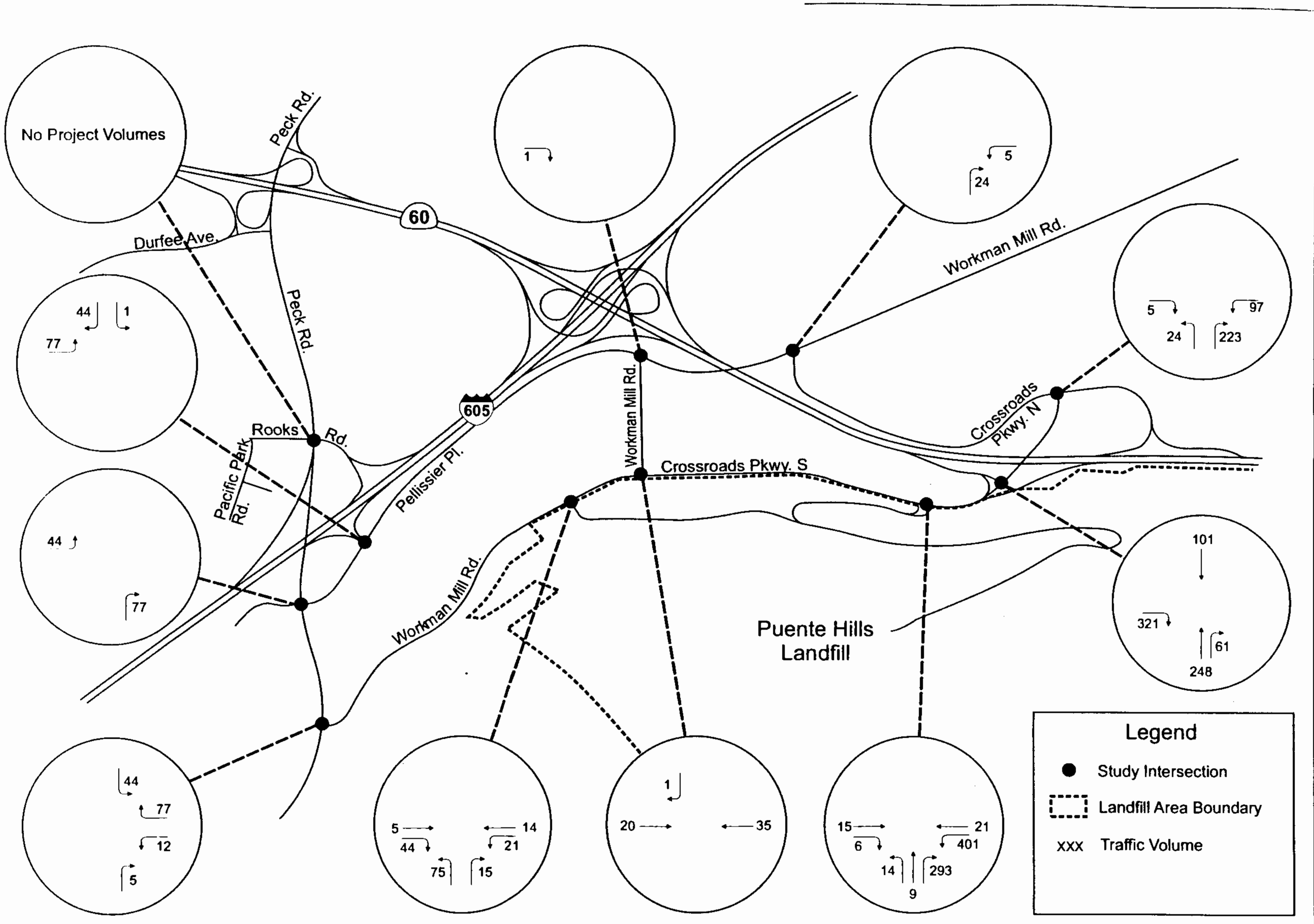

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Figure 4.2.5

Project Volumes - Mid-Day Peak Hour

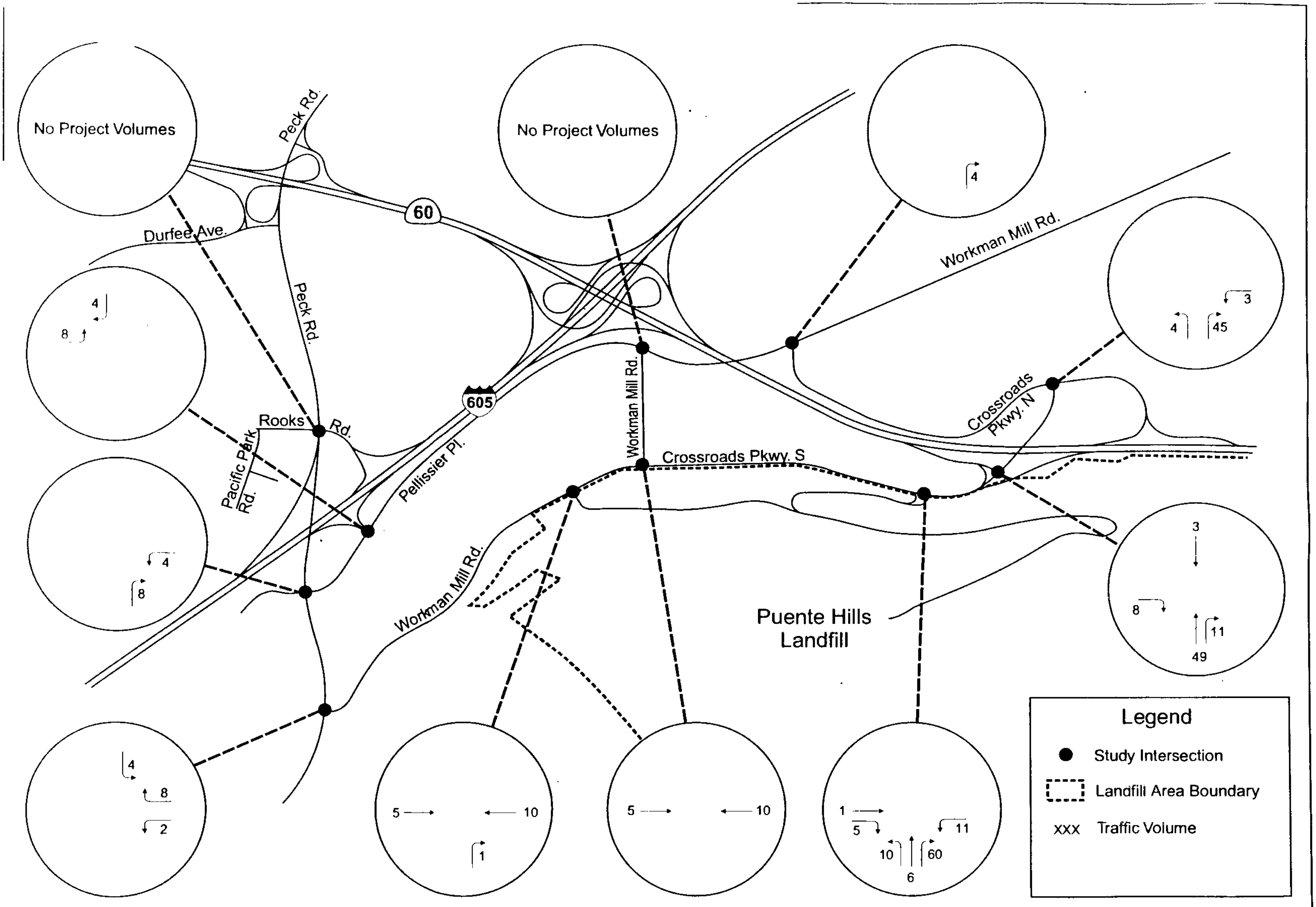

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Figure 4.2.6

Project Volumes - PM Peak Hour

5.0 FUTURE (YEAR 2013) TRAFFIC CONDITIONS WITHOUT THE PROPOSED PROJECT

This section evaluates the traffic that would exist if the landfill were not used in the Year 2013. It suggests future traffic conditions in that year if the landfill permit is not renewed. It is not an actual scenario that will happen; however, the traffic is analyzed theoretically, in order to determine the impacts of the traffic differences between keeping the landfill operating and having a non-operating landsite.

5.1 Future Traffic Conditions - Ambient Growth Only with Landfill Closure

This base scenario analyzes intersection conditions assuming 1% ambient growth between the years of 2000 and 2013. The intersection turn volumes were extrapolated to 2013 then the Landfill traffic was removed from the study area roadway network traffic volumes.

Exhibits 5.1.1, 5.1.2, and 5.1.3 indicate the resulting volumes on the study area roadway network under this scenario during the a.m., mid-day, and p.m. peak hours respectively. **Table 5.1.1** indicates traffic conditions based upon the peak hour volumes indicated. It illustrates that with future ambient growth, only the Pellissier Road and Peck Road intersection would operate below an acceptable level of service.

Table 5.1.1 – Future Traffic Conditions without Landfill

Intersection	*A.M. Peak Hour*		*Mid-Day Peak Hour*		*P.M. Peak Hour*	
	ICU or Delay (")	*Level of Service*	*ICU or Delay (")*	*Level of Service*	*ICU or Delay (")*	*Level of Service*
Crossroads Pkwy S/ East Entrance	0.7"	A	0.9"	A	1.1"	A
Workman Mill Rd / West Entrance	0.0"	A	0.0"	A	0.0"	A
Crossroads Pkwy S/ 60 EB Ramps	0.434	A	0.422	A	0.270	A
Crossroads Pkwy S/ Crossroads N.	0.591	A	0.616	B	0.393	A
Crossroads Pkwy S/ Workman Mill	0.490	A	0.342	A	0.678	B
Crossroads Pkwy N/ Workman Mill	0.879	D	0.420	A	0.735	C
Workman Mill / Pellissier Rd	0.784	C	0.324	A	0.445	A
Workman Mill / Peck Rd	0.698	B	0.394	A	0.659	B
605 Fwy / Pellissier Rd	0.651	B	0.646	B	0.670	B
Pellissier Rd / Peck Rd	1.083	F	0.779	C	1.063	F
Peck Rd / Rook Road	0.706	C	0.556	A	0.697	B

Note: ICU = Intersection Capacity Utilization; Delay = Seconds per Vehicle, average

Analysis of significant project impacts is discussed in Section 6.0 of this report.

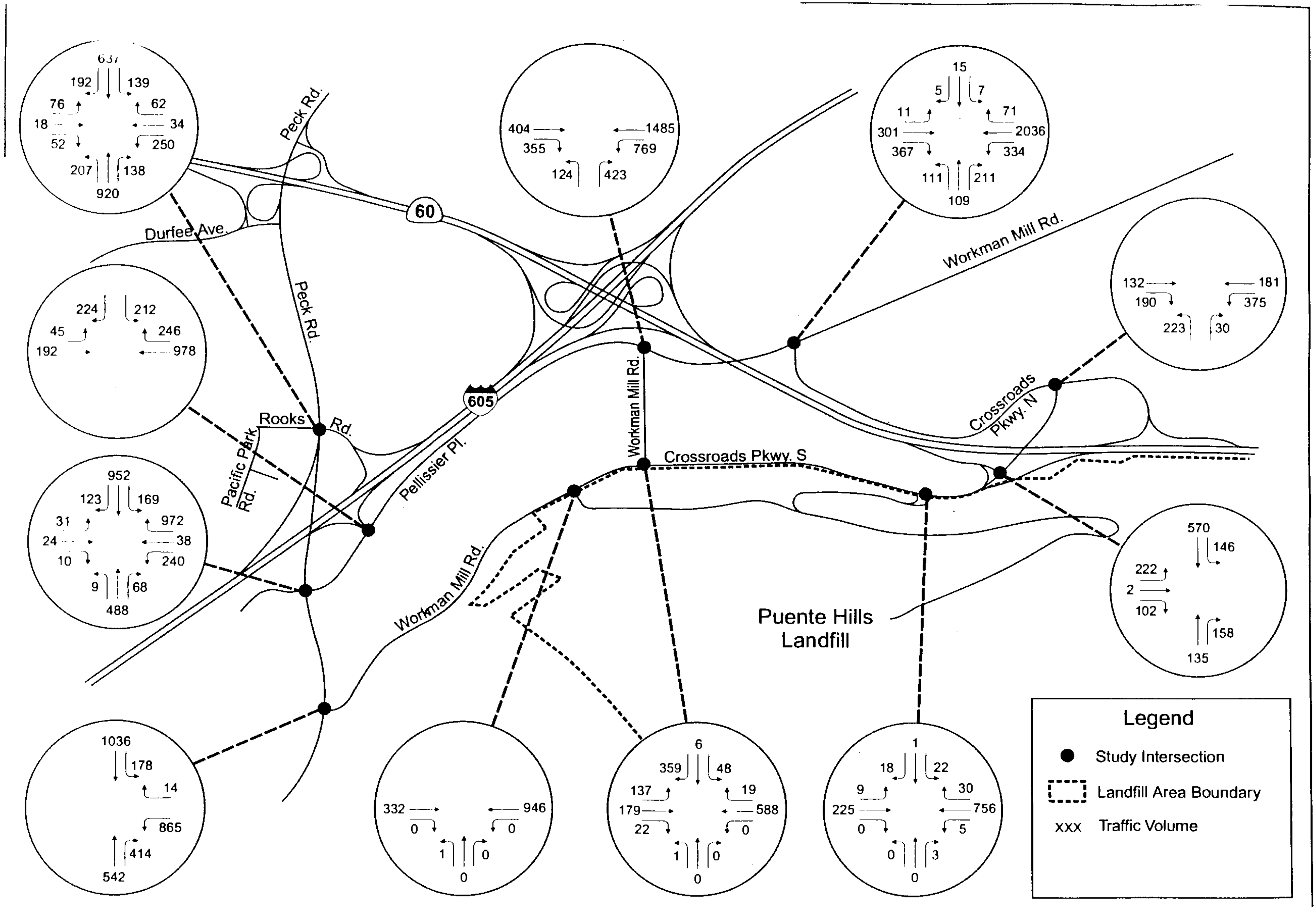

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Figure 5.1.1

Future (Ambient) Volumes Without Project - AM Peak Hour

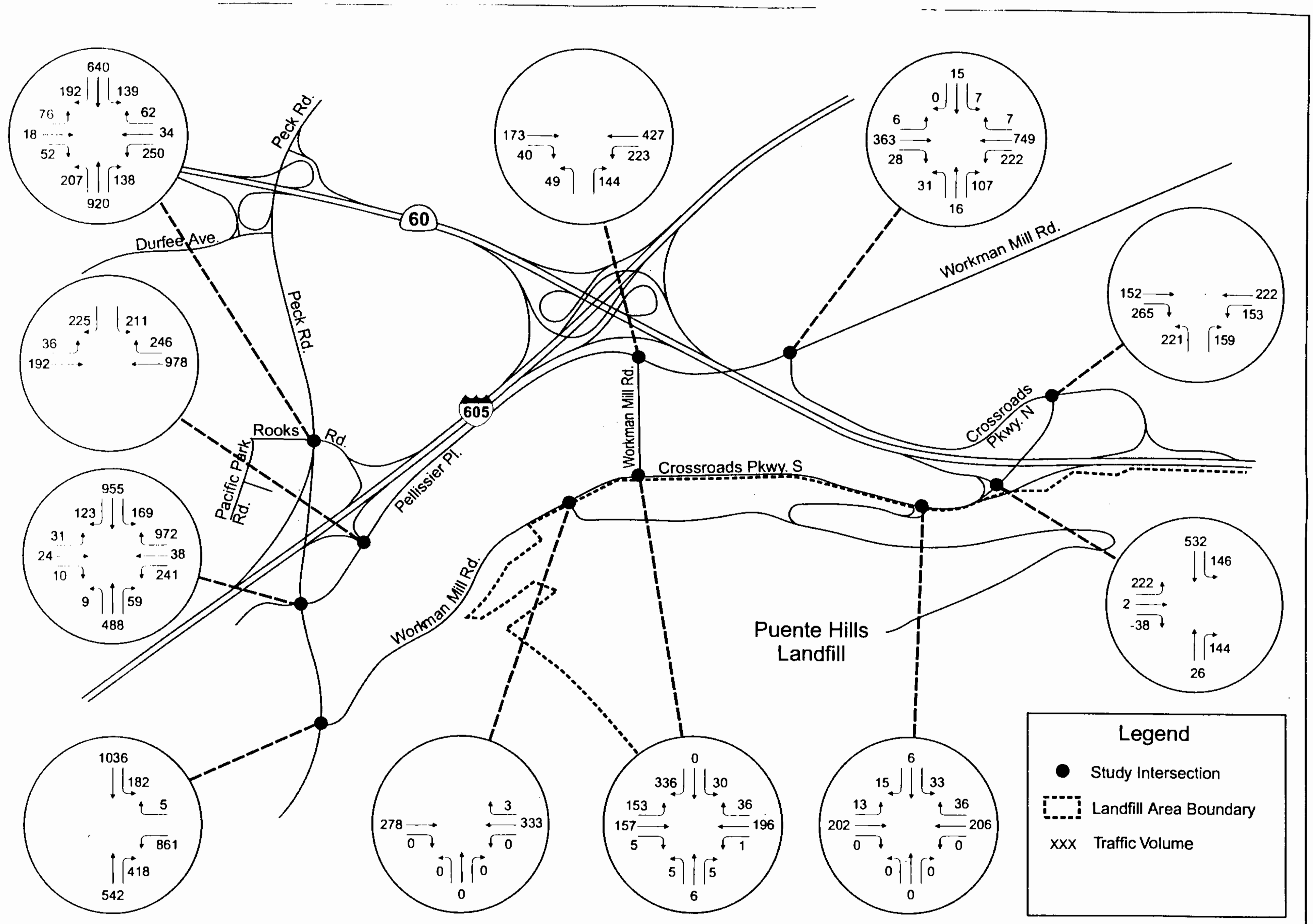

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Figure 5.1.2

Future (Ambient) Volumes Without Project - Mid-Day Peak Hour

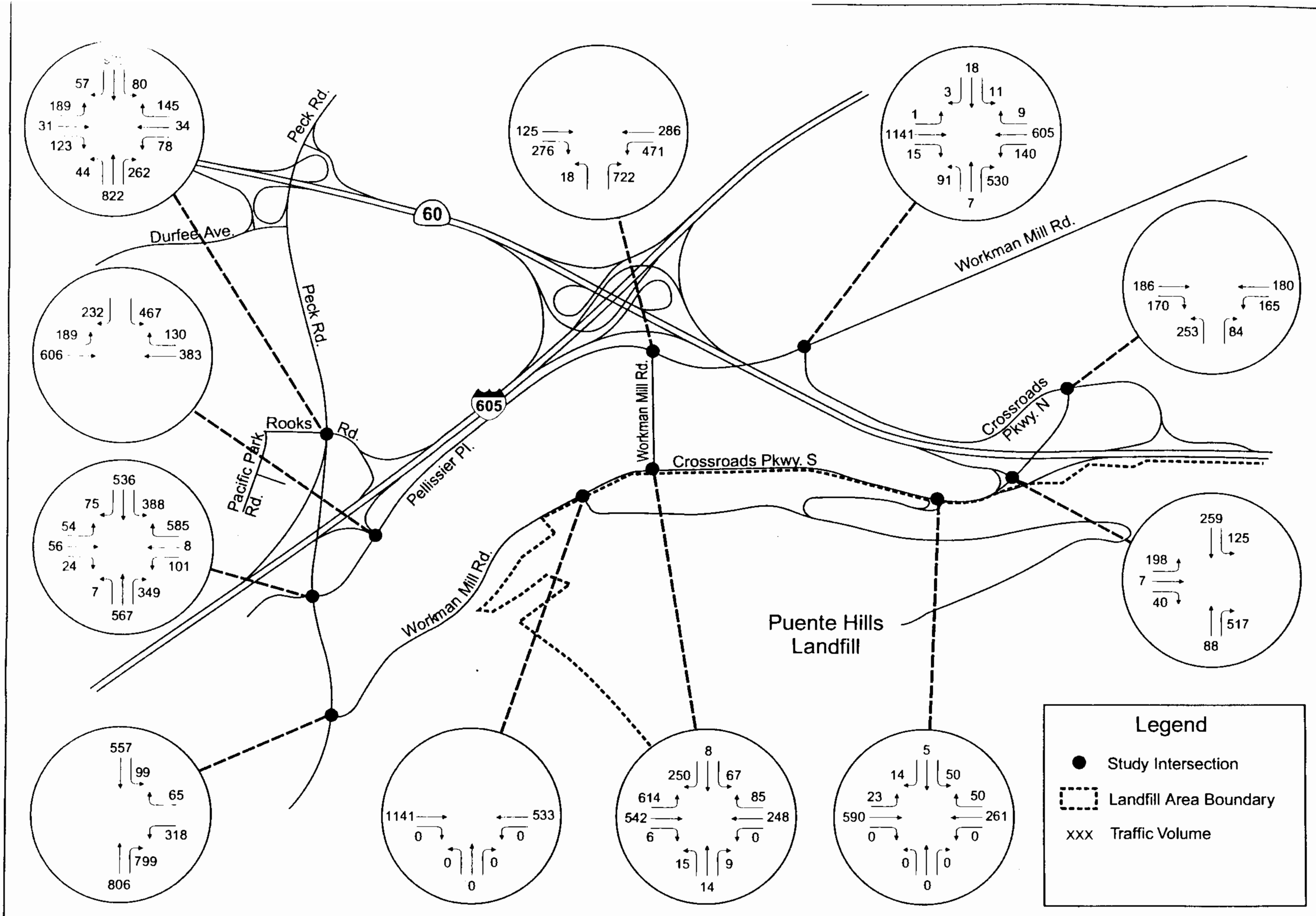

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Figure 5.1.3

Future (Ambient) Volumes Without Project - PM Peak Hour

5.2 Future Traffic Conditions Ambient and Cumulative Growth with Landfill Closure

This scenario analyzes intersection conditions under ambient and cumulative project growth between the years of 2000 and 2013, and landfill traffic. **Exhibits 5.2.1, 5.2.2 and 5.2.3** indicate the resulting volumes on the study area roadway network under this scenario for the a.m., mid-day and p.m. peak periods respectively. **Table 5.2.1** indicates Level of Service at the study area intersections under this scenario.

Table 5.2.1 – Future Traffic Conditions without Project Plus Cumulative Projects

	A.M. Peak Hour		*Mid-Day Peak Hour*		*P.M. Peak Hour*	
Intersection	*ICU or Delay (")*	*Level of Service*	*ICU or Delay (")*	*Level of Service*	*ICU or Delay (")*	*Level of Service*
Crossroads Pkwy S/ East Entrance	0.5"	A	1.6"	A	1.1"	A
Workman Mill Rd / West Entrance	0.7"	A	0.4"	A	0.7"	A
Crossroads Pkwy S/ 60 EB Ramps	0.400	A	0.493	A	0.391	A
Crossroads Pkwy S/ Crossroads N.	0.538	A	0.715	C	0.575	A
Crossroads Pkwy S/ Workman Mill	0.543	A	0.406	A	0.723	C
Crossroads Pkwy N/ Workman Mill	0.890	D	0.426	A	0.763	C
Workman Mill / Pellissier Rd	0.804	D	0.340	A	0.471	A
Workman Mill / Peck Rd	0.713	C	0.437	A	0.678	B
605 Fwy / Pellissier Rd	0.687	B	0.677	B	0.677	B
Pellissier Rd / Peck Rd	1.087	F	0.782	C	1.067	F
Peck Rd / Rook Road	0.713	C	0.559	A	0.697	B

Note: ICU = Intersection Capacity Utilization; Delay = Seconds per Vehicle, average

Table 5.2.1 shows that with ambient traffic growth and cumulative projects there would be one intersection with an unacceptable Level of Service in the a.m. and the p.m. peak period. This intersection, Pellissier Road at Peck Road, was also indicated as deficient in the other traffic forecast scenarios.

Analysis of significant project impacts is discussed in Section 6.0 of this report.

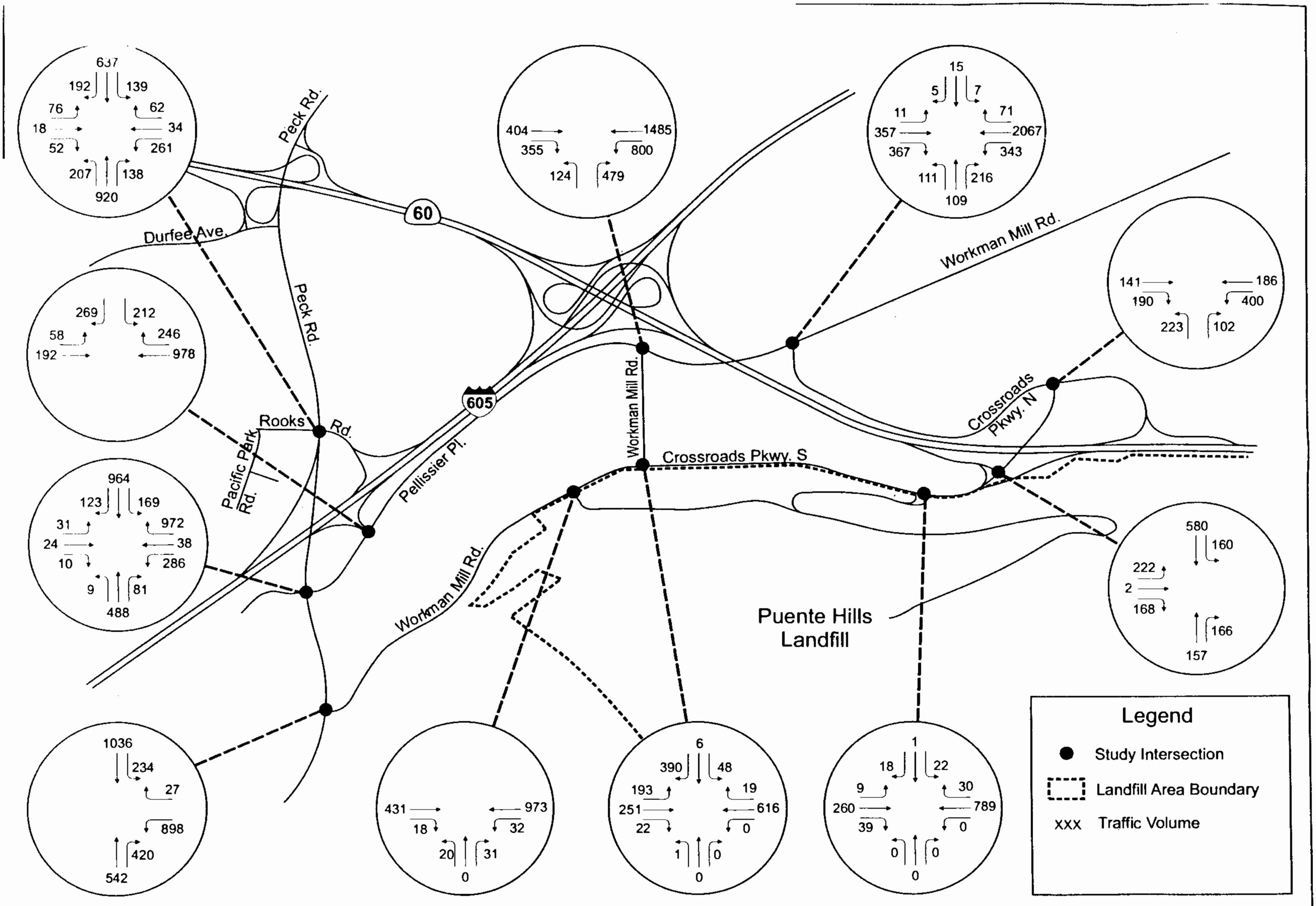

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Figure 5.2.1

Future (Cumulative) Volumes Without Project - AM Peak Hour

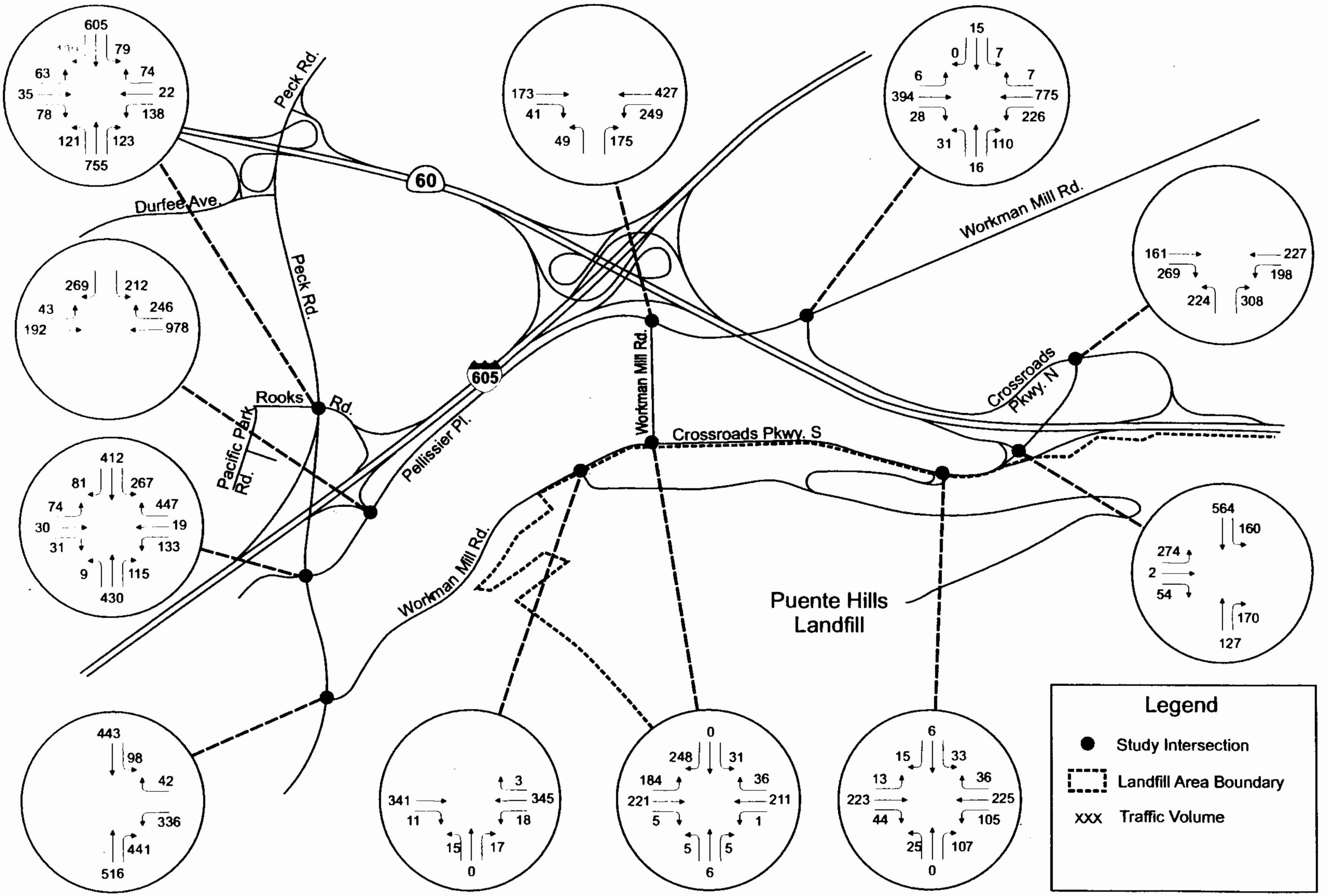

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Figure 5.2.2

Future (Cumulative) Volumes Without Project - Mid-D ak Hour

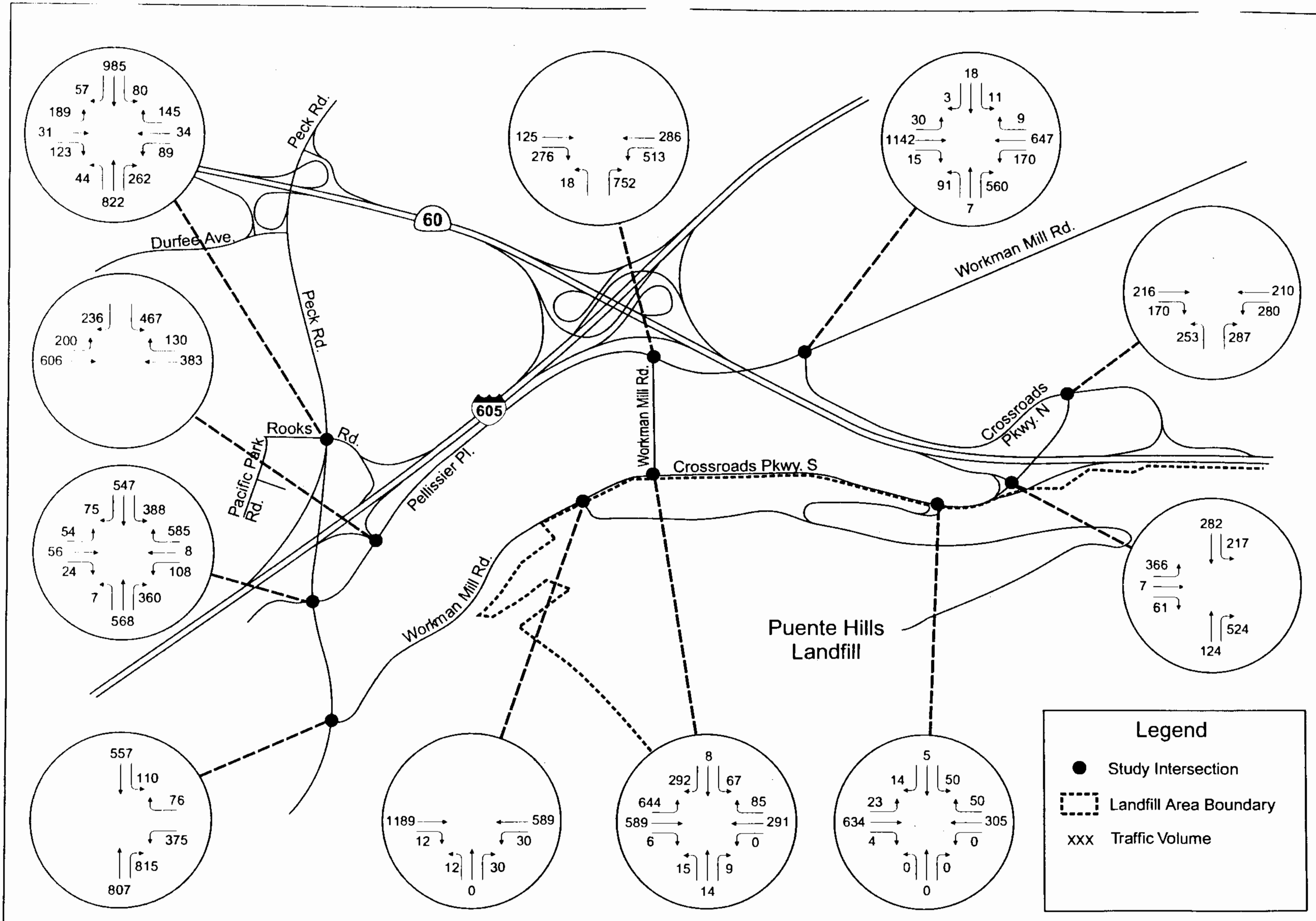

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Figure 5.2.3

Future (Cumulative) Volumes Without Project - PM Peak Hour

5.3 Future Traffic Conditions Ambient and Cumulative Growth, Including Non-Pending Projects, with Landfill Closure

This scenario analyzes intersection conditions under ambient and cumulative project growth between the years of 2000 and 2013, including the non-pending cumulative project of the Crossroads Business park. **Exhibits 5.3.1, 5.3.2 and 5.3.3** indicate the resulting volumes on the study area roadway network under this scenario for the a.m., mid-day and p.m. peak periods respectively. **Table 5.3.1** indicates Level of Service at the study area intersections under this scenario.

Table 5.3.1 – Future Traffic Conditions without Project Plus Cumulative Projects

	A.M. Peak Hour		*Mid-Day Peak Hour*		*P.M. Peak Hour*	
Intersection	*ICU or Delay (")*	*Level of Service*	*ICU or Delay (")*	*Level of Service*	*ICU or Delay (")*	*Level of Service*
Crossroads Pkwy S/ East Entrance	0.8"	A	1.9"	A	1.7"	A
Workman Mill Rd / West Entrance	0.7"	A	0.4"	A	0.8"	A
Crossroads Pkwy S/ 60 EB Ramps	0.593	A	0.579	A	0.464	A
Crossroads Pkwy S/ Crossroads N.	0.709	C	0.842	D	0.720	C
Crossroads Pkwy S/ Workman Mill	0.547	A	0.416	A	0.742	C
Crossroads Pkwy N/ Workman Mill	0.892	D	0.431	A	0.771	C
Workman Mill / Pellissier Rd	0.804	D	0.340	A	0.471	A
Workman Mill / Peck Rd	0.716	C	0.455	A	0.681	B
605 Fwy / Pellissier Rd	0.696	B	0.698	B	0.702	C
Pellissier Rd / Peck Rd	1.087	F	0.787	C	1.079	F
Peck Rd / Rook Road	0.713	C	0.559	A	0.697	B

Note: ICU = Intersection Capacity Utilization; Delay = Seconds per Vehicle, average

Table 5.3.1 shows that with ambient traffic growth and cumulative projects there would be one intersection with an unacceptable Level of Service in the a.m. and the p.m. peak period. This intersection, Pellissier Road at Peck Road, was also indicated as deficient in the other traffic forecast scenarios.

Analysis of significant project impacts is discussed in Section 6.0 of this report.

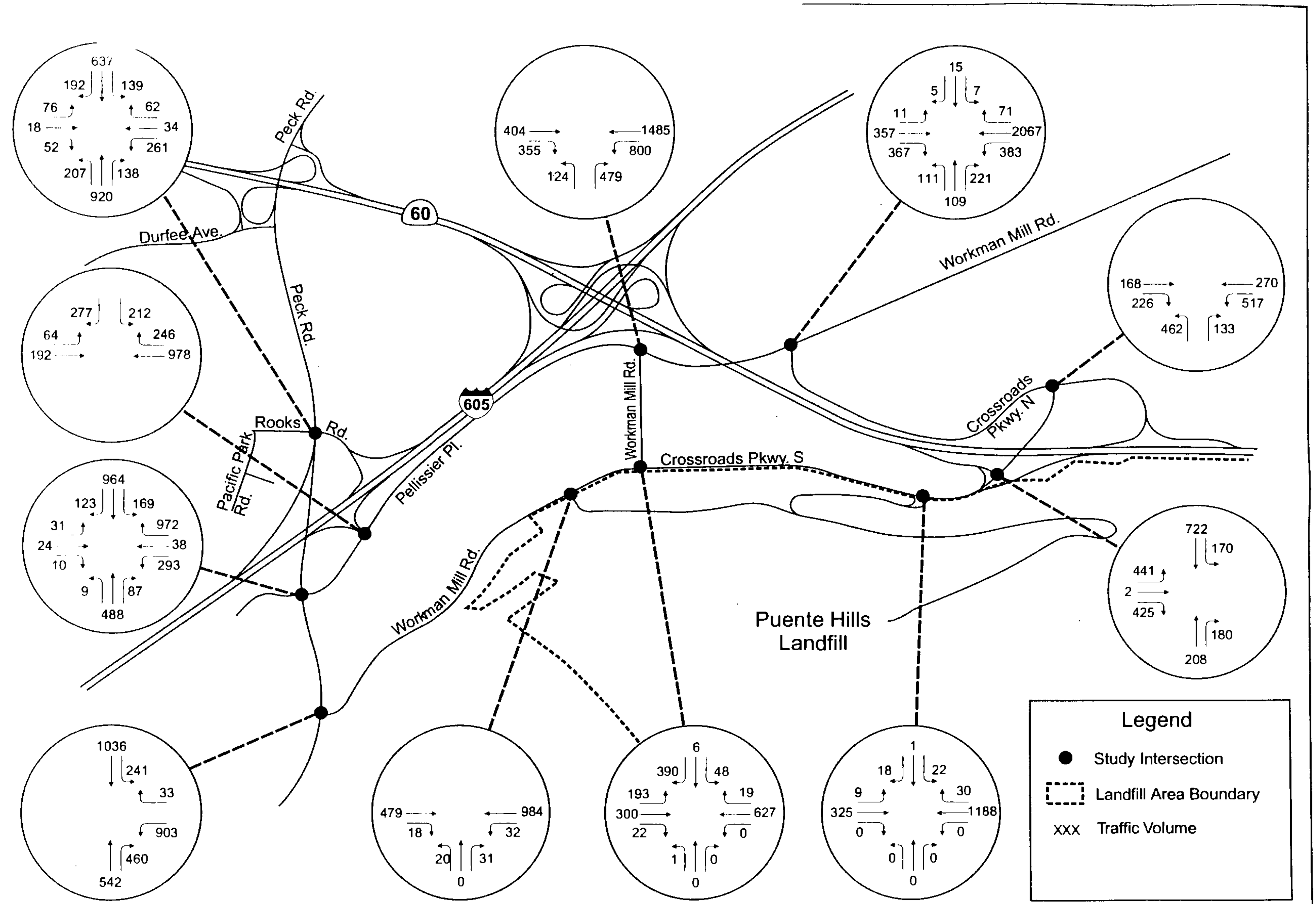

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Figure 5.3.1

Future (Non-Pending Cumulative) Volumes Without Project - AM Peak Hour

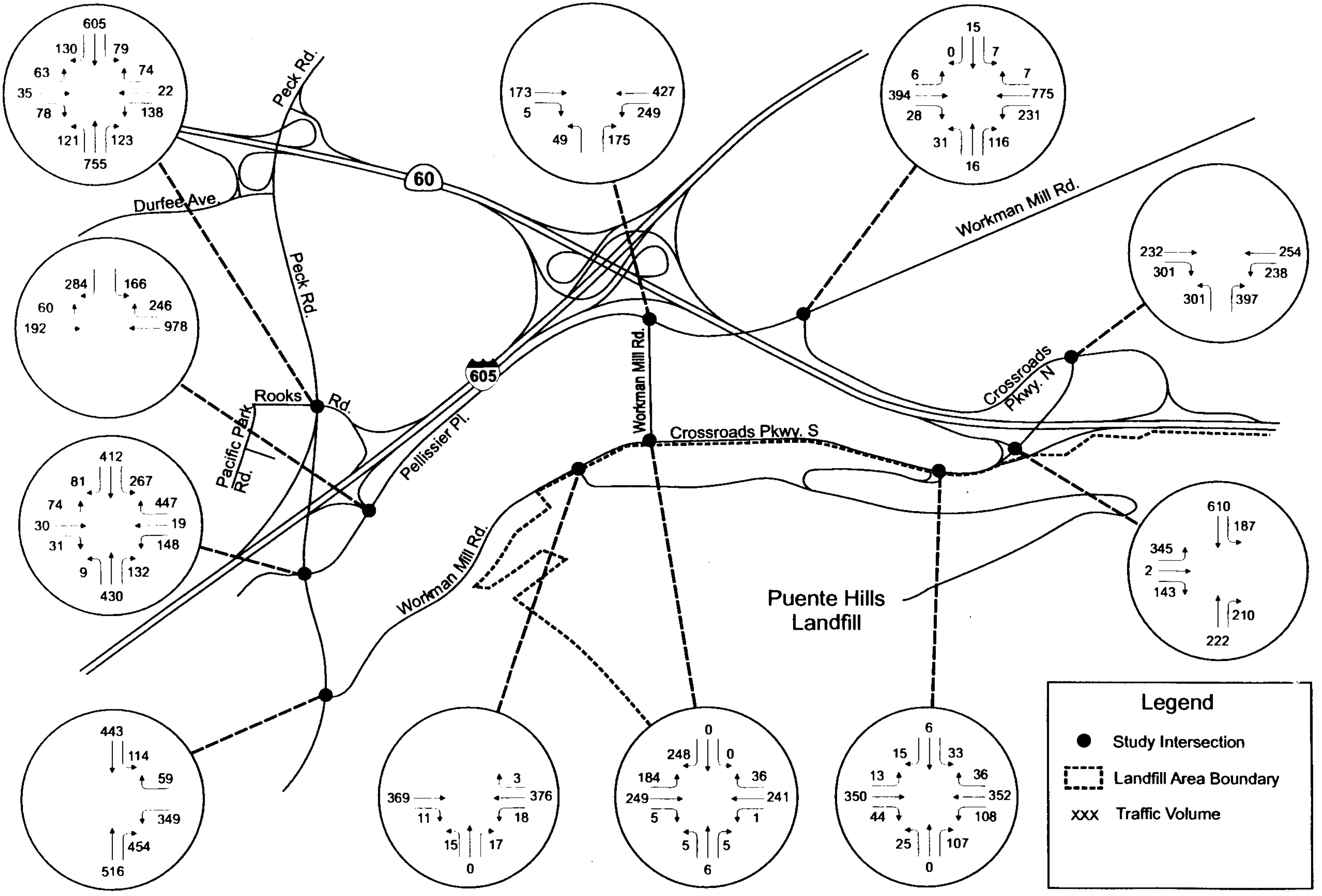

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Figure 5.3.2

Future (Non-Pending Cumulative) Volumes Without Project - Mid-Day Peak

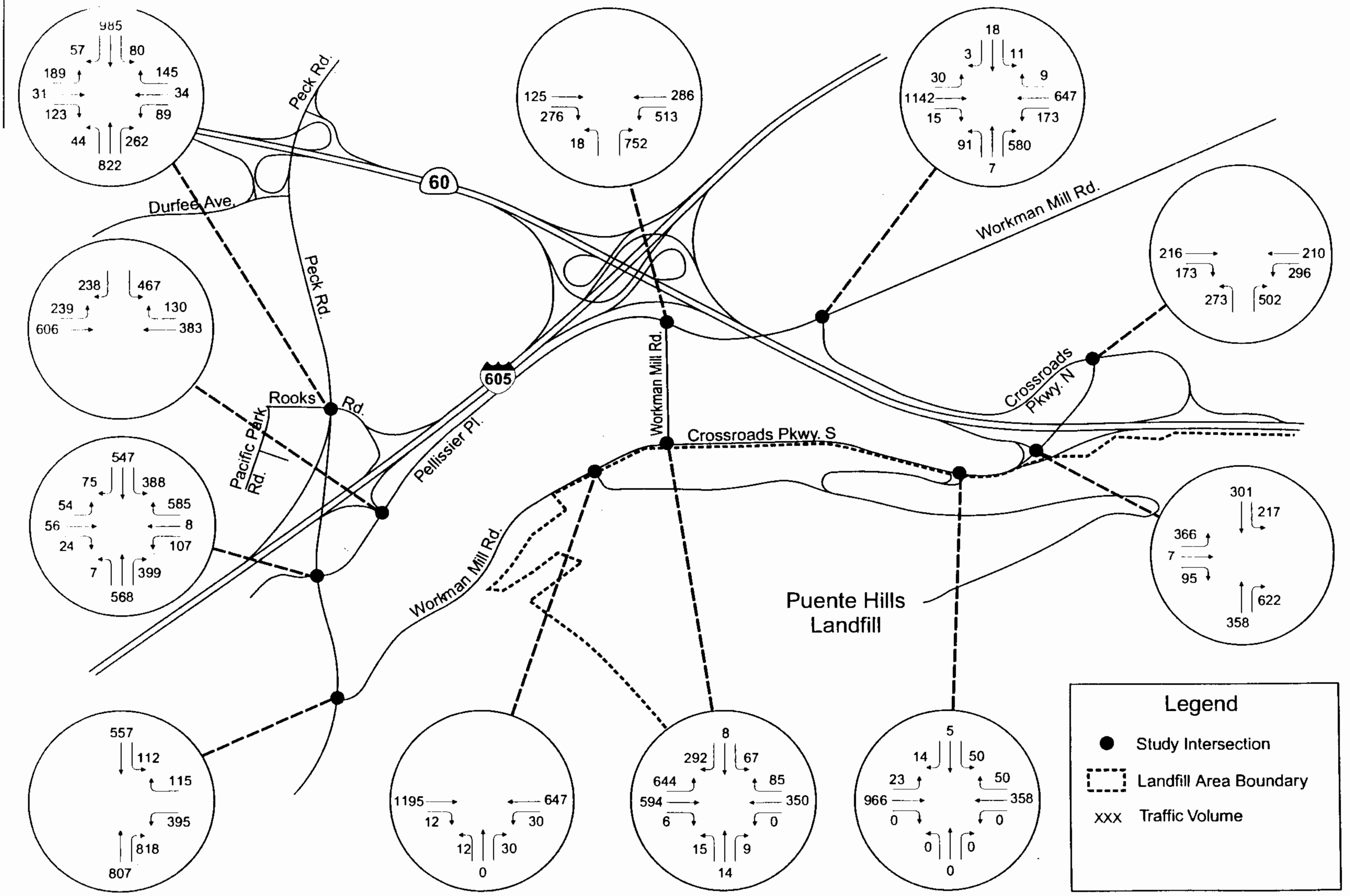

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Figure 5.3.3

Future (Non-Pending Cumulative) Volumes Without Project - PM Peak Hour

6.0 PROJECT TRAFFIC IMPACTS

The Intersection Performance tables included with each future traffic scenario analysis indicate which intersections are expected to operate at unacceptable Level of Service during each of the study periods: a.m. peak and p.m. street traffic peak. An intersection with an unacceptable Level of Service in a project scenario does not necessarily mean that the project would have significant impacts at the particular intersections. Instead, it is necessary to determine whether the project's traffic impacts would result in a significant change in traffic conditions at a location with unacceptable Level of Service, or if the project related traffic would cause an intersection to fall into an unacceptable range.

A majority of the study area intersections fall within the City of Industry or unincorporated areas of Los Angeles County. The City of Industry requires the use of Los Angeles County guidelines for each Traffic Impact Analysis performed for projects within the city. The Congestion Management Program (CMP) for Los Angeles County defines the threshold for determining whether or not a project impact is considered to be significant. The definition stated below utilizes the difference between a base traffic level and the base-plus project traffic level:

> " For the purposes of a CMP TIA, a significant project impact occurs when the proposed project increases traffic demand by 2% of capacity (V/C> 0.02), causing or worsening LOS E (V/C> 0.90) or LOS F (V/C> 1.00)."

Tables 6.0.1, 6.0.2, and 6.0.3 summarize the change in Level of Service at the study area intersections and indicate the contribution of landfill traffic. Impacts would be considered significant if an increase of 0.02 or more was forecast at a location which currently does not meet acceptable standards for level of service. Impacts would also be potentially significant at locations where acceptable standards are now met, but forecasts indicate future conditions may become unacceptable.

None of the intersections will experience a significant impact in Table 6.0.1 and Table 6.0.2, for the ambient growth and pending cumulative project scenarios. Two locations are identified as impacted in Table 6.0.3, Crossroads Parkway South at the landfill entrance and at Crossroads Parkway North.

Table 6.0.1 - Project Impacts for the Future Year With Growth Only

Intersection	*Future Without the Proposed Project* *ICU or Delay*	*LOS*	*Future With the Proposed Project* *ICU or Delay*	*LOS*	*Project Increase ICU*	*Signifi-Cant?*
Crossroads Parkway South / East Entrance						
AM	0.7"	A	2.1"	A	1.4"	No
Mid-Day	0.9"	A	5.3"	B	4.4"	No
PM	1.1"	A	1.4"	A	0.3"	No
Workman Mill/West Entrance						
AM	0.0"	A	2.5"	A	2.5"	No
Mid-Day	0.0"	A	1.6"	A	1.6"	No
PM	0.0"	A	0.0"	A	0.0"	No
Crossroads Parkway South /60 EB Ramps						
AM	0.434	A	0.507	A	0.067	No
Mid-Day	0.422	A	0.397	A	0.008	No
PM	0.270	A	0.285	A	0.015	No
Crossroads Parkway South/Crossroads Parkway North						
AM	0.591	A	0.667	B	0.076	No
Mid-Day	0.616	B	0.816	D	0.200	No
PM	0.393	A	0.397	A	0.004	No
Crossroads Parkway South/Workman Mill						
AM	0.490	A	0.499	A	0.009	No
Mid-Day	0.342	A	0.352	A	0.010	No
PM	0.678	B	0.681	B	0.003	No
Crossroads Parkway North/Workman Mill						
AM	0.879	D	0.884	D	0.005	No
Mid-Day	0.420	A	0.424	A	0.004	No
PM	0.735	C	0.736	C	0.001	No
Workman Mill/Pellissier Road						
AM	0.784	C	0.784	C	0.000	No
Mid-Day	0.324	A	0.324	A	0.000	No
PM	0.445	A	0.445	A	0.000	No
Workman Mill/Peck Road						
AM	0.698	B	0.722	C	0.024	No
Mid-Day	0.394	A	0.422	A	0.028	No
PM	0.659	B	0.661	B	0.002	No
605 Freeway/Pellissier Road						
AM	0.651	B	0.721	C	0.070	No
Mid-Day	0.646	B	0.721	C	0.075	No
PM	0.670	B	0.675	B	0.005	No
Pellissier Road/Peck Road						
AM	1.083	F	1.084	F	0.001	No
Mid-Day	0.779	C	0.803	D	0.024	No
PM	1.063	F	1.066	F	0.003	No
Rooks Road/Peck Road						
AM	0.706	C	0.706	C	0.000	No
Mid-Day	0.556	A	0.556	A	0.000	No
PM	0.697	B	0.697	B	0.000	No

Note: ICU = Intersection Capacity Utilization; LOS = Level of Service

Table 6.0.2 - Project Impacts for the 2013 with Cumulative Projects

Intersection	*Future Without the Proposed Project* *ICU or Delay*	*LOS*	*Future With the Proposed Project* *ICU or Delay*	*LOS*	*Project Increase ICU or Delay*	*Signifi-Cant?*
Crossroads Parkway South/ East Entrance						
AM	0.5"	A	20.6"	C	20.1"	No
Mid-Day	1.6"	A	123.8"	A	122.2"	Yes
PM	1.1"	A	1.4"	A	0.3"	No
Workman Mill/West Entrance						
AM	0.7"	A	0.7"	A	0.0"	No
Mid-Day	0.4"	A	0.4"	A	0.0"	No
PM	0.7"	A	0.7"	A	0.0"	No
Crossroads Parkway South / 60 EB Ramps						
AM	0.400	A	0.537	A	0.137	No
Mid-Day	0.493	A	0.495	A	0.002	No
PM	0.391	A	0.406	A	0.015	No
Crossroads Parkway South/Crossroads Parkway North						
AM	0.538	A	0.738	C	0.200	No
Mid-Day	0.715	C	0.969	E	0.254	No
PM	0.575	A	0.605	A	0.030	No
Crossroads Parkway South/Workman Mill						
AM	0.543	A	0.557	A	0.014	No
Mid-Day	0.406	A	0.437	A	0.031	No
PM	0.723	C	0.726	C	0.003	No
Crossroads Parkway North/Workman Mill						
AM	0.890	D	0.895	D	0.005	No
Mid-Day	0.426	A	0.437	A	0.017	No
PM	0.763	C	0.773	C	0.010	No
Workman Mill/Pellissier Road						
AM	0.804	D	0.803	D	0.000	No
Mid-Day	0.340	A	0.340	A	0.000	No
PM	0.471	A	0.470	A	0.000	No
Workman Mill/Peck Road						
AM	0.713	C	0.736	C	0.023	No
Mid-Day	0.437	A	0.440	A	0.003	No
PM	0.678	B	0.679	B	0.001	No
605 Freeway/Pellissier Road						
AM	0.687	B	0.728	C	0.041	No
Mid-Day	0.677	B	0.724	C	0.047	No
PM	0.677	B	0.682	B	0.005	No
Pellissier Road/Peck Road						
AM	1.087	F	1.088	F	0.001	No
Mid-Day	0.782	C	0.805	D	0.023	No
PM	1.067	F	1.069	F	0.002	No
Peck Road/Rook Road						
AM	0.713	C	0.713	C	0.000	No
Mid-Day	0.559	A	0.559	A	0.000	No
PM	0.697	B	0.697	B	0.000	No

Note: ICU = Intersection Capacity Utilization; LOS = Level of Service

Table 6.0.3 - Project Impacts for the 2013 with Cumulative (Including Non-Pending) Projects

Intersection	*Future Without the Proposed Project* *ICU or Delay*	*Future Without the Proposed Project* *LOS*	*Future With the Proposed Project* *ICU or Delay*	*Future With the Proposed Project* *LOS*	*Project Increase* *ICU or Delay*	*Signifi-Cant?*
Crossroads Parkway South/ East Entrance						
AM	0.8"	A	81.4"	F	80.6"	Yes**
Mid-Day	1.9"	A	23.8"	D	21.9"	No
PM	1.7"	A	1.9"	A	0.2"	No
Workman Mill/West Entrance						
AM	0.7"	A	0.8"	A	0.1"	No
Mid-Day	0.4"	A	0.4"	A	0.0"	No
PM	0.8"	A	0.8"	A	0.0"	No
Crossroads Parkway South / 60 EB Ramps						
AM	0.593	A	0.526	A	0.000	No
Mid-Day	0.579	A	0.584	A	0.005	No
PM	0.464	A	0.533	A	0.069	No
Crossroads Parkway South/Crossroads Parkway North						
AM	0.709	C	0.787	C	0.068	No
Mid-Day	0.842	D	1.099	F	0.257	Yes**
PM	0.720	C	0.824	D	0.104	No
Crossroads Parkway South/Workman Mill						
AM	0.547	A	0.570	A	0.023	No
Mid-Day	0.416	A	0.447	A	0.031	No
PM	0.742	C	0.749	C	0.007	No
Crossroads Parkway North/Workman Mill						
AM	0.892	D	0.897	D	0.005	No
Mid-Day	0.431	A	0.451	A	0.020	No
PM	0.771	C	0.787	C	0.016	No
Workman Mill/Pellissier Road						
AM	0.804	D	0.804	D	0.000	No
Mid-Day	0.340	A	0.340	A	0.000	No
PM	0.471	A	0.471	A	0.000	No
Workman Mill/Peck Road						
AM	0.716	C	0.739	C	0.023	No
Mid-Day	0.455	A	0.458	A	0.003	No
PM	0.681	B	0.686	B	0.005	No
605 Freeway/Pellissier Road						
AM	0.696	B	0.761	C	0.065	No
Mid-Day	0.698	B	0.744	C	0.046	No
PM	0.702	C	0.707	C	0.005	No
Pellissier Road/Peck Road						
AM	1.087	F	1.088	F	0.002	No
Mid-Day	0.787	C	0.810	D	0.023	No
PM	1.079	F	1.082	F	0.003	No
Peck Road/Rook Road						
AM	0.713	C	0.713	C	0.000	No
Mid-Day	0.559	A	0.559	A	0.000	No
PM	0.697	B	0.697	B	0.000	No

Note: ICU = Intersection Capacity Utilization; LOS = Level of Service

6.1 Mitigation Measures

Two intersections will be negatively impacted by the project in the future year, with build-out of all cumulative (including non-pending) projects. These are the intersections of Crossroads Parkway South at the landfill main entrance, and Crossroads Parkway South at Crossroads Parkway North. Specific mitigation measures for each intersection are indicated below.

Crossroads Parkway at Landfill Main Entrance

This intersection will experience significant delay in the future, with cumulative projects. This is due to the fact that Crossroads Parkway is a heavily used street, and cars must stop and wait for a break in traffic to exit the landfill and turn left. Only the northbound left-turning vehicles experience a delay at this intersection; however, their delay is significant. Signalizing the intersection can relieve this congestion. It is recommended that the intersection continue to be monitored for the need for signalization in the future. The need should be reviewed most closely in conjunction with review of the MRF and its change to the west gate use.

Crossroads Parkway South at Crossroads Parkway North

This intersection also operates at a poor level of service in the future with all cumulative projects built-out. This intersection can easily be mitigated by restriping the northbound approach to the intersection. The northbound approach currently provides (and is assumed to provide in the future) two left turn lanes and one right turn lane at the intersection. With existing geometrics, the intersection will operate at a Level of Service F (1.002) in the mid-day peak hour in the year 2013. If the northbound approach is changed to provide one left-turn lane, one left- and right- turn lane, and one right-turn lane, it will improve intersection operations to Level of Service D (0.813).

The impact at the intersection at Crossroads Parkway South at Crossroads Parkway North is caused jointly by the Crossroads Business Park development.

7.0 FREEWAY ANALYSIS

The a.m. and p.m. peak hour levels of service on the SR-60 and I-605 freeways are not at acceptable levels. Both freeways are marked by stop-and-go traffic conditions that are representative of Level of Service F. Route 60 is particularly congested during the AM peak period in the westbound direction and in the PM peak in the eastbound direction.

The Los Angeles County Congestion Management Plan indicates that a freeway impact is considered when a freeway is operating at Level of Service F and a project is found to contribute 150 peak hour trips or greater in the direction of poor Level of Service. The project traffic volume (181 vehicles) exceeds 150 vehicles on the 60 Freeway eastbound between the 605 Freeway and Crossroads Parkway during the AM peak hour. The traffic volume does not exceed 150 in the opposite direction (westbound) on Route 60 (124 vehicles). The 150 vehicle volume is not exceeded at any location on the 605 Freeway or on other portions of the 60 Freeway. The 150 vehicle threshold of significance is not exceeded at any freeway location during the PM peak hour.

The level of service on the 60 Freeway is within the acceptable range, better than Level of Service F, in the eastbound direction between the 605 Freeway and Crossroads Parkway. This direction is opposite the heavy AM peak flow toward Los Angeles and traffic flows freely in this direction during the AM peak hour. As a result, the project volume does not constitute a significant freeway impact for this location and time period.

The portion of Route 60 between the 605 Freeway and Crossroads Parkway includes auxiliary lanes that facilitate the heavy volume of weaving and merging vehicles that are generated by the freeway interchange. Due to the presence of these lanes, the capacity restriction for the 60 Freeway is not located in this immediate area. The traffic congestion is caused by reductions in the number of traffic lanes east of Crossroads Parkway and west of the 605 Freeway where the freeway attains its minimum cross section. The project related traffic increases in these botttleneck areas are much lower than 150 vehicles. Based upon the location of the bottlenecks, project related traffic does not significantly contribute to poor freeway level of service at any location beyond the levels of significance established by the Congestion Management Plan.

If the landfill is closed, the region will continue to generate refuse at a comparable rate. Trash haul trucks will still be required to carry refuse from its point of generation to its point of disposal. These trucks will likely utilize the same Southern California Freeway system, and they may be required to travel greater distances to more remote landfill sites, potentially contributing to freeway congestion at other locations. The net impact of the closure of the landfill may thus increase the overall use of the freeway system for refuse disposal, and the closure of Puente Hills Landfill is not expected to result in any overall benefit to freeway traffic conditions.

8.0 ALTERNATE FUTURE PROJECT TRAFFIC IMPACTS

Although the project has been compared to a non-use of the project site, this scenario is not likely to occur. It is more likely that if the landfill permit is not re-issued, the land will revert to usage by the County Parks and Recreation Department. The land will most likely be used to develop a Regional Park. This would typically include a golf course that would generate most of the AM and PM peak period traffic associated with a regional park on this site. The Sanitation Districts has also discussed options with the next-door Rose Hills cemetery to allow for access to the cemetery through the project area roads. Therefore, a more accurate assessment of traffic conditions with and without the landfill would require analysis of the project continuation versus these probable future uses, instead of continued use versus no use of the site. This section of the report analyzes the impacts of the project site, were it used as a golf course and to provide access to the next door cemetery.

Table 8.0.1 summarizes the daily and peak hour traffic generation rates for the proposed alternate developments and Table 8.0.2 summarizes the expected traffic generation for these projects, as indicated by the ITE *Trip Generation* report.

Table 8.0.1 – Golf Course & Cemetery Trip Generation Rates

	Trip Generation Rate									
		AM Peak Hour			*Mid-Day*			*PM Peak Hour*		
	Daily Trips	*Total*	*In*	*Out*	*Total*	*In*	*Out*	*Total*	*In*	*Out*
Golf Course (per hole)	35.74	2.22	79%	21%	2.74*	44%*	56%*	2.74	44%	56%
Cemetery (per acre)	4.73	0.50*	80%*	20%*	1.00*	60%*	40%*	1.00*	60%*	40%*

Note: * No ITE rates indicated for mid-day golf or peak hour cemetery uses, so these rates estimated.

Table 8.0.2 – Golf Course & Cemetary Traffic Volumes

	Trip Generation Rate									
		AM Peak Hour			*Mid-Day*			*PM Peak Hour*		
	Daily	*Total*	*In*	*Out*	*Total*	*In*	*Out*	*Total*	*In*	*Out*
Golf Course (27-hole)	965	60	47	13	74	33	41	74	33	41
Cemetery (200 acres*)	946	100	80	20	200	120	80	200	120	80
Total Trips Generated	1911	160	127	33	274	153	121	274	153	121

Note: * Approximately 200 acres assumed. Actual cemetery is larger, but only a limited and remote portion of the cemetery grounds is assumed to be accessed by the landfill access roadways. It is assumed that this access will be convenient for approximately 400 acres of the cemetery. And approximately one-half of the traffic will use these driveways

Another potential use for the project site is a less-active park, such as a nature park, or a park with all green areas to cover areas of the landfill which actually had refuse. This is approximately 700 acres; however, only 181 acres of this is flat developable area. Therefore, a park is assumed to be at 181 acres This park would have a much lower trip generation rate. Table 7.0.3 summarizes the daily and peak hour traffic generation rates for the proposed alternate development and Table 7.0.3 summarizes the expected traffic generation for this projects, as indicated by the ITE *Trip Generation* report.

Table 8.0.3 – Nature Park Trip Generation Rates

		Trip Generation Rate								
		AM Peak Hour			*Mid-Day*			*PM Peak Hour*		
	Daily Trips	*Total*	*In*	*Out*	*Total*	*In*	*Out*	*Total*	*In*	*Out*
County Park (per acre)	2.28	0.01	80%	20%	0.04*	50%*	50%*	0.06	41%	59%
Cemetery (per acre)	4.73	0.50*	80%*	20%*	1.00*	60%*	40%*	1.00*	60%*	40%*

Note: * No ITE rates indicated for mid-day golf or park uses, so these rates estimated.

Table 8.0.4 – Nature Park Traffic Volumes

		Trip Generation Rate								
		AM Peak Hour			*Mid-Day*			*PM Peak Hour*		
	Daily	*Total*	*In*	*Out*	*Total*	*In*	*Out*	*Total*	*In*	*Out*
County Park (181 acres)	413	2	2	0	7	4	3	11	5	6
Cemetery (200 acres)	946	100	80	20	200	120	80	200	120	80
Total Trips Generated	1359	102	82	20	207	124	83	211	125	86

The differing uses will all create different traffic. The comparison between all uses is shown below.

Table 8.0.5 – Traffic Volume Comparisons

		Trip Generation Rate								
		AM Peak Hour			*Mid-Day*			*PM Peak Hour*		
	Daily	*Total*	*In*	*Out*	*Total*	*In*	*Out*	*Total*	*In*	*Out*
Golf Course Alternative	1911	160	127	33	274	153	121	274	153	121
County Park Alternative	1359	102	82	20	207	124	83	211	125	86
Extended Landfill Use	5546	560	295	265	640	330	320	70	8	62

The landfill will create more trips in the a.m. and mid-day peak periods and significantly less traffic during the p.m. peak period.

9.0 TRAFFIC SIGNAL WARRANT ANALYSIS

This section documents the signal warrant analysis for the landfill main entrance at Crossroads Parkway South.

This analysis is based on signal warrants published in the 1996 *Caltrans Traffic Manual*. In order to determine the need for a traffic signal at the intersection the following traffic signal warrants were analyzed:

1. Minimum Vehicle Warrant – This warrant is intended for use where the volume of intersecting traffic is the primary reason for considering a traffic signal.
2. Interruption of Continuous Flow - This warrant is intended for use where the volume on the major street is so heavy that traffic on the minor street suffers excessive delay or hazards in entering the major street.
8. Combination of Warrants – This warrant is used when the Minimum Vehicle Warrant and Interruption of Continuous Flow warrant are each satisfied to the extent of 80% or more.
9. Four Hour Volume Warrant – This warrant is satisfied when any four hours of an average day exceed a specified threshold of vehicle volumes.
10. Peak Hour Delay Warrant – This warrant is satisfied when three conditions involving peak hour delay are all satisfied.
11. Peak Hour Volume Warrant - This warrant is used when the peak hour volume on the major street is so heavy that the minor street volume suffers undue delay in entering or crossing the major street.
12. Daily Traffic Volume Warrant – This warrant is used when peak hour traffic volumes are not available. It is normally used for future traffic analysis, when it is not practical to predict traffic volumes during 8 different hours. It is thus normally used for planning analysis.

The treatment of right turns is handled with special care during traffic signal warrant analysis. The right turn volume from the landfill exit to Crossroads Parkway is not controlled by the intersection, so it should not be considered in determining the needs for signalization at the location.

The existing landfill driveway has insufficient traffic volume to warrant signalization under any of the criteria above. This is because the outbound right turn volume is discounted, and the outbound traffic volume to turn left onto Crossroads Parkway is very low.

When the Materials Recovery Site is approved and constructed, the use of the West entrance will cease. This will cause an increase in traffic volumes for outbound left turns and the main entrance. At this time, the entrance road will potentially warrant traffic signalization under the daily traffic volume warrant. It is suggested that the need for this signal be reviewed closely at the time that closure of the west entrance is being considered.

10.0 CONCLUSIONS

The County Sanitation Districts is evaluating the continued operation of the Puente Hills Landfill from the closure date currently indicated on its permit, 2003, until the estimated date of attainment of landfill capacity, in about 2013. The landfill site is located southeast of the intersection of the 60 and 605 Freeways. The main entrance to the landfill is located on Crossroads Parkway South near the 60 Freeway interchange.

The impact of the proposed project was evaluated for the surrounding street system. The project traffic impact was found to be insignificant at all locations for the future without cumulative projects. Under future scenarios with cumulative projects, two intersections, including the main entrance and Crossroads Parkway South at Crossroads Parkway North will need to be mitigated.

In summary, the proposed project would not have a significant impact upon intersections in the area in the near future.

Appendices:

TRAFFIC COUNTS
CAPACITY ANALYSIS - EXISTING
CAPACITY ANALYSIS - FUTURE
CAPACITY ANALYSIS - GENERAL PLAN YEAR (2020)

Appendices:

- **A. Traffic Counts**
- **B. Capacity Analysis - Existing**
- **C. Capacity Analysis - Future With Project**
- **D. Capacity Analysis - Future WithOut Project**

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: CROSSROADS PKWY NORTH   DATE: 7/18/2000   CITY: INDUSTRY
E-W STREET: WORKMAN MILL RD   DAY: TUESDAY
PROJECT# 0680008A

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	0.5	0.5	0.5	0.5	0	1	2	0	1	2	0	
6:00 AM													
15 AM													
30 AM													
45 AM													
7:00 AM	24	36	37	2	4	1	3	66	53	93	385	21	725
15 AM	16	19	43	0	2	2	3	55	74	57	416	18	705
30 AM	34	29	89	2	4	1	4	55	107	77	513	14	929
45 AM	23	12	30	2	3	0	0	88	88	69	472	9	796
8:00 AM	24	5	36	2	6	0	3	69	75	59	347	6	632
15 AM	18	4	44	0	5	0	2	68	41	52	273	2	509
30 AM	16	5	26	3	2	0	2	67	4	59	203	4	391
45 AM	13	3	29	1	4	2	0	69	5	54	177	2	359
9:00 AM	7	2	24	3	2	0	1	69	7	46	123	3	287
15 AM	3	3	32	0	5	0	0	70	3	54	134	0	304
30 AM	6	3	17	2	2	0	1	61	8	36	168	0	304
45 AM	7	4	24	0	2	0	2	67	3	31	127	2	269
10:00 AM	9	3	30	2	5	0	4	80	7	21	125	0	286
15 AM	9	5	24	3	4	0	0	89	9	40	110	0	293
30 AM	7	10	32	2	3	2	1	74	5	41	98	0	275
45 AM	6	5	41	2	6	1	1	78	3	30	101	1	275
TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	222	148	558	26	59	9	27	1125	492	819	3772	82	7339

AM Peak Hr Begins at 700 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES =	97	96	199	6	13	4	10	264	322	296	1786	62	3155

CONDITIONS:SIGNALIZED

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: CROSSROADS PKWY NORTH   DATE: 7/18/2000   CITY: INDUSTRY
E-W STREET: WORKMAN MILL RD   DAY: TUESDAY
PROJECT# 0680008P

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	0.5	0.5	0.5	0.5	0	1	2	0	1	2	0	
2:00 PM													
15 PM													
30 PM													
45 PM													
3:00 PM													
15 PM													
30 PM													
45 PM													
4:00 PM	5	2	72	17	21	3	0	177	7	29	145	2	480
15 PM	5	3	72	6	15	0	1	205	3	27	130	1	468
30 PM	4	1	75	18	49	0	1	214	3	25	137	0	527
45 PM	19	1	72	10	8	0	0	167	4	27	116	1	425
·00 PM	19	3	109	4	6	3	0	229	0	26	105	1	505
5 PM	34	1	157	6	2	0	0	257	9	34	167	2	669
PM	12	2	98	0	5	0	1	271	2	33	118	1	543
45 PM	15	0	104	0	3	0	0	244	2	30	141	4	543
6:00 PM													
15 PM													
30 PM													
45 PM													

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES =	113	13	759	61	109	6	3	1764	30	231	1059	12	4160

PM Peak Hr Begins at 500 PM

PEAK VOLUMES =	80	6	468	10	16	3	1	1001	13	123	531	8	2260

CONDITIONS:SIGNALIZED

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: PECK RD. DATE: 7/18/2000 CITY: INDUSTRY

E-W STREET: ROOKS RD. DAY: TUESDAY

PROJECT# 0680003A

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	1	1	3	0	1	2	0	1	2	1	
6:00 AM													
15 AM													
30 AM													
45 AM													
7:00 AM	35	150	39	19	122	42	8	5	8	47	8	8	491
15 AM	41	151	45	24	126	53	13	4	11	57	13	15	553
30 AM	47	167	35	32	135	50	15	3	13	60	11	12	580
45 AM	50	192	28	34	142	47	18	2	10	54	7	13	597
8:00 AM	43	228	34	27	145	35	13	5	9	65	6	20	630
15 AM	42	220	24	29	139	36	21	6	14	40	6	9	586
30 AM	30	179	23	34	141	29	14	7	12	47	5	9	530
45 AM	24	167	29	22	130	32	12	4	12	37	7	14	490
9:00 AM	23	145	29	22	122	29	10	5	12	30	5	15	447
15 AM	22	145	20	10	105	30	11	6	13	25	3	13	403
30 AM	20	136	20	11	117	22	12	7	15	23	5	15	403
45 AM	24	130	22	15	102	15	13	8	17	20	3	12	381
10:00 AM	23	128	25	17	99	16	15	6	11	25	6	13	384
15 AM	22	116	22	18	105	17	16	5	16	19	5	14	375
30 AM	21	114	30	16	99	18	18	3	15	20	4	13	371
45 AM	20	115	33	7	96	18	18	5	18	20	4	15	369
TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	487	2483	458	337	1925	489	227	81	206	589	98	210	7590

AM Peak Hr Begins at 730 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES =	182	807	121	122	561	168	67	16	46	219	30	54	2393

ADDITIONS:SIGNALIZED

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: PECK RD. DATE: 7/18/2000 CITY: INDUSTRY

E-W STREET: ROOKS RD. DAY: TUESDAY

PROJECT# 0680003P

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	1	1	3	0	1	2	0	1	2	1	
2:00 PM													
15 PM													
30 PM													
45 PM													
3:00 PM													
15 PM													
30 PM													
45 PM													
4:00 PM	7	164	67	15	159	10	39	2	10	21	10	26	530
15 PM	10	184	70	29	134	12	18	3	12	14	12	27	525
30 PM	15	200	47	19	153	18	23	9	16	26	9	27	562
45 PM	16	146	51	19	166	25	34	7	19	20	8	36	547
:00 PM	9	173	69	14	201	11	62	9	31	19	10	34	642
15 PM	13	179	59	23	200	15	35	10	27	21	6	28	616
PM	9	176	46	16	224	11	38	3	23	13	5	36	600
5 PM	8	193	56	17	239	13	31	5	27	15	9	29	642
6:00 PM													
15 PM													
30 PM													
45 PM													

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES =	87	1415	465	152	1476	115	280	48	165	149	69	243	4664

PM Peak Hr Begins at 500 PM

PEAK VOLUMES =	39	721	230	70	864	50	166	27	108	68	30	127	2500

CONDITIONS:SIGNALIZED

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: PECK RD. DATE: 7/18/2000 CITY: INDUSTRY

E-W STREET: PELLISSIER PL. DAY: TUESDAY

PROJECT# 0680004A

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	0.5	0.5	1	0.5	0.5	1	
6:00 AM													
15 AM													
30 AM													
45 AM													
7:00 AM	2	77	25	23	108	8	3	6	0	45	5	187	489
15 AM	1	83	29	34	126	10	4	3	1	54	4	195	544
30 AM	2	111	19	31	234	12	6	5	2	62	6	204	694
45 AM	3	138	40	48	307	47	11	8	4	75	15	238	934
8:00 AM	2	96	31	35	171	39	6	5	2	59	8	216	670
15 AM	0	81	20	26	82	22	7	2	1	34	6	141	422
30 AM	3	67	28	29	85	25	6	1	1	27	4	118	394
45 AM	2	72	22	26	78	19	9	3	0	23	4	105	363
·00 AM	0	69	31	45	69	7	8	4	2	21	3	72	331
15 AM	2	94	25	43	67	6	10	3	4	24	4	68	350
30 AM	2	74	30	52	74	10	12	5	2	23	5	74	363
45 AM	2	86	32	46	57	9	14	6	3	17	4	81	357
10:00 AM	1	71	37	61	80	11	19	9	6	19	3	89	406
15 AM	1	88	41	43	90	18	21	5	7	31	5	96	446
30 AM	2	77	31	45	66	14	9	4	5	28	2	69	352
45 AM	3	81	27	48	64	17	6	4	5	20	4	75	354
TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LUMES =	28	1365	468	635	1758	274	151	73	45	562	82	2028	7469

AM Peak Hr Begins at 715 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES =	8	428	119	148	838	108	27	21	9	250	33	853	2842

ADDITIONS:SIGNALIZED

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: PECK RD. DATE: 7/18/2000 CITY: INDUSTRY

E-W STREET: PELLISSIER PL. DAY: TUESDAY

PROJECT# 0680004P

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	0.5	0.5	1	0.5	0.5	1	
2:00 PM													
15 PM													
30 PM													
45 PM													
3:00 PM													
15 PM													
30 PM													
45 PM													
4:00 PM	0	152	79	84	109	18	5	10	2	24	4	123	610
15 PM	1	85	62	85	73	7	6	5	3	21	4	84	436
30 PM	0	124	62	77	104	11	9	10	8	21	1	142	569
45 PM	3	106	74	79	113	13	11	2	7	25	3	116	552
5:00 PM	2	135	83	91	129	21	18	18	3	21	1	154	676
15 PM	1	132	94	93	124	21	9	19	3	25	2	101	624
30 PM	0	100	70	94	100	19	17	14	1	22	4	91	532
45 PM	1	104	74	106	93	24	14	14	3	21	2	88	544
6:00 PM													
15 PM													
30 PM													
45 PM													
TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	8	938	598	709	845	134	89	92	30	180	21	899	4543

PM Peak Hr Begins at 430 PM

PEAK VOLUMES =	6	497	313	340	470	66	47	49	21	92	7	513	2421

ADDITIONS:SIGNALIZED

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: PECK RD./ WORKMAN MILL RD. DATE: 7/18/2000 CITY: INDUSTRY

E-W STREET: WORKMAN MILL RD. DAY: TUESDAY

PROJECT# 0680005A

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:		3	1	1	2					1.5		0.5	
6:00 AM													
15 AM													
30 AM													
45 AM													
7:00 AM		86	74	22	127					131		17	457
15 AM		97	78	26	138					178		18	535
30 AM		118	87	59	270					255		19	808
45 AM		139	113	66	296					161		18	793
8:00 AM		121	93	47	204					172		17	654
15 AM		84	65	22	89					143		15	418
30 AM		83	63	16	97					111		19	389
45 AM		74	52	19	80					75		24	324
9:00 AM		79	56	15	74					49		17	290
15 AM		101	61	22	98					74		26	382
30 AM		78	67	19	58					62		27	311
45 AM		94	80	14	82					64		23	357
10:00 AM		86	61	18	74					66		22	327
15 AM		103	90	19	88					43		18	361
30 AM		98	73	16	96					55		22	360
45 AM		96	87	16	68					70		20	357

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	0	1537	1200	416	1939	0	0	0	0	1709	0	322	7123

Peak Hr Begins at 715 AM

PEAK													
VOLUMES =	0	475	371	198	908	0	0	0	0	766	0	72	2790

ADDITIONS:SIGNALIZED

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: PECK RD./ WORKMAN MILL RD.   DATE: 7/18/2000   CITY: INDUSTRY

E-W STREET: WORKMAN MILL RD.   DAY: TUESDAY   PROJECT# 0680005P

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:		3	1	1	2					1.5		0.5	
2:00 PM													
15 PM													
30 PM													
45 PM													
3:00 PM													
15 PM													
30 PM													
45 PM													
4:00 PM		161	146	24	108					85		37	561
15 PM		172	139	17	99					69		29	525
30 PM		167	135	19	107					91		25	544
45 PM		168	167	17	102					66		15	535
:00 PM		166	153	18	139					94		21	591
5 PM		181	162	14	118					48		14	537
PM		187	205	26	102					74		10	604
45 PM		173	181	29	130					65		19	597
6:00 PM													
15 PM													
30 PM													
45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	0	1375	1288	164	905	0	0	0	0	592	0	170	4494

PM Peak Hr Begins at 500 PM

PEAK													
VOLUMES =	0	707	701	87	489	0	0	0	0	281	0	64	2329

DITIONS:SIGNALIZED

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: SR-605 NB RAMPS DATE: 7/18/2000 CITY: INDUSTRY

E-W STREET: PELLISSIER PL. DAY: TUESDAY

PROJECT# 0680006A

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	1	0	1	1	1	0	0	2	0	
6:00 AM													
15 AM													
30 AM													
45 AM													
7:00 AM	1	0	4	55	2	43	21	36	1	1	218	61	443
15 AM	2	3	7	45	0	56	21	34	2	5	202	57	434
30 AM	0	5	2	40	4	42	20	33	0	1	213	51	411
45 AM	0	3	5	56	2	63	24	56	0	1	241	61	512
8:00 AM	5	3	6	45	0	75	34	45	5	2	202	47	469
15 AM	2	4	8	37	1	35	18	26	5	6	123	34	299
30 AM	2	2	6	24	2	44	31	35	9	4	114	36	309
45 AM	2	2	3	20	2	37	27	23	3	4	90	23	236
9:00 AM	6	2	6	24	1	31	35	37	8	6	56	14	226
15 AM	6	4	5	21	0	37	28	36	6	8	48	18	217
30 AM	4	5	8	32	2	41	41	51	7	8	62	25	286
45 AM	5	8	7	25	1	38	29	37	9	6	57	28	250
10:00 AM	7	9	11	28	5	43	45	60	12	9	74	34	337
15 AM	8	4	8	23	2	56	32	44	6	11	66	24	284
30 AM	6	5	6	24	2	37	33	45	11	7	59	23	258
45 AM	4	2	6	21	3	45	27	40	8	6	49	17	228
TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	60	61	98	520	29	723	466	638	92	85	1874	553	5199

AM Peak Hr Begins at 715 AM

PEAK VOLUMES =	7	14	20	186	6	236	99	168	7	9	858	216	1826

ADDITIONS:SIGNALIZED

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: SR-605 NB RAMPS   DATE: 7/18/2000   CITY: INDUSTRY

E-W STREET: PELLISSIER PL.   DAY: TUESDAY

PROJECT# 0680006P

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	1	0	1	1	1	0	0	2	0	
2:00 PM													
15 PM													
30 PM													
45 PM													
3:00 PM													
15 PM													
30 PM													
45 PM													
4:00 PM	4	1	13	54	1	47	47	105	11	2	106	48	439
15 PM	3	4	6	67	3	44	27	81	6	6	69	20	336
30 PM	7	4	7	78	3	53	43	92	6	5	79	35	412
45 PM	4	5	9	99	5	42	47	109	8	8	76	23	435
5:00 PM	1	3	6	80	2	23	46	107	3	5	106	22	404
15 PM	2	5	10	113	3	51	34	143	8	4	81	22	476
30 PM	5	3	5	110	3	61	45	140	9	3	77	40	501
45 PM	3	4	10	107	2	72	48	142	10	2	72	30	502
6:00 PM													
15 PM													
30 PM													
45 PM													
TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	29	29	66	708	22	393	337	919	61	35	666	240	3505

PM Peak Hr Begins at 500 PM

PEAK VOLUMES =	11	15	31	410	10	207	173	532	30	14	336	114	1883

ADDITIONS:SIGNALIZED

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: WORKMAN MILL RD   DATE: 7/18/2000   CITY: INDUSTRY

E-W STREET: PELLISSIER PL.   DAY: TUESDAY

PROJECT# 0680007A

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1		1					1	1	1	1		
6:00 AM													
15 AM													
30 AM													
45 AM													
7:00 AM	35		71					86	49	161	271		673
15 AM	36		86					78	66	187	289		742
30 AM	19		116					71	61	207	396		870
45 AM	29		89					97	108	152	327		802
8:00 AM	25		80					108	76	129	291		709
15 AM	8		59					62	14	86	197		426
30 AM	4		38					49	8	68	162		329
45 AM	9		33					54	11	74	139		320
·00 AM	10		29					39	4	48	88		218
15 AM	6		26					30	9	50	75		196
30 AM	12		27					31	6	32	84		192
45 AM	8		24					28	11	35	69		175
10:00 AM	9		32					39	7	35	56		178
15 AM	5		35					36	5	36	58		175
30 AM	6		37					38	9	51	47		188
45 AM	7		41					35	13	47	52		195
TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	228	0	823	0	0	0	0	881	457	1398	2601	0	6388

AM Peak Hr Begins at 715 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES =	109	0	371	0	0	0	0	354	311	675	1303	0	3123

ADDITIONS:STOP SIGN ON NL ONLY.

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: WORKMAN MILL RD DATE: 7/18/2000 CITY: INDUSTRY

E-W STREET: PELLISSIER PL. DAY: TUESDAY

PROJECT# 0680007P

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1		1					1	1	1	1		
2:00 PM													
15 PM													
30 PM													
45 PM													
3:00 PM													
15 PM													
30 PM													
45 PM													
4:00 PM	3		186					26	58	117			390
15 PM	4		163					24	52	105			348
30 PM	5		149					29	67	98			348
45 PM	4		135					31	65	93			328
5:00 PM	7		150					27	50	103			337
15 PM	11		147					25	52	95			330
30 PM	5		166					20	44	88			323
45 PM	6		159					22	46	95			328
6:00 PM													
15 PM													
30 PM													
45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	45	0	1255	0	0	0	0	204	434	794	0	0	2732

PM Peak Hr Begins at 400 PM

PEAK	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	16	0	633	0	0	0	0	110	242	413	0	0	1414

ADDITIONS: STOP SIGN ON NL ONLY.

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: WEST LANDFILL ACCESS DWY. DATE: 7/18/2000 CITY: INDUSTRY
E-W STREET: WORKMAN MILL RD DAY: TUESDAY
PROJECT# 0680010A

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	0	0	0	2	0	1	2	0	
6:00 AM													
15 AM													
30 AM													
45 AM													
7:00 AM	1	0	1	1	0	3	1	77	7	7	75	0	173
15 AM	21	0	0	0	0	1	1	81	16	2	112	0	234
30 AM	18	0	4	0	0	1	1	70	12	6	149	2	263
45 AM	25	0	1	0	0	0	0	79	9	6	297	0	417
8:00 AM	9	0	1	0	0	0	2	74	14	2	193	0	295
15 AM	8	0	1	1	0	3	1	73	11	3	199	1	301
30 AM	13	0	2	0	0	0	1	59	11	8	114	3	211
45 AM	15	0	3	0	0	0	3	54	10	4	105	1	195
9:00 AM	9	0	7	1	0	1	0	62	5	2	83	0	170
15 AM	18	0	1	2	0	1	0	57	8	4	88	0	179
30 AM	10	0	2	1	0	0	2	49	7	3	49	0	123
45 AM	16	0	8	0	0	1	0	52	13	7	68	0	165
10:00 AM	15	0	3	0	0	0	0	57	12	4	72	0	163
15 AM	10	0	4	0	0	1	0	64	9	6	74	1	169
30 AM	22	0	4	0	0	1	0	62	11	7	82	1	190
45 AM	19	0	2	1	0	0	0	65	7	1	76	1	172
TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	229	0	44	7	0	13	12	1035	162	72	1836	10	3420

AM Peak Hr Begins at 730 AM

PEAK VOLUMES =	60	0	7	1	0	4	4	296	46	17	838	3	1276

ADDITIONS: 1-WAY STOP
NORTH

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: WEST LANDFILL ACCESS DWY. DATE: 7/18/2000 CITY: INDUSTRY
E-W STREET: WORKMAN MILL RD DAY: TUESDAY
PROJECT# 0680010P

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	0	0	0	2	0	1	2	0	
2:00 PM													
15 PM													
30 PM													
45 PM													
3:00 PM													
15 PM													
30 PM													
45 PM													
4:00 PM	0	0	0	1	0	1	1	251	0	1	98	0	353
15 PM	0	0	0	1	0	1	0	263	0	0	103	0	368
30 PM	0	0	0	1	0	1	0	236	0	0	111	0	349
45 PM	0	0	1	0	0	0	0	229	0	1	109	0	340
5:00 PM	0	0	0	0	0	1	1	254	0	0	116	0	372
15 PM	0	0	1	0	0	0	0	236	0	0	120	0	357
30 PM	0	0	0	2	0	1	0	269	0	0	126	0	398
45 PM	0	0	0	0	0	1	0	246	0	0	114	1	362
6:00 PM													
15 PM													
30 PM													
45 PM													
TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	0	0	2	5	0	6	2	1984	0	2	897	1	2899

PM Peak Hr Begins at 500 PM

PEAK VOLUMES =	0	0	1	2	0	3	1	1005	0	0	476	1	1489

ADDITIONS: 1-WAY STOP
NORTH

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: WORKMAN MILL RD DATE: 7/18/2000 CITY: INDUSTRY

E-W STREET: CROSSROADS PKWY SOUTH DAY: TUESDAY PROJECT# 0680011A

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	0	1	0.5	1.5	1	2	0	0	2	0	
6:00 AM													
15 AM													
30 AM													
45 AM													
7:00 AM	0	0	1	17	0	8	24	45	10	0	74	10	189
15 AM	1	0	0	8	0	5	17	55	9	1	110	2	208
30 AM	0	0	0	11	0	19	23	40	7	1	142	7	250
45 AM	0	0	0	9	3	131	30	42	8	0	157	2	382
8:00 AM	0	0	0	12	0	63	31	51	0	0	161	4	322
15 AM	1	0	0	10	2	102	36	35	4	1	80	4	275
30 AM	1	0	0	4	6	75	27	25	1	0	49	4	192
45 AM	2	0	1	4	2	72	18	31	2	1	36	4	173
:00 AM	5	1	0	2	0	35	38	29	3	0	45	5	163
15 AM	0	2	0	4	2	56	24	32	3	0	36	6	165
30 AM	2	0	3	2	1	31	27	26	1	1	29	3	126
45 AM	0	0	3	4	0	46	29	29	2	1	30	5	149
10:00 AM	0	2	0	2	0	35	32	19	1	0	41	6	138
15 AM	2	1	1	1	0	45	20	40	0	0	34	9	153
30 AM	0	0	0	7	0	48	29	37	0	0	55	3	179
45 AM	1	1	2	13	0	36	32	34	2	1	41	7	170
TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	15	7	11	110	16	807	437	570	53	7	1120	81	3234

AM Peak Hr Begins at 730 AM

PEAK VOLUMES =	1	0	0	42	5	315	120	168	19	2	540	17	1229

ADDITIONS:SIGNALIZED

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: WORKMAN MILL RD DATE: 7/18/2000 CITY: INDUSTRY

E-W STREET: CROSSROADS PKWY SOUTH DAY: TUESDAY PROJECT# 0680011P

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	0	1	0.5	1.5	1	2	0	0	2	0	
2:00 PM													
15 PM													
30 PM													
45 PM													
3:00 PM													
15 PM													
30 PM													
45 PM													
4:00 PM	15	8	7	7	1	74	176	98	1	0	28	14	429
15 PM	4	3	4	13	4	49	146	128	0	0	33	12	396
30 PM	3	2	1	9	6	86	132	113	2	0	38	18	410
45 PM	3	2	3	7	0	51	121	81	1	1	54	13	337
·00 PM	2	2	2	14	2	46	118	115	2	1	63	21	388
5 PM	3	0	1	24	0	48	139	140	1	0	60	13	429
PM	4	6	4	12	3	67	147	102	2	1	54	17	419
45 PM	4	4	1	9	2	58	135	123	0	0	49	24	409
6:00 PM													
15 PM													
30 PM													
45 PM													
TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	38	27	23	95	18	479	1114	900	9	3	379	132	3217

PM Peak Hr Begins at 500 PM

PEAK VOLUMES =	13	12	8	59	7	219	539	480	5	2	226	75	1645

CONDITIONS:SIGNALIZED

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: EAST LANDFILL ACCESS DATE: 7/18/2000 CITY: INDUSTRY
E-W STREET: CROSSROADS PKWY SOUTH DAY: TUESDAY PROJECT# 0680012A

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	0	1	0	1	0	0	2	0	1	2	0	
6:00 AM													
15 AM													
30 AM													
45 AM													
7:00 AM	3	0	61	7	0	9	4	57	1	58	105	9	314
15 AM	2	0	42	7	1	3	5	54	1	55	133	6	309
30 AM	2	0	47	1	0	6	0	58	1	41	214	6	376
45 AM	1	0	37	2	0	4	0	48	1	39	157	7	296
8:00 AM	3	0	34	9	0	3	3	44	1	68	176	7	348
15 AM	4	0	42	6	0	3	2	45	0	76	109	3	290
30 AM	1	0	40	2	1	2	2	28	1	73	54	10	214
45 AM	2	0	37	4	0	1	1	35	0	80	42	5	207
9:00 AM	1	0	43	11	0	2	0	28	1	78	57	9	230
15 AM	0	0	55	3	0	6	0	33	1	62	50	9	219
30 AM	2	1	57	9	0	0	3	25	1	64	32	4	198
45 AM	3	3	40	5	0	3	0	39	1	56	33	5	188
10:00 AM	2	1	49	8	0	2	3	19	0	59	18	5	166
15 AM	2	1	28	5	2	2	2	50	1	61	35	7	196
30 AM	3	3	72	3	1	5	1	38	3	81	62	5	277
45 AM	3	2	67	8	1	2	3	53	0	68	52	10	269
TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	34	11	751	90	6	53	29	654	14	1019	1329	107	4097

AM Peak Hr Begins at 715 AM

PEAK VOLUMES =	8	0	160	19	1	16	8	204	4	203	680	26	1329

ADDITIONS: 2-WAY STOP
NORTH/SOUTH

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: EAST LANDFILL ACCESS — DATE: 7/18/2000 — CITY: INDUSTRY

E-W STREET: CROSSROADS PKWY SOUTH — DAY: TUESDAY — PROJECT# 0680012P

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	0	1	0	1	0	0	2	0	1	2	0	
2:00 PM													
15 PM													
30 PM													
45 PM													
3:00 PM													
15 PM													
30 PM													
45 PM													
4:00 PM	1	2	8	6	0	7	4	121	2	6	27	6	190
15 PM	1	2	22	11	1	6	4	114	0	11	31	7	210
30 PM	6	0	12	9	1	4	4	120	1	7	37	9	210
45 PM	3	0	10	18	0	4	6	91	1	7	45	11	196
5:00 PM	1	0	19	11	0	4	6	115	0	6	69	15	246
15 PM	6	2	16	16	0	2	5	172	1	2	52	13	287
PM	2	1	13	10	1	3	4	119	0	0	58	9	220
45 PM	0	2	5	7	3	3	5	112	3	2	50	7	199
6:00 PM													
15 PM													
30 PM													
45 PM													
TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	20	9	105	88	6	33	38	964	8	41	369	77	1758

PM Peak Hr Begins at 500 PM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES =	9	5	53	44	4	12	20	518	4	10	229	44	952

CONDITIONS: 2-WAY STOP
NORTH/SOUTH

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

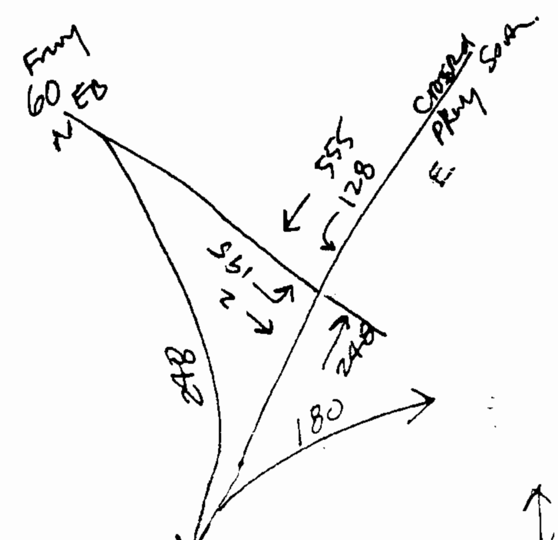
N-S STREET: CROSSROADS PKWY. SOUTH — DATE: 7/18/2000 — CITY: INDUSTRY
E-W STREET: SR-60 EB RAMPS — DAY: TUESDAY
PROJECT# 0680013A

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:		2	1	1	2		1	0	1				
6:00 AM													
15 AM													
30 AM													
45 AM													
7:00 AM		82	49	35	94		47	1	71				379
15 AM		59	51	35	127		62	0	62				396
30 AM		55	45	27	186		44	0	62				419
45 AM		52	35	31	148		42	1	53				362
8:00 AM		61	20	21	165		43	1	66				377
15 AM		63	31	27	122		52	1	62				358
30 AM		37	29	22	69		36	0	62				255
45 AM		36	37	18	57		38	0	50				236
9:00 AM		49	32	18	63		33	0	65				260
15 AM		61	38	19	56		43	0	51				268
30 AM		65	33	20	50		42	1	52				263
45 AM		58	34	20	43		32	0	53				240
10:00 AM		38	32	14	28		42	2	53				209
15 AM		27	29	14	46		29	0	35				180
30 AM		57	43	16	68		40	0	61				285
45 AM		70	51	13	62		32	0	66				294
TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	0	870	589	350	1384	0	657	7	924	0	0	0	4781

AM Peak Hr Begins at 700 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES =	0	248	180	128	555	0	195	2	248	0	0	0	1556

ADDITIONS:SIGNALIZED



SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: CROSSROADS PKWY. SOUTH DATE: 7/18/2000 CITY: INDUSTRY

E-W STREET: SR-60 EB RAMPS DAY: TUESDAY

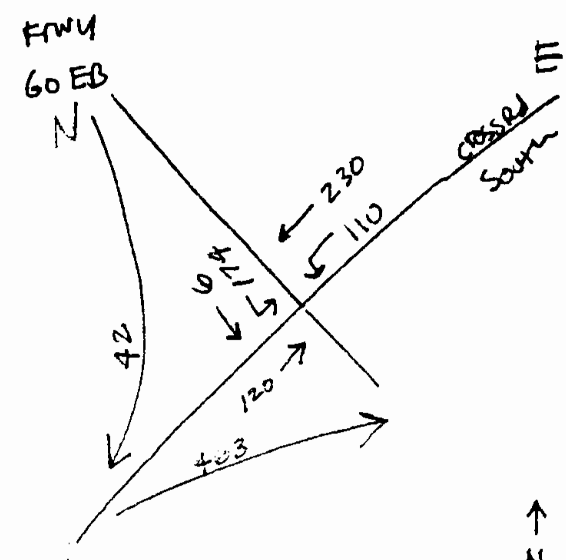
PROJECT# 0680013P

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:		2	1	1	2		1	0	1				
2:00 PM													
15 PM													
30 PM													
45 PM													
3:00 PM													
15 PM													
30 PM													
45 PM													
4:00 PM		21	107	24	19		52	2	6				231
15 PM		29	110	22	27		50	8	20				266
30 PM		22	108	41	37		50	0	13				271
45 PM		31	85	23	48		37	0	12				236
5:00 PM		19	113	36	72		42	0	10				292
15 PM		63	130	20	58		37	0	11				319
30 PM		27	117	28	55		39	0	10				276
45 PM		11	103	26	45		56	6	11				258
6:00 PM													
15 PM													
30 PM													
45 PM													
TOTAL VOLUMES =	0	223	873	220	361	0	363	16	93	0	0	0	2149

PM Peak Hr Begins at 500 PM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES =	0	120	463	110	230	0	174	6	42	0	0	0	1145

ADDITIONS: SIGNALIZED



SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: CROSSROADS PKWY SOUTH DATE: 7/18/2000 CITY: INDUSTRY
E-W STREET: CROSSROADS PKWY NORTH DAY: TUESDAY
PROJECT# 0680009A

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	2		1					1	1	1	2		
6:00 AM													
15 AM													
30 AM													
45 AM													
7:00 AM	39		32					26	43	37	37		214
15 AM	63		38					42	49	74	47		313
30 AM	37		31					26	40	108	30		272
45 AM	51		27					24	46	132	51		331
8:00 AM	59		39					24	34	68	31		255
15 AM	49		32					19	47	74	45		266
30 AM	43		36					15	39	60	33		226
45 AM	51		57					18	34	69	41		270
9:00 AM	32		47					23	28	23	30		183
15 AM	41		62					19	43	51	29		245
30 AM	37		82					20	69	51	29		288
45 AM	28		63					24	73	48	29		265
10:00 AM	40		88					30	50	46	37		291
15 AM	45		64					22	52	43	28		254
30 AM	47		72					33	53	49	45		299
45 AM	49		74					27	44	46	54		294

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	711	0	844	0	0	0	0	392	744	979	596	0	4266

AM Peak Hr Begins at 715 AM

PEAK													
VOLUMES =	210	0	135	0	0	0	0	116	169	382	159	0	1171

ADDITIONS:SIGNALIZED

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: CROSSROADS PKWY SOUTH   DATE: 7/18/2000   CITY: INDUSTRY

E-W STREET: CROSSROADS PKWY NORTH   DAY: TUESDAY   PROJECT# 0680009P

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	2		1					1	1	1	2		
2:00 PM													
15 PM													
30 PM													
45 PM													
3:00 PM													
15 PM													
30 PM													
45 PM													
4:00 PM	49		30					54	49	38	30		250
15 PM	64		39					31	32	45	52		263
30 PM	46		27					49	38	31	42		233
45 PM	47		22					25	29	38	34		195
5:00 PM	68		25					58	50	33	30		264
15 PM	64		22					26	32	36	44		224
30 PM	50		25					59	49	23	38		244
45 PM	48		33					25	24	34	37		201
6:00 PM													
15 PM													
30 PM													
45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	436	0	223	0	0	0	0	327	303	278	307	0	1874

PM Peak Hr Begins at 415 PM

PEAK													
VOLUMES =	225	0	113	0	0	0	0	163	149	147	158	0	955

ADDITIONS:SIGNALIZED

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: PECK RD. DATE: 7/18/2000 CITY: EL MONTE

E-W STREET: SR-60 WB RAMPS DAY: TUESDAY

PROJECT# 0680001A

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:		2	1		2	1				1		1	
6:00 AM													
15 AM													
30 AM													
45 AM													
7:00 AM		69	35		167	58				27	3	31	390
15 AM		122	49		197	98				28	0	60	554
30 AM		183	53		311	110				38	0	52	747
45 AM		202	57		351	84				38	7	95	834
8:00 AM		185	62		254	80				49	0	76	706
15 AM		158	79		182	90				37	0	85	631
30 AM		140	59		214	65				24	0	71	573
45 AM		126	59		178	65				25	0	83	536
9:00 AM		128	34		138	49				28	0	61	438
15 AM		105	50		169	72				20	0	67	483
30 AM		111	31		113	57				24	0	55	391
45 AM		95	49		128	56				22	0	71	421
10:00 AM		123	49		118	63				15	0	57	425
15 AM		144	58		129	58				16	0	67	472
30 AM		141	45		148	67				20	0	63	484
45 AM		119	56		157	36				29	0	77	474
TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	0	2151	825	0	2954	1108	0	0	0	440	10	1071	8559

AM Peak Hr Begins at 730 AM

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
PEAK VOLUMES =	0	728	251	0	1098	364	0	0	0	162	7	308	2918

ADDITIONS:SIGNALIZED

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: PECK RD. DATE: 7/18/2000 CITY: EL MONTE

E-W STREET: SR-60 WB RAMPS DAY: TUESDAY

PROJECT# 0680001P

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:		2	1		2	1				1		1	
2:00 PM													
15 PM													
30 PM													
45 PM													
3:00 PM													
15 PM													
30 PM													
45 PM													
4:00 PM		243	83		169	33				15		91	634
15 PM		277	76		178	62				17		128	738
30 PM		274	107		193	66				20		155	815
45 PM		293	87		168	58				21		165	792
5:00 PM		270	70		189	71				23		137	760
15 PM		260	71		216	67				15		175	804
30 PM		273	49		212	62				25		131	752
45 PM		297	56		161	843				8		131	1496
6:00 PM													
15 PM													
30 PM													
45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	0	2187	599	0	1486	1262	0	0	0	144	0	1113	6791

PM Peak Hr Begins at 500 PM

PEAK VOLUMES =	0	1100	246	0	778	1043	0	0	0	71	0	574	3812

ADDITIONS:SIGNALIZED

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: PECK RD. DATE: 7/18/2000 CITY: INDUSTRY

E-W STREET: DUNFREE ST. DAY: TUESDAY

PROJECT# 0680002A

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	1	1.33	0.33	1.33	0	1	0	
6:00 AM													
15 AM													
30 AM													
45 AM													
7:00 AM	72	94	3	12	108	134	45	3	44	4	13	8	540
15 AM	70	112	7	8	125	128	62	4	61	10	20	5	612
30 AM	59	145	10	14	193	194	109	2	72	8	42	1	849
45 AM	54	154	5	8	217	169	120	6	107	4	34	2	880
8:00 AM	71	145	7	7	160	143	67	1	74	12	15	2	704
15 AM	83	156	4	11	107	124	67	3	47	7	9	4	622
30 AM	75	116	6	7	98	113	48	3	47	9	12	7	541
45 AM	50	96	2	7	108	110	51	12	44	6	6	5	497
9:00 AM	59	91	3	8	70	60	52	7	32	6	9	2	399
15 AM	35	86	2	10	91	80	40	2	38	9	4	1	398
30 AM	34	92	1	5	61	79	45	4	31	7	3	2	364
45 AM	38	96	0	5	66	85	47	3	35	3	10	4	392
10:00 AM	43	90	4	6	50	67	62	7	50	8	6	2	395
15 AM	41	82	5	9	63	78	58	6	49	6	3	4	404
30 AM	36	94	2	14	96	78	61	4	65	11	3	0	464
45 AM	42	122	2	11	119	61	42	3	64	6	6	0	478
TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	862	1771	63	142	1732	1703	976	70	860	116	195	49	8539

AM Peak Hr Begins at 730 AM

PEAK VOLUMES =	267	600	26	40	677	630	363	12	300	31	100	9	3055

ADDITIONS:SIGNALIZED

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: PECK RD. DATE: 7/18/2000 CITY: INDUSTRY

E-W STREET: DUNFREE ST. DAY: TUESDAY

PROJECT# 0680002P

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	1	1.33	0.33	1.33	0	1	0	
2:00 PM													
15 PM													
30 PM													
45 PM													
3:00 PM													
15 PM													
30 PM													
45 PM													
4:00 PM	36	191	1	7	99	86	113	13	89	4	14	3	656
15 PM	32	217	3	6	112	74	109	8	93	7	6	7	674
30 PM	40	256	1	9	120	92	116	7	101	8	3	4	757
45 PM	43	208	3	7	103	65	130	14	102	5	22	6	708
5:00 PM	31	176	2	13	120	84	147	19	96	10	13	7	718
15 PM	40	211	2	11	135	68	123	6	104	17	5	0	722
30 PM	42	194	4	9	128	71	117	7	118	9	7	5	711
45 PM	30	190	2	11	100	68	122	11	120	4	8	2	668
6:00 PM													
15 PM													
30 PM													
45 PM													
TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	294	1643	18	73	917	608	977	85	823	64	78	34	5614

PM Peak Hr Begins at 430 PM

PEAK VOLUMES =	154	851	8	40	478	309	516	46	403	40	43	17	2905

ADDITIONS:SIGNALIZED

Location:East landfill access, Crossroads Pkwy. Sout Volumes for Wed. 7/19/00 06740003

AM Period	NB		SB			PM Period	NB		SB		
12:00-12:15	0		0			12:00-12:15	91		56		
12:15-12:30	0		0			12:15-12:30	93		44		
12:30-12:45	0		0			12:30-12:45	93		37		
12:45-1:00	0	0	2	2	2	12:45-1:00	60	337	26	163	500
1:00-1:15	0		0			1:00-1:15	49		29		
1:15-1:30	0		0			1:15-1:30	44		29		
1:30-1:45	0		0			1:30-1:45	36		24		
1:45-2:00	0	0	0	0	0	1:45-2:00	42	171	33	115	286
2:00-2:15	0		0			2:00-2:15	32		28		
2:15-2:30	0		0			2:15-2:30	45		29		
2:30-2:45	0		0			2:30-2:45	37		37		
2:45-3:00	0	0	0	0	0	2:45-3:00	46	160	20	114	274
3:00-3:15	3		0			3:00-3:15	24		21		
3:15-3:30	2		0			3:15-3:30	21		12		
3:30-3:45	2		0			3:30-3:45	23		18		
3:45-4:00	3	10	9	9	19	3:45-4:00	23	91	16	67	158
4:00-4:15	14		11			4:00-4:15	22		7		
4:15-4:30	15		21			4:15-4:30	32		17		
4:30-4:45	17		21			4:30-4:45	21		14		
4:45-5:00	16	62	29	82	144	4:45-5:00	34	109	4	42	151
5:00-5:15	31		47			5:00-5:15	18		2		
5:15-5:30	31		29			5:15-5:30	27		1		
5:30-5:45	32		43			5:30-5:45	11		2		
5:45-6:00	30	124	107	226	350	5:45-6:00	11	67	1	6	73
6:00-6:15	25		95			6:00-6:15	0		2		
6:15-6:30	46		75			6:15-6:30	2		2		
6:30-6:45	54		80			6:30-6:45	6		0		
6:45-7:00	65	190	85	335	525	6:45-7:00	0	8	1	5	13
7:00-7:15	65		80			7:00-7:15	0		2		
7:15-7:30	58		75			7:15-7:30	1		1		
7:30-7:45	64		63			7:30-7:45	0		0		
7:45-8:00	75	262	60	278	540	7:45-8:00	0	1	0	3	4
8:00-8:15	77		91			8:00-8:15	0		0		
8:15-8:30	75		100			8:15-8:30	0		2		
8:30-8:45	76		99			8:30-8:45	0		0		
8:45-9:00	54	282	105	395	677	8:45-9:00	0	0	0	2	2
9:00-9:15	54		98			9:00-9:15	0		0		
9:15-9:30	69		86			9:15-9:30	0		0		
9:30-9:45	57		87			9:30-9:45	0		0		
9:45-10:00	62	242	76	347	589	9:45-10:00	0	0	0	0	0
10:00-10:15	65		76			10:00-10:15	0		0		
10:15-10:30	67		81			10:15-10:30	0		0		
10:30-10:45	59		102			10:30-10:45	0		2		
10:45-11:00	63	254	86	345	599	10:45-11:00	0	0	0	2	2
11:00-11:15	9[illegible]		93			11:00-11:15	0		0		
11:15-11:30	87		90			11:15-11:30	0		0		
11:30-11:45	85		72			11:30-11:45	0		0		
11:45-12:00	86	354	77	332	686	11:45-12:00	0	0	0	0	0
Total Vol	1780		2351		4131		944		519		1463
Daily Totals							2724		2870		5594

Location: West landfill access, Workman Mil Industry Volumes for Wed. 7/19/00 ·06740002

AM Period	NB		SB			PM Period	NB		SB		
12:00-12:15	0		0			12:00-12:15	4		5		
12:15-12:30	2		1			12:15-12:30	15		6		
12:30-12:45	0		0			12:30-12:45	4		2		
12:45-1:00	0	2	0	1	3	12:45-1:00	1	24	3	16	40
1:00-1:15	0		0			1:00-1:15	3		2		
1:15-1:30	0		0			1:15-1:30	3		5		
1:30-1:45	0		0			1:30-1:45	5		5		
1:45-2:00	0	0	0	0	0	1:45-2:00	9	20	3	15	35
2:00-2:15	0		0			2:00-2:15	2		4		
2:15-2:30	0		0			2:15-2:30	0		1		
2:30-2:45	0		0			2:30-2:45	5		2		
2:45-3:00	0	0	0	0	0	2:45-3:00	3	10	3	10	20
3:00-3:15	0		0			3:00-3:15	1		3		
3:15-3:30	0		0			3:15-3:30	2		3		
3:30-3:45	0		0			3:30-3:45	3		3		
3:45-4:00	2	2	0	0	2	3:45-4:00	6	12	2	11	23
4:00-4:15	0		0			4:00-4:15	0		0		
4:15-4:30	0		1			4:15-4:30	0		2		
4:30-4:45	1		3			4:30-4:45	0		1		
4:45-5:00	0	1	1	5	6	4:45-5:00	0	0	0	3	3
5:00-5:15	0		5			5:00-5:15	0		0		
5:15-5:30	0		7			5:15-5:30	0		0		
5:30-5:45	0		16			5:30-5:45	0		0		
5:45-6:00	1	1	12	40	41	5:45-6:00	0	0	0	0	0
6:00-6:15	4		8			6:00-6:15	0		0		
6:15-6:30	28		5			6:15-6:30	4		0		
6:30-6:45	30		10			6:30-6:45	0		1		
6:45-7:00	37	99	5	28	127	6:45-7:00	0	4	1	2	6
7:00-7:15	45		5			7:00-7:15	0		0		
7:15-7:30	45		15			7:15-7:30	0		0		
7:30-7:45	27		10			7:30-7:45	1		2		
7:45-8:00	19	136	12	42	178	7:45-8:00	0	1	0	2	3
8:00-8:15	28		15			8:00-8:15	2		0		
8:15-8:30	15		9			8:15-8:30	1		1		
8:30-8:45	31		16			8:30-8:45	0		0		
8:45-9:00	8	82	15	55	137	8:45-9:00	5	8	1	2	10
9:00-9:15	36		16			9:00-9:15	4		0		
9:15-9:30	33		20			9:15-9:30	0		1		
9:30-9:45	39		21			9:30-9:45	0		1		
9:45-10:00	35	143	20	77	220	9:45-10:00	0	4	0	2	6
10:00-10:15	24		11			10:00-10:15	0		1		
10:15-10:30	28		15			10:15-10:30	1		1		
10:30-10:45	29		16			10:30-10:45	2		0		
10:45-11:00	23	104	19	61	165	10:45-11:00	0	3	0	2	5
11:00-11:15	32		0			11:00-11:15	0		0		
11:15-11:30	28		0			11:15-11:30	0		0		
11:30-11:45	24		1			11:30-11:45	1		2		
11:45-12:00	28	112	2	3	115	11:45-12:00	0	1	0	2	3
Total Vol	682		312		994		87		67		154
Daily Totals							769		379		1148

Location:East of Workman Mill & Crossroads (S) Volumes for Wed. 7/19/00 06740005

AM Period	EB		WB			PM Period	EB		WB		
12:00-12:15	10		5			12:00-12:15	95		78		
12:15-12:30	12		4			12:15-12:30	74		89		
12:30-12:45	18		10			12:30-12:45	85		88		
12:45-1:00	8	48	5	24	72	12:45-1:00	78	332	103	358	690
1:00-1:15	12		6			1:00-1:15	71		61		
1:15-1:30	9		7			1:15-1:30	63		56		
1:30-1:45	7		11			1:30-1:45	74		67		
1:45-2:00	5	33	5	29	62	1:45-2:00	54	262	64	248	510
2:00-2:15	6		9			2:00-2:15	64		45		
2:15-2:30	5		5			2:15-2:30	66		58		
2:30-2:45	9		17			2:30-2:45	94		66		
2:45-3:00	12	32	11	42	74	2:45-3:00	85	309	45	214	523
3:00-3:15	11		8			3:00-3:15	96		41		
3:15-3:30	8		5			3:15-3:30	88		52		
3:30-3:45	12		3			3:30-3:45	111		46		
3:45-4:00	7	38	8	24	62	3:45-4:00	94	389	46	185	574
4:00-4:15	6		4			4:00-4:15	118		61		
4:15-4:30	10		13			4:15-4:30	112		69		
4:30-4:45	15		21			4:30-4:45	139		70		
4:45-5:00	9	40	18	56	96	4:45-5:00	124	493	62	262	755
5:00-5:15	9		10			5:00-5:15	147		71		
5:15-5:30	13		14			5:15-5:30	145		71		
5:30-5:45	14		25			5:30-5:45	142		67		
5:45-6:00	26	62	32	81	143	5:45-6:00	128	562	73	282	844
6:00-6:15	22		25			6:00-6:15	97		38		
6:15-6:30	45		46			6:15-6:30	85		28		
6:30-6:45	32		39			6:30-6:45	89		38		
6:45-7:00	24	123	54	164	287	6:45-7:00	74	345	21	125	470
7:00-7:15	50		87			7:00-7:15	54		22		
7:15-7:30	50		89			7:15-7:30	57		23		
7:30-7:45	40		122			7:30-7:45	46		17		
7:45-8:00	45	185	94	392	577	7:45-8:00	40	197	23	85	282
8:00-8:15	43		97			8:00-8:15	36		10		
8:15-8:30	38		83			8:15-8:30	21		19		
8:30-8:45	39		75			8:30-8:45	13		29		
8:45-9:00	41	161	78	333	494	8:45-9:00	17	87	15	73	160
9:00-9:15	40		74			9:00-9:15	15		19		
9:15-9:30	35		76			9:15-9:30	22		11		
9:30-9:45	33		87			9:30-9:45	25		18		
9:45-10:00	49	157	76	313	470	9:45-10:00	21	83	26	74	157
10:00-10:15	51		63			10:00-10:15	16		19		
10:15-10:30	62		64			10:15-10:30	17		11		
10:30-10:45	63		68			10:30-10:45	13		18		
10:45-11:00	54	230	57	252	482	10:45-11:00	19	65	10	58	123
11:00-11:15	58		41			11:00-11:15	14		6		
11:15-11:30	59		52			11:15-11:30	20		10		
11:30-11:45	63		32			11:30-11:45	18		4		
11:45-12:00	54	234	28	153	387	11:45-12:00	9	61	8	28	89
Total Vol	1343		1863		3206		3185		1992		5177
Daily Totals							4528		3855		8383

Location:Crossroads Pkwy. (N) e/o Crossroads (S) Volumes for Wed. 7/19/00 06740006

AM Period	EB		WB			PM Period	EB		WB		
12:00-12:15	4		3			12:00-12:15	89		74		
12:15-12:30	9		6			12:15-12:30	87		87		
12:30-12:45	6		5			12:30-12:45	74		92		
12:45-1:00	7	26	1	15	41	12:45-1:00	96	346	127	380	726
1:00-1:15	5		3			1:00-1:15	72		68		
1:15-1:30	6		3			1:15-1:30	79		68		
1:30-1:45	7		7			1:30-1:45	81		74		
1:45-2:00	8	26	0	13	39	1:45-2:00	89	321	50	260	581
2:00-2:15	10		2			2:00-2:15	76		58		
2:15-2:30	8		5			2:15-2:30	93		60		
2:30-2:45	15		0			2:30-2:45	75		61		
2:45-3:00	12	45	2	9	54	2:45-3:00	63	307	85	264	571
3:00-3:15	9		6			3:00-3:15	75		55		
3:15-3:30	8		8			3:15-3:30	64		41		
3:30-3:45	7		2			3:30-3:45	70		52		
3:45-4:00	10	34	1	17	51	3:45-4:00	75	284	64	212	496
4:00-4:15	15		4			4:00-4:15	63		77		
4:15-4:30	18		4			4:15-4:30	83		59		
4:30-4:45	20		4			4:30-4:45	78		78		
4:45-5:00	21	74	10	22	96	4:45-5:00	92	316	98	312	628
5:00-5:15	21		11			5:00-5:15	113		70		
5:15-5:30	20		17			5:15-5:30	75		71		
5:30-5:45	31		14			5:30-5:45	78		53		
5:45-6:00	50	122	17	59	181	5:45-6:00	70	336	78	272	608
6:00-6:15	37		25			6:00-6:15	66		61		
6:15-6:30	20		33			6:15-6:30	42		55		
6:30-6:45	40		52			6:30-6:45	56		38		
6:45-7:00	40	137	60	170	307	6:45-7:00	45	209	50	204	413
7:00-7:15	55		81			7:00-7:15	40		27		
7:15-7:30	78		115			7:15-7:30	55		29		
7:30-7:45	66		135			7:30-7:45	47		19		
7:45-8:00	56	255	189	520	775	7:45-8:00	50	192	22	97	289
8:00-8:15	67		101			8:00-8:15	32		29		
8:15-8:30	42		120			8:15-8:30	31		29		
8:30-8:45	61		93			8:30-8:45	54		23		
8:45-9:00	78	248	110	424	672	8:45-9:00	41	158	20	101	259
9:00-9:15	67		56			9:00-9:15	36		17		
9:15-9:30	78		80			9:15-9:30	31		23		
9:30-9:45	80		81			9:30-9:45	38		19		
9:45-10:00	90	315	77	294	609	9:45-10:00	35	140	12	71	211
10:00-10:15	112		81			10:00-10:15	41		14		
10:15-10:30	98		72			10:15-10:30	32		9		
10:30-10:45	99		89			10:30-10:45	34		13		
10:45-11:00	101	410	110	352	762	10:45-11:00	22	129	11	47	176
11:00-11:15	98		96			11:00-11:15	42		15		
11:15-11:30	85		85			11:15-11:30	55		10		
11:30-11:45	93		87			11:30-11:45	37		11		
11:45-12:00	80	356	99	367	723	11:45-12:00	51	185	6	42	227
Total Vol	2048		2262		4310		2923		2262		5185
Daily Totals							4971		4524		9495

Location:60 eb off-ramp @ Crossroads Pkwy. South					Volumes for Wed. 7/19/00				06740007
AM Period	OFF				PM Period	OFF			
12:00-12:15	4				12:00-12:15	53			
12:15-12:30	5				12:15-12:30	87			
12:30-12:45	9				12:30-12:45	89			
12:45-1:00	6	24	0	24	12:45-1:00	99	328	0	328
1:00-1:15	3				1:00-1:15	54			
1:15-1:30	8				1:15-1:30	89			
1:30-1:45	6				1:30-1:45	83			
1:45-2:00	1	18	0	18	1:45-2:00	82	308	0	308
2:00-2:15	4				2:00-2:15	37			
2:15-2:30	1				2:15-2:30	54			
2:30-2:45	10				2:30-2:45	63			
2:45-3:00	3	18	0	18	2:45-3:00	34	188	0	188
3:00-3:15	6				3:00-3:15	49			
3:15-3:30	3				3:15-3:30	45			
3:30-3:45	1				3:30-3:45	45			
3:45-4:00	9	19	0	19	3:45-4:00	70	209	0	209
4:00-4:15	11				4:00-4:15	55			
4:15-4:30	19				4:15-4:30	60			
4:30-4:45	20				4:30-4:45	86			
4:45-5:00	35	85	0	85	4:45-5:00	69	270	0	270
5:00-5:15	57				5:00-5:15	70			
5:15-5:30	44				5:15-5:30	64			
5:30-5:45	70				5:30-5:45	62			
5:45-6:00	105	276	0	276	5:45-6:00	43	239	0	239
6:00-6:15	117				6:00-6:15	46			
6:15-6:30	99				6:15-6:30	38			
6:30-6:45	117				6:30-6:45	33			
6:45-7:00	150	483	0	483	6:45-7:00	26	143	0	143
7:00-7:15	104				7:00-7:15	44			
7:15-7:30	88				7:15-7:30	40			
7:30-7:45	100				7:30-7:45	25			
7:45-8:00	89	381	0	381	7:45-8:00	33	142	0	142
8:00-8:15	105				8:00-8:15	27			
8:15-8:30	124				8:15-8:30	21			
8:30-8:45	97				8:30-8:45	36			
8:45-9:00	127	453	0	453	8:45-9:00	27	111	0	111
9:00-9:15	125				9:00-9:15	22			
9:15-9:30	91				9:15-9:30	30			
9:30-9:45	89				9:30-9:45	26			
9:45-10:00	98	403	0	403	9:45-10:00	24	102	0	102
10:00-10:15	106				10:00-10:15	8			
10:15-10:30	113				10:15-10:30	27			
10:30-10:45	121				10:30-10:45	18			
10:45-11:00	113	453	0	453	10:45-11:00	14	67	0	67
11:00-11:15	78				11:00-11:15	23			
11:15-11:30	99				11:15-11:30	12			
11:30-11:45	87				11:30-11:45	17			
11:45-12:00	74	338	0	338	11:45-12:00	9	61	0	61
Total Vol	2951		0	2951		2168		0	2168
Daily Totals						5119		0	$\boxed{5119}$

Location:60 eb on-ramp @ Crossroads Pkwy. South Volumes for Wed. 7/19/00 00740008

AM Period	ON				PM Period	ON			
12:00-12:15	26				12:00-12:15	104			
12:15-12:30	29				12:15-12:30	123			
12:30-12:45	25				12:30-12:45	131			
12:45-1:00	23	103	0	103	12:45-1:00	128	486	0	486
1:00-1:15	20				1:00-1:15	104			
1:15-1:30	13				1:15-1:30	109			
1:30-1:45	19				1:30-1:45	124			
1:45-2:00	18	70	0	70	1:45-2:00	95	432	0	432
2:00-2:15	29				2:00-2:15	86			
2:15-2:30	11				2:15-2:30	94			
2:30-2:45	9				2:30-2:45	115			
2:45-3:00	16	65	0	65	2:45-3:00	102	397	0	397
3:00-3:15	12				3:00-3:15	121			
3:15-3:30	13				3:15-3:30	109			
3:30-3:45	12				3:30-3:45	149			
3:45-4:00	7	44	0	44	3:45-4:00	118	497	0	497
4:00-4:15	13				4:00-4:15	152			
4:15-4:30	16				4:15-4:30	132			
4:30-4:45	18				4:30-4:45	120			
4:45-5:00	24	71	0	71	4:45-5:00	145	549	0	549
5:00-5:15	22				5:00-5:15	139			
5:15-5:30	27				5:15-5:30	131			
5:30-5:45	34				5:30-5:45	155			
5:45-6:00	46	129	0	129	5:45-6:00	134	559	0	559
6:00-6:15	34				6:00-6:15	112			
6:15-6:30	69				6:15-6:30	94			
6:30-6:45	68				6:30-6:45	92			
6:45-7:00	69	240	0	240	6:45-7:00	83	381	0	381
7:00-7:15	81				7:00-7:15	73			
7:15-7:30	69				7:15-7:30	71			
7:30-7:45	81				7:30-7:45	67			
7:45-8:00	64	295	0	295	7:45-8:00	53	264	0	264
8:00-8:15	53				8:00-8:15	69			
8:15-8:30	57				8:15-8:30	39			
8:30-8:45	61				8:30-8:45	43			
8:45-9:00	61	232	0	232	8:45-9:00	31	182	0	182
9:00-9:15	56				9:00-9:15	30			
9:15-9:30	60				9:15-9:30	38			
9:30-9:45	75				9:30-9:45	39			
9:45-10:00	62	253	0	253	9:45-10:00	41	148	0	148
10:00-10:15	62				10:00-10:15	32			
10:15-10:30	63				10:15-10:30	25			
10:30-10:45	69				10:30-10:45	34			
10:45-11:00	57	251	0	251	10:45-11:00	26	117	0	117
11:00-11:15	85				11:00-11:15	48			
11:15-11:30	96				11:15-11:30	36			
11:30-11:45	57				11:30-11:45	35			
11:45-12:00	57	295	0	295	11:45-12:00	47	166	0	166
Total Vol	2048		0	2048		4178		0	4178
Daily Totals						6226		0	6226

Location:Workman Mill w/o landfill access Industry Volumes for Wed. 7/19/00 06740001

AM Period	EB		WB			PM Period	EB		WB		
12:00-12:15	17		9			12:00-12:15	129		103		
12:15-12:30	24		2			12:15-12:30	132		90		
12:30-12:45	25		4			12:30-12:45	118		101		
12:45-1:00	11	77	5	20	97	12:45-1:00	112	491	112	406	897
1:00-1:15	13		9			1:00-1:15	93		85		
1:15-1:30	11		10			1:15-1:30	88		60		
1:30-1:45	9		9			1:30-1:45	110		63		
1:45-2:00	11	44	5	33	77	1:45-2:00	80	371	48	256	627
2:00-2:15	11		11			2:00-2:15	101		50		
2:15-2:30	7		5			2:15-2:30	108		69		
2:30-2:45	11		14			2:30-2:45	161		79		
2:45-3:00	15	44	16	46	90	2:45-3:00	125	495	73	271	766
3:00-3:15	16		4			3:00-3:15	158		73		
3:15-3:30	12		2			3:15-3:30	149		66		
3:30-3:45	20		0			3:30-3:45	198		115		
3:45-4:00	10	58	9	15	73	3:45-4:00	189	694	81	335	1029
4:00-4:15	10		5			4:00-4:15	205		94		
4:15-4:30	19		15			4:15-4:30	215		69		
4:30-4:45	27		23			4:30-4:45	209		104		
4:45-5:00	14	70	10	53	123	4:45-5:00	211	840	57	324	1164
5:00-5:15	19		16			5:00-5:15	231		85		
5:15-5:30	35		32			5:15-5:30	230		92		
5:30-5:45	45		42			5:30-5:45	232		82		
5:45-6:00	48	147	57	147	294	5:45-6:00	225	918	63	322	1240
6:00-6:15	45		44			6:00-6:15	169		64		
6:15-6:30	82		126			6:15-6:30	140		52		
6:30-6:45	74		152			6:30-6:45	126		78		
6:45-7:00	77	278	147	469	747	6:45-7:00	104	539	50	244	783
7:00-7:15	98		198			7:00-7:15	91		49		
7:15-7:30	86		282			7:15-7:30	94		46		
7:30-7:45	83		331			7:30-7:45	59		40		
7:45-8:00	98	365	265	1076	1441	7:45-8:00	61	305	43	178	483
8:00-8:15	93		206			8:00-8:15	48		30		
8:15-8:30	73		185			8:15-8:30	41		29		
8:30-8:45	69		160			8:30-8:45	37		42		
8:45-9:00	59	294	138	689	983	8:45-9:00	32	158	31	132	290
9:00-9:15	59		96			9:00-9:15	36		33		
9:15-9:30	69		103			9:15-9:30	36		26		
9:30-9:45	76		105			9:30-9:45	41		29		
9:45-10:00	72	276	101	405	681	9:45-10:00	40	153	36	124	277
10:00-10:15	74		98			10:00-10:15	22		26		
10:15-10:30	85		87			10:15-10:30	35		23		
10:30-10:45	96		74			10:30-10:45	27		24		
10:45-11:00	54	309	82	341	650	10:45-11:00	25	109	8	81	190
11:00-11:15	77		101			11:00-11:15	25		10		
11:15-11:30	74		104			11:15-11:30	34		10		
11:30-11:45	82		98			11:30-11:45	31		6		
11:45-12:00	93	326	99	402	728	11:45-12:00	13	103	7	33	136
Total Vol	2288		3696		5984		5176		2706		7882
Daily Totals							7464		6402		13866

Location: Crossroads Pkwy. (S) e/o landfill access Volumes for Wed. 7/19/00 06740004

AM Period	NB		SB			PM Period	NB		SB		
12:00-12:15	9		3			12:00-12:15	112		98		
12:15-12:30	13		5			12:15-12:30	123		104		
12:30-12:45	17		9			12:30-12:45	131		112		
12:45-1:00	9	48	7	24	72	12:45-1:00	109	475	123	437	912
1:00-1:15	12		6			1:00-1:15	109		74		
1:15-1:30	7		11			1:15-1:30	108		98		
1:30-1:45	7		10			1:30-1:45	115		96		
1:45-2:00	6	32	3	30	62	1:45-2:00	85	417	100	368	785
2:00-2:15	4		10			2:00-2:15	88		77		
2:15-2:30	3		7			2:15-2:30	98		88		
2:30-2:45	8		17			2:30-2:45	104		94		
2:45-3:00	13	28	12	46	74	2:45-3:00	108	398	65	324	722
3:00-3:15	11		9			3:00-3:15	103		55		
3:15-3:30	8		5			3:15-3:30	88		69		
3:30-3:45	13		3			3:30-3:45	111		59		
3:45-4:00	4	36	16	33	69	3:45-4:00	113	415	71	254	669
4:00-4:15	9		19			4:00-4:15	146		72		
4:15-4:30	11		35			4:15-4:30	130		86		
4:30-4:45	15		44			4:30-4:45	137		86		
4:45-5:00	10	45	50	148	193	4:45-5:00	130	543	69	313	856
5:00-5:15	10		67			5:00-5:15	163		66		
5:15-5:30	11		50			5:15-5:30	153		53		
5:30-5:45	15		96			5:30-5:45	154		54		
5:45-6:00	13	49	129	342	391	5:45-6:00	158	628	59	232	860
6:00-6:15	14		152			6:00-6:15	85		50		
6:15-6:30	19		159			6:15-6:30	85		33		
6:30-6:45	61		180			6:30-6:45	93		39		
6:45-7:00	108	202	179	670	872	6:45-7:00	76	339	26	148	487
7:00-7:15	138		211			7:00-7:15	60		33		
7:15-7:30	109		232			7:15-7:30	57		28		
7:30-7:45	101		255			7:30-7:45	50		21		
7:45-8:00	106	454	217	915	1369	7:45-8:00	45	212	29	111	323
8:00-8:15	88		216			8:00-8:15	34		11		
8:15-8:30	72		191			8:15-8:30	31		20		
8:30-8:45	70		138			8:30-8:45	22		28		
8:45-9:00	81	311	128	673	984	8:45-9:00	12	99	19	78	177
9:00-9:15	82		145			9:00-9:15	14		20		
9:15-9:30	76		139			9:15-9:30	27		16		
9:30-9:45	81		108			9:30-9:45	30		23		
9:45-10:00	75	314	102	494	808	9:45-10:00	29	100	28	87	187
10:00-10:15	72		91			10:00-10:15	20		25		
10:15-10:30	99		109			10:15-10:30	21		13		
10:30-10:45	115		151			10:30-10:45	20		25		
10:45-11:00	112	398	130	481	879	10:45-11:00	21	82	10	73	155
11:00-11:15	105		120			11:00-11:15	14		9		
11:15-11:30	109		110			11:15-11:30	16		12		
11:30-11:45	110		89			11:30-11:45	22		2		
11:45-12:00	102	426	96	415	841	11:45-12:00	11	63	11	34	97
Total Vol	2343		4271		6614		3771		2459		6230
Daily Totals							6114		6730		12844

Kimley-Horn
and Associates, Inc

Los Angeles Office
18425 Burbank Blvd.,
Suite 509
Tarzana, CA 94588

TEL 818 609-8942
FAX 818 609-9091

Fax Transmittal

Ph 626-458-5909
Return

To: Mr. James Shawn
Firm/Location: L.A. County Public Works

Fax No.: 626-458-5936
Date: August 28, 2000

From: Brian Marchetti
Firm/Location: Kimley-Horn - LA Office

Job No.: 099014000
No. of Pages: 2

Original coming by mail: Yes ☐ No ☒
If you have any problems, please call (818) 609-8942 and ask for: Brian

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Message:

Kimley-Horn is performing a Traffic Impact Analysis as part of an EIR for Continuation of the Puente Hills Landfill, at Workman Mill Road & Crossroads Parkway in the City of Industry. Our study area for the TIA includes portions of City of Industry, City of South El Monte, and unincorporated areas of Los Angeles County. Most traffic from the project is estimated to utilize the 60 and I-605 freeways.

I'd like to discuss the following issues with you:

- 9 out of 13 intersections fall within The City of Industry's jurisdiction. Their traffic study requirements include Highway Capacity Manual analysis, and inclusion of Congestion Management Program guidelines.
- Are these guidelines acceptable to use for all study intersections?
- Crossroads Parkway/Workman Mill Road and Peck Road/Workman Mill Road are within the jurisdiction of Los Angeles County.

The Analysis considers the continued operation of the landfill, with little or no increase in project traffic. The study will consider cumulative project impacts and background ambient growth through the year 2013. Environmental Science Associates of Los Angeles is producing the main EIR document.

Please review the attached diagram of study area intersections, and I will contact you via phone today or on Tuesday so that we can finalize this part of our study. Thank you in advance for your help.

Engineering
Planning
and
Environmental
Consultants

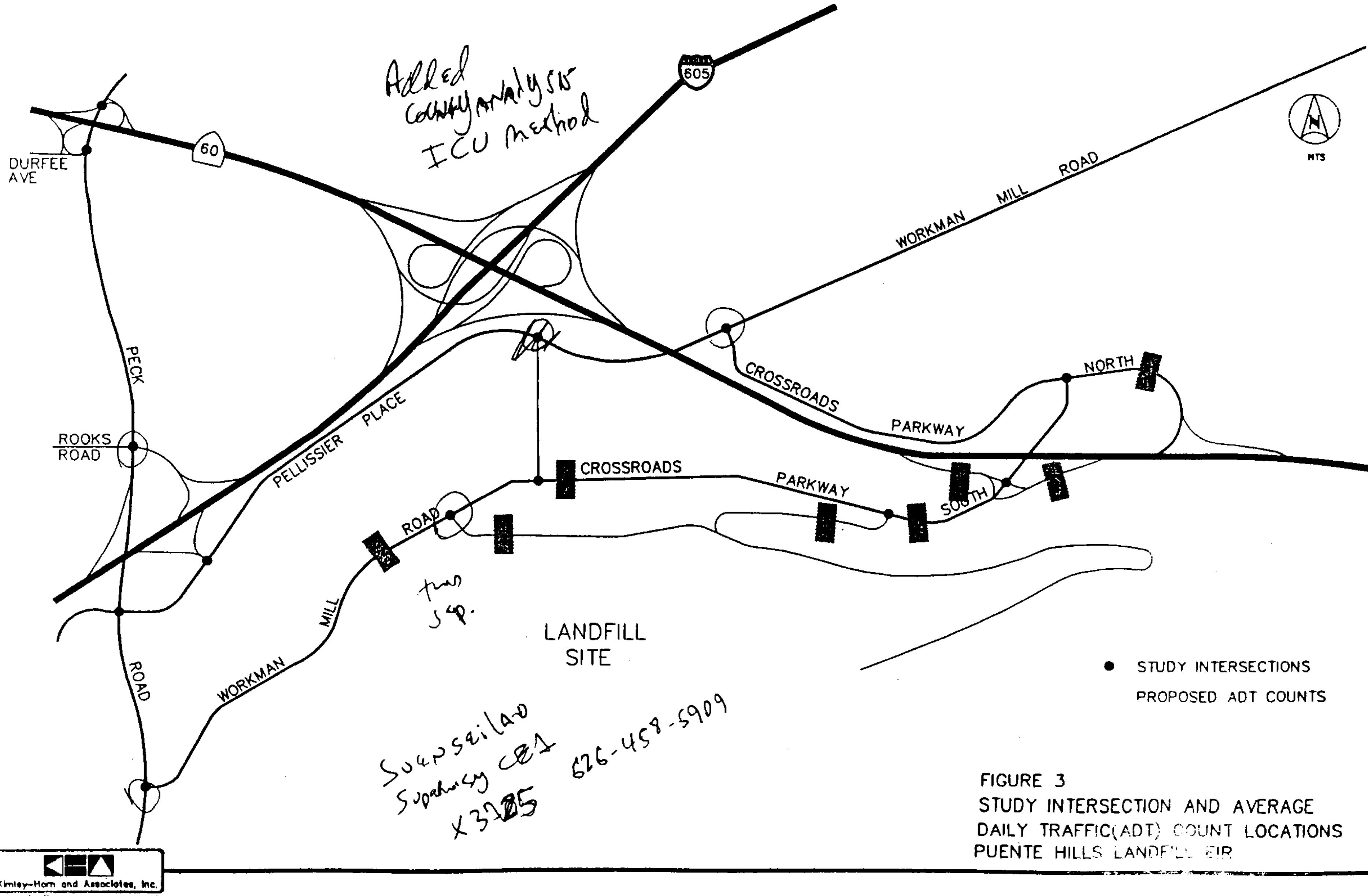

FIGURE 3
STUDY INTERSECTION AND AVERAGE
DAILY TRAFFIC(ADT) COUNT LOCATIONS
PUENTE HILLS LANDFILL EIR

Kimley Horn
Location West Landfill Access at Workman Mill Rd.
Count Date Tuesday 11/7/00
Abnormal conditions none

15 MIN PERIOD BEGIN	AM IN Cars	AM IN 2-Axle	AM IN 3-Axle	AM IN 4-Axle	AM IN 5+-Axle	AM IN Total	AM OUT Cars	AM OUT 2-Axle	AM OUT 3-Axle	AM OUT 4-Axle	AM OUT 5+-Axle	AM OUT Total		PM IN Cars	PM IN 2-Axle	PM IN 3-Axle	PM IN 4-Axle	PM IN 5+-Axle	PM IN Total	PM OUT Cars	PM OUT 2-Axle	PM OUT 3-Axle	PM OUT 4-Axle	PM OUT 5+-Axle	PM OUT Total
	0	0	0	0	0	0	0	0	0	0	0	0	12:00	15	0	0	1	1	17	0	0	0	0	0	
12:15	0	0	0	0	0	0	0	0	0	0	0	0	12:15	12	0	0	2	0	14	0	0	0	0	0	
12:30	0	0	0	0	0	0	0	0	0	0	0	0	12:30	11	0	0	1	0	12	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0	0	0	0	12:45	9	0	0	1	1	11	0	0	0	0	1	1
1:00	0	0	0	0	0	0	0	0	0	0	0	0	1:00	2	1	0	0	0	3	2	0	0	0	0	2
1:15	0	0	0	0	0	0	0	0	0	0	0	0	1:15	2	1	1	1	0	5	1	0	0	0	0	1
1:30	0	0	0	0	0	0	0	0	0	0	0	0	1:30	0	0	2	1	0	3	0	0	0	0	0	0
1:45	0	0	0	0	0	0	0	0	0	0	0	0	1:45	0	0	1	0	0	1	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0	0	0	2:00	0	0	0	0	0	0	0	0	0	0	0	0
2:15	0	0	0	0	0	0	0	0	0	0	0	0	2:15	2	0	1	0	0	3	0	0	0	0	0	0
2:30	0	0	0	0	0	0	0	0	0	0	0	0	2:30	0	0	1	0	0	1	0	0	0	0	0	0
2:45	0	0	0	0	0	0	0	0	0	0	0	0	2:45	0	0	0	0	1	1	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	3:00	0	0	0	0	2	2	0	0	0	0	0	0
3:15	0	0	0	0	0	0	0	0	0	0	0	0	3:15	0	0	0	0	1	1	0	0	0	0	0	0
3:30	0	0	0	0	0	0	0	0	0	0	0	0	3:30	0	0	0	0	2	2	0	0	0	0	0	0
3:45	0	0	0	0	0	0	0	0	0	0	0	0	3:45	0	0	0	0	2	2	0	0	0	0	0	0
4:00	4	0	0	0	0	4	0	0	0	0	0	0	4:00	0	0	0	0	1	1	2	0	0	0	0	2
4:15	2	0	0	0	0	2	0	0	0	0	0	0	4:15	0	0	0	0	0	0	0	0	0	0	0	0
4:30	6	0	0	0	0	6	1	0	0	0	0	1	4:30	0	0	0	0	0	0	0	0	0	0	0	0
4:45	5	0	0	0	0	5	1	0	0	0	0	1	4:45	0	0	0	0	0	0	0	0	0	1	0	1
5:00	1	0	0	0	0	1	1	0	0	0	0	1	5:00	0	0	0	0	0	0	0	0	0	0	0	0
5:15	5	0	0	0	0	5	1	0	0	0	0	1	5:15	0	0	0	0	0	0	0	0	0	0	0	0
5:30	9	0	0	0	0	9	3	1	5	3	1	13	5:30	0	0	0	0	0	0	0	0	0	0	0	0
5:45	5	0	0	0	0	5	11	0	5	2	4	22	5:45	0	0	0	0	0	0	0	0	0	0	0	0
6:00	16	0	0	0	0	16	9	1	10	4	5	29	6:00	1	0	0	0	0	1	0	0	0	0	0	0
6:15	4	0	0	0	1	5	5	0	5	3	0	13	6:15	0	0	0	0	0	0	0	0	0	0	0	0
6:30	23	1	1	0	2	27	5	1	8	7	4	25	6:30	0	0	0	0	0	0	0	0	0	0	0	0
6:45	9	2	0	1	1	13	12	2	4	2	2	22	6:45	1	0	0	0	0	1	0	0	0	0	0	0
7:00	16	3	1	2	2	24	3	3	2	2	2	12	7:00	0	0	0	0	0	0	0	0	0	0	0	0
7:15	29	2	1	1	1	34	1	0	3	1	1	6	7:15	0	0	0	0	0	0	2	0	0	0	0	2
7:30	12	1	2	1	3	19	4	1	6	2	2	15	7:30	0	0	0	0	0	0	0	0	0	0	0	0
7:45	21	2	1	1	2	27	3	0	2	1	4	10	7:45	0	0	0	0	0	0	0	0	0	0	0	0
8:00	9	0	0	1	2	12	4	1	3	4	0	12	8:00	0	0	0	0	0	0	0	0	0	0	0	0
8:15	14	0	0	2	2	18	3	0	3	2	2	10	8:15	0	0	0	0	0	0	0	0	0	0	0	0
8:30	5	0	0	0	4	9	4	0	1	1	0	6	8:30	0	0	0	0	0	0	0	0	0	0	0	0
8:45	10	0	0	0	1	11	2	1	3	0	2	8	8:45	0	0	0	0	0	0	0	0	0	0	0	0
	14	0	0	1	1	16	1	1	3	0	0	5	9:00	0	0	0	0	0	0	0	0	0	0	0	
	20	0	0	1	2	23	13	0	0	5	0	18	9:15	0	0	0	0	0	0	1	0	0	0	0	
9:30	12	0	0	2	3	17	6	0	0	0	1	7	9:30	0	0	0	0	0	0	0	0	0	0	0	0
9:45	7	0	0	0	4	11	5	1	1	2	1	10	9:45	1	0	0	0	0	1	0	0	0	0	0	0
10:00	16	0	0	0	3	19	7	0	4	3	2	16	10:00	2	0	0	0	0	2	0	0	0	0	0	0
10:15	5	0	1	0	3	9	10	2	2	3	1	18	10:15	1	0	0	0	0	1	0	0	0	0	0	0
10:30	16	0	1	0	2	19	4	0	3	2	0	9	10:30	0	0	0	0	0	0	0	0	0	0	0	0
10:45	17	0	2	0	2	21	5	1	3	2	2	13	10:45	0	0	0	0	0	0	0	0	0	0	0	0
11:00	13	0	0	0	2	15	7	0	0	0	4	11	11:00	0	0	0	0	0	0	0	0	0	0	0	0
11:15	19	0	1	0	4	24	5	0	4	2	5	16	11:15	0	0	0	0	0	0	0	0	0	0	0	0
11:30	19	0	0	0	1	20	0	0	0	0	0	0	11:30	0	0	0	0	0	0	0	0	0	0	0	0
11:45	16	0	0	0	3	19	0	0	0	0	0	0	11:45	0	0	0	0	0	0	0	0	0	0	0	0
Total Vol	379	11	11	13	13	465	136	16	80	53	45	330		59	2	6	7	11	85	8	0	0	1	1	10
Daily Totals																		IN Total	550					OUT Total	340

PROJECT # 10550001 SOUTHLAND CAR COUNTERS (714) 997-4498 Daily Total 890

Kimley Horn
Location East Landfill Access at Crossroads Pkwy. South
Count Date Tuesday 11/7/00
Abnormal conditions none

15 MIN PERIOD BEGAN	AM IN Cars	AM IN 2-Axle	AM IN 3-Axle	AM IN 4-Axle	AM IN 5+-Axle	AM IN Total	AM OUT Cars	AM OUT 2-Axle	AM OUT 3-Axle	AM OUT 4-Axle	AM OUT 5+-Axle	AM OUT Total	PM	PM IN Cars	PM IN 2-Axle	PM IN 3-Axle	PM IN 4-Axle	PM IN 5+-Axle	PM IN Total	PM OUT Cars	PM OUT 2-Axle	PM OUT 3-Axle	PM OUT 4-Axle	PM OUT 5+-Axle	PM OUT Total
12:00	0	0	0	0	0	0	0	0	0	0	0	0	12:00	16	1	4	15	6	42	36	7	0	18	9	70
12:15	0	0	0	0	0	0	0	0	0	0	0	0	12:15	15	4	4	4	11	38	60	6	0	12	10	88
12:30	0	0	0	0	0	0	0	0	0	0	0	0	12:30	6	6	17	6	8	43	51	3	0	9	7	70
12:45	0	0	0	0	0	0	0	0	0	0	0	0	12:45	9	3	8	0	10	30	16	3	23	3	17	62
1:00	0	0	0	0	0	0	0	0	0	0	0	0	1:00	10	0	4	0	5	19	22	5	53	2	15	97
1:15	0	0	0	0	0	0	0	0	0	0	0	0	1:15	9	3	1	1	9	23	14	5	10	[illegible]	16	56
1:30	0	0	0	0	0	0	0	0	0	0	0	0	1:30	13	3	3	1	1	21	9	2	16	0	16	43
1:45	0	0	0	0	0	0	0	0	0	0	0	0	1:45	12	3	2	1	3	21	10	2	10	1	6	29
2:00	0	0	0	0	0	0	0	0	0	0	0	0	2:00	13	2	4	0	7	26	18	2	13	0	2	35
2:15	0	0	0	0	0	0	0	0	0	0	0	0	2:15	14	4	3	1	3	25	20	2	5	0	7	34
2:30	0	0	0	0	0	0	0	0	0	0	0	0	2:30	6	3	7	0	2	18	16	3	3	0	4	26
2:45	0	0	0	0	0	0	0	0	0	0	0	0	2:45	3	3	5	1	9	21	20	3	3	0	7	33
3:00	0	0	0	0	0	0	0	0	0	0	0	0	3:00	9	1	5	1	1	17	18	2	10	1	5	36
3:15	0	0	0	0	0	0	0	0	0	0	0	0	3:15	4	0	2	0	1	7	10	1	6	0	7	24
3:30	0	0	0	0	0	0	0	0	0	0	0	0	3:30	1	1	4	0	1	7	10	1	6	1	1	19
3:45	1	0	0	0	0	1	0	0	0	0	0	0	3:45	0	0	11	0	1	12	12	0	3	0	1	16
4:00	1	0	1	0	1	3	0	0	0	0	0	0	4:00	0	0	2	0	1	3	15	0	6	0	1	22
4:15	3	0	1	0	3	7	0	0	0	0	0	0	4:15	0	0	7	1	1	9	4	0	10	0	2	16
4:30	1	0	3	0	1	5	0	0	0	0	0	0	4:30	3	1	5	0	1	10	6	0	7	0	1	14
4:45	2	1	7	0	1	11	2	0	0	0	0	2	4:45	3	0	3	0	1	7	4	4	5	0	0	13
5:00	0	1	3	2	2	8	1	0	0	0	0	1	5:00	1	0	1	0	1	3	4	0	1	0	3	8
5:15	0	1	6	1	0	8	0	0	0	0	0	0	5:15	0	0	0	0	0	0	18	0	8	0	0	26
5:30	1	2	6	1	6	16	1	0	0	0	0	1	5:30	0	0	0	0	0	0	31	1	0	0	0	32
5:45	5	1	16	0	5	27	0	1	0	0	0	1	5:45	0	0	0	0	0	0	2	0	0	0	0	2
6:00	6	0	34	4	7	51	4	0	1	0	0	5	6:00	0	0	0	0	0	0	0	0	0	0	0	0
6:15	7	7	27	4	10	55	2	2	7	0	2	13	6:15	0	0	0	0	0	0	1	0	0	0	0	1
6:30	4	4	22	3	9	42	4	6	26	2	10	48	6:30	0	0	0	0	0	0	3	0	0	0	0	3
6:45	5	6	15	2	7	35	3	4	41	0	7	55	6:45	3	0	0	0	0	3	1	0	0	0	0	1
7:00	7	6	18	1	6	38	3	6	33	0	13	55	7:00	0	0	0	0	0	0	0	0	0	0	0	0
7:15	2	6	15	2	7	32	7	9	29	0	14	59	7:15	0	0	0	0	0	0	0	0	0	0	0	0
7:30	8	2	10	0	10	30	9	12	21	1	10	53	7:30	0	0	0	0	0	0	0	0	0	0	0	0
7:45	4	5	14	1	8	32	8	5	22	0	7	42	7:45	0	0	0	0	0	0	0	0	0	0	0	0
8:00	8	7	14	3	10	42	6	5	18	0	5	34	8:00	0	0	0	0	0	0	0	0	0	0	0	0
8:15	5	9	29	2	12	57	10	7	22	1	7	47	8:15	0	0	0	0	0	0	0	0	0	0	0	0
8:30	9	2	26	4	5	46	4	4	16	0	8	32	8:30	0	0	0	0	0	0	0	0	0	0	0	0
8:45	15	6	8	3	10	42	16	9	24	0	6	55	8:45	0	0	0	0	0	0	0	0	0	0	0	0
9:00	19	2	5	6	4	36	12	3	29	0	7	51	9:00	2	0	0	0	0	2	0	0	0	0	0	0
9:15	14	7	27	7	10	65	13	6	21	1	6	47	9:15	0	0	0	0	0	0	0	0	0	0	0	0
9:30	4	6	30	10	22	72	13	6	30	0	26	75	9:30	0	0	0	0	0	0	0	0	0	0	0	0
9:45	7	4	18	4	20	53	13	5	26	0	20	64	9:45	0	0	0	0	0	0	0	0	0	0	0	0
10:00	19	2	18	13	16	68	13	5	37	0	23	78	10:00	0	0	0	0	0	0	0	0	0	0	0	0
	8	3	12	6	3	32	10	8	27	1	22	68	10:15	0	0	0	0	0	0	0	0	0	0	0	0
	6	13	20	4	13	56	12	6	28	1	33	80	10:30	0	0	0	0	0	0	0	0	0	0	0	0
1	21	3	10	11	11	56	15	3	38	0	23	79	10:45	1	0	0	0	0	1	0	0	0	0	0	0
11:00	9	6	16	1	3	35	2	2	0	12	6	22	11:00	1	0	0	0	0	1	0	0	0	0	0	0
11:15	8	11	24	3	15	61	38	7	0	14	9	68	11:15	0	0	0	0	0	0	0	0	0	0	0	0
11:30	16	5	12	4	13	50	38	6	0	13	8	65	11:30	0	0	0	0	0	0	0	0	0	0	0	0
11:45	12	3	9	5	9	38	39	4	0	11	6	60	11:45	0	0	0	0	0	0	0	0	0	0	0	0
Total Vol.	237	131	476	107	13	1210	298	131	496	57	278	1260		154	38	102	32	83	409	431	52	218	48	137	886

Daily Totals IN Total 1619 OUT Total 2146

Daily Total 3765

PROJECT 10550002 SOUTHLAND CAR COUNTERS (714) 997-4498

Kimley Horn
Location East Landfill access at Workman Mill Rd. (on site)
Count Date Wed 8/23-Thurs 8/24/2000
Abnormal conditions none

15 MIN ...OD ...N	AM IN Cars	AM IN 2-Axle	AM IN 3-Axle	AM IN 4-Axle	AM IN 5+-Axl	AM IN Total	AM OUT Cars	AM OUT 2-Axle	AM OUT 3-Axle	AM OUT 4-Axle	AM OUT 5+-Axl	AM OUT Total		PM IN Cars	PM IN 2-Axle	PM IN 3-Axle	PM IN 4-Axle	PM IN 5+-Axl	PM IN Total	PM OUT Cars	PM OUT 2-Axle	PM OUT 3-Axle	PM OUT 4-Axle	PM OUT 5+-Axl	
..:00	0	0	0	0	0	0	0	0	0	0	0	0	12:00	8	4	11	2	5	30	18	8	20	4	7	
12:15	2	0	0	0	0	2	0	0	0	0	0	0	12:15	9	6	24	3	8	50	14	15	30	5	14	78
12:30	0	0	0	0	0	0	0	0	0	0	0	0	12:30	15	4	21	6	19	65	11	8	37	2	12	70
12:45	0	1	0	0	0	1	0	0	0	0	0	0	12:45	15	7	16	2	14	54	10	13	37	6	21	87
1:00	0	0	0	0	0	0	0	0	0	0	0	0	1:00	9	5	16	3	13	46	14	9	21	1	18	63
1:15	0	0	0	0	0	0	0	0	0	0	0	0	1:15	11	5	10	4	6	36	25	9	23	6	14	77
1:30	0	0	0	0	0	0	0	0	0	0	0	0	1:30	13	2	20	3	9	47	7	7	25	2	10	51
1:45	0	0	0	0	0	0	0	0	0	0	0	0	1:45	10	3	19	4	15	51	12	9	18	4	15	58
2:00	0	[illegible]	0	0	0	0	0	0	0	0	0	0	2:00	8	2	13	2	6	31	12	4	12	1	17	46
2:15	0	0	0	0	0	0	0	0	0	0	0	0	2:15	9	3	5	3	7	27	7	8	14	5	8	42
2:30	0	0	0	0	0	0	0	0	0	0	0	0	2:30	10	1	5	2	6	24	9	4	11	6	10	40
2:45	0	0	0	0	0	0	0	0	0	0	0	0	2:45	8	1	12	4	7	32	12	5	28	1	14	60
3:00	0	0	0	0	0	0	0	0	0	0	0	0	3:00	10	0	10	2	5	27	19	8	12	4	10	53
3:15	0	0	0	0	0	0	0	0	0	0	0	0	3:15	5	0	6	0	0	11	11	1	17	3	8	40
3:30	0	0	0	0	0	0	0	0	0	0	0	0	3:30	9	0	2	1	2	14	4	1	14	5	4	28
3:45	0	0	0	0	0	0	0	0	0	0	0	0	3:45	6	1	2	1	2	12	12	0	6	4	0	22
4:00	0	1	0	1	2	4	0	0	1	0	0	1	4:00	3	0	7	0	0	10	5	1	5	0	1	12
4:15	0	2	0	0	2	4	0	0	0	0	0	0	4:15	4	0	3	1	2	10	6	1	3	0	3	13
4:30	2	3	0	0	2	7	0	0	2	0	0	2	4:30	6	0	7	0	0	13	11	1	3	0	0	15
4:45	2	7	0	1	2	12	0	0	2	0	0	2	4:45	4	1	2	1	1	9	11	0	5	0	0	16
5:00	2	5	0	0	2	9	1	0	1	0	0	2	5:00	4	0	0	0	0	4	7	0	8	0	2	17
5:15	4	4	0	2	3	13	1	0	1	0	0	2	5:15	1	0	0	0	0	1	20	2	3	0	0	25
5:30	5	13	0	0	7	25	0	0	3	0	0	3	5:30	4	0	0	0	0	4	9	0	0	0	0	9
5:45	8	6	0	0	7	21	1	1	1	0	0	3	5:45	0	0	0	0	0	0	4	0	0	0	0	4
6:00	7	14	0	6	9	36	1	0	2	0	0	3	6:00	1	0	0	0	0	1	3	0	0	0	0	3
6:15	8	3	9	6	12	38	3	3	2	0	1	9	6:15	0	0	0	0	0	0	5	0	0	0	0	5
6:30	11	18	16	3	9	57	8	4	4	0	3	19	6:30	2	0	0	0	0	2	0	0	0	0	0	0
6:45	13	13	23	3	7	59	2	8	6	1	7	24	6:45	1	0	0	0	0	1	0	0	0	0	0	0
7:00	18	8	25	2	6	59	6	9	2	0	10	27	7:00	0	0	0	0	0	0	0	0	0	0	0	0
7:15	8	7	27	2	10	54	9	5	3	1	10	28	7:15	0	0	0	0	0	0	0	0	0	0	0	0
7:30	9	10	9	0	4	32	9	3	6	0	8	26	7:30	0	0	0	0	0	0	0	0	0	0	0	0
7:45	15	8	11	1	11	46	4	9	3	0	7	23	7:45	0	0	0	0	0	0	0	0	0	0	0	0
8:00	13	7	9	1	12	42	8	4	6	0	4	22	8:00	0	0	0	0	0	0	0	0	0	0	0	0
8:15	17	8	11	1	12	49	3	6	8	0	6	23	8:15	0	0	0	0	0	0	0	0	0	0	0	0
	8	10	11	1	14	44	7	4	12	1	10	34	8:30	0	0	0	0	0	0	0	0	0	0	0	
	8	12	18	1	11	50	5	2	14	1	5	27	8:45	0	0	0	0	0	0	0	0	0	0	0	
9:00	7	4	16	4	18	49	4	0	14	0	14	32	9:00	0	0	0	0	0	0	0	0	0	0	0	0
9:15	3	8	14	6	9	40	8	5	17	2	9	41	9:15	0	0	0	0	0	0	0	0	0	0	0	0
9:30	6	6	11	5	13	41	6	3	11	0	13	33	9:30	0	0	0	0	0	0	0	0	0	0	0	0
9:45	3	2	30	8	12	55	3	5	13	4	12	37	9:45	0	0	0	1	0	1	0	0	0	0	0	0
10:00	5	5	16	8	18	52	8	8	11	9	14	50	10:00	0	0	0	0	0	0	0	0	0	0	0	0
10:15	9	3	20	3	13	48	9	9	15	8	14	55	10:15	0	0	0	1	0	1	0	0	0	0	0	0
10:30	5	6	28	6	12	57	7	8	20	9	14	58	10:30	0	0	0	0	0	0	0	0	0	0	0	0
10:45	6	5	25	9	10	55	9	4	15	8	15	51	10:45	0	0	0	0	0	0	0	0	0	0	0	0
11:00	4	5	21	6	11	47	10	9	14	9	16	58	11:00	0	0	0	0	0	0	0	0	0	0	0	0
11:15	6	4	16	7	21	54	6	7	16	8	7	44	11:15	0	0	0	0	0	0	0	0	0	0	0	0
11:30	8	9	10	4	17	48	7	7	12	7	13	46	11:30	0	0	0	0	0	0	0	0	0	0	0	0
11:45	6	5	11	1	11	34	8	11	8	6	15	48	11:45	0	0	0	0	0	0	0	0	0	0	0	0
Total Vol.	228	222	387	98	309	1244	153	134	245	74	227	833		185	45	211	46	127	614	278	114	352	59	188	991
Daily Totals																		IN Total	1858					OUT Total	1824

PROJECT 07910002 SOUTHLAND CAR COUNTERS (714) 997-4498 Daily Total 3682

Kimley Horn
Location West Landfill access at Workman Mill Rd. (on site)
Count Date Wed 8/23-Thurs 8/24/2000
Abnormal conditions none

15 MIN PERIOD	AM IN Cars	AM IN 2-Axle	AM IN 3-Axle	AM IN 4-Axle	AM IN 5+-Axl	AM IN Total	AM OUT Cars	AM OUT 2-Axle	AM OUT 3-Axle	AM OUT 4-Axle	AM OUT 5+-Axl	AM OUT Total		PM IN Cars	PM IN 2-Axle	PM IN 3-Axle	PM IN 4-Axle	PM IN 5+-Axl	PM IN Total	PM OUT Cars	PM OUT 2-Axle	PM OUT 3-Axle	PM OUT 4-Axle	PM OUT 5+-Axl	PM OUT Total
	0	0	0	0	0	0	0	0	0	0	0	0	12:00	3	0	0	0	0	3	6	0	2	3	1	12
	2	0	0	0	1	3	0	0	0	0	0	0	12:15	5	0	1	0	0	6	2	0	0	2	[illegible]	[illegible]
12:30	0	0	0	0	0	0	0	0	0	0	0	0	12:30	5	0	0	0	0	5	4	0	0	3	5	[illegible]
12:45	0	0	0	0	0	0	0	0	0	0	0	0	12:45	3	0	1	1	0	5	1	0	1	1	0	[illegible]
1:00	0	0	0	0	0	0	0	0	0	0	0	0	1:00	5	0	1	0	0	6	3	0	0	[illegible]	2	[illegible]
1:15	0	0	0	0	0	0	0	0	0	0	0	0	1:15	2	0	1	1	0	4	5	1	0	[illegible]	1	[illegible]
1:30	0	0	0	0	0	0	0	0	0	0	0	0	1:30	3	1	0	0	0	4	3	0	0	0	1	[illegible]
1:45	0	0	0	0	0	0	0	0	0	0	0	0	1:45	1	0	0	0	0	1	5	0	1	0	0	[illegible]
2:00	0	0	0	0	0	0	0	0	0	0	0	0	2:00	1	0	1	1	0	3	5	0	0	0	0	[illegible]
2:15	0	0	0	0	0	0	0	0	0	0	0	0	2:15	4	0	0	0	0	4	0	0	0	0	0	[illegible]
2:30	0	0	0	0	0	0	0	0	0	0	0	0	2:30	5	0	0	0	0	5	4	0	0	0	0	4
2:45	0	0	0	0	0	0	0	0	0	0	0	0	2:45	5	0	0	1	0	6	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	3:00	1	0	0	0	0	1	4	0	0	0	1	5
3:15	0	0	0	0	0	0	0	0	0	0	0	0	3:15	1	0	1	0	2	4	3	1	0	0	0	4
3:30	0	0	0	0	0	0	0	0	0	0	0	0	3:30	0	0	0	0	3	3	1	0	0	0	0	1
3:45	0	0	0	0	0	0	0	0	0	0	0	0	3:45	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	2	2	0	0	0	0	0	0	4:00	0	0	0	0	0	0	0	0	0	0	0	0
4:15	0	0	0	0	0	0	0	0	0	0	0	0	4:15	0	0	0	0	0	0	0	0	0	0	0	0
4:30	2	0	0	0	0	2	0	0	0	0	0	0	4:30	0	0	0	0	0	0	0	0	0	0	0	0
4:45	2	0	0	0	0	2	1	0	0	0	0	1	4:45	0	0	0	0	0	0	0	0	0	0	0	0
5:00	2	0	0	0	0	2	0	0	0	0	0	0	5:00	0	0	0	0	0	0	0	0	0	0	0	0
5:15	4	0	0	0	1	5	2	0	0	0	0	2	5:15	0	0	0	0	0	0	0	0	0	0	0	0
5:30	5	0	0	0	0	5	0	0	0	0	0	0	5:30	0	0	0	0	0	0	0	0	0	0	1	1
5:45	6	0	0	0	0	6	0	0	0	0	0	0	5:45	0	0	0	0	0	0	0	0	0	0	0	0
6:00	3	0	1	0	0	4	1	1	0	1	0	3	6:00	0	0	0	0	0	0	0	0	0	0	0	0
6:15	3	0	0	0	0	3	0	0	0	0	0	0	6:15	0	0	0	0	0	0	0	0	0	0	0	0
6:30	11	0	1	3	1	16	5	2	0	5	1	13	6:30	0	0	0	0	0	0	0	0	0	0	0	0
6:45	2	2	1	2	1	8	3	0	0	1	6	10	6:45	0	0	0	0	0	0	0	0	0	0	0	0
7:00	10	2	1	4	2	19	10	0	0	1	4	15	7:00	1	0	0	1	0	2	0	0	0	0	0	0
7:15	4	3	0	2	3	12	5	2	1	2	5	15	7:15	0	0	0	0	0	0	0	0	0	0	0	0
7:30	9	2	3	3	2	19	6	1	1	4	0	12	7:30	0	0	0	0	0	0	0	0	0	0	0	0
7:45	10	0	0	4	2	16	2	0	0	0	2	4	7:45	0	0	0	0	0	0	0	0	0	0	0	0
8:00	13	0	0	4	1	18	10	1	0	1	3	15	8:00	0	0	0	0	0	0	0	0	0	0	0	0
8:15	3	0	0	3	0	6	7	0	1	3	3	14	8:15	0	0	0	0	0	0	0	0	0	0	0	0
	2	0	0	2	2	6	4	0	1	0	3	8	8:30	0	0	0	0	0	0	0	0	0	0	0	0
	8	0	0	1	3	12	1	0	2	1	0	4	8:45	0	0	0	0	0	0	0	0	0	0	0	0
	7	0	0	1	1	9	5	1	2	0	1	9	9:00	0	0	0	0	0	0	0	0	0	0	0	0
9:15	3	0	0	0	2	5	6	0	1	1	1	9	9:15	0	0	0	0	0	0	0	0	0	0	0	0
9:30	6	0	0	0	1	7	6	0	1	1	3	11	9:30	1	0	0	0	0	1	0	0	0	0	0	0
9:45	2	0	0	0	2	4	8	0	0	1	3	12	9:45	2	0	0	1	0	3	0	0	0	0	0	0
10:00	5	0	0	0	5	10	10	0	0	2	2	14	10:00	0	0	0	0	0	0	0	0	0	0	0	0
10:15	4	0	0	0	3	7	14	1	1	3	0	19	10:15	0	0	0	1	0	1	0	0	0	0	0	0
10:30	5	0	4	0	1	10	12	0	0	0	2	14	10:30	0	0	0	0	0	0	0	0	0	0	0	0
10:45	6	0	3	0	5	14	18	0	0	1	1	20	10:45	0	0	0	0	0	0	0	0	0	0	0	0
11:00	4	0	0	0	2	6	10	1	2	1	1	15	11:00	0	0	0	0	0	0	0	0	0	0	0	0
11:15	6	0	0	0	4	10	2	0	0	0	1	3	11:15	0	0	0	0	0	0	0	0	0	0	0	0
11:30	1	0	1	0	2	4	8	2	1	0	3	14	11:30	0	0	0	0	0	0	0	0	0	0	0	0
11:45	6	0	0	0	1	7	3	1	1	0	1	6	11:45	0	0	0	0	0	0	0	0	0	0	0	0
Total Vol.	156	9	15	29	50	259	159	13	15	29	46	262		48	1	6	7	5	67	46	2	4	11	13	76
Daily Totals																		IN Total	326					OUT Total	338
																								Daily Total	664

PROJECT 07910001

SOUTHLAND CAR COUNTERS (714) 997-4498

Kimley Horn
Location West Landfill access at Workman Mill Rd. (on site)
Count Date Thursday 8/10/00
Abnormal conditions none

15 MIN ENDING	AM IN Cars	2-Axle	3-Axle	4-Axle	5+-Axl	Total	AM OUT Cars	2-Axle	3-Axle	4-Axle	5+-Axl	Total		PM IN Cars	2-Axle	3-Axle	4-Axle	5+-Axl	Total	PM OUT Cars	2-Axle	3-Axle	4-Axle	5+-Axl	Total
12:00	0	0	0	0	0	0	0	0	0	0	0	0	12:00	0	0	0	0	0	0	0	0	0	0	0	0
12 15	0	0	0	0	0	0	0	0	0	0	0	0	12:15	0	0	0	0	0	0	0	0	0	0	0	0
12 30	0	0	0	0	0	0	0	0	0	0	0	0	12:30	0	0	0	0	0	0	0	0	0	0	0	0
12 45	0	0	0	0	0	0	0	0	0	0	0	0	12:45	0	0	0	0	0	0	0	0	0	0	0	0
1 00	0	0	0	0	0	0	0	0	0	0	0	0	1:00	0	0	0	0	0	0	0	0	0	0	0	0
1 15	0	0	0	0	0	0	0	0	0	0	0	0	1:15	0	0	0	0	0	0	0	0	0	0	0	0
1 30	0	0	0	0	0	0	0	0	0	0	0	0	1:30	1	0	0	0	0	1	0	0	0	0	0	0
1 45	0	0	0	0	0	0	0	0	0	0	0	0	1:45	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0	0	0	2:00	0	0	0	0	0	0	0	0	0	0	0	0
2 15	0	0	0	0	0	0	0	0	0	0	0	0	2:15	0	0	0	0	0	0	0	0	0	0	0	0
2 30	0	0	0	0	0	0	0	0	0	0	0	0	2:30	0	0	0	0	0	0	0	0	0	0	0	0
2 45	0	0	0	0	0	0	0	0	0	0	0	0	2:45	0	0	0	0	0	0	0	0	0	0	0	0
3 00	0	0	0	0	0	0	0	0	0	0	0	0	3:00	1	0	0	0	0	1	0	0	0	0	0	0
3 15	0	0	0	0	0	0	0	0	0	0	0	0	3:15	0	0	0	0	0	0	0	0	0	0	0	0
3 30	0	0	0	0	0	0	0	0	0	0	0	0	3:30	0	0	0	0	0	0	0	0	0	0	0	0
3 45	0	0	0	0	0	0	0	0	0	0	0	0	3:45	0	0	0	0	0	0	0	0	0	0	0	0
4 00	0	0	0	0	0	0	0	0	0	0	0	0	4:00	1	0	0	0	0	1	0	0	0	1	0	1
4 15	0	0	0	0	0	0	0	0	0	0	0	0	4:15	0	0	0	0	0	0	0	0	0	0	0	0
4:30	0	0	0	0	0	0	0	0	0	0	0	0	4:30	0	0	0	0	0	0	0	0	0	0	0	0
4:45	0	0	0	0	0	0	0	0	0	0	0	0	4:45	0	0	0	0	0	0	0	0	0	0	0	0
5 00	0	0	0	0	0	0	0	0	0	0	0	0	5:00	0	0	0	0	0	0	0	0	0	0	0	0
5 15	0	0	0	0	0	0	0	0	0	0	0	0	5:15	0	0	0	0	0	0	0	0	0	0	0	0
5 30	0	0	0	0	0	0	0	0	0	0	0	0	5:30	0	0	0	0	0	0	0	0	0	0	0	0
5 45	0	0	0	0	0	0	0	0	0	0	0	0	5:45	0	0	0	0	0	0	0	0	0	0	0	0
6:00	3	0	0	0	0	3	1	0	0	0	0	1	6:00	0	0	0	0	0	0	0	0	0	0	0	0
6 15	0	0	0	0	0	0	0	0	0	0	0	0	6:15	0	0	0	0	0	0	0	0	0	0	0	0
6 30	2	0	0	1	0	3	2	0	0	2	0	4	6:30	0	0	0	0	0	0	0	0	0	0	0	0
6 45	0	0	0	0	0	0	2	1	0	0	2	5	6:45	0	0	0	0	0	0	0	0	0	0	0	0
7 00	2	0	0	0	0	2	3	0	0	1	2	6	7:00	0	0	0	0	0	0	0	0	0	0	0	0
7.15	0	0	0	0	0	0	0	0	0	0	2	2	7:15	1	0	0	0	0	1	0	0	0	0	0	0
7 30	6	0	0	0	0	6	2	0	0	0	0	2	7:30	0	0	0	0	0	0	0	0	0	0	0	0
7 45	11	0	0	1	0	12	2	0	0	0	1	3	7:45	0	0	0	0	0	0	0	0	0	0	0	0
8 00	8	0	0	0	0	8	4	0	0	0	0	4	8:00	0	0	0	0	0	0	0	0	0	0	0	0
8 15	6	0	0	1	0	7	3	0	0	0	0	3	8:15	0	0	0	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	5	1	0	0	0	0	1	8:30	0	0	0	0	0	0	0	0	0	0	0	0
	4	0	0	1	0	5	1	0	0	0	0	1	8:45	0	0	0	0	0	0	0	0	0	0	0	[illegible]
9 00	3	0	0	1	0	4	6	0	1	1	0	8	9:00	0	0	0	0	0	0	0	0	0	0	0	
9 15	2	0	0	0	0	2	4	0	0	0	2	6	9:15	0	0	0	0	0	0	0	0	0	0	0	0
9 30	0	0	0	0	0	0	3	0	0	0	2	5	9:30	0	0	0	0	0	0	0	0	0	0	0	0
9 45	0	0	0	0	0	0	2	0	0	0	1	3	9:45	0	0	0	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	5	0	0	0	1	6	10:00	0	0	0	0	0	0	0	0	0	0	0	0
10 15	0	0	0	0	0	0	1	0	0	0	1	2	10:15	0	0	0	0	0	0	0	0	0	0	0	0
10 30	0	0	0	0	0	0	0	0	0	0	1	1	10:30	0	0	0	0	0	0	0	0	0	0	0	0
10 45	0	0	0	0	0	0	1	0	0	0	0	1	10:45	0	0	0	0	0	0	0	0	0	0	0	0
11 00	0	0	0	0	0	0	0	0	0	0	0	0	11:00	0	0	0	0	0	0	0	0	0	0	0	0
11 15	0	0	0	0	0	0	0	0	0	0	0	0	11:15	0	0	0	0	0	0	0	0	0	0	0	0
11 30	0	0	0	0	0	0	0	0	0	0	0	0	11:30	0	0	0	0	0	0	0	0	0	0	0	0
11 45	0	0	0	0	0	0	0	0	0	0	0	0	11:45	0	0	0	0	0	0	0	0	0	0	0	0
Total Vol	52	0	0	5	0	57	43	1	1	4	15	64		4	0	0	0	0	4	0	0	0	1	0	1
Daily Totals																		IN Total	61					OUT Total	65
																								Daily Total	126

PROJECT 07550001

SOUTHLAND CAR COUNTERS (714) 997-4498

after a phone call it was learned
The Dwy was closed due TO a Truck
hitting ~~at~~ The fence

Kimley Horn
Location East Landfill access at Crossroads Pkwy. South (on-site)
Count Date Thursday 8/10/00
Abnormal conditions none

15 MIN	AM											AM		PM											PM
	IN						OUT							IN						OUT					
	Cars	2-Axle	3-Axle	4-Axle	5+-Axl	Total	Cars	2-Axle	3-Axle	4-Axle	5+-Axl	Total		Cars	2-Axle	3-Axle	4-Axle	5+-Axl	Total	Cars	2-Axle	3-Axle	4-Axle	5+-Axl	Total
12	0	0	0	0	0	0	25	0	0	0	0	25	12:00	5	7	4	3	14	33	2	0	0	10	0	12
12:15	1	0	0	0	0	1	3	0	0	0	0	3	12:15	3	5	6	5	13	31	2	1	2	1	3	9
12:30	0	0	0	0	0	0	2	0	0	0	0	2	12:30	4	6	5	4	13	32	3	3	29	5	15	55
12:45	0	0	0	0	0	0	0	0	0	0	0	0	12:45	5	3	8	3	16	35	5	6	53	5	13	82
1:00	0	0	0	0	0	0	0	0	0	0	0	0	1:00	7	10	15	5	11	48	9	11	31	1	13	65
1:15	2	0	0	0	0	2	0	0	0	0	0	0	1:15	8	8	8	4	15	43	7	13	24	5	13	62
1:30	0	0	0	0	0	0	0	0	0	0	0	0	1:30	9	9	16	0	16	50	7	5	33	7	[illegible]	60
1:45	0	0	0	0	0	0	0	0	0	0	0	0	1:45	7	5	9	6	15	42	9	10	24	6	9	58
2:00	0	0	0	0	0	0	0	0	0	0	0	0	2:00	10	10	9	9	16	54	10	5	26	0	[illegible]	45
2:15	1	1	0	0	0	2	1	0	0	0	0	1	2:15	9	7	10	4	12	42	13	3	33	1	[illegible]	64
2:30	1	2	3	0	0	6	0	0	0	0	0	0	2:30	17	5	16	8	20	56	18	6	25	2	10	61
2:45	0	3	2	0	1	6	0	0	0	0	0	0	2:45	15	6	15	1	14	51	7	8	19	1	9	44
3:00	5	4	1	1	2	13	0	0	0	0	0	0	3:00	13	5	14	1	18	51	9	2	29	2	7	49
3:15	5	1	3	1	1	11	1	0	0	0	0	1	3:15	10	6	19	6	16	57	13	4	37	1	15	70
3:30	8	8	1	1	3	21	0	0	0	0	0	0	3:30	14	7	17	6	21	65	12	10	31	1	23	77
3:45	7	3	4	2	1	17	0	0	0	0	0	0	3:45	10	15	11	1	16	53	8	6	27	0	19	60
4:00	15	6	7	1	4	33	0	0	0	0	6	6	4:00	13	11	23	0	16	63	12	10	34	1	16	73
4:15	7	6	8	1	7	29	0	0	0	0	6	6	4:15	13	6	12	9	21	61	18	7	37	2	14	78
4:30	14	6	8	4	17	49	0	0	0	0	7	7	4:30	6	3	12	7	14	42	19	7	33	2	13	74
4:45	10	3	17	4	9	43	0	1	7	0	8	16	4:45	7	4	17	6	24	58	16	9	31	1	17	74
5:00	12	2	14	7	10	45	5	0	8	0	10	23	5:00	9	3	16	4	15	47	12	3	33	2	10	60
5:15	13	4	9	2	10	38	6	0	10	0	10	26	5:15	9	1	5	3	6	24	11	0	35	1	15	62
5:30	6	2	16	0	18	42	7	0	12	0	9	28	5:30	2	0	0	0	0	2	11	8	24	0	16	59
5:45	9	3	13	3	11	39	7	1	15	0	8	31	5:45	0	0	0	0	0	0	12	4	36	1	15	68
6:00	14	5	9	9	10	47	8	2	12	2	17	41	6:00	0	0	0	0	0	0	16	11	41	2	19	89
6:15	18	8	12	7	10	55	9	2	8	0	17	36	6:15	0	0	0	0	0	0	26	7	42	1	17	93
6:30	5	6	15	1	8	35	7	1	9	0	16	33	6:30	1	0	0	0	0	1	10	1	31	2	10	54
6:45	11	10	18	6	18	63	7	3	10	0	15	35	6:45	0	0	0	0	0	0	8	1	37	3	11	60
7:00	26	7	14	4	22	73	10	2	11	1	12	36	7:00	1	0	0	0	0	1	1	1	2	1	2	7
7:15	15	7	9	0	24	55	8	1	8	2	10	29	7:15	0	0	0	0	0	0	2	1	1	5	3	12
7:30	15	9	19	3	20	66	9	1	11	2	20	43	7:30	0	0	0	0	0	0	2	0	2	0	2	6
7:45	10	3	20	4	16	53	10	2	15	1	18	46	7:45	1	0	0	0	0	1	0	0	5	0	0	5
8:00	8	12	17	1	11	49	8	6	17	1	10	42	8:00	0	0	0	0	0	0	0	0	0	0	0	0
8:15	3	5	17	7	18	50	2	1	18	2	11	34	8:15	1	0	0	0	0	1	0	0	0	0	0	0
	11	6	16	2	15	50	4	2	10	7	12	35	8:30	1	0	0	0	0	1	0	0	0	1	0	1
	10	10	20	7	16	63	3	5	12	6	15	41	8:45	0	0	0	0	0	0	0	0	0	0	0	0
9	9	13	15	7	19	63	2	0	16	5	11	34	9:00	1	0	0	0	0	1	0	2	0	1	0	3
9:15	11	2	15	3	11	42	3	1	12	3	10	29	9:15	0	0	0	0	0	0	0	0	0	0	0	0
9:30	5	2	12	2	2	23	3	1	10	1	9	24	9:30	2	0	0	0	0	2	0	1	0	1	1	3
9:45	6	3	14	4	11	38	1	3	8	2	8	22	9:45	1	0	0	0	0	1	0	0	0	0	0	0
10:00	5	2	13	5	14	39	2	2	9	1	12	26	10:00	1	0	0	0	0	1	5	3	0	0	0	8
10:15	2	4	10	6	13	35	1	1	7	1	18	28	10:15	0	0	0	0	0	0	9	0	0	0	0	9
10:30	3	1	8	3	15	30	1	2	6	2	17	28	10:30	0	0	0	0	0	0	6	2	0	0	0	8
10:45	2	5	7	2	18	34	2	2	7	3	15	29	10:45	1	0	0	0	0	1	16	1	0	1	0	18
11:00	4	2	15	4	13	38	5	1	10	2	10	28	11:00	0	0	0	0	0	0	0	0	0	0	0	0
11:15	1	6	14	1	11	33	6	4	11	2	18	41	11:15	1	0	0	0	0	1	0	0	0	0	0	0
11:30	2	8	10	10	10	40	2	2	12	1	20	37	11:30	1	0	0	0	0	1	0	0	0	0	0	0
11:45	3	5	8	8	18	42	2	3	5	2	15	27	11:45	0	0	0	0	0	0	0	1	0	0	0	1
Total Vol	315	195	433	133	437	1513	172	52	306	49	400	979		217	142	267	95	342	1063	346	171	847	76	361	1801
Daily Totals																		IN Total	2576					OUT Total	2780

PROJECT 07550002 SOUTHLAND CAR COUNTERS (714) 997-4498 Daily Total 5356

Appendix B
Capacity Analysis
Existing Conditions

Traffic Analysis for
Puente Hills Landfill EIR
Existing Conditions - AM

Scenario Report

Scenario:	AM
Command:	AM
Volume:	AM
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	AM
Trip Distribution:	All
Paths:	Default Paths
Routes:	Default Routes
Configuration:	AM

Traffic Analysis for
Puente Hills Landfill EIR
Existing Conditions - AM

Turning Movement Report

Volume	Northbound			Southbound			Eastbound			Westbound			Total
Type	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Volume
#1 Crossroads Pkwy N. @ Crossroads Pkwy S.													
Base	210	0	135	0	0	0	0	116	169	382	159	0	1171
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	210	0	135	0	0	0	0	116	169	382	159	0	1171
#2 SR-60 @ Crossroads Pkwy S.													
Base	0	0	0	195	2	248	0	240	180	128	555	0	1548
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	195	2	248	0	240	180	128	555	0	1548
#3 Workman Mill/Crossroads South @ Workman Mill													
Base	1	0	0	42	5	315	120	168	19	0	540	17	1227
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	42	5	315	120	168	19	0	540	17	1227
#4 Pellissier/Workman Mill @ Workman Mill (Signal To Be Constructed This Month)													
Base	109	0	371	0	0	0	0	354	311	675	1303	0	3123
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	109	0	371	0	0	0	0	354	311	675	1303	0	3123
#5 Crossroads Pkwy N. @ Workman Mill													
Base	97	96	199	6	13	4	10	264	322	296	1786	62	3155
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	97	96	199	6	13	4	10	264	322	296	1786	62	3155
#6 Peck Rd @ Workman Mill													
Base	0	475	371	198	908	0	0	0	0	766	0	72	2790
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	475	371	198	908	0	0	0	0	766	0	72	2790
#7 605 NB @ Pellissier													
Base	0	0	0	186	0	236	99	168	0	0	858	216	1763
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	186	0	236	99	168	0	0	858	216	1763
#8 Pellissier @ Peck Rd													
Base	8	428	119	148	838	108	27	21	9	250	33	853	2842
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	8	428	119	148	838	108	27	21	9	250	33	853	2842
#9 Rooks @ Peck Rd													
Base	182	807	121	122	561	168	67	16	46	219	30	54	2393
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	182	807	121	122	561	168	67	16	46	219	30	54	2393

Traffic Analysis for
Puente Hills Landfill EIR
Existing Conditions - AM

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#10 Proj Ent East @ Crossroads Pkwy S.													
Base	8	0	160	19	1	16	8	204	4	203	680	26	1329
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	8	0	160	19	1	16	8	204	4	203	680	26	1329
#12 Proj Ent West @ Workman Mill													
Base	60	0	7	0	0	0	0	296	46	17	838	0	1264
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	60	0	7	0	0	0	0	296	46	17	838	0	1264

Traffic Analysis for
Puente Hills Landfill EIR
Existing Conditions - AM

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/C	Future LOS	Future Del/ Veh	Future V/C	Change in
# 1 Crossroads Pkwy N. @ Crossroad	A	xxxxx	0.598	A	xxxxx	0.598	+ 0.000 V/C
# 2 SR-60 @ Crossroads Pkwy S.	A	xxxxx	0.456	A	xxxxx	0.456	+ 0.000 V/C
# 3 Workman Mill/Crossroads South	A	xxxxx	0.450	A	xxxxx	0.450	+ 0.000 V/C
# 4 Pelliasier/Workman Mill @ Work	F	778.6	0.000	F	778.6	0.000	+ 0.000 V/C
# 5 Crossroads Pkwy N. @ Workman M	C	xxxxx	0.788	C	xxxxx	0.788	+ 0.000 V/C
# 6 Peck Rd @ Workman Mill	B	xxxxx	0.646	B	xxxxx	0.646	+ 0.000 V/C
# 7 605 NB @ Pellissier	B	xxxxx	0.645	B	xxxxx	0.645	+ 0.000 V/C
# 8 Pellissier @ Peck Rd	E	xxxxx	0.964	E	xxxxx	0.964	+ 0.000 V/C
# 9 Rooks @ Peck Rd	B	xxxxx	0.632	B	xxxxx	0.632	+ 0.000 V/C
# 10 Proj Ent East @ Crossrosds Pkw	E	1.6	0.000	E	1.6	0.000	+ 0.000 V/C
# 12 Proj Ent West @ Workman Mill	D	1.6	0.000	D	1.6	0.000	+ 0.000 V/C

Traffic Analysis for
Puente Hills Landfill EIR
Existing Conditions - AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Crossroads Pkwy N. @ Crossroads Pkwy S.

Cycle (sec): 100 Critical Vol./Cap. (X): 0.598
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 40 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	0 0	1	0 0	0 0	0	0 0	1 1	0	1 0	2 0	0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	210	0	135	0	0	0	0	116	169	382	159	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	0	135	0	0	0	0	116	169	382	159	0
User Adj:	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	244	0	157	0	0	0	0	135	196	443	184	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	244	0	157	0	0	0	0	135	196	443	184	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	244	0	157	0	0	0	0	135	196	443	184	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	2.00	0.00
Final Sat.:	3200	0	1600	0	0	0	0	1600	1600	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.10	0.00	0.00	0.00	0.00	0.08	0.12	0.28	0.06	0.00
Crit Moves:			****						****	****		

Traffic Analysis for
Puente Hills Landfill EIR
Existing Conditions - AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 SR-60 @ Crossroads Pkwy S.

Cycle (sec): 100 Critical Vol./Cap. (X): 0.456
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 31 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	1 1	0 0	1	0 0	2 0	1	1 0	2 0	0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	0	0	0	195	2	248	0	240	180	128	555	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	195	2	248	0	240	180	128	555	0
User Adj:	1.15	1.15	1.15	1.15	1.15	0.00	1.15	1.15	0.00	1.15	1.15	1.15
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	0	0	224	2	0	0	276	0	147	638	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	224	2	0	0	276	0	147	638	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	0	0	0	224	2	0	0	276	0	147	638	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.98	0.02	1.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	0	0	0	3172	28	1600	0	3200	1600	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.07	0.07	0.00	0.00	0.09	0.00	0.09	0.20	0.00
Crit Moves:				****				****			****	

```
---------------------------------------------------------------------------
                           Traffic Analysis for
                        Puente Hills Landfill EIR
                        Existing Conditions - AM
---------------------------------------------------------------------------
                    Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
***************************************************************************
Intersection #3 Workman Mill/Crossroads South @ Workman Mill
***************************************************************************
Cycle (sec):          100              Critical Vol./Cap. (X):        0.450
Loss Time (sec):       10 (Y+R =  4 sec) Average Delay (sec/veh):     xxxxxx
Optimal Cycle:         31              Level Of Service:                  A
***************************************************************************
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Permitted        Permitted
Rights:          Include          Include          Include          Include
Min. Green:    0     0     0   0     0     0   0     0     0   0     0     0
Lanes:       1  0  1  0  1   1  0  0  1  1   1  0  1  1  0   0  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:      1     0     0    42     5   315   120   168    19     0   540    17
Growth Adj: 1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Initial Bse:   1     0     0    42     5   315   120   168    19     0   540    17
User Adj:   1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:    1     0     0    42     5   315   120   168    19     0   540    17
Reduct Vol:    0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:   1     0     0    42     5   315   120   168    19     0   540    17
PCE Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
MLF Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Final Vol.:    1     0     0    42     5   315   120   168    19     0   540    17
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1600  1600  1600  1600  1600  1600  1600  1600  1600  1600  1600  1600
Adjustment: 1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Lanes:      1.00  1.00  1.00  1.00  0.03  1.97  1.00  1.80  0.20  0.00  1.94  0.06
Final Sat.: 1600  1600  1600  1600    50  3150  1600  2875   325     0  3102    98
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.00  0.00  0.00  0.03  0.10  0.10  0.08  0.06  0.06  0.00  0.17  0.17
Crit Moves: ****                    ****        ****                    ****
***************************************************************************
```



```
---------------------------------------------------------------------------
                           Traffic Analysis for
                        Puente Hills Landfill EIR
                        Existing Conditions - AM
---------------------------------------------------------------------------
                    Level Of Service Computation Report
          1994 HCM Unsignalized Method (Base Volume Alternative)
***************************************************************************
Intersection #4 Pellissier/Workman Mill @ Workman Mill (Signal To Be Constructed
***************************************************************************
Average Delay (sec/veh):    778.6          Worst Case Level Of Service:      F
***************************************************************************
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:          Ignore           Include          Ignore           Include
Lanes:       1  0  0  0  1   0  0  0  0  0   0  0  1  1  0   1  0  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:    109     0   371     0     0     0     0   354   311   675  1303     0
Growth Adj: 1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Initial Bse: 109     0   371     0     0     0     0   354   311   675  1303     0
User Adj:   1.00  1.00  0.00  1.00  1.00  1.00  1.00  1.00  0.00  1.00  1.00  1.00
PHF Adj:    1.00  1.00  0.00  1.00  1.00  1.00  1.00  1.00  0.00  1.00  1.00  1.00
PHF Volume:  109     0     0     0     0     0     0   354     0   675  1303     0
Reduct Vol:    0     0     0     0     0     0     0     0     0     0     0     0
Final Vol.:  109     0     0     0     0     0     0   354     0   675  1303     0
------------|---------------||---------------||---------------||---------------|
Adjusted Volume Module:
Grade:             0%               0%               0%               0%
% Cycle/Cars:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
% Truck/Comb:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
PCE Adj:    1.10  1.10  1.10  1.10  1.10  1.10  1.10  1.00  1.00  1.10  1.00  1.00
Cycl/Car PCE:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Trck/Cmb PCE:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Adj Vol.:    120     0     0     0     0     0     0   354     0   743  1303     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
MoveUp Time:  3.4 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.1 xxxx xxxxx
Critical Gp:  7.0 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   5.5 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: 2332 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx   354 xxxx xxxxx
Potent Cap.:   34 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1107 xxxx xxxxx
Adj Cap:     0.33 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1.00 xxxx xxxxx
Move Cap.:     11 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1107 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del:16310 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   6.3 xxxx xxxxx
LOS by Move:    F     *     A     *     *     *     *     *     *     B     *     *
Movement:      LT  - LTR  - RT    LT  - LTR  - RT    LT  - LTR  - RT    LT  - LTR  - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *     *     *     *     *     *     *     *     *     *     *     *
ApproachDel:     xxxxxx              0.0               0.0               3.0
```

Traffic Analysis for
Puente Hills Landfill EIR
Existing Conditions - AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Crossroads Pkwy N. @ Workman Mill

Cycle (sec): 100 — Critical Vol./Cap. (X): 0.788
Loss Time (sec): 10 (Y+R = 4 sec) — Average Delay (sec/veh): xxxxxx
Optimal Cycle: 64 — Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	1 1	0 0	1!	0 0	1 0	1	1 0	1 0	1	1 0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	97	96	199	6	13	4	10	264	322	296	1786	62
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	97	96	199	6	13	4	10	264	322	296	1786	62
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	97	96	199	6	13	0	10	264	322	296	1786	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	97	96	199	6	13	0	10	264	322	296	1786	62
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	97	96	199	6	13	0	10	264	322	296	1786	62
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.65	1.35	0.32	0.68	0.00	1.00	1.00	1.00	1.00	1.93	0.07
Final Sat.:	1600	1041	2159	505	1095	0	1600	1600	1600	1600	3093	107
Capacity Analysis Module:												
Vol/Sat:	0.06	0.09	0.09	0.01	0.01	0.00	0.01	0.17	0.20	0.19	0.58	0.58
Crit Moves:		****		****			****				****	

Traffic Analysis for
Puente Hills Landfill EIR
Existing Conditions - AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Peck Rd @ Workman Mill

Cycle (sec): 100 — Critical Vol./Cap. (X): 0.646
Loss Time (sec): 10 (Y+R = 4 sec) — Average Delay (sec/veh): xxxxxx
Optimal Cycle: 44 — Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	3	0 1	1 0	2	0 0	0 0	0	0 0	1 0	1!	0 0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	0	475	371	198	908	0	0	0	0	766	0	72
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	475	371	198	908	0	0	0	0	766	0	72
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	475	371	198	908	0	0	0	0	766	0	72
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	475	371	198	908	0	0	0	0	766	0	72
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	475	371	198	908	0	0	0	0	766	0	72
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.83	0.00	0.17
Final Sat.:	0	4800	1600	1600	3200	0	0	0	0	2925	0	275
Capacity Analysis Module:												
Vol/Sat:	0.00	0.10	0.23	0.12	0.28	0.00	0.00	0.00	0.00	0.26	0.00	0.26
Crit Moves:	****				****					****		

Traffic Analysis for
Puente Hills Landfill EIR
Existing Conditions - AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 605 NB @ Pellissier

Cycle (sec):	100	Critical Vol./Cap. (X):	0.645
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	1 0	0 0	1	1 0	2 0	0	0 0	1 1	0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	0	0	0	186	0	236	99	168	0	0	858	216
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	186	0	236	99	168	0	0	858	216
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	186	0	236	99	168	0	0	858	216
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	186	0	236	99	168	0	0	858	216
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	186	0	236	99	168	0	0	858	216
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.60	0.40
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	2556	644
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.12	0.00	0.15	0.06	0.05	0.00	0.00	0.34	0.34
Crit Moves:						****	****				****	

Traffic Analysis for
Puente Hills Landfill EIR
Existing Conditions - AM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Pellissier @ Peck Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.964
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	147	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 1	0	1 0	1 1	0	0 1	0 0	1	0 1	0 0	1
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	8	428	119	148	838	108	27	21	9	250	33	853
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	428	119	148	838	108	27	21	9	250	33	853
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	8	428	119	148	838	108	27	21	9	250	33	853
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	428	119	148	838	108	27	21	9	250	33	853
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	8	428	119	148	838	108	27	21	9	250	33	853
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.56	0.44	1.00	1.77	0.23	0.56	0.44	1.00	0.88	0.12	1.00
Final Sat.:	1600	2504	696	1600	2835	365	900	700	600	1413	187	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.17	0.17	0.09	0.30	0.30	0.03	0.03	0.01	0.18	0.18	0.53
Crit Moves:	****				****		****					****

```
--------------------------------------------------------------------------------
                         Traffic Analysis for
                      Puente Hills Landfill EIR
                      Existing Conditions - AM
--------------------------------------------------------------------------------
                   Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #9 Rooks @ Peck Rd
********************************************************************************
Cycle (sec):          100               Critical Vol./Cap. (X):         0.632
Loss Time (sec):       10 (Y+R =  4 sec) Average Delay (sec/veh):       xxxxxx
Optimal Cycle:         43               Level Of Service:                   B
********************************************************************************
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|-----------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Permitted        Permitted
Rights:          Include          Include          Include          Include
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:       1  0  1  1  0    1  0  1  1  0    1  0  1  1  0    1  0  1  0  1
------------|-----------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:      182   807   121   122   561   168    67    16    46   219    30    54
Growth Adj:   1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Initial Bse:   182   807   121   122   561   168    67    16    46   219    30    54
User Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:      1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:    182   807   121   122   561   168    67    16    46   219    30    54
Reduct Vol:      0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:   182   807   121   122   561   168    67    16    46   219    30    54
PCE Adj:      1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
MLF Adj:      1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Final Vol.:    182   807   121   122   561   168    67    16    46   219    30    54
------------|-----------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1600  1600  1600  1600  1600  1600  1600  1600  1600  1600  1600  1600
Adjustment:   1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Lanes:        1.00  1.74  0.26  1.00  1.54  0.46  1.00  1.00  1.00  1.00  1.00  1.00
Final Sat.:   1600  2783   417  1600  2463   737  1600  1600  1600  1600  1600  1600
------------|-----------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.11  0.29  0.29  0.08  0.23  0.23  0.04  0.01  0.03  0.14  0.02  0.03
Crit Moves:         ****        ****                          ****  ****
********************************************************************************
```



```
--------------------------------------------------------------------------------
                         Traffic Analysis for
                      Puente Hills Landfill EIR
                      Existing Conditions - AM
--------------------------------------------------------------------------------
                   Level Of Service Computation Report
          1994 HCM Unsignalized Method (Base Volume Alternative)
********************************************************************************
Intersection #10 Proj Ent East @ Crossroads Pkwy S.
********************************************************************************
Average Delay (sec/veh):         1.6        Worst Case Level Of Service:      E
********************************************************************************
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|-----------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:           Ignore          Include          Include          Include
Lanes:       1  0  1  0  1    0  0  1! 0  0    1  0  1  1  0    1  0  1  !  0
------------|-----------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:        8     0   160    19     1    16     8   204     4   203   680    26
Growth Adj:   1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Initial Bse:     8     0   160    19     1    16     8   204     4   203   680    26
User Adj:     1.17  1.17  0.00  1.17  1.17  1.17  1.17  1.17  1.17  1.17  1.17  1.17
PHF Adj:      1.00  1.00  0.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:      9     0     0    22     1    19     9   239     5   238   796    30
Reduct Vol:      0     0     0     0     0     0     0     0     0     0     0     0
Final Vol.:      9     0     0    22     1    19     9   239     5   238   796    30
------------|-----------------||---------------||---------------||---------------|
Adjusted Volume Module:
Grade:              0%               0%               0%               0%
% Cycle/Cars:  xxxx  xxxx        xxxx  xxxx        xxxx  xxxx        xxxx  xxxx
% Truck/Comb:  xxxx  xxxx        xxxx  xxxx        xxxx  xxxx        xxxx  xxxx
PCE Adj:      1.10  1.10  1.10  1.10  1.10  1.10  1.10  1.00  1.00  1.10  1.00  1.00
Cycl/Car PCE:  xxxx  xxxx        xxxx  xxxx        xxxx  xxxx        xxxx  xxxx
Trck/Cmb PCE:  xxxx  xxxx        xxxx  xxxx        xxxx  xxxx        xxxx  xxxx
Adj Vol.:       10     0     0    24     1    21    10   239     5   261   796    30
------------|-----------------||---------------||---------------||---------------|
Critical Gap Module:
MoveUp Time:   3.4  xxxx xxxxx   3.4   3.3   2.6   2.1  xxxx xxxxx   2.1  xxxx xxxxx
Critical Gp:   7.0  xxxx xxxxx   7.0   6.5   5.5   5.5  xxxx xxxxx   5.5  xxxx xxxxx
------------|-----------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  1284  xxxx xxxxx  1296  1301   413   826  xxxx xxxxx   243  xxxx xxxxx
Potent Cap.:   160  xxxx xxxxx   157   189   855   618  xxxx xxxxx  1269  xxxx xxxxx
Adj Cap:      0.81  xxxx xxxxx  0.83  0.78  1.00  1.00  xxxx xxxxx  1.00  xxxx xxxxx
Move Cap.:     129  xxxx xxxxx   131   148   855   618  xxxx xxxxx  1269  xxxx xxxxx
------------|-----------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del:  30.1  xxxx xxxxx  33.2  24.6   4.3   5.9  xxxx xxxxx   3.5  xxxx xxxxx
LOS by Move:     E     *     A     *     *     *     B     *     *     A     *     *
Movement:      LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.:  xxxx  xxxx xxxxx  xxxx   210 xxxxx  xxxx  xxxx xxxxx  xxxx  xxxx xxxxx
Shrd StpDel:xxxxx  xxxx xxxxx xxxxx  20.1 xxxxx xxxxx  xxxx xxxxx xxxxx  xxxx xxxxx
Shared LOS:      *     *     *     *     D     *     *     *     *     *     *     *
ApproachDel:        30.1             20.1              0.2              0.8
```

```
------------------------------------------------------------------------------
                         Traffic Analysis for
                        Puente Hills Landfill EIR
                        Existing Conditions - AM
------------------------------------------------------------------------------
                    Level Of Service Computation Report
          1994 HCM Unsignalized Method (Base Volume Alternative)
******************************************************************************
Intersection #12 Proj Ent West @ Workman Mill
******************************************************************************
Average Delay (sec/veh):       1.6          Worst Case Level Of Service:     D
******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:          Include          Include          Include          Include
Lanes:        0  0  1! 0  0    0  0  0  0  0    0  0  1  1  0    1  0  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:       60    0     7     0    0     0     0  296    46    17  838     0
Growth Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    60    0     7     0    0     0     0  296    46    17  838     0
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     60    0     7     0    0     0     0  296    46    17  838     0
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:     60    0     7     0    0     0     0  296    46    17  838     0
------------|---------------||---------------||---------------||---------------|
Adjusted Volume Module:
Grade:             0%               0%               0%               0%
 Cycle/Cars:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
 Truck/Comb:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
PCE Adj:      1.10 1.10  1.10  1.10 1.10  1.10  1.10 1.00  1.00  1.10 1.00  1.00
Cycl/Car PCE:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Trck/Cmb PCE:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Adj Vol.:       66    0     8     0    0     0     0  296    46    19  838     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
MoveUp Time:   3.4 xxxx   2.6 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.1 xxxx xxxxx
Critical Gp:   7.0 xxxx   5.5 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   5.5 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: 1174 xxxx    171  xxxx xxxx xxxxx  xxxx xxxx xxxxx   342 xxxx xxxxx
Potent Cap.:  188 xxxx   1134  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1123 xxxx xxxxx
Adj Cap:     0.98 xxxx   1.00  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1.00 xxxx xxxxx
Move Cap.:    185 xxxx   1134  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1123 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del: 28.8 xxxx    3.2 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   3.3 xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     *    *     *     A    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx  203 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Shrd StpDel:xxxxx 26.1 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    D     *     *    *     *     *    *     *     *    *     *
ApproachDel:        26.1              0.0              0.0              0.1
```



```
------------------------------------------------------------------------------
                Traffic Analysis for Puente Hills Landfill EIR
                            Existing Conditions
                             Mid-Day Peak Hour
------------------------------------------------------------------------------
                               Scenario Report
Scenario:                Mid-Day

Command:                 Default Command
Volume:                  MidDay
Geometry:                Existing
Impact Fee:              Default Impact Fee
Trip Generation:         Mid-day
Trip Distribution:       All
Paths:                   Default Paths
Routes:                  Default Routes
Configuration:           Mid-day
```

Traffic Analysis for Puente Hills Landfill EIR
Existing Conditions
Mid-Day Peak Hour

Turning Movement Report
AM

Volume	Northbound			Southbound			Eastbound			Westbound			Total
Type	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Volume
#1 Crossroads Pkwy N. @ Crossroads Pkwy S.													
Base	215	0	335	0	0	0	0	133	237	219	195	0	1334
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	215	0	335	0	0	0	0	133	237	219	195	0	1334
#2 SR-60 @ Crossroads Pkwy S.													
Base	0	0	0	179	1	263	0	277	163	92	252	0	1227
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	179	1	263	0	277	163	92	252	0	1227
#3 Workman Mill/Crossroads South @ Workman Mill													
Base	4	5	4	27	0	195	134	155	4	1	203	32	764
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	4	5	4	27	0	195	134	155	4	1	203	32	764
#4 Pellissier/Workman Mill @ Workman Mill (Signal To Be Constructed)													
Base	43	0	126	0	0	0	0	152	36	196	375	0	928
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	43	0	126	0	0	0	0	152	36	196	375	0	928
#5 Crossroads Pkwy N. @ Workman Mill													
Base	27	14	115	6	13	0	5	318	25	199	657	6	1385
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	27	14	115	6	13	0	5	318	25	199	657	6	1385
#6 Peck Rd @ Workman Mill													
Base	0	453	370	82	388	0	0	0	0	278	0	98	1669
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	1	0	0	0	0	0	0	0	1
Total	0	453	370	82	388	0	0	0	0	278	0	98	1669
#7 605 NB @ Pellissier													
Base	0	0	0	186	0	236	99	168	0	0	858	216	1763
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	186	0	236	99	168	0	0	858	216	1763
#8 Pellissier @ Peck Rd													
Base	8	377	162	234	357	71	65	26	27	117	17	392	1853
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	8	377	[illegible]	234	357	71	65	26	27	117	17	392	1853
#9 Rooks @ Peck Rd													
Base	106	662	108	69	531	114	55	31	68	117	19	65	1945
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	106	662	108	69	531	114	55	31	68	117	19	65	1945

Traffic Analysis for Puente Hills Landfill EIR
Existing Conditions
Mid-Day Peak Hour

Volume	Northbound			Southbound			Eastbound			Westbound			Total
Type	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Volume
#10 Proj Ent East @ Crossroads Pkwy S.													
Base	12	8	257	29	5	13	11	190	5	352	199	32	1113
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	12	8	257	29	5	13	11	190	5	352	199	32	1113
#12 Proj Ent West @ Workman Mill													
Base	66	0	13	0	0	0	0	248	39	18	304	3	691
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	66	0	13	0	0	0	0	248	39	18	304	3	691

Traffic Analysis for Puente Hills Landfill EIR
Existing Conditions
Mid-Day Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/C	Future LOS	Future Del/ Veh	Future V/C	Change in
# 1 Crossroads Pkwy N. @ Crossroad	C	xxxxx	0.727	C	xxxxx	0.727	+ 0.000 V/C
# 2 SR-60 @ Crossroads Pkwy S.	A	xxxxx	0.361	A	xxxxx	0.361	+ 0.000 V/C
# 3 Workman Mill/Crossroads South	A	xxxxx	0.321	A	xxxxx	0.321	+ 0.000 V/C
# 4 Pellissier/Workman Mill @ Work	C	1.6	0.000	C	1.6	0.000	+ 0.000 V/C
# 5 Crossroads Pkwy N. @ Workman M	A	xxxxx	0.384	A	xxxxx	0.384	+ 0.000 V/C
# 6 Peck Rd @ Workman Mill	A	xxxxx	0.383	A	xxxxx	0.383	+ 0.000 V/C
# 7 605 NB @ Pellissier	B	xxxxx	0.645	B	xxxxx	0.645	+ 0.000 V/C
# 8 Pellissier @ Peck Rd	C	xxxxx	0.717	C	xxxxx	0.717	+ 0.000 V/C
# 9 Rooks @ Peck Rd	A	xxxxx	0.499	A	xxxxx	0.499	+ 0.000 V/C
# 10 Proj Ent East @ Crossroads Pkw	D	3.8	0.000	D	3.8	0.000	+ 0.000 V/C
# 12 Proj Ent West @ Workman Mill	B	1.3	0.000	B	1.3	0.000	+ 0.000 V/C

Traffic Analysis for Puente Hills Landfill EIR
Existing Conditions
Mid-Day Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Crossroads Pkwy N. @ Crossroads Pkwy S.

Cycle (sec): 100 Critical Vol./Cap. (X): 0.727
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 54 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	0	0 1	0 0	0	0 0	0 0	1	1 0	1 0	2	0 0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	215	0	335	0	0	0	0	133	237	219	195	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	215	0	335	0	0	0	0	133	237	219	195	0
User Adj:	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	273	0	425	0	0	0	0	169	301	278	248	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	273	0	425	0	0	0	0	169	301	278	248	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	273	0	425	0	0	0	0	169	301	278	248	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	2.00	0.00
Final Sat.:	3200	0	1600	0	0	0	0	1600	1600	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.09	0.00	0.27	0.00	0.00	0.00	0.00	0.11	0.19	0.17	0.08	0.00
Crit Moves:			****						****	****		

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Mid-Day                     Wed May 30, 2001 09:11:29                    Page 5-1
---------------------------------------------------------------------------------
                 Traffic Analysis for Puente Hills Landfill EIR
                             Existing Conditions
                              Mid-Day Peak Hour
---------------------------------------------------------------------------------
                       Level Of Service Computation Report
          ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
*********************************************************************************
Intersection #2 SR-60 @ Crossroads Pkwy S.
*********************************************************************************
Cycle (sec):        100               Critical Vol./Cap. (X):         0.361
Loss Time (sec):     10 (Y+R =  4 sec) Average Delay (sec/veh):       xxxxxx
Optimal Cycle:       27               Level Of Service:                   A
*********************************************************************************
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|-----------------||----------------||----------------||--------------|
Control:         Permitted        Permitted        Permitted        Protected
Rights:           Include           Ignore           Ignore           Include
Min. Green:     0    0    0     0    0    0     0    0    0     0    0    0
Lanes:        0  0  0  0  0   1  1  0  0  1   0  0  2  0  1   1  0  2  0  0
------------|-----------------||----------------||----------------||--------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:       0    0    0   179    1  263     0  277  163    92  252    0
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:    0    0    0   179    1  263     0  277  163    92  252    0
User Adj:    1.30 1.30 1.30  1.30 1.30 0.00  1.30 1.30 0.00  1.30 1.30 1.30
PHF Adj:     1.00 1.00 1.00  1.00 1.00 0.00  1.00 1.00 0.00  1.00 1.00 1.00
PHF Volume:     0    0    0   233    1    0     0  360    0   120  328    0
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:    0    0    0   233    1    0     0  360    0   120  328    0
PCE Adj:     1.00 1.00 1.00  1.00 1.00 0.00  1.00 1.00 0.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 0.00  1.00 1.00 0.00  1.00 1.00 1.00
Final Vol.:     0    0    0   233    1    0     0  360    0   120  328    0
------------|-----------------||----------------||----------------||--------------|
Saturation Flow Module:
Sat/Lane:    1600 1600 1600  1600 1600 1600  1600 1600 1600  1600 1600 1600
Adjustment:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Lanes:       0.00 0.00 0.00  1.99 0.01 1.00  0.00 2.00 1.00  1.00 2.00 0.00
Final Sat.:     0    0    0  3186   14 1600     0 3200 1600  1600 3200    0
------------|-----------------||----------------||----------------||--------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00  0.07 0.07 0.00  0.00 0.11 0.00  0.08 0.10 0.00
Crit Moves:                  ****                  ****        ****
*********************************************************************************
```



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Mid-Day                     Wed May 30, 2001 09:11:29                    Page 6-1
---------------------------------------------------------------------------------
                 Traffic Analysis for Puente Hills Landfill EIR
                             Existing Conditions
                              Mid-Day Peak Hour
---------------------------------------------------------------------------------
                       Level Of Service Computation Report
          ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
*********************************************************************************
Intersection #3 Workman Mill/Crossroads South @ Workman Mill
*********************************************************************************
Cycle (sec):        100               Critical Vol./Cap. (X):         0.321
Loss Time (sec):     10 (Y+R =  4 sec) Average Delay (sec/veh):       xxxxxx
Optimal Cycle:       26               Level Of Service:                   A
*********************************************************************************
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|-----------------||----------------||----------------||--------------|
Control:         Permitted        Permitted        Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:     0    0    0     0    0    0     0    0    0     0    0    0
Lanes:        1  0  1  0  1   1  0  0  1  1   1  0  1  1  0   0  1  0  1  0
------------|-----------------||----------------||----------------||--------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:       4    5    4    27    0  195   134  155    4     1  203   32
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:    4    5    4    27    0  195   134  155    4     1  203   32
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     4    5    4    27    0  195   134  155    4     1  203   32
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:    4    5    4    27    0  195   134  155    4     1  203   32
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:     4    5    4    27    0  195   134  155    4     1  203   32
------------|-----------------||----------------||----------------||--------------|
Saturation Flow Module:
Sat/Lane:    1600 1600 1600  1600 1600 1600  1600 1600 1600  1600 1600 1600
Adjustment:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Lanes:       1.00 1.00 1.00  1.00 0.00 2.00  1.00 1.95 0.05  0.01 1.72 0.27
Final Sat.:  1600 1600 1600  1600    0 3200  1600 3119   81    14 2753  434
------------|-----------------||----------------||----------------||--------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00  0.02 0.00 0.06  0.08 0.05 0.05  0.07 0.07 0.07
Crit Moves:  ****                       ****  ****                   ****
*********************************************************************************
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Traffic Analysis for Puente Hills Landfill EIR
Existing Conditions
Mid-Day Peak Hour

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Pellissier/Workman Mill @ Workman Mill [Signal To Be Constructed

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Ignore			Include			Ignore			Include		
Lanes:	1 0 0 0 1			0 0 0 0 0			0 0 1 1 0			1 0 2 0 0		
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	43	0	126	0	0	0	0	152	36	196	375	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	43	0	126	0	0	0	0	152	36	196	375	0
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	43	0	0	0	0	0	0	152	0	196	375	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	43	0	0	0	0	0	0	152	0	196	375	0
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	47	0	0	0	0	0	0	152	0	216	375	0
Critical Gap Module:												
MoveUp Time:	3.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.1	xxxx	xxxxx
Critical Gp:	7.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	5.5	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	723	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	152	xxxx	xxxxx
Potent Cap.:	365	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1421	xxxx	xxxxx
Adj Cap:	0.85	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	xxxxx
Move Cap.:	310	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1421	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	13.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.9	xxxx	xxxxx
LOS by Move:	C	*	A	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	13.5			0.0			0.0			1.1		

Traffic Analysis for Puente Hills Landfill EIR
Existing Conditions
Mid-Day Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Crossroads Pkwy N. @ Workman Mill

Cycle (sec): 100 Critical Vol./Cap. (X): 0.384
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 28 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 0 1 1			0 1 0 0 0			1 0 1 1 0			1 0 1 1 0		
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	27	14	115	6	13	0	5	318	25	199	657	6
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	27	14	115	6	13	0	5	318	25	199	657	6
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	27	14	115	6	13	0	5	318	25	199	657	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	14	115	6	13	0	5	318	25	199	657	6
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	27	14	115	6	13	0	5	318	25	199	657	6
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.22	1.78	0.32	0.68	0.00	1.00	1.85	0.15	1.00	1.98	0.02
Final Sat.:	1600	347	2853	505	1095	0	1600	2967	233	1600	3171	29
Capacity Analysis Module:												
Vol/Sat:	0.02	0.04	0.04	0.01	0.01	0.00	0.00	0.11	0.11	0.12	0.21	0.21
Crit Moves:		****		****				****		****		

Traffic Analysis for Puente Hills Landfill EIR
Existing Conditions
Mid-Day Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Peck Rd @ Workman Mill

Cycle (sec):	100	Critical Vol./Cap. (X):	0.383
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	3	0 1	1 0	2	0 0	0 0	0	0 0	1 0	1!	0 0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	0	453	370	82	388	0	0	0	0	278	0	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	453	370	82	388	0	0	0	0	278	0	98
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	453	370	82	388	0	0	0	0	278	0	98
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	453	370	82	388	0	0	0	0	278	0	98
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	453	370	82	388	0	0	0	0	278	0	98
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.48	0.00	0.52
Final Sat.:	0	4800	1600	1600	3200	0	0	0	0	2366	0	834
Capacity Analysis Module:												
Vol/Sat:	0.00	0.09	0.23	0.05	0.12	0.00	0.00	0.00	0.00	0.12	0.00	0.12
Crit Moves:			****	****						****		

Traffic Analysis for Puente Hills Landfill EIR
Existing Conditions
Mid-Day Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 605 NB @ Pellissier

Cycle (sec):	100	Critical Vol./Cap. (X):	0.645
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	1 0	0	0 1	1 0	2	0 0	0 0	1	1 0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	0	0	0	186	0	236	99	168	0	0	858	216
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	186	0	236	99	168	0	0	858	216
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	186	0	236	99	168	0	0	858	216
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	186	0	236	99	168	0	0	858	216
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	186	0	236	99	168	0	0	858	216
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.60	0.40
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	2556	644
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.12	0.00	0.15	0.06	0.05	0.00	0.00	0.34	0.34
Crit Moves:						****	****				****	

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Traffic Analysis for Puente Hills Landfill EIR
Existing Conditions
Mid-Day Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Pellissier @ Peck Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.717
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 1	0	1 0	1 1	0	0 1	0 0	1	0 1	0 0	1
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	8	377	162	234	357	71	65	26	27	117	17	392
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	377	162	234	357	71	65	26	27	117	17	392
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	8	377	162	234	357	71	65	26	27	117	17	392
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	377	162	234	357	71	65	26	27	117	17	392
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	8	377	162	234	357	71	65	26	27	117	17	392
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.40	0.60	1.00	1.67	0.33	0.71	0.29	1.00	0.87	0.13	1.00
Final Sat.:	1600	2238	962	1600	2669	531	1143	457	1600	1397	203	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.17	0.17	0.15	0.13	0.13	0.06	0.06	0.02	0.08	0.08	0.25
Crit Moves:		****		****			****					****

Mid-Day Wed May 30, 2001 09:11:29 Page 12-1

Traffic Analysis for Puente Hills Landfill EIR
Existing Conditions
Mid-Day Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Rooks @ Peck Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.499
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 0	0	1 0	1 0	1
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	106	662	108	69	531	114	55	33	68	117	19	65
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	106	662	108	69	531	114	55	33	68	117	19	65
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	106	662	108	69	531	114	55	33	68	117	19	65
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	106	662	108	69	531	114	55	33	68	117	19	65
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	106	662	108	69	531	114	55	33	68	117	19	65
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.72	0.28	1.00	1.65	0.35	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	2751	449	1600	2634	566	1600	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.24	0.24	0.04	0.20	0.20	0.03	0.02	0.04	0.07	0.01	0.04
Crit Moves:		****		****					****	****		

```
Traffic Analysis for Puente Hills Landfill EIR
Existing Conditions
Mid-Day Peak Hour
------------------------------------------------------------------------------
Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)
******************************************************************************
Intersection #10 Proj Ent East @ Crossroads Pkwy S.
******************************************************************************
Average Delay (sec/veh):       3.8        Worst Case Level Of Service:       D
******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:           Ignore          Include          Include          Include
Lanes:        1  0  1  0  1    0  0  1! 0  0    1  0  1  1  0    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:      12    8  257     29    5   13     11  190    5    352  199   32
Growth Adj:  1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
Initial Bse:   12    8  257     29    5   13     11  190    5    352  199   32
User Adj:    1.30 1.30 0.00   1.30 1.30 1.30   1.30 1.30 1.30   1.30 1.30 1.30
PHF Adj:     1.00 1.00 0.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
PHF Volume:    16   10    0     38    7   17     14  247    7    458  259   42
Reduct Vol:     0    0    0      0    0    0      0    0    0      0    0    0
Final Vol.:    16   10    0     38    7   17     14  247    7    458  259   42
------------|---------------||---------------||---------------||---------------|
Adjusted Volume Module:
Grade:            0%               0%               0%               0%
% Cycle/Cars:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
% Truck/Comb:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
PCE Adj:     1.10 1.10 1.10   1.10 1.10 1.10   1.10 1.00 1.00   1.10 1.00 1.00
Cycl/Car PCE:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Trck/Cmb PCE:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Adj Vol.:      17   11    0     41    7   19     16  247    7    503  259   42
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
MoveUp Time:  3.4  3.3 xxxxx    3.4  3.3  2.6    2.1 xxxx xxxxx   2.1 xxxx xxxxx
Critical Gp:  7.0  6.5 xxxxx    7.0  6.5  5.5    5.5 xxxx xxxxx   5.5 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  984 1022 xxxxx   1004 1005  150    300 xxxx xxxxx   254 xxxx xxxxx
Potent Cap.:  249  275 xxxxx    242  282 1162   1183 xxxx xxxxx  1253 xxxx xxxxx
Adj Cap:     0.65 0.59 xxxxx   0.65 0.59 1.00   1.00 xxxx xxxxx  1.00 xxxx xxxxx
Move Cap.:    161  162 xxxxx    156  166 1162   1183 xxxx xxxxx  1253 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del: 24.7 23.7 xxxxx   30.3 22.5  3.1    3.1 xxxx xxxxx   4.5 xxxx xxxxx
LOS by Move:    D    D    A      *    *    *      A    *    *      A    *    *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx   xxxx  207 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx  xxxxx 22.0 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *    *      *    D    *      *    *    *      *    *    *
ApproachDel:       24.3             22.0              0.2              2.8
```



```
Traffic Analysis for Puente Hills Landfill EIR
Existing Conditions
Mid-Day Peak Hour
------------------------------------------------------------------------------
Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)
******************************************************************************
Intersection #12 Proj Ent West @ Workman Mill
******************************************************************************
Average Delay (sec/veh):       1.3        Worst Case Level Of Service:       B
******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:           Include          Include          Include          Include
Lanes:        0  0  1! 0  0    0  0  0  0  0    0  0  1  1  0    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:      66    0   13      0    0    0      0  248   39     18  304    3
Growth Adj:  1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
Initial Bse:   66    0   13      0    0    0      0  248   39     18  304    3
User Adj:    1.12 1.12 1.12   1.12 1.12 1.12   1.12 1.12 1.12   1.12 1.12 1.12
PHF Adj:     1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
PHF Volume:    74    0   15      0    0    0      0  278   44     20  340    3
Reduct Vol:     0    0    0      0    0    0      0    0    0      0    0    0
Final Vol.:    74    0   15      0    0    0      0  278   44     20  340    3
------------|---------------||---------------||---------------||---------------|
Adjusted Volume Module:
Grade:            0%               0%               0%               0%
% Cycle/Cars:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
% Truck/Comb:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
PCE Adj:     1.10 1.10 1.10   1.10 1.10 1.10   1.10 1.00 1.00   1.10 1.00 1.00
Cycl/Car PCE:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Trck/Cmb PCE:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Adj Vol.:      81    0   16      0    0    0      0  278   44     22  340    3
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
MoveUp Time:  3.4 xxxx   2.6 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.1 xxxx xxxxx
Critical Gp:  7.0 xxxx   5.5 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   5.5 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  660 xxxx   161  xxxx xxxx xxxxx  xxxx xxxx xxxxx   321 xxxx xxxxx
Potent Cap.:  401 xxxx  1148  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1152 xxxx xxxxx
Adj Cap:     0.98 xxxx  1.00  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1.00 xxxx xxxxx
Move Cap.:    393 xxxx  1148  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1152 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del: 11.3 xxxx   3.2 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   3.2 xxxx xxxxx
LOS by Move:    *    *    *      *    *    *      *    *    *      A    *    *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx  441 xxxxx   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Shrd StpDel:xxxxx 10.0 xxxxx  xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    B    *      *    *    *      *    *    *      *    *    *
ApproachDel:       10.0              0.0              0.0              0.2
```

Traffic Analysis for
Puente Hills Landfill EIR
Existing Conditions - PM

Scenario Report

Scenario:	PM
Command:	PM
Volume:	PM
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	PM
Trip Distribution:	All
Paths:	Default Paths
Routes:	Default Routes
Configuration:	PM

Traffic Analysis for
Puente Hills Landfill EIR
Existing Conditions - PM

Turning Movement Report

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#1 Crossroads Pkwy N. @ Crossroads Pkwy S.													
Base	225	0	113	0	0	0	0	163	149	147	158	0	955
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	225	0	113	0	0	0	0	163	149	147	158	0	955
#2 SR-60 @ Crossroads Pkwy S.													
Base	0	0	0	174	6	42	0	120	463	110	230	0	1145
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	174	6	42	0	120	463	110	230	0	1145
#3 Workman Mill/Crossroads South @ Workman Mill													
Base	13	12	8	59	7	219	539	480	5	0	226	75	1643
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	13	12	8	59	7	219	539	480	5	0	226	75	1643
#4 Pellissier/Workman Mill @ Workman Mill (Signal To Be Constructed This Month)													
Base	16	0	633	0	0	0	0	110	242	413	251	0	1665
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	16	0	633	0	0	0	0	110	242	413	251	0	1665
#5 Crossroads Pkwy N. @ Workman Mill													
Base	80	6	468	10	16	3	1	1001	13	123	531	8	2260
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	80	6	468	10	16	3	1	1001	13	123	531	8	2260
#6 Peck Rd @ Workman Mill													
Base	0	707	701	87	489	0	0	0	0	281	0	64	2329
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	707	701	87	489	0	0	0	0	281	0	64	2329
#7 605 NB @ Pellissier													
Base	0	0	0	410	0	207	173	532	0	0	336	114	1772
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	410	0	207	173	532	0	0	336	114	1772
#8 Pellissier @ Peck Rd													
Base	6	497	313	340	470	66	47	49	21	92	7	513	2421
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	6	497	313	340	470	66	47	49	21	92	7	513	2421
#9 Rooks @ Peck Rd													
Base	39	721	230	70	864	50	166	27	108	68	30	127	2500
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	39	721	230	70	864	50	166	27	108	68	30	127	2500

Traffic Analysis for
Puente Hills Landfill EIR
Existing Conditions - PM

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#10 Proj Ent East @ Crossroads Pkwy S.													
Base	9	5	53	44	4	12	20	518	4	10	229	44	952
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	9	5	53	44	4	12	20	518	4	10	229	44	952
#12 Proj Ent West @ Workman Mill													
Base	0	0	1	0	0	0	0	1005	0	0	476	0	1482
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1.	0	0	0	0	1005	0	0	476	0	1482

Traffic Analysis for
Puente Hills Landfill EIR
Existing Conditions - PM

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Crossroads Pkwy N. @ Crossroad	A	xxxxx	0.360	A	xxxxx	0.360	+ 0.000 V/C
# 2 SR-60 @ Crossroads Pkwy S.	A	xxxxx	0.263	A	xxxxx	0.263	+ 0.000 V/C
# 3 Workman Mill/Crossroads South	B	xxxxx	0.610	B	xxxxx	0.610	+ 0.000 V/C
# 4 Pellissier/Workman Mill @ Work	C	2.2	0.000	C	2.2	0.000	+ 0.000 V/C
# 5 Crossroads Pkwy N. @ Workman M	B	xxxxx	0.658	B	xxxxx	0.658	+ 0.000 V/C
# 6 Peck Rd @ Workman Mill	A	xxxxx	0.361	A	xxxxx	0.361	+ 0.000 V/C
# 7 605 NB @ Pellissier	B	xxxxx	0.605	B	xxxxx	0.605	+ 0.000 V/C
# 8 Pellissier @ Peck Rd	E	xxxxx	0.946	E	xxxxx	0.946	+ 0.000 V/C
# 9 Rooks @ Peck Rd	B	xxxxx	0.624	B	xxxxx	0.624	+ 0.000 V/C
# 10 Proj Ent East @ Crossroads Pkw	C	1.1	0.000	C	1.1	0.000	+ 0.000 V/C
# 12 Proj Ent West @ Workman Mill	A	0.0	0.000	A	0.0	0.000	+ 0.000 V/C

Traffic Analysis for
Puente Hills Landfill EIR
Existing Conditions - PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Crossroads Pkwy N. @ Crossroads Pkwy S.

Cycle (sec): 100 Critical Vol./Cap. (X): 0.360
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 27 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	0 0	1	0 0	0 0	0	0 0	1 1	0	1 0	2 0	0
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	225	0	113	0	0	0	0	163	149	147	158	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	225	0	113	0	0	0	0	163	149	147	158	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	225	0	113	0	0	0	0	163	149	147	158	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	225	0	113	0	0	0	0	163	149	147	158	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	225	0	113	0	0	0	0	163	149	147	158	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	1.04	0.96	1.00	2.00	0.00
Final Sat.:	3200	0	1600	0	0	0	0	1672	1528	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.00	0.07	0.00	0.00	0.00	0.00	0.10	0.10	0.09	0.05	0.00
Crit Moves:	****							****		****		

Traffic Analysis for
Puente Hills Landfill EIR
Existing Conditions - PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 SR-60 @ Crossroads Pkwy S.

Cycle (sec): 100 Critical Vol./Cap. (X): 0.263
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 24 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	1 1	0 0	1	0 0	2 0	1	1 0	2 0	0
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	0	0	0	174	6	42	0	120	[illegible]	110	230	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	174	6	42	0	120	[illegible]	110	230	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	0	0	174	6	0	0	120	[illegible]	110	230	0
Reduct Vol:	0	0	0	0	0	0	0	[illegible]	[illegible]	[illegible]	0	0
Reduced Vol:	0	0	0	174	6	0	0	120	[illegible]	110	230	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	0	0	0	174	6	0	0	120	0	110	230	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.93	0.07	1.00	0.00	2.00	[illegible]	1.00	2.00	0.00
Final Sat.:	0	0	0	3093	107	1600	0	3200	1600	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.06	0.06	0.00	0.00	0.04	0.00	0.07	0.07	0.00
Crit Moves:				****				****		****		

Traffic Analysis for
Puente Hills Landfill EIR
Existing Conditions - PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Workman Mill/Crossroads South @ Workman Mill

Cycle (sec):	100	Critical Vol./Cap. (X):	0.610
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	0 1	1 0	0	1 1	1 0	1	1 0	0 0	1	1 0
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	13	12	8	59	7	219	539	480	5	0	226	75
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	13	12	8	59	7	219	539	480	5	0	226	75
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	13	12	8	59	7	219	539	480	5	0	226	75
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	12	8	59	7	219	539	480	5	0	226	75
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	13	12	8	59	7	219	539	480	5	0	226	75
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.06	1.94	1.00	1.98	0.02	0.00	1.50	0.50
Final Sat.:	1600	1600	1600	1600	99	3101	1600	3167	33	0	2403	797
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.04	0.07	0.07	0.34	0.15	0.15	0.00	0.09	0.09
Crit Moves:	****				****		****				****	

Traffic Analysis for
Puente Hills Landfill EIR
Existing Conditions - PM

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #4 Pellissier/Workman Mill @ Workman Mill [Signal To Be Constructed

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Ignore			Include			Ignore			Include		
Lanes:	1 0	0	0 1	0 0	0	0 0	0 0	1	1 0	1 0	2	0 0
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	16	0	633	0	0	0	0	110	242	413	251	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	16	0	633	0	0	0	0	110	242	413	251	0
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	16	0	0	0	0	0	0	110	0	413	251	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	16	0	0	0	0	0	0	110	0	413	251	0
Adjusted Volume Module:												
Grade:		0%			0%			0%			0%	
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	18	0	0	0	0	0	0	110	0	454	251	0
Critical Gap Module:												
MoveUp Time:	3.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.1	xxxx	xxxxx
Critical Gp:	7.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	5.5	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	774	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	110	xxxx	xxxxx
Potent Cap.:	339	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1496	xxxx	xxxxx
Adj Cap:	0.70	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	xxxxx
Move Cap.:	236	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1496	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	16.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.3	xxxx	xxxxx
LOS by Move:	C	*	A	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:		16.4			0.0			0.0			2.1	

Traffic Analysis for
Puente Hills Landfill EIR
Existing Conditions - PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Crossroads Pkwy N. @ Workman Mill

Cycle (sec): 100 Critical Vol./Cap. (X): 0.658
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 45 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 0 1 1			0 0 1! 0 0			1 0 1 1 0			1 0 1 1 0		
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	80	6	468	10	16	3	1	1001	13	123	531	8
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	6	468	10	16	3	1	1001	13	123	531	8
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	6	468	10	16	0	1	1001	13	123	531	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	6	468	10	16	0	1	1001	13	123	531	8
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	80	6	468	10	16	0	1	1001	13	123	531	8
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.03	1.97	0.38	0.62	0.00	1.00	1.97	0.03	1.00	1.97	0.03
Final Sat.:	1600	41	3159	615	985	0	1600	3159	41	1600	3153	47
Capacity Analysis Module:												
Vol/Sat:	0.05	0.15	0.15	0.02	0.02	0.00	0.00	0.32	0.32	0.08	0.17	0.17
Crit Moves:	****			****				****		****		

Traffic Analysis for
Puente Hills Landfill EIR
Existing Conditions - PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Peck Rd @ Workman Mill

Cycle (sec): 100 Critical Vol./Cap. (X): 0.361
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 27 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 3 0 1			1 0 2 0 0			0 0 0 0 0			1 0 1! 0 0		
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	0	707	701	87	489	0	0	0	0	281	0	64
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	707	701	87	489	0	0	0	0	281	0	64
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	707	701	87	489	0	0	0	0	281	0	64
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	707	701	87	489	0	0	0	0	281	0	64
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	707	701	87	489	0	0	0	0	281	0	64
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.63	0.00	0.37
Final Sat.:	0	4800	1600	1600	3200	0	0	0	0	2606	0	594
Capacity Analysis Module:												
Vol/Sat:	0.00	0.15	0.44	0.05	0.15	0.00	0.00	0.00	0.00	0.11	0.00	0.11
Crit Moves:			****		****					****		

Traffic Analysis for
Puente Hills Landfill EIR
Existing Conditions - PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 605 NB @ Pellissier

Cycle (sec):	100	Critical Vol./Cap. (X):	0.605
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	B

Approach:	North Bound	South Bound	East Bound	West Bound
Control:	Protected	Permitted	Protected	Protected
Rights:	Include	Include	Include	Include
Lanes:	0 0 0 0 0	1 0 0 0 1	1 0 2 0 0	0 0 1 1 0

Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	0	0	0	410	0	207	173	532	0	0	336	114
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	410	0	207	173	532	0	0	336	114
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	410	0	207	173	532	0	0	336	114
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	410	0	207	173	532	0	0	336	114
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	410	0	207	173	532	0	0	336	114
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.49	0.51
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	2389	811
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.26	0.00	0.13	0.11	0.17	0.00	0.00	0.14	0.14
Crit Moves:				****			****				****	

Traffic Analysis for
Puente Hills Landfill EIR
Existing Conditions - PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Pellissier @ Peck Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.946
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	130	Level Of Service:	E

Approach:	North Bound	South Bound	East Bound	West Bound
Control:	Protected	Protected	Permitted	Permitted
Rights:	Include	Include	Include	Include
Lanes:	1 0 1 1 0	1 0 1 1 0	0 1 0 0 1	0 1 0 0 1

Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	6	497	313	340	470	66	47	49	21	92	7	513
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	497	313	340	470	66	47	49	21	92	7	513
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	6	497	313	340	470	66	47	49	21	92	7	513
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	497	313	340	470	66	47	49	21	92	7	513
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	6	497	313	340	470	66	47	49	21	92	7	513
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.23	0.77	1.00	1.75	0.25	0.49	0.51	1.00	0.93	0.07	1.00
Final Sat.:	1600	1963	1237	1600	2806	394	783	817	1600	1487	113	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.25	0.21	0.17	0.17	0.06	0.06	0.01	0.06	0.06	0.32
Crit Moves:		****		****			****					****

Traffic Analysis for
Puente Hills Landfill EIR
Existing Conditions - PM

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Rooks @ Peck Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.624
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1 1 0			1 0 1 1 0			1 0 1 1 0			1 0 1 0 1		
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	39	721	230	70	864	50	166	27	108	68	30	127
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	39	721	230	70	864	50	166	27	108	68	30	127
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	39	721	230	70	864	50	166	27	108	68	30	127
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	721	230	70	864	50	166	27	108	68	30	127
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	39	721	230	70	864	50	166	27	108	68	30	127
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.52	0.48	1.00	1.89	0.11	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	2426	774	1600	3025	175	1600	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.30	0.30	0.04	0.29	0.29	0.10	0.02	0.07	0.04	0.02	0.08
Crit Moves:		****			****		****					****

Traffic Analysis for
Puente Hills Landfill EIR
Existing Conditions - PM

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #10 Proj Ent East @ Crossroads Pkwy S.

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Ignore			Include			Include			Include		
Lanes:	1 0 1 0 1			0 0 1! 0 0			1 0 [illegible] 1 0			1 0 1 1 0		
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	9	5	53	44	4	12	20	518	4	10	229	44
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	5	53	44	4	12	20	518	4	10	229	44
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	5	0	44	4	12	20	518	4	10	229	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	9	5	0	44	4	12	20	518	4	10	229	44
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	10	6	0	48	4	13	22	518	4	11	229	44
Critical Gap Module:												
MoveUp Time:	3.4	3.3	xxxxx	3.4	3.3	2.6	2.1	xxxx	xxxxx	2.1	xxxx	xxxxx
Critical Gp:	7.0	6.5	xxxxx	7.0	6.5	5.5	5.5	xxxx	xxxxx	5.5	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	781	823	xxxxx	802	803	137	273	xxxx	xxxxx	522	xxxx	xxxxx
Potent Cap.:	335	360	xxxxx	325	370	1181	1233	xxxx	xxxxx	939	xxxx	xxxxx
Adj Cap:	0.96	0.97	xxxxx	0.97	0.97	1.00	1.00	xxxx	xxxxx	1.00	xxxx	xxxxx
Move Cap.:	321	349	xxxxx	314	359	1181	1223	xxxx	xxxxx	899	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	11.5	10.5	xxxxx	13.3	10.1	3.1	3.0	xxxx	xxxxx	4.0	xxxx	xxxxx
LOS by Move:	C	C	A	*	*	*	A	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	372	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	11.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	C	*	*	*	*	*	*	*
ApproachDel:	11.2			11.1			0.1			0.2		

```
--------------------------------------------------------------------------------
                          Traffic Analysis for
                        Puente Hills Landfill EIR
                        Existing Conditions - PM
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
          1994 HCM Unsignalized Method (Base Volume Alternative)
********************************************************************************
Intersection #12 Proj Ent West @ Workman Mill
********************************************************************************
Average Delay (sec/veh):        0.0        Worst Case Level Of Service:        A
********************************************************************************
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:          Include          Include          Include          Include
Lanes:       0  0  0  0  1    0  0  0  0  0    0  0  1  1  0    1  0  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour
Base Vol:       0    0    1    0    0    0    0 1005    0    0  476    0
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:    0    0    1    0    0    0    0 1005    0    0  476    0
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:     0    0    1    0    0    0    0 1005    0    0  476    0
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Final Vol.:     0    0    1    0    0    0    0 1005    0    0  476    0
------------|---------------||---------------||---------------||---------------|
Adjusted Volume Module:
Grade:              0%               0%               0%               0%
% Cycle/Cars:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
% Truck/Comb:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
PCE Adj:     1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.00 1.00 1.10 1.00 1.00
Cycl/Car PCE:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Trck/Cmb PCE:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Adj Vol.:       0    0    1    0    0    0    0 1005    0    0  476    0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
MoveUp Time:xxxxx xxxx   2.6 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Critical Gp:xxxxx xxxx   5.5 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx   503  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx   770  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Adj Cap:     xxxx xxxx  1.00  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx   770  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del:xxxxx xxxx   4.7 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     A    *    *    *    *    *    *    *    *    *
Movement:      LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *    *    *    *    *    *    *    *    *    *
ApproachDel:        4.7              0.0              0.0              0.0
```

Appendix C
Capacity Analysis
Future With Project Conditions

Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
AM Peak Hour Conditions

Scenario Report

Scenario:	Future AM
Command:	Future AM
Volume:	AM
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	AM
Trip Distribution:	All
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Future AM

table 3.2.1

Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
AM Peak Hour Conditions

Turning Movement Report
AM

Volume	Northbound			Southbound			Eastbound			Westbound			Total
Type	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Volume
#1 Crossroads Pkwy N. @ Crossroads Pkwy S.													
Base	239	0	154	0	0	0	0	132	193	435	181	0	1335
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	239	0	154	0	0	0	0	132	193	435	181	0	1335
#2 SR-60 @ Crossroads Pkwy S.													
Base	0	0	0	222	2	283	0	274	205	146	633	0	1765
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	222	2	283	0	274	205	146	633	0	1765
#3 Workman Mill/Crossroads South @ Workman Mill													
Base	1	0	0	48	6	359	137	192	22	0	616	19	1399
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	48	6	359	137	192	22	0	616	19	1399
#4 Pellissier/Workman Mill @ Workman Mill (Signal To Be Constructed)													
Base	124	0	423	0	0	0	0	404	355	769	1485	0	3560
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	124	0	423	0	0	0	0	404	355	769	1485	0	3560
#5 Crossroads Pkwy N. @ Workman Mill													
Base	111	109	227	7	15	5	11	301	367	337	2036	71	3597
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	111	109	227	7	15	5	11	301	367	337	2036	71	3597
#6 Peck Rd @ Workman Mill													
Base	0	542	423	226	1035	0	0	0	0	873	0	82	3181
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	542	423	226	1035	0	0	0	0	873	0	82	3181
#7 605 NB @ Pellissier													
Base	0	0	0	212	0	269	113	192	0	0	978	246	2010
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	212	0	269	113	192	0	0	978	246	2010
#8 Pellissier @ Peck Rd													
Base	9	488	136	169	955	123	31	24	10	285	38	972	3240
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	9	488	136	169	955	123	31	24	10	285	38	972	3240
#9 Rooks @ Peck Rd													
Base	207	920	138	139	640	192	76	18	52	250	34	62	2728
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	207	920	138	139	640	192	76	18	52	250	34	62	2728

Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
AM Peak Hour Conditions

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#11 Proj Ent East @ Crossroads Pkwy S.													
Base	9	0	182	22	1	18	9	233	5	231	775	30	1515
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	9	0	182	22	1	18	9	233	5	231	775	30	1515
#12 Proj Ent West @ Workman Mill													
Base	68	0	8	0	0	0	0	337	52	19	955	0	1441
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	68	0	8	0	0	0	0	337	52	19	955	0	1441

Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
AM Peak Hour Conditions

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/Veh	Base V/C	Future LOS	Future Del/Veh	Future V/C	Change in
# 1 Crossroads Pkwy N. @ Crossroad	B	xxxxx	0.667	B	xxxxx	0.667	+ 0.000 V/C
# 2 SR-60 @ Crossroads Pkwy S.	A	xxxxx	0.507	A	xxxxx	0.507	+ 0.000 V/C
# 3 Workman Mill/Crossroads South	A	xxxxx	0.499	A	xxxxx	0.499	+ 0.000 V/C
# 4 Pellissier/Workman Mill @ Work	C	xxxxx	0.784	C	xxxxx	0.784	+ 0.000 V/C
# 5 Crossroads Pkwy N. @ Workman M	D	xxxxx	0.884	D	xxxxx	0.884	+ 0.000 V/C
# 6 Peck Rd @ Workman Mill	C	xxxxx	0.722	C	xxxxx	0.722	+ 0.000 V/C
# 7 605 NB @ Pellissier	C	xxxxx	0.721	C	xxxxx	0.721	+ 0.000 V/C
# 8 Pellissier @ Peck Rd	F	xxxxx	1.084	F	xxxxx	1.084	+ 0.000 V/C
# 9 Rooks @ Peck Rd	C	xxxxx	0.706	C	xxxxx	0.706	+ 0.000 V/C
# 10 Proj Ent East @ Crossroads Pkw	E	2.1	0.000	E	2.1	0.000	+ 0.000 V/C
# 12 Proj Ent West @ Workman Mill	E	2.5	0.000	E	2.5	0.000	+ 0.000 V/C

Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Crossroads Pkwy N. @ Crossroads Pkwy S.

Cycle (sec): 100 Critical Vol./Cap. (X): 0.667
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 46 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	0	0 1	0 0	0	0 0	0 0	1	1 0	1 0	2	0 0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	210	0	135	0	0	0	0	116	169	382	159	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	239	0	154	0	0	0	0	132	193	435	181	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	239	0	154	0	0	0	0	132	193	435	181	0
User Adj:	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	278	0	179	0	0	0	0	153	223	505	210	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	278	0	179	0	0	0	0	153	223	505	210	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	278	0	179	0	0	0	0	153	223	505	210	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	2.00	0.00
Final Sat.:	3200	0	1600	0	0	0	0	1600	1600	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.09	0.00	0.11	0.00	0.00	0.00	0.00	0.10	0.14	0.32	0.07	0.00
Crit Moves:			****						****	****		

Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 SR-60 @ Crossroads Pkwy S.

Cycle (sec): 100 Critical Vol./Cap. (X): 0.507
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 34 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	1 1	0	0 1	0 0	2	0 1	1 0	2	0 0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	0	0	0	195	2	248	0	240	180	128	555	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	0	0	222	2	283	0	274	205	146	633	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	222	2	283	0	274	205	146	633	0
User Adj:	1.15	1.15	1.15	1.15	1.15	0.00	1.15	1.15	0.00	1.15	1.15	1.15
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	0	0	256	3	0	0	315	0	168	728	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	256	3	0	0	315	0	168	728	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	0	0	0	256	3	0	0	315	0	168	728	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.98	0.02	1.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	0	0	0	3163	37	1600	0	3200	1600	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.08	0.08	0.00	0.00	0.10	0.00	0.11	0.23	0.00
Crit Moves:				****				****			****	

Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Workman Mill/Crossroads South @ Workman Mill

Cycle (sec):	100	Critical Vol./Cap. (X):	0.499
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1 0 1			1 0 0 1 1			1 0 1 1 0			0 0 1 1 0		
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	1	0	0	42	5	315	120	168	19	0	540	17
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	1	0	0	48	6	359	137	192	22	0	616	19
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Other Appro:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	0	0	48	6	359	137	192	22	0	616	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	0	0	48	6	359	137	192	22	0	616	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	0	0	48	6	359	137	192	22	0	616	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	1	0	0	48	6	359	137	192	22	0	616	19
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.03	1.97	1.00	1.79	0.21	0.00	1.94	0.06
Final Sat.:	1600	1600	1600	1600	53	3147	1600	2871	329	0	3104	96
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.03	0.11	0.11	0.09	0.07	0.07	0.00	0.20	0.20
Crit Moves:	****				****		****				****	

Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Pellissier/Workman Mill @ Workman Mill (Signal To Be Constructed

Cycle (sec):	100	Critical Vol./Cap. (X):	0.784
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 0 0 1			0 0 0 0 0			0 0 1 1 0			1 0 2 0 0		
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	109	0	371	0	0	0	0	354	311	675	1303	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	124	0	423	0	0	0	0	404	355	769	1485	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Other Appro:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	124	0	423	0	0	0	0	404	355	769	1485	0
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	124	0	0	0	0	0	0	404	0	769	1485	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	124	0	0	0	0	0	0	404	0	769	1485	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	124	0	0	0	0	0	0	404	0	769	1485	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00	2.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	3200	0	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.48	0.46	0.00
Crit Moves:	****							****		****		

Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Crossroads Pkwy N. @ Workman Mill

Cycle (sec): 100 Critical Vol./Cap. (X): 0.884
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 93 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Permitted			Permitted			Permitted			Permitted	
Rights:		Include			Ignore			Include			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 0 1 1			0 0 1! 0 0			1 0 1 1 0			1 0 1 1 0		
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	97	96	199	6	13	4	10	264	322	296	1786	62
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	111	109	227	7	15	5	11	301	367	337	2036	71
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Other Appro:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	111	109	227	7	15	5	11	301	367	337	2036	71
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	111	109	227	7	15	0	11	301	367	337	2036	71
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	111	109	227	7	15	0	11	301	367	337	2036	71
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	111	109	227	7	15	0	11	301	367	337	2036	71
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.65	1.35	0.32	0.68	0.00	1.00	1.00	1.00	1.00	1.93	0.07
Final Sat.:	1600	1038	2162	509	1091	0	1600	1600	1600	1600	3092	108
Capacity Analysis Module:												
Vol/Sat:	0.07	0.11	0.11	0.01	0.01	0.00	0.01	0.19	0.23	0.21	0.66	0.66
Crit Moves:		****		****			****				****	

Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Peck Rd @ Workman Mill

Cycle (sec): 100 Critical Vol./Cap. (X): 0.722
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 53 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Permitted			Permitted			Protected			Protected	
Rights:		Ovl			Include			Include			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 3 0 1			1 0 2 0 0			0 0 0 0 0			1 0 1! 0 0		
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	0	475	371	198	908	0	0	0	0	766	0	72
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	542	423	226	1035	0	0	0	0	873	0	82
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Other Appro:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	542	423	226	1035	0	0	0	0	873	0	82
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	542	423	226	1035	0	0	0	0	873	0	82
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	542	423	226	1035	0	0	0	0	873	0	82
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	542	423	226	1035	0	0	0	0	873	0	82
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.83	0.00	0.17
Final Sat.:	0	4800	1600	1600	3200	0	0	0	0	2925	0	275
Capacity Analysis Module:												
Vol/Sat:	0.00	0.11	0.26	0.14	0.32	0.00	0.00	0.00	0.00	0.30	0.00	0.30
Crit Moves:	****				****					****		

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Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 605 NB @ Pellissier

Cycle (sec): 100 — Critical Vol./Cap. (X): 0.721
Loss Time (sec): 10 (Y+R = 4 sec) — Average Delay (sec/veh): xxxxxx
Optimal Cycle: 53 — Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 0 0			1 0 0 0 1			1 0 2 0 0			0 0 1 1 0		
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	0	0	0	186	0	236	99	168	0	0	858	216
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	0	0	212	0	269	113	192	0	0	978	246
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	212	0	269	113	192	0	0	978	246
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	212	0	269	113	192	0	0	978	246
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	212	0	269	113	192	0	0	978	246
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	212	0	269	113	192	0	0	978	246
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.60	0.40
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	2557	643
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.17	0.07	0.06	0.00	0.00	0.38	0.38
Crit Moves:						****	****				****	

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Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Pellissier @ Peck Rd

Cycle (sec): 100 — Critical Vol./Cap. (X): 1.084
Loss Time (sec): 10 (Y+R = 4 sec) — Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 — Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1 1 0			1 0 1 1 0			0 1 0 0 1			0 1 0 0 1		
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	8	428	119	148	838	108	27	21	9	250	33	853
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	9	488	136	169	955	123	31	24	10	285	38	972
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Other Appro:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	488	136	169	955	123	31	24	10	285	38	972
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	488	136	169	955	123	31	24	[illegible]	285	38	972
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	488	136	169	955	123	31	24	[illegible]	285	38	972
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	9	488	136	169	955	123	31	24	10	285	38	972
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	[illegible]	1.00	1.00	1.00	1.00
Lanes:	1.00	1.56	0.44	1.00	1.77	0.23	0.56	[illegible]	[illegible]	0.88	0.12	1.00
Final Sat.:	1600	2503	697	1600	2835	365	902	698	1600	1412	188	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.20	0.20	0.11	0.34	0.34	0.03	0.03	0.01	0.20	0.20	0.61
Crit Moves:	****				****		****					****

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--------------------------------------------------------------------------------
              Traffic Analysis for  Puente Hills Landfill EIR
                      Future Background Growth Only
                         AM Peak Hour Conditions
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
           ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #9 Rooks @ Peck Rd
********************************************************************************
Cycle (sec):        100              Critical Vol./Cap. (X):        0.706
Loss Time (sec):     10 (Y+R =  4 sec) Average Delay (sec/veh):    xxxxxx
Optimal Cycle:       51              Level Of Service:                 C
********************************************************************************
Approach:     North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Permitted        Permitted
Rights:          Include          Include          Include          Include
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:         1  0  1  1  0    1  0  1  1  0    1  0  1  1  0    1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:     182   807   121   122   561   168    67    16    46   219    30    54
Growth Adj:  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14
Initial Bse:  207   920   138   139   640   192    76    18    52   250    34    62
Added Vol:      0     0     0     0     0     0     0     0     0     0     0     0
PasserByVol:    0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:  207   920   138   139   640   192    76    18    52   250    34    62
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:   207   920   138   139   640   192    76    18    52   250    34    62
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:  207   920   138   139   640   192    76    18    52   250    34    62
PCE Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
MLF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Final Vol.:   207   920   138   139   640   192    76    18    52   250    34    62
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600  1600  1600  1600  1600  1600  1600  1600  1600  1600  1600  1600
Adjustment:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Lanes:       1.00  1.74  0.26  1.00  1.54  0.46  1.00  1.00  1.00  1.00  1.00  1.00
Final Sat.:  1600  2783   417  1600  2462   738  1600  1600  1600  1600  1600  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.13  0.33  0.33  0.09  0.26  0.26  0.05  0.01  0.03  0.16  0.02  0.04
Crit Moves:        ****        ****                          ****  ****
********************************************************************************
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--------------------------------------------------------------------------------
              Traffic Analysis for  Puente Hills Landfill EIR
                      Future Background Growth Only
                         AM Peak Hour Conditions
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
             1994 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #10 Proj Ent East @ Crossroads Pkwy S.
********************************************************************************
Average Delay (sec/veh):     2.1          Worst Case Level Of Service:        E
********************************************************************************
Approach:     North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign      Uncontrolled     Uncontrolled
Rights:          Ignore           Include          Include          Include
Lanes:         1  0  1  0  1    0  0  1! 0  0    1  0  1  1  0    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:       8     0   160    19     1    16     8   204     4   203   680    26
Growth Adj:  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14
Initial Bse:    9     0   182    22     1    18     9   233     5   231   775    30
Added Vol:      0     0     0     0     0     0     0     0     0     0     0     0
PasserByVol:    0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:    9     0   182    22     1    18     9   233     5   231   775    30
User Adj:    1.17  1.17  0.00  1.17  1.17  1.17  1.17  1.17  1.17  1.17  1.17  1.17
PHF Adj:     1.00  1.00  0.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:    11     0     0    25     1    21    11   272     5   271   907    35
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Final Vol.:    11     0     0    25     1    21    11   272     5   271   907    35
Adjusted Volume Module:
Grade:            0%               0%               0%               0%
% Cycle/Cars:  xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
% Truck/Comb:  xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
PCE Adj:     1.10  1.10  1.10  1.10  1.10  1.10  1.10  1.00  1.00  1.10  1.00  1.00
Cycl/Car PCE:  xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Trck/Cmb PCE:  xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Adj Vol.:      12     0     0    28     1    23    12   272     5   298   907    35
Critical Gap Module:
MoveUp Time:  3.4  xxxx xxxxx   3.4   3.3   2.6   2.1  xxxx xxxxx   2.1  xxxx xxxxx
Critical Gp:  7.0  xxxx xxxxx   7.0   6.5   5.5   5.5  xxxx xxxxx   5.5  xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: 1464  xxxx xxxxx  1478  1483   471   942  xxxx xxxxx   277  xxxx xxxxx
Potent Cap.:  123  xxxx xxxxx   120   148   799   535  xxxx xxxxx  1217  xxxx xxxxx
Adj Cap:     0.77  xxxx xxxxx  0.80  0.74  1.00  1.00  xxxx xxxxx  1.00  xxxx xxxxx
Move Cap.:     94  xxxx xxxxx    96   109   799   535  xxxx xxxxx  1217  xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del: 43.1  xxxx xxxxx  50.9  33.4   4.6   6.9  xxxx xxxxx   3.8  xxxx xxxxx
LOS by Move:    E     *     A     *     *     *     B     *     *     A     *     *
Movement:      LT  - LTR  - RT    LT  - LTR  - RT    LT  - LTR  - RT    LT  - LTR  - RT
Shared Cap.: xxxx  xxxx xxxxx  xxxx   158 xxxxx  xxxx  xxxx xxxxx  xxxx  xxxx xxxxx
Shrd StpDel:xxxxx  xxxx xxxxx xxxxx  29.8 xxxxx xxxxx  xxxx xxxxx xxxxx  xxxx xxxxx
Shared LOS:     *     *     *     *     D     *     *     *     *     *     *     *
ApproachDel:       43.1              29.8               0.3               0.9
```

```
------------------------------------------------------------------------------
              Traffic Analysis for  Puente Hills Landfill EIR
                     Future Background Growth Only
                        AM Peak Hour Conditions
------------------------------------------------------------------------------
                   Level Of Service Computation Report
         1994 HCM Unsignalized Method (Future Volume Alternative)
******************************************************************************
Intersection #12 Proj Ent West @ Workman Mill
******************************************************************************
Average Delay (sec/veh):       2.5         Worst Case Level Of Service:      E
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:          Include          Include          Include          Include
Lanes:        0  0  1! 0  0    0  0  0  0  0    0  0  1  1  0    1  0  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:      60    0    7     0    0    0     0  296   46    17  838    0
Growth Adj:  1.14 1.14 1.14  1.14 1.14 1.14  1.14 1.14 1.14  1.14 1.14 1.14
Initial Bse:   68    0    8     0    0    0     0  337   52    19  955    0
Added Vol:      0    0    0     0    0    0     0    0    0     0    0    0
Other Appro:    0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:   68    0    8     0    0    0     0  337   52    19  955    0
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:    68    0    8     0    0    0     0  337   52    19  955    0
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Final Vol.:    68    0    8     0    0    0     0  337   52    19  955    0
Adjusted Volume Module:
Grade:            0%               0%               0%               0%
% Cycle/Cars:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
% Truck/Comb:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
PCE Adj:     1.10 1.10 1.10  1.10 1.10 1.10  1.10 1.00 1.00  1.10 1.00 1.00
Cycl/Car PCE:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Trck/Cmb PCE:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Adj Vol.:      75    0    9     0    0    0     0  337   52    21  955    0
Critical Gap Module:
MoveUp Time:  3.4 xxxx  2.6 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.1 xxxx xxxxx
Critical Gp:  7.0 xxxx  5.5 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   5.5 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: 1338 xxxx  195  xxxx xxxx xxxxx  xxxx xxxx xxxxx   390 xxxx xxxxx
Potent Cap.:  148 xxxx 1103  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1059 xxxx xxxxx
Adj Cap:     0.98 xxxx 1.00  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1.00 xxxx xxxxx
Move Cap.:    145 xxxx 1103  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1059 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del: 46.7 xxxx  3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   3.5 xxxx xxxxx
LOS by Move:    *    *    *     *    *    *     *    *    *     A    *    *
Movement:     LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx  159 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Shrd StpDel:xxxxx 42.2 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    E    *     *    *    *     *    *    *     *    *    *
ApproachDel:       42.2              0.0              0.0              0.1
```



```
------------------------------------------------------------------------------
              Traffic Analysis for Puent Hills Landfill EIR
                     Future Background Growth Only
                        PM Peak Hour Conditions
------------------------------------------------------------------------------
                            Scenario Report
Scenario:            Future PM

Command:             Future PM
Volume:              PM
Geometry:            Existing
Impact Fee:          Default Impact Fee
Trip Generation:     PM
Trip Distribution:   All
Paths:               Default Paths
Routes:              Default Routes
Configuration:       Future PM
```

Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
Mid Day Peak Hour Conditions

Scenario Report

Scenario:	Mid-Day
Command:	Default Command
Volume:	MidDay
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	Mid-day
Trip Distribution:	All
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Mid-day

Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
Mid Day Peak Hour Conditions

Turning Movement Report
AM

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#1 Crossroads Pkwy N. @ Crossroads Pkwy S.													
Base	245	0	382	0	0	0	0	152	270	250	222	0	1521
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	245	0	382	0	0	0	0	152	270	250	222	0	1521
#2 SR-60 @ Crossroads Pkwy S.													
Base	0	0	0	204	1	300	0	316	186	105	287	0	1399
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	204	1	300	0	316	186	105	287	0	1399
#3 Workman Mill/Crossroads South @ Workman Mill													
Base	5	6	5	31	0	222	153	177	5	1	231	36	871
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	5	6	5	31	0	222	153	177	5	1	231	36	871
#4 Pellissier/Workman Mill @ Workman Mill [Signal To Be Constructed]													
Base	49	0	144	0	0	0	0	173	41	223	427	0	1058
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	49	0	144	0	0	0	0	173	41	223	427	0	1058
#5 Crossroads Pkwy N. @ Workman Mill													
Base	31	16	131	7	15	0	6	363	28	227	749	7	1579
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	31	16	131	7	15	0	6	363	28	227	749	7	1579
#6 Peck Rd @ Workman Mill													
Base	0	516	422	93	442	0	0	0	0	318	0	112	1904
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	1	0	0	0	0	0	0	0	1
Total	0	516	422	93	442	0	0	0	0	318	0	112	1904
#7 605 NB @ Pellissier													
Base	0	0	0	212	0	269	113	192	0	0	978	246	2010
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	212	0	269	113	192	0	0	978	246	2010
#8 Pellissier @ Peck Rd													
Base	9	430	185	267	407	81	74	30	31	133	19	447	2112
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	9	430	185	267	407	81	74	30	31	133	19	447	2112
#9 Rooks @ Peck Rd													
Base	121	755	123	79	605	130	63	35	78	133	22	74	2217
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	121	755	123	79	605	130	63	35	78	133	22	74	2217

Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
Mid Day Peak Hour Conditions

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#11 Proj Ent East @ Crossroads Pkwy S.													
Base	14	9	293	33	6	15	13	217	6	401	227	36	1269
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	14	9	293	33	6	15	13	217	6	401	227	36	1269
#12 Proj Ent West @ Workman Mill													
Base	75	0	15	0	0	0	0	283	44	21	347	3	788
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	75	0	15	0	0	0	0	283	44	21	347	3	788

Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
Mid Day Peak Hour Conditions

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/C	Future LOS	Future Del/ Veh	Future V/C	Change in
# 1 Crossroads Pkwy N. @ Crossroad	D	xxxxx	0.816	D	xxxxx	0.816	+ 0.000 V/C
# 2 SR-60 @ Crossroads Pkwy S.	A	xxxxx	0.397	A	xxxxx	0.397	+ 0.000 V/C
# 3 Workman Mill/Crossroads South	A	xxxxx	0.352	A	xxxxx	0.352	+ 0.000 V/C
# 4 Pellissier/Workman Mill @ Work	A	xxxxx	0.324	A	xxxxx	0.324	+ 0.000 V/C
# 5 Crossroads Pkwy N. @ Workman M	A	xxxxx	0.424	A	xxxxx	0.424	+ 0.000 V/C
# 6 Peck Rd @ Workman Mill	A	xxxxx	0.422	A	xxxxx	0.422	+ 0.000 V/C
# 7 605 NB @ Pellissier	C	xxxxx	0.721	C	xxxxx	0.721	+ 0.000 V/C
# 8 Pellissier @ Peck Rd	D	xxxxx	0.803	D	xxxxx	0.803	+ 0.000 V/C
# 9 Rooks @ Peck Rd	A	xxxxx	0.556	A	xxxxx	0.556	+ 0.000 V/C
# 10 Proj Ent East @ Crossroads Pkw	E	5.3	0.000	F	5.3	0.000	+ 0.000 V/C
# 12 Proj Ent West @ Workman Mill	C	1.6	0.000	C	1.6	0.000	+ 0.000 V/C

Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Crossroads Pkwy N. @ Crossroads Pkwy S.

Cycle (sec):	100	Critical Vol./Cap. (X):	0.816
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	70	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 0 0 1			0 0 0 0 0			0 0 1 1 0			1 0 2 0 0		
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	215	0	335	0	0	0	0	133	237	219	195	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	245	0	382	0	0	0	0	152	270	250	222	0
User Adj:	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	311	0	485	0	0	0	0	193	343	317	282	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	311	0	485	0	0	0	0	193	343	317	282	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	311	0	485	0	0	0	0	193	343	317	282	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	[illegible]	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	2.00	0.00
Final Sat.:	3200	[illegible]	1600	0	0	0	0	1600	1600	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.10	0.00	0.30	0.00	0.00	0.00	0.00	0.12	0.21	0.20	0.09	0.00
Crit Moves:			****						****	****		

Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 SR-60 @ Crossroads Pkwy S.

Cycle (sec):	100	Critical Vol./Cap. (X):	0.397
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 0 0			1 1 0 0 1			0 0 2 0 1			1 0 2 0 0		
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	0	0	0	179	1	263	0	277	163	92	252	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	0	0	204	1	300	0	316	186	105	287	0
User Adj:	1.30	1.30	1.30	1.30	1.30	0.00	1.30	1.30	0.00	1.30	1.30	1.30
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	0	0	265	1	0	0	411	0	136	373	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	265	1	0	0	411	0	136	373	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	0	0	0	265	1	0	0	411	0	136	373	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.99	0.01	1.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	0	0	0	3188	12	1600	0	3200	1600	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.08	0.08	0.00	0.00	0.13	0.00	0.09	0.12	0.00
Crit Moves:				****				****		****		

Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Workman Mill/Crossroads South @ Workman Mill

Cycle (sec):	100	Critical Vol./Cap. (X):	0.352
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	0 1	1 0	0	1 1	1 0	1	1 0	0 1	0	1 0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	4	5	4	27	0	195	134	155	4	1	203	32
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	5	6	5	31	0	222	153	177	5	1	231	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	5	6	5	31	0	222	153	177	5	1	231	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	6	5	31	0	222	153	177	5	1	231	36
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	5	6	5	31	0	222	153	177	5	1	231	36
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.00	2.00	1.00	1.95	0.05	0.01	1.72	0.27
Final Sat.:	1600	1600	1600	1600	0	3200	1600	3112	88	12	2758	430
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.07	0.10	0.06	0.06	0.08	0.08	0.08
Crit Moves:	****					****	****				****	

Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Pellissier/Workman Mill @ Workman Mill (Signal To Be Constructed

Cycle (sec):	100	Critical Vol./Cap. (X):	0.324
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	0 1	0 0	0	0 0	0 0	1	1 0	1 0	2	0 0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	43	0	126	0	0	0	0	152	35	196	375	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	49	0	144	0	0	0	0	173	41	223	427	0
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	49	0	0	0	0	0	0	173	0	223	427	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	49	0	0	0	0	0	0	173	0	223	427	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	49	0	0	0	0	0	0	173	0	223	427	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00	2.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	3200	0	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.14	0.13	0.00
Crit Moves:	****							****		****		

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-------------------------------------------------------------------------------
                 Traffic Analysis for Puente Hills Landfill EIR
                         Future Background Growth Only
                         Mid Day Peak Hour Conditions
-------------------------------------------------------------------------------
                       Level Of Service Computation Report
          ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
*******************************************************************************
Intersection #5 Crossroads Pkwy N. @ Workman Mill
*******************************************************************************
Cycle (sec):          100              Critical Vol./Cap. (X):        0.424
Loss Time (sec):       10 (Y+R =  4 sec) Average Delay (sec/veh):     xxxxxx
Optimal Cycle:         30              Level Of Service:                  A
*******************************************************************************
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Permitted        Permitted
Rights:          Include          Ignore           Include          Include
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:        1  0  0  1  1    0  1  0  0  0    1  0  1  1  0    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:      27    14   115     6    13     0     5   318    25   199   657     6
Growth Adj:  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14
Initial Bse:   31    16   131     7    15     0     6   363    28   227   749     7
User Adj:    1.00  1.00  1.00  1.00  1.00  0.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  0.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:    31    16   131     7    15     0     6   363    28   227   749     7
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:   31    16   131     7    15     0     6   363    28   227   749     7
PCE Adj:     1.00  1.00  1.00  1.00  1.00  0.00  1.00  1.00  1.00  1.00  1.00  1.00
MLF Adj:     1.00  1.00  1.00  1.00  1.00  0.00  1.00  1.00  1.00  1.00  1.00  1.00
Final Vol.:    31    16   131     7    15     0     6   363    28   227   749     7
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600  1600  1600  1600  1600  1600  1600  1600  1600  1600  1600  1600
Adjustment:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Lanes:       1.00  0.22  1.78  0.32  0.68  0.00  1.00  1.86  0.14  1.00  1.98  0.02
Final Sat.:  1600   348  2852   509  1091     0  1600  2971   229  1600  3170    30
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.02  0.05  0.05  0.01  0.01  0.00  0.00  0.12  0.12  0.14  0.24  0.24
Crit Moves:               ****  ****                   ****  ****
*******************************************************************************
```



```
-------------------------------------------------------------------------------
                 Traffic Analysis for Puente Hills Landfill EIR
                         Future Background Growth Only
                         Mid Day Peak Hour Conditions
-------------------------------------------------------------------------------
                       Level Of Service Computation Report
          ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
*******************************************************************************
Intersection #6 Peck Rd @ Workman Mill
*******************************************************************************
Cycle (sec):          100              Critical Vol./Cap. (X):        0.422
Loss Time (sec):       10 (Y+R =  4 sec) Average Delay (sec/veh):     xxxxxx
Optimal Cycle:         29              Level Of Service:                  A
*******************************************************************************
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Protected        Protected
Rights:            Ovl            Include          Include          Include
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:        0  0  3  0  1    1  0  2  0  0    0  0  0  0  0    1  0  1! 0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:       0   453   370    82   388     0     0     0     0   279     0    98
Growth Adj:  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14
Initial Bse:    0   516   422    93   442     0     0     0     0   318     0   112
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:     0   516   422    93   442     0     0     0     0   318     0   112
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:    0   516   422    93   442     0     0     0     0   318     0   112
PCE Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
MLF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Final Vol.:     0   516   422    93   442     0     0     0     0   318     0   112
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600  1600  1600  1600  1600  1600  1600  1600  1600  1600  1600  1600
Adjustment:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Lanes:       0.00  3.00  1.00  1.00  2.00  0.00  0.00  0.00  0.00  1.48  0.00  0.52
Final Sat.:     0  4800  1600  1600  3200     0     0     0     0  2367     0   833
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00  0.11  0.26  0.06  0.14  0.00  0.00  0.00  0.00  0.13  0.00  0.13
Crit Moves:               ****  ****                               ****
*******************************************************************************
```

Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 605 NB @ Pellissier

Cycle (sec): 100 Critical Vol./Cap. (X): 0.721
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 53 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	1 0	0	0 1	1 0	2	0 0	0 0	1	1 0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	0	0	0	186	0	236	99	168	0	0	858	216
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	0	0	212	0	269	113	192	0	0	978	246
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	212	0	269	113	192	0	0	978	246
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	212	0	269	113	192	0	0	978	246
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	212	0	269	113	192	0	0	978	246
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.60	0.40
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	2557	643
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.17	0.07	0.06	0.00	0.00	0.38	0.38
Crit Moves:						****	****				****	

Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Pellissier @ Peck Rd

Cycle (sec): 100 Critical Vol./Cap. (X): 0.803
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 67 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	0	0 1	0 1	0	0 1
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	8	377	162	234	357	71	55	26	27	117	17	392
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	9	430	185	267	407	81	74	30	31	133	19	447
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	430	185	267	407	81	74	30	31	133	19	447
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	430	185	267	407	81	74	30	31	133	19	447
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	9	430	185	267	407	81	74	30	31	133	19	447
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.40	0.60	1.00	1.67	0.33	0.71	0.29	1.00	0.88	0.12	1.00
Final Sat.:	1600	2237	963	1600	2669	531	1138	452	1600	1400	200	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.19	0.19	0.17	0.15	0.15	0.06	0.07	0.02	0.10	0.10	0.28
Crit Moves:		****		****			****					****

```
                Traffic Analysis for Puente Hills Landfill EIR
                       Future Background Growth Only
                       Mid Day Peak Hour Conditions
-----------------------------------------------------------------------------
                    Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
*****************************************************************************
Intersection #9 Rooks @ Peck Rd
*****************************************************************************
Cycle (sec):         100              Critical Vol./Cap. (X):          0.556
Loss Time (sec):      10 (Y+R =  4 sec) Average Delay (sec/veh):        xxxxxx
Optimal Cycle:        37              Level Of Service:                    A
*****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Permitted        Permitted
Rights:          Include          Include          Include          Include
Min. Green:    0    0    0     0    0    0     0    0    0     0    0    0
Lanes:        1  0  1  1  0   1  0  1  1  0   1  0  1  1  0   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:      106  662  108    69  531  114    55   31   68   117   19   65
Growth Adj:   1.14 1.14 1.14  1.14 1.14 1.14  1.14 1.14 1.14  1.14 1.14 1.14
Initial Bse:   121  755  123    79  605  130    63   35   78   133   22   74
User Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:      1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:    121  755  123    79  605  130    63   35   78   133   22   74
Reduct Vol:      0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:   121  755  123    79  605  130    63   35   78   133   22   74
PCE Adj:      1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:      1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:    121  755  123    79  605  130    63   35   78   133   22   74
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1600 1600 1600  1600 1600 1600  1600 1600 1600  1600 1600 1600
Adjustment:   1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Lanes:        1.00 1.72 0.28  1.00 1.65 0.35  1.00 1.00 1.00  1.00 1.00 1.00
Final Sat.:   1600 2752  448  1600 2634  566  1600 1600 1600  1600 1600 1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.08 0.27 0.27  0.05 0.23 0.23  0.04 0.02 0.05  0.08 0.01 0.05
Crit Moves:        ****       ****                       ****  ****
*****************************************************************************
```



```
                Traffic Analysis for Puente Hills Landfill EIR
                       Future Background Growth Only
                       Mid Day Peak Hour Conditions
-----------------------------------------------------------------------------
                    Level Of Service Computation Report
           1994 HCM Unsignalized Method (Base Volume Alternative)
*****************************************************************************
Intersection #10 Proj Ent East @ Crossroads Pkwy S.
*****************************************************************************
Average Delay (sec/veh):        5.3         Worst Case Level Of Service:      E
*****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:           Ignore          Include          Include          Include
Lanes:        1  0  1  0  1   0  0  1! 0  0   1  0  1  1  0   1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:       12    8  257    29    5   13    11  190    5   352  199   32
Growth Adj:   1.14 1.14 1.14  1.14 1.14 1.14  1.14 1.14 1.14  1.14 1.14 1.14
Initial Bse:    14    9  293    33    6   15    13  217    6   401  227   36
User Adj:     1.30 1.30 0.00  1.30 1.30 1.30  1.30 1.30 1.30  1.30 1.30 1.30
PHF Adj:      1.00 1.00 0.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     18   12    0    43    7   19    16  282    7   522  295   47
Reduct Vol:      0    0    0     0    0    0     0    0    0     0    0    0
Final Vol.:     18   12    0    43    7   19    16  282    7   522  295   47
------------|---------------||---------------||---------------||---------------|
Adjusted Volume Module:
Grade:              0%               0%               0%               0%
% Cycle/Cars:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
% Truck/Comb:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
PCE Adj:      1.10 1.10 1.10  1.10 1.10 1.10  1.10 1.00 1.00  1.10 1.00 1.00
Cycl/Car PCE:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Trck/Cmb PCE:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Adj Vol.:       20   13    0    47    8   21    18  282    7   574  295   47
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
MoveUp Time:   3.4  3.3 xxxxx   3.4  3.3  2.6   2.1 xxxx xxxxx   2.1 xxxx xxxxx
Critical Gp:   7.0  6.5 xxxxx   7.0  6.5  5.5   5.5 xxxx xxxxx   5.5 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: 1122 1166 xxxxx  1144 1146  171   342 xxxx xxxxx   289 xxxx xxxxx
Potent Cap.:  203  227 xxxxx   196  233 1134  1123 xxxx xxxxx  1199 xxxx xxxxx
Adj Cap:      0.58 0.51 xxxxx  0.57 0.51 1.00  1.00 xxxx xxxxx  1.00 xxxx xxxxx
Move Cap.:     117  116 xxxxx   112  120 1134  1123 xxxx xxxxx  1199 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del: 36.2 34.4 xxxxx  51.9 32.1  3.2   3.3 xxxx xxxxx   5.3 xxxx xxxxx
LOS by Move:    E    E    A     *    *    *     A    *    *     B    *    *
Movement:     LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  150 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx 36.3 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *    *     *    E    *     *    *    *     *    *    *
ApproachDel:       35.5             36.3              0.2              3.3
```

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-----------------------------------------------------------------------------
              Traffic Analysis for Puente Hills Landfill EIR
                       Future Background Growth Only
                       Mid Day Peak Hour Conditions
-----------------------------------------------------------------------------
                     Level Of Service Computation Report
            1994 HCM Unsignalized Method (Base Volume Alternative)
*****************************************************************************
Intersection #12 Proj Ent West @ Workman Mill
*****************************************************************************
Average Delay (sec/veh):        1.6           Worst Case Level Of Service:  C
*****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:          Include          Include          Include          Include
Lanes:        0  0  1! 0  0    0  0  0  0  0    0  0  1  1  0    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:      66    0    13     0    0     0     0  248    39    18  304     3
Growth Adj:  1.14 1.14  1.14  1.14 1.14  1.14  1.14 1.14  1.14  1.14 1.14  1.14
Initial Bse:   75    0    15     0    0     0     0  283    44    21  347     3
User Adj:    1.12 1.12  1.12  1.12 1.12  1.12  1.12 1.12  1.12  1.12 1.12  1.12
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    84    0    17     0    0     0     0  317    50    23  388     4
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:    84    0    17     0    0     0     0  317    50    23  388     4
------------|---------------||---------------||---------------||---------------|
Adjusted Volume Module:
Grade:            0%               0%               0%               0%
% Cycle/Cars:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
% Truck/Comb:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
PCE Adj:     1.10 1.10  1.10  1.10 1.10  1.10  1.10 1.00  1.00  1.10 1.00  1.00
Cycl/Car PCE:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Trck/Cmb PCE:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Adj Vol.:      93    0    18     0    0     0     0  317    50    25  388     4
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
MoveUp Time:  3.4 xxxx   2.6 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.1 xxxx xxxxx
Critical Gp:  7.0 xxxx   5.5 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   5.5 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  753 xxxx   183  xxxx xxxx xxxxx  xxxx xxxx xxxxx   366 xxxx xxxxx
Potent Cap.:  350 xxxx  1118  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1090 xxxx xxxxx
Adj Cap:     0.98 xxxx  1.00  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1.00 xxxx xxxxx
Move Cap.:    341 xxxx  1118  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1090 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del: 14.0 xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   3.4 xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     *    *     *     A    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx  386 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Shrd StpDel:xxxxx 12.2 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    C     *     *    *     *     *    *     *     *    *     *
ApproachDel:        12.2              0.0              0.0              0.2
```

Traffic Analysis for Puent Hills Landfill EIR
Future Background Growth Only
PM Peak Hour Conditions

Turning Movement Report
PM

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#1 Crossroads Pkwy N. @ Crossroads Pkwy S.													
Base	257	0	129	0	0	0	0	186	170	168	180	0	1089
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	257	0	129	0	0	0	0	186	170	168	180	0	1089
#2 SR-60 @ Crossroads Pkwy S.													
Base	0	0	0	198	7	48	0	137	528	125	262	0	1305
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	198	7	48	0	137	528	125	262	0	1305
#3 Workman Mill/Crossroads South @ Workman Mill													
Base	15	14	9	67	8	250	614	547	6	0	258	85	1873
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	15	14	9	67	8	250	614	547	6	0	258	85	1873
#4 Pellissier/Workman Mill @ Workman Mill [Signal To Be Constructed]													
Base	18	0	722	0	0	0	0	125	276	471	286	0	1898
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	18	0	722	0	0	0	0	125	276	471	286	0	1898
#5 Crossroads Pkwy N. @ Workman Mill													
Base	91	7	534	11	18	3	1	1141	15	140	605	9	2576
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	91	7	534	11	18	3	1	1141	15	140	605	9	2576
#6 Peck Rd @ Workman Mill													
Base	0	806	799	99	557	0	0	0	0	320	0	73	2655
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	806	799	99	557	0	0	0	0	320	0	73	2655
#7 605 NB @ Pellissier													
Base	0	0	0	467	0	236	197	606	0	0	383	130	2020
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	467	0	236	197	606	0	0	383	130	2020
#8 Pellissier @ Peck Rd													
Base	7	567	357	388	536	75	54	56	24	105	8	585	2760
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	7	567	357	388	536	75	54	56	24	105	8	585	2760
#9 Hooks @ Peck Rd													
Base	44	822	262	80	985	57	189	31	123	78	34	145	2850
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	44	822	262	80	985	57	189	31	123	78	34	145	2850

Traffic Analysis for Puent Hills Landfill EIR
Future Background Growth Only
PM Peak Hour Conditions

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#10 Proj Ent East @ Crossroads Pkwy S.													
Base	10	6	60	50	5	14	23	591	5	11	261	50	1085
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	10	6	60	50	5	14	23	591	5	11	261	50	1085
#12 Proj Ent West @ Workman Mill													
Base	0	0	1	0	0	0	0	1146	0	0	543	0	1689
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	0	0	0	0	1146	0	0	543	0	1689

Traffic Analysis for Puent Hills Landfill EIR
Future Background Growth Only
PM Peak Hour Conditions

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Crossroads Pkwy N. @ Crossroad	A	xxxxx	0.397	A	xxxxx	0.397	+ 0.000 V/C
# 2 SR-60 @ Crossroads Pkwy S.	A	xxxxx	0.285	A	xxxxx	0.285	+ 0.000 V/C
# 3 Workman Mill/Crossroads South	B	xxxxx	0.681	B	xxxxx	0.681	+ 0.000 V/C
# 4 Pellissier/Workman Mill @ Work	A	xxxxx	0.445	A	xxxxx	0.445	+ 0.000 V/C
# 5 Crossroads Pkwy N. @ Workman M	C	xxxxx	0.736	C	xxxxx	0.736	+ 0.000 V/C
# 6 Peck Rd @ Workman Mill	B	xxxxx	0.661	B	xxxxx	0.661	+ 0.000 V/C
# 7 605 NB @ Pellissier	B	xxxxx	0.675	B	xxxxx	0.675	+ 0.000 V/C
# 8 Pellissier @ Peck Rd	F	xxxxx	1.066	F	xxxxx	1.066	+ 0.000 V/C
# 9 Rooks @ Peck Rd	B	xxxxx	0.697	B	xxxxx	0.697	+ 0.000 V/C
# 10 Proj Ent East @ Crossroads Pkw	C	1.4	0.000	C	1.4	0.000	+ 0.000 V/C
# 12 Proj Ent West @ Workman Mill	B	0.0	0.000	B	0.0	0.000	+ 0.000 V/C

Traffic Analysis for Puent Hills Landfill EIR
Future Background Growth Only
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Crossroads Pkwy N. @ Crossroads Pkwy S

Cycle (sec): 100 Critical Vol./Cap. (X): 0.397
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 28 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0		0	0	0
Lanes:	2 0	0	0 1	0 0	0	0 0	0 0	1	1 0	1 0	2	0 0
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	225	0	113	0	0	0	0	163	149	147	158	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	257	0	129	0	0	0	0	186	170	168	180	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	257	0	129	0	0	0	0	186	170	168	180	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	257	0	129	0	0	0	0	186	170	168	180	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	257	0	129	0	0	0	0	186	170	168	180	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	257	0	129	0	0	0	0	186	170	168	180	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	1.04	0.96	1.00	2.00	0.00
Final Sat.:	3200	0	1600	0	0	0	0	1672	1528	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.08	0.00	0.00	0.00	0.00	0.11	0.11	0.11	0.06	0.00
Crit Moves:	****							****		****		

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Traffic Analysis for Puent Hills Landfill EIR
Future Background Growth Only
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 SP-60 @ Crossroads Pkwy S.

Cycle (sec):	100	Critical Vol./Cap. (X):	0.285
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	25	Level Of Service:	A

Approach:	North Bound	South Bound	East Bound	West Bound
Control:	Permitted	Permitted	Permitted	Protected
Rights:	Include	Ignore	Ignore	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	0 0 0 0 0	1 1 0 0 1	0 0 2 0 1	1 0 2 0 0

Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour

Movement:	NB L	NB T	NB R	SB L	SB T	SB R	EB L	EB T	EB R	WB L	WB T	WB R
Base Vol:	0	0	0	174	6	42	0	120	463	110	230	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	0	0	198	7	48	0	137	528	125	262	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	198	7	48	0	137	528	125	262	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	0	0	198	7	0	0	137	0	125	262	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	198	7	0	0	137	0	125	262	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	0	0	0	198	7	0	0	137	0	125	262	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.93	0.07	1.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	0	0	0	3091	109	1600	0	3200	1600	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.06	0.06	0.00	0.00	0.04	0.00	0.08	0.08	0.00
Crit Moves:				****				****		****		

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Traffic Analysis for Puent Hills Landfill EIR
Future Background Growth Only
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Workman Mill/Crossroads South @ Workman Mill

Cycle (sec):	100	Critical Vol./Cap. (X):	0.681
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	B

Approach:	North Bound	South Bound	East Bound	West Bound
Control:	Permitted	Permitted	Permitted	Permitted
Rights:	Include	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	1 0 1 0 1	1 0 0 1 1	1 0 1 1 0	0 0 1 1 0

Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour

Movement:	NB L	NB T	NB R	SB L	SB T	SB R	EB L	EB T	EB R	WB L	WB T	WB R
Base Vol:	13	12	8	59	7	219	539	480	5	0	226	75
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	15	14	9	67	8	250	614	547	6	0	258	85
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Other Appro:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	15	14	9	67	8	250	614	547	6	0	258	85
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	15	14	9	67	8	250	614	547	6	0	258	85
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	14	9	67	8	250	614	547	6	0	258	85
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	15	14	9	67	8	250	614	547	6	0	258	85
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.06	1.94	1.00	1.98	0.02	0.00	1.50	0.50
Final Sat.:	1600	1600	1600	1600	99	3101	1600	3165	35	0	2407	793
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.04	0.08	0.08	0.38	0.17	0.17	0.00	0.11	0.11
Crit Moves:	****				****		****				****	

Traffic Analysis for Puent Hills Landfill EIR
Future Background Growth Only
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Pellissier/Workman Mill @ Workman Mill (Signal To Be Constructed

Cycle (sec):	100	Critical Vol./Cap. (X):	0.445
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 0	1	0 0	0 0	0	0 0	1 1	0	1 0	2 0	0
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	16	0	633	0	0	0	0	110	242	413	251	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	18	0	722	0	0	0	0	125	276	471	286	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Other Appro:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	18	0	722	0	0	0	0	125	276	471	286	0
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	18	0	0	0	0	0	0	125	0	471	286	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	0	0	0	0	0	0	125	0	471	286	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	18	0	0	0	0	0	0	125	0	471	286	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00	2.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	3200	0	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.29	0.09	0.00
Crit Moves:	****							****		****		

Traffic Analysis for Puent Hills Landfill EIR
Future Background Growth Only
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Crossroads Pkwy N. @ Workman Mill

Cycle (sec):	100	Critical Vol./Cap. (X):	[illegible]
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	1	0 0	1! 0	0	1 0	1 1	0	1 0	1 1	0
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	80	6	468	10	16	3	1	1001	13	123	531	8
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	91	7	534	11	18	3	1	1141	15	140	605	9
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Other Appro:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	91	7	534	11	18	3	1	1141	15	140	605	9
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	91	7	534	11	18	0	1	1141	15	140	605	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	91	7	534	11	18	0	1	1141	15	140	605	9
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	91	7	534	11	18	0	1	1141	15	140	605	9
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.03	1.97	0.38	0.62	0.00	1.00	1.97	0.03	1.00	1.97	0.03
Final Sat.:	1600	41	3159	607	993	0	1600	3158	42	1600	3153	47
Capacity Analysis Module:												
Vol/Sat:	0.06	0.17	0.17	0.02	0.02	0.00	0.00	0.36	0.36	0.09	0.19	0.19
Crit Moves:		****		****				****		****		

Traffic Analysis for Puent Hills Landfill EIR
Future Background Growth Only
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Peck Rd @ Workman Mill

Cycle (sec):	100	Critical Vol./Cap. (X):	0.661
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Permitted			Permitted			Protected			Protected	
Rights:		Ovl			Include			Include			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:		0 0 3 0 1			1 0 2 0 0			0 0 0 0 0			1 0 1! 0 0	
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	0	707	701	87	489	0	0	0	0	281	0	64
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	806	799	99	557	0	0	0	0	320	0	73
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Other Appro:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	806	799	99	557	0	0	0	0	320	0	73
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	806	799	99	557	0	0	0	0	320	0	73
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	806	799	99	557	0	0	0	0	320	0	73
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	806	799	99	557	0	0	0	0	320	0	73
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	[illegible]	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.63	0.00	0.37
Final Sat.:	0	4800	1600	1600	3200	0	0	0	0	2606	0	594
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.50	0.06	0.17	0.00	0.00	0.00	0.00	0.12	0.00	0.12
Crit Moves:			****	****						****		

Traffic Analysis for Puent Hills Landfill EIR
Future Background Growth Only
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 605 NB @ Pellissier

Cycle (sec):	100	Critical Vol./Cap. (X):	0.675
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Permitted			Protected			Protected	
Rights:		Include			Include			Include			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:		0 0 0 0 0			1 0 0 0 1			1 0 2 0 0			0 0 1 1 0	
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	0	0	0	410	0	207	173	532	0	0	336	114
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	0	0	467	0	236	197	606	0	0	383	130
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	467	0	236	197	606	0	0	383	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	467	0	236	197	606	0	0	383	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	467	0	236	197	606	0	0	383	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	467	0	236	197	606	0	0	383	130
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.49	0.51
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	2389	811
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.29	0.00	0.15	0.12	0.19	0.00	0.00	0.16	0.16
Crit Moves:				****			****				****	

Traffic Analysis for Puent Hills Landfill EIR
Future Background Growth Only
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Pellissier @ Peck Rd

Cycle (sec): 100 Critical Vol./Cap. (X): 1.066
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 1	0	1 0	1 1	0	0 1	0 0	1	0 1	0 0	1
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	6	497	313	340	470	66	47	49	21	92	7	513
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	7	567	357	388	536	75	54	56	24	105	8	585
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Other Appro:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	7	567	357	388	536	75	54	56	24	105	8	585
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	7	567	357	388	536	75	54	56	24	105	8	585
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	567	357	388	536	75	54	56	24	105	8	585
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	7	567	357	388	536	75	54	56	24	105	8	585
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.23	0.77	1.00	1.75	0.25	0.49	0.51	1.00	0.93	0.07	1.00
Final Sat.:	1600	1964	1236	1600	2807	393	785	815	1600	1487	113	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.29	0.29	0.24	0.19	0.19	0.07	0.07	0.02	0.07	0.07	0.37
Crit Moves:		****		****			****					****

Traffic Analysis for Puent Hills Landfill EIR
Future Background Growth Only
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Rooks @ Peck Rd

Cycle (sec): 100 Critical Vol./Cap. (X): 0.697
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 50 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 0	1	1 0	1 0	1
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	39	721	230	70	864	50	166	27	108	68	30	127
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	44	822	262	80	985	57	189	31	123	78	34	145
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	44	822	262	80	985	57	189	31	123	78	34	145
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	44	822	262	80	985	57	189	31	123	78	34	145
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	44	822	262	80	985	57	189	31	123	78	34	145
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	44	822	262	80	985	57	189	31	123	78	34	145
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.52	0.48	1.00	1.89	0.11	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	2427	773	1600	3025	175	1600	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.34	0.34	0.05	0.33	0.33	0.12	0.02	0.08	0.05	0.02	0.09
Crit Moves:		****		****			****					****

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Future PM                   Fri May 25, 2001 14:51:23                 Page 13-1
---------------------------------------------------------------------------
                Traffic Analysis for Puent Hills Landfill EIR
                      Future Background Growth Only
                        PM Peak Hour Conditions
---------------------------------------------------------------------------
                   Level Of Service Computation Report
        1994 HCM Unsignalized Method (Future Volume Alternative)
***************************************************************************
Intersection #10 Proj Ent East @ Crossroads Pkwy S.
***************************************************************************
Average Delay (sec/veh):      1.4          Worst Case Level Of Service:    C
***************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign      Uncontrolled     Uncontrolled
Rights:           Ignore          Include          Include          Include
Lanes:        1  0  1  0  1    0  0  1! 0  0    1  0  1  1  0    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour
Base Vol:       9    5   53     44    4   12     20  518    4     10  229   44
Growth Adj:  1.14 1.14 1.14   1.14 1.14 1.14   1.14 1.14 1.14   1.14 1.14 1.14
Initial Bse:   10    6   60     50    5   14     23  591    5     11  261   50
Added Vol:      0    0    0      0    0    0      0    0    0      0    0    0
PasserByVol:    0    0    0      0    0    0      0    0    0      0    0    0
Initial Fut:   10    6   60     50    5   14     23  591    5     11  261   50
User Adj:    1.00 1.00 0.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
PHF Adj:     1.00 1.00 0.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
PHF Volume:    10    6    0     50    5   14     23  591    5     11  261   50
Reduct Vol:     0    0    0      0    0    0      0    0    0      0    0    0
Final Vol.:    10    6    0     50    5   14     23  591    5     11  261   50
Adjusted Volume Module:
Grade:           0%               0%               0%               0%
% Cycle/Cars:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
% Truck/Comb:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
PCE Adj:     1.10 1.10 1.10   1.10 1.10 1.10   1.10 1.00 1.00   1.10 1.00 1.00
Cycl/Car PCE:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Trck/Cmb PCE:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Adj Vol.:      11    6    0     55    5   15     25  591    5     13  261   50
Critical Gap Module:
MoveUp Time:  3.4  3.3 xxxxx   3.4  3.3  2.6    2.1 xxxx xxxxx   2.1 xxxx xxxxx
Critical Gp:  7.0  6.5 xxxxx   7.0  6.5  5.5    5.5 xxxx xxxxx   5.5 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  890  938 xxxxx   914  915  156    311 xxxx xxxxx   595 xxxx xxxxx
Potent Cap.:  285  308 xxxxx   276  318 1155   1167 xxxx xxxxx   822 xxxx xxxxx
Adj Cap:     0.95 0.96 xxxxx  0.96 0.96 1.00   1.00 xxxx xxxxx  1.00 xxxx xxxxx
Move Cap.:    271  297 xxxxx   264  306 1155   1167 xxxx xxxxx   822 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del: 13.8 12.4 xxxxx  16.8 11.9  3.2    3.1 xxxx xxxxx   4.4 xxxx xxxxx
LOS by Move:    C    C    A      *    *    *      A    *    *      A    *    *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  315 xxxxx   xxxx xxxx xxxxx  xxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx 13.8 xxxxx  xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *    *      *    C    *      *    *    *      *    *    *
ApproachDel:       13.3             13.8              0.1              0.2

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---------------------------------------------------------------------------
                Traffic Analysis for Puent Hills Landfill EIR
                      Future Background Growth Only
                        PM Peak Hour Conditions
---------------------------------------------------------------------------
                   Level Of Service Computation Report
        1994 HCM Unsignalized Method (Future Volume Alternative)
***************************************************************************
Intersection #12 Proj Ent West @ Workman Mill
***************************************************************************
Average Delay (sec/veh):      0.0          Worst Case Level Of Service:    B
***************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign      Uncontrolled     Uncontrolled
Rights:          Include          Include          Include          Include
Lanes:        0  0  0  0  1    0  0  0  0  0    0  0  1  1  0    1  0  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour
Base Vol:       0    0    1      0    0    0      0 1005    0      0  476    0
Growth Adj:  1.14 1.14 1.14   1.14 1.14 1.14   1.14 1.14 1.14   1.14 1.14 1.14
Initial Bse:    0    0    1      0    0    0      0 1146    0      0  543    0
Added Vol:      0    0    0      0    0    0      0    0    0      0    0    0
Other Appro:    0    0    0      0    0    0      0    0    0      0    0    0
Initial Fut:    0    0    1      0    0    0      0 1146    0      0  543    0
User Adj:    1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
PHF Volume:     0    0    1      0    0    0      0 1146    0      0  543    0
Reduct Vol:     0    0    0      0    0    0      0    0    0      0    0    0
Final Vol.:     0    0    1      0    0    0      0 1146    0      0  543    0
Adjusted Volume Module:
Grade:           0%               0%               0%               0%
% Cycle/Cars:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
% Truck/Comb:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
PCE Adj:     1.10 1.10 1.10   1.10 1.10 1.10   1.10 1.00 1.00   1.10 1.00 1.00
Cycl/Car PCE:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Trck/Cmb PCE:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Adj Vol.:       0    0    1      0    0    0      0 1146    0      0  543    0
Critical Gap Module:
MoveUp Time:xxxxx xxxx  2.6  xxxxx xxxx xxxxx  xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Critical Gp:xxxxx xxxx  5.5  xxxxx xxxx xxxxx  xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx  573   xxxx xxxx xxxxx   xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx  710   xxxx xxxx xxxxx   xxxx xxxx xxxxx  xxxx xxxx xxxxx
Adj Cap:     xxxx xxxx 1.00   xxxx xxxx xxxxx   xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx  710   xxxx xxxx xxxxx   xxxx xxxx xxxxx  xxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del:xxxxx xxxx  5.1  xxxxx xxxx xxxxx  xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *    B      *    *    *      *    *    *      *    *    *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx   xxxx xxxx xxxxx  xxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx  xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *    *      *    *    *      *    *    *      *    *    *
ApproachDel:        5.1              0.0              0.0              0.0

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Traffic Analysis for Puente Hills Landfill EIR
Future With Other Approved Projects (3.3)
AM Peak Hour Conditions

Scenario Report

Scenario:	Fut+Other Projects AM
Command:	Fut+Other Projects AM
Volume:	AM
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	AM
Trip Distribution:	All
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Fut+Other Projects AM

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Approved Projects (3.3)
AM Peak Hour Conditions

Trip Generation Report
Project Trips
Forecast for AM

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
5	MRF	1.00	MRF	42.00	42.00	42	42	84	100.0
	Zone 5 Subtotal					42	42	84	100.0
TOTAL						42	42	84	100.0

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Approved Projects (3.3)
AM Peak Hour Conditions

Trip Distribution Report

Percent Of Trips All

Zone	To Gates 2	4	6	8	12
5	26.0	3.0	48.0	3.0	20.0

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Approved Projects (3.3)
AM Peak Hour Conditions

Turning Movement Report
AM

Volume	Northbound			Southbound			Eastbound			Westbound			Total
Type	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Volume
#1 Crossroads Pkwy N. @ Crossroads Pkwy S.													
Base	239	0	154	0	0	0	0	132	193	435	181	0	1335
Added	0	0	20	0	0	0	0	0	0	8	0	0	28
Other	0	0	54	0	0	0	0	9	0	17	5	0	85
Total	239	0	228	0	0	0	0	141	193	460	186	0	1448
#2 SR-60 @ Crossroads Pkwy S.													
Base	0	0	0	222	2	283	0	274	205	146	633	0	1765
Added	0	0	0	0	0	20	0	20	8	0	8	0	56
Other	0	0	0	52	0	0	0	5	0	14	2	0	73
Total	0	0	0	274	2	303	0	299	213	160	643	0	1894
#3 Workman Mill/Crossroads South @ Workman Mill													
Base	1	0	0	48	6	359	137	192	22	0	616	19	1399
Added	0	0	0	0	0	0	0	29	0	0	29	0	58
Other	0	0	0	0	0	30	55	44	0	0	45	0	174
Total	1	0	0	48	6	389	192	265	22	0	690	19	1631
#4 Pellissier/Workman Mill @ Workman Mill [Signal To Be Constructed]													
Base	124	0	423	0	0	0	0	404	355	769	1485	0	3560
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	55	0	0	0	0	0	0	30	0	0	85
Total	124	0	478	0	0	0	0	404	355	799	1485	0	3645
#5 Crossroads Pkwy N. @ Workman Mill													
Base	111	109	227	7	15	5	11	301	367	337	2036	71	3597
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	5	0	0	0	0	55	0	9	30	0	99
Total	111	109	232	7	15	5	11	356	367	346	2066	71	3696
#6 Peck Rd @ Workman Mill													
Base	0	542	423	226	1035	0	0	0	0	873	0	82	3181
Added	0	0	1	11	0	0	0	0	0	1	0	11	24
Other	0	0	5	0	1	0	0	0	0	32	0	0	38
Total	0	542	429	237	1036	0	0	0	0	906	0	93	3243
#7 605 NB @ Pelliasier													
Base	0	0	0	212	0	269	113	192	0	0	978	246	2010
Added	0	0	0	0	0	0	11	0	0	0	0	0	11
Total	0	0	0	212	0	269	124	192	0	0	978	246	2021
#8 Pellissier @ Peck Rd													
Base	9	488	136	169	955	123	31	24	10	285	38	972	3240
Added	0	0	11	0	11	0	0	0	0	0	0	0	22
Other	0	0	0	0	1	0	0	0	0	0	0	0	1
Total	9	488	147	169	967	123	31	24	10	285	38	972	3263

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Approved Projects (3.3)
AM Peak Hour Conditions

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#9 Rooks @ Peck Rd													
Base	207	920	138	139	640	192	76	18	52	250	34	62	2728
Added	0	0	0	0	0	0	0	0	0	11	0	0	11
Total	207	920	138	139	640	192	76	18	52	261	34	62	2739
#10 Proj Ent East @ Crossroads Pkwy S.													
Base	9	0	182	22	1	18	9	233	5	231	775	30	1515
Added	0	0	0	0	0	0	0	29	0	0	29	0	58
Other	60	0	7	0	0	0	0	-2	46	17	-15	0	113
Total	69	0	189	22	1	18	9	260	51	248	789	30	1686
#12 Proj Ent West @ Workman Mill													
Base	68	0	8	0	0	0	0	337	52	19	955	0	1441
Added	12	0	29	0	0	0	0	0	12	29	0	0	82
Other	-60	0	-7	0	0	0	0	106	-46	-17	92	0	68
Total	20	0	30	0	0	0	0	443	18	31	1047	0	1591

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Approved Projects (3.3)
AM Peak Hour Conditions

Intersection Volume Report
Base Volume Alternative

Node	Intersection	Northbound L	Northbound T	Northbound R	Southbound L	Southbound T	Southbound R	Eastbound L	Eastbound T	Eastbound R	Westbound L	Westbound T	Westbound R
1	Crossroads Pk	239	0	154	0	0	0	0	132	193	435	181	0
2	SR-60 @ Cross	0	0	0	222	2	283	0	774	205	146	633	0
3	Workman Mill/	1	0	0	48	6	359	137	192	22	0	616	19
4	Pellissier/Wo	124	0	423	0	0	0	0	404	355	769	1485	0
5	Crossroads Pk	111	109	227	7	15	5	11	401	367	337	2036	71
6	Peck Rd @ Wor	0	542	423	226	1035	0	[illegible]	0	0	873	0	82
7	605 NB @ Pell	0	0	0	212	0	269	113	192	0	0	978	246
8	Pelllssier @	9	488	136	169	955	123	31	24	10	285	18	972
9	Rooks @ Peck	207	920	138	139	640	192	76	18	52	250	34	62
10	Proj Ent East	9	0	182	22	1	18	9	233	5	231	775	30
12	Proj Ent West	68	0	8	0	0	0	0	337	52	19	955	0

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Approved Projects (3.3)
AM Peak Hour Conditions

Intersection Volume Report
Future Volume Alternative

Node	Intersection	Northbound L	Northbound T	Northbound R	Southbound L	Southbound T	Southbound R	Eastbound L	Eastbound T	Eastbound R	Westbound L	Westbound T	Westbound R
1	Crossroads Pk	239	0	228	0	0	0	0	141	193	460	186	0
2	SR-60 @ Cross	0	0	0	274	2	303	0	299	213	160	643	0
3	Workman Mill/	1	0	0	48	6	389	192	265	22	0	690	19
4	Pellissier/Wo	124	0	478	0	0	0	0	404	355	799	1485	0
5	Crossroads Pk	111	109	232	7	15	5	11	356	367	346	2066	71
6	Peck Rd @ Wor	0	542	429	237	1036	0	0	0	0	906	0	93
7	605 NB @ Pell	0	0	0	212	0	269	124	192	0	0	978	246
8	Pellissier @	9	488	147	169	967	123	31	24	10	285	38	972
9	Rooks @ Peck	207	920	138	139	640	192	76	18	52	261	34	62
10	Proj Ent East	69	0	189	22	1	18	9	260	51	248	789	30
12	Proj Ent West	20	0	30	0	0	0	0	443	18	31	1047	0

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Approved Projects (3.3)
AM Peak Hour Conditions

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/Veh	Base V/C	Future LOS	Future Del/Veh	Future V/C	Change in
# 1 Crossroads Pkwy N. @ Crossroad	B	xxxxx	0.667	C	xxxxx	0.738	+ 0.071 V/C
# 2 SR-60 @ Crossroads Pkwy S.	A	xxxxx	0.507	A	xxxxx	0.537	+ 0.031 V/C
# 3 Workman Mill/Crossroads South	A	xxxxx	0.499	A	xxxxx	0.566	+ 0.067 V/C
# 4 Pellissier/Workman Mill @ Work	C	xxxxx	0.784	D	xxxxx	0.803	+ 0.019 V/C
# 5 Crossroads Pkwy N. @ Workman M	D	xxxxx	0.884	D	xxxxx	0.895	+ 0.011 V/C
# 6 Peck Rd @ Workman Mill	C	xxxxx	0.722	C	xxxxx	0.736	+ 0.014 V/C
# 7 605 NB @ Pellissier	C	xxxxx	0.721	C	xxxxx	0.728	+ 0.007 V/C
# 8 Pellissier @ Peck Rd	F	xxxxx	1.084	F	xxxxx	1.088	+ 0.004 V/C
# 9 Rooks @ Peck Rd	C	xxxxx	0.706	C	xxxxx	0.713	+ 0.007 V/C
# 10 Proj Ent East @ Crossroads Pkw	E	2.1	0.000	F	20.6	0.000	+ 0.000 V/C
# 12 Proj Ent West @ Workman Mill	B	2.5	0.000	C	0.7	0.000	+ 0.000 V/C

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Approved Projects (3.3)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Crossroads Pkwy N. @ Crossroads Pkwy S.

Cycle (sec): 100   Critical Vol./Cap. (X): 0.738
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 55   Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	0	0 1	0 0	0	0 0	0 0	1	1 0	1 0	2	0 0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	210	0	135	0	0	0	0	116	169	382	159	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	239	0	154	0	0	0	0	132	193	435	181	0
Added Vol:	0	0	20	0	0	0	0	0	0	8	0	0
Other Appro:	0	0	54	0	0	0	0	9	0	17	5	0
Initial Fut:	239	0	228	0	0	0	0	141	193	460	186	0
User Adj:	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	278	0	264	0	0	0	0	164	223	534	216	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	278	0	264	0	0	0	0	164	223	534	216	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	278	0	264	0	0	0	0	164	223	534	216	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	2.00	0.00
Final Sat.:	3200	0	1600	0	0	0	0	1600	1600	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.09	0.00	0.17	0.00	0.00	0.00	0.00	0.10	0.14	0.33	0.07	0.00
Crit Moves:			****						****	****		

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Approved Projects (3.3)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 SR-60 @ Crossroads Pkwy S.

Cycle (sec): 100   Critical Vol./Cap. (X): 0.537
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 36   Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	1 1	0	0 1	0 0	2	0 1	1 0	2	0 0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	0	0	0	195	2	248	0	240	180	128	555	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	0	0	222	2	283	0	274	205	146	633	0
Added Vol:	0	0	0	0	0	20	0	20	8	0	8	0
Other Appro:	0	0	0	52	0	0	0	5	0	14	2	0
Initial Fut:	0	0	0	274	2	303	0	299	213	160	643	0
User Adj:	1.15	1.15	1.15	1.15	1.15	0.00	1.15	1.15	0.00	1.15	1.15	1.15
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	0	0	315	3	0	0	343	0	184	739	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	315	3	0	0	343	0	184	739	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	0	0	0	315	3	0	0	343	0	184	739	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.98	0.02	1.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	0	0	0	3170	30	1600	0	3200	1600	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.10	0.10	0.00	0.00	0.11	0.00	0.12	0.23	0.00
Crit Moves:				****				****			****	

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Approved Projects (3.3)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Workman Mill/Crossroads South @ Workman Mill

Cycle (sec): 100 Critical Vol./Cap. (X): 0.566
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 37 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	0 1	1 0	0	1 1	1 0	1	1 0	0 0	1	1 0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	1	0	0	42	5	315	120	168	19	0	540	17
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	1	0	0	48	6	359	137	192	22	0	616	19
Added Vol:	0	0	0	0	0	0	0	29	0	0	29	0
Other Appro:	0	0	0	0	0	30	55	44	0	0	45	0
Initial Fut:	1	0	0	48	6	389	192	265	22	0	690	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	0	0	48	6	389	192	265	22	0	690	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	0	0	48	6	389	192	265	22	0	690	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	1	0	0	48	6	389	192	265	22	0	690	19
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.03	1.97	1.00	1.85	0.15	0.00	1.95	0.05
Final Sat.:	1600	1600	1600	1600	49	3151	1600	2955	245	0	3114	86
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.03	0.12	0.12	0.12	0.09	0.09	0.00	0.22	0.22
Crit Moves:	****				****		****				****	

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Approved Projects (3.3)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Pellissier/Workman Mill @ Workman Mill (Signal To Be Constructed

Cycle (sec): 100 Critical Vol./Cap. (X): 0.803
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 67 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	0 1	0 0	0	0 0	0 0	1	1 0	1 0	2	0 0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	109	0	371	0	0	0	0	354	311	675	1303	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	124	0	423	0	0	0	0	404	355	769	1485	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Other Appro:	0	0	55	0	0	0	0	0	0	30	0	0
Initial Fut:	124	0	478	0	0	0	0	404	355	799	1485	0
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	124	0	0	0	0	0	0	404	0	799	1485	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	124	0	0	0	0	0	0	404	0	799	1485	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	124	0	0	0	0	0	0	404	0	799	1485	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00	2.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	3200	0	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.50	0.46	0.00
Crit Moves:	****							****		****		

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Approved Projects (3.3)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Crossroads Pkwy N. @ Workman Mill

Cycle (sec): 100   Critical Vol./Cap. (X): 0.895
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 98   Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	1	0 0	1! 0	0	1 0	1 1	0	1 0	1 1	0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	97	96	199	6	13	4	10	264	322	296	1786	62
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	111	109	227	7	15	5	11	301	367	337	2036	71
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Other Appro:	0	0	5	0	0	0	0	55	0	9	30	0
Initial Fut:	111	109	232	7	15	5	11	356	367	346	2066	71
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	111	109	232	7	15	0	11	356	367	346	2066	71
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	111	109	232	7	15	0	11	356	367	346	2066	71
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	111	109	232	7	15	0	11	356	367	346	2066	71
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.64	1.36	0.32	0.68	0.00	1.00	1.00	1.00	1.00	1.93	0.07
Final Sat.:	1600	1023	2177	509	1091	0	1600	1600	1600	1600	3094	106
Capacity Analysis Module:												
Vol/Sat:	0.07	0.11	0.11	0.01	0.01	0.00	0.01	0.22	0.23	0.22	0.67	0.67
Crit Moves:		****		****			****				****	

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Approved Projects (3.3)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Peck Rd @ Workman Mill

Cycle (sec): 100   Critical Vol./Cap. (X): 0.736
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 55   Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	3 0	1	1 0	2 0	0	0 0	0 0	0	1 0	1! 0	0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	0	475	371	198	908	0	0	0	0	766	0	72
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	542	423	226	1035	0	0	0	0	873	0	82
Added Vol:	0	0	1	11	0	0	0	0	0	1	0	11
Other Appro:	0	0	5	0	1	0	0	0	0	32	0	0
Initial Fut:	0	542	429	237	1036	0	0	0	0	906	0	93
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	542	429	237	1036	0	0	0	0	906	0	93
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	542	429	237	1036	0	0	0	0	906	0	93
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	542	429	237	1036	0	0	0	0	906	0	93
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.81	0.00	0.19
Final Sat.:	0	4800	1600	1600	3200	0	0	0	0	2902	0	298
Capacity Analysis Module:												
Vol/Sat:	0.00	0.11	0.27	0.15	0.32	0.00	0.00	0.00	0.00	0.31	0.00	0.31
Crit Moves:	****				****					****		

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Approved Projects (3.3)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 605 NB @ Pellissier

Cycle (sec): 100 Critical Vol./Cap. (X): 0.728
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 54 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 0 0			1 0 0 0 1			1 0 2 0 0			0 0 1 1 0		
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	0	0	0	186	0	236	99	168	0	0	858	216
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	0	0	212	0	269	113	192	0	0	978	246
Added Vol:	0	0	0	0	0	0	11	0	0	0	0	0
Other Appro:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	212	0	269	124	192	0	0	978	246
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	212	0	269	124	192	0	0	978	246
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	212	0	269	124	192	0	0	978	246
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	212	0	269	124	192	0	0	978	246
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.60	0.40
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	2557	643
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.17	0.08	0.06	0.00	0.00	0.38	0.38
Crit Moves:						****	****				****	

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Approved Projects (3.3)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Pellissier @ Peck Rd

Cycle (sec): 100 Critical Vol./Cap. (X): 1.088
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1 1 0			1 0 1 1 0			0 1 0 0 1			0 1 0 0 1		
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	8	428	119	148	838	108	27	21	9	250	33	853
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	9	488	136	169	955	123	31	24	10	285	38	972
Added Vol:	0	0	11	0	11	0	0	0	0	0	0	0
Other Appro:	0	0	0	0	1	0	0	0	0	0	0	0
Initial Fut:	9	488	147	169	967	123	31	24	10	285	38	972
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	488	147	169	967	123	31	24	10	285	38	972
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	488	147	169	967	123	31	24	10	285	38	972
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	9	488	147	169	967	123	31	24	10	285	38	972
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.54	0.46	1.00	1.77	0.23	0.56	0.44	1.00	0.88	0.12	1.00
Final Sat.:	1600	2459	741	1600	2839	361	902	698	1600	1412	188	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.20	0.20	0.11	0.34	0.34	0.03	0.03	0.01	0.20	0.20	0.61
Crit Moves:	****				****		****					****

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Approved Projects (3.3)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Rooks @ Peck Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.713
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0	1 0	1 0	1
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	182	807	121	122	561	168	67	16	46	219	30	54
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	207	920	138	139	640	192	76	18	52	250	34	62
Added Vol:	0	0	0	0	0	0	0	0	0	11	0	0
Other Appro:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	207	920	138	139	640	192	76	18	52	261	34	62
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	207	920	138	139	640	192	76	18	52	261	34	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	207	920	138	139	640	192	76	18	52	261	34	62
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	207	920	138	139	640	192	76	18	52	261	34	62
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.74	0.26	1.00	1.54	0.46	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	2783	417	1600	2462	738	1600	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.13	0.33	0.33	0.09	0.26	0.26	0.05	0.01	0.03	0.16	0.02	0.04
Crit Moves:		****		****					****	****		

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Approved Projects (3.3)
AM Peak Hour Conditions

Level Of Service Computation Report
1994 HCM Unsignalized Method (Future Volume Alternative)

Intersection #10 Proj Ent East @ Crossroads Pkwy S

Average Delay (sec/veh): 20.6 Worst Case Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Ignore			Include			Include			Include		
Lanes:	1 0	1 0	1	0 0	1!	0 0	1 0	1 1	0	1 0	1 1	0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	8	0	160	19	1	16	8	204	4	203	680	26
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	9	0	182	22	1	18	9	233	5	231	775	30
Added Vol:	0	0	0	0	0	0	0	29	0	0	29	0
Other Appro:	60	0	7	0	0	0	0	-2	46	17	-15	0
Initial Fut:	69	0	189	22	1	18	9	260	51	249	789	30
User Adj:	1.17	1.17	0.00	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	81	0	0	25	1	21	11	304	59	291	923	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	81	0	0	25	1	21	11	304	59	291	923	35
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	89	0	0	28	1	23	12	304	59	320	923	35
Critical Gap Module:												
MoveUp Time:	3.4	xxxx	xxxxx	3.4	3.3	2.6	[illegible]	xxxx	xxxxx	2.1	xxxx	xxxxx
Critical Gp:	7.0	xxxx	xxxxx	7.0	6.5	5.5	5.5	xxxx	xxxxx	5.5	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1559	xxxx	xxxxx	1546	1605	479	958	xxxx	xxxxx	363	xxxx	xxxxx
Potent Cap.:	107	xxxx	xxxxx	109	126	792	525	xxxx	xxxxx	1095	xxxx	xxxxx
Adj Cap:	0.73	xxxx	xxxxx	0.76	0.69	1.00	1.00	xxxx	xxxxx	1.00	xxxx	xxxxx
Move Cap.:	78	xxxx	xxxxx	83	87	792	525	xxxx	xxxxx	1095	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	376.2	xxxx	xxxxx	62.3	42.1	4.7	7.0	xxxx	xxxxx	4.5	xxxx	xxxxx
LOS by Move:	F	*	A	*	*	*	B	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	138	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	36.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	E	*	*	*	*	*	*	*
ApproachDel:	376.2			36.1			[illegible]			1.1		

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Approved Projects (3.3)
AM Peak Hour Conditions

Level Of Service Computation Report
1994 HCM Unsignalized Method (Future Volume Alternative)

Intersection #12 Proj Ent West @ Workman Mill

Average Delay (sec/veh): 0.7   Worst Case Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1!	0 0	0 0	0	0 0	0 0	1	1 0	1 0	2	0 0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	60	0	7	0	0	0	0	296	46	17	838	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	68	0	8	0	0	0	0	337	52	19	955	0
Added Vol:	12	0	29	0	0	0	0	0	12	29	0	0
Other Appro:	-60	0	-7	0	0	0	0	106	-46	-17	92	0
Initial Fut:	20	0	30	0	0	0	0	443	18	31	1047	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	0	30	0	0	0	0	443	18	31	1047	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	20	0	30	0	0	0	0	443	18	31	1047	0
Adjusted Volume Module:												
Grade:		0%			0%			0%			0%	
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	22	0	33	0	0	0	0	443	18	35	1047	0
Critical Gap Module:												
MoveUp Time:	3.4	xxxx	2.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.1	xxxx	xxxxx
Critical Gp:	7.0	xxxx	5.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	5.5	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1531	xxxx	231	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	462	xxxx	xxxxx
Potent Cap.:	111	xxxx	1058	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	969	xxxx	xxxxx
Adj Cap:	0.96	xxxx	1.00	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	xxxxx
Move Cap.:	107	xxxx	1058	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	969	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	41.5	xxxx	3.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.8	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	230	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	18.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	*	*	*
ApproachDel:		18.9			0.0			0.0			0.1	

Traffic Analysis for Puente Hills Landfill EIR
Future With Approved Projects (3.3)
Mid Day Peak Hour Conditions

Scenario Report

Scenario: Mid-Day

Command: Default Command
Volume: MidDay
Geometry: Existing
Impact Fee: Default Impact Fee
Trip Generation: Mid-day
Trip Distribution: All
Paths: Default Paths
Routes: Default Routes
Configuration: Mid-day

Traffic Analysis for Puente Hills Landfill EIR
Future With Approved Projects (3.3)
Mid Day Peak Hour Conditions

Scenario Report

Scenario:	Mid-Day
Command:	Default Command
Volume:	MidDay
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	Mid-day
Trip Distribution:	All
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Mid-day

Traffic Analysis for Puente Hills Landfill EIR
Future With Approved Projects (3.3)
Mid Day Peak Hour Conditions

Trip Generation Report

Forecast for AM

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
5	MRF Empl	1.00	MRF	21.00	21.00	21	21	42	15.9
	Zone 5 Subtotal					21	21	42	15.9
6	MRF Trucks	1.00	MRF	111.00	111.00	111	111	222	84.1
	Zone 6 Subtotal					111	111	222	84.1
TOTAL	....					132	132	264	100.0

Traffic Analysis for Puente Hills Landfill EIR
Future With Approved Projects (3.3)
Mid Day Peak Hour Conditions

Trip Distribution Report

Percent Of Trips All

Zone	To Gates 2	4	6	8	12
5	26.0	3.0	48.0	3.0	20.0
6	0.0	3.0	74.0	3.0	20.0

Traffic Analysis for Puente Hills Landfill EIR
Future With Approved Projects (3.3)
Mid Day Peak Hour Conditions

Turning Movement Report
AM

Volume	Northbound			Southbound			Eastbound			Westbound			Total
Type	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Volume
#1 Crossroads Pkwy N. @ Crossroads Pkwy S.													
Base	245	0	382	0	0	0	0	152	270	250	222	0	1521
Added	3	0	92	0	0	0	0	0	3	26	0	0	124
Fry's	0	0	57	0	0	0	0	9	0	16	5	0	87
Total	248	0	531	0	0	0	0	161	273	292	227	0	1732
#2 SR-60 @ Crossroads Pkwy S.													
Base	0	0	0	222	2	283	0	274	205	146	633	0	1765
Added	0	0	0	0	0	92	0	96	26	0	30	0	244
Fry's	0	0	0	52	0	0	0	5	0	14	2	0	73
Total	0	0	0	274	2	375	0	375	231	160	665	0	2082
#3 Workman Mill/Crossroads South @ Workman Mill													
Base	5	6	5	31	0	222	153	177	5	1	231	36	871
Added	0	0	0	0	0	1	1	18	0	0	18	0	38
Other	0	0	0	0	0	25	30	31	0	0	50	0	136
Total	5	6	5	31	0	248	184	226	5	1	299	36	1045
#4 Pellissier/Workman Mill @ Workman Mill [Signal To Be Constructed]													
Base	49	0	144	0	0	0	0	173	41	223	427	0	1058
Added	0	0	1	0	0	0	0	0	0	1	0	0	2
Other	0	0	30	0	0	0	0	0	0	25	0	0	55
Total	49	0	175	0	0	0	0	173	41	249	427	0	1115
#5 Crossroads Pkwy N. @ Workman Mill													
Base	31	16	131	7	15	0	6	363	28	227	749	7	1579
Added	0	0	3	0	0	0	0	1	0	3	1	0	8
Other	0	0	5	0	0	0	0	30	0	9	25	0	69
Total	31	16	139	7	15	0	6	394	28	239	775	7	1656
#6 Peck Rd @ Workman Mill													
Base	0	516	422	93	442	0	0	0	0	317	0	112	1903
Added	0	0	4	5	0	0	0	0	0	4	0	5	18
Other	0	0	20	0	1	0	0	0	0	27	0	0	48
Total	0	516	446	98	443	0	0	0	0	348	0	117	1969
#7 605 NB @ Pellissier													
Base	0	0	0	212	0	269	113	192	0	0	978	246	2010
Added	0	0	0	0	0	0	5	0	0	0	0	0	5
Total	0	0	0	212	0	269	118	192	0	0	978	246	2015
#8 Pellissier @ Peck Rd													
Base	9	430	185	267	407	81	74	30	31	133	19	447	2112
Added	0	0	5	0	5	0	0	0	0	0	0	0	10
Total	9	430	190	267	412	81	74	30	31	133	19	447	2122

Traffic Analysis for Puente Hills Landfill EIR
Future With Approved Projects (3.3)
Mid Day Peak Hour Conditions

Volume	Northbound			Southbound			Eastbound			Westbound			Total
Type	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Volume
#9 Rooks @ Peck Rd													
Base	121	755	123	79	605	130	63	35	78	133	22	74	2217
Added	0	0	0	0	0	0	0	0	0	5	0	0	5
Total	121	755	123	79	605	130	63	35	78	138	22	74	2222
#10 Proj Ent East @ Crossroads Pkwy S.													
Base	14	9	293	33	6	15	13	217	6	401	227	36	1269
Added	3	0	108	0	0	0	0	14	3	108	14	0	250
Other	66	0	13	0	0	0	0	-8	39	18	-16	0	112
Total	83	9	414	33	6	15	13	223	48	527	225	36	1631
#12 Proj Ent West @ Workman Mill													
Base	75	0	15	0	0	0	0	283	44	21	347	3	788
Added	6	0	15	0	0	0	0	3	6	15	3	0	48
Other	-66	0	-13	0	0	0	0	74	-39	-18	93	0	31
Total	15	0	17	0	0	0	0	360	11	18	443	3	867

Traffic Analysis for Puente Hills Landfill EIR
Future With Approved Projects (3.3)
Mid Day Peak Hour Conditions

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/C	Future LOS	Future Del/ Veh	Future V/C	Change in
# 1 Crossroads Pkwy N. @ Crossroad	D	xxxxx	0.816	E	xxxxx	0.969	+ 0.154 V/C
# 2 SR-60 @ Crossroads Pkwy S.	A	xxxxx	0.560	A	xxxxx	0.495	-0.065 V/C
# 3 Workman Mill/Crossroads South	A	xxxxx	0.382	A	xxxxx	0.437	+ 0.055 V/C
# 4 Pellissier/Workman Mill @ Work	A	xxxxx	0.324	A	xxxxx	0.340	+ 0.016 V/C
# 5 Crossroads Pkwy N. @ Workman M	A	xxxxx	0.424	A	xxxxx	0.443	+ 0.020 V/C
# 6 Peck Rd @ Workman Mill	A	xxxxx	0.422	A	xxxxx	0.440	+ 0.018 V/C
# 7 605 NB @ Pellissier	C	xxxxx	0.721	C	xxxxx	0.724	+ 0.003 V/C
# 8 Pellissier @ Peck Rd	D	xxxxx	0.803	D	xxxxx	0.805	+ 0.002 V/C
# 9 Rooks @ Peck Rd	A	xxxxx	0.556	A	xxxxx	0.559	+ 0.003 V/C
# 10 Proj Ent East @ Crossroads Pkw	E	5.3	0.000	F	123.8	0.000	+ 0.000 V/C
# 12 Proj Ent West @ Workman Mill	C	1.4	0.000	B	0.4	0.000	+ 0.000 V/C

Traffic Analysis for Puente Hills Landfill EIR
Future With Approved Projects (3.3)
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Crossroads Pkwy N. @ Crossroads Pkwy S.

Cycle (sec):	100	Critical Vol./Cap. (X):	0.816
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	70	Level Of Service:	D

Approach:	North Bound	South Bound	East Bound	West Bound
Control:	Protected	Permitted	Permitted	Permitted
Rights:	Include	Include	Include	Include
Lanes:	2 0 0 0 1	0 0 0 0 0	0 0 1 1 0	1 0 2 0 0

Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	215	0	335	0	0	0	0	133	237	219	195	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	245	0	382	0	0	0	0	152	270	250	222	0
User Adj:	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	311	0	485	0	0	0	0	193	343	317	282	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	311	0	485	0	0	0	0	193	343	317	282	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	311	0	485	0	0	0	0	193	343	317	282	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	2.00	0.00
Final Sat.:	3200	0	1600	0	0	0	0	1600	1600	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.10	0.00	0.30	0.00	0.00	0.00	0.00	0.12	0.21	0.20	0.09	0.00
Crit Moves:			****						****	****		

Traffic Analysis for Puente Hills Landfill EIR
Future With Approved Projects (3.3)
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 SR-60 @ Crossroads Pkwy S.

Cycle (sec):	100	Critical Vol./Cap. (X):	0.560
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 0 0			1 1 0 0 1			0 0 2 0 1			1 0 2 0 0		
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	0	0	0	195	2	248	0	240	180	128	555	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	0	0	222	2	283	0	274	205	146	633	0
User Adj:	1.30	1.30	1.30	1.30	1.30	0.00	1.30	1.30	0.00	1.30	1.30	1.30
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	0	0	289	3	0	0	356	0	190	823	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	289	3	0	0	356	0	190	823	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	0	0	0	289	3	0	0	356	0	190	823	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.98	0.02	1.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	0	0	0	3167	33	1600	0	3200	1600	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.09	0.09	0.00	0.00	0.11	0.00	0.12	0.26	0.00
Crit Moves:				****				****			****	

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------------------------------------------------------------------------------
           Traffic Analysis for Puente Hills Landfill EIR
                Future With Approved Projects (3.3)
                   Mid Day Peak Hour Conditions
------------------------------------------------------------------------------

                Level Of Service Computation Report
     ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
******************************************************************************
Intersection #3 Workman Mill/Crossroads South @ Workman Mill
******************************************************************************
Cycle (sec):         100             Critical Vol./Cap. (X):         0.382
Loss Time (sec):      10 (Y+R =  4 sec) Average Delay (sec/veh):    xxxxxx
Optimal Cycle:        28             Level Of Service:                   A
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Permitted        Permitted
Rights:          Include          Include          Include          Include
Min. Green:    0    0    0     0    0    0     0    0    0     0    0    0
Lanes:        1  0  1  0  1   1  0  0  1  1   1  0  1  1  0   0  1  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:      4    5    4    27    0   195   134  155    4     1  203   32
Growth Adj:  1.14 1.14 1.14  1.14 1.14 1.14  1.14 1.14 1.14  1.14 1.14 1.14
Initial Bse:   5    6    5    31    0   222   153  177    5     1  231   36
User Adj:    1.12 1.12 1.12  1.12 1.12 1.12  1.12 1.12 1.12  1.12 1.12 1.12
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:    5    6    5    34    0   249   171  198    5     1  259   41
Reduct Vol:    0    0    0     0    0     0     0    0    0     0    0    0
Reduced Vol:   5    6    5    34    0   249   171  198    5     1  259   41
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:    5    6    5    34    0   249   171  198    5     1  259   41
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600 1600  1600 1600 1600  1600 1600 1600  1600 1600 1600
Adjustment:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Lanes:       1.00 1.00 1.00  1.00 0.00 2.00  1.00 1.95 0.05  0.01 1.72 0.27
Final Sat.:  1600 1600 1600  1600    0 3200  1600 3121   79    11 2753  436
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00 0.00  0.02 0.00 0.08  0.11 0.06 0.06  0.09 0.09 0.09
Crit Moves:  ****                      ****  ****                   ****
******************************************************************************
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Traffic Analysis for Puente Hills Landfill EIR
Future With Approved Projects (3.3)
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Pellissier/Workman Mill @ Workman Mill [Signal To Be Constructed

Cycle (sec):	100	Critical Vol./Cap. (X):	0.324
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Ignore			Include			Ignore			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:		1 0 0 0 1			0 0 0 0 0			0 0 1 1 0			1 0 2 0 0	
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	43	0	126	0	0	0	0	152	36	196	375	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	49	0	144	0	0	0	0	173	41	223	427	0
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	49	0	0	0	0	0	0	173	0	223	427	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	49	0	0	0	0	0	0	173	0	223	427	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	49	0	0	0	0	0	0	173	0	223	427	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00	2.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	3200	0	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.14	0.13	0.00
Crit Moves:	****							****		****		

Traffic Analysis for Puente Hills Landfill EIR
Future With Approved Projects (3.3)
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Crossroads Pkwy N @ Workman Mill

Cycle (sec):	100	Critical Vol./Cap. (X):	0.424
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 0 1 1			0 1 0 0 0			1 0 1 1 0			1 0 1 1 0		
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	27	14	115	6	13	0	5	318	25	199	657	6
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	31	16	131	7	15	0	6	363	28	227	749	7
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	31	16	131	7	15	0	6	363	28	227	749	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	16	131	7	15	0	6	363	28	227	749	7
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	31	16	131	7	15	0	6	363	28	227	749	7
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.22	1.78	0.32	0.68	0.00	1.00	1.86	0.14	1.00	1.98	0.02
Final Sat.:	1600	348	2852	509	1091	0	1600	2971	229	1600	3170	30
Capacity Analysis Module:												
Vol/Sat:	0.02	0.05	0.05	0.01	0.01	0.00	0.00	0.12	0.12	0.14	0.24	0.24
Crit Moves:		****		****				****		****		

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-------------------------------------------------------------------------------
                 Traffic Analysis for Puente Hills Landfill EIR
                      Future With Approved Projects (3.3)
                         Mid Day Peak Hour Conditions
-------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #6 Peck Rd @ Workman Mill
********************************************************************************
Cycle (sec):          100               Critical Vol./Cap. (X):         0.422
Loss Time (sec):       10 (Y+R =  4 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:         29               Level Of Service:                   A
********************************************************************************
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:         Permitted        Permitted        Protected        Protected
Rights:             Ovl            Include          Include          Include
Min. Green:     0    0     0    0    0     0    0    0     0    0    0     0
Lanes:         0  0  3  0  1   1  0  2  0  0   0  0  0  0  0   1  0  1! 0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:       0  453   370   82  388     0    0    0     0  278    0    98
Growth Adj:  1.14 1.14  1.14 1.14 1.14  1.14 1.14 1.14  1.14 1.14 1.14  1.14
Initial Bse:    0  516   422   93  442     0    0    0     0  317    0   112
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0  516   422   93  442     0    0    0     0  317    0   112
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0  516   422   93  442     0    0    0     0  317    0   112
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0  516   422   93  442     0    0    0     0  317    0   112
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600 1600 1600  1600 1600 1600  1600 1600 1600  1600
Adjustment:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Lanes:       0.00 3.00  1.00 1.00 2.00  0.00 0.00 0.00  0.00 1.48 0.00  0.52
Final Sat.:     0 4800  1600 1600 3200     0    0    0     0 2365    0   835
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.11  0.26 0.06 0.14  0.00 0.00 0.00  0.00 0.13 0.00  0.13
Crit Moves:             ****  ****                             ****
********************************************************************************
```

Traffic Analysis for Puente Hills Landfill EIR
Future With Approved Projects (3.3)
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 605 NB @ Pellissier

Cycle (sec):	100	Critical Vol./Cap. (X):	0.721
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	1 0	0	0 1	1 0	2	0 0	0 0	1	1 0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	0	0	0	186	0	236	99	168	0	0	858	216
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	0	0	212	0	269	113	192	0	0	978	246
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	212	0	269	113	192	0	0	978	246
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	212	0	269	113	192	0	0	978	246
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	212	0	269	113	192	0	0	978	246
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.60	0.40
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	2557	643
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.17	0.07	0.06	0.00	0.00	0.38	0.38
Crit Moves:						****	****				****	

Traffic Analysis for Puente Hills Landfill EIR
Future With Approved Projects (3.3)
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Pellissier @ Peck Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.803
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1 1 0			1 0 1 1 0			0 1 0 0 1			0 1 0 0 1		
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	8	377	162	234	357	71	65	26	27	117	17	392
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	9	430	185	267	407	81	74	30	31	133	19	447
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	430	185	267	407	81	74	30	31	133	19	447
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	430	185	267	407	81	74	30	31	133	19	447
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	9	430	185	267	407	81	74	30	31	133	19	447
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.40	0.60	1.00	1.67	0.33	0.71	0.29	1.00	0.88	0.12	1.00
Final Sat.:	1600	2237	963	1600	2669	531	1138	462	1600	1400	200	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.19	0.19	0.17	0.15	0.15	0.06	0.07	0.02	0.10	0.10	0.28
Crit Moves:		****		****			****					****

```
-------------------------------------------------------------------------------
                 Traffic Analysis for Puente Hills Landfill EIR
                      Future With Approved Projects (3.3)
                        Mid Day Peak Hour Conditions
-------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #9 Rooks @ Peck Rd
********************************************************************************
Cycle (sec):          100               Critical Vol./Cap. (X):        0.556
Loss Time (sec):       10 (Y+R =  4 sec) Average Delay (sec/veh):       xxxxxx
Optimal Cycle:         37               Level Of Service:                  A
********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Permitted        Permitted
Rights:          Include          Include          Include          Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Lanes:        1  0  1  1  0   1  0  1  1  0   1  0  1  1  0   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:     106  662   108    69  531   114    55   31    68   117   19    65
Growth Adj:  1.14 1.14  1.14  1.14 1.14  1.14  1.14 1.14  1.14  1.14 1.14  1.14
Initial Bse:  121  755   123    79  605   130    63   35    78   133   22    74
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   121  755   123    79  605   130    63   35    78   133   22    74
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  121  755   123    79  605   130    63   35    78   133   22    74
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:   121  755   123    79  605   130    63   35    78   133   22    74
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 1.72  0.28  1.00 1.65  0.35  1.00 1.00  1.00  1.00 1.00  1.00
Final Sat.:  1600 2752   448  1600 2634   566  1600 1600  1600  1600 1600  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.08 0.27  0.27  0.05 0.23  0.23  0.04 0.02  0.05  0.08 0.01  0.05
Crit Moves:       ****        ****                         ****  ****
********************************************************************************
```

```
------------------------------------------------------------------------------
              Traffic Analysis for Puente Hills Landfill EIR
                  Future With Approved Projects (3.3)
                     Mid Day Peak Hour Conditions
------------------------------------------------------------------------------
                  Level Of Service Computation Report
         1994 HCM Unsignalized Method (Base Volume Alternative)
******************************************************************************
Intersection #10 Proj Ent East @ Crossroads Pkwy S.
******************************************************************************
Average Delay (sec/veh):       5.3           Worst Case Level Of Service:    E
******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:           Ignore           Include          Include          Include
Lanes:        1  0  1  0  1    0  0  1! 0  0    1  0  1  1  0    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:      12     8   257    29     5    13    11   190     5   352   199    32
Growth Adj:  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14
Initial Bse:   14     9   293    33     6    15    13   217     6   401   227    36
User Adj:    1.30  1.30  0.00  1.30  1.30  1.30  1.30  1.30  1.30  1.30  1.30  1.30
PHF Adj:     1.00  1.00  0.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:    18    12     0    43     7    19    16   282     7   522   295    47
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Final Vol.:    18    12     0    43     7    19    16   282     7   522   295    47
------------|---------------||---------------||---------------||---------------|
Adjusted Volume Module:
Grade:             0%               0%               0%               0%
% Cycle/Cars:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
% Truck/Comb:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
PCE Adj:     1.10  1.10  1.10  1.10  1.10  1.10  1.10  1.00  1.00  1.10  1.00  1.00
Cycl/Car PCE:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Trck/Cmb PCE:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Adj Vol.:      20    13     0    47     8    21    18   282     7   574   295    47
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
MoveUp Time:  3.4   3.3 xxxxx   3.4   3.3   2.6   2.1  xxxx xxxxx   2.1  xxxx xxxxx
Critical Gp:  7.0   6.5 xxxxx   7.0   6.5   5.5   5.5  xxxx xxxxx   5.5  xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: 1122  1166 xxxxx  1144  1146   171   342  xxxx xxxxx   289  xxxx xxxxx
Potent Cap.:  203   227 xxxxx   196   233  1134  1123  xxxx xxxxx  1199  xxxx xxxxx
Adj Cap:     0.58  0.51 xxxxx  0.57  0.51  1.00  1.00  xxxx xxxxx  1.00  xxxx xxxxx
Move Cap.:    117   116 xxxxx   112   120  1134  1123  xxxx xxxxx  1199  xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del: 36.2  34.4 xxxxx  51.9  32.1   3.2   3.3  xxxx xxxxx   5.3  xxxx xxxxx
LOS by Move:    E     E     A     *     *     *     A     *     *     B     *     *
Movement:      LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx  xxxx xxxxx  xxxx   150 xxxxx  xxxx  xxxx xxxxx  xxxx  xxxx xxxxx
Shrd StpDel:xxxxx  xxxx xxxxx xxxxx  36.3 xxxxx xxxxx  xxxx xxxxx xxxxx  xxxx xxxxx
Shared LOS:     *     *     *     *     E     *     *     *     *     *     *     *
ApproachDel:       35.5             36.3              0.2              3.3
```

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---------------------------------------------------------------------------
              Traffic Analysis for Puente Hills Landfill EIR
                  Future With Approved Projects (3 3)
                    Mid Day Peak Hour Conditions
---------------------------------------------------------------------------
                  Level Of Service Computation Report
        1994 HCM Unsignalized Method (Base Volume Alternative)
***************************************************************************
Intersection #12 Proj Ent West @ Workman Mill
***************************************************************************
Average Delay (sec/veh):       1.4        Worst Case Level Of Service:    C
***************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:          Include          Include          Include          Include
Lanes:        0  0  1! 0  0   0  0  0  0  0   0  0  1  1  0   1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:      66    0    13    0    0     0    0  248    39   18  304     3
Growth Adj:  1.14 1.14  1.14 1.14 1.14  1.14 1.14 1.14  1.14 1.14 1.14  1.14
Initial Bse:   75    0    15    0    0     0    0  283    44   21  347     3
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:    75    0    15    0    0     0    0  283    44   21  347     3
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Final Vol.:    75    0    15    0    0     0    0  283    44   21  347     3
------------|---------------||---------------||---------------||---------------|
Adjusted Volume Module:
Grade:             0%               0%               0%               0%
% Cycle/Cars:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
% Truck/Comb:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
PCE Adj:     1.10 1.10  1.10 1.10 1.10  1.10 1.10 1.00  1.00 1.10 1.00  1.00
Cycl/Car PCE:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Trck/Cmb PCE:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Adj Vol.:      83    0    16    0    0     0    0  283    44   23  347     3
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
MoveUp Time:  3.4 xxxx   2.6 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.1 xxxx xxxxx
Critical Gp:  7.0 xxxx   5.5 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   5.5 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  672 xxxx   164  xxxx xxxx xxxxx  xxxx xxxx xxxxx   327 xxxx xxxxx
Potent Cap.:  394 xxxx  1144  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1144 xxxx xxxxx
Adj Cap:     0.98 xxxx  1.00  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1.00 xxxx xxxxx
Move Cap.:    386 xxxx  1144  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1144 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del: 11.6 xxxx   3.2 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   3.2 xxxx xxxxx
LOS by Move:    *    *     *    *    *     *    *    *     *    A    *     *
Movement:     LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx  433 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Shrd StpDel:xxxxx 10.2 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    C     *    *    *     *    *    *     *    *    *     *
ApproachDel:       10.2              0.0              0.0              0.2
```

Traffic Analysis for Puente Hills Landfill
Future With Other Approved Projects (3.3)
PM Peak Hour Conditions

Scenario Report

Scenario:	Fut+Other Projects PM
Command:	Fut+Other Projects PM
Volume:	PM
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	PM
Trip Distribution:	All
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Fut+Other Projects PM

Traffic Analysis for Puente Hills Landfill
Future With Other Approved Projects (3.3)
PM Peak Hour Conditions

Trip Generation Report
Project Trips
Forecast for PM

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
5	MRF	1.00	MRF	42.00	42.00	42	42	84	100.0
	Zone 5 Subtotal					42	42	84	100.0
TOTAL						42	42	84	100.0

Traffic Analysis for Puente Hills Landfill
Future With Other Approved Projects (3.3)
PM Peak Hour Conditions

Trip Generation Report
Project Trips
Forecast for PM

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
5	MRF	1.00	MRF	42.00	42.00	42	42	84	100.0
	Zone 5 Subtotal					42	42	84	100.0
TOTAL						42	42	84	100.0

Traffic Analysis for Puente Hills Landfill
Future With Other Approved Projects (3.3)
PM Peak Hour Conditions

Trip Distribution Report

Percent Of Trips All

Zone	To Gates 2	4	6	8	12
5	26.0	3.0	48.0	3.0	20.0

Traffic Analysis for Puente Hills Landfill
Future With Other Approved Projects (3.3)
PM Peak Hour Conditions

Turning Movement Report
PM

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#1 Crossroads Pkwy N. @ Crossroads Pkwy S.													
Base	257	0	129	0	0	0	0	186	170	168	180	0	1089
Added	0	0	20	0	0	0	0	0	0	8	0	0	28
Other	0	0	183	0	0	0	0	30	0	107	30	0	350
Total	257	0	332	0	0	0	0	216	170	283	210	0	1467
#2 SR-60 @ Crossroads Pkwy S.													
Base	0	0	0	198	7	48	0	137	528	125	262	0	1305
Added	0	0	0	0	0	20	0	20	8	0	8	0	56
Other	0	0	0	168	0	0	0	15	0	92	15	0	290
Total	0	0	0	366	7	68	0	172	536	217	285	0	1651
#3 Workman Mill/Crossroads South @ Workman Mill													
Base	15	14	9	67	8	250	614	547	6	0	258	85	1873
Added	0	0	0	0	0	0	0	29	0	0	29	0	58
Other	0	0	0	0	0	41	29	14	0	0	15	0	99
Total	15	14	9	67	8	291	643	590	6	0	302	85	2030
#4 Pellissier/Workman Mill @ Workman Mill (Signal To Be Constructed)													
Base	18	0	722	0	0	0	0	125	276	471	286	0	1898
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	29	0	0	0	0	0	0	41	0	0	70
Total	18	0	751	0	0	0	0	125	276	512	286	0	1968
#5 Crossroads Pkwy N. @ Workman Mill													
Base	91	7	534	11	18	3	1	1141	15	140	605	9	2576
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	30	0	0	0	0	29	0	30	41	0	130
Total	91	7	564	11	18	3	1	1170	15	170	646	9	2706
#6 Peck Rd @ Workman Mill													
Base	0	806	799	99	557	0	0	0	0	320	0	73	2655
Added	0	0	1	11	0	0	0	0	0	1	0	11	24
Other	0	1	16	0	0	0	0	0	0	56	0	0	73
Total	0	807	816	110	557	0	0	0	0	377	0	84	2752
#7 605 NB @ Pellissier													
Base	0	0	0	467	0	236	197	606	0	0	383	130	2020
Added	0	0	0	0	0	0	11	0	0	0	0	0	11
Total	0	0	0	467	0	236	208	606	0	0	383	130	2031
#8 Pellissier @ Peck Rd													
Base	7	567	357	388	536	75	54	56	24	105	8	585	2760
Added	0	0	11	0	11	0	0	0	0	0	0	0	22
Other	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	7	568	368	388	547	75	54	56	24	105	8	585	2783

Traffic Analysis for Puente Hills Landfill
Future With Other Approved Projects (3.3)
PM Peak Hour Conditions

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#9 Rooks @ Peck Rd													
Base	44	822	262	80	985	57	189	31	123	78	34	145	2850
Added	0	0	0	0	0	0	0	0	0	11	0	0	11
Total	44	822	262	80	985	57	189	31	123	89	34	145	2861
#10 Proj Ent East @ Crossroads Pkwy S.													
Base	10	6	60	50	5	14	23	591	5	11	261	50	1085
Added	0	0	0	0	0	0	0	29	0	0	29	0	58
Other	0	0	1	0	0	0	0	14	0	0	15	0	30
Total	10	6	61	50	5	14	23	634	5	11	305	50	1173
#12 Proj Ent West @ Workman Mill													
Base	0	0	1	0	0	0	0	1146	0	0	543	0	1689
Added	12	0	29	0	0	0	0	0	12	29	0	0	82
Other	0	0	-1	0	0	0	0	44	0	0	56	0	99
Total	12	0	29	0	0	0	0	1190	12	29	599	0	1870

Traffic Analysis for Puente Hills Landfill
Future With Other Approved Projects (3.3)
PM Peak Hour Conditions

Intersection Volume Report
Base Volume Alternative

Node	Intersection	Northbound L	Northbound T	Northbound R	Southbound L	Southbound T	Southbound R	Eastbound L	Eastbound T	Eastbound R	Westbound L	Westbound T	Westbound R
1	Crossroads Pk	257	0	129	0	0	0	0	186	170	168	180	0
2	SR-60 @ Cross	0	0	0	198	7	48	0	137	528	125	262	0
3	Workman Mill/	15	14	9	67	8	250	614	547	6	0	258	85
4	Pellissier/Wo	18	0	722	0	0	0	0	125	276	471	286	0
5	Crossroads Pk	91	7	534	11	18	3	1	1141	15	140	605	9
6	Peck Rd @ Wor	0	806	799	99	557	0	0	0	0	320	0	73
7	605 NB @ Pell	0	0	0	467	0	236	197	606	0	0	383	130
8	Pellissier @	7	567	357	388	536	75	54	56	24	105	8	585
9	Rooks @ Peck	44	822	262	80	985	57	189	31	123	78	34	145
10	Proj Ent East	10	6	60	50	5	14	23	591	5	11	261	50
12	Proj Ent West	0	0	1	0	0	0	0	1146	0	0	543	0

Traffic Analysis for Puente Hills Landfill
Future With Other Approved Projects (3.3)
PM Peak Hour Conditions

Intersection Volume Report
Future Volume Alternative

Node	Intersection	Northbound L	Northbound T	Northbound R	Southbound L	Southbound T	Southbound R	Eastbound L	Eastbound T	Eastbound R	Westbound L	Westbound T	Westbound R
1	Crossroads Pk	257	0	332	0	0	0	0	216	170	283	210	0
2	SR-60 @ Cross	0	0	0	366	7	68	0	172	536	217	285	0
3	Workman Mill/	15	14	9	67	8	291	643	590	6	0	302	85
4	Pellissier/Wo	18	0	751	0	0	0	0	125	276	512	286	0
5	Crossroads Pk	91	7	564	11	18	3	1	1170	15	170	646	9
6	Peck Rd @ Wor	0	807	816	110	557	0	0	0	0	377	0	84
7	605 NB @ Pell	0	0	0	467	0	236	208	606	0	0	383	130
8	Pellissier @	7	568	368	388	547	75	54	56	24	105	8	585
9	Rooks @ Peck	44	822	262	80	985	57	189	31	123	89	34	145
10	Proj Ent East	10	6	61	50	5	14	23	634	5	11	305	50
12	Proj Ent West	12	0	29	0	0	0	0	1190	12	29	599	0

Traffic Analysis for Puente Hills Landfill
Future With Other Approved Projects (3.3)
PM Peak Hour Conditions

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Crossroads Pkwy N. @ Crossroad	A	xxxxx	0.397	B	xxxxx	0.605	+ 0.208 V/C
# 2 SP-60 @ Crossroads Pkwy S.	A	xxxxx	0.285	A	xxxxx	0.406	+ 0.121 V/C
# 3 Workman Mill/Crossroads South	B	xxxxx	0.681	C	xxxxx	0.726	+ 0.045 V/C
# 4 Pellissier/Workman Mill @ Work	A	xxxxx	0.445	A	xxxxx	0.470	+ 0.026 V/C
# 5 Crossroads Pkwy N. @ Workman M	C	xxxxx	0.736	C	xxxxx	0.773	+ 0.037 V/C
# 6 Peck Rd @ Workman Mill	B	xxxxx	0.661	B	xxxxx	0.679	+ 0.017 V/C
# 7 605 NB @ Pellissier	B	xxxxx	0.675	B	xxxxx	0.682	+ 0.007 V/C
# 8 Pellissier @ Peck Rd	F	xxxxx	1.066	F	xxxxx	1.069	+ 0.004 V/C
# 9 Rooks @ Peck Rd	B	xxxxx	0.697	B	xxxxx	0.697	+ 0.000 V/C
# 10 Proj Ent East @ Crossroads Pkw	C	1.4	0.000	C	1.4	0.000	+ 0.000 V/C
# 12 Proj Ent West @ Workman Mill	B	0.0	0.000	D	0.7	0.000	+ 0.000 V/C

Traffic Analysis for Puente Hills Landfill
Future With Other Approved Projects (3.3)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Crossroads Pkwy N. @ Crossroads Pkwy S.

Cycle (sec): 100 Critical Vol./Cap. (X): 0.605
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 40 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0		0	0	0	0	0
Lanes:	2 0 0 0 1			0 0 0 0 0			0 0 1 1 0			1 0 2 0 0		
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	225	0	113	0	0	0	0	163	149	147	158	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	257	0	129	0	0	0	0	186	170	168	180	0
Added Vol:	0	0	20	0	0	0	0	0	0	5	0	0
Other Appro:	0	0	183	0	0	0	0	30	0	107	30	0
Initial Fut:	257	0	332	0	0	0	0	216	170	283	210	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	257	0	332	0	0	0	0	216	170	283	210	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	257	0	332	0	0	0	0	216	170	283	210	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	257	0	332	0	0	0	0	216	170	283	210	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	1.12	0.88	1.00	2.00	0.00
Final Sat.:	3200	0	1600	0	0	0	0	1791	1409	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.21	0.00	0.00	0.00	0.00	0.12	0.12	0.18	0.07	0.00
Crit Moves:			****					****		****		

Traffic Analysis for Puente Hills Landfill
Future With Other Approved Projects (3.3)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 SR-60 @ Crossroads Pkwy S.

Cycle (sec): 100 Critical Vol./Cap. (X): 0.406
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 29 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 0 0			1 1 0 0 1			0 0 2 0 1			1 0 2 0 0		
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	0	0	0	174	6	42	0	120	463	110	230	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	0	0	198	7	48	0	137	528	125	262	0
Added Vol:	0	0	0	0	0	20	0	20	8	0	8	0
Other Appro:	0	0	0	168	0	0	0	15	0	92	15	0
Initial Fut:	0	0	0	366	7	68	0	172	536	217	285	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	0	0	366	7	0	0	172	0	217	285	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	366	7	0	0	172	0	217	285	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	0	0	0	366	7	0	0	172	0	217	285	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.96	0.04	1.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	0	0	0	3140	60	1600	0	3200	1600	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.12	0.12	0.00	0.00	0.05	0.00	0.14	0.09	0.00
Crit Moves:				****				****		****		

Traffic Analysis for Puente Hills Landfill
Future With Other Approved Projects (3.3)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Workman Mill/Crossroads South @ Workman Mill

Cycle (sec): 100 Critical Vol./Cap. (X): 0.726
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 53 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1 0 1			1 0 0 1 1			1 0 1 1 0			0 0 1 1 0		
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	13	12	8	59	7	219	539	480	5	0	226	75
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	15	14	9	67	8	250	614	547	6	0	258	85
Added Vol:	0	0	0	0	0	0	0	29	0	0	29	0
Other Appro:	0	0	0	0	0	41	29	14	0	0	15	0
Initial Fut:	15	14	9	67	8	291	643	590	6	0	302	85
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	15	14	9	67	8	291	643	590	6	0	302	85
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	14	9	67	8	291	643	590	6	0	302	85
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	15	14	9	67	8	291	643	590	6	0	302	85
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.05	1.95	1.00	1.98	0.02	0.00	1.56	0.44
Final Sat.:	1600	1600	1600	1600	86	3114	1600	3168	32	0	2497	703
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.04	0.09	0.09	0.40	0.19	0.19	0.00	0.12	0.12
Crit Moves:	****				****		****				****	

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Traffic Analysis for Puente Hills Landfill
Future With Other Approved Projects (3.3)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Pellissier/Workman Mill @ Workman Mill (Signal To Be Constructed

Cycle (sec): 100 Critical Vol./Cap. (X): 0.470
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 32 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 0	1	0 0	0 0	0	0 0	1 1	0	1 0	2 0	0
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	16	0	633	0	0	0	0	110	242	413	251	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	18	0	722	0	0	0	0	125	276	471	286	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Other Appro:	0	0	29	0	0	0	0	0	0	41	0	0
Initial Fut:	18	0	751	0	0	0	0	125	276	512	286	0
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	18	0	0	0	0	0	0	125	0	512	286	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	0	0	0	0	0	0	125	0	512	286	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	18	0	0	0	0	0	0	125	0	512	286	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00	2.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	3200	0	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.32	0.09	0.00
Crit Moves:	****							****		****		

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Traffic Analysis for Puente Hills Landfill
Future With Other Approved Projects (3.3)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Crossroads Pkwy N. @ Workman Mill

Cycle (sec): 100 Critical Vol./Cap. (X): 0.773
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 61 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	1	0 0	1! 0	0	[illegible]	[illegible]	[illegible]	1 0	1 1	0
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	80	6	468	10	16	3	[illegible]	100[illegible]	[illegible]	123	531	8
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	[illegible]	[illegible]	[illegible]	1.14	1.14	1.14
Initial Bse:	91	7	534	11	18	3	1	114[illegible]	[illegible]	140	605	9
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Other Appro:	0	0	30	0	0	0	0	29	0	30	41	0
Initial Fut:	91	7	564	11	18	3	1	1170	15	170	646	9
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	[illegible]	[illegible]	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	[illegible]	1.00	[illegible]	1.00	1.00	1.00
PHF Volume:	91	7	564	11	18	0	[illegible]	1170	15	170	646	9
Reduct Vol:	0	0	0	0	0	0	0	0	[illegible]	0	0	0
Reduced Vol:	91	7	564	11	18	0	[illegible]	[illegible]	15	170	646	9
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	[illegible]	[illegible]	[illegible]	[illegible]	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	[illegible]	[illegible]	1.00	1.00	1.00
Final Vol.:	91	7	564	11	18	0	[illegible]	117[illegible]	15	170	646	9
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	[illegible]	1600	[illegible]	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	[illegible]	[illegible]	[illegible]	1.00	1.00	1.00
Lanes:	1.00	0.02	1.98	0.38	0.62	0.00	1.00	[illegible]	[illegible]	1.00	1.97	0.03
Final Sat.:	1600	39	3161	607	993	0	1600	[illegible]	41	1600	3156	44
Capacity Analysis Module:												
Vol/Sat:	0.06	0.18	0.18	0.02	0.02	0.00	0.00	[illegible]	0.37	0.11	0.20	0.20
Crit Moves:		****		****				****		****		

Traffic Analysis for Puente Hills Landfill
Future With Other Approved Projects (3.3)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Peck Rd @ Workman Mill

Cycle (sec):	100	Critical Vol./Cap. (X):	0.679
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	3	0 1	1 0	2	0 0	0 0	0	0 0	1 0	1!	0 0
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	0	707	701	87	489	0	0	0	0	281	0	64
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	806	799	99	557	0	0	0	0	320	0	73
Added Vol:	0	0	1	11	0	0	0	0	0	1	0	11
Other Appro:	0	1	16	0	0	0	0	0	0	56	0	0
Initial Fut:	0	807	816	110	557	0	0	0	0	377	0	84
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	807	816	110	557	0	0	0	0	377	0	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	807	816	110	557	0	0	0	0	377	0	84
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	807	816	110	557	0	0	0	0	377	0	84
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.64	0.00	0.36
Final Sat.:	0	4800	1600	1600	3200	0	0	0	0	2617	0	583
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.51	0.07	0.17	0.00	0.00	0.00	0.00	0.14	0.00	0.14
Crit Moves:			****	****						****		

Traffic Analysis for Puente Hills Landfill
Future With Other Approved Projects (3.3)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 605 NB @ Pellissier

Cycle (sec):	100	Critical Vol./Cap. (X):	0.682
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	1 0	0	0 1	1 0	2	0 0	0 0	1	1 0
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	0	0	0	410	0	207	173	532	0	0	336	114
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	0	0	467	0	236	197	606	0	0	383	130
Added Vol:	0	0	0	0	0	0	11	0	0	0	0	0
Other Appro:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	467	0	236	208	606	0	0	383	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	467	0	236	208	606	0	0	383	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	467	0	236	208	606	0	0	383	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	467	0	236	208	606	0	0	383	130
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.49	0.51
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	2389	811
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.29	0.00	0.15	0.13	0.19	0.00	0.00	0.16	0.16
Crit Moves:				****			****				****	

Traffic Analysis for Puente Hills Landfill
Future With Other Approved Projects (3.3)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Pellissier @ Peck Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	1.069
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 1	0	1 0	1 1	0	0 1	0 0	1	0 1	0 0	1
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	6	497	313	340	470	66	47	49	21	92	7	513
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	7	567	357	388	536	75	54	56	24	105	8	585
Added Vol:	0	0	11	0	11	0	0	0	0	0	0	0
Other Appro:	0	1	0	0	0	0	0	0	0	0	0	0
Initial Fut:	7	568	368	388	547	75	54	56	24	105	8	585
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	7	568	368	388	547	75	54	56	24	105	8	585
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	568	368	388	547	75	54	56	24	105	8	585
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	7	568	368	388	547	75	54	56	24	105	8	585
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.21	0.79	1.00	1.76	0.24	0.49	0.51	1.00	0.93	0.07	1.00
Final Sat.:	1600	1942	1258	1600	2814	386	785	815	1600	1487	113	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.29	0.29	0.24	0.19	0.19	0.07	0.07	0.02	0.07	0.07	0.37
Crit Moves:		****		****			****					****

Traffic Analysis for Puente Hills Landfill
Future With Other Approved Projects (3.3)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Rooks @ Peck Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.697
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 0	1	1 0	1 0	1
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	39	721	230	70	864	50	156	27	108	68	30	127
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	44	822	262	80	985	57	189	31	123	78	34	145
Added Vol:	0	0	0	0	0	0	0	0	0	11	0	0
Other Appro:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	44	822	262	80	985	57	189	31	123	89	34	145
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	44	822	262	80	985	57	189	31	123	89	34	145
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	44	822	262	80	985	57	189	31	123	89	34	145
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	44	822	262	80	985	57	189	31	123	89	34	145
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.52	0.48	1.00	1.89	0.11	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	2427	773	1600	3025	175	1600	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.34	0.34	0.05	0.33	0.33	0.12	0.02	0.08	0.06	0.02	0.09
Crit Moves:		****		****			****					****

```
--------------------------------------------------------------------------------
                 Traffic Analysis for Puente Hills Landfill
                  Future With Other Approved Projects (3.3)
                         PM Peak Hour Conditions
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
           1994 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #10 Proj Ent East @ Crossroads Pkwy S.
********************************************************************************
Average Delay (sec/veh):       1.4        Worst Case Level Of Service:        C
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:         Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:            Ignore          Include          Include          Include
Lanes:        1   0  1  0  1   0  0  1! 0  0   1  0  1  1  0   1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour
Base Vol:       9     5    53    44     4    12    20   518     4    10   229    44
Growth Adj:  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14
Initial Bse:   10     6    60    50     5    14    23   591     5    11   261    50
Added Vol:      0     0     0     0     0     0     0    29     0     0    29     0
Other Appro:    0     0     1     0     0     0     0    14     0     0    15     0
Initial Fut:   10     6    61    50     5    14    23   634     5    11   305    50
User Adj:    1.00  1.00  0.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     1.00  1.00  0.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:    10     6     0    50     5    14    23   634     5    11   305    50
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Final Vol.:    10     6     0    50     5    14    23   634     5    11   305    50
Adjusted Volume Module:
Grade:            0%               0%               0%               0%
% Cycle/Cars:  xxxx  xxxx        xxxx  xxxx        xxxx  xxxx        xxxx  xxxx
% Truck/Comb:  xxxx  xxxx        xxxx  xxxx        xxxx  xxxx        xxxx  xxxx
PCE Adj:     1.10  1.10  1.10  1.10  1.10  1.10  1.10  1.00  1.00  1.10  1.00  1.00
Cycl/Car PCE:  xxxx  xxxx        xxxx  xxxx        xxxx  xxxx        xxxx  xxxx
Trck/Cmb PCE:  xxxx  xxxx        xxxx  xxxx        xxxx  xxxx        xxxx  xxxx
Adj Vol.:      11     6     0    55     5    15    25   634     5    13   305    50
Critical Gap Module:
MoveUp Time:  3.4   3.3 xxxxx   3.4   3.3   2.6   2.1  xxxx xxxxx   2.1  xxxx xxxxx
Critical Gp:  7.0   6.5 xxxxx   7.0   6.5   5.5   5.5  xxxx xxxxx   5.5  xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  977  1025 xxxxx  1001  1002   178   355  xxxx xxxxx   638  xxxx xxxxx
Potent Cap.:  251   274 xxxxx   243   283  1125  1105  xxxx xxxxx   779  xxxx xxxxx
Adj Cap:     0.94  0.96 xxxxx  0.95  0.96  1.00  1.00  xxxx xxxxx  1.00  xxxx xxxxx
Move Cap.:    237   264 xxxxx   231   272  1125  1105  xxxx xxxxx   779  xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del: 15.9  14.0 xxxxx  19.9  13.5   3.2   3.3  xxxx xxxxx   4.7  xxxx xxxxx
LOS by Move:    C     C     A     *     *     *     A     *     *     A     *     *
Movement:     LT  - LTR -  RT   LT  - LTR -  RT   LT  - LTR -  RT   LT  - LTR -  RT
Shared Cap.: xxxx  xxxx xxxxx  xxxx   278 xxxxx  xxxx  xxxx xxxxx  xxxx  xxxx xxxxx
Shrd StpDel:xxxxx  xxxx xxxxx xxxxx  16.1 xxxxx xxxxx  xxxx xxxxx xxxxx  xxxx xxxxx
Shared LOS:     *     *     *     *     C     *     *     *     *     *     *     *
ApproachDel:        15.2             16.1              0.1              0.2
```



```
--------------------------------------------------------------------------------
                 Traffic Analysis for Puente Hills Landfill
                  Future With Other Approved Projects (3.3)
                         PM Peak Hour Conditions
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
           1994 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #12 Proj Ent West @ Workman Mill
********************************************************************************
Average Delay (sec/veh):       0.7        Worst Case Level Of Service:        D
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:         Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:            Include          Include          Include          Include
Lanes:        0   0  1! 0  0   0  0  0  0  0   0  0  1  1  0   1  0  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour
Base Vol:       0     0     1     0     0     0     0  1005     0     0   476     0
Growth Adj:  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14
Initial Bse:    0     0     1     0     0     0     0  1146     0     0   543     0
Added Vol:     12     0    29     0     0     0     0     0    12    29     0     0
Other Appro:    0     0    -1     0     0     0     0    44     0     0    56     0
Initial Fut:   12     0    29     0     0     0     0  1190    12    29   599     0
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:    12     0    29     0     0     0     0  1190    12    29   599     0
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Final Vol.:    12     0    29     0     0     0     0  1190    12    29   599     0
Adjusted Volume Module:
Grade:            0%               0%               0%               0%
% Cycle/Cars:  xxxx  xxxx        xxxx  xxxx        xxxx  xxxx        xxxx  xxxx
% Truck/Comb:  xxxx  xxxx        xxxx  xxxx        xxxx  xxxx        xxxx  xxxx
PCE Adj:     1.10  1.10  1.10  1.10  1.10  1.10  1.10  1.00  1.00  1.10  1.00  1.00
Cycl/Car PCE:  xxxx  xxxx        xxxx  xxxx        xxxx  xxxx        xxxx  xxxx
Trck/Cmb PCE:  xxxx  xxxx        xxxx  xxxx        xxxx  xxxx        xxxx  xxxx
Adj Vol.:      13     0    32     0     0     0     0  1190    12    32   599     0
Critical Gap Module:
MoveUp Time:  3.4  xxxx   2.6 xxxxx  xxxx xxxxx xxxxx  xxxx xxxxx   2.1  xxxx xxxxx
Critical Gp:  7.0  xxxx   5.5 xxxxx  xxxx xxxxx xxxxx  xxxx xxxxx   5.5  xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: 1823  xxxx   601  xxxx  xxxx xxxxx  xxxx  xxxx xxxxx  1202  xxxx xxxxx
Potent Cap.:   72  xxxx   687  xxxx  xxxx xxxxx  xxxx  xxxx xxxxx   388  xxxx xxxxx
Adj Cap:     0.92  xxxx  1.00  xxxx  xxxx xxxxx  xxxx  xxxx xxxxx  1.00  xxxx xxxxx
Move Cap.:     66  xxxx   687  xxxx  xxxx xxxxx  xxxx  xxxx xxxxx   388  xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del: 66.2  xxxx   5.5 xxxxx  xxxx xxxxx xxxxx  xxxx xxxxx  10.0  xxxx xxxxx
LOS by Move:    *     *     *     *     *     *     *     *     *     C     *     *
Movement:     LT  - LTR -  RT   LT  - LTR -  RT   LT  - LTR -  RT   LT  - LTR -  RT
Shared Cap.: xxxx   184 xxxxx  xxxx  xxxx xxxxx  xxxx  xxxx xxxxx  xxxx  xxxx xxxxx
Shrd StpDel:xxxxx  23.2 xxxxx xxxxx  xxxx xxxxx xxxxx  xxxx xxxxx xxxxx  xxxx xxxxx
Shared LOS:     *     D     *     *     *     *     *     *     *     *     *     *
ApproachDel:        23.2              0.0              0.0              0.5
```

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Approved Projects With Crossroads Business Park (3.4)
AM Peak Hour Conditions

Scenario Report

Scenario:	Fut+Other Projects AM
Command:	Fut+Other Projects AM
Volume:	AM
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	AM
Trip Distribution:	All
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Fut+Other Projects AM

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Approved Projects With Crossroads Business Park (3.4)
AM Peak Hour Conditions

Trip Generation Report
Project Trips
Forecast for AM

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
5	Parcel 1-3	1.00	Cum Parcel 1-3	468.00	57.00	468	57	525	53.2
	Zone 5 Subtotal					468	57	525	53.2
6	Parcel 5&6	1.00	Cum Proj 5&6	337.00	41.00	337	41	378	38.3
	Zone 6 Subtotal					337	41	378	38.3
7	MRF	1.00	MRF	42.00	42.00	42	42	84	8.5
	Zone 7 Subtotal					42	42	84	8.5
TOTAL						847	140	987	100.0

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Approved Projects With Crossroads Business Park (3.4)
AM Peak Hour Conditions

Trip Distribution Report

Percent Of Trips All

	To Gates				
Zone	2	4	6	8	12
5	10.0	5.0	55.0	5.0	25.0
6	0.0	5.0	65.0	5.0	25.0
7	26.0	3.0	48.0	3.0	20.0

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Approved Projects With Crossroads Business Park (3.4)
AM Peak Hour Conditions

Turning Movement Report
AM

Volume	Northbound			Southbound			Eastbound			Westbound			Total
Type	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Volume
#1 Crossroads Pkwy N. @ Crossroads Pkwy S.													
Base	239	0	154	0	0	0	0	132	193	435	181	0	1335
Added	239	0	52	0	0	0	0	27	36	8	84	0	446
Other	0	0	54	0	0	0	0	9	0	17	5	0	85
Total	478	0	260	0	0	0	0	168	229	460	270	0	1866
#2 SR-60 @ Crossroads Pkwy S.													
Base	0	0	0	222	2	283	0	274	205	146	633	0	1765
Added	0	0	0	219	0	278	0	71	8	10	34	0	620
Other	0	0	0	0	0	52	0	5	0	14	2	0	73
Total	0	0	0	441	2	613	0	350	213	170	669	0	2458
#3 Workman Mill/Crossroads South @ Workman Mill													
Base	1	0	0	48	6	359	137	192	22	0	616	19	1399
Added	0	0	0	0	0	1	1	116	0	0	39	0	157
Other	0	0	0	0	0	30	55	44	0	0	45	0	174
Total	1	0	0	48	6	390	193	352	22	0	700	19	1730
#4 Pellissier/Workman Mill @ Workman Mill [Signal To Be Constructed]													
Base	124	0	423	0	0	0	0	404	355	769	1485	0	3560
Added	0	0	1	0	0	0	0	0	0	1	0	0	2
Other	0	0	55	0	0	0	0	0	0	30	0	0	85
Total	124	0	479	0	0	0	0	404	355	800	1485	0	3647
#5 Crossroads Pkwy N. @ Workman Mill													
Base	111	109	227	7	15	5	11	301	367	337	2036	71	3597
Added	0	0	5	0	0	0	0	1	0	40	1	0	47
Other	0	0	5	0	0	0	0	55	0	9	30	0	99
Total	111	109	237	7	15	5	11	357	367	386	2067	71	3743
#6 Peck Rd @ Workman Mill													
Base	0	542	423	226	1035	0	0	0	0	873	0	82	3181
Added	0	0	42	58	0	0	0	0	0	6	0	17	123
Other	0	0	5	0	1	0	0	0	0	32	0	0	38
Total	0	542	470	284	1036	0	0	0	0	911	0	99	3342
#7 605 NB @ Pellissier													
Base	0	0	0	212	0	269	113	192	0	0	978	246	2010
Added	0	0	0	0	0	47	17	0	0	0	0	0	64
Total	0	0	0	212	0	316	130	192	0	0	978	246	2074
#8 Pellissier @ Peck Rd													
Base	9	488	136	169	955	123	31	24	10	285	38	972	3240
Added	0	0	17	0	11	0	0	0	0	47	0	0	75
Other	0	0	0	0	1	0	0	0	0	0	0	0	1
Total	9	488	153	169	967	123	31	24	10	332	38	972	3316

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Approved Projects With Crossroads Business Park (3.4)
AM Peak Hour Conditions

Volume	Northbound			Southbound			Eastbound			Westbound			Total
Type	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Volume
#9 Rooks @ Peck Rd													
Base	207	920	138	139	640	192	76	18	52	250	34	62	2728
Added	0	0	0	0	0	0	0	0	0	11	0	0	11
Total	207	920	138	139	640	192	76	18	52	261	34	62	2739
#10 Proj Ent East @ Crossroads Pkwy S.													
Base	9	0	182	22	1	18	9	233	5	231	775	30	1515
Added	0	0	0	0	0	0	0	80	0	0	311	0	391
Other	60	0	7	0	0	0	0	-2	46	17	-15	0	113
Total	69	0	189	22	1	18	9	311	51	248	1071	30	2019
#12 Proj Ent West @ Workman Mill													
Base	68	0	8	0	0	0	0	337	52	19	955	0	1441
Added	12	0	30	0	0	0	0	87	12	30	11	0	182
Other	-60	0	-7	0	0	0	0	106	-46	-17	92	0	68
Total	20	0	31	0	0	0	0	530	18	32	1058	0	1691

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Approved Projects With Crossroads Business Park (3.4)
AM Peak Hour Conditions

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Crossroads Pkwy N. @ Crossroad	B	xxxxx	0.567	C	xxxxx	0.787	+ 0.121 V/C
# 2 SR-60 @ Crossroads Pkwy S.	A	xxxxx	0.507	A	xxxxx	0.507	+ 0.000 V/C
# 3 Workman Mill/Crossroads South	A	xxxxx	0.499	A	xxxxx	0.570	+ 0.071 V/C
# 4 Pellissier/Workman Mill @ Work	C	xxxxx	0.784	D	xxxxx	0.804	+ 0.019 V/C
# 5 Crossroads Pkwy N. @ Workman M	D	xxxxx	0.884	D	xxxxx	0.897	+ 0.011 V/C
# 6 Peck Rd @ Workman Mill	C	xxxxx	0.722	C	xxxxx	0.739	+ 0.018 V/C
# 7 605 NB @ Pellissier	C	xxxxx	0.721	C	xxxxx	0.761	+ 0.040 V/C
# 8 Pellissier @ Peck Rd	F	xxxxx	1.084	F	xxxxx	1.088	+ 0.004 V/C
# 9 Rooks @ Peck Rd	C	xxxxx	0.706	C	xxxxx	0.713	+ 0.007 V/C
# 10 Proj Ent East @ Crossroads Pkw	E	2.1	0.000	F	31.4	0.000	+ 0.000 V/C
# 12 Proj Ent West @ Workman Mill	E	2.5	0.000	D	0.8	0.000	+ 0.000 V/C

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Approved Projects With Crossroads Business Park (3.4)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Crossroads Pkwy N. @ Crossroads Pkwy S.

Cycle (sec): 100 Critical Vol./Cap. (X): 0.787
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 64 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	0	0 1	0 0	0	0 0	0 0	1	1 0	1 0	2	0 0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	210	0	135	0	0	0	0	116	169	382	159	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	239	0	154	0	0	0	0	132	193	435	181	0
Added Vol:	239	0	52	0	0	0	0	27	36	8	84	0
Other Appro:	0	0	54	0	0	0	0	9	0	17	5	0
Initial Fut:	478	0	260	0	0	0	0	168	229	460	270	0
User Adj:	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	555	0	301	0	0	0	0	195	265	534	314	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	555	0	301	0	0	0	0	195	265	534	314	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	555	0	301	0	0	0	0	195	265	534	314	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	2.00	0.00
Final Sat.:	3200	0	1600	0	0	0	0	1600	1600	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.17	0.00	0.19	0.00	0.00	0.00	0.00	0.12	0.17	0.33	0.10	0.00
Crit Moves:			****						****	****		

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Approved Projects With Crossroads Business Park (3.4)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 SR-60 @ Crossroads Pkwy S.

Cycle (sec): 100 Critical Vol./Cap. (X): 0.507
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 34 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	1 1	0	0 1	0 0	2	0 1	1 0	2	0 0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	0	0	0	195	2	248	0	240	180	128	555	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	0	0	222	2	283	0	274	205	146	633	0
Added Vol:	0	0	0	219	0	278	0	71	8	10	34	0
Other Appro:	0	0	0	0	0	52	0	5	0	14	2	0
Initial Fut:	0	0	0	441	2	613	0	350	213	170	669	0
User Adj:	1.15	1.15	1.15	1.15	1.15	0.00	1.15	1.15	0.00	1.15	1.15	1.15
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	0	0	507	3	0	0	402	0	195	769	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	507	3	0	0	402	0	195	769	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	0	0	0	507	3	0	0	402	0	195	769	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.99	0.01	1.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	0	0	0	3181	19	1600	0	3200	1600	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.16	0.16	0.00	0.00	0.13	0.00	0.12	0.24	0.00
Crit Moves:				****				****		****		

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Approved Projects With Crossroads Business Park (3.4)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Workman Mill/Crossroads South @ Workman Mill

Cycle (sec):	100	Critical Vol./Cap. (X):	0.570
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1 0 1			1 0 0 1 1			1 0 1 1 0			0 0 1 1 0		
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	1	0	0	42	5	315	120	168	19	0	540	17
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	1	0	0	48	6	359	137	192	22	0	616	19
Added Vol:	0	0	0	0	0	1	1	116	0	0	39	0
Other Appro:	0	0	0	0	0	30	55	44	0	0	45	0
Initial Fut:	1	0	0	48	6	390	193	352	22	0	700	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	0	0	48	6	390	193	352	22	0	700	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	0	0	48	6	390	193	352	22	0	700	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	1	0	0	48	6	390	193	352	22	0	700	19
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.03	1.97	1.00	1.88	0.12	0.00	1.95	0.05
Final Sat.:	1600	1600	1600	1600	48	3152	1600	3012	188	0	3115	85
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.03	0.12	0.12	0.12	0.12	0.12	0.00	0.22	0.22
Crit Moves:	****				****		****				****	

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Approved Projects With Crossroads Business Park (3.4)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Pellissier/Workman Mill @ Workman Mill (Signal To Be Constructed

Cycle (sec):	100	Critical Vol./Cap. (X):	0.804
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	68	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 0 0 1			0 0 0 0 0			0 0 1 1 0			1 0 2 0 0		
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	109	0	371	0	0	0	0	354	311	675	1303	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	124	0	423	0	0	0	0	404	355	769	1485	0
Added Vol:	0	0	1	0	0	0	0	0	0	1	0	0
Other Appro:	0	0	55	0	0	0	0	0	0	30	0	0
Initial Fut:	124	0	479	0	0	0	0	404	355	800	1485	0
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	124	0	0	0	0	0	0	404	0	800	1485	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	124	0	0	0	0	0	0	404	0	800	1485	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	124	0	0	0	0	0	0	404	0	800	1485	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00	2.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	3200	0	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.50	0.46	0.00
Crit Moves:	****							****		****		

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Approved Projects With Crossroads Business Park (3.4)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Crossroads Pkwy N. @ Workman Mill

Cycle (sec): 100 Critical Vol./Cap. (X): 0.897
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 98 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 0 1 1			0 0 1! 0 0			1 0 1 1 0			1 0 1 1 0		
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	97	96	199	6	13	4	10	264	322	296	1786	62
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	111	109	227	7	15	5	11	301	367	337	2036	71
Added Vol:	0	0	5	0	0	0	0	1	0	40	1	0
Other Appro:	0	0	5	0	0	0	0	55	0	9	30	0
Initial Fut:	111	109	237	7	15	5	11	357	367	386	2067	71
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	111	109	237	7	15	0	11	357	367	386	2067	71
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	111	109	237	7	15	0	11	357	367	386	2067	71
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	111	109	237	7	15	0	11	357	367	386	2067	71
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.63	1.37	0.32	0.68	0.00	1.00	1.00	1.00	1.00	1.93	0.07
Final Sat.:	1600	1009	2192	509	1091	0	1600	1600	1600	1600	3094	106
Capacity Analysis Module:												
Vol/Sat:	0.07	0.11	0.11	0.01	0.01	0.00	0.01	0.22	0.23	0.24	0.67	0.67
Crit Moves:		****		****			****				****	

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Approved Projects With Crossroads Business Park (3.4)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Peck Rd @ Workman Mill

Cycle (sec): 100 Critical Vol./Cap. (X): 0.739
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 55 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 3 0 1			1 0 2 0 0			0 0 0 0 0			1 0 1! 0 0		
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	0	475	371	198	908	0	0	0	0	766	0	72
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	542	423	226	1035	0	0	0	0	873	0	82
Added Vol:	0	0	42	58	0	0	0	0	0	6	0	17
Other Appro:	0	0	5	0	1	0	0	0	0	32	0	0
Initial Fut:	0	542	470	284	1036	0	0	0	0	911	0	99
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	542	470	284	1036	0	0	0	0	911	0	99
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	542	470	284	1036	0	0	0	0	911	0	99
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	542	470	284	1036	0	0	0	0	911	0	99
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.80	0.00	0.20
Final Sat.:	0	4800	1600	1600	3200	0	0	0	0	2886	0	314
Capacity Analysis Module:												
Vol/Sat:	0.00	0.11	0.29	0.18	0.32	0.00	0.00	0.00	0.00	0.32	0.00	0.32
Crit Moves:	****				****					****		

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-----------------------------------------------------------------------------
              Traffic Analysis for Puente Hills Landfill EIR
   Future With Other Approved Projects With Crossroads Business Park (3.4)
                         AM Peak Hour Conditions
-----------------------------------------------------------------------------
                    Level Of Service Computation Report
      ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
*****************************************************************************
Intersection #7 605 NB @ Pellissier
*****************************************************************************
Cycle (sec):        100              Critical Vol./Csp. (X):        0.761
Loss Time (sec):     10 (Y+R = 4 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       59              Level Of Service:                  C
*****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Permitted        Protected        Protected
Rights:           Include          Include          Include          Include
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:        0  0  0  0  0    1  0  0  0  1    1  0  2  0  0    0  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:      0     0     0  186     0   236   99   168     0    0   858   216
Growth Adj: 1.14  1.14  1.14 1.14  1.14  1.14 1.14  1.14  1.14 1.14  1.14  1.14
Initial Bse:   0     0     0  212     0   269  113   192     0    0   978   246
Added Vol:     0     0     0    0     0    47   17     0     0    0     0     0
Other Appro:   0     0     0    0     0     0    0     0     0    0     0     0
Initial Fut:   0     0     0  212     0   316  130   192     0    0   978   246
User Adj:   1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
PHF Adj:    1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
PHF Volume:    0     0     0  212     0   316  130   192     0    0   978   246
Reduct Vol:    0     0     0    0     0     0    0     0     0    0     0     0
Reduced Vol:   0     0     0  212     0   316  130   192     0    0   978   246
PCE Adj:    1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
MLF Adj:    1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
Final Vol.:    0     0     0  212     0   316  130   192     0    0   978   246
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600  1600
Adjustment: 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
Lanes:      0.00  0.00  0.00 1.00  0.00  1.00 1.00  2.00  0.00 0.00  1.60  0.40
Final Sat.:    0     0     0 1600     0  1600 1600  3200     0    0  2557   643
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.00  0.00  0.00 0.13  0.00  0.20 0.08  0.06  0.00 0.00  0.38  0.38
Crit Moves:                               **** ****                     ****
*****************************************************************************
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-----------------------------------------------------------------------------
              Traffic Analysis for Puente Hills Landfill EIR
   Future With Other Approved Projects With Crossroads Business Park (3.4)
                         AM Peak Hour Conditions
-----------------------------------------------------------------------------
                    Level Of Service Computation Report
      ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
*****************************************************************************
Intersection #8 Pellissier @ Peck Rd
*****************************************************************************
Cycle (sec):        100              Critical Vol./Cap. (X):        1.088
Loss Time (sec):     10 (Y+R = 4 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:      180              Level Of Service:                  F
*****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:        1  0  1  1  0    1  0  1  1  0    0  1  0  0  1    0  1  0  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:      8   428   119  148   838   108   27    21     9  256    33   853
Growth Adj: 1.14  1.14  1.14 1.14  1.14  1.14 1.14  1.14  1.14 1.14  1.14  1.14
Initial Bse:   9   488   136  169   955   123   31    24    10  [illegible]   38   972
Added Vol:     0     0    17    0    11     0    0     0     0   47     0     0
Other Appro:   0     0     0    0     1     0    0     0     0    0     0     0
Initial Fut:   9   488   153  169   967   123   31    24    10  332    38   972
User Adj:   1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
PHF Adj:    1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
PHF Volume:    9   488   153  169   967   123   31    24    10  332    38   972
Reduct Vol:    0     0     0    0     0     0    0     0     0    0     0     0
Reduced Vol:   9   488   153  169   967   123   31    24    10  332    38   972
PCE Adj:    1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
MLF Adj:    1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
Final Vol.:    9   488   153  169   967   123   31    24    10  332    38   972
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600  1600
Adjustment: 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
Lanes:      1.00  1.52  0.48 1.00  1.77  0.23 0.56  0.44  1.00 0.90  0.10  1.00
Final Sat.: 1600  2436   764 1600  2839   361  902   698  1600 1436   164  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.01  0.20  0.20 0.11  0.34  0.34 0.03 [illegible] 0.01 0.23  0.23  0.61
Crit Moves: ****                     ****      ****                        ****
*****************************************************************************
```

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                  Traffic Analysis for Puente Hills Landfill EIR
        Future With Other Approved Projects With Crossroads Business Park (3.4)
                            AM Peak Hour Conditions
------------------------------------------------------------------------------
                       Level Of Service Computation Report
          ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
******************************************************************************
Intersection #9 Rooks @ Peck Rd
******************************************************************************
Cycle (sec):          100              Critical Vol./Cap. (X):          0.713
Loss Time (sec):       10 (Y+R =  4 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:         52              Level Of Service:                    C
******************************************************************************
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:         Permitted        Permitted        Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:     0     0     0    0     0     0    0     0     0    0     0     0
Lanes:        1  0  1  1  0    1  0  1  1  0    1  0  1  1  0    1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:     182   807   121   122   561   168    67    16    46   219    30    54
Growth Adj:  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14
Initial Bse:  207   920   138   139   640   192    76    18    52   250    34    62
Added Vol:      0     0     0     0     0     0     0     0     0    11     0     0
Other Appro:    0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:  207   920   138   139   640   192    76    18    52   261    34    62
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:   207   920   138   139   640   192    76    18    52   261    34    62
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:  207   920   138   139   640   192    76    18    52   261    34    62
PCE Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
MLF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Final Vol.:   207   920   138   139   640   192    76    18    52   261    34    62
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600  1600  1600  1600  1600  1600  1600  1600  1600  1600  1600  1600
Adjustment:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Lanes:       1.00  1.74  0.26  1.00  1.54  0.46  1.00  1.00  1.00  1.00  1.00  1.00
Final Sat.:  1600  2783   417  1600  2462   738  1600  1600  1600  1600  1600  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.13  0.33  0.33  0.09  0.26  0.26  0.05  0.01  0.03  0.16  0.02  0.04
Crit Moves:        ****        ****                          ****  ****
******************************************************************************
```



```
                  Traffic Analysis for Puente Hills Landfill EIR
        Future With Other Approved Projects With Crossroads Business Park (3.4)
                            AM Peak Hour Conditions
------------------------------------------------------------------------------
                       Level Of Service Computation Report
          1994 HCM Unsignalized Method (Future Volume Alternative)
******************************************************************************
Intersection #10 Proj Ent East @ Crossroads Pkwy S.
******************************************************************************
Average Delay (sec/veh):       81.4         Worst Case Level Of Service:      F
******************************************************************************
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:         Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:            Ignore          Include          Include          Include
Lanes:        1  0  1  0  1    0  0  1! 0  0    1  0  1  1  0    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:       8     0   160    19     1    16     8   204     4   203   680    26
Growth Adj:  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14
Initial Bse:    9     0   182    22     1    18     9   233     5   231   775    30
Added Vol:      0     0     0     0     0     0     0    80     0     0   311     0
Other Appro:   60     0     7     0     0     0     0    -2    46    17   -15     0
Initial Fut:   69     0   189    22     1    18     9   311    51   248  1071    30
User Adj:    1.17  1.17  0.00  1.17  1.17  1.17  1.17  1.17  1.17  1.17  1.17  1.17
PHF Adj:     1.00  1.00  0.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:    81     0     0    25     1    21    11   363    59   291  1253    35
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Final Vol.:    81     0     0    25     1    21    11   363    59   291  1253    35
Adjusted Volume Module:
Grade:             0%               0%               0%               0%
% Cycle/Cars:  xxxx  xxxx        xxxx  xxxx        xxxx  xxxx        xxxx  xxxx
% Truck/Comb:  xxxx  xxxx        xxxx  xxxx        xxxx  xxxx        xxxx  xxxx
PCE Adj:     1.10  1.10  1.10  1.10  1.10  1.10  1.10  1.00  1.00  1.10  1.00  1.00
Cycl/Car PCE:  xxxx  xxxx        xxxx  xxxx        xxxx  xxxx        xxxx  xxxx
Trck/Cmb PCE:  xxxx  xxxx        xxxx  xxxx        xxxx  xxxx        xxxx  xxxx
Adj Vol.:      89     0     0    28     1    23    12   363    59   320  1253    35
Critical Gap Module:
MoveUp Time:  3.4  xxxx xxxxx   3.4   3.3   2.6   2.1  xxxx xxxxx   2.1  xxxx xxxxx
Critical Gp:  7.0  xxxx xxxxx   7.0   6.5   5.5   5.5  xxxx xxxxx   5.5  xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: 1948  xxxx xxxxx  1935  1994   644  1288  xxxx xxxxx   423  xxxx xxxxx
Potent Cap.:   60  xxxx xxxxx    61    74   653   349  xxxx xxxxx  1017  xxxx xxxxx
Adj Cap:     0.70  xxxx xxxxx  0.74  0.66  1.00  1.00  xxxx xxxxx  1.00  xxxx xxxxx
Move Cap.:     42  xxxx xxxxx    45    49   653   349  xxxx xxxxx  1017  xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del: 1924  xxxx xxxxx 170.5  75.2   5.7  10.6  xxxx xxxxx   5.0  xxxx xxxxx
LOS by Move:    F     *     A     *     *     *     C     *     *     A     *     *
Movement:      LT  - LTR  - RT    LT  - LTR  - RT    LT  - LTR  - RT    LT  - LTR  - RT
Shared Cap.: xxxx  xxxx xxxxx  xxxx    77 xxxxx  xxxx  xxxx xxxxx  xxxx  xxxx xxxxx
Shrd StpDel:xxxxx  xxxx xxxxx xxxxx  94.6 xxxxx xxxxx  xxxx xxxxx xxxxx  xxxx xxxxx
Shared LOS:     *     *     *     *     F     *     *     *     *     *     *     *
ApproachDel:        1924.0             94.6              0.3              1.0
```

```
------------------------------------------------------------------------------
                 Traffic Analysis for Puente Hills Landfill EIR
      Future With Other Approved Projects With Crossroads Business Park (3.4)
                           AM Peak Hour Conditions
------------------------------------------------------------------------------
                    Level Of Service Computation Report
          1994 HCM Unsignalized Method (Future Volume Alternative)
******************************************************************************
Intersection #12 Proj Ent West @ Workman Mill
******************************************************************************
Average Delay (sec/veh):       0.8          Worst Case Level Of Service:      D
******************************************************************************
Approach:      North Bound       South Bound        East Bound        West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign         Stop Sign        Uncontrolled      Uncontrolled
Rights:          Include           Include           Include           Include
Lanes:        0  0  1! 0  0    0  0  0  0  0    0  0  1  1  0    1  0  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:       60    0    7     0    0    0     0  296   46    17  838    0
Growth Adj:   1.14 1.14 1.14  1.14 1.14 1.14  1.14 1.14 1.14  1.14 1.14 1.14
Initial Bse:    68    0    8     0    0    0     0  337   52    19  955    0
Added Vol:      12    0   30     0    0    0     0   87   12    30   11    0
Other Appro:   -60    0   -7     0    0    0     0  106  -46   -17   92    0
Initial Fut:    20    0   31     0    0    0     0  530   18    32 1058    0
User Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:      1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     20    0   31     0    0    0     0  530   18    32 1058    0
Reduct Vol:      0    0    0     0    0    0     0    0    0     0    0    0
Final Vol.:     20    0   31     0    0    0     0  530   18    32 1058    0
Adjusted Volume Module:
Grade:             0%                0%                0%                0%
% Cycle/Cars:   xxxx xxxx         xxxx xxxx         xxxx xxxx         xxxx xxxx
% Truck/Comb:   xxxx xxxx         xxxx xxxx         xxxx xxxx         xxxx xxxx
PCE Adj:      1.10 1.10 1.10  1.10 1.10 1.10  1.10 1.00 1.00  1.10 1.00 1.00
Cycl/Car PCE:   xxxx xxxx         xxxx xxxx         xxxx xxxx         xxxx xxxx
Trck/Cmb PCE:   xxxx xxxx         xxxx xxxx         xxxx xxxx         xxxx xxxx
Adj Vol.:       22    0   34     0    0    0     0  530   18    36 1058    0
Critical Gap Module:
MoveUp Time:   3.4 xxxx  2.6 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.1 xxxx xxxxx
Critical Gp:   7.0 xxxx  5.5 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   5.5 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: 1630 xxxx   274  xxxx xxxx xxxxx  xxxx xxxx xxxxx   549 xxxx xxxxx
Potent Cap.:    96 xxxx  1005  xxxx xxxx xxxxx  xxxx xxxx xxxxx   870 xxxx xxxxx
Adj Cap:      0.96 xxxx  1.00  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1.00 xxxx xxxxx
Move Cap.:      92 xxxx  1005  xxxx xxxx xxxxx  xxxx xxxx xxxxx   870 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del: 50.1 xxxx   3.7 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   4.3 xxxx xxxxx
LOS by Move:     *    *    *     *    *    *     *    *    *     A    *    *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx  204 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Shrd StpDel:xxxxx 22.1 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:      *    D    *     *    *    *     *    *    *     *    *    *
ApproachDel:       22.1              0.0               0.0               0.1
```



```
------------------------------------------------------------------------------
                 Traffic Analysis for Puente Hills Landfill EIR
        Future With Approved Projects with Crossroads Business Park (3.4)
                         Mid Day Peak Hour Conditions
------------------------------------------------------------------------------
                               Scenario Report
Scenario:                 Mid-Day

Command:                  Default Command
Volume:                   MidDay
Geometry:                 Existing
Impact Fee:               Default Impact Fee
Trip Generation:          Mid-day
Trip Distribution:        All
Paths:                    Default Paths
Routes:                   Default Routes
Configuration:            Mid-day
```

Traffic Analysis for Puente Hills Landfill EIR
Future With Approved Projects with Crossroads Business Park (3.4)
Mid Day Peak Hour Conditions

Trip Generation Report

Forecast for Mid-Day

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
5	Projs 1-3	1.00	Cum Projs 1-3	151.00	151.00	151	151	302	38.5
	Zone 5 Subtotal					151	151	302	38.5
6	Parcel 5&6	1.00	Cum Proj 5&6	109.00	109.00	109	109	218	27.8
	Zone 6 Subtotal					109	109	218	27.8
7	MRF	1.00	MRF	111.00	153.00	111	153	264	33.7
	Zone 7 Subtotal					111	153	264	33.7
TOTAL						371	413	784	100.0

Traffic Analysis for Puente Hills Landfill EIR
Future With Approved Projects with Crossroads Business Park (3.4)
Mid Day Peak Hour Conditions

Trip Distribution Report

Percent Of Trips All

Zone	To Gates 2	4	6	8	12
5	10.0	5.0	55.0	5.0	25.0
6	0.0	5.0	65.0	5.0	25.0
7	26.0	3.0	48.0	3.0	20.0

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Traffic Analysis for Puente Hills Landfill EIR
Future With Approved Projects with Crossroads Business Park (3.4)
Mid Day Peak Hour Conditions

Scenario Report

Scenario:	Mid-Day
Command:	Default Command
Volume:	MidDay
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	Mid-day
Trip Distribution:	All
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Mid-day

Traffic Analysis for Puente Hills Landfill EIR
Future With Approved Projects with Crossroads Business Park (3.4)
Mid Day Peak Hour Conditions

Trip Generation Report

Forecast for Mid-Day

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
5	Projs 1-3	1.00	Cum Projs 1-3	151.00	151.00	151	151	302	38.5
	Zone 5 Subtotal					151	151	302	38.5
6	Parcel 5&6	1.00	Cum Proj 5&6	109.00	109.00	109	109	218	27.8
	Zone 6 Subtotal					109	109	218	27.8
7	MRF	1.00	MRF	21.00	21.00	21	21	42	5.4
	Zone 7 Subtotal					21	21	42	5.4
8	MRF Trucks	1.00	MRF Trucks	111.00	111.00	111	111	222	28.3
	Zone 8 Subtotal					111	111	222	28.3
TOTAL						392	392	784	100.0

Traffic Analysis for Puente Hills Landfill EIR
Future With Approved Projects with Crossroads Business Park (3.4)
Mid Day Peak Hour Conditions

Trip Distribution Report

Percent Of Trips All

Zone	To Gates 2	4	6	8	12
5	10.0	5.0	55.0	5.0	25.0
6	0.0	5.0	65.0	5.0	25.0
7	26.0	3.0	48.0	3.0	20.0
8	0.0	3.0	74.0	3.0	20.0

Traffic Analysis for Puente Hills Landfill EIR
Future With Approved Projects with Crossroads Business Park (3.4)
Mid Day Peak Hour Conditions

Turning Movement Report
Mid-Day

Volume	Northbound			Southbound			Eastbound			Westbound			Total
Type	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Volume
#1 Crossroads Pkwy N. @ Crossroads Pkwy S.													
Base	245	0	382	0	0	0	0	152	270	250	222	0	1521
Added	87	0	175	0	0	0	0	71	44	64	27	0	468
Fry's	0	0	57	0	0	0	0	9	0	16	5	0	87
Total	332	0	614	0	0	0	0	232	314	330	254	0	2076
#2 SR-60 @ Crossroads Pkwy S.													
Base	0	0	0	222	2	283	0	274	205	146	633	0	1765
Added	0	0	0	71	0	175	0	192	64	27	80	0	609
Fry's	0	0	0	52	0	0	0	5	0	14	2	0	73
Total	0	0	0	345	2	458	0	471	269	187	715	0	2447
#3 Workman Mill/Crossroads South @ Workman Mill													
Base	5	6	5	31	0	222	153	177	5	1	231	36	871
Added	0	0	0	0	0	1	1	46	0	0	46	0	94
Other	0	0	0	0	0	25	30	31	0	0	50	0	136
Total	5	6	5	31	0	248	184	254	5	1	327	36	1101
#4 Pellissier/Workman Mill @ Workman Mill [Signal To Be Constructed]													
Base	49	0	144	0	0	0	0	173	41	223	427	0	1058
Added	0	0	1	0	0	0	0	0	0	1	0	0	2
Other	0	0	30	0	0	0	0	0	0	25	0	0	55
Total	49	0	175	0	0	0	0	173	41	249	427	0	1115
#5 Crossroads Pkwy N. @ Workman Mill													
Base	31	16	131	7	15	0	6	363	28	227	749	7	1579
Added	0	0	11	0	0	0	0	1	0	11	1	0	24
Other	0	0	5	0	0	0	0	30	0	9	25	0	69
Total	31	16	147	7	15	0	6	394	28	247	775	7	1672
#6 Peck Rd @ Workman Mill													
Base	0	516	422	93	442	0	0	0	0	317	0	112	1903
Added	0	0	17	21	0	0	0	0	0	17	0	21	76
Other	0	0	20	0	1	0	0	0	0	27	0	0	48
Total	0	516	459	114	443	0	0	0	0	361	0	133	2027
#7 605 NB @ Pellissier													
Base	0	0	0	212	0	269	113	192	0	0	978	246	2010
Added	0	0	0	0	0	15	21	0	0	0	0	0	36
Total	0	0	0	212	0	284	134	192	0	0	978	246	2046
#8 Pellissier @ Peck Rd													
Base	9	430	185	267	407	81	74	30	31	133	19	447	2112
Added	0	0	21	0	5	0	0	0	0	15	0	0	41
Total	9	430	206	267	412	81	74	30	31	148	19	447	2153

Traffic Analysis for Puente Hills Landfill EIR
Future With Approved Projects with Crossroads Business Park (3.4)
Mid Day Peak Hour Conditions

Volume	Northbound			Southbound			Eastbound			Westbound			Total
Type	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Volume
#9 Rooks @ Peck Rd													
Base	121	755	123	79	605	130	63	35	78	133	22	74	2217
Added	0	0	0	0	0	0	0	0	0	5	0	0	5
Total	121	755	123	79	605	130	63	35	78	138	22	74	2222
#10 Proj Ent East @ Crossroads Pkwy S.													
Base	14	9	293	33	6	15	13	217	6	401	227	36	1269
Added	3	0	108	0	0	0	0	148	3	108	148	0	518
Other	66	0	13	0	0	0	0	-8	39	18	-16	0	112
Total	83	9	414	33	6	15	13	357	48	527	359	36	1899
#12 Proj Ent West @ Workman Mill													
Base	75	0	15	0	0	0	0	283	44	21	347	3	788
Added	6	0	15	0	0	0	0	31	6	15	31	0	104
Other	-66	0	-13	0	0	0	0	74	-39	-18	93	0	31
Total	15	0	17	0	0	0	0	388	11	18	471	3	923

Traffic Analysis for Puente Hills Landfill EIR
Future With Approved Projects with Crossroads Business Park (3.4)
Mid Day Peak Hour Conditions

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/Veh	Base V/C	Future LOS	Future Del/Veh	Future V/C	Change in
# 1 Crossroads Pkwy N. @ Crossroad	D	xxxxx	0.816	F	xxxxx	1.099	+ 0.283 V/C
# 2 SR-60 @ Crossroads Pkwy S.	A	xxxxx	0.560	A	xxxxx	0.584	+ 0.025 V/C
# 3 Workman Mill/Crossroads South	A	xxxxx	0.382	A	xxxxx	0.447	+ 0.065 V/C
# 4 Pellissier/Workman Mill @ Work	A	xxxxx	0.324	A	xxxxx	0.340	+ 0.016 V/C
# 5 Crossroads Pkwy N. @ Workman M	A	xxxxx	0.424	A	xxxxx	0.451	+ 0.027 V/C
# 6 Peck Rd @ Workman Mill	A	xxxxx	0.422	A	xxxxx	0.458	+ 0.036 V/C
# 7 605 NB @ Pellissier	C	xxxxx	0.721	C	xxxxx	0.744	+ 0.023 V/C
# 8 Pellissier @ Peck Rd	D	xxxxx	0.803	D	xxxxx	0.810	+ 0.007 V/C
# 9 Rooks @ Peck Rd	A	xxxxx	0.556	A	xxxxx	0.559	+ 0.003 V/C
# 10 Proj Ent East @ Crossroads Pkw	C	3.1	0.000	F	23.8	0.000	+ 0.000 V/C
# 12 Proj Ent West @ Workman Mill	C	1.4	0.000	B	0.4	0.000	+ 0.000 V/C

```
--------------------------------------------------------------------------------
                 Traffic Analysis for Puente Hills Landfill EIR
       Future With Approved Projects with Crossroads Business Park (3.4)
                         Mid Day Peak Hour Conditions
--------------------------------------------------------------------------------

                        Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #1 Crossroads Pkwy N. @ Crossroads Pkwy S.
********************************************************************************
Cycle (sec):        100              Critical Vol./Cap. (X):        0.816
Loss Time (sec):     10 (Y+R =  4 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       70              Level Of Service:                  D
********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Permitted        Permitted        Permitted
Rights:          Include          Include          Include          Include
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:        2  0  0  0  1   0  0  0  0  0   0  0  1  1  0   1  0  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:      215     0   335     0     0     0     0   133   237   219   195     0
Growth Adj:   1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14
Initial Bse:   245     0   382     0     0     0     0   152   270   250   222     0
User Adj:     1.27  1.27  1.27  1.27  1.27  1.27  1.27  1.27  1.27  1.27  1.27  1.27
PHF Adj:      1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:    311     0   485     0     0     0     0   193   343   317   282     0
Reduct Vol:      0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:   311     0   485     0     0     0     0   193   343   317   282     0
PCE Adj:      1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
MLF Adj:      1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Final Vol.:    311     0   485     0     0     0     0   193   343   317   282     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1600  1600  1600  1600  1600  1600  1600  1600  1600  1600  1600  1600
Adjustment:   1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Lanes:        2.00  0.00  1.00  0.00  0.00  0.00  0.00  1.00  1.00  1.00  2.00  0.00
Final Sat.:   3200     0  1600     0     0     0     0  1600  1600  1600  3200     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.10  0.00  0.30  0.00  0.00  0.00  0.00  0.12  0.21  0.20  0.09  0.00
Crit Moves:               ****                                ****  ****
********************************************************************************
```

Traffic Analysis for Puente Hills Landfill EIR
Future With Approved Projects with Crossroads Business Park (3.4)
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 SR-60 @ Crossroads Pkwy S.

```
Cycle (sec):        100               Critical Vol./Cap. (X):        0.560
Loss Time (sec):     10 (Y+R =  4 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       37               Level Of Service:                  A
```

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	1 1	0	0 1	0 0	2	0 1	1 0	2	0 0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	0	0	0	195	2	248	0	240	180	128	555	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	0	0	222	2	283	0	274	205	146	633	0
User Adj:	1.30	1.30	1.30	1.30	1.30	0.00	1.30	1.30	0.00	1.30	1.30	1.30
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	0	0	289	3	0	0	356	0	190	823	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	289	3	0	0	356	0	190	823	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	0	0	0	289	3	0	0	356	0	190	823	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.98	0.02	1.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	0	0	0	3167	33	1600	0	3200	1600	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.09	0.09	0.00	0.00	0.11	0.00	0.12	0.26	0.00
Crit Moves:				****				****			****	

Traffic Analysis for Puente Hills Landfill EIR
Future With Approved Projects with Crossroads Business Park (3.4)
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Workman Mill/Crossroads South @ Workman Mill

Cycle (sec):	100	Critical Vol./Cap. (X):	0.382
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Permitted	Permitted	Permitted	Permitted
Rights:	Include	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	1 0 1 0 1	1 0 0 1 1	1 0 1 1 0	0 1 0 1 0

Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour

	NB L	NB T	NB R	SB L	SB T	SB R	EB L	EB T	EB R	WB L	WB T	WB R
Base Vol:	4	5	4	27	0	195	134	155	4	1	203	32
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	5	6	5	31	0	222	153	177	5	1	231	36
User Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	5	6	5	34	0	249	171	198	5	1	259	41
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	6	5	34	0	249	171	198	5	1	259	41
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	5	6	5	34	0	249	171	198	5	1	259	41
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.00	2.00	1.00	1.95	0.05	0.01	1.72	0.27
Final Sat.:	1600	1600	1600	1600	0	3200	1600	3121	79	11	2753	436
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.08	0.11	0.06	0.06	0.09	0.09	0.09
Crit Moves:	****					****	****				****	

Traffic Analysis for Puente Hills Landfill EIR
Future With Approved Projects with Crossroads Business Park (3.4)
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Pellissier/Workman Mill @ Workman Mill [Signal To Be Constructed

Cycle (sec):	100	Critical Vol./Cap. (X):	0.324
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	0 1	0 0	0	0 0	0 0	1	1 0	1 0	2	0 0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	43	0	126	0	0	0	0	152	36	196	375	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	49	0	144	0	0	0	0	173	41	223	427	0
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	49	0	0	0	0	0	0	173	0	223	427	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	49	0	0	0	0	0	0	173	0	223	427	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	49	0	0	0	0	0	0	173	0	223	427	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00	2.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	3200	0	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.14	0.13	0.00
Crit Moves:	****							****		****		

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-----------------------------------------------------------------------------
                Traffic Analysis for Puente Hills Landfill EIR
      Future With Approved Projects with Crossroads Business Park (3.4)
                      Mid Day Peak Hour Conditions
-----------------------------------------------------------------------------
                   Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
*****************************************************************************
Intersection #5 Crossroads Pkwy N. @ Workman Mill
*****************************************************************************
Cycle (sec):        100              Critical Vol./Cap. (X):         0.424
Loss Time (sec):     10 (Y+R = 4 sec) Average Delay (sec/veh):       xxxxxx
Optimal Cycle:       30              Level Of Service:                   A
*****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Permitted        Permitted
Rights:          Include          Ignore           Include          Include
Min. Green:    0    0    0     0    0    0     0    0    0     0    0    0
Lanes:        1  0  0  1  1   0  1  0  0  0   1  0  1  1  0   1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:     27   14  115     6   13    0     5  318   25   199  657    6
Growth Adj: 1.14 1.14 1.14  1.14 1.14 1.14  1.14 1.14 1.14  1.14 1.14 1.14
Initial Bse:  31   16  131     7   15    0     6  363   28   227  749    7
User Adj:   1.00 1.00 1.00  1.00 1.00 0.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:    1.00 1.00 1.00  1.00 1.00 0.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:   31   16  131     7   15    0     6  363   28   227  749    7
Reduct Vol:    0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:  31   16  131     7   15    0     6  363   28   227  749    7
PCE Adj:    1.00 1.00 1.00  1.00 1.00 0.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:    1.00 1.00 1.00  1.00 1.00 0.00  1.00 1.00 1.00  1.00 1.00 1.00
Final Vol.:   31   16  131     7   15    0     6  363   28   227  749    7
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1600 1600 1600  1600 1600 1600  1600 1600 1600  1600 1600 1600
Adjustment: 1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Lanes:      1.00 0.22 1.78  0.32 0.68 0.00  1.00 1.86 0.14  1.00 1.98 0.02
Final Sat.: 1600  348 2852   509 1091    0  1600 2971  229  1600 3170   30
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.02 0.05 0.05  0.01 0.01 0.00  0.00 0.12 0.12  0.14 0.24 0.24
Crit Moves:      ****       ****                  ****       ****
*****************************************************************************
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Traffic Analysis for Puente Hills Landfill EIR
Future With Approved Projects with Crossroads Business Park (3.4)
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Peck Rd @ Workman Mill

Cycle (sec): 100 Critical Vol./Cap. (X): 0.422
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 29 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	3 0	1	1 0	2 0	0	0 0	0 0	0	1 0	1! 0	0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	0	453	370	82	388	0	0	0	0	278	0	98
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	516	422	93	442	0	0	0	0	317	0	112
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	516	422	93	442	0	0	0	0	317	0	112
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	516	422	93	442	0	0	0	0	317	0	112
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	516	422	93	442	0	0	0	0	317	0	112
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.48	0.00	0.52
Final Sat.:	0	4800	1600	1600	3200	0	0	0	0	2365	0	835
Capacity Analysis Module:												
Vol/Sat:	0.00	0.11	0.26	0.06	0.14	0.00	0.00	0.00	0.00	0.13	0.00	0.13
Crit Moves:			****	****						****		

Traffic Analysis for Puente Hills Landfill EIR
Future With Approved Projects with Crossroads Business Park (3.4)
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 605 NB @ Pellissier

Cycle (sec):	100	Critical Vol./Cap. (X):	0.721
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	1 0	0	0 1	1 0	2	0 0	0 0	1	1 0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	0	0	0	186	0	236	99	168	0	0	858	216
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	0	0	212	0	269	113	192	0	0	978	246
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	212	0	269	113	192	0	0	978	246
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	212	0	269	113	192	0	0	978	246
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	212	0	269	113	192	0	0	978	246
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.60	0.40
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	2557	643
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.17	0.07	0.06	0.00	0.00	0.38	0.38
Crit Moves:						****	****				****	

Traffic Analysis for Puente Hills Landfill EIR
Future With Approved Projects with Crossroads Business Park (3.4)
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Pellissier @ Peck Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.803
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 1	0	1 0	1 1	0	0 1	0 0	1	0 1	0 0	1
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	8	377	162	234	357	71	65	26	27	117	17	392
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	9	430	185	267	407	81	74	30	31	133	19	447
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	430	185	267	407	81	74	30	31	133	19	447
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	430	185	267	407	81	74	30	31	133	19	447
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	9	430	185	267	407	81	74	30	31	133	19	447
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.40	0.60	1.00	1.67	0.33	0.71	0.29	1.00	0.88	0.12	1.00
Final Sat.:	1600	2237	963	1600	2669	531	1138	462	1600	1400	200	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.19	0.19	0.17	0.15	0.15	0.06	0.07	0.02	0.10	0.10	0.28
Crit Moves:		****		****			****					****

Traffic Analysis for Puente Hills Landfill EIR
Future With Approved Projects with Crossroads Business Park (3.4)
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Rooks @ Peck Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.556
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0	1 0	1 0	1

Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour

	NB L	NB T	NB R	SB L	SB T	SB R	EB L	EB T	EB R	WB L	WB T	WB R
Base Vol:	106	662	108	69	531	114	55	31	68	117	19	65
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	121	755	123	79	605	130	63	35	78	133	22	74
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	121	755	123	79	605	130	63	35	78	133	22	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	121	755	123	79	605	130	63	35	78	133	22	74
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	121	755	123	79	605	130	63	35	78	133	22	74

Saturation Flow Module:

	NB L	NB T	NB R	SB L	SB T	SB R	EB L	EB T	EB R	WB L	WB T	WB R
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.72	0.28	1.00	1.65	0.35	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	2752	448	1600	2634	566	1600	1600	1600	1600	1600	1600

Capacity Analysis Module:

	NB L	NB T	NB R	SB L	SB T	SB R	EB L	EB T	EB R	WB L	WB T	WB R
Vol/Sat:	0.08	0.27	0.27	0.05	0.23	0.23	0.04	0.02	0.05	0.08	0.01	0.05
Crit Moves:		****		****					****	****		

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                 Traffic Analysis for Puente Hills Landfill EIR
      Future With Approved Projects with Crossroads Business Park (3.4)
                         Mid Day Peak Hour Conditions
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
          1994 HCM Unsignalized Method (Base Volume Alternative)
********************************************************************************
Intersection #10 Proj Ent East @ Crossroads Pkwy S.
********************************************************************************
Average Delay (sec/veh):      3.1        Worst Case Level Of Service:        C
********************************************************************************
Approach:      North Bound     South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Stop Sign        Stop Sign      Uncontrolled     Uncontrolled
Rights:          Ignore          Include          Include          Include
Lanes:        1  0  1  0  1   0  0  1! 0  0   1  0  1  1  0   1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:      12    8   257   29    5    13   11  190     5  352  199    32
Growth Adj:  1.14 1.14  1.14 1.14 1.14  1.14 1.14 1.14  1.14 1.14 1.14  1.14
Initial Bse:   14    9   293   33    6    15   13  217     6  401  227    36
User Adj:    1.00 1.00  0.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:    14    9     0   33    6    15   13  217     6  401  227    36
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Final Vol.:    14    9     0   33    6    15   13  217     6  401  227    36
------------|---------------||---------------||---------------||---------------|
Adjusted Volume Module:
Grade:             0%               0%               0%               0%
% Cycle/Cars:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
% Truck/Comb:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
PCE Adj:     1.10 1.10  1.10 1.10 1.10  1.10 1.10 1.00  1.00 1.10 1.00  1.00
Cycl/Car PCE:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Trck/Cmb PCE:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Adj Vol.:      15   10     0   36    6    16   14  217     6  441  227    36
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
MoveUp Time:  3.4  3.3 xxxxx  3.4  3.3   2.6  2.1 xxxx xxxxx  2.1 xxxx xxxxx
Critical Gp:  7.0  6.5 xxxxx  7.0  6.5   5.5  5.5 xxxx xxxxx  5.5 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  863  897 xxxxx  880  881   132  263 xxxx xxxxx  222 xxxx xxxxx
Potent Cap.:  297  326 xxxxx  290  333  1187 1238 xxxx xxxxx 1302 xxxx xxxxx
Adj Cap:     0.71 0.65 xxxxx 0.71 0.65  1.00 1.00 xxxx xxxxx 1.00 xxxx xxxxx
Move Cap.:    210  213 xxxxx  205  218  1187 1238 xxxx xxxxx 1302 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del: 18.3 17.6 xxxxx 21.0 17.0   3.1  2.9 xxxx xxxxx  4.0 xxxx xxxxx
LOS by Move:    C    C     A    *    *     *    A    *     *    A    *     *
Movement:     LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx xxxx  268 xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx 15.6 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *    *    C     *    *    *     *    *    *     *
ApproachDel:       18.1             15.6              0.2              2.5
```

Traffic Analysis for Puente Hills Landfill EIR
Future With Approved Projects with Crossroads Business Park (3.4)
Mid Day Peak Hour Conditions

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #12 Proj Ent West @ Workman Mill

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Stop Sign			Stop Sign			Uncontrolled			Uncontrolled	
Rights:		Include			Include			Include			Include	
Lanes:	0 0 1! 0 0			0 0 0 0 0			0 0 1 1 0			1 0 1 1 0		
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	66	0	13	0	0	0	0	248	39	18	304	3
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	75	0	15	0	0	0	0	283	44	21	347	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	75	0	15	0	0	0	0	283	44	21	347	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	75	0	15	0	0	0	0	283	44	21	347	3
Adjusted Volume Module:												
Grade:		0%			0%			0%			0%	
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	83	0	16	0	0	0	0	283	44	23	347	3
Critical Gap Module:												
MoveUp Time:	3.4	xxxx	2.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.1	xxxx	xxxxx
Critical Gp:	7.0	xxxx	5.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	5.5	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	672	xxxx	164	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	327	xxxx	xxxxx
Potent Cap.:	394	xxxx	1144	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1144	xxxx	xxxxx
Adj Cap:	0.98	xxxx	1.00	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	xxxxx
Move Cap.:	386	xxxx	1144	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1144	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	11.6	xxxx	3.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.2	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	433	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	10.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	*	*	*
ApproachDel:		10.2			0.0			0.0			0.2	

Traffic Analysis for Puente Hills Landfill EIR
Future With Approved Projects with Crossroads Business Park (3.4)
Mid Day Peak Hour Conditions

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #10 Proj Ent East @ Crossroads Pkwy S.

Average Delay (sec/veh): 3.1 Worst Case Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Ignore			Include			Include			Include		
Lanes:	1 0 1 0 1			0 0 1! 0 0			1 0 1 1 0			1 0 1 1 0		
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	12	8	257	29	5	13	11	190	5	352	199	32
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	14	9	293	33	6	15	13	217	6	401	227	36
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	14	9	0	33	6	15	13	217	6	401	227	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	14	9	0	33	6	15	13	217	6	401	227	36
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	15	10	0	36	6	16	14	217	6	441	227	36
Critical Gap Module:												
MoveUp Time:	3.4	3.3	xxxxx	3.4	3.3	2.8	2.1	xxxx	xxxxx	2.1	xxxx	xxxxx
Critical Gp:	7.0	6.5	xxxxx	7.0	6.5	5.5	5.5	xxxx	xxxxx	5.5	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	863	897	xxxxx	880	881	132	263	xxxx	xxxxx	222	xxxx	xxxxx
Potent Cap.:	297	326	xxxxx	290	333	1187	1238	xxxx	xxxxx	1302	xxxx	xxxxx
Adj Cap:	0.71	0.65	xxxxx	0.71	0.65	1.00	1.00	xxxx	xxxxx	1.00	xxxx	xxxxx
Move Cap.:	210	218	xxxxx	205	218	1187	1238	xxxx	xxxxx	1302	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	18.3	17.6	xxxxx	21.0	17.0	3.1	2.9	xxxx	xxxxx	4.0	xxxx	xxxxx
LOS by Move:	C	C	A	*	*	A	A	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	268	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	15.6	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	C	*	*	*	*	*	*	*
ApproachDel:	18.1			15.6			0.2			2.5		

Traffic Analysis for Puente Hills Landfill EIR
Future With Approved Projects with Crossroads Business Park (3.4)
Mid Day Peak Hour Conditions

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #12 Proj Ent West @ Workman Mill

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			0 0 0 0 0			0 0 1 1 0			1 0 1 1 0		
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	66	0	13	0	0	0	0	245	39	18	304	3
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	75	0	15	0	0	0	0	283	44	21	347	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	75	0	15	0	0	0	0	283	44	21	347	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	75	0	15	0	0	0	0	283	44	21	347	3
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	83	0	16	0	0	0	0	283	44	23	347	3
Critical Gap Module:												
MoveUp Time:	3.4	xxxx	2.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.1	xxxx	xxxxx
Critical Gp:	7.0	xxxx	5.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	5.5	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	672	xxxx	164	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	327	xxxx	xxxxx
Potent Cap.:	394	xxxx	1144	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1144	xxxx	xxxxx
Adj Cap:	0.98	xxxx	1.00	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	xxxxx
Move Cap.:	386	xxxx	1144	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1144	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	11.6	xxxx	3.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.2	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	433	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	10.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	*	*	*
ApproachDel:	10.2			0.0			0.0			0.2		

Traffic Analysis for Puente Hills Landfill
Future With Other Approved Projects With Crossroads business Park (3.4)
PM Peak Hour Conditions

Scenario Report

Scenario:	Fut+Other Projects PM
Command:	Fut+Other Projects PM
Volume:	PM
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	PM
Trip Distribution:	All
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Fut+Other Projects PM

Traffic Analysis for Puente Hills Landfill
Future With Other Approved Projects With Crossroads business Park (3.4)
PM Peak Hour Conditions

Trip Generation Report
Project Trips
Forecast for PM

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
5	Parcel 1-3	1.00	Cum Parcel 1-3	63.00	391.00	63	391	454	52.5
	Zone 5 Subtotal					63	391	454	52.5
6	Parcel 5&6	1.00	Cum Proj 5&6	45.00	281.00	45	281	326	37.7
	Zone 6 Subtotal					45	281	326	37.7
7	MRF	1.00	MRF	42.00	42.00	42	42	84	9.7
	Zone 7 Subtotal					42	42	84	9.7
TOTAL						150	714	864	100.0

Traffic Analysis for Puente Hills Landfill
Future With Other Approved Projects With Crossroads business Park (3.4)
PM Peak Hour Conditions

Trip Distribution Report

Percent Of Trips All

Zone	To Gates 2	4	6	8	12
5	10.0	5.0	55.0	5.0	25.0
6	0.0	5.0	65.0	5.0	25.0
7	26.0	3.0	48.0	3.0	20.0

Traffic Analysis for Puente Hills Landfill
Future With Other Approved Projects With Crossroads business Park (3.4)
PM Peak Hour Conditions

Turning Movement Report
PM

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#1 Crossroads Pkwy N. @ Crossroads Pkwy S.													
Base	257	0	129	0	0	0	0	186	170	168	180	0	1089
Added	51	0	235	0	0	0	0	183	87	8	11	0	575
Other	0	0	183	0	0	0	0	30	0	107	30	0	350
Total	308	0	547	0	0	0	0	399	257	283	221	0	2014
#2 SR-60 @ Crossroads Pkwy S.													
Base	0	0	0	198	7	48	0	137	528	125	262	0	1305
Added	0	0	0	29	0	55	0	257	8	70	26	0	445
Other	0	0	0	168	0	0	0	15	0	92	15	0	290
Total	0	0	0	395	7	103	0	409	536	287	303	0	2040
#3 Workman Mill/Crossroads South @ Workman Mill													
Base	15	14	9	67	8	250	614	547	6	0	258	85	1873
Added	0	0	0	0	0	1	1	40	0	0	101	0	143
Other	0	0	0	0	0	41	29	14	0	0	15	0	99
Total	15	14	9	67	8	292	644	601	6	0	374	85	2115
#4 Pellissier/Workman Mill @ Workman Mill (Signal To Be Constructed)													
Base	18	0	722	0	0	0	0	125	276	471	286	0	1898
Added	0	0	1	0	0	0	0	0	0	1	0	0	2
Other	0	0	29	0	0	0	0	0	0	41	0	0	70
Total	18	0	752	0	0	0	0	125	276	513	286	0	1970
#5 Crossroads Pkwy N. @ Workman Mill													
Base	91	7	534	11	18	3	1	1141	15	140	605	9	2576
Added	0	0	34	0	0	0	0	1	0	5	1	0	41
Other	0	0	30	0	0	0	0	29	0	30	41	0	130
Total	91	7	598	11	18	3	1	1171	15	175	647	9	2747
#6 Peck Rd @ Workman Mill													
Base	0	806	799	99	557	0	0	0	0	320	0	73	2655
Added	0	0	7	17	0	0	0	0	0	35	0	50	109
Other	0	1	16	0	0	0	0	0	0	56	0	0	73
Total	0	807	822	116	557	0	0	0	0	411	0	123	2837
#7 605 NB @ Pellissier													
Base	0	0	0	467	0	236	197	606	0	0	383	130	2020
Added	0	0	0	0	0	6	50	0	0	0	0	0	56
Total	0	0	0	467	0	242	247	606	0	0	383	130	2076
#8 Pellissier @ Peck Rd													
Base	7	567	357	388	536	75	54	56	24	105	8	585	2760
Added	0	0	50	0	11	0	0	0	0	6	0	0	67
Other	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	7	568	407	388	547	75	54	56	24	111	8	585	2828

Traffic Analysis for Puente Hills Landfill
Future With Other Approved Projects With Crossroads business Park (3.4)
PM Peak Hour Conditions

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#9 Rooks @ Peck Rd													
Base	44	822	262	80	985	57	189	31	123	78	34	145	2850
Added	0	0	0	0	0	0	0	0	0	11	0	0	11
Total	44	822	262	80	985	57	189	31	123	89	34	145	2861
#10 Proj Ent East @ Crossroads Pkwy S.													
Base	10	6	60	50	5	14	23	591	5	11	261	50	1085
Added	0	0	0	0	0	0	0	265	0	0	80	0	345
Other	0	0	1	0	0	0	0	14	0	0	15	0	30
Total	10	6	61	50	5	14	23	870	5	11	356	50	1460
#12 Proj Ent West @ Workman Mill													
Base	0	[illegible]	1	0	0	0	0	1146	0	0	543	0	1689
Added	12	[illegible]	30	0	0	0	0	12	12	30	73	0	169
Other	0	0	-1	0	0	0	0	44	0	0	56	0	99
Total	12	0	30	0	0	0	0	1202	12	30	672	0	1957

Traffic Analysis for Puente Hills Landfill
Future With Other Approved Projects With Crossroads business Park (3.4)
PM Peak Hour Conditions

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/Veh	Base V/C	Future LOS	Future Del/Veh	Future V/C	Change in
# 1 Crossroads Pkwy N. @ Crossroad	A	xxxxx	0.3[illegible]7	D	xxxxx	0.824	+ 0.427 V/C
# 2 SR-60 @ Crossroads Pkwy S.	A	xxxxx	0.285	A	xxxxx	0.533	+ 0.248 V/C
# 3 Workman Mill/Crossroads South	B	xxxxx	0.681	C	xxxxx	0.749	+ 0.068 V/C
# 4 Pellissier/Workman Mill @ Work	A	xxxxx	0.445	A	xxxxx	0.471	+ 0.026 V/C
# 5 Crossroads Pkwy N. @ Workman M	C	xxxxx	0.736	C	xxxxx	0.787	+ 0.051 V/C
# 6 Peck Rd @ Workman Mill	B	xxxxx	0.661	B	xxxxx	0.686	+ 0.025 V/C
# 7 605 NB @ Pellissier	B	xxxxx	0.675	C	xxxxx	0.707	+ 0.031 V/C
# 8 Pellissier @ Peck Rd	F	xxxxx	1.066	F	xxxxx	1.082	+ 0.016 V/C
# 9 Rooks @ Peck Rd	B	xxxxx	0.697	B	xxxxx	0.697	+ 0.000 V/C
# 10 Proj Ent East @ Crossroads Pkw	C	1.4	0.000	D	1.9	0.000	+ 0.000 V/C
# 12 Proj Ent West @ Workman Mill	B	0.0	0.000	D	0.8	0.000	+ 0.000 V/C

Traffic Analysis for Puente Hills Landfill
Future With Other Approved Projects With Crossroads business Park (3.4)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Crossroads Pkwy N. @ Crossroads Pkwy S.

Cycle (sec):	100	Critical Vol./Cap. (X):	0.824
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	72	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	0 0	1	0 0	0 0	0	0 0	1 1	0	1 0	2 0	0
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	225	0	113	0	0	0	0	163	149	147	158	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	257	0	129	0	0	0	0	186	170	168	180	0
Added Vol:	51	0	235	0	0	0	0	183	87	8	11	0
Other Appro:	0	0	183	0	0	0	0	30	0	107	30	0
Initial Fut:	308	0	547	0	0	0	0	399	257	283	221	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	308	0	547	0	0	0	0	399	257	283	221	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	308	0	547	0	0	0	0	399	257	283	221	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	308	0	547	0	0	0	0	399	257	283	221	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	1.22	0.78	1.00	2.00	0.00
Final Sat.:	3200	0	1600	0	0	0	0	1946	1254	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.10	0.00	0.34	0.00	0.00	0.00	0.00	0.20	0.20	0.18	0.07	0.00
Crit Moves:			****					****		****		

Traffic Analysis for Puente Hills Landfill
Future With Other Approved Projects With Crossroads business Park (3.4)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 SR-60 @ Crossroads Pkwy S.

Cycle (sec):	100	Critical Vol./Cap. (X):	0.533
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	1 1	0 0	1	0 0	2 0	1	1 0	2 0	0
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	0	0	0	174	6	42	0	120	463	110	230	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	0	0	198	7	48	0	137	528	125	262	0
Added Vol:	0	0	0	29	0	55	0	257	8	70	26	0
Other Appro:	0	0	0	168	0	0	0	15	0	92	15	0
Initial Fut:	0	0	0	395	7	103	0	409	[illegible]	287	303	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	0	0	395	7	0	0	409	0	287	303	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	395	7	0	0	409	0	287	303	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	0	0	0	395	7	0	0	409	0	287	303	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.97	0.03	1.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	0	0	0	3144	56	1600	0	3200	1600	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.13	0.00	0.00	0.13	0.00	0.18	0.09	0.00
Crit Moves:				****				****		****		

Traffic Analysis for Puente Hills Landfill
Future With Other Approved Projects With Crossroads business Park (3.4)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Workman Mill/Crossroads South @ Workman Mill

Cycle (sec):	100	Critical Vol./Cap. (X):	0.749
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 0	0 1	1	1 0	1 1	0	0 0	1 1	0
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	13	12	8	59	7	219	539	480	5	0	226	75
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	15	14	9	67	8	250	614	547	6	0	258	85
Added Vol:	0	0	0	0	0	1	1	40	0	0	101	0
Other Appro:	0	0	0	0	0	41	29	14	0	0	15	0
Initial Fut:	15	14	9	67	8	292	644	601	6	0	374	85
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	15	14	9	67	8	292	644	601	6	0	374	85
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	14	9	67	8	292	644	601	6	0	374	85
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	15	14	9	67	8	292	644	601	6	0	374	85
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.05	1.95	1.00	1.98	0.02	0.00	1.63	0.37
Final Sat.:	1600	1600	1600	1600	85	3115	1600	3168	32	0	2607	593
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.04	0.09	0.09	0.40	0.19	0.19	0.00	0.14	0.14
Crit Moves:	****				****		****				****	

Traffic Analysis for Puente Hills Landfill
Future With Other Approved Projects With Crossroads business Park (3.4)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Pellissier/Workman Mill @ Workman Mill (Signal To Be Constructed

Cycle (sec):	100	Critical Vol./Cap. (X):	0.471
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 0	1	0 0	0 0	0	0 0	1 1	0	1 0	2 0	0
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	16	0	633	0	0	0	0	110	242	413	251	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	18	0	722	0	0	0	0	125	276	471	286	0
Added Vol:	0	0	1	0	0	0	0	0	0	1	0	0
Other Appro:	0	0	29	0	0	0	0	0	0	41	0	0
Initial Fut:	18	0	752	0	0	0	0	125	276	513	286	0
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	18	0	0	0	0	0	0	125	0	513	286	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	0	0	0	0	0	0	125	0	513	286	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	18	0	0	0	0	0	0	125	0	513	286	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00	2.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	3200	0	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.32	0.09	0.00
Crit Moves:	****							****		****		

Traffic Analysis for Puente Hills Landfill
Future With Other Approved Projects With Crossroads business Park (3.4)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Crossroads Pkwy N. @ Workman Mill

Cycle (sec):	100	Critical Vol./Cap. (X):	0.787
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	64	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	1	0 0	1! 0	0	1 0	1 1	0	1 0	1 1	0
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	80	6	468	10	16	3	1	1001	13	123	531	8
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	91	7	534	11	18	3	1	1141	15	140	605	9
Added Vol:	0	0	34	0	0	0	0	1	0	5	1	0
Other Appro:	0	0	30	0	0	0	0	29	0	30	41	0
Initial Fut:	91	7	598	11	18	3	1	1171	15	175	647	9
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	91	7	598	11	18	0	1	1171	15	175	647	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	91	7	598	11	18	0	1	1171	15	175	647	9
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	91	7	598	11	18	0	1	1171	15	175	647	9
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.02	1.98	0.38	0.62	0.00	1.00	1.97	0.03	1.00	1.97	0.03
Final Sat.:	1600	37	3163	607	993	0	1600	3160	40	1600	3156	44
Capacity Analysis Module:												
Vol/Sat:	0.06	0.19	0.19	0.02	0.02	0.00	0.00	0.37	0.37	0.11	0.21	0.20
Crit Moves:		****		****				****		****		

Traffic Analysis for Puente Hills Landfill
Future With Other Approved Projects With Crossroads business Park (3.4)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Peck Rd @ Workman Mill

Cycle (sec):	100	Critical Vol./Cap. (X):	0.686
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	3 0	1	1 0	2 0	0	0 0	0 0	0	1 0	1! 0	0
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	0	707	701	87	489	0	0	0	0	281	0	64
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	806	799	99	557	0	0	0	0	320	0	73
Added Vol:	0	0	7	17	0	0	0	0	0	35	0	50
Other Appro:	0	1	16	0	0	0	0	0	0	55	0	0
Initial Fut:	0	807	822	116	557	0	0	0	0	411	0	123
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	807	822	116	557	0	0	0	0	411	0	123
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	807	822	116	557	0	0	0	0	411	0	123
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	807	822	116	557	0	0	0	0	411	0	123
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.54	0.00	0.46
Final Sat.:	0	4800	1600	1600	3200	0	0	0	0	2463	0	737
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.51	0.07	0.17	0.00	0.00	0.00	0.00	0.17	0.00	0.17
Crit Moves:			****	****						****		

Traffic Analysis for Puente Hills Landfill
Future With Other Approved Projects With Crossroads business Park (3.4)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 605 NB @ Pellissier

Cycle (sec):	100	Critical Vol./Cap. (X):	0.707
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	1 0	0	0 1	1 0	2	0 0	0 0	1	1 0
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	0	0	0	410	0	207	173	532	0	0	336	114
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	0	0	467	0	236	197	606	0	0	383	130
Added Vol:	0	0	0	0	0	6	50	0	0	0	0	0
Other Appro:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	467	0	242	247	606	0	0	383	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	467	0	242	247	606	0	0	383	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	467	0	242	247	606	0	0	383	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	467	0	242	247	606	0	0	383	130
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.49	0.51
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	2389	811
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.29	0.00	0.15	0.15	0.19	0.00	0.00	0.16	0.16
Crit Moves:				****			****				****	

Traffic Analysis for Puente Hills Landfill
Future With Other Approved Projects With Crossroads business Park (3.4)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Pellissier @ Peck Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	1.082
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	0	0 1	0 1	0	0 1
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	6	497	313	340	470	66	47	49	21	92	7	513
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	7	567	357	388	536	75	54	56	24	105	8	585
Added Vol:	0	0	50	0	11	0	0	0	0	6	0	0
Other Appro:	0	1	0	0	0	0	0	0	0	0	0	0
Initial Fut:	7	568	407	388	547	75	54	56	24	111	8	585
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	7	568	407	388	547	75	54	56	24	111	8	585
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	568	407	388	547	75	54	56	24	111	8	585
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	7	568	407	388	547	75	54	56	24	111	8	585
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.17	0.83	1.00	1.76	0.24	0.49	0.51	1.00	0.93	0.07	1.00
Final Sat.:	1600	1864	1336	1600	2814	386	785	815	1600	1492	108	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.30	0.30	0.24	0.19	0.19	0.07	0.07	0.02	0.07	0.07	0.37
Crit Moves:		****		****			****					****

Traffic Analysis for Puente Hills Landfill
Future With Other Approved Projects With Crossroads business Park (3.4)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Rooks @ Peck Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.697
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1 1 0			1 0 1 1 0			1 0 1 1 0			1 0 1 0 1		
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	39	721	230	70	864	50	166	27	108	68	30	127
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	44	822	262	80	985	57	189	31	123	78	34	145
Added Vol:	0	0	0	0	0	0	0	0	0	11	0	0
Other Appro:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	44	822	262	80	985	57	189	31	123	89	34	145
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	44	822	262	80	985	57	189	31	123	89	34	145
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	44	822	262	80	985	57	189	31	123	89	34	145
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	44	822	262	80	985	57	189	31	123	89	34	145
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.52	0.48	1.00	1.89	0.11	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	2427	773	1600	3025	175	1600	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.34	0.34	0.05	0.33	0.33	0.12	0.02	0.08	0.06	0.02	0.09
Crit Moves:		****			****		****					****

Traffic Analysis for Puente Hills Landfill
Future With Other Approved Projects With Crossroads business Park (3.4)
PM Peak Hour Conditions

Level Of Service Computation Report
1994 HCM Unsignalized Method (Future Volume Alternative)

Intersection #10 Proj Ent East @ Crossroads Pkwy S.

Average Delay (sec/veh): 1.9   Worst Case Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Ignore			Include			Include			Include		
Lanes:	1 0 1 0 1			0 0 1! 0 0			1 0 1 1 0			1 0 1 1 0		
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	9	5	53	44	4	12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	44
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	10	6	60	50	5	14	[illegible]	591	5	11	[illegible]	50
Added Vol:	0	0	0	0	0	0	[illegible]	265	0	[illegible]	[illegible]	0
Other Appro:	0	0	1	0	0	0	[illegible]	14	[illegible]	[illegible]	[illegible]	0
Initial Fut:	10	6	61	50	5	14	[illegible]	870	5	11	[illegible]	50
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	10	6	0	50	5	14	23	870	5	11	356	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	10	6	0	50	5	14	23	870	5	11	356	50
Adjusted Volume Module:												
Grade:	0%			0%			[illegible]			[illegible]		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	11	6	0	55	5	15	25	870	5	13	356	50
Critical Gap Module:												
MoveUp Time:	3.4	3.3	xxxxx	3.4	3.3	2.6	2.1	xxxx	xxxxx	2.1	xxxx	xxxxx
Critical Gp:	7.0	6.5	xxxxx	7.0	6.5	5.5	5.5	xxxx	xxxxx	5.5	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1264	1312	xxxxx	1288	1289	203	[illegible]	xxxx	xxxxx	[illegible]	xxxx	xxxxx
Potent Cap.:	165	186	xxxxx	159	192	1092	[illegible]	xxxx	xxxxx	[illegible]	xxxx	xxxxx
Adj Cap:	0.93	0.95	xxxxx	0.94	0.95	1.00	[illegible]	xxxx	xxxxx	1.00	xxxx	xxxxx
Move Cap.:	153	178	xxxxx	149	183	1092	[illegible]	xxxx	xxxxx	[illegible]	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	25.1	20.9	xxxxx	36.1	20.1	3.3	[illegible]	xxxx	xxxxx	6.3	xxxx	xxxxx
LOS by Move:	D	D	A	*	*	[illegible]	[illegible]	*	[illegible]	B	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	TR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	183	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	28.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	D	*	*	*	*	*	*	*
ApproachDel:	23.6			28.5			[illegible]			0.2		

```
-------------------------------------------------------------------------------
                   Traffic Analysis for Puente Hills Landfill
      Future With Other Approved Projects With Crossroads business Park (3.4)
                           PM Peak Hour Conditions
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
          1994 HCM Unsignalized Method (Future Volume Alternative)
*******************************************************************************
Intersection #12 Proj Ent West @ Workman Mill
*******************************************************************************
Average Delay (sec/veh):        0.8         Worst Case Level Of Service:       D
*******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:          Include          Include          Include          Include
Lanes:        0  0  1! 0  0    0  0  0  0  0    0  0  1  1  0    1  0  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour
Base Vol:       0    0    1     0    0    0     0 1005    0     0  476    0
Growth Adj:  1.14 1.14 1.14  1.14 1.14 1.14  1.14 1.14 1.14  1.14 1.14 1.14
Initial Bse:    0    0    1     0    0    0     0 1146    0     0  543    0
Added Vol:     12    0   30     0    0    0     0   12   12    30   73    0
Other Appro:    0    0   -1     0    0    0     0   44    0     0   56    0
Initial Fut:   12    0   30     0    0    0     0 1202   12    30  672    0
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:    12    0   30     0    0    0     0 1202   12    30  672    0
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Final Vol.:    12    0   30     0    0    0     0 1202   12    30  672    0
Adjusted Volume Module:
Grade:            0%               0%               0%               0%
% Cycle/Cars:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
% Truck/Comb:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
PCE Adj:     1.10 1.10 1.10  1.10 1.10 1.10  1.10 1.00 1.00  1.10 1.00 1.00
Cycl/Car PCE:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Trck/Cmb PCE:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Adj Vol.:      13    0   33     0    0    0     0 1202   12    33  672    0
Critical Gap Module:
MoveUp Time:  3.4 xxxx  2.6 xxxxx xxxx xxxxx xxxxx xxxx xxxxx  2.1 xxxx xxxxx
Critical Gp:  7.0 xxxx  5.5 xxxxx xxxx xxxxx xxxxx xxxx xxxxx  5.5 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: 1909 xxxx  607  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1214 xxxx xxxxx
Potent Cap.:   64 xxxx  682  xxxx xxxx xxxxx  xxxx xxxx xxxxx   382 xxxx xxxxx
Adj Cap:     0.91 xxxx 1.00  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1.00 xxxx xxxxx
Move Cap.:     58 xxxx  682  xxxx xxxx xxxxx  xxxx xxxx xxxxx   382 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del: 77.8 xxxx  5.5 xxxxx xxxx xxxxx xxxxx xxxx xxxxx  10.2 xxxx xxxxx
LOS by Move:    *    *    *     *    *    *     *    *    *     C    *    *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx  168 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Shrd StpDel:xxxxx 26.1 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    D    *     *    *    *     *    *    *     *    *    *
ApproachDel:       26.1              0.0              0.0              0.5
```

Appendix D
Capacity Analysis
Future Without Project Condition

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
AM Peak Hour Conditions

Scenario Report

Scenario:	Fut-Proj AM
Command:	Fut+Proj AM
Volume:	AM
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	AM
Trip Distribution:	All
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Fut+Proj AM

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
AM Peak Hour Conditions

Trip Generation Report
Project Trips
Forecast for AM

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
3	Landfill Pro	1.00	Landfill Proj	-302.00	0.00	-302	0	-302	53.
	Zone 3 Subtotal					-302	0	-302	53.5
4	Landfill Pro	1.00	Landfill Proj	0.00	-263.00	0	-263	-263	46.
	Zone 4 Subtotal					0	-263	-263	46.5
TOTAL						-302	-263	-565	100.0

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
AM Peak Hour Conditions

Trip Distribution Report

Percent Of Trips All

Zone	To Gates 2	3	4	6	7	8	12
3	15.0	0.0	1.0	60.0	1.0	3.0	20.0
4	26.0	0.0	6.0	47.0	0.0	3.0	18.0

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
AM Peak Hour Conditions

Turning Movement Report
AM

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#1 Crossroads Pkwy N. @ Crossroads Pkwy S.													
Base	239	0	154	0	0	0	0	132	193	435	181	0	1335
Added	-16	0	-124	0	0	0	0	0	-3	-60	0	0	-203
Total	223	0	30	0	0	0	0	132	190	375	181	0	1132
#2 SR-60 @ Crossroads Pkwy S.													
Base	0	0	0	222	2	283	0	274	205	146	633	0	1765
Added	0	0	0	0	0	-181	0	-139	-47	0	-63	0	-430
Total	0	0	0	222	2	102	0	135	158	146	570	0	1335
#3 Workman Mill/Crossroads South @ Workman Mill													
Base	1	0	0	48	6	359	137	192	22	0	616	19	1399
Added	0	0	0	0	0	0	0	-13	0	0	-28	0	-41
Total	1	0	0	48	6	359	137	179	22	0	588	19	1358
#4 Pellissier/Workman Mill @ Workman Mill (Signal To Be Constructed)													
Base	124	0	423	0	0	0	0	404	355	769	1485	0	3560
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	124	0	423	0	0	0	0	404	355	769	1485	0	3560
#5 Crossroads Pkwy N. @ Workman Mill													
Base	111	109	227	7	15	5	11	301	367	337	2036	71	3597
Added	0	0	-16	0	0	0	0	0	0	-3	0	0	-19
Total	111	109	211	7	15	5	11	301	367	334	2036	71	3578
#6 Peck Rd @ Workman Mill													
Base	0	542	423	226	1035	0	0	0	0	273	0	82	3181
Added	0	0	-9	-48	0	0	0	0	0	-9	0	-68	-133
Other	0	0	0	0	1	0	0	0	0	[illegible]	0	0	1
Total	0	542	414	178	1036	0	0	0	0	865	0	14	3049
#7 605 NB @ Pellissier													
Base	0	0	0	212	0	269	113	192	0	0	978	246	2010
Added	0	0	0	0	0	-45	-68	0	0	0	0	0	-113
Total	0	0	0	212	0	224	45	192	0	0	978	246	1897
#8 Pellissier @ Peck Rd													
Base	9	488	136	169	955	123	31	24	10	285	38	972	3240
Added	0	0	-68	0	-3	0	0	0	0	-45	0	0	-116
Total	9	488	68	169	952	123	31	24	10	240	38	972	3124
#9 Rooks @ Peck Rd													
Base	207	920	138	139	640	192	76	18	52	250	34	62	2728
Added	0	0	0	0	-3	0	0	0	0	0	0	0	-3
Total	207	920	138	139	637	192	76	18	52	250	34	62	2725

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
AM Peak Hour Conditions

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#10 Proj Ent East @ Crossroads Pkwy S.													
Base	9	0	182	22	1	18	9	233	5	231	775	30	1515
Added	-9	0	-179	0	0	0	0	-8	-5	-226	-19	0	-446
Total	0	0	3	22	1	18	9	225	-0	5	756	30	1069
#12 Proj Ent West @ Workman Mill													
Base	68	0	8	0	0	0	0	337	52	19	955	0	1441
Added	-67	0	-8	0	0	0	0	-5	-52	-19	-9	0	-160
Total	1	0	-0	0	0	0	0	332	0	0	946	0	1281

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
AM Peak Hour Conditions

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/Veh	Base V/C	Future LOS	Future Del/Veh	Future V/C	Change in
# 1 Crossroads Pkwy N. @ Crossroad	B	xxxxx	0.667	A	xxxxx	0.591	-0.076 V/C
# 2 SR-60 @ Crossroads Pkwy S.	A	xxxxx	0.507	A	xxxxx	0.434	-0.073 V/C
# 3 Workman Mill/Crossroads South	A	xxxxx	0.499	A	xxxxx	0.490	-0.009 V/C
# 4 Pellissier/Workman Mill @ Work	C	xxxxx	0.784	C	xxxxx	0.784	+ 0.000 V/C
# 5 Crossroads Pkwy N. @ Workman M	D	xxxxx	0.884	D	xxxxx	0.879	-0.005 V/C
# 6 Peck Rd @ Workman Mill	C	xxxxx	0.722	B	xxxxx	0.698	-0.023 V/C
# 7 605 NB @ Pellissier	C	xxxxx	0.721	B	xxxxx	0.651	-0.071 V/C
# 8 Pellissier @ Peck Rd	F	xxxxx	1.084	F	xxxxx	1.083	-0.001 V/C
# 9 Rooks @ Peck Rd	C	xxxxx	0.706	C	xxxxx	0.706	+ 0.000 V/C
# 10 Proj Ent East @ Crossroads Pkw	E	2.1	0.000	F	0.7	0.000	+ 0.000 V/C
# 12 Proj Ent West @ Workman Mill	E	2.5	0.000	A	0.0	0.000	+ 0.000 V/C

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Crossroads Pkwy N. @ Crossroads Pkwy S.

Cycle (sec): 100 — Critical Vol./Cap. (X): 0.591
Loss Time (sec): 10 (Y+R = 4 sec) — Average Delay (sec/veh): xxxxxx
Optimal Cycle: 39 — Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	0 0	1	0 0	0 0	0	0 0	1 1	0	1 0	2 0	0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	210	0	135	0	0	0	0	116	169	382	159	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	239	0	154	0	0	0	0	132	193	435	181	0
Added Vol:	-16	0	-124	0	0	0	0	0	-3	-60	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	223	0	30	0	0	0	0	132	190	375	181	0
User Adj:	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	259	0	35	0	0	0	0	153	220	436	210	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	259	0	35	0	0	0	0	153	220	436	210	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	259	0	35	0	0	0	0	153	220	436	210	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	2.00	0.00
Final Sat.:	3200	0	1600	0	0	0	0	1600	1600	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.02	0.00	0.00	0.00	0.00	0.10	0.14	0.27	0.07	0.00
Crit Moves:	****								****	****		

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 SR-60 @ Crossroads Pkwy S.

Cycle (sec): 100 — Critical Vol./Cap. (X): 0.434
Loss Time (sec): 10 (Y+R = 4 sec) — Average Delay (sec/veh): xxxxxx
Optimal Cycle: 30 — Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	1 1	0 0	1	0 0	2 0	1	1 0	2 0	0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	0	0	0	195	2	248	0	240	180	128	555	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	0	0	222	2	283	0	274	205	146	633	0
Added Vol:	0	0	0	0	0	-181	0	-139	-47	0	-63	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	222	2	102	0	135	158	146	570	0
User Adj:	1.15	1.15	1.15	1.15	1.15	0.00	1.15	1.15	0.00	1.15	1.15	1.15
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	0	0	256	3	0	0	155	0	168	655	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	256	3	0	0	155	0	168	655	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	0	0	0	256	3	0	0	155	[illegible]	168	655	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.98	0.02	1.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	0	0	0	3163	37	1600	0	3200	1600	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.08	0.08	0.00	0.00	0.05	0.00	0.11	0.20	0.00
Crit Moves:				****				****			****	

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Workman Mill/Crossroads South @ Workman Mill

Cycle (sec):	100	Critical Vol./Cap. (X):	0.490
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1 0 1			1 0 0 1 1			1 0 1 1 0			0 0 1 1 0		
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	1	0	0	42	5	315	120	168	19	0	540	17
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	1	0	0	48	6	359	137	192	22	0	616	19
Added Vol:	0	0	0	0	0	0	0	-13	0	0	-28	0
Other Appro:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	0	0	48	6	359	137	179	22	0	588	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	0	0	48	6	359	137	179	22	0	588	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	0	0	48	6	359	137	179	22	0	588	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	1	0	0	48	6	359	137	179	22	0	588	19
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.03	1.97	1.00	1.78	0.22	0.00	1.94	0.06
Final Sat.:	1600	1600	1600	1600	53	3147	1600	2850	350	0	3100	100
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.03	0.11	0.11	0.09	0.06	0.06	0.00	0.19	0.19
Crit Moves:	****				****		****				****	

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Pellissier/Workman Mill @ Workman Mill (Signal To Be Constructed

Cycle (sec):	100	Critical Vol./Cap. (X):	0.784
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 0 0 1			0 0 0 0 0			0 0 1 1 0			1 0 2 0 0		
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	109	0	371	0	0	0	0	354	311	675	1303	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	124	0	423	0	0	0	0	404	355	769	1485	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Other Appro:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	124	0	423	0	0	0	0	404	355	769	1485	0
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	124	0	0	0	0	0	0	404	0	769	1485	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	124	0	0	0	0	0	0	404	0	769	1485	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	124	0	0	0	0	0	0	404	0	769	1485	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00	2.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	3200	0	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.48	0.46	0.00
Crit Moves:	****							****		****		

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Crossroads Pkwy N. @ Workman Mill

Cycle (sec): 100 Critical Vol./Cap. (X): 0.879
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 91 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 0 1 1			0 0 1! 0 0			1 0 1 1 0			1 0 1 1 0		
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	97	96	199	6	13	4	10	264	322	296	1786	62
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	111	109	227	7	15	5	11	301	367	337	2036	71
Added Vol:	0	0	-16	0	0	0	0	0	0	-3	0	0
Other Appro:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	111	109	211	7	15	5	11	301	367	334	2036	71
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	111	109	211	7	15	0	11	301	367	334	2036	71
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	111	109	211	7	15	0	11	301	367	334	2036	71
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	111	109	211	7	15	0	11	301	367	334	2036	71
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.68	1.32	0.32	0.68	0.00	1.00	1.00	1.00	1.00	1.93	0.07
Final Sat.:	1600	1090	2110	509	1091	0	1600	1600	1600	1600	3092	108
Capacity Analysis Module:												
Vol/Sat:	0.07	0.10	0.10	0.01	0.01	0.00	0.01	0.19	0.23	0.21	0.66	0.66
Crit Moves:		****		****			****				****	

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Peck Rd @ Workman Mill

Cycle (sec): 100 Critical Vol./Cap. (X): 0.698
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 50 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 3 0 1			1 0 2 0 0			0 0 0 0 0			1 0 1! 0 0		
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	0	475	371	198	908	0	0	0	0	766	0	72
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	542	423	226	1035	0	0	0	0	873	0	82
Added Vol:	0	0	-9	-48	0	0	0	0	0	-6	0	-68
Other Appro:	0	0	0	0	1	0	0	[illegible]	0	0	0	0
Initial Fut:	0	542	414	178	1036	0	0	0	0	865	0	14
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	542	414	178	1036	0	0	0	[illegible]	865	0	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	[illegible]	[illegible]	0
Reduced Vol:	0	542	414	178	1036	0	[illegible]	0	0	865	0	14
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	542	414	178	1036	0	0	0	0	865	[illegible]	14
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.97	0.00	0.03
Final Sat.:	0	4800	1600	1600	3200	0	0	0	0	3149	0	51
Capacity Analysis Module:												
Vol/Sat:	0.00	0.11	0.26	0.11	0.32	0.00	0.00	0.00	0.00	0.27	0.00	0.27
Crit Moves:	****				****					****		

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 605 NB @ Pellissier

Cycle (sec):	100	Critical Vol./Cap. (X):	0.651
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	45	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	1 0	0 0	1	1 0	2 0	0	0 0	1 1	0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	0	0	0	186	0	236	99	168	0	0	858	216
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	0	0	212	0	269	113	192	0	0	978	246
Added Vol:	0	0	0	0	0	-45	-68	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	212	0	224	45	192	0	0	978	246
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	212	0	224	45	192	0	0	978	246
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	212	0	224	45	192	0	0	978	246
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	212	0	224	45	192	0	0	978	246
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.60	0.40
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	2557	643
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.14	0.03	0.06	0.00	0.00	0.38	0.38
Crit Moves:						****	****				****	

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Pellissier @ Peck Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	1.083
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 1	0	1 0	1 1	0	0 1	0 0	1	0 1	0 0	1
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	8	428	119	148	838	108	27	21	9	250	33	853
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	9	488	136	169	955	123	31	24	10	285	38	972
Added Vol:	0	0	-68	0	-3	0	0	0	0	-45	0	0
Other Appro:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	488	68	169	952	123	31	24	10	240	38	972
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	488	68	169	952	123	31	24	10	240	38	972
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	488	68	169	952	123	31	24	10	240	38	972
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	9	488	68	169	952	123	31	24	10	240	38	972
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.76	0.24	1.00	1.77	0.23	0.56	0.44	1.00	0.86	0.14	1.00
Final Sat.:	1600	2809	391	1600	2834	366	902	698	1600	1381	219	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.17	0.17	0.11	0.34	0.34	0.03	0.03	0.01	0.17	0.17	0.61
Crit Moves:	****				****		****					****

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Rooks @ Peck Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.706
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0	1 0	1 0	1
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	182	807	121	122	561	168	67	16	46	219	30	54
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	207	920	138	139	640	192	76	18	52	250	34	62
Added Vol:	0	0	0	0	-3	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	207	920	138	139	637	192	76	18	52	250	34	62
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	207	920	138	139	637	192	76	18	52	250	34	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	207	920	138	139	637	192	76	18	52	250	34	62
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	207	920	138	139	637	192	76	18	52	250	34	62
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.74	0.26	1.00	1.54	0.46	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	2783	417	1600	2459	741	1600	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.13	0.33	0.33	0.09	0.26	0.26	0.05	0.01	0.03	0.16	0.02	0.04
Crit Moves:		****		****					****	****		

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
AM Peak Hour Conditions

Level Of Service Computation Report
1994 HCM Unsignalized Method (Future Volume Alternative)

Intersection #10 Proj Ent East @ Crossroads Pkwy S.

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Ignore			Include			Include			Include		
Lanes:	1 0	1 0	1	0 0	1! 0	0	1 0	1 1	0	1 0	1 1	0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	8	0	160	19	1	16	8	204	4	203	660	26
Growth Adj:	0.00	1.14	0.00	1.14	1.14	1.14	1.14	1.14	0.00	0.00	1.14	1.14
Initial Bse:	9	0	182	22	1	18	9	233	5	231	775	30
Added Vol:	-9	0	-179	0	0	0	0	-8	5	-226	-19	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	22	1	18	9	225	[illegible]	[illegible]	756	30
User Adj:	0.00	1.17	0.00	1.17	1.17	1.17	1.17	1.17	0.00	0.00	1.17	1.17
PHF Adj:	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
PHF Volume:	0	0	0	25	1	21	11	263	[illegible]	0	885	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	25	1	21	11	263	[illegible]	0	885	35
Adjusted Volume Module:												
Grade:		0%			0%			0%			0%	
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	28	1	23	12	262	0	0	985	35
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	3.3	2.6	2.[illegible]	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	7.0	6.5	5.5	5.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1175	1175	460	915	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	188	224	810	550	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.98	0.98	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	184	219	810	550	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	22.7	16.5	4.6	6.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	F	*	A	*	*	*	B	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	282	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	14.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	C	*	*	*	*	*	*	*
ApproachDel:		0.0			14.5			0.[illegible]			0.0	

```
-----------------------------------------------------------------------------
               Traffic Analysis for Puente Hills Landfill EIR
                  Future Conditions Minus the Project (5.1)
                          AM Peak Hour Conditions
-----------------------------------------------------------------------------
                      Level Of Service Computation Report
          1994 HCM Unsignalized Method (Future Volume Alternative)
*****************************************************************************
Intersection #12 Proj Ent West @ Workman Mill
*****************************************************************************
Average Delay (sec/veh):        0.0          Worst Case Level Of Service:    A
*****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
-------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:          Include          Include          Include          Include
Lanes:        0  0  1! 0  0    0  0  0  0  0    0  0  1  1  0    1  0  2  0  0
-------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:      60    0    7     0    0    0     0  296   46    17  838    0
Growth Adj:  0.00 1.14 0.00  1.14 1.14 1.14  1.14 1.14 0.00  0.00 1.14 1.14
Initial Bse:   68    0    8     0    0    0     0  337   52    19  955    0
Added Vol:    -67    0   -8     0    0    0     0   -5  -52   -19   -9    0
Other Appro:    0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:    0    0    0     0    0    0     0  332    0     0  946    0
User Adj:    0.00 1.00 0.00  1.00 1.00 1.00  1.00 1.00 0.00  0.00 1.00 1.00
PHF Adj:     0.00 1.00 0.00  1.00 1.00 1.00  1.00 1.00 0.00  0.00 1.00 1.00
PHF Volume:     0    0    0     0    0    0     0  332    0     0  946    0
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Final Vol.:     0    0    0     0    0    0     0  332    0     0  946    0
Adjusted Volume Module:
Grade:            0%               0%               0%               0%
% Cycle/Cars:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
% Truck/Comb:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
PCE Adj:     1.10 1.10 1.10  1.10 1.10 1.10  1.10 1.00 1.00  1.10 1.00 1.00
Cycl/Car PCE:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Trck/Cmb PCE:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Adj Vol.:       0    0    0     0    0    0     0  332    0     0  946    0
Critical Gap Module:
MoveUp Time:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
-------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Adj Cap:     xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
-------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *    *     *    *    *     *    *    *     A    *    *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *    *     *    *    *     *    *    *     *    *    *
ApproachDel:        0.0              0.0              0.0              0.0
```

Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
Mid Day Peak Hour Conditions

Scenario Report

Scenario:	Mid-Day
Command:	Default Command
Volume:	MidDay
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	Mid-day
Trip Distribution:	All
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Mid-day

Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
Mid Day Peak Hour Conditions

Trip Generation Report

Forecast for AM

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
3	Landfill Pro	1.00	Landfill Proj	-472.00	0.00	-472	0	-472	53.
	Zone 3 Subtotal					-472	0	-472	53.8
4	Landfill Pro	1.00	Landfill Proj	0.00	-406.00	0	-406	-406	46.
	Zone 4 Subtotal					0	-406	-406	46.2
TOTAL						-472	-406	-878	100.0

Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
Mid Day Peak Hour Conditions

Trip Distribution Report

Percent Of Trips All

Zone	To Gates 2	3	4	6	7	8	11	12	13
3	9.7	0.0	1.0	68.0	0.0	1.0	0.0	20.3	0.0
4	18.7	0.0	6.0	55.0	0.0	3.0	2.3	15.0	0.0

Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
Mid Day Peak Hour Conditions

Turning Movement Report
AM

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#1 Crossroads Pkwy N. @ Crossroads Pkwy S.													
Base	245	0	382	0	0	0	0	152	270	250	222	0	1521
Added	-24	0	-221	0	0	0	0	0	-5	-97	0	0	-349
Other	0	0	57	0	0	0	0	9	0	16	5	0	87
Total	221	0	216	0	0	0	0	161	265	169	227	0	1259
#2 SR-60 @ Crossroads Pkwy S.													
Base	0	0	0	222	2	283	0	274	205	146	633	0	1765
Added	0	0	0	0	0	-321	0	-248	-61	0	-101	0	-731
Other	0	0	0	52	0	0	0	5	0	14	2	0	73
Total	0	0	0	274	2	-38	0	31	144	160	534	0	1107
#3 Workman Mill/Crossroads South @ Workman Mill													
Base	5	6	5	31	0	222	153	177	5	1	231	36	871
Added	0	0	0	-1	0	0	0	-20	0	0	-35	0	-56
Other	0	0	0	0	0	0	0	5	0	0	2	0	7
Total	5	6	5	30	0	222	153	162	5	1	198	36	822
#4 Pellissier/Workman Mill @ Workman Mill [Signal To Be Constructed]													
Base	49	0	144	0	0	0	0	173	41	223	427	0	1058
Added	0	0	0	0	0	0	0	0	-1	0	0	0	-1
Total	49	0	144	0	0	0	0	173	40	223	427	0	1057
#5 Crossroads Pkwy N. @ Workman Mill													
Base	31	16	131	7	15	0	6	363	28	227	749	7	1579
Added	0	0	-24	0	0	0	0	0	0	-5	0	0	-29
Other	0	0	5	0	0	0	0	0	0	9	0	0	14
Total	31	16	112	7	15	0	6	363	28	231	749	7	1564
#6 Peck Rd @ Workman Mill													
Base	0	516	422	93	442	0	0	0	0	317	0	112	1903
Added	0	0	-5	-44	0	0	0	0	0	-12	0	-77	-138
Other	0	0	5	0	1	0	0	0	0	2	0	0	8
Total	0	516	422	49	443	0	0	0	0	307	0	35	1773
#7 605 NB @ Pellissier													
Base	0	0	0	212	0	269	113	192	0	0	978	246	2010
Added	0	0	0	-1	0	-44	-77	0	0	0	0	0	-122
Total	0	0	0	211	0	225	36	192	0	0	978	246	1888
#8 Pellissier @ Peck Rd													
Base	9	430	185	267	407	81	74	30	31	133	19	447	2112
Added	0	0	-77	0	0	0	0	0	0	-44	0	0	-121
Total	9	430	108	267	407	81	74	30	31	89	19	447	1991

Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
Mid Day Peak Hour Conditions

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#9 Rooks @ Peck Rd													
Base	121	755	123	79	605	130	63	35	78	133	22	74	2217
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	121	755	123	79	605	130	63	35	78	133	22	74	2217
#10 Proj Ent East @ Crossroads Pkwy S.													
Base	14	9	293	33	6	15	13	217	6	401	227	36	1269
Added	-14	-9	-293	0	0	0	0	-15	-6	-401	-21	0	-759
Other	0	0	0	0	0	0	0	5	0	0	2	0	7
Total	-0	0	-0	33	6	15	13	207	-0	0	208	36	517
#12 Proj Ent West @ Workman Mill													
Base	75	0	15	0	0	0	0	283	44	21	347	3	788
Added	75	0	-15	0	0	0	0	-5	-44	-21	-14	0	-174
Other	0	0	0	0	0	0	0	5	0	0	2	0	7
Total	0	0	-0	0	0	0	0	283	0	-0	335	3	621

Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
Mid Day Peak Hour Conditions

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/Veh	Base V/C	Future LOS	Future Del/Veh	Future V/C	Change in
# 1 Crossroads Pkwy N. @ Crossroad	D	xxxxx	0.816	B	xxxxx	0.616	-0.200 V/C
# 2 SR-60 @ Crossroads Pkwy S.	A	xxxxx	0.549	A	xxxxx	0.422	-0.127 V/C
# 3 Workman Mill/Crossroads South	A	xxxxx	0.352	A	xxxxx	0.342	-0.010 V/C
# 4 Pellissier/Workman Mill @ Work	A	xxxxx	0.324	A	xxxxx	0.324	+ 0.000 V/C
# 5 Crossroads Pkwy N. @ Workman M	A	xxxxx	0.424	A	xxxxx	0.420	0.003 V/C
# 6 Peck Rd @ Workman Mill	A	xxxxx	0.422	A	xxxxx	0.394	-0.027 V/C
# 7 605 NB @ Pellissier	C	xxxxx	0.721	B	xxxxx	0.646	-0.076 V/C
# 8 Pelliesier @ Peck Rd	D	xxxxx	0.803	C	xxxxx	0.779	-0.024 V/C
# 9 Rooks @ Peck Rd	A	xxxxx	0.556	A	xxxxx	0.556	+ 0.000 V/C
# 10 Proj Ent East @ Crossroads Pkw	F	5.3	0.000	F	0.9	0.000	+ 0.000 V/C
# 12 Proj Ent West @ Workman Mill	C	1.6	0.000	A	0.0	0.000	+ 0.000 V/C

Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Crossroads Pkwy N. @ Crossroads Pkwy S.

Cycle (sec): 100 Critical Vol./Cap. (X): 0.816
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 70 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 0 0 1			0 0 0 0 0			0 0 1 1 0			1 0 2 0 0		
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	215	0	335	0	0	0	0	133	237	219	195	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	245	0	382	0	0	0	0	152	270	250	222	0
User Adj:	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	311	0	485	0	0	0	0	193	343	317	282	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	311	0	485	0	0	0	0	193	343	317	282	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	311	0	485	0	0	0	0	193	343	317	282	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	2.00	0.00
Final Sat.:	3200	0	1600	0	0	0	0	1600	1600	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.10	0.00	0.30	0.00	0.00	0.00	0.00	0.12	0.21	0.20	0.09	0.00
Crit Moves:			****						****	****		

Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 SR-60 @ Crossroads Pkwy S.

Cycle (sec): 100 Critical Vol./Cap. (X): 0.549
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 36 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 0 0			1 1 0 0 1			0 0 2 0 1			1 0 2 0 0		
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	0	0	0	195	2	248	0	240	180	128	555	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	0	0	222	2	283	0	274	205	146	633	0
User Adj:	1.27	1.27	1.27	1.27	1.27	0.00	1.27	1.27	0.00	1.27	1.27	1.27
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	0	0	282	3	0	0	347	0	185	804	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	282	3	0	0	347	0	185	804	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	0	0	0	282	3	0	0	347	0	185	804	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.98	0.02	1.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	0	0	0	3166	34	1600	0	3200	1600	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.09	0.09	0.00	0.00	0.11	0.00	0.12	0.25	0.00
Crit Moves:				****				****			****	

Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Workman Mill/Crossroads South @ Workman Mill

Cycle (sec):	100	Critical Vol./Cap. (X):	0.352
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	27	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 0	0 1	1	1 0	1 1	0	0 1	0 1	0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	4	5	4	27	0	195	134	155	4	1	203	32
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	5	6	5	31	0	222	153	177	5	1	231	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	5	6	5	31	0	222	153	177	5	1	231	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	6	5	31	0	222	153	177	5	1	231	36
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	5	6	5	31	0	222	153	177	5	1	231	36
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.00	2.00	1.00	1.95	0.05	0.01	1.72	0.27
Final Sat.:	1600	1600	1600	1600	0	3200	1600	3112	88	12	2758	430
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.07	0.10	0.06	0.06	0.08	0.08	0.08
Crit Moves:						****	****				****	

Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Pellissier/Workman Mill @ Workman Mill (Signal To Be Constructed

Cycle (sec):	100	Critical Vol./Cap. (X):	0.324
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 0	1	0 0	0 0	0	0 0	1 1	0	1 0	2 0	0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	43	0	126	0	0	0	0	152	36	196	375	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	49	0	144	0	0	0	0	173	41	223	427	0
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	49	0	0	0	0	0	0	173	0	223	427	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	49	0	0	0	0	0	0	173	0	223	427	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	49	0	0	0	0	0	0	173	0	223	427	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00	2.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	3200	0	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.14	0.13	0.00
Crit Moves:	****							****		****		

Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Crossroads Pkwy N. @ Workman Mill

Cycle (sec):	100	Critical Vol./Cap. (X):	0.424
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 0 1 1			0 1 0 0 0			1 0 1 1 0			1 0 1 1 0		
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	27	14	115	6	13	0	5	318	25	199	657	6
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	31	16	131	7	15	0	6	363	28	227	749	7
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	31	16	131	7	15	0	6	363	28	227	749	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	16	131	7	15	0	6	363	28	227	749	7
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	31	16	131	7	15	0	6	363	28	227	749	7
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.22	1.78	0.32	0.68	0.00	1.00	1.86	0.14	1.00	1.98	0.02
Final Sat.:	1600	348	2852	509	1091	0	1600	2971	229	1600	3170	30
Capacity Analysis Module:												
Vol/Sat:	0.02	0.05	0.05	0.01	0.01	0.00	0.00	0.12	0.12	0.14	0.24	0.24
Crit Moves:		****		****				****		****		

Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Peck Rd @ Workman Mill

Cycle (sec):	100	Critical Vol./Cap. (X):	0.422
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 3 0 1			1 0 2 0 0			0 0 0 0 0			1 0 1! 0 0		
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	0	453	370	82	388	0	0	0	0	278	0	98
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	516	422	93	442	0	0	0	0	317	0	112
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	516	422	93	442	0	0	0	0	317	0	112
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	516	422	93	442	0	0	0	0	317	0	112
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	516	422	93	442	0	0	0	0	317	0	112
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.48	0.00	0.52
Final Sat.:	0	4800	1600	1600	3200	0	0	0	0	2365	0	835
Capacity Analysis Module:												
Vol/Sat:	0.00	0.11	0.26	0.06	0.14	0.00	0.00	0.00	0.00	0.13	0.00	0.13
Crit Moves:			****	****						****		

Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 605 NB @ Pellissier

Cycle (sec):	100	Critical Vol./Cap. (X):	0.721
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	1 0	0	0 1	1 0	2	0 0	0 0	1	1 0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	0	0	0	186	0	236	99	168	0	0	858	216
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	0	0	212	0	269	113	192	0	0	978	246
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	212	0	269	113	192	0	0	978	246
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	212	0	269	113	192	0	0	978	246
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	212	0	269	113	192	0	0	978	246
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.60	0.40
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	2557	643
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.17	0.07	0.06	0.00	0.00	0.38	0.38
Crit Moves:						****	****				****	

Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Pellissier @ Peck Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.803
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	1 0	1 0	1	1 0	0 1	0	0 1	0 1	0	0 1
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	8	377	162	234	357	71	65	26	27	117	17	392
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	9	430	185	267	407	81	74	30	31	133	19	447
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	430	185	267	407	81	74	30	31	133	19	447
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	430	185	267	407	81	74	30	31	133	19	447
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	9	430	185	267	407	81	74	30	31	133	19	447
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.40	0.60	1.00	1.67	0.33	0.71	0.29	1.00	0.88	0.12	1.00
Final Sat.:	1600	2237	963	1600	2669	531	1138	[illegible]	1600	1400	200	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.19	0.19	0.17	0.15	0.15	0.06	0.07	0.02	0.10	0.10	0.28
Crit Moves:		****		****			****					****

Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Rooks @ Peck Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.556
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0	1 0	1 0	1
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	106	662	108	69	531	114	55	31	68	117	19	65
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	121	755	123	79	605	130	63	35	78	133	22	74
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	121	755	123	79	605	130	63	35	78	133	22	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	121	755	123	79	605	130	63	35	78	133	22	74
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	121	755	123	79	605	130	63	35	78	133	22	74
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.72	0.28	1.00	1.65	0.35	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	2752	448	1600	2634	566	1600	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.27	0.27	0.05	0.23	0.23	0.04	0.02	0.05	0.08	0.01	0.05
Crit Moves:		****		****					****	****		

Traffic Analysis for Puente Hills Landfill EIR
Future Background Growth Only
Mid Day Peak Hour Conditions

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #10 Proj Ent East @ Crossroads Pkwy S.

Average Delay (sec/veh): 5.3 Worst Case Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Ignore			Include			Include			Include		
Lanes:	1 0	1 0	1	0 0	1! 0	0	1 0	1 1	0	1 0	1 1	0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	12	8	257	29	5	13	11	190	5	352	199	32
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	14	9	293	33	6	15	13	217	6	401	227	36
User Adj:	1.30	1.30	0.00	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	18	12	0	43	7	19	16	282	7	522	295	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	18	12	0	43	7	19	16	282	7	522	295	47
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	20	13	0	47	8	21	18	282	7	574	295	47
Critical Gap Module:												
MoveUp Time:	3.4	3.3	xxxxx	3.4	3.3	2.6	2.1	xxxx	xxxxx	2.1	xxxx	xxxxx
Critical Gp:	7.0	6.5	xxxxx	7.0	6.5	5.5	5.5	xxxx	xxxxx	5.5	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1122	1166	xxxxx	1144	1146	171	342	xxxx	xxxxx	289	xxxx	xxxxx
Potent Cap.:	203	227	xxxxx	196	233	1134	1123	xxxx	xxxxx	1199	xxxx	xxxxx
Adj Cap:	0.58	0.51	xxxxx	0.57	0.51	1.00	1.00	xxxx	xxxxx	1.00	xxxx	xxxxx
Move Cap.:	117	116	xxxxx	112	120	1134	1123	xxxx	xxxxx	1199	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	36.2	34.4	xxxxx	51.9	32.1	3.2	3.3	xxxx	xxxxx	5.3	xxxx	xxxxx
LOS by Move:	E	E	A	*	*	*	A	*	*	B	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	150	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	36.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	E	*	*	*	*	*	*	*
ApproachDel:	35.5			36.3			0.2			3.3		

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                Traffic Analysis for Puente Hills Landfill EIR
                        Future Background Growth Only
                        Mid Day Peak Hour Conditions
--------------------------------------------------------------------------------
                    Level Of Service Computation Report
          1994 HCM Unsignalized Method (Base Volume Alternative)
********************************************************************************
Intersection #12 Proj Ent West @ Workman Mill
********************************************************************************
Average Delay (sec/veh):       1.6         Worst Case Level Of Service:        C
********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:          Include          Include          Include          Include
Lanes:       0  0  1! 0  0    0  0  0  0  0    0  0  1  1  0    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:      66    0    13     0    0     0     0  248    39    18  304     3
Growth Adj:  1.14 1.14  1.14  1.14 1.14  1.14  1.14 1.14  1.14  1.14 1.14  1.14
Initial Bse:   75    0    15     0    0     0     0  283    44    21  347     3
User Adj:    1.12 1.12  1.12  1.12 1.12  1.12  1.12 1.12  1.12  1.12 1.12  1.12
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    84    0    17     0    0     0     0  317    50    23  388     4
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:    84    0    17     0    0     0     0  317    50    23  388     4
------------|---------------||---------------||---------------||---------------|
Adjusted Volume Module:
Grade:            0%               0%               0%               0%
% Cycle/Cars:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
% Truck/Comb:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
PCE Adj:     1.10 1.10  1.10  1.10 1.10  1.10  1.10 1.00  1.00  1.10 1.00  1.00
Cycl/Car PCE:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Truck/Comb PCE: xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Adj Vol.:      93    0    18     0    0     0     0  317    50    25  388     4
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
MoveUp Time:  3.4 xxxx   2.6 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.1 xxxx xxxxx
Critical Gp:  7.0 xxxx   5.5 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   5.5 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  753 xxxx   183  xxxx xxxx xxxxx  xxxx xxxx xxxxx   366 xxxx xxxxx
Potent Cap.:  350 xxxx  1118  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1090 xxxx xxxxx
Adj Cap:     0.98 xxxx  1.00  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1.00 xxxx xxxxx
Move Cap.:    341 xxxx  1118  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1090 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del: 14.0 xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   3.4 xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     *    *     *     A    *     *
Movement:      LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx  386 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Shrd StpDel:xxxxx 12.2 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    C     *     *    *     *     *    *     *     *    *     *
ApproachDel:       12.2             0.0              0.0              0.2
```

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
PM Peak Hour Conditions

Scenario Report

Scenario:	Fut-Proj PM
Command:	Fut+Proj PM
Volume:	PM
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	PM
Trip Distribution:	All
Paths:	Default Paths.
Routes:	Default Routes
Configuration:	Fut+Proj PM

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
PM Peak Hour Conditions

Trip Generation Report
Project Trips
Forecast for PM

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
3	Landfill Pro	1.00	Landfill Proj	-15.00	0.00	-15	0	-15	16.5
	Zone 3 Subtotal					-15	0	-15	16.5
4	Landfill Pro	1.00	Landfill Proj	0.00	-76.00	0	-76	-76	83.5
	Zone 4 Subtotal					0	-76	-76	83.5
TOTAL						-15	-76	-91	100.0

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
PM Peak Hour Conditions

Trip Distribution Report

Percent Of Trips All

Zone	To Gates 2	3	4	6	7	8	11	12
3	24.1	0.0	1.0	50.9	1.0	3.0	0.0	20.0
4	11.0	0.0	5.0	59.0	0.0	2.7	7.3	15.0

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
PM Peak Hour Conditions

Turning Movement Report
PM

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#1 Crossroads Pkwy N. @ Crossroads Pkwy S.													
Base	257	0	129	0	0	0	0	186	170	168	180	0	1089
Added	-4	0	-45	0	0	0	0	0	0	-3	0	0	-52
Total	253	0	84	0	0	0	0	186	170	165	180	0	1037
#2 SR-60 @ Crossroads Pkwy S.													
Base	0	0	0	198	7	48	0	137	528	125	262	0	1305
Added	0	0	0	0	0	-8	0	-49	-11	0	-3	0	-71
Total	0	0	0	198	7	40	0	88	517	125	259	0	1234
#3 Workman Mill/Crossroads South @ Workman Mill													
Base	15	14	9	67	8	250	614	547	6	0	258	85	1873
Added	0	0	0	0	0	0	0	-5	0	0	-10	0	-15
Total	15	14	9	67	8	250	614	542	6	0	248	85	1858
#4 Pellissier/Workman Mill @ Workman Mill [Signal To Be Constructed]													
Base	18	0	722	0	0	0	0	125	276	471	286	0	1898
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	18	0	722	0	0	0	0	125	276	471	286	0	1898
#5 Crossroads Pkwy N. @ Workman Mill													
Base	91	7	534	11	18	3	1	1141	15	140	605	9	2576
Added	0	0	-4	0	0	0	0	0	0	0	0	0	-4
Total	91	7	530	11	18	3	1	1141	15	140	605	9	2572
#6 Peck Rd @ Workman Mill													
Base	0	806	799	99	557	0	0	0	0	320	0	73	2655
Added	0	0	0	-4	0	0	0	0	0	-2	0	-8	-14
Total	0	806	799	95	557	0	0	0	0	318	0	65	2641
#7 605 NB @ Pellissier													
Base	0	0	0	467	0	236	197	606	0	0	383	130	2020
Added	0	0	0	0	0	-4	-8	0	0	0	0	0	-12
Total	0	0	0	467	0	232	189	606	0	0	383	130	2008
#8 Pellissier @ Peck Rd													
Base	7	567	357	388	536	75	54	56	24	105	8	585	2760
Added	0	0	-8	0	0	0	0	0	0	-4	0	0	-12
Total	7	567	349	388	536	75	54	56	24	101	8	585	2748
#9 Rooks @ Peck Rd													
Base	44	822	262	80	985	57	189	31	123	78	34	145	2850
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	44	822	262	80	985	57	189	31	123	78	34	145	2850

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
PM Peak Hour Conditions

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#10 Proj Ent East @ Crossroads Pkwy S.													
Base	10	6	60	50	5	14	23	591	5	11	261	50	1085
Added	-10	-6	-60	0	0	0	0	-1	-5	-11	0	0	-93
Total	0	-0	0	50	5	14	23	590	-0	0	261	50	992
#12 Proj Ent West @ Workman Mill													
Base	0	0	1	0	0	0	0	1146	0	0	543	0	1689
Added	0	0	-1	0	0	0	0	-5	0	0	-10	0	-16
Total	0	0	0	0	0	0	0	1141	0	0	533	0	1673

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
PM Peak Hour Conditions

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/Veh	Base V/C	Future LOS	Future Del/Veh	Future V/C	Change in
# 1 Crossroads Pkwy N. @ Crossroad	A	xxxxx	0.3[illegible]7	A	xxxxx	0.393	-0.003 V/C
# 2 SR-60 @ Crossroads Pkwy S.	A	xxxxx	0.285	A	xxxxx	0.270	-0.015 V/C
# 3 Workman Mill/Crossroads South	B	xxxxx	0.681	B	xxxxx	0.678	-0.003 V/C
# 4 Pellissler/Workman Mill @ Work	A	xxxxx	0.445	A	xxxxx	0.445	+ 0.000 V/C
# 5 Crossroads Pkwy N. @ Workman M	C	xxxxx	0.736	C	xxxxx	0.735	-0.001 V/C
# 6 Peck Rd @ Workman Mill	B	xxxxx	0.661	B	xxxxx	0.659	-0.002 V/C
# 7 605 NB @ Pellissier	B	xxxxx	0.675	B	xxxxx	0.670	-0.005 V/C
# 8 Pelliasier @ Peck Rd	F	xxxxx	1.066	F	xxxxx	1.063	-0.002 V/C
# 9 Rooks @ Peck Rd	B	xxxxx	0.697	B	xxxxx	0.697	+ 0.000 V/C
# 10 Proj Ent East @ Crossroads Pkw	C	1.4	0.000	F	1.1	0.000	+ 0.000 V/C
# 12 Proj Ent West @ Workman Mill	[illegible]	0.0	0.000	A	0.0	0.000	+ 0.000 V/C

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Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Crossroads Pkwy N. @ Crossroads Pkwy S.

Cycle (sec):	100	Critical Vol./Cap. (X):	0.393
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	0	0 1	0 0	0	0 0	0 0	1	1 0	1 0	2	0 0
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	225	0	113	0	0	0	0	163	149	147	158	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	257	0	129	0	0	0	0	186	170	168	180	0
Added Vol:	-4	0	-45	0	0	0	0	0	0	-3	0	0
Other Appro:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	253	0	84	0	0	0	0	186	170	165	180	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	253	0	84	0	0	0	0	186	170	165	180	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	253	0	84	0	0	0	0	186	170	165	180	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	253	0	84	0	0	0	0	186	170	165	180	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	1.04	0.96	1.00	2.00	0.00
Final Sat.:	3200	0	1600	0	0	0	0	1672	1528	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.05	0.00	0.00	0.00	0.00	0.11	0.11	0.10	0.06	0.00
Crit Moves:	****							****		****		

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Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 SR-60 @ Crossroads Pkwy S.

Cycle (sec):	100	Critical Vol./Cap. (X):	0.270
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	24	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	1 1	0	0 1	0 0	2	[illegible]	1 0	2	0 0
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	0	0	0	174	6	42	0	120	463	110	230	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	0	0	198	7	48	0	137	528	125	262	0
Added Vol:	0	0	0	0	0	-8	0	-49	-11	0	-3	0
Other Appro:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	198	7	40	0	88	517	125	259	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	0	0	198	7	0	0	88	0	125	259	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	198	7	0	0	88	0	125	259	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	0	0	0	198	7	0	0	88	0	125	259	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.93	0.07	1.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	0	0	0	3091	109	1600	0	3200	1600	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.06	0.06	0.00	0.00	0.03	0.00	0.08	0.08	0.00
Crit Moves:				****				****		****		

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Workman Mill/Crossroads South @ Workman Mill

Cycle (sec): 100 Critical Vol./Cap. (X): 0.678
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 47 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1 0 1			1 0 0 1 1			1 0 1 1 0			0 0 1 1 0		
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	13	12	8	59	7	219	539	480	5	0	226	75
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	15	14	9	67	8	250	614	547	6	0	258	85
Added Vol:	0	0	0	0	0	0	0	-5	0	0	-10	0
Other Appro:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	15	14	9	67	8	250	614	542	6	0	248	85
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	15	14	9	67	8	250	614	542	6	0	248	85
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	14	9	67	8	250	614	542	6	0	248	85
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	15	14	9	67	8	250	614	542	6	0	248	85
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.06	1.94	1.00	1.98	0.02	0.00	1.49	0.51
Final Sat.:	1600	1600	1600	1600	99	3101	1600	3165	35	0	2383	817
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.04	0.08	0.08	0.38	0.17	0.17	0.00	0.10	0.10
Crit Moves:	****				****		****				****	

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Pellissier/Workman Mill @ Workman Mill (Signal To Be Constructed

Cycle (sec): 100 Critical Vol./Cap. (X): 0.445
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 31 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 0 0 1			0 0 0 0 0			0 0 1 1 0			1 0 2 0 0		
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	16	0	633	0	0	0	0	110	242	413	251	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	18	0	722	0	0	0	0	125	276	471	286	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Other Appro:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	18	0	722	0	0	0	0	125	276	471	286	0
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	18	0	0	0	0	0	0	125	0	471	286	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	0	0	0	0	0	0	125	0	471	286	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	18	0	0	0	0	0	0	125	0	471	286	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00	2.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	3200	0	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.29	0.09	0.00
Crit Moves:	****							****		****		

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Crossroads Pkwy N. @ Workman Mill

Cycle (sec): 100 Critical Vol./Cap. (X): 0.735
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 55 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 0 1 1			0 0 1! 0 0			1 0 1 1 0			1 0 1 1 0		
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	80	6	468	10	16	3	1	1001	13	123	531	8
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	91	7	534	11	18	3	1	1141	15	140	605	9
Added Vol:	0	0	-4	0	0	0	0	0	0	0	0	0
Other Appro:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	91	7	530	11	18	3	1	1141	15	140	605	9
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	91	7	530	11	18	0	1	1141	15	140	605	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	91	7	530	11	18	0	1	1141	15	140	605	9
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	91	7	530	11	18	0	1	1141	15	140	605	9
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.03	1.97	0.38	0.62	0.00	1.00	1.97	0.03	1.00	1.97	0.03
Final Sat.:	1600	42	3158	607	993	0	1600	3158	42	1600	3153	47
Capacity Analysis Module:												
Vol/Sat:	0.06	0.17	0.17	0.02	0.02	0.00	0.00	0.36	0.36	0.09	0.19	0.19
Crit Moves:		****		****				****		****		

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Peck Rd @ Workman Mill

Cycle (sec): 100 Critical Vol./Cap. (X): 0.659
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 45 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 3 0 1			1 0 2 0 0			0 0 0 0 0			1 0 1! 0 0		
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	0	707	701	87	489	0	0	0	0	281	0	64
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	806	799	99	557	0	0	0	0	320	0	73
Added Vol:	0	0	0	-4	0	0	0	0	0	-2	0	-8
Other Appro:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	806	799	95	557	0	0	0	0	318	0	65
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	806	799	95	557	0	0	0	0	318	0	65
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	806	799	95	557	0	0	0	0	318	0	65
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	806	799	95	557	0	0	0	0	318	0	65
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.66	0.00	0.34
Final Sat.:	0	4800	1600	1600	3200	0	0	0	0	2657	0	543
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.50	0.06	0.17	0.00	0.00	0.00	0.00	0.12	0.00	0.12
Crit Moves:			****	****						****		

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 605 NB @ Pellissier

Cycle (sec):	100	Critical Vol./Cap. (X):	0.670
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 0 0			1 0 0 0 1			1 0 2 0 0			0 0 1 1 0		
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	0	0	0	410	0	207	173	532	0	0	336	114
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	0	0	467	0	236	197	606	0	0	383	130
Added Vol:	0	0	0	0	0	-4	-8	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	467	0	232	189	606	0	0	383	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	467	0	232	189	606	0	0	383	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	467	0	232	189	606	0	0	383	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	467	0	232	189	606	0	0	383	130
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.49	0.51
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	2389	811
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.29	0.00	0.14	0.12	0.19	0.00	0.00	0.16	0.16
Crit Moves:				****			****				****	

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Pellissier @ Peck Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	1.063
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1 1 0			1 0 1 1 0			0 1 0 0 1			0 1 0 0 1		
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	6	497	313	340	470	66	47	49	21	92	7	513
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	7	567	357	388	536	75	54	56	24	105	8	585
Added Vol:	0	0	-8	0	0	0	0	0	0	-4	0	0
Other Appro:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	7	567	349	388	536	75	54	56	24	101	8	585
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	7	567	349	388	536	75	54	56	24	101	8	585
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	567	349	388	536	75	54	56	24	101	8	585
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	7	567	349	388	536	75	54	56	24	101	8	585
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.24	0.76	1.00	1.75	0.25	0.49	0.51	1.00	0.93	0.07	1.00
Final Sat.:	1600	1981	1219	1600	2807	393	785	815	1600	1483	117	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.29	0.29	0.24	0.19	0.19	0.07	0.07	0.02	0.07	0.07	0.37
Crit Moves:		****		****			****					****

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Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 Rooks @ Peck Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.697
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0	1 0	1 0	1
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	39	721	230	70	864	50	166	27	108	68	30	127
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	44	822	262	80	985	57	189	31	123	78	34	145
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	44	822	262	80	985	57	189	31	123	78	34	145
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	44	822	262	80	985	57	189	31	123	78	34	145
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	44	822	262	80	985	57	189	31	123	78	34	145
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	44	822	262	80	985	57	189	31	123	78	34	145
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.52	0.48	1.00	1.89	0.11	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	2427	773	1600	3025	175	1600	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.34	0.34	0.05	0.33	0.33	0.12	0.02	0.08	0.05	0.02	0.09
Crit Moves:		****		****			****					****

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Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
PM Peak Hour Conditions

Level Of Service Computation Report
1994 HCM Unsignalized Method (Future Volume Alternative)

Intersection #10 Proj Ent East @ Crossroads Pkwy S

Average Delay (sec/veh): 1.1   Worst Case Level Of Service: [illegible]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Ignore			Include			Include			Include		
Lanes:	1 0	1 0	1	0 0	1! 0	0	1 0	1 1	0	1 0	1 1	0
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	9	5	53	44	4	12	20	518	[illegible]	10	229	44
Growth Adj:	0.00	0.00	0.00	1.14	1.14	1.14	1.14	1.14	[illegible]	0.00	1.14	1.14
Initial Bse:	10	6	60	50	5	14	23	591	5	11	261	50
Added Vol:	-10	-6	-60	0	0	0	[illegible]	-1	-5	-11	0	0
Other Appro:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	50	5	14	23	590	0	0	261	50
User Adj:	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
PHF Adj:	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
PHF Volume:	0	0	0	50	5	14	23	590	[illegible]	0	261	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	50	5	14	23	590	0	0	261	50
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	55	5	15	25	590	0	0	261	50
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	3.3	2.6	[illegible]	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	7.0	6.5	5.5	5.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	898	898	156	[illegible]	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	282	325	1155	1167	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.98	0.98	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	276	318	1155	1167	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	15.9	11.5	3.2	3.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	F	C	A	*	*	*	A	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	329	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	13.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	C	*	*	*	*	*	*	*
ApproachDel:		0.0			13.1			0.1			0.0	

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---------------------------------------------------------------------------
              Traffic Analysis for Puente Hills Landfill EIR
                 Future Conditions Minus the Project (5.1)
                         PM Peak Hour Conditions
---------------------------------------------------------------------------
                   Level Of Service Computation Report
        1994 HCM Unsignalized Method (Future Volume Alternative)
***************************************************************************
Intersection #12 Proj Ent West @ Workman Mill
***************************************************************************
Average Delay (sec/veh):       0.0          Worst Case Level Of Service:    A
***************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
-------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:          Include          Include          Include          Include
Lanes:        0  0  0  0  1    0  0  0  0  0    0  0  1  1  0    1  0  2  0  0
-------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour
Base Vol:       0    0    1     0    0    0     0 1005    0     0  476    0
Growth Adj:  1.14 1.14 1.14  1.14 1.14 1.14  1.14 1.14 1.14  1.14 1.14 1.14
Initial Bse:    0    0    1     0    0    0     0 1146    0     0  543    0
Added Vol:      0    0   -1     0    0    0     0   -5    0     0  -10    0
Other Appro:    0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:    0    0    0     0    0    0     0 1141    0     0  533    0
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     0    0    0     0    0    0     0 1141    0     0  533    0
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Final Vol.:     0    0    0     0    0    0     0 1141    0     0  533    0
Adjusted Volume Module:
Grade:            0%               0%               0%               0%
% Cycle/Cars:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
% Truck/Comb:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
PCE Adj:     1.10 1.10 1.10  1.10 1.10 1.10  1.10 1.00 1.00  1.10 1.00 1.00
Cycl/Car PCE:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Trck/Cmb PCE:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Adj Vol.:       0    0    0     0    0    0     0 1141    0     0  533    0
Critical Gap Module:
MoveUp Time:xxxxx xxxx  2.6 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Critical Gp:xxxxx xxxx  5.5 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
-------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx  570  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx  712  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Adj Cap:     xxxx xxxx 1.00  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx  712  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
-------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del:xxxxx xxxx  5.1 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *    *     *    *    *     *    *    *     *    *    *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *    *     *    *    *     *    *    *     *    *    *
ApproachDel:       5.1              0.0              0.0              0.0
```

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Projects Minus the Project (5.2)
AM Peak Hour Conditions

Scenario Report

Scenario:	Fut-Proj AM
Command:	Fut+Proj AM
Volume:	AM
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	AM
Trip Distribution:	All
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Fut+Proj AM

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Projects Minus the Project (5.2)
AM Peak Hour Conditions

Trip Generation Report
Project Trips
Forecast for AM

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
3	Landfill Pro	1.00	Landfill Proj	-302.00	0.00	-302	0	-302	62.
	Zone 3 Subtotal					-302	0	-302	62.8
4	Landfill Pro	1.00	Landfill Proj	0.00	-263.00	0	-263	-263	54.
	Zone 4 Subtotal					0	-263	-263	54.7
5	MRF	1.00	MRF	42.00	42.00	42	42	84	-17.5
	Zone 5 Subtotal					42	42	84	-17.5
TOTAL						-260	-221	-481	100.0

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Projects Minus the Project (5.2)
AM Peak Hour Conditions

Trip Distribution Report

Percent Of Trips All

Zone	To Gates 2	3	4	6	7	8	12
3	13.0	0.0	1.0	62.0	1.0	3.0	20.0
4	25.0	0.0	6.0	48.0	0.0	3.0	18.0
5	26.0	0.0	3.0	48.0	0.0	3.0	20.0

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Projects Minus the Project (5.2)
AM Peak Hour Conditions

Turning Movement Report
AM

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#1 Crossroads Pkwy N. @ Crossroads Pkwy S.													
Base	239	0	154	0	0	0	0	132	193	435	181	0	1335
Added	-16	0	-106	0	0	0	0	0	-3	-52	0	0	-177
PassBy	0	0	54	0	0	0	0	9	0	17	5	0	85
Total	223	0	102	0	0	0	0	141	190	400	186	0	1243
#2 SR-60 @ Crossroads Pkwy S.													
Base	0	0	0	222	2	283	0	274	205	146	633	0	1765
Added	0	0	0	0	0	-167	0	-122	-39	0	-55	0	-383
PassBy	0	0	0	0	0	52	0	5	0	14	2	0	73
Total	0	0	0	222	2	168	0	157	166	160	580	0	1455
#3 Workman Mill/Crossroads South @ Workman Mill													
Base	1	0	0	48	6	359	137	192	22	0	616	19	1399
Added	0	0	0	0	0	1	1	16	0	0	-45	0	-27
Other	0	0	0	0	0	30	55	44	0	0	45	0	174
Total	1	0	0	48	6	390	193	252	22	0	616	19	1546
#4 Pellissier/Workman Mill @ Workman Mill (Signal To Be Constructed)													
Base	124	0	423	0	0	0	0	404	355	769	1485	0	3560
Added	0	0	1	0	0	0	0	0	0	1	0	0	2
Other	0	0	55	0	0	0	0	0	0	30	0	0	85
Total	124	0	479	0	0	0	0	404	355	800	1485	0	3647
#5 Crossroads Pkwy N. @ Workman Mill													
Base	111	109	227	7	15	5	11	301	367	337	2036	71	3597
Added	0	0	-16	0	0	0	0	1	0	-3	1	0	-17
Other	0	0	5	0	0	0	0	55	0	9	30	0	99
Total	111	109	216	7	15	5	11	357	367	343	2067	71	3679
#6 Peck Rd @ Workman Mill													
Base	0	542	423	226	1035	0	0	0	0	873	0	82	3181
Added	0	0	-8	8	0	0	0	0	0	-7	0	-55	-62
Other	0	0	5	0	1	0	0	0	0	32	0	0	38
Total	0	542	420	234	1036	0	0	0	0	898	0	27	3157
#7 605 NB @ Pellissier													
Base	0	0	0	212	0	269	113	192	0	0	978	246	2010
Added	0	0	0	0	0	0	-55	0	0	0	0	0	-55
Total	0	0	0	212	0	269	58	192	0	0	978	246	1955
#8 Pellissier @ Peck Rd													
Base	9	488	136	169	955	123	31	24	10	285	38	972	3240
Added	0	0	-55	0	8	0	0	0	0	0	0	0	-47
Other	0	0	0	0	1	0	0	0	0	0	0	0	1
Total	9	488	81	169	964	123	31	24	10	285	38	972	3194

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Projects Minus the Project (5.2)
AM Peak Hour Conditions

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#9 Rooks @ Peck Rd													
Base	207	920	138	139	640	192	76	18	52	250	34	62	2728
Added	0	0	0	0	-3	0	0	0	0	11	0	0	8
Total	207	920	138	139	637	192	76	18	52	261	34	62	2736
#10 Proj Ent East @ Crossroads Pkwy S.													
Base	9	0	182	22	1	18	9	233	5	231	775	30	1515
Added	-74	0	-189	0	0	0	0	29	-12	-251	29	0	-468
PassBy	65	0	7	0	0	0	0	-2	46	20	-15	0	121
Total	0	0	0	22	1	18	9	260	39	0	789	30	1168
#12 Proj Ent West @ Workman Mill													
Base	68	0	8	0	0	0	0	337	52	19	955	0	1441
Added	12	0	30	0	0	0	0	-12	12	30	-74	0	-2
Other	-60	0	-7	0	0	0	0	106	-46	-17	92	0	68
Total	20	0	31	0	0	0	0	431	18	32	973	0	1507

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Projects Minus the Project (5.2)
AM Peak Hour Conditions

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Crossroads Pkwy N. @ Crossroad	A	xxxxx	0.589	A	xxxxx	0.538	-0.050 V/C
# 2 SR-60 @ Crossroads Pkwy S.	A	xxxxx	0.453	A	xxxxx	0.400	-0.053 V/C
# 3 Workman Mill/Crossroads South	A	xxxxx	0.499	A	xxxxx	0.543	+ 0.045 V/C
# 4 Pellissier/Workman Mill @ Work	C	xxxxx	0.784	D	xxxxx	0.804	+ 0.019 V/C
# 5 Crossroads Pkwy N. @ Workman M	D	xxxxx	0.884	D	xxxxx	0.890	- 0.006 V/C
# 6 Peck Rd @ Workman Mill	C	xxxxx	0.722	C	xxxxx	0.715	-0.009 V/C
# 7 605 NB @ Pellissier	C	xxxxx	0.721	B	xxxxx	0.687	-0.034 V/C
# 8 Pellissier @ Peck Rd	F	xxxxx	1.084	F	xxxxx	1.087	+ 0.003 V/C
# 9 Rooks @ Peck Rd	C	xxxxx	0.706	C	xxxxx	0.713	+ 0.007 V/C
# 10 Proj Ent East @ Crossroads Pkw	D	1.5	0.000	F	0.5	0.000	+ 0.000 V/C
# 12 Proj Ent West @ Workman Mill	B	2.5	0.000	C	0.7	0.000	+ 0.000 V/C

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-----------------------------------------------------------------------------
              Traffic Analysis for Puente Hills Landfill EIR
           Future With Other Projects Minus the Project (5.2)
                         AM Peak Hour Conditions
-----------------------------------------------------------------------------
                    Level Of Service Computation Report
      ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
*****************************************************************************
Intersection #1 Crossroads Pkwy N. @ Crossroads Pkwy S.
*****************************************************************************
Cycle (sec):         100              Critical Vol./Cap. (X):        0.538
Loss Time (sec):      10 (Y+R =  4 sec) Average Delay (sec/veh):     xxxxxx
Optimal Cycle:        36              Level Of Service:                  A
*****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
-------------|---------------||---------------||---------------||---------------|
Control:         Protected        Permitted        Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:        2  0  0  0  1   0  0  0  0  0   0  0  1  1  0   1  0  2  0  0
-------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:      210     0   135    0     0     0    0   116   169  382   159     0
Growth Adj:   1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14
Initial Bse:   239     0   154    0     0     0    0   132   193  435   181     0
Added Vol:     -16     0  -106    0     0     0    0     0    -3  -52     0     0
PasserByVol:     0     0    54    0     0     0    0     9     0   17     5     0
Initial Fut:   223     0   102    0     0     0    0   141   190  400   186     0
User Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:      1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:    223     0   102    0     0     0    0   141   190  400   186     0
Reduct Vol:      0     0     0    0     0     0    0     0     0    0     0     0
Reduced Vol:   223     0   102    0     0     0    0   141   190  400   186     0
PCE Adj:      1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
MLF Adj:      1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Final Vol.:    223     0   102    0     0     0    0   141   190  400   186     0
-------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1600  1600  1600  1600  1600  1600  1600  1600  1600  1600  1600  1600
Adjustment:   1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Lanes:        2.00  0.00  1.00  0.00  0.00  0.00  0.00  1.00  1.00  1.00  2.00  0.00
Final Sat.:   3200     0  1600     0     0     0     0  1600  1600  1600  3200     0
-------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.07  0.00  0.06  0.00  0.00  0.00  0.00  0.09  0.12  0.25  0.06  0.00
Crit Moves:   ****                                            ****  ****
*****************************************************************************
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-----------------------------------------------------------------------------
              Traffic Analysis for Puente Hills Landfill EIR
           Future With Other Projects Minus the Project (5.2)
                         AM Peak Hour Conditions
-----------------------------------------------------------------------------
                    Level Of Service Computation Report
      ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
*****************************************************************************
Intersection #2 SR-60 @ Crossroads Pkwy S.
*****************************************************************************
Cycle (sec):         100              Critical Vol./Cap. (X):        0.400
Loss Time (sec):      10 (Y+R =  4 sec) Average Delay (sec/veh):     xxxxxx
Optimal Cycle:        29              Level Of Service:                  A
*****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
-------------|---------------||---------------||---------------||---------------|
Control:         Permitted        Permitted        Permitted        Protected
Rights:           Include          Ignore           Ignore           Include
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:        0  0  0  0  0   1  1  0  0  1   0  0  2  0  1   1  0  2  0  0
-------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:        0     0     0  195     2   248    0   240   180  128   555     0
Growth Adj:   1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14
Initial Bse:     0     0     0  222     2   283    0   274   205  146   633     0
Added Vol:       0     0     0    0     0  -167    0  -122   -39    0   -55     0
PasserByVol:     0     0     0    0     0    52    0     5     0   14     2     0
Initial Fut:     0     0     0  222     2   168    0   157   166  160   580     0
User Adj:     1.00  1.00  1.00  1.00  1.00  0.00  1.00  1.00  0.00  1.00  1.00  1.00
PHF Adj:      1.00  1.00  1.00  1.00  1.00  0.00  1.00  1.00  0.00  1.00  1.00  1.00
PHF Volume:      0     0     0  222     2     0    0   157     0  160   580     0
Reduct Vol:      0     0     0    0     0     0    0     0     0    0     0     0
Reduced Vol:     0     0     0  222     2     0    0   157     0  160   580     0
PCE Adj:      1.00  1.00  1.00  1.00  1.00  0.00  1.00  1.00  0.00  1.00  1.00  1.00
MLF Adj:      1.00  1.00  1.00  1.00  1.00  0.00  1.00  1.00  0.00  1.00  1.00  1.00
Final Vol.:      0     0     0  222     2     0    0   157     0  160   580     0
-------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1600  1600  1600  1600  1600  1600  1600  1600  1600  1600  1600  1600
Adjustment:   1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Lanes:        0.00  0.00  0.00  1.98  0.02  1.00  0.00  2.00  1.00  1.00  2.00  0.00
Final Sat.:      0     0     0  3171    29  1600     0  3200  1600  1600  3200     0
-------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.00  0.00  0.00  0.07  0.07  0.00  0.00  0.05  0.00  0.10  0.18  0.00
Crit Moves:                     ****                    ****              ****
*****************************************************************************
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Traffic Analysis for Puente Hills Landfill EIR
Future With Other Projects Minus the Project (5.2)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Workman Mill/Crossroads South @ Workman Mill

Cycle (sec):	100	Critical Vol./Cap. (X):	0.543
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 0	0 1	1	1 0	1 1	0	0 0	1 1	0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	1	0	0	42	5	315	120	168	19	0	540	17
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	1	0	0	48	6	359	137	192	22	0	616	19
Added Vol:	0	0	0	0	0	1	1	16	0	0	-45	0
Other Appro:	0	0	0	0	0	30	55	44	0	0	45	0
Initial Fut:	1	0	0	48	6	390	193	252	22	0	616	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	0	0	48	6	390	193	252	22	0	616	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	0	0	48	6	390	193	252	22	0	616	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	1	0	0	48	6	390	193	252	22	0	616	19
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.03	1.97	1.00	1.84	0.16	0.00	1.94	0.06
Final Sat.:	1600	1600	1600	1600	48	3152	1600	2943	257	0	3104	96
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.03	0.12	0.12	0.12	0.09	0.09	0.00	0.20	0.20
Crit Moves:					****		****				****	

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Projects Minus the Project (5.2)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Pellissier/Workman Mill @ Workman Mill (Signal To Be Constructed

Cycle (sec):	100	Critical Vol./Cap. (X):	0.804
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	68	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 0	1	0 0	0 0	0	0 0	[illegible]	0	1 0	[illegible] 0	0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	109	0	371	0	0	0	[illegible]	354	[illegible]	[illegible]	1303	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	[illegible]	1.14	1.14	1.14
Initial Bse:	124	0	423	0	0	0	0	404	[illegible]	769	1485	0
Added Vol:	0	0	1	0	0	0	0	0	[illegible]	1	0	0
Other Appro:	0	0	55	0	0	0	0	[illegible]	[illegible]	[illegible]	0	0
Initial Fut:	124	0	479	0	0	0	0	404	[illegible]	800	1485	0
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	[illegible]	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	124	0	0	0	0	0	0	404	0	800	1485	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	124	0	0	0	0	0	[illegible]	404	0	800	1485	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	[illegible]	[illegible]	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	[illegible]	0.00	1.00	1.00	1.00
Final Vol.:	124	0	0	0	0	0	[illegible]	404	0	800	1485	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00	2.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	3200	0	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.50	0.46	0.00
Crit Moves:	****							****		****		

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Projects Minus the Project (5.2)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Crossroads Pkwy N. @ Workman Mill

Cycle (sec):	100	Critical Vol./Cap. (X):	0.890
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	95	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	1 1	0 0	1!	0 0	1 0	1	1 0	1 0	1	1 0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	97	96	199	6	13	4	10	264	322	296	1786	62
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	111	109	227	7	15	5	11	301	367	337	2036	71
Added Vol:	0	0	-16	0	0	0	0	1	0	-3	1	0
Other Appro:	0	0	5	0	0	0	0	55	0	9	30	0
Initial Fut:	111	109	216	7	15	5	11	357	367	343	2067	71
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	111	109	216	7	15	0	11	357	367	343	2067	71
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	111	109	216	7	15	0	11	357	367	343	2067	71
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	111	109	216	7	15	0	11	357	367	343	2067	71
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.67	1.33	0.32	0.68	0.00	1.00	1.00	1.00	1.00	1.93	0.07
Final Sat.:	1600	1073	2127	509	1091	0	1600	1600	1600	1600	3094	106
Capacity Analysis Module:												
Vol/Sat:	0.07	0.10	0.10	0.01	0.01	0.00	0.01	0.22	0.23	0.21	0.67	0.67
Crit Moves:		****		****			****				****	

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Projects Minus the Project (5.2)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Peck Rd @ Workman Mill

Cycle (sec):	100	Critical Vol./Cap. (X):	0.713
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	3	0 1	1 0	2	0 0	0 0	0	0 0	1 0	1!	0 0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	0	475	371	198	908	0	0	0	0	766	0	72
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	542	423	226	1035	0	0	0	0	873	0	82
Added Vol:	0	0	-8	8	0	0	0	0	0	-7	0	-55
Other Appro:	0	0	5	0	1	0	0	0	0	32	0	0
Initial Fut:	0	542	420	234	1036	0	0	0	0	898	0	27
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	542	420	234	1036	0	0	0	0	898	0	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	542	420	234	1036	0	0	0	0	898	0	27
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	542	420	234	1036	0	0	0	0	898	0	27
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.94	0.00	0.06
Final Sat.:	0	4800	1600	1600	3200	0	0	0	0	3107	0	93
Capacity Analysis Module:												
Vol/Sat:	0.00	0.11	0.26	0.15	0.32	0.00	0.00	0.00	0.00	0.29	0.00	0.29
Crit Moves:	****			****						****		

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Projects Minus the Project (5.2)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 605 NB @ Pellissier

Cycle (sec):	100	Critical Vol./Cap. (X):	0.687
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	1 0	0 0	1	1 0	2 0	0	0 0	1 1	0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	0	0	0	186	0	236	99	168	0	0	858	216
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	0	0	212	0	269	113	192	0	0	978	246
Added Vol:	0	0	0	0	0	0	-55	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	212	0	269	58	192	0	0	978	246
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	212	0	269	58	192	0	0	978	246
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	212	0	269	58	192	0	0	978	246
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	212	0	269	58	192	0	0	978	246
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.60	0.40
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	2557	643
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.17	0.04	0.06	0.00	0.00	0.38	0.38
Crit Moves:						****	****				****	

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Projects Minus the Project (5.2)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Pellissier @ Peck Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	1.08[illegible]
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 1	0	1 0	1 1	0	0 1	0 0	1	0 1	0 0	1
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	8	428	119	148	838	108	27	21	9	250	37	853
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	9	488	136	169	955	123	31	24	10	285	38	972
Added Vol:	0	0	-55	0	8	0	0	0	0	0	0	0
Other Appro:	0	0	0	0	1	0	0	0	0	0	0	0
Initial Fut:	9	488	81	169	964	123	31	24	10	285	38	972
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	488	81	169	964	123	31	24	10	285	38	972
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	488	81	169	964	123	31	24	10	285	38	972
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	9	488	81	169	964	123	31	24	10	285	38	972
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.72	0.28	1.00	1.77	0.23	0.56	0.44	1.00	0.88	0.12	1.00
Final Sat.:	1600	2744	456	1600	2838	362	902	698	1600	1412	188	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.18	0.18	0.11	0.34	0.34	0.03	0.03	0.01	0.20	0.20	0.61
Crit Moves:	****				****		****					****

```
Traffic Analysis for Puente Hills Landfill EIR
Future With Other Projects Minus the Project (5.2)
AM Peak Hour Conditions
--------------------------------------------------------------------------------
Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #9 Rooks @ Peck Rd
********************************************************************************
Cycle (sec):        100            Critical Vol./Cap. (X):        0.713
Loss Time (sec):     10 (Y+R =  4 sec) Average Delay (sec/veh):   xxxxxx
Optimal Cycle:       52            Level Of Service:                  C
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
-------------|-----------------||---------------||---------------||-------------|
Control:        Permitted        Permitted        Permitted        Permitted
Rights:          Include          Include          Include          Include
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:        1  0  1  1  0    1  0  1  1  0    1  0  1  1  0    1  0  1  0  1
-------------|-----------------||---------------||---------------||-------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:     182   807   121   122   561   168    67    16    46   219    30    54
Growth Adj:  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14
Initial Bse:  207   920   138   139   640   192    76    18    52   250    34    62
Added Vol:      0     0     0     0    -3     0     0     0     0    11     0     0
PasserByVol:    0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:  207   920   138   139   637   192    76    18    52   261    34    62
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:   207   920   138   139   637   192    76    18    52   261    34    62
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:  207   920   138   139   637   192    76    18    52   261    34    62
PCE Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
MLF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Final Vol.:   207   920   138   139   637   192    76    18    52   261    34    62
-------------|-----------------||---------------||---------------||-------------|
Saturation Flow Module:
Sat/Lane:    1600  1600  1600  1600  1600  1600  1600  1600  1600  1600  1600  1600
Adjustment:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Lanes:       1.00  1.74  0.26  1.00  1.54  0.46  1.00  1.00  1.00  1.00  1.00  1.00
Final Sat.:  1600  2783   417  1600  2459   741  1600  1600  1600  1600  1600  1600
-------------|-----------------||---------------||---------------||-------------|
Capacity Analysis Module:
Vol/Sat:     0.13  0.33  0.33  0.09  0.26  0.26  0.05  0.01  0.03  0.16  0.02  0.04
Crit Moves:        ****        ****                          ****  ****
********************************************************************************
```



```
Traffic Analysis for Puente Hills Landfill EIR
Future With Other Projects Minus the Project (5.2)
AM Peak Hour Conditions
--------------------------------------------------------------------------------
Level Of Service Computation Report
1994 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #10 Proj Ent East @ Crossroads Pkwy S.
********************************************************************************
Average Delay (sec/veh):       0.5         Worst Case Level Of Service:        F
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
-------------|-----------------||---------------||---------------||-------------|
Control:        Stop Sign        Stop Sign      Uncontrolled     Uncontrolled
Rights:          Ignore           Include          Include          Include
Lanes:        1  0  1  0  1    0  0  1! 0  0    1  0  1  1  0    1  0  1  1  0
-------------|-----------------||---------------||---------------||-------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:       8     0   160    19     1    16     8   204     4   203   680    26
Growth Adj:  0.00  1.14  0.00  1.14  1.14  1.14  1.14  1.14  0.00  0.00  1.14  1.14
Initial Bse:    9     0   182    22     1    18     9   233     5   231   775    30
Added Vol:    -74     0  -189     0     0     0     0    29   -12  -251    29     0
PasserByVol:   65     0     7     0     0     0     0    -2    46    20   -15     0
Initial Fut:    0     0     0    22     1    18     9   260     0     0   789    30
User Adj:    0.00  1.00  0.00  1.00  1.00  1.00  1.00  1.00  0.00  0.00  1.00  1.00
PHF Adj:     0.00  1.00  0.00  1.00  1.00  1.00  1.00  1.00  0.00  0.00  1.00  1.00
PHF Volume:     0     0     0    22     1    18     9   260     0     0   789    30
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Final Vol.:     0     0     0    22     1    18     9   260     0     0   789    30
Adjusted Volume Module:
Grade:            0%               0%               0%               0%
% Cycle/Cars:  xxxx  xxxx      xxxx  xxxx      xxxx  xxxx      xxxx  xxxx
% Truck/Comb:  xxxx  xxxx      xxxx  xxxx      xxxx  xxxx      xxxx  xxxx
PCE Adj:     1.10  1.10  1.10  1.10  1.10  1.10  1.10  1.00  1.00  1.10  1.00  1.00
Cycl/Car PCE:  xxxx  xxxx      xxxx  xxxx      xxxx  xxxx      xxxx  xxxx
Trck/Cmb PCE:  xxxx  xxxx      xxxx  xxxx      xxxx  xxxx      xxxx  xxxx
Adj Vol.:       0     0     0    24     1    20    10   260     0     0   789    30
Critical Gap Module:
MoveUp Time:xxxxx  xxxx xxxxx   3.4   3.3   2.6   2.1  xxxx xxxxx xxxxx  xxxx xxxxx
Critical Gp:xxxxx  xxxx xxxxx   7.0   6.5   5.5   5.5  xxxx xxxxx xxxxx  xxxx xxxxx
-------------|-----------------||---------------||---------------||-------------|
Capacity Module:
Cnflict Vol: xxxx  xxxx xxxxx  1073  1073   409   819  xxxx xxxxx  xxxx  xxxx xxxxx
Potent Cap.: xxxx  xxxx xxxxx   218   257   859   623  xxxx xxxxx  xxxx  xxxx xxxxx
Adj Cap:     xxxx  xxxx xxxxx  0.98  0.98  1.00  1.00  xxxx xxxxx  xxxx  xxxx xxxxx
Move Cap.:   xxxx  xxxx xxxxx   215   253   859   623  xxxx xxxxx  xxxx  xxxx xxxxx
-------------|-----------------||---------------||---------------||-------------|
Level Of Service Module:
Stopped Del:xxxxx  xxxx xxxxx  18.6  14.3   4.3   5.9  xxxx xxxxx xxxxx  xxxx xxxxx
LOS by Move:    F     *     A     *     *     *     B     *     *     A     *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx  xxxx xxxxx  xxxx   324 xxxxx  xxxx  xxxx xxxxx  xxxx  xxxx xxxxx
Shrd StpDel:xxxxx  xxxx xxxxx xxxxx  12.1 xxxxx xxxxx  xxxx xxxxx xxxxx  xxxx xxxxx
Shared LOS:     *     *     *     *     C     *     *     *     *     *     *     *
ApproachDel:         0.0              12.1               0.2               0.0
```

```
------------------------------------------------------------------------------
                Traffic Analysis for Puente Hills Landfill EIR
             Future With Other Projects Minus the Project (5.2)
                           AM Peak Hour Conditions
------------------------------------------------------------------------------

                     Level Of Service Computation Report
          1994 HCM Unsignalized Method (Future Volume Alternative)
******************************************************************************
Intersection #12 Proj Ent West @ Workman Mill
******************************************************************************
Average Delay (sec/veh):        0.7        Worst Case Level Of Service:      C
******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:          Include          Include          Include          Include
Lanes:        0  0  1! 0  0    0  0  0  0  0    0  0  1  1  0    1  0  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:      60    0    7     0    0    0     0  296   46    17  838    0
Growth Adj:  1.14 1.14 1.14  1.14 1.14 1.14  1.14 1.14 1.14  1.14 1.14 1.14
Initial Bse:   68    0    8     0    0    0     0  337   52    19  955    0
Added Vol:     12    0   30     0    0    0     0  -12   12    30  -74    0
Other Appro:  -60    0   -7     0    0    0     0  106  -46   -17   92    0
Initial Fut:   20    0   31     0    0    0     0  431   18    32  973    0
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:    20    0   31     0    0    0     0  431   18    32  973    0
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Final Vol.:    20    0   31     0    0    0     0  431   18    32  973    0
Adjusted Volume Module:
Grade:            0%               0%               0%               0%
 Cycle/Cars:   xxxx  xxxx      xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
 Truck/Comb:   xxxx  xxxx      xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
PCE Adj:     1.10 1.10 1.10  1.10 1.10 1.10  1.10 1.00 1.00  1.10 1.00 1.00
Cycl/Car PCE:  xxxx  xxxx      xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Trck/Cmb PCE:  xxxx  xxxx      xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Adj Vol.:      22    0   34     0    0    0     0  431   18    36  973    0
Critical Gap Module:
MoveUp Time:  3.4 xxxx  2.6 xxxxx xxxx xxxxx xxxxx xxxx xxxxx  2.1 xxxx xxxxx
Critical Gp:  7.0 xxxx  5.5 xxxxx xxxx xxxxx xxxxx xxxx xxxxx  5.5 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: 1446 xxxx  225  xxxx xxxx xxxxx  xxxx xxxx xxxxx  450 xxxx xxxxx
Potent Cap.:  126 xxxx 1065  xxxx xxxx xxxxx  xxxx xxxx xxxxx  983 xxxx xxxxx
Adj Cap:     0.96 xxxx 1.00  xxxx xxxx xxxxx  xxxx xxxx xxxxx 1.00 xxxx xxxxx
Move Cap.:    121 xxxx 1065  xxxx xxxx xxxxx  xxxx xxxx xxxxx  983 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del: 35.6 xxxx  3.5 xxxxx xxxx xxxxx xxxxx xxxx xxxxx  3.8 xxxx xxxxx
LOS by Move:    *    *    *     *    *    *     *    *    *     A    *    *
Movement:     LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx  261 xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx
Shrd StpDel:xxxxx 16.2 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    C    *     *    *    *     *    *    *     *    *    *
ApproachDel:        16.2             0.0              0.0              0.1
```



```
------------------------------------------------------------------------------
                Traffic Analysis for Puente Hills Landfill EIR
            Future With Cumulative Projects - Without Project (5.2)
                         Mid Day Peak Hour Conditions
------------------------------------------------------------------------------
                               Scenario Report
Scenario:              Mid-Day

Command:               Default Command
Volume:                MidDay
Geometry:              Existing
Impact Fee:            Default Impact Fee
Trip Generation:       Mid-day
Trip Distribution:     All
Paths:                 Default Paths
Routes:                Default Routes
Configuration:         Mid-day
```

Traffic Analysis for Puente Hills Landfill EIR
Future With Cumulative Projects - Without Project (5.2)
Mid Day Peak Hour Conditions

Trip Generation Report

Forecast for AM

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
3	Landfill Pro	1.00	Landfill Proj	-472.00	0.00	-472	0	-472	76.
	Zone 3 Subtotal					-472	0	-472	76.9
4	Landfill Pro	1.00	Landfill Proj	0.00	-406.00	0	-406	-406	66.
	Zone 4 Subtotal					0	-406	-406	66.1
5	MRF	1.00	MRF	111.00	153.00	111	153	264	-43.0
	Zone 5 Subtotal					111	153	264	-43.0
TOTAL						-361	-253	-614	100.0

Traffic Analysis for Puente Hills Landfill EIR
Future With Cumulative Projects - Without Project (5.2)
Mid Day Peak Hour Conditions

Trip Distribution Report

Percent Of Trips All

	To Gates								
Zone	2	3	4	6	7	8	11	12	13
3	9.7	0.0	1.0	68.0	0.0	1.0	0.0	20.3	0.0
4	18.7	0.0	6.0	55.0	0.0	3.0	2.3	15.0	0.0
5	26.0	0.0	3.0	48.0	0.0	3.0	0.0	20.0	0.0

Traffic Analysis for Puente Hills Landfill EIR
Future With Cumulative Projects - Without Project (5.2)
Mid Day Peak Hour Conditions

Scenario Report

Scenario:	Mid-Day
Command:	Default Command
Volume:	MidDay
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	Mid-day
Trip Distribution:	All
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Mid-day

Traffic Analysis for Puente Hills Landfill EIR
Future With Cumulative Projects - Without Project (5.2)
Mid Day Peak Hour Conditions

Trip Generation Report

Forecast for AM

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
3	Landfill Pro	1.00	Landfill Proj	-472.00	0.00	-472	0	-472	76.
	Zone 3 Subtotal					-472	0	-472	76.9
4	Landfill Pro	1.00	Landfill Proj	0.00	-406.00	0	-406	-406	66.
	Zone 4 Subtotal					0	-406	-406	66.1
5	MRF	1.00	MRF	21.00	21.00	21	21	42	-6.8
	Zone 5 Subtotal					21	21	42	-6.8
6	MRF Trucks	1.00	MRF Trucks	111.00	111.00	111	111	222	-36.2
	Zone 6 Subtotal					111	111	222	-36.2
TOTAL						-340	-274	-614	100.0

Traffic Analysis for Puente Hills Landfill EIR
Future With Cumulative Projects - Without Project (5.2)
Mid Day Peak Hour Conditions

Trip Distribution Report

Percent Of Trips All

	To Gates								
Zone	2	3	4	6	7	8	11	12	13
3	9.7	0.0	1.0	68.0	0.0	1.0	0.0	20.3	0.0
4	18.7	0.0	6.0	55.0	0.0	3.0	2.3	15.0	0.0
5	26.0	0.0	3.0	48.0	0.0	3.0	0.0	20.0	0.0
6	0.0	0.0	3.0	74.0	0.0	3.0	0.0	20.0	0.0

Traffic Analysis for Puente Hills Landfill EIR
Future With Cumulative Projects - Without Project (5.2)
Mid Day Peak Hour Conditions

Turning Movement Report
AM

Volume	Northbound			Southbound			Eastbound			Westbound			Total
Type	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Volume
#1 Crossroads Pkwy N. @ Crossroads Pkwy S.													
Base	245	0	382	0	0	0	0	152	270	250	222	0	1521
Added	-21	0	-131	0	0	0	0	0	-1	-69	0	0	-222
ther A	0	0	57	0	0	0	0	9	0	17	5	0	88
Total	224	0	308	0	0	0	0	161	269	198	227	0	1387
#2 SR-60 @ Crossroads Pkwy S.													
Base	0	0	0	222	2	283	0	274	205	146	633	0	1765
Added	0	0	0	0	0	-229	0	-152	-35	0	-71	0	-487
Other	0	0	0	52	0	0	0	5	0	14	2	0	73
Total	0	0	0	274	2	54	0	127	170	160	564	0	1351
#3 Workman Mill/Crossroads South @ Workman Mill													
Base	5	6	5	31	0	222	153	177	5	1	231	36	871
Added	0	0	0	0	0	1	1	13	0	0	-70	0	-55
Other	0	0	0	0	0	25	30	31	0	0	50	0	136
Total	5	6	5	31	0	248	184	221	5	1	211	36	952
#4 Pellissier/Workman Mill @ Workman Mill [Signal To Be Constructed]													
Base	49	0	144	0	0	0	0	173	41	223	427	0	1058
Added	0	0	1	0	0	0	0	0	0	1	0	0	2
Other	0	0	30	0	0	0	0	0	0	25	0	0	55
Total	49	0	175	0	0	0	0	173	41	249	427	0	1115
#5 Crossroads Pkwy N. @ Workman Mill													
Base	31	16	131	7	15	0	6	363	28	227	749	7	1579
Added	0	0	-21	0	0	0	0	1	0	-1	1	0	-20
Other	0	0	0	0	0	0	0	30	0	0	25	0	55
Total	31	16	110	7	15	0	6	394	28	226	775	7	1614
#6 Peck Rd @ Workman Mill													
Base	0	516	422	93	442	0	0	0	0	317	0	112	1903
Added	0	0	-1	5	0	0	0	0	0	-8	0	-70	-74
Other	0	0	20	0	1	0	0	0	0	27	0	0	48
Total	0	516	441	98	443	0	0	0	0	336	0	42	1877
#7 605 NB @ Pellissier													
Base	0	0	0	212	0	269	113	192	0	0	978	246	2010
Added	0	0	0	0	0	0	-70	0	0	0	0	0	-70
Total	0	0	0	212	0	269	43	192	0	0	978	246	1940
#8 Pellissier @ Peck Rd													
Base	9	430	185	267	407	81	74	30	31	133	19	447	2112
Added	0	0	-70	0	5	0	0	0	0	0	0	0	-65
Total	9	430	115	267	412	81	74	30	31	133	19	447	2047

Traffic Analysis for Puente Hills Landfill EIR
Future With Cumulative Projects - Without Project (5.2)
Mid Day Peak Hour Conditions

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#9 Rooks @ Peck Rd													
Base	121	755	123	79	605	130	63	35	78	133	22	74	2217
Added	0	0	0	0	0	0	0	0	0	5	0	0	5
Total	121	755	123	79	605	130	63	35	78	138	22	74	2222
#10 Proj Ent East @ Crossroads Pkwy S.													
Base	14	9	293	33	6	15	13	217	6	401	227	36	1269
Added	-80	-9	-201	0	0	0	0	14	-1	-314	14	0	-582
Other	66	0	13	0	0	0	0	-8	39	18	-16	0	112
Total	0	0	105	33	6	15	13	223	44	105	225	36	799
#12 Proj Ent West @ Workman Mill													
Base	75	0	15	0	0	0	0	283	44	21	347	3	788
Added	6	0	15	0	0	0	0	-1	6	15	-85	0	-44
Other	-66	0	-13	0	0	0	0	59	-39	-18	83	0	6
Total	15	0	17	0	0	0	0	341	11	18	345	3	750

Traffic Analysis for Puente Hills Landfill EIR
Future With Cumulative Projects - Without Project (5.2)
Mid Day Peak Hour Conditions

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Crossroads Pkwy N. @ Crossroad	D	xxxxx	0.816	C	xxxxx	0.715	-0.101 V/C
# 2 SR-60 @ Crossroads Pkwy S.	A	xxxxx	0.560	A	xxxxx	0.493	-0.067 V/C
# 3 Workman Mill/Crossroads South	A	xxxxx	0.382	A	xxxxx	0.406	+ 0.024 V/C
# 4 Pellissier/Workman Mill @ Work	A	xxxxx	0.324	A	xxxxx	0.340	+ 0.016 V/C
# 5 Crossroads Pkwy N. @ Workman M	A	xxxxx	0.424	A	xxxxx	0.426	+ 0.003 V/C
# 6 Peck Rd @ Workman Mill	A	xxxxx	0.422	A	xxxxx	0.437	+ 0.015 V/C
# 7 605 NB @ Pellissier	C	xxxxx	0.721	B	xxxxx	0.677	-0.044 V/C
# 8 Pellissier @ Peck Rd	D	xxxxx	0.803	C	xxxxx	0.782	-0.022 V/C
# 9 Rooks @ Peck Rd	A	xxxxx	0.556	A	xxxxx	0.559	+ 0.003 V/C
# 10 Proj Ent East @ Crossroads Pkw	E	5.3	0.000	F	1.6	0.000	+ 0.000 V/C
# 12 Proj Ent West @ Workman Mill	C	1.4	0.000	B	0.4	0.000	+ 0.000 V/C

```
---------------------------------------------------------------------------
                Traffic Analysis for Puente Hills Landfill EIR
        Future With Cumulative Projects  Without Project (5.2)
                     Mid Day Peak Hour Conditions
---------------------------------------------------------------------------
                   Level Of Service Computation Report
      ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
***************************************************************************
Intersection #1 Crossroads Pkwy N. @ Crossroads Pkwy S.
***************************************************************************
Cycle (sec):        100            Critical Vol./Cap. (X):        0.816
Loss Time (sec):     10 (Y+R =  4 sec) Average Delay (sec/veh):   xxxxxx
Optimal Cycle:       70            Level Of Service:                  D
***************************************************************************
Approach:     North Bound     South Bound      East Bound      West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Permitted        Permitted        Permitted
Rights:         Include          Include          Include          Include
Min. Green:    0    0    0    0    0    0    0    0    0    0    0    0
Lanes:       2  0  0  0  1   0  0  0  0  0   0  0  1  1  0   1  0  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:     215    0   335     0    0     0     0  133   237   219  195     0
Growth Adj:  1.14 1.14  1.14  1.14 1.14  1.14  1.14 1.14  1.14  1.14 1.14  1.14
Initial Bse:  245    0   382     0    0     0     0  152   270   250  222     0
User Adj:    1.27 1.27  1.27  1.27 1.27  1.27  1.27 1.27  1.27  1.27 1.27  1.27
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   311    0   485     0    0     0     0  193   343   317  282     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  311    0   485     0    0     0     0  193   343   317  282     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:   311    0   485     0    0     0     0  193   343   317  282     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       2.00 0.00  1.00  0.00 0.00  0.00  0.00 1.00  1.00  1.00 2.00  0.00
Final Sat.:  3200    0  1600     0    0     0     0 1600  1600  1600 3200     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.10 0.00  0.30  0.00 0.00  0.00  0.00 0.12  0.21  0.20 0.09  0.00
Crit Moves:             ****                              ****  ****
***************************************************************************
```

Traffic Analysis for Puente Hills Landfill EIR
Future With Cumulative Projects - Without Project (5.2)
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 SR-60 @ Crossroads Pkwy S.

Cycle (sec):	100	Critical Vol./Cap. (X):	0.560
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	1 1	0	0 1	0 0	2	0 1	1 0	2	0 0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	0	0	0	195	2	248	0	240	180	128	555	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	0	0	222	2	283	0	274	205	146	633	0
User Adj:	1.30	1.30	1.30	1.30	1.30	0.00	1.30	1.30	0.00	1.30	1.30	1.30
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	0	0	289	3	0	0	356	0	190	823	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	289	3	0	0	356	0	190	823	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	0	0	0	289	3	0	0	356	0	190	823	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.98	0.02	1.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	0	0	0	3167	33	1600	0	3200	1600	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.09	0.09	0.00	0.00	0.11	0.00	0.12	0.26	0.00
Crit Moves:				****				****			****	

Traffic Analysis for Puente Hills Landfill EIR
Future With Cumulative Projects - Without Project (5.2)
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Workman Mill/Crossroads South @ Workman Mill

Cycle (sec):	100	Critical Vol./Cap. (X):	0.382
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 0	0 1	1	1 0	1 1	0	0 1	0 1	0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	4	5	4	27	0	195	134	155	4	1	203	32
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	5	6	5	31	0	222	153	177	5	1	231	36
User Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	5	6	5	34	0	249	171	198	5	1	259	41
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	6	5	34	0	249	171	198	5	1	259	41
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	5	6	5	34	0	249	171	198	5	1	259	41
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.00	2.00	1.00	1.95	0.05	0.01	1.72	0.27
Final Sat.:	1600	1600	1600	1600	0	3200	1600	3121	79	11	2753	436
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.08	0.11	0.06	0.06	0.09	0.09	0.09
Crit Moves:	****					****	****				****	

Traffic Analysis for Puente Hills Landfill EIR
Future With Cumulative Projects - Without Project (5.2)
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Pellissier/Workman Mill @ Workman Mill [Signal To Be Constructed

Cycle (sec):	100	Critical Vol./Cap. (X):	0.324
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	26	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 0 0 1			0 0 0 0 0			0 0 1 1 0			1 0 2 0 0		
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	43	0	126	0	0	0	0	152	36	196	375	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	49	0	144	0	0	0	0	173	41	223	427	0
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	49	0	0	0	0	0	0	173	0	223	427	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	49	0	0	0	0	0	0	173	0	223	427	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	49	0	0	0	0	0	0	173	0	223	427	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00	2.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	3200	0	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.14	0.13	0.00
Crit Moves:	****							****		****		

Traffic Analysis for Puente Hills Landfill EIR
Future With Cumulative Projects - Without Project (5.2)
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Crossroads Pkwy N. @ Workman Mill

Cycle (sec): 100 Critical Vol./Cap. (X): 0.424
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 30 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	1 1	0 1	0	0 0	1 0	1	1 0	1 0	1	1 0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	27	14	115	6	13	0	5	318	25	199	657	6
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	31	16	131	7	15	0	6	363	28	227	749	7
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	31	16	131	7	15	0	6	363	28	227	749	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	16	131	7	15	0	6	363	28	227	749	7
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	31	16	131	7	15	0	6	363	28	227	749	7
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.22	1.78	0.32	0.68	0.00	1.00	1.86	0.14	1.00	1.98	0.02
Final Sat.:	1600	348	2852	509	1091	0	1600	2971	229	1600	3170	30
Capacity Analysis Module:												
Vol/Sat:	0.02	0.05	0.05	0.01	0.01	0.00	0.00	0.12	0.12	0.14	0.24	0.24
Crit Moves:		****		****				****		****		

Traffic Analysis for Puente Hills Landfill EIR
Future With Cumulative Projects - Without Project (5.2)
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #6 Peck Rd @ Workman Mill

Cycle (sec):	100	Critical Vol./Cap. (X):	0.422
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	29	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Permitted			Permitted			Protected			Protected	
Rights:		Ovl			Include			Include			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:		0 0 3 0 1			1 0 2 0 0			0 0 0 0 0			1 0 1! 0 0	
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	0	453	370	82	388	0	0	0	0	278	0	98
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	516	422	93	442	0	0	0	0	317	0	112
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	516	422	93	442	0	0	0	0	317	0	112
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	516	422	93	442	0	0	0	0	317	0	112
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	516	422	93	442	0	0	0	0	317	0	112
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.48	0.00	0.52
Final Sat.:	0	4800	1600	1600	3200	0	0	0	0	2365	0	835
Capacity Analysis Module:												
Vol/Sat:	0.00	0.11	0.26	0.06	0.14	0.00	0.00	0.00	0.00	0.13	0.00	0.13
Crit Moves:			****	****						****		

```
----------------------------------------------------------------------------
                Traffic Analysis for Puente Hills Landfill EIR
      Future With Cumulative Projects - Without Project (5.2)
                      Mid Day Peak Hour Conditions
----------------------------------------------------------------------------

                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
******************************************************************************
Intersection #7 605 NB @ Pellissier
******************************************************************************
Cycle (sec):          100             Critical Vol./Cap. (X):          0.721
Loss Time (sec):       10 (Y+R =  4 sec) Average Delay (sec/veh):       xxxxxx
Optimal Cycle:         53             Level Of Service:                    C
******************************************************************************
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|----------------||---------------||---------------||---------------|
Control:        Protected         Permitted        Protected        Protected
Rights:          Include           Include          Include          Include
Min. Green:     0    0     0    0    0     0    0    0  .  0    0    0     0
Lanes:         0  0  0  0  0   1  0  0  0  1   1  0  2  0  0   0  0  1  1  0
------------|----------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:       0    0     0  186    0   236    99  168     0     0  858   216
Growth Adj:  1.14 1.14  1.14 1.14 1.14  1.14  1.14 1.14  1.14  1.14 1.14  1.14
Initial Bse:    0    0     0  212    0   269   113  192     0     0  978   246
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0    0     0  212    0   269   113  192     0     0  978   246
Reduct Vol:     0    0     0    0    0     0     0    0     0     0    0     0
Reduced Vol:    0    0     0  212    0   269   113  192     0     0  978   246
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     0    0     0  212    0   269   113  192     0     0  978   246
------------|----------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600 1600 1600  1600  1600 1600  1600  1600 1600  1600
Adjustment:  1.00 1.00  1.00 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 1.00 0.00  1.00  1.00 2.00  0.00  0.00 1.60  0.40
Final Sat.:     0    0     0 1600    0  1600  1600 3200     0     0 2557   643
------------|----------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.13 0.00  0.17  0.07 0.06  0.00  0.00 0.38  0.38
Crit Moves:                             ****  ****                  ****
******************************************************************************
```

Traffic Analysis for Puente Hills Landfill EIR
Future With Cumulative Projects - Without Project (5.2)
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Pellissier @ Peck Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.803
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1 1 0			1 0 1 1 0			0 1 0 0 1			0 1 0 0 1		
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	8	377	162	234	357	71	65	26	27	117	17	392
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	9	430	185	267	407	81	74	30	31	133	19	447
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	430	185	267	407	81	74	30	31	133	19	447
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	430	185	267	407	81	74	30	31	133	19	447
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	9	430	185	267	407	81	74	30	31	133	19	447
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.40	0.60	1.00	1.67	0.33	0.71	0.29	1.00	0.88	0.12	1.00
Final Sat.:	1600	2237	963	1600	2669	531	1138	462	1600	1400	200	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.19	0.19	0.17	0.15	0.15	0.06	0.07	0.02	0.10	0.10	0.28
Crit Moves:		****		****			****					****

Traffic Analysis for Puente Hills Landfill EIR
Future With Cumulative Projects - Without Project (5.2)
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Rooks @ Peck Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.556
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0	1 0	1 0	1
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	106	662	108	69	531	114	55	31	68	117	19	65
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	121	755	123	79	605	130	63	35	78	133	22	74
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	121	755	123	79	605	130	63	35	78	133	22	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	121	755	123	79	605	130	63	35	78	133	22	74
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	121	755	123	79	605	130	63	35	78	133	22	74
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.72	0.28	1.00	1.65	0.35	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	2752	448	1600	2634	566	1600	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.27	0.27	0.05	0.23	0.23	0.04	0.02	0.05	0.08	0.01	0.05
Crit Moves:		****		****					****	****		

```
---------------------------------------------------------------------------------
                Traffic Analysis for Puente Hills Landfill EIR
            Future With Cumulative Projects - Without Project (5.2)
                         Mid Day Peak Hour Conditions
---------------------------------------------------------------------------------
                      Level Of Service Computation Report
            1994 HCM Unsignalized Method (Base Volume Alternative)
*********************************************************************************
Intersection #10 Proj Ent East @ Crossroads Pkwy S.
*********************************************************************************
Average Delay (sec/veh):       5.3          Worst Case Level Of Service:        E
*********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:          Ignore          Include          Include          Include
Lanes:        1  0  1  0  1   0  0  1! 0  0   1  0  1  1  0    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:      12    8   257   29    5    13   11  190     5   352  199    32
Growth Adj:  1.14 1.14  1.14 1.14 1.14  1.14 1.14 1.14  1.14  1.14 1.14  1.14
Initial Bse:   14    9   293   33    6    15   13  217     6   401  227    36
User Adj:    1.30 1.30  0.00 1.30 1.30  1.30 1.30 1.30  1.30  1.30 1.30  1.30
PHF Adj:     1.00 1.00  0.00 1.00 1.00  1.00 1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    18   12     0   43    7    19   16  282     7   522  295    47
Reduct Vol:     0    0     0    0    0     0    0    0     0     0    0     0
Final Vol.:    18   12     0   43    7    19   16  282     7   522  295    47
------------|---------------||---------------||---------------||---------------|
Adjusted Volume Module:
Grade:            0%               0%               0%               0%
% Cycle/Cars:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
% Truck/Comb:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
PCE Adj:     1.10 1.10  1.10 1.10 1.10  1.10 1.10 1.00  1.00  1.10 1.00  1.00
Cycl/Car PCE:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Trck/Cmb PCE:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Adj Vol.:      20   13     0   47    8    21   18  282     7   574  295    47
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
MoveUp Time:  3.4  3.3 xxxxx  3.4  3.3   2.6  2.1 xxxx xxxxx   2.1 xxxx xxxxx
Critical Gp:  7.0  6.5 xxxxx  7.0  6.5   5.5  5.5 xxxx xxxxx   5.5 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: 1122 1166 xxxxx 1144 1146   171  342 xxxx xxxxx   289 xxxx xxxxx
Potent Cap.:  203  227 xxxxx  196  233  1134 1123 xxxx xxxxx  1199 xxxx xxxxx
Adj Cap:     0.58 0.51 xxxxx 0.57 0.51  1.00 1.00 xxxx xxxxx  1.00 xxxx xxxxx
Move Cap.:    117  116 xxxxx  112  120  1134 1123 xxxx xxxxx  1199 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del: 36.2 34.4 xxxxx 51.9 32.1   3.2  3.3 xxxx xxxxx   5.3 xxxx xxxxx
LOS by Move:    E    E     A    *    *     *    A    *     *     B    *     *
Movement:     LT - LTR - RT   LT - LTR - RT   LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx xxxx  150 xxxxx xxxx xxxx xxxxx  xxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx 36.3 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *    *    E     *    *    *     *     *    *     *
ApproachDel:      35.5             36.3              0.2              3.3
```

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-------------------------------------------------------------------------------
                  Traffic Analysis for Puente Hills Landfill EIR
             Future With Cumulative Projects   Without Project (5.2)
                         Mid Day Peak Hour Conditions
-------------------------------------------------------------------------------

                      Level Of Service Computation Report
             1994 HCM Unsignalized Method (Base Volume Alternative)
********************************************************************************
Intersection #12 Proj Ent West @ Workman Mill
********************************************************************************
Average Delay (sec/veh):       1.4          Worst Case Level Of Service:       C
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:           Include          Include          Include          Include
Lanes:        0  0  1! 0  0   0  0  0  0  0   0  0  1  1  0   1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:      66    0    13    0    0     0    0  248    39   18  304     3
Growth Adj:  1.14 1.14  1.14 1.14 1.14  1.14 1.14 1.14  1.14 1.14 1.14  1.14
Initial Bse:   75    0    15    0    0     0    0  283    44   21  347     3
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:    75    0    15    0    0     0    0  283    44   21  347     3
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Final Vol.:    75    0    15    0    0     0    0  283    44   21  347     3
------------|---------------||---------------||---------------||---------------|
Adjusted Volume Module:
Grade:            0%               0%               0%               0%
% Cycle/Cars:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
% Truck/Comb:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
PCE Adj:     1.10 1.10  1.10 1.10 1.10  1.10 1.10 1.00  1.00 1.10 1.00  1.00
Cycl/Car PCE:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Trck/Cmb PCE:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Adj Vol.:      83    0    16    0    0     0    0  283    44   23  347     3
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
MoveUp Time:  3.4 xxxx    2.6 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.1 xxxx xxxxx
Critical Gp:  7.0 xxxx    5.5 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   5.5 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  672 xxxx    164  xxxx xxxx xxxxx  xxxx xxxx xxxxx   327 xxxx xxxxx
Potent Cap.:  394 xxxx   1144  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1144 xxxx xxxxx
Adj Cap:     0.98 xxxx   1.00  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1.00 xxxx xxxxx
Move Cap.:    386 xxxx   1144  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1144 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del: 11.6 xxxx    3.2 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   3.2 xxxx xxxxx
LOS by Move:    *    *     *    *    *     *    *    *     *    A    *     *
Movement:     LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx  433 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Shrd StpDel:xxxxx 10.2 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    C     *    *    *     *    *    *     *    *    *     *
ApproachDel:       10.2              0.0              0.0              0.2
```

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-------------------------------------------------------------------------------------
                  Traffic Analysis for Puente Hills Landfill EIR
              Future With Cumulative Projects - Without Project (5.2)
                         Mid Day Peak Hour Conditions
-------------------------------------------------------------------------------------
                      Level Of Service Computation Report
              1994 HCM Unsignalized Method (Base Volume Alternative)
*************************************************************************************
Intersection #10 Proj Ent East @ Crossroads Pkwy S.
*************************************************************************************
Average Delay (sec/veh):        5.3          Worst Case Level Of Service:          E
*************************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|-----------------||---------------||---------------||---------------|
Control:         Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:            Ignore          Include          Include          Include
Lanes:         1  0  1  0  1    0  0  1! 0  0    1  0  1  1  0    1  0  1  1  0
------------|-----------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:        12    8   257     29    5    13     11  190     5    352  199    32
Growth Adj:    1.14 1.14  1.14   1.14 1.14  1.14   1.14 1.14  1.14   1.14 1.14  1.14
Initial Bse:     14    9   293     33    6    15     13  217     6    401  227    36
User Adj:      1.30 1.30  0.00   1.30 1.30  1.30   1.30 1.30  1.30   1.30 1.30  1.30
PHF Adj:       1.00 1.00  0.00   1.00 1.00  1.00   1.00 1.00  1.00   1.00 1.00  1.00
PHF Volume:      18   12     0     43    7    19     16  282     7    522  295    47
Reduct Vol:       0    0     0      0    0     0      0    0     0      0    0     0
Final Vol.:      18   12     0     43    7    19     16  282     7    522  295    47
------------|-----------------||---------------||---------------||---------------|
Adjusted Volume Module:
Grade:              0%               0%               0%               0%
% Cycle/Cars:    xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
% Truck/Comb:    xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
PCE Adj:       1.10 1.10  1.10   1.10 1.10  1.10   1.10 1.00  1.00   1.10 1.00  1.00
Cycl/Car PCE:    xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Trck/Cmb PCE:    xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Adj Vol.:        20   13     0     47    8    21     18  282     7    574  295    47
------------|-----------------||---------------||---------------||---------------|
Critical Gap Module:
MoveUp Time:    3.4  3.3 xxxxx    3.4  3.3   2.6    2.1 xxxx xxxxx    2.1 xxxx xxxxx
Critical Gp:    7.0  6.5 xxxxx    7.0  6.5   5.5    5.5 xxxx xxxxx    5.5 xxxx xxxxx
------------|-----------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:   1122 1166 xxxxx   1144 1146   171    342 xxxx xxxxx    289 xxxx xxxxx
Potent Cap.:    203  227 xxxxx    196  233  1134   1123 xxxx xxxxx   1199 xxxx xxxxx
Adj Cap:       0.58 0.51 xxxxx   0.57 0.51  1.00   1.00 xxxx xxxxx   1.00 xxxx xxxxx
Move Cap.:      117  116 xxxxx    112  120  1134   1123 xxxx xxxxx   1199 xxxx xxxxx
------------|-----------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del:   36.2 34.4 xxxxx   51.9 32.1   3.2    3.3 xxxx xxxxx    5.3 xxxx xxxxx
LOS by Move:      E    E     A      *    *     *      A    *     *      B    *     *
Movement:       LT - LTR - RT     LT - LTR - RT     LT - LTR - RT     LT - LTR - RT
Shared Cap.:   xxxx xxxx xxxxx   xxxx  150 xxxxx   xxxx xxxx xxxxx   xxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx 36.3 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:       *    *     *      *    E     *      *    *     *      *    *     *
ApproachDel:         35.5             36.3              0.2              3.3
```



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Mid-Day                     Tue Jun 26, 2001 10:08:36                      Page 16-1
-------------------------------------------------------------------------------------
                  Traffic Analysis for Puente Hills Landfill EIR
              Future With Cumulative Projects - Without Project (5.2)
                         Mid Day Peak Hour Conditions
-------------------------------------------------------------------------------------
                      Level Of Service Computation Report
              1994 HCM Unsignalized Method (Base Volume Alternative)
*************************************************************************************
Intersection #12 Proj Ent West @ Workman Mill
*************************************************************************************
Average Delay (sec/veh):        1.4          Worst Case Level Of Service:          C
*************************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|-----------------||---------------||---------------||---------------|
Control:         Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:           Include          Include          Include          Include
Lanes:         0  0  1! 0  0    0  0  0  0  0    0  0  1  1  0    1  0  1  1  0
------------|-----------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:        66    0    13      0    0     0      0  248    39     18  304     3
Growth Adj:    1.14 1.14  1.14   1.14 1.14  1.14   1.14 1.14  1.14   1.14 1.14  1.14
Initial Bse:     75    0    15      0    0     0      0  283    44     21  347     3
User Adj:      1.00 1.00  1.00   1.00 1.00  1.00   1.00 1.00  1.00   1.00 1.00  1.00
PHF Adj:       1.00 1.00  1.00   1.00 1.00  1.00   1.00 1.00  1.00   1.00 1.00  1.00
PHF Volume:      75    0    15      0    0     0      0  283    44     21  347     3
Reduct Vol:       0    0     0      0    0     0      0    0     0      0    0     0
Final Vol.:      75    0    15      0    0     0      0  283    44     21  347     3
------------|-----------------||---------------||---------------||---------------|
Adjusted Volume Module:
Grade:              0%               0%                                0%
% Cycle/Cars:    xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
% Truck/Comb:    xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
PCE Adj:       1.10 1.10  1.10   1.10 1.10  1.10   1.10 1.00  1.00   1.10 1.00  1.00
Cycl/Car PCE:    xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Trck/Cmb PCE:    xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Adj Vol.:        83    0    16      0    0     0      0  283    44     23  347     3
------------|-----------------||---------------||---------------||---------------|
Critical Gap Module:
MoveUp Time:    3.4 xxxx   2.6 xxxxx xxxx xxxxx xxxxx xxxx xxxxx    2.1 xxxx xxxxx
Critical Gp:    7.0 xxxx   5.5 xxxxx xxxx xxxxx xxxxx xxxx xxxxx    5.5 xxxx xxxxx
------------|-----------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:    672 xxxx   164   xxxx xxxx xxxxx   xxxx xxxx xxxxx   [illegible] xxxx xxxxx
Potent Cap.:    394 xxxx  1144   xxxx xxxx xxxxx   xxxx xxxx xxxxx   1144 xxxx xxxxx
Adj Cap:       0.98 xxxx  1.00   xxxx xxxx xxxxx   xxxx xxxx xxxxx   1.00 xxxx xxxxx
Move Cap.:      386 xxxx  1144   xxxx xxxx xxxxx   xxxx xxxx xxxxx   1144 xxxx xxxxx
------------|-----------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del:   11.6 xxxx   3.2 xxxxx xxxx xxxxx xxxxx xxxx xxxxx    3.2 xxxx xxxxx
LOS by Move:      *    *     *      *    *     *      *    *     *      A    *     *
Movement:       LT - LTR - RT     LT - LTR - RT     LT - LTR - RT     LT - LTR - RT
Shared Cap.:   xxxx  433 xxxxx   xxxx xxxx xxxxx   xxxx xxxx xxxxx   xxxx xxxx xxxxx
Shrd StpDel:xxxxx 10.2 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:       *    C     *      *    *     *      *    *     *      *    *     *
ApproachDel:         10.2              0.0              0.0              0.2
```

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
PM Peak Hour Conditions

Scenario Report

Scenario:	Fut-Proj PM
Command:	Fut+Proj PM
Volume:	PM
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	PM
Trip Distribution:	All
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Fut+Proj PM

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
PM Peak Hour Conditions

Trip Generation Report
Project Trips
Forecast for PM

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
3	Landfill Pro	1.00	Landfill Proj	-15.00	0.00	-15	0	-15	214.3
	Zone 3 Subtotal		....			-15	0	-15	214.3
4	Landfill Pro	1.00	Landfill Proj	0.00	-76.00	0	-76	-76	1085.
	Zone 4 Subtotal		....			0	-76	-76	1085.
5	MRF	1.00	MRF	42.00	42.00	42	42	84	-1200
	Zone 5 Subtotal		....			42	42	84	-1200
TOTAL	....					27	-34	-7	100.0

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
PM Peak Hour Conditions

Trip Distribution Report

Percent Of Trips All

Zone	To Gates 2	3	4	6	7	8	11	12
3	24.1	0.0	1.0	50.9	1.0	3.0	0.0	20.0
4	11.0	0.0	5.0	59.0	0.0	2.7	7.3	15.0
5	26.0	0.0	3.0	48.0	0.0	3.0	0.0	20.0

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
PM Peak Hour Conditions

Turning Movement Report
PM

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#1 Crossroads Pkwy N. @ Crossroads Pkwy S.													
Base	257	0	129	0	0	0	0	186	170	163	180	0	1089
Added	-4	0	-25	0	0	0	0	0	0	5	0	0	-24
Other	0	0	183	0	0	0	0	30	0	107	30	0	350
Total	253	0	287	0	0	0	0	216	170	280	210	0	1415
#2 SR-60 @ Crossroads Pkwy S.													
Base	0	0	0	198	7	48	0	137	528	125	262	0	1305
Added	0	0	0	0	0	13	0	-28	-4	0	5	0	-14
Other	0	0	0	168	0	0	0	15	0	92	15	0	290
Total	0	0	0	366	7	61	0	124	524	217	282	0	1581
#3 Workman Mill/Crossroads South @ Workman Mill													
Base	15	14	9	67	8	250	614	547	5	0	258	95	1873
Added	0	0	0	0	0	1	1	28	0	0	18	0	48
Other	0	0	0	0	0	41	29	14	0	0	15	0	99
Total	15	14	9	67	8	292	644	589	5	0	291	85	2020
#4 Pellissier/Workman Mill @ Workman Mill [Signal To Be Constructed]													
Base	18	0	722	0	0	0	0	125	276	471	286	0	1898
Added	0	0	1	0	0	0	0	0	0	1	0	0	2
Other	0	0	29	0	0	0	0	0	0	41	0	0	70
Total	18	0	752	0	0	0	0	125	276	513	286	0	1970
#5 Crossroads Pkwy N. @ Workman Mill													
Base	91	7	534	11	18	3	1	1141	15	140	605	9	2576
Added	0	0	-4	0	0	0	0	1	0	0	1	0	-2
Other	0	0	30	0	0	0	29	0	0	30	41	0	130
Total	91	7	560	11	18	3	30	1142	15	170	647	9	2704
#6 Peck Rd @ Workman Mill													
Base	0	806	799	99	557	0	0	0	0	320	0	73	2655
Added	0	0	1	11	0	0	0	0	0	-1	0	3	14
Other	0	1	15	0	0	0	0	0	0	56	0	0	72
Total	0	807	815	110	557	0	0	0	0	375	0	76	2741
#7 605 NB @ Pellissier													
Base	0	0	0	467	0	236	197	606	0	0	383	130	2020
Added	0	0	0	0	0	0	3	0	0	0	0	0	3
Total	0	0	0	467	0	236	200	606	0	0	383	130	2023
#8 Pellissier @ Peck Rd													
Base	7	567	357	388	536	75	54	56	24	105	8	585	2760
Added	0	0	3	0	11	0	0	0	0	0	0	0	14
Other	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	7	568	360	388	547	75	54	56	24	105	8	585	2775

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
PM Peak Hour Conditions

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#9 Rooks @ Peck Rd													
Base	44	822	262	80	985	57	189	31	123	78	34	145	2850
Added	0	0	0	0	0	0	0	0	0	11	0	0	11
Total	44	822	262	80	985	57	189	31	123	89	34	145	2861
#10 Proj Ent East @ Crossroads Pkwy S.													
Base	10	6	60	50	5	14	23	591	5	11	261	50	1085
Added	-10	-6	-61	0	0	0	0	29	-1	-11	29	0	-31
Other	0	0	1	0	0	0	0	14	0	0	15	0	30
Total	0	-0	0	50	5	14	23	634	4	0	305	50	1084
#12 Proj Ent West @ Workman Mill													
Base	0	0	1	0	0	0	0	1146	0	0	543	0	1689
Added	12	0	30	0	0	0	0	-1	12	30	-10	0	73
Other	0	0	-1	0	0	0	0	44	0	0	56	0	99
Total	12	0	30	0	0	0	0	1189	12	30	589	0	1861

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
PM Peak Hour Conditions

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/C	Future LOS	Future Del/ Veh	Future V/C	Change in
# 1 Crossroads Pkwy N. @ Crossroad	A	xxxxx	0.397	A	xxxxx	0.575	+ 0.178 V/C
# 2 SR-60 @ Crossroads Pkwy S.	A	xxxxx	0.285	A	xxxxx	0.391	+ 0.106 V/C
# 3 Workman Mill/Crossroads South	B	xxxxx	0.681	C	xxxxx	0.723	+ 0.042 V/C
# 4 Pellissier/Workman Mill @ Work	A	xxxxx	0.445	A	xxxxx	0.471	+ 0.026 V/C
# 5 Crossroads Pkwy N. @ Workman M	C	xxxxx	0.736	C	xxxxx	0.763	+ 0.027 V/C
# 6 Peck Rd @ Workman Mill	B	xxxxx	0.661	B	xxxxx	0.678	+ 0.017 V/C
# 7 605 NB @ Pellissier	B	xxxxx	0.675	B	xxxxx	0.677	+ 0.002 V/C
# 8 Pellissier @ Peck Rd	F	xxxxx	1.066	F	xxxxx	1.067	+ 0.001 V/C
# 9 Rooks @ Peck Rd	B	xxxxx	0.697	B	xxxxx	0.697	+ 0.000 V/C
# 10 Proj Ent East @ Crossroads Pkw	C	1.4	0.000	F	1.1	0.000	+ 0.000 V/C
# 12 Proj Ent West @ Workman Mill	B	0.0	0.000	D	0.7	0.000	+ 0.000 V/C

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.I)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Crossroads Pkwy N. @ Crossroads Pkwy S.

Cycle (sec):	100	Critical Vol./Cap. (X):	0.575
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	0 0	1	0 0	0 0	0	0 0	1 1	0	1 0	2 0	0
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	225	0	113	0	0	0	0	163	149	147	158	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	257	0	129	0	0	0	0	186	170	168	180	0
Added Vol:	-4	0	-25	0	0	0	0	0	0	5	0	0
Other Appro:	0	0	183	0	0	0	0	30	0	107	30	0
Initial Fut:	253	0	287	0	0	0	0	216	170	280	210	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	253	0	287	0	0	0	0	216	170	280	210	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	253	0	287	0	0	0	0	216	170	280	210	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	253	0	287	0	0	0	0	216	170	280	210	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	1.12	0.88	1.00	2.00	0.00
Final Sat.:	3200	0	1600	0	0	0	0	1791	1409	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.18	0.00	0.00	0.00	0.00	0.12	0.12	0.17	0.07	0.00
Crit Moves:			****					****		****		

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.I)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 SR-60 @ Crossroads Pkwy S.

Cycle (sec):	100	Critical Vol./Cap. (X):	0.391
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	1 1	0 0	1	0 0	2 0	1	1 0	2 0	0
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	0	0	0	174	6	42	0	120	463	110	230	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	0	0	198	7	48	0	137	528	125	262	0
Added Vol:	0	0	0	0	0	13	0	-28	-4	0	5	0
Other Appro:	0	0	0	168	0	0	0	15	0	92	15	0
Initial Fut:	0	0	0	366	7	61	0	124	524	217	282	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	0	0	366	7	0	0	124	0	217	282	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	366	7	0	0	124	0	217	282	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	0	0	0	366	7	0	0	124	0	217	282	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.96	0.04	1.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	0	0	0	3140	60	1600	0	3200	1600	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.12	0.12	0.00	0.00	0.04	0.00	0.14	0.09	0.00
Crit Moves:				****				****		****		

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Workman Mill/Crossroads South @ Workman Mill

Cycle (sec): 100 Critical Vol./Cap. (X): 0.723
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 53 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 0	0	1 1	1 0	1	1 0	0 0	1	1 0
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	13	12	8	59	7	219	539	480	5	0	226	75
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	15	14	9	67	8	250	614	547	6	0	258	85
Added Vol:	0	0	0	0	0	1	1	28	0	0	18	0
Other Appro:	0	0	0	0	0	41	29	14	0	0	15	0
Initial Fut:	15	14	9	67	8	292	644	589	6	0	291	85
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	15	14	9	67	8	292	644	589	6	0	291	85
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	14	9	67	8	292	644	589	6	0	291	85
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	15	14	9	67	8	292	644	589	6	0	291	85
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.05	1.95	1.00	1.98	0.02	0.00	1.55	0.45
Final Sat.:	1600	1600	1600	1600	85	3115	1600	3168	32	0	2477	723
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.04	0.09	0.09	0.40	0.19	0.19	0.00	0.12	0.12
Crit Moves:	****				****		****				****	

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Pellissier/Workman Mill @ Workman Mill [Signal To Be Constructed

Cycle (sec): 100 Critical Vol./Cap. (X): 0.471
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 32 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	0 1	0 0	0	D 0	0 0	1	1 0	1 0	2	0 0
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	16	0	633	0	0	0	0	110	242	413	251	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	18	0	722	0	0	0	0	125	276	471	286	0
Added Vol:	0	0	1	0	0	0	0	0	0	1	0	0
Other Appro:	0	0	29	0	0	0	0	0	0	41	0	0
Initial Fut:	18	0	752	0	0	0	0	125	276	513	286	0
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	D.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	18	0	0	0	0	0	0	125	0	513	286	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	0	0	0	0	0	0	125	0	513	286	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	18	0	0	0	0	0	0	125	0	513	286	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00	2.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	3200	0	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.32	0.09	0.00
Crit Moves:	****							****		****		

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Crossroads Pkwy N. @ Workman Mill

Cycle (sec): 100 Critical Vol./Cap. (X): 0.763
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 59 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	1 1	0 0	1!	0 0	1 0	1	1 0	1 0	1	1 0
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	80	6	468	10	16	3	1	1001	13	123	531	8
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	91	7	534	11	18	3	1	1141	15	140	605	9
Added Vol:	0	0	-4	0	0	0	0	1	0	0	1	0
Other Appro:	0	0	30	0	0	0	29	0	0	30	41	0
Initial Fut:	91	7	560	11	18	3	30	1142	15	170	647	9
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	91	7	560	11	18	0	30	1142	15	170	647	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	91	7	560	11	18	0	30	1142	15	170	647	9
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	91	7	560	11	18	0	30	1142	15	170	647	9
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.02	1.98	0.38	0.62	0.00	1.00	1.97	0.03	1.00	1.97	0.03
Final Sat.:	1600	40	3160	607	993	0	1600	3159	41	1600	3156	44
Capacity Analysis Module:												
Vol/Sat:	0.06	0.18	0.18	0.02	0.02	0.00	0.02	0.36	0.36	0.11	0.21	0.20
Crit Moves:		****		****				****		****		

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Peck Rd @ Workman Mill

Cycle (sec): 100 Critical Vol./Cap. (X): 0.678
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 47 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	3	0 1	1 0	2	0 0	0 0	0	0 0	1 0	1!	0 0
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	0	707	701	87	489	0	0	0	0	[illegible]	0	64
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	806	799	99	557	0	0	0	0	370	0	73
Added Vol:	0	0	1	11	0	0	0	0	0	-1	0	3
Other Appro:	0	1	15	0	0	0	0	0	0	56	0	0
Initial Fut:	0	807	815	110	557	0	0	0	0	375	0	76
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	807	815	110	557	0	0	0	0	375	0	76
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	807	815	110	557	0	0	0	0	375	0	76
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	807	815	110	557	0	0	0	0	375	0	76
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.66	0.00	0.34
Final Sat.:	0	4800	1600	1600	3200	0	0	0	0	2661	0	539
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.51	0.07	0.17	0.00	0.00	0.00	0.00	0.14	0.00	0.14
Crit Moves:			****	****						****		

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 605 NB @ Pellissier

Cycle (sec): 100 Critical Vol./Cap. (X): 0.677
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 47 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 0 0			1 0 0 0 1			1 0 2 0 0			0 0 1 1 0		
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	0	0	0	410	0	207	173	532	0	0	336	114
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	0	0	467	0	236	197	606	0	0	383	130
Added Vol:	0	0	0	0	0	0	3	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	467	0	236	200	606	0	0	383	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	467	0	236	200	606	0	0	383	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	467	0	236	200	606	0	0	383	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	467	0	236	200	606	0	0	383	130
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.49	0.51
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	2389	811
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.29	0.00	0.15	0.13	0.19	0.00	0.00	0.16	0.16
Crit Moves:				****			****				****	

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project (5.1)
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Pellissier @ Peck Rd

Cycle (sec): 100 Critical Vol./Cap. (X): 1.067
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1 1 0			1 0 1 1 0			0 1 0 0 1			0 1 0 0 1		
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	6	497	313	340	470	66	47	49	21	92	7	513
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	7	567	357	388	536	75	54	56	24	105	8	585
Added Vol:	0	0	3	0	11	0	0	0	0	0	0	0
Other Appro:	0	1	0	0	0	0	0	0	0	0	0	0
Initial Fut:	7	568	360	388	547	75	54	56	24	105	8	585
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	7	568	360	388	547	75	54	56	24	105	8	585
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	568	360	388	547	75	54	56	24	105	8	585
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	7	568	360	388	547	75	54	56	24	105	8	585
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.22	0.78	1.00	1.76	0.24	0.49	0.51	1.00	0.93	0.07	1.00
Final Sat.:	1600	1959	1241	1600	2814	386	785	815	1600	1487	113	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.29	0.29	0.24	0.19	0.19	0.07	0.07	0.02	0.07	0.07	0.37
Crit Moves:		****		****				****				****

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--------------------------------------------------------------------------------
                Traffic Analysis for Puente Hills Landfill EIR
                  Future Conditions Minus the Project (5.1)
                         PM Peak Hour Conditions
--------------------------------------------------------------------------------
                    Level Of Service Computation Report
      ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #9 Pooks @ Peck Rd
********************************************************************************
Cycle (sec):          100              Critical Vol./Cap. (X):        0.697
Loss Time (sec):       10 (Y+R =  4 sec) Average Delay (sec/veh):     xxxxxx
Optimal Cycle:         50              Level Of Service:                  B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted         Permitted        Permitted
Rights:          Include          Include           Include          Include
Min. Green:    0     0     0     0     0     0     0     0     0    0     0     0
Lanes:        1  0  1  1  0    1  0  1  1  0    1  0  1  1  0    1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour
Base Vol:      39  721   230    70  864    50   166   27   108    68   30   127
Growth Adj:  1.14 1.14  1.14  1.14 1.14  1.14  1.14 1.14  1.14  1.14 1.14  1.14
Initial Bse:   44  822   262    80  985    57   189   31   123    78   34   145
Added Vol:      0    0     0     0    0     0     0    0     0    11    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   44  822   262    80  985    57   189   31   123    89   34   145
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    44  822   262    80  985    57   189   31   123    89   34   145
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   44  822   262    80  985    57   189   31   123    89   34   145
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    44  822   262    80  985    57   189   31   123    89   34   145
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 1.52  0.48  1.00 1.89  0.11  1.00 1.00  1.00  1.00 1.00  1.00
Final Sat.:  1600 2427   773  1600 3025   175  1600 1600  1600  1600 1600  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.34  0.34  0.05 0.33  0.33  0.12 0.02  0.08  0.06 0.02  0.09
Crit Moves:       ****        ****             ****                         ****
********************************************************************************
```



```
--------------------------------------------------------------------------------
                Traffic Analysis for Puente Hills Landfill EIR
                  Future Conditions Minus the Project (5.1)
                         PM Peak Hour Conditions
--------------------------------------------------------------------------------
                    Level Of Service Computation Report
          1994 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #10 Proj Ent East @ Crossroads Pkwy S
********************************************************************************
Average Delay (sec/veh):        1.1        Worst Case Level Of Service:       F
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Stop Sign        Stop Sign       Uncontrolled      Uncontrolled
Rights:         Ignore           Include          Include          Include
Lanes:        1  0  1  0  1    0  0  1! 0  0    1  0  0  1  0    1  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour
Base Vol:       9    5    53    44    4    12    20  518     4    10  229    44
Growth Adj:  0.00 0.00  0.00  1.14 1.14  1.14  1.14 1.14  1.14  0.00 1.14  1.14
Initial Bse:   10    6    60    50    5    14    23  591     5    11  261    50
Added Vol:    -10   -6   -61     0    0     0     0   29    -1   -11   29     0
Other Appro:    0    0     1     0    0     0     0   14     0     0   15     0
Initial Fut:    0    0     0    50    5    14    23  634     4     0  305    50
User Adj:    0.00 0.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  0.00 1.00  1.00
PHF Adj:     0.00 0.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  0.00 1.00  1.00
PHF Volume:     0    0     0    50    5    14    23  634     4     0  305    50
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:     0    0     0    50    5    14    23  634     4     0  305    50
Adjusted Volume Module:
Grade:            0%               0%               0%               0%
% Cycle/Cars:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
% Truck/Comb:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
PCE Adj:     1.10 1.10  1.10  1.10 1.10  1.10  1.10 1.00  1.00  1.10 1.00  1.00
Cycl/Car PCE:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Trck/Cmb PCE:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Adj Vol.:       0    0     0    55    5    15    25  634     4     0  305    50
Critical Gap Module:
MoveUp Time:xxxxx xxxx xxxxx   3.4  3.3   2.6   2.1 xxxx xxxxx xxxxx xxxx xxxxx
Critical Gp:xxxxx xxxx xxxxx   7.0  6.5   5.5   5.5 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   986  990   178   355 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   248  287  1125  1105 xxxx xxxxx  xxxx xxxx xxxxx
Adj Cap:     xxxx xxxx xxxxx  0.98 0.98  1.00  1.00 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   242  281  1125  1105 xxxx xxxxx  xxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del:xxxxx xxxx xxxxx  18.7 13.0   3.2   3.3 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    F    C     A     *    *     *     A    *     *     A    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  290 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx 15.3 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    C     *     *    *     *     *    *     *
ApproachDel:       0.0              15.3              0.1              0.0
```

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-------------------------------------------------------------------------------
              Traffic Analysis for Puente Hills Landfill EIR
                 Future Conditions Minus the Project (5.1)
                          PM Peak Hour Conditions
-------------------------------------------------------------------------------
                    Level Of Service Computation Report
          1994 HCM Unsignalized Method (Future Volume Alternative)
*******************************************************************************
Intersection #12 Proj Ent West @ Workman Mill
*******************************************************************************
Average Delay (sec/veh):        0.7          Worst Case Level Of Service:     D
*******************************************************************************
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:          Include          Include          Include          Include
Lanes:         0  0  1! 0  0   0  0  0  0  0   0  0  1  1  0   1  0  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour
Base Vol:        0    0    1    0    0    0    0 1005    0    0  476    0
Growth Adj:   1.14 1.14 1.14 1.14 1.14 1.14 1.14 1.14 1.14 1.14 1.14 1.14
Initial Bse:     0    0    1    0    0    0    0 1146    0    0  543    0
Added Vol:      12    0   30    0    0    0    0   -1   12   30  -10    0
Other Appro:     0    0   -1    0    0    0    0   44    0    0   56    0
Initial Fut:    12    0   30    0    0    0    0 1189   12   30  589    0
User Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:     12    0   30    0    0    0    0 1189   12   30  589    0
Reduct Vol:      0    0    0    0    0    0    0    0    0    0    0    0
Final Vol.:     12    0   30    0    0    0    0 1189   12   30  589    0
Adjusted Volume Module:
Grade:             0%               0%               0%               0%
% Cycle/Cars:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
  Truck/Comb:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
PCE Adj:      1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.00 1.00 1.10 1.00 1.00
Cycl/Car PCE:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Trck/Cmb PCE:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Adj Vol.:       13    0   33    0    0    0    0 1189   12   33  589    0
Critical Gap Module:
MoveUp Time:   3.4 xxxx  2.6 xxxxx xxxx xxxxx xxxxx xxxx xxxxx  2.1 xxxx xxxxx
Critical Gp:   7.0 xxxx  5.5 xxxxx xxxx xxxxx xxxxx xxxx xxxxx  5.5 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: 1813 xxxx   600  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1201 xxxx xxxxx
Potent Cap.:   73 xxxx   687  xxxx xxxx xxxxx  xxxx xxxx xxxxx   389 xxxx xxxxx
Adj Cap:     0.92 xxxx  1.00  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1.00 xxxx xxxxx
Move Cap.:     67 xxxx   687  xxxx xxxx xxxxx  xxxx xxxx xxxxx   389 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del: 65.2 xxxx   5.5 xxxxx xxxx xxxxx xxxxx xxxx xxxxx 10.0 xxxx xxxxx
LOS by Move:     *    *    *    *    *    *    *    *    *    C    *    *
Movement:      LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx  189 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Shrd StpDel:xxxxx 22.5 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:      *    D    *    *    *    *    *    *    *    *    *    *
ApproachDel:        22.5             0.0              0.0              0.5
```

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Projects (incl. Crossroads) Minus the Project (5.3)
AM Peak Hour Conditions

Scenario Report

Scenario:	Fut-Proj AM
Command:	Fut+Proj AM
Volume:	AM
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	AM
Trip Distribution:	All
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Fut+Proj AM

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Projects (incl. Crossroads) Minus the Project (5.3)
AM Peak Hour Conditions

Trip Generation Report
Project Trips
Forecast for AM

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
3	Landfill Pro	1.00	Landfill Proj	-302.00	0.00	-302	0	-302	-71.
	Zone 3 Subtotal					-302	0	-302	-71.6
4	Landfill Pro	1.00	Landfill Proj	0.00	-263.00	0	-263	-263	-62.
	Zone 4 Subtotal					0	-263	-263	-62.3
5	Proj 1-3	1.00	Cum Proj 1-3	468.00	57.00	468	57	525	124.4
	Zone 5 Subtotal					468	57	525	124.4
6	Projs 5&6	1.00	Cum Projs 5&6	337.00	41.00	337	41	378	89.6
	Zone 6 Subtotal					337	41	378	89.6
7	MRF	1.00	MRF	42.00	42.00	42	42	84	19.9
	Zone 7 Subtotal					42	42	84	19.9
TOTAL						545	-123	422	100.0

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Projects (incl. Crossroads) Minus the Project (5.3)
AM Peak Hour Conditions

Trip Distribution Report

Percent Of Trips All

Zone	To Gates 2	3	4	6	7	8	12
3	13.0	0.0	1.0	62.0	1.0	3.0	20.0
4	25.0	0.0	6.0	48.0	0.0	3.0	18.0
5	10.0	0.0	5.0	55.0	0.0	5.0	25.0
6	0.0	0.0	5.0	65.0	0.0	5.0	25.0
7	26.0	0.0	3.0	48.0	0.0	3.0	20.0

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Projects (incl. Crossroads) Minus the Project (5.3)
AM Peak Hour Conditions

Turning Movement Report
AM

Volume	Northbound			Southbound			Eastbound			Westbound			Total
Type	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Volume
#1 Crossroads Pkwy N. @ Crossroads Pkwy S.													
Base	239	0	154	0	0	0	0	132	193	435	181	0	1335
Added	223	0	-75	0	0	0	0	27	33	65	84	0	357
PassBy	0	0	54	0	0	0	0	9	0	17	5	0	85
Total	462	0	133	0	0	0	0	168	226	517	270	0	1777
#2 SR-60 @ Crossroads Pkwy S.													
Base	0	0	0	222	2	283	0	274	205	146	633	0	1765
Added	0	0	0	219	0	90	0	-71	-25	10	87	0	310
PassBy	0	0	0	0	0	52	0	5	0	14	2	0	73
Total	0	0	0	441	2	425	0	208	180	170	722	0	2148
#3 Workman Mill/Crossroads South @ Workman Mill													
Base	1	0	0	48	6	359	137	192	22	0	616	19	1399
Added	0	0	0	0	0	1	1	64	0	0	-34	0	32
Other	0	0	0	0	0	30	55	44	0	0	45	0	174
Total	1	0	0	48	6	390	193	300	22	0	627	19	1605
#4 Pellisaler/Workman Mill @ Workman Mill [Signal To Be Constructed]													
Base	124	0	423	0	0	0	0	404	355	769	1485	0	3560
Added	0	0	1	0	0	0	0	0	0	1	0	0	2
Other	0	0	55	0	0	0	0	0	0	30	0	0	85
Total	124	0	479	0	0	0	0	404	355	800	1485	0	3647
#5 Crossroads Pkwy N. @ Workman Mill													
Base	111	109	227	7	15	5	11	301	367	337	2036	71	3597
Added	0	0	-11	0	0	0	0	1	0	37	1	0	28
Other	0	0	5	0	0	0	0	55	0	9	30	0	99
Total	111	109	221	7	15	5	11	357	367	383	2067	71	3724
#6 Peck Rd @ Workman Mill													
Base	0	542	423	226	1035	0	0	0	0	873	0	82	3181
Added	0	0	32	15	0	0	0	0	0	-2	0	-49	-4
Other	0	0	5	0	1	0	0	0	0	32	0	0	38
Total	0	542	460	241	1036	0	0	0	0	903	0	33	3215
#7 605 NB @ Pellissier													
Base	0	0	0	212	0	269	113	192	0	0	978	246	2010
Added	0	0	0	0	0	8	-49	0	0	0	0	0	-41
Total	0	0	0	212	0	277	64	192	0	0	978	246	1969
#8 Pellissier @ Peck Rd													
Base	9	488	136	169	955	123	31	24	10	285	38	972	3240
Added	0	0	-49	0	8	0	0	0	0	8	0	0	-33
Other	0	0	0	0	1	0	0	0	0	0	0	0	1
Total	9	488	87	169	964	123	31	24	10	293	38	972	3208

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Projects (incl. Crossroads) Minus the Project (5.3)
AM Peak Hour Conditions

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#9 Rooks @ Peck Rd													
Base	207	920	138	139	640	192	76	18	52	250	34	62	2728
Added	0	0	0	0	-3	0	0	0	0	11	0	0	8
Total	207	920	138	139	637	192	76	18	52	261	34	62	2736
#10 Proj Ent East @ Crossroads Pkwy S.													
Base	9	0	182	22	1	18	9	233	5	231	775	30	1515
Added	-74	0	-189	0	0	0	0	94	-51	-251	428	0	-43
PassBy	65	0	7	0	0	0	0	-2	46	20	-15	0	121
Total	0	0	0	22	1	18	9	325	-0	0	1188	30	1593
#12 Proj Ent West @ Workman Mill													
Base	68	0	8	0	0	0	0	337	52	19	955	0	1441
Added	12	0	30	0	0	0	0	36	12	30	-63	0	57
Other	-60	0	-7	0	0	0	0	106	-46	-17	92	0	68
Total	20	0	31	0	0	0	0	479	18	32	984	0	1566

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Projects (incl. Crossroads) Minus the Project (5.3)
AM Peak Hour Conditions

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/Veh	Base V/C	Future LOS	Future Del/Veh	Future V/C	Change in
# 1 Crossroads Pkwy N. @ Crossroad	A	xxxxx	0.589	C	xxxxx	0.709	+ 0.120 V/C
# 2 SR-60 @ Crossroads Pkwy S.	A	xxxxx	0.507	A	xxxxx	0.593	+ 0.087 V/C
# 3 Workman Mill/Crossroads South	A	xxxxx	0.499	A	xxxxx	0.547	+ 0.048 V/C
# 4 Pellissier/Workman Mill @ Work	C	xxxxx	0.784	D	xxxxx	0.804	+ 0.019 V/C
# 5 Crossroads Pkwy N. @ Workman M	D	xxxxx	0.884	D	xxxxx	0.892	0.008 V/C
# 6 Peck Rd @ Workman Mill	C	xxxxx	0.722	C	xxxxx	0.716	-0.006 V/C
# 7 605 NB @ Pellissier	C	xxxxx	0.721	B	xxxxx	0.696	-0.026 V/C
# 8 Pellissier @ Peck Rd	F	xxxxx	1.094	F	xxxxx	1.097	+ 0.003 V/C
# 9 Rooks @ Peck Rd	C	xxxxx	0.706	C	xxxxx	0.713	+ 0.007 V/C
# 10 Proj Ent East @ Crossroads Pkw	D	1.5	0.000	F	0.8	0.000	+ 0.000 V/C
# 12 Proj Ent West @ Workman Mill	B	2.5	0.000	C	0.7	0.000	+ 0.000 V/C

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Projects (incl. Crossroads) Minus the Project (5.3)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Crossroads Pkwy N. @ Crossroads Pkwy S.

Cycle (sec): 100 Critical Vol./Cap. (X): 0.709
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 51 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0	0 0	1	0 0	0 0	0	0 0	1 1	0	1 0	2 0	0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	210	0	135	0	0	0	0	116	169	382	159	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	239	0	154	0	0	0	0	132	193	435	181	0
Added Vol:	223	0	-75	0	0	0	0	27	33	65	84	0
PasserByVol:	0	0	54	0	0	0	0	9	0	17	5	0
Initial Fut:	462	0	133	0	0	0	0	168	226	517	270	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	462	0	133	0	0	0	0	168	226	517	270	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	462	0	133	0	0	0	0	168	226	517	270	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	462	0	133	0	0	0	0	168	226	517	270	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	2.00	0.00
Final Sat.:	3200	0	1600	0	0	0	0	1600	1600	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.14	0.00	0.08	0.00	0.00	0.00	0.00	0.11	0.14	0.32	0.08	0.00
Crit Moves:	****								****	****		

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Projects (incl. Crossroads) Minus the Project (5.3)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 SR-60 @ Crossroads Pkwy S.

Cycle (sec): 100 Critical Vol./Cap. (X): 0.593
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 39 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	1 1	0 0	1	0 0	2 0	1	1 0	2 0	0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	0	0	0	195	2	248	0	240	180	128	555	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	0	0	222	2	283	0	274	205	146	633	0
Added Vol:	0	0	0	219	0	90	0	-71	-25	10	87	0
PasserByVol:	0	0	0	0	0	52	0	5	0	14	2	0
Initial Fut:	0	0	0	441	2	425	0	208	180	170	722	0
User Adj:	1.15	1.15	1.15	1.15	1.15	0.00	1.15	1.15	0.00	1.15	1.15	1.15
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	0	0	507	3	0	0	239	0	195	830	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	507	3	0	0	239	0	195	830	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	0	0	0	507	3	0	0	239	0	195	830	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.99	0.01	1.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	0	0	0	3181	19	1600	0	3200	1600	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.16	0.16	0.00	0.00	0.07	0.00	0.12	0.26	0.00
Crit Moves:				****				****			****	

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Projects (incl. Crossroads) Minus the Project (5.3)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Workman Mill/Crossroads South @ Workman Mill

Cycle (sec):	100	Critical Vol./Cap. (X):	0.547
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 0	0 1	1	1 0	1 1	0	0 0	1 1	0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	1	0	0	42	5	315	120	168	19	0	540	17
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	1	0	0	48	6	359	137	192	22	0	616	19
Added Vol:	0	0	0	0	0	1	1	64	0	0	-34	0
Other Appro:	0	0	0	0	0	30	55	44	0	0	45	0
Initial Fut:	1	0	0	48	6	390	193	300	22	0	627	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	1	0	0	48	6	390	193	300	22	0	627	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	0	0	48	6	390	193	300	22	0	627	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	1	0	0	48	6	390	193	300	22	0	627	19
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.03	1.97	1.00	1.86	0.14	0.00	1.94	0.06
Final Sat.:	1600	1600	1600	1600	48	3152	1600	2981	219	0	3106	94
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.03	0.12	0.12	0.12	0.10	0.10	0.00	0.20	0.20
Crit Moves:	****				****		****				****	

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Projects (incl. Crossroads) Minus the Project (5.3)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Pellissier/Workman Mill @ Workman Mill Signal to Be Constructed

Cycle (sec):	100	Critical Vol./Cap. (X):	0.804
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	68	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 0	1	0 0	0 0	0	0 0	1 1	0	1 0	2 0	0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	109	0	371	0	0	0	0	354	311	675	1303	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	124	0	423	0	0	0	0	404	355	769	1485	0
Added Vol:	0	0	1	0	0	0	0	0	0	1	0	0
Other Appro:	0	0	55	0	0	0	0	0	0	30	0	0
Initial Fut:	124	0	479	0	0	0	0	404	355	800	1485	0
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	124	0	0	0	0	0	0	404	0	800	1485	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	124	0	0	0	0	0	0	404	0	800	1485	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	124	0	0	0	0	0	0	404	0	800	1485	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00	2.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	3200	0	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.50	0.46	0.00
Crit Moves:	****							****		****		

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Projects (incl. Crossroads) Minus the Project (5.3)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Crossroads Pkwy N. @ Workman Mill

Cycle (sec): 100 Critical Vol./Cap. (X): 0.892
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 96 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Permitted			Permitted			Permitted			Permitted	
Rights:		Include			Ignore			Include			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 0 1 1			0 0 1! 0 0			1 0 1 1 0			1 0 1 1 0		
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	97	96	199	6	13	4	10	264	322	296	1786	62
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	111	109	227	7	15	5	11	301	367	337	2036	71
Added Vol:	0	0	-11	0	0	0	0	1	0	37	1	0
Other Appro:	0	0	5	0	0	0	0	55	0	9	30	0
Initial Fut:	111	109	221	7	15	5	11	357	367	383	2067	71
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	111	109	221	7	15	0	11	357	367	383	2067	71
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	111	109	221	7	15	0	11	357	367	383	2067	71
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	111	109	221	7	15	0	11	357	367	383	2067	71
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.66	1.34	0.32	0.68	0.00	1.00	1.00	1.00	1.00	1.93	0.07
Final Sat.:	1600	1057	2143	509	1091	0	1600	1600	1600	1600	3094	106
Capacity Analysis Module:												
Vol/Sat:	0.07	0.10	0.10	0.01	0.01	0.00	0.01	0.22	0.23	0.24	0.67	0.67
Crit Moves:		****		****			****				****	

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Projects (incl. Crossroads) Minus the Project (5.3)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #6 Peck Rd @ Workman Mill

Cycle (sec): 100 Critical Vol./Cap. (X): 0.716
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 52 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Permitted			Permitted			Protected			Protected	
Rights:		Ovl			Include			Include			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 3 0 1			1 0 2 0 0			0 0 0 0 0			1 0 1! 0 0		
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	0	475	371	198	908	0	0	0	0	766	0	72
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	542	423	226	1035	0	0	0	0	873	0	82
Added Vol:	0	0	32	15	0	0	0	0	0	-2	0	-49
Other Appro:	0	0	5	0	1	0	0	0	0	32	0	0
Initial Fut:	0	542	460	241	1036	0	0	0	0	903	0	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	542	460	241	1036	0	0	0	0	903	0	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	542	460	241	1036	0	0	0	0	903	0	33
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	542	460	241	1036	0	0	0	0	903	0	33
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.93	0.00	0.07
Final Sat.:	0	4800	1600	1600	3200	0	0	0	0	3087	0	113
Capacity Analysis Module:												
Vol/Sat:	0.00	0.11	0.29	0.15	0.32	0.00	0.00	0.00	0.00	0.29	0.00	0.29
Crit Moves:	****				****					****		

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Projects (incl. Crossroads) Minus the Project (5.3)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 605 NB @ Pellissier

Cycle (sec):	100	Critical Vol./Cap. (X):	0.696
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 0 0			1 0 0 0 1			1 0 2 0 0			0 0 1 1 0		
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	0	0	0	186	0	236	99	168	0	0	858	216
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	0	0	212	0	269	113	192	0	0	978	246
Added Vol:	0	0	0	0	0	8	-49	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	212	0	277	64	192	0	0	978	246
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	212	0	277	64	192	0	0	978	246
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	212	0	277	64	192	0	0	978	246
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	212	0	277	64	192	0	0	978	246
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.60	0.40
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	2557	643
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.17	0.04	0.06	0.00	0.00	0.38	0.38
Crit Moves:						****	****				****	

Traffic Analysis for Puente Hills Landfill EIR
Future With Other Projects (incl. Crossroads) Minus the Project (5.3)
AM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Pellissier @ Peck Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	1.087
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	[illegible]	[illegible]	0	0
Lanes:	1 0 1 1 0			1 0 1 1 0			0 1 [illegible] 0 [illegible]			[illegible] 1 0 0 1		
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	8	428	119	148	838	108	[illegible]	[illegible]	9	[illegible]	33	853
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	9	488	136	169	955	123	31	24	10	285	38	972
Added Vol:	0	0	-49	0	8	0	0	0	0	8	0	0
Other Appro:	0	0	0	0	1	0	0	0	0	0	0	0
Initial Fut:	9	488	87	169	964	123	31	24	[illegible]	293	38	972
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	[illegible]	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	[illegible]	1.00	1.00	1.00
PHF Volume:	9	488	87	169	964	123	31	24	[illegible]	293	38	972
Reduct Vol:	0	0	0	0	0	0	0	[illegible]	[illegible]	0	0	0
Reduced Vol:	9	488	87	169	964	123	31	24	[illegible]	[illegible]	38	972
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	[illegible]	[illegible]	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	9	488	87	169	964	123	31	24	10	293	38	972
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.70	0.30	1.00	1.77	0.23	0.56	0.44	1.00	0.89	0.11	1.00
Final Sat.:	1600	2716	484	1600	2838	362	[illegible]	[illegible]	1600	1416	184	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.18	0.18	0.11	0.34	0.34	0.03	0.03	0.01	0.21	0.21	0.61
Crit Moves:	****				****		****					****

```
----------------------------------------------------------------------------
                 Traffic Analysis for Puente Hills Landfill EIR
       Future With Other Projects (incl. Crossroads) Minus the Project (5.3)
                            AM Peak Hour Conditions
----------------------------------------------------------------------------
                    Level Of Service Computation Report
         ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
****************************************************************************
Intersection #9 Rooks @ Peck Rd
****************************************************************************
Cycle (sec):          100             Critical Vol./Cap. (X):         0.713
Loss Time (sec):       10 (Y+R =  4 sec) Average Delay (sec/veh):     xxxxxx
Optimal Cycle:         52             Level Of Service:                   C
****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
-------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Permitted        Permitted
Rights:          Include          Include          Include          Include
Min. Green:    0     0     0     0     0     0     0     0     0     0     0     0
Lanes:        1  0  1  1  0    1  0  1  1  0    1  0  1  1  0    1  0  1  0  1
-------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:      182   807   121   122   561   168    67    16    46   219    30    54
Growth Adj:   1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14  1.14
Initial Bse:   207   920   138   139   640   192    76    18    52   250    34    62
Added Vol:       0     0     0     0    -3     0     0     0     0    11     0     0
PasserByVol:     0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:   207   920   138   139   637   192    76    18    52   261    34    62
User Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:      1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:    207   920   138   139   637   192    76    18    52   261    34    62
Reduct Vol:      0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:   207   920   138   139   637   192    76    18    52   261    34    62
PCE Adj:      1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
MLF Adj:      1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Final Vol.:    207   920   138   139   637   192    76    18    52   261    34    62
-------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1600  1600  1600  1600  1600  1600  1600  1600  1600  1600  1600  1600
Adjustment:   1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Lanes:        1.00  1.74  0.26  1.00  1.54  0.46  1.00  1.00  1.00  1.00  1.00  1.00
Final Sat.:   1600  2783   417  1600  2459   741  1600  1600  1600  1600  1600  1600
-------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.13  0.33  0.33  0.09  0.26  0.26  0.05  0.01  0.03  0.16  0.02  0.04
Crit Moves:         ****        ****                          ****  ****
****************************************************************************
```



```
----------------------------------------------------------------------------
                 Traffic Analysis for Puente Hills Landfill EIR
       Future With Other Projects (incl. Crossroads) Minus the Project (5.3)
                            AM Peak Hour Conditions
----------------------------------------------------------------------------
                    Level Of Service Computation Report
         1994 HCM Unsignalized Method (Future Volume Alternative)
****************************************************************************
Intersection #10 Proj Ent East @ Crossroads Pkwy S.
****************************************************************************
Average Delay (sec/veh):       0.8        Worst Case Level Of Service:      F
****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
-------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:          Ignore           Include          Include          Include
Lanes:        1  0  1  0  1    0  0  1! 0  0    1  0  1  1  0    1  0  1  1  0
-------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:        8     0   160    19     1    16     8   204     4   203   680    26
Growth Adj:   0.00  1.14  0.00  1.14  1.14  1.14  1.14  1.14  0.00  0.00  1.14  1.14
Initial Bse:     9     0   182    22     1    18     9   233     5   231   775    30
Added Vol:     -74     0  -189     0     0     0     0    94   -51  -251   428     0
PasserByVol:    65     0     7     0     0     0     0    -2    46    20   -15     0
Initial Fut:     0     0     0    22     1    18     9   325     0     0  1188    30
User Adj:     0.00  1.00  0.00  1.00  1.00  1.00  1.00  1.00  0.00  0.00  1.00  1.00
PHF Adj:      0.00  1.00  0.00  1.00  1.00  1.00  1.00  1.00  0.00  0.00  1.00  1.00
PHF Volume:      0     0     0    22     1    18     9   325     0     0  1188    30
Reduct Vol:      0     0     0     0     0     0     0     0     0     0     0     0
Final Vol.:      0     0     0    22     1    18     9   325     0     0  1188    30
Adjusted Volume Module:
Grade:             0%               0%               0%               0%
% Cycle/Cars:  xxxx  xxxx        xxxx  xxxx        xxxx  xxxx        xxxx  xxxx
% Truck/Comb:  xxxx  xxxx        xxxx  xxxx        xxxx  xxxx        xxxx  xxxx
PCE Adj:      1.10  1.10  1.10  1.10  1.10  1.10  1.10  1.00  1.00  1.10  1.00  1.00
Cycl/Car PCE:  xxxx  xxxx        xxxx  xxxx        xxxx  xxxx        xxxx  xxxx
Trck/Cmb PCE:  xxxx  xxxx        xxxx  xxxx        xxxx  xxxx        xxxx  xxxx
Adj Vol.:        0     0     0    24     1    20    10   325     0     0  1188    30
Critical Gap Module:
MoveUp Time:xxxxx  xxxx xxxxx    3.4   3.3   2.6   2.1  xxxx xxxxx xxxxx  xxxx xxxxx
Critical Gp:xxxxx  xxxx xxxxx    7.0   6.5   5.5   5.5  xxxx xxxxx xxxxx  xxxx xxxxx
-------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  xxxx  xxxx xxxxx  1537  1537   609  1218  xxxx xxxxx  xxxx  xxxx xxxxx
Potent Cap.:  xxxx  xxxx xxxxx   110   138   680   380  xxxx xxxxx  xxxx  xxxx xxxxx
Adj Cap:      xxxx  xxxx xxxxx  0.97  0.97  1.00  1.00  xxxx xxxxx  xxxx  xxxx xxxxx
Move Cap.:    xxxx  xxxx xxxxx   107   134   680   380  xxxx xxxxx  xxxx  xxxx xxxxx
-------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del:xxxxx  xxxx xxxxx   42.0  27.1   5.4   9.7  xxxx xxxxx xxxxx  xxxx xxxxx
LOS by Move:     F     *     A     *     *     *     B     *     *     A     *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.:  xxxx  xxxx xxxxx  xxxx   173 xxxxx  xxxx  xxxx xxxxx  xxxx  xxxx xxxxx
Shrd StpDel:xxxxx  xxxx xxxxx xxxxx  25.3 xxxxx xxxxx  xxxx xxxxx xxxxx  xxxx xxxxx
Shared LOS:      *     *     *     *     D     *     *     *     *     *     *     *
ApproachDel:         0.0              25.3               0.3               0.0
```

```
Traffic Analysis for Puente Hills Landfill EIR
Future With Other Projects (incl. Crossroads) Minus the Project (5.3)
AM Peak Hour Conditions
-----------------------------------------------------------------------------
Level Of Service Computation Report
1994 HCM Unsignalized Method (Future Volume Alternative)
*****************************************************************************
Intersection #12 Proj Ent West @ Workman Mill
*****************************************************************************
Average Delay (sec/veh):        0.7         Worst Case Level Of Service:    C
*****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:           Include          Include          Include          Include
Lanes:         0  0  1! 0  0    0  0  0  0  0    0  0  1  1  0    1  0  2  0  D
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:       60    0    7     0    0    0     0  296   46    17  838    0
Growth Adj:   1.14 1.14 1.14  1.14 1.14 1.14  1.14 1.14 1.14  1.14 1.14 1.14
Initial Bse:    68    0    8     0    0    0     0  337   52    19  955    0
Added Vol:      12    0   30     0    0    0     0   36   12    30  -63    0
Other Appro:   -60    0   -7     0    0    0     0  106  -46   -17   92    0
Initial Fut:    20    0   31     0    0    0     0  479   18    32  984    0
User Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:      1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     20    0   31     0    0    0     0  479   18    32  984    0
Reduct Vol:      0    0    0     0    0    0     0    0    0     0    0    0
Final Vol.:     20    0   31     0    0    0     0  479   18    32  984    0
Adjusted Volume Module:
Grade:             0%               0%               0%               0%
% Cycle/Cars:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
% Truck/Comb:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
PCE Adj:      1.10 1.10 1.10  1.10 1.10 1.10  1.10 1.00 1.00  1.10 1.00 1.00
Cycl/Car PCE:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Trck/Cmb PCE:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Adj Vol.:       22    0   34     0    0    0     0  479   18    36  984    0
Critical Gap Module:
MoveUp Time:   3.4 xxxx  2.6 xxxxx xxxx xxxxx xxxxx xxxx xxxxx  2.1 xxxx xxxxx
Critical Gp:   7.0 xxxx  5.5 xxxxx xxxx xxxxx xxxxx xxxx xxxxx  5.5 xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol: 1505 xxxx   249  xxxx xxxx xxxxx  xxxx xxxx xxxxx   498 xxxx xxxxx
Potent Cap.:  115 xxxx  1036  xxxx xxxx xxxxx  xxxx xxxx xxxxx   926 xxxx xxxxx
Adj Cap:     0.96 xxxx  1.00  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1.00 xxxx xxxxx
Move Cap.:    111 xxxx  1036  xxxx xxxx xxxxx  xxxx xxxx xxxxx   926 xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
Stopped Del: 39.7 xxxx   3.6 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   4.0 xxxx xxxxx
LOS by Move:    *    *    *     *    *    *     *    *    *     A    *    *
Movement:     LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx  240 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Shrd StpDel:xxxxx 17.9 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    C    *     *    *    *     *    *    *     *    *    *
ApproachDel:       17.9              0.0              0.0              0.1
```



```
Traffic Analysis for Puente Hills Landfill EIR
Future With Cumulative Projects - Without Project (5.2)
Mid Day Peak Hour Conditions
-----------------------------------------------------------------------------
Scenario Report
Scenario:            Mid-Day

Command:             Default Command
Volume:              MidDay
Geometry:            Existing
Impact Fee:          Default Impact Fee
Trip Generation:     Mid-day
Trip Distribution:   All
Paths:               Default Paths
Routes:              Default Routes
Configuration:       Mid-day
```

Traffic Analysis for Puente Hills Landfill EIR
Future With Cumulative Projects - Without Project (5.2)
Mid Day Peak Hour Conditions

Trip Generation Report

Forecast for AM

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
3	Landfill Pro	1.00	Landfill Proj	-464.00	0.00	-464	0	-464	618.
	Zone 3 Subtotal					-464	0	-464	618.7
4	Landfill Pro	1.00	Landfill Proj	0.00	-395.00	0	-395	-395	526.
	Zone 4 Subtotal					0	-395	-395	526.7
5	Proj 1-3	1.00	Cum Proj 1-3	151.00	151.00	151	151	302	-402.
	Zone 5 Subtotal					151	151	302	-402.
6	Proj 5&6	1.00	Cum Proj 5&6	109.00	109.00	109	109	218	-290.
	Zone 6 Subtotal					109	109	218	-290.
7	MRF	1.00	MRF	111.00	153.00	111	153	264	-352.
	Zone 7 Subtotal					111	153	264	-352.
TOTAL						-93	18	-75	100.0

Traffic Analysis for Puente Hills Landfill EIR
Future With Cumulative Projects - Without Project (5.2)
Mid Day Peak Hour Conditions

Trip Distribution Report

Percent Of Trips All

	To Gates								
Zone	2	3	4	6	7	8	11	12	13
3	10.0	0.0	1.0	68.0	0.0	1.0	0.0	20.0	0.0
4	18.7	0.0	6.0	55.0	0.0	3.0	2.3	15.0	0.0
5	10.0	0.0	5.0	55.0	0.0	5.0	0.0	25.0	0.0
6	0.0	0.0	5.0	65.0	0.0	5.0	0.0	25.0	0.0
7	26.0	0.0	3.0	48.0	0.0	3.0	0.0	20.0	0.0

Traffic Analysis for Puente Hills Landfill EIR
Future With Cumulative (Non-p) Projects - Without Project (5.3)
Mid Day Peak Hour Conditions

Scenario Report

Scenario:	Mid-Day
Command:	Default Command
Volume:	MidDay
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	Mid-day
Trip Distribution:	All
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Mid-day

Traffic Analysis for Puente Hills Landfill EIR
Future With Cumulative (Non-p) Projects - Without Project (5.3)
Mid Day Peak Hour Conditions

Trip Generation Report

Forecast for AM

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
3	Landfill Pro	1.00	Landfill Proj	-464.00	0.00	-464	0	-464	618.
	Zone 3 Subtotal		....			-464	0	-464	618.7
4	Landfill Pro	1.00	Landfill Proj	0.00	-395.00	0	-395	-395	526.
	Zone 4 Subtotal		....			0	-395	-395	526.7
5	Proj 1-3	1.00	Cum Proj 1-3	151.00	151.00	151	151	302	-402.
	Zone 5 Subtotal		....			151	151	302	-402.
6	Proj 5&6	1.00	Cum Proj 5&6	109.00	109.00	109	109	218	-290.
	Zone 6 Subtotal		....			109	109	218	-290.
7	MRF	1.00	MRF	21.00	21.00	21	21	42	-56.0
	Zone 7 Subtotal		....			21	21	42	-56.0
8	MRF Trucks	1.00	MRF Trucks	111.00	111.00	111	111	222	-296.
	Zone 8 Subtotal		....			111	111	222	-296.
TOTAL	....					-72	-3	-75	100.0

Traffic Analysis for Puente Hills Landfill EIR
Future With Cumulative (Non-p) Projects Without Project (5.3)
Mid Day Peak Hour Conditions

Trip Distribution Report

Percent Of Trips All

To Gates

Zone	2	3	4	6	7	8	11	12	13
3	10.0	0.0	1.0	68.0	0.0	1.0	0.0	20.0	0.0
4	18.7	0.0	6.0	55.0	0.0	3.0	2.3	15.0	0.0
5	10.0	0.0	5.0	55.0	0.0	5.0	0.0	25.0	0.0
6	0.0	0.0	5.0	65.0	0.0	5.0	0.0	25.0	0.0
7	26.0	0.0	3.0	48.0	0.0	3.0	0.0	20.0	0.0
8	0.0	0.0	3.0	74.0	0.0	3.0	0.0	20.0	0.0

Traffic Analysis for Puente Hills Landfill EIR
Future With Cumulative (Non-p) Projects - Without Project (5.3)
Mid Day Peak Hour Conditions

Turning Movement Report
AM

Volume	Northbound			Southbound			Eastbound			Westbound			Total
Type	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Volume
#1 Crossroads Pkwy N. @ Crossroads Pkwy S.													
Base	245	0	382	0	0	0	0	152	270	250	222	0	1521
Added	56	0	-42	0	0	0	0	71	31	-29	27	0	114
ther A	0	0	57	0	0	0	0	9	0	17	5	0	88
Total	301	0	397	0	0	0	0	232	301	238	254	0	1723
#2 SR-60 @ Crossroads Pkwy S.													
Base	0	0	0	222	2	283	0	274	205	146	633	0	1765
Added	0	0	0	71	0	-140	0	-57	5	27	-25	0	-119
Other	0	0	0	52	0	0	0	5	0	14	2	0	73
Total	0	0	0	345	2	143	0	222	210	187	610	0	1719
#3 Workman Mill/Crossroads South @ Workman Mill													
Base	5	6	5	31	0	222	153	177	5	1	231	36	871
Added	0	0	0	-31	0	1	1	41	0	0	-40	0	-43
Other	0	0	0	0	0	25	30	31	0	0	50	0	136
Total	5	6	5	0	0	248	184	249	5	1	241	36	964
#4 Pellissier/Workman Mill @ Workman Mill [Signal To Be Constructed]													
Base	49	0	144	0	0	0	0	173	41	223	427	0	1058
Added	0	0	1	0	0	0	0	0	-46	1	0	0	-44
Other	0	0	30	0	0	0	0	0	0	25	0	0	55
Total	49	0	175	0	0	0	0	173	-5	249	427	0	1069
#5 Crossroads Pkwy N. @ Workman Mill													
Base	31	16	131	7	15	0	6	363	28	227	749	7	1579
Added	0	0	-15	0	0	0	0	1	0	4	1	0	-9
Other	0	0	0	0	0	0	0	30	0	0	25	0	55
Total	31	16	116	7	15	0	6	394	28	231	775	7	1625
#6 Peck Rd @ Workman Mill													
Base	0	516	422	93	442	0	0	0	0	317	0	112	1903
Added	0	0	12	21	0	0	0	0	0	5	0	-53	-15
Other	0	0	20	0	1	0	0	0	0	27	0	0	48
Total	0	516	454	114	443	0	0	0	0	349	0	59	1936
#7 605 NB @ Pellissier													
Base	0	0	0	212	0	269	113	192	0	0	978	246	2010
Added	0	0	0	-46	0	15	-53	0	0	0	0	0	-84
Total	0	0	0	166	0	284	60	192	0	0	978	246	1926
#8 Pellissier @ Peck Rd													
Base	9	430	185	267	407	81	74	30	31	[illegible]	19	447	2112
Added	0	0	-53	0	5	0	0	0	0	.5	0	0	-33
Total	9	430	132	267	412	81	74	30	31	148	19	447	2079

Traffic Analysis for Puente Hills Landfill EIR
Future With Cumulative (Non-p) Projects - Without Project (5.3)
Mid Day Peak Hour Conditions

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#9 Rooks @ Peck Rd													
Base	121	755	123	79	605	130	63	35	78	133	22	74	2217
Added	0	0	0	0	0	0	0	0	0	5	0	0	5
Total	121	755	123	79	605	130	63	35	78	138	22	74	2222
#10 Proj Ent East @ Crossroads Pkwy S.													
Base	14	9	293	33	6	15	13	217	6	401	227	36	1269
Added	-82	-9	-193	0	0	0	0	141	-48	-305	141	0	-355
Other	72	0	7	0	0	0	0	-8	45	12	-16	0	112
Total	4	0	107	33	6	15	13	350	3	108	352	36	1026
#12 Proj Ent West @ Workman Mill													
Base	75	0	15	0	0	0	0	283	44	21	347	3	788
Added	6	0	15	0	0	0	0	27	6	15	-54	0	15
Other	-66	0	-13	0	0	0	0	59	-39	-18	83	0	6
Total	15	0	17	0	0	0	0	369	11	18	376	3	809

Traffic Analysis for Puente Hills Landfill EIR
Future With Cumulative (Non-p) Projects - Without Project (5.3)
Mid Day Peak Hour Conditions

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/Veh	Base V/C	Future LOS	Future Del/Veh	Future V/C	Change in
# 1 Crossroads Pkwy N. @ Crossroad	D	xxxxx	0.816	D	xxxxx	0.842	+ 0.027 V/C
# 2 SR-60 @ Crossroads Pkwy S.	A	xxxxx	0.560	A	xxxxx	0.579	+ 0.019 V/C
# 3 Workman Mill/Crossroads South	A	xxxxx	0.382	A	xxxxx	0.416	+ 0.034 V/C
# 4 Pellissier/Workman Mill @ Work	A	xxxxx	0.324	A	xxxxx	0.340	+ 0.016 V/C
# 5 Crossroads Pkwy N. @ Workman M	A	xxxxx	0.424	A	xxxxx	0.431	+ 0.008 V/C
# 6 Peck Rd @ Workman Mill	A	xxxxx	0.422	A	xxxxx	0.455	+ 0.033 V/C
# 7 605 NB @ Pellissier	C	xxxxx	0.721	B	xxxxx	0.698	-0.024 V/C
# 8 Pellissier @ Peck Rd	D	xxxxx	0.803	C	xxxxx	0.787	-0.017 V/C
# 9 Rooks @ Peck Rd	A	xxxxx	0.556	A	xxxxx	0.559	+ 0.003 V/C
# 10 Proj Ent East @ Crossroads Pkw	E	5.3	0.000	F	1.9	0.000	+ 0.000 V/C
# 12 Proj Ent West @ Workman Mill	C	1.4	0.000	B	0.4	0.000	+ 0.000 V/C

Traffic Analysis for Puente Hills Landfill EIR
Future With Cumulative (Non-p) Projects - Without Project (5.3)
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Crossroads Pkwy N. @ Crossroads Pkwy S.

Cycle (sec):	100	Critical Vol./Cap. (X):	0.816
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	70	Level Of Service:	D

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Protected	Permitted	Permitted	Permitted
Rights:	Include	Include	Include	Include
Lanes:	2 0 0 0 1	0 0 0 0 0	0 0 1 1 0	1 0 2 0 0

Movement:	NB L	NB T	NB R	SB L	SB T	SB R	EB L	EB T	EB R	WB L	WB T	WB R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	215	0	335	0	0	0	0	133	237	219	195	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	245	0	382	0	0	0	0	152	270	250	222	0
User Adj:	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	311	0	485	0	0	0	0	193	343	317	282	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	311	0	485	0	0	0	0	193	343	317	282	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	311	0	485	0	0	0	0	193	343	317	282	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	2.00	0.00
Final Sat.:	3200	0	1600	0	0	0	0	1600	1600	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.10	0.00	0.30	0.00	0.00	0.00	0.00	0.12	0.21	0.20	0.09	0.00
Crit Moves:			****						****	****		

```
-----------------------------------------------------------------------------
            Traffic Analysis for Puente Hills Landfill EIR
    Future With Cumulative (Non-p) Projects - Without Project (5.3)
                      Mid Day Peak Hour Conditions
-----------------------------------------------------------------------------
                   Level Of Service Computation Report
    ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
*****************************************************************************
Intersection #2 SR-60 @ Crossroads Pkwy S.
*****************************************************************************
Cycle (sec):         100                Critical Vol./Cap. (X):         0.560
Loss Time (sec):      10 (Y+R =  4 sec) Average Delay (sec/veh):       xxxxxx
Optimal Cycle:        37                Level Of Service:                   A
*****************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Permitted        Protected
Rights:          Include          Ignore           Ignore           Include
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:       0  0  0  0  0    1  1  0  0  1    0  0  2  0  1    1  0  2  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:      0     0     0  195     2   248    0   240   180  128   555     0
Growth Adj:  1.14 1.14  1.14 1.14 1.14  1.14 1.14 1.14  1.14 1.14 1.14  1.14
Initial Bse:   0     0     0  222     2   283    0   274   205  146   633     0
User Adj:    1.30 1.30  1.30 1.30 1.30  0.00 1.30 1.30  0.00 1.30 1.30  1.30
PHF Adj:     1.00 1.00  1.00 1.00 1.00  0.00 1.00 1.00  0.00 1.00 1.00  1.00
PHF Volume:    0     0     0  289     3     0    0   356     0  190   823     0
Reduct Vol:    0     0     0    0     0     0    0     0     0    0     0     0
Reduced Vol:   0     0     0  289     3     0    0   356     0  190   823     0
PCE Adj:     1.00 1.00  1.00 1.00 1.00  0.00 1.00 1.00  0.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  0.00 1.00 1.00  0.00 1.00 1.00  1.00
Final Vol.:    0     0     0  289     3     0    0   356     0  190   823     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600 1600 1600  1600 1600 1600  1600 1600 1600  1600
Adjustment:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Lanes:       0.00 0.00  0.00 1.98 0.02  1.00 0.00 2.00  1.00 1.00 2.00  0.00
Final Sat.:    0     0     0 3167    33  1600    0 3200  1600 1600 3200     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.00  0.00 0.09 0.09  0.00 0.00 0.11  0.00 0.12 0.26  0.00
Crit Moves:                  ****                   ****             ****
*****************************************************************************
```

Traffic Analysis for Puente Hills Landfill EIR
Future With Cumulative (Non-p) Projects - Without Project (5.3)
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #3 Workman Mill/Crossroads South @ Workman Mill

Cycle (sec):	100	Critical Vol./Cap. (X):	0.382
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Permitted			Permitted			Permitted			Permitted	
Rights:		Include			Include			Include			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:		1 0 1 0 1			1 0 0 1 1			1 0 1 1 0			0 1 0 1 0	
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	4	5	4	27	0	195	134	155	4	1	203	32
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	5	6	5	31	0	222	153	177	5	1	231	36
User Adj:	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	5	6	5	34	0	249	171	198	5	1	259	41
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	6	5	34	0	249	171	198	5	1	259	41
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	5	6	5	34	0	249	171	198	5	1	259	41
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.00	2.00	1.00	1.95	0.05	0.01	1.72	0.27
Final Sat.:	1600	1600	1600	1600	0	3200	1600	3121	79	11	2753	436
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.08	0.11	0.06	0.06	0.09	0.09	0.09
Crit Moves:	****					****	****				****	

Traffic Analysis for Puente Hills Landfill EIR
Future With Cumulative (Non-p) Projects - Without Project (5.3)
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

****

Intersection #4 Pellissier/Workman Mill @ Workman Mill [Signal To Be Constructed

****

Cycle (sec): 100 Critical Vol./Cap. (X): 0.324
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 26 Level Of Service: A

****

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Protected	Protected
Rights:	Ignore	Include	Ignore	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 1 1 0	1 0 2 0 0

Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour

	NB L	NB T	NB R	SB L	SB T	SB R	EB L	EB T	EB R	WB L	WB T	WB R
Base Vol:	43	0	126	0	0	0	0	152	36	196	375	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	49	0	144	0	0	0	0	173	41	223	427	0
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	49	0	0	0	0	0	0	173	0	223	427	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	49	0	0	0	0	0	0	173	0	223	427	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	49	0	0	0	0	0	0	173	0	223	427	0

Saturation Flow Module:

	NB L	NB T	NB R	SB L	SB T	SB R	EB L	EB T	EB R	WB L	WB T	WB R
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00	2.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	3200	0	1600	3200	0

Capacity Analysis Module:

	NB L	NB T	NB R	SB L	SB T	SB R	EB L	EB T	EB R	WB L	WB T	WB R
Vol/Sat:	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.14	0.13	0.00
Crit Moves:	****							****		****		

****

Traffic Analysis for Puente Hills Landfill EIR
Future With Cumulative (Non-p) Projects - Without Project (5.3)
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #5 Crossroads Pkwy N. @ Workman Mill

Cycle (sec):	100	Critical Vol./Cap. (X):	0.424
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	30	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	1	0 1	0 0	0	1 0	1 1	0	1 0	1 1	0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	27	14	115	6	13	0	5	318	25	199	657	6
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	31	16	131	7	15	0	6	363	28	227	749	7
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	31	16	131	7	15	0	6	363	28	227	749	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	16	131	7	15	0	6	363	28	227	749	7
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	31	16	131	7	15	0	6	363	28	227	749	7
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.22	1.78	0.32	0.68	0.00	1.00	1.86	0.14	1.00	1.98	0.02
Final Sat.:	1600	348	2852	509	1091	0	1600	2971	229	1600	3170	30
Capacity Analysis Module:												
Vol/Sat:	0.02	0.05	0.05	0.01	0.01	0.00	0.00	0.12	0.12	0.14	0.24	0.24
Crit Moves:		****		****				****		****		

```
------------------------------------------------------------------------------
               Traffic Analysis for Puente Hills Landfill EIR
       Future With Cumulative (Non-p) Projects - Without Project (5.3)
                         Mid Day Peak Hour Conditions
------------------------------------------------------------------------------
                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #6 Peck Rd @ Workman Mill
********************************************************************************
Cycle (sec):          100               Critical Vol./Cap. (X):        0.422
Loss Time (sec):       10 (Y+R =  4 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:         29               Level Of Service:                  A
********************************************************************************
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Permitted        Permitted        Protected        Protected
Rights:            Ovl            Include          Include          Include
Min. Green:     0    0     0    0    0     0    0    0     0    0    0     0
Lanes:        0  0  3  0  1   1  0  2  0  0   0  0  0  0  0   1  0  1! 0  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:       0  453   370   82  388     0    0    0     0  278    0    98
Growth Adj:  1.14 1.14  1.14 1.14 1.14  1.14 1.14 1.14  1.14 1.14 1.14  1.14
Initial Bse:    0  516   422   93  442     0    0    0     0  317    0   112
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:     0  516   422   93  442     0    0    0     0  317    0   112
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:    0  516   422   93  442     0    0    0     0  317    0   112
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:     0  516   422   93  442     0    0    0     0  317    0   112
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600 1600 1600  1600 1600 1600  1600 1600 1600  1600
Adjustment:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Lanes:       0.00 3.00  1.00 1.00 2.00  0.00 0.00 0.00  0.00 1.48 0.00  0.52
Final Sat.:     0 4800  1600 1600 3200     0    0    0     0 2365    0   835
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.11  0.26 0.06 0.14  0.00 0.00 0.00  0.00 0.13 0.00  0.13
Crit Moves:             ****  ****                             ****
********************************************************************************
```

Traffic Analysis for Puente Hills Landfill EIR
Future With Cumulative (Non-p) Projects - Without Project (5.3)
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #7 605 NB @ Pellissier

Cycle (sec):	100	Critical Vol./Cap. (X):	0.721
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0	0 0	1 0	0	0 1	1 0	2	0 0	0 0	1	1 0
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	0	0	0	186	0	236	99	168	0	0	858	216
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	0	0	212	0	269	113	192	0	0	978	246
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	212	0	269	113	192	0	0	978	246
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	-0
Reduced Vol:	0	0	0	212	0	269	113	192	0	0	978	246
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	212	0	269	113	192	0	0	978	246
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.60	0.40
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	2557	643
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.17	0.07	0.06	0.00	0.00	0.38	0.38
Crit Moves:						****	****				****	

Traffic Analysis for Puente Hills Landfill EIR
Future With Cumulative (Non-p) Projects - Without Project (5.3)
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #8 Pellissier @ Peck Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.803
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 1	0	1 0	1 1	0	0 1	0 0	1	0 1	0 0	1
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	8	377	162	234	357	71	65	26	27	117	17	392
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	9	430	185	267	407	81	74	30	31	133	19	447
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	430	185	267	407	81	74	30	31	133	19	447
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	430	185	267	407	81	74	30	31	133	19	447
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	9	430	185	267	407	81	74	30	31	133	19	447
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.40	0.60	1.00	1.67	0.33	0.71	0.29	1.00	0.88	0.12	1.00
Final Sat.:	1600	2237	963	1600	2669	531	1138	462	1600	1400	200	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.19	0.19	0.17	0.15	0.15	0.06	0.07	0.02	0.10	0.10	0.28
Crit Moves:		****		****			****					****

Traffic Analysis for Puente Hills Landfill EIR
Future With Cumulative (Non-p) Projects - Without Project (5.3)
Mid Day Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 Rooks @ Peck Rd

Cycle (sec): 100 Critical Vol./Cap. (X): 0.556
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 37 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	1 1	0	1 0	1 0	1
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour												
Base Vol:	106	662	108	69	531	114	55	31	68	117	19	65
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	121	755	123	79	605	130	63	35	78	133	22	74
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	121	755	123	79	605	130	63	35	78	133	22	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	121	755	123	79	605	130	63	35	78	133	22	74
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	121	755	123	79	605	130	63	35	78	133	22	74
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.72	0.28	1.00	1.65	0.35	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	2752	448	1600	2634	566	1600	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.27	0.27	0.05	0.23	0.23	0.04	0.02	0.05	0.08	0.01	0.05
Crit Moves:		****		****					****	****		

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--------------------------------------------------------------------------------
                 Traffic Analysis for Puente Hills Landfill EIR
         Future With Cumulative (Non-p) Projects - Without Project (5.3)
                        Mid Day Peak Hour Conditions
--------------------------------------------------------------------------------

                     Level Of Service Computation Report
            1994 HCM Unsignalized Method (Base Volume Alternative)
********************************************************************************
Intersection #10 Proj Ent East @ Crossroads Pkwy S.
********************************************************************************
Average Delay (sec/veh):        5.3        Worst Case Level Of Service:        E
********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:           Ignore          Include          Include          Include
Lanes:        1  0  1  0  1   0  0  1! 0  0   1  0  1  1  0   1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:      12    8   257   29    5    13   11  190     5  352  199    32
Growth Adj:  1.14 1.14  1.14 1.14 1.14  1.14 1.14 1.14  1.14 1.14 1.14  1.14
Initial Bse:   14    9   293   33    6    15   13  217     6  401  227    36
User Adj:    1.30 1.30  0.00 1.30 1.30  1.30 1.30 1.30  1.30 1.30 1.30  1.30
PHF Adj:     1.00 1.00  0.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:    18   12     0   43    7    19   16  282     7  522  295    47
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Final Vol.:    18   12     0   43    7    19   16  282     7  522  295    47
------------|---------------||---------------||---------------||---------------|
Adjusted Volume Module:
Grade:             0%               0%               0%               0%
% Cycle/Cars:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
% Truck/Comb:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
PCE Adj:     1.10 1.10  1.10 1.10 1.10  1.10 1.10 1.00  1.00 1.10 1.00  1.00
Cycl/Car PCE:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Trck/Cmb PCE:   xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Adj Vol.:      20   13     0   47    8    21   18  282     7  574  295    47
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
MoveUp Time:  3.4  3.3 xxxxx  3.4  3.3   2.6  2.1 xxxx xxxxx  2.1 xxxx xxxxx
Critical Gp:  7.0  6.5 xxxxx  7.0  6.5   5.5  5.5 xxxx xxxxx  5.5 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: 1122 1166 xxxxx 1144 1146   171  342 xxxx xxxxx  289 xxxx xxxxx
Potent Cap.:  203  227 xxxxx  196  233  1134 1123 xxxx xxxxx 1199 xxxx xxxxx
Adj Cap:     0.58 0.51 xxxxx 0.57 0.51  1.00 1.00 xxxx xxxxx 1.00 xxxx xxxxx
Move Cap.:    117  116 xxxxx  112  120  1134 1123 xxxx xxxxx 1199 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del: 36.2 34.4 xxxxx 51.9 32.1   3.2  3.3 xxxx xxxxx  5.3 xxxx xxxxx
LOS by Move:    E    E     A    *    *     *    A    *     *    B    *     *
Movement:     LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx xxxx  150 xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx 36.3 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *    *    E     *    *    *     *    *    *     *
ApproachDel:       35.5             36.3              0.2              3.3
```

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------------------------------------------------------------------------------------
               Traffic Analysis for Puente Hills Landfill EIR
     Future With Cumulative (Non-p) Projects - Without Project (5.3)
                     Mid-Day Peak Hour Conditions
------------------------------------------------------------------------------------
                  Level Of Service Computation Report
          1994 HCM Unsignalized Method (Base Volume Alternative)
************************************************************************************
Intersection #12 Proj Ent West @ Workman Mill
************************************************************************************
Average Delay (sec/veh):        1.4        Worst Case Level Of Service:          C
************************************************************************************
Approach:      North Bound       South Bound        East Bound        West Bound
Movement:     L  -  T  -  R    L  -  T  -  R     L  -  T  -  R     L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign         Stop Sign        Uncontrolled      Uncontrolled
Rights:           Include           Include           Include           Include
Lanes:        0  0  1! 0  0    0  0  0  0  0     0  0  1  1  0     1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:       66    0    13     0    0     0     0  248    39    18  304     3
Growth Adj:   1.14 1.14  1.14  1.14 1.14  1.14  1.14 1.14  1.14  1.14 1.14  1.14
Initial Bse:    75    0    15     0    0     0     0  283    44    21  347     3
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     75    0    15     0    0     0     0  283    44    21  347     3
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:     75    0    15     0    0     0     0  283    44    21  347     3
------------|---------------||---------------||---------------||---------------|
Adjusted Volume Module:
Grade:             0%                0%                0%                0%
% Cycle/Cars:   xxxx xxxx         xxxx xxxx         xxxx xxxx         xxxx xxxx
% Truck/Comb:   xxxx xxxx         xxxx xxxx         xxxx xxxx         xxxx xxxx
PCE Adj:      1.10 1.10  1.10  1.10 1.10  1.10  1.10 1.00  1.00  1.10 1.00  1.00
Cycl/Car PCE:   xxxx xxxx         xxxx xxxx         xxxx xxxx         xxxx xxxx
Trck/Cmb PCE:   xxxx xxxx         xxxx xxxx         xxxx xxxx         xxxx xxxx
Adj Vol.:       83    0    16     0    0     0     0  283    44    23  347     3
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
MoveUp Time:   3.4 xxxx   2.6 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.1 xxxx xxxxx
Critical Gp:   7.0 xxxx   5.5 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   5.5 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:   672 xxxx   164  xxxx xxxx xxxxx  xxxx xxxx xxxxx   327 xxxx xxxxx
Potent Cap.:   394 xxxx  1144  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1144 xxxx xxxxx
Adj Cap:      0.98 xxxx  1.00  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1.00 xxxx xxxxx
Move Cap.:     386 xxxx  1144  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1144 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del: 11.6 xxxx   3.2 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   3.2 xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     *    *     *     A    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx  433 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Shrd StpDel:xxxxx 10.2 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    C     *     *    *     *     *    *     *     *    *     *
ApproachDel:       10.2              0.0               0.0               0.2
```

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Mid-Day                     Tue Jun 26, 2001 08:48:42                    Page 15-1
------------------------------------------------------------------------------------
                 Traffic Analysis for Puente Hills Landfill EIR
            Future With Cumulative Projects - Without Project (5.2)
                          Mid Day Peak Hour Conditions
------------------------------------------------------------------------------------
                       Level Of Service Computation Report
              1994 HCM Unsignalized Method (Base Volume Alternative)
************************************************************************************
Intersection #10 Proj Ent East @ Crossroads Pkwy S.
************************************************************************************
Average Delay (sec/veh):         5.3         Worst Case Level Of Service:          E
************************************************************************************
Approach:       North Bound      South Bound       East Bound        West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R     L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:        Stop Sign        Stop Sign        Uncontrolled      Uncontrolled
Rights:           Ignore           Include          Include           Include
Lanes:       1  0  1  0  1    0  0  1! 0  0    1  0  1  1  0     1  0  1  1  0
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:       12     8   257     29     5    13     11   190     5    352   199    32
Growth Adj:   1.14  1.14  1.14   1.14  1.14  1.14   1.14  1.14  1.14   1.14  1.14  1.14
Initial Bse:    14     9   293     33     6    15     13   217     6    401   227    36
User Adj:     1.30  1.30  0.00   1.30  1.30  1.30   1.30  1.30  1.30   1.30  1.30  1.30
PHF Adj:      1.00  1.00  0.00   1.00  1.00  1.00   1.00  1.00  1.00   1.00  1.00  1.00
PHF Volume:     18    12     0     43     7    19     16   282     7    522   295    47
Reduct Vol:      0     0     0      0     0     0      0     0     0      0     0     0
Final Vol.:     18    12     0     43     7    19     16   282     7    522   295    47
------------|----------------||----------------||----------------||----------------|
Adjusted Volume Module:
Grade:              0%               0%               0%                0%
% Cycle/Cars:  xxxx  xxxx        xxxx  xxxx       xxxx  xxxx        xxxx  xxxx
% Truck/Comb:  xxxx  xxxx        xxxx  xxxx       xxxx  xxxx        xxxx  xxxx
PCE Adj:      1.10  1.10  1.10   1.10  1.10  1.10   1.10  1.00  1.00   1.10  1.00  1.00
Cycl/Car PCE:  xxxx  xxxx        xxxx  xxxx       xxxx  xxxx        xxxx  xxxx
Trck/Cmb PCE:  xxxx  xxxx        xxxx  xxxx       xxxx  xxxx        xxxx  xxxx
Adj Vol.:       20    13     0     47     8    21     18   282     7    574   295    47
------------|----------------||----------------||----------------||----------------|
Critical Gap Module:
MoveUp Time:   3.4   3.3 xxxxx    3.4   3.3   2.6    2.1  xxxx xxxxx    2.1  xxxx xxxxx
Critical Gp:   7.0   6.5 xxxxx    7.0   6.5   5.5    5.5  xxxx xxxxx    5.5  xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol:  1122  1166 xxxxx   1144  1146   171    342  xxxx xxxxx    289  xxxx xxxxx
Potent Cap.:   203   227 xxxxx    196   233  1134   1123  xxxx xxxxx   1199  xxxx xxxxx
Adj Cap:      0.58  0.51 xxxxx   0.57  0.51  1.00   1.00  xxxx xxxxx   1.00  xxxx xxxxx
Move Cap.:     117   116 xxxxx    112   120  1134   1123  xxxx xxxxx   1199  xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
Stopped Del:  36.2  34.4 xxxxx   51.9  32.1   3.2    3.3  xxxx xxxxx    5.3  xxxx xxxxx
LOS by Move:     E     E     A      *     *     *      A     *     *      B     *     *
Movement:      LT - LTR - RT     LT - LTR - RT     LT - LTR - RT      LT - LTR - RT
Shared Cap.:  xxxx  xxxx xxxxx   xxxx   150 xxxxx   xxxx  xxxx xxxxx   xxxx  xxxx xxxxx
Shrd StpDel:xxxxx  xxxx xxxxx  xxxxx  36.3 xxxxx  xxxxx  xxxx xxxxx  xxxxx  xxxx xxxxx
Shared LOS:      *     *     *      *     E     *      *     *     *      *     *     *
ApproachDel:        35.5              36.3               0.2                3.3

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------------------------------------------------------------------------------------
                 Traffic Analysis for Puente Hills Landfill EIR
            Future With Cumulative Projects - Without Project (5.2)
                          Mid Day Peak Hour Conditions
------------------------------------------------------------------------------------
                       Level Of Service Computation Report
              1994 HCM Unsignalized Method (Base Volume Alternative)
************************************************************************************
Intersection #12 Proj Ent West @ Workman Mill
************************************************************************************
Average Delay (sec/veh):         1.4         Worst Case Level Of Service:          C
************************************************************************************
Approach:       North Bound      South Bound       East Bound        West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R     L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:        Stop Sign        Stop Sign        Uncontrolled      Uncontrolled
Rights:          Include          Include           Include           Include
Lanes:       0  0  1! 0  0    0  0  0  0  0    0  0  [illegible]     1  0  1  1  0
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date: 18 Jul 2000 << AM Peak Hour
Base Vol:       66     0    13      0     0     0      0   248    39     18   304     3
Growth Adj:   1.14  1.14  1.14   1.14  1.14  1.14   1.14  1.14  1.14   1.14  1.14  1.14
Initial Bse:    75     0    15      0     0     0      0   283    44     21   347     3
User Adj:     1.00  1.00  1.00   1.00  1.00  1.00   1.00  1.00  1.00   1.00  1.00  1.00
PHF Adj:      1.00  1.00  1.00   1.00  1.00  1.00   1.00  1.00  1.00   1.00  1.00  1.00
PHF Volume:     75     0    15      0     0     0      0   283    44     21   347     3
Reduct Vol:      0     0     0      0     0     0      0     0     0      0     0     0
Final Vol.:     75     0    15      0     0     0      0   283    44     21   347     3
------------|----------------||----------------||----------------||----------------|
Adjusted Volume Module:
Grade:              0%               0%               0%                0%
% Cycle/Cars:  xxxx  xxxx        xxxx  xxxx       xxxx  xxxx        xxxx  xxxx
% Truck/Comb:  xxxx  xxxx        xxxx  xxxx       xxxx  xxxx        xxxx  xxxx
PCE Adj:      1.10  1.10  1.10   1.10  1.10  1.10   1.10  1.00  1.00   1.10  1.00  1.00
Cycl/Car PCE:  xxxx  xxxx        xxxx  xxxx       xxxx  xxxx        xxxx  xxxx
Trck/Cmb PCE:  xxxx  xxxx        xxxx  xxxx       xxxx  xxxx        xxxx  xxxx
Adj Vol.:       83     0    16      0     0     0      0   283    44     23   347     3
------------|----------------||----------------||----------------||----------------|
Critical Gap Module:
MoveUp Time:   3.4  xxxx   2.6 xxxxx  xxxx xxxxx  xxxxx  xxxx xxxxx    2.1  xxxx xxxxx
Critical Gp:   7.0  xxxx   5.5 xxxxx  xxxx xxxxx  xxxxx  xxxx xxxxx    5.5  xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol:   672  xxxx   164   xxxx  xxxx xxxxx   xxxx  xxxx xxxxx    327  xxxx xxxxx
Potent Cap.:   394  xxxx  1144   xxxx  xxxx xxxxx   xxxx  xxxx xxxxx   1144  xxxx xxxxx
Adj Cap:      0.98  xxxx  1.00   xxxx  xxxx xxxxx   xxxx  xxxx xxxxx   1.00  xxxx xxxxx
Move Cap.:     386  xxxx  1144   xxxx  xxxx xxxxx   xxxx  xxxx xxxxx   1144  xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
Stopped Del:  11.6  xxxx   3.2  xxxxx  xxxx xxxxx  xxxxx  xxxx xxxxx    3.2  xxxx xxxxx
LOS by Move:     *     *     *      *     *     *      *     *     *      A     *     *
Movement:      LT - LTR - RT     LT - LTR - RT     LT - LTR - RT      LT - LTR - RT
Shared Cap.:  xxxx   433 xxxxx   xxxx  xxxx xxxxx   xxxx  xxxx xxxxx   xxxx  xxxx xxxxx
Shrd StpDel:xxxxx  10.2 xxxxx  xxxxx  xxxx xxxxx  xxxxx  xxxx xxxxx  xxxxx  xxxx xxxxx
Shared LOS:      *     C     *      *     *     *      *     *     *      *     *     *
ApproachDel:        10.2               0.0               0.0                0.2

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Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project with Cumulative and Crossroads Business Par
PM Peak Hour Conditions

Scenario Report

Scenario:	Fut-Proj PM
Command:	Fut+Proj PM
Volume:	PM
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	PM
Trip Distribution:	All
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Fut+Proj PM

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project with Cumulative and Crossroads Business Par
PM Peak Hour Conditions

Trip Generation Report
Project Trips
Forecast for PM

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
3	Landfill Pro	1.00	Landfill Proj	-15.00	0.00	-15	0	-15	-3.4
	Zone 3 Subtotal					-15	0	-15	-3.4
4	Landfill Pro	1.00	Landfill Proj	0.00	-76.00	0	-76	-76	-17.0
	Zone 4 Subtotal					0	-76	-76	-17.0
5	Prfoj 1-3	1.00	Cum Proj 1-3	63.00	391.00	63	391	454	101.6
	Zone 5 Subtotal					63	391	454	101.6
7	MRF	1.00	MRF	42.00	42.00	42	42	84	18.8
	Zone 7 Subtotal					42	42	84	18.8
TOTAL						90	357	447	100.0

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project with Cumulative and Crossroads Business Par
PM Peak Hour Conditions

Trip Distribution Report

Percent Of Trips All

Zone	To Gates 2	3	4	6	7	8	11	12
3	24.1	0.0	1.0	50.9	1.0	3.0	0.0	20.0
4	11.0	0.0	5.0	59.0	0.0	2.7	7.3	15.0
5	10.0	0.0	5.0	55.0	0.0	5.0	0.0	25.0
6	0.0	0.0	5.0	65.0	0.0	5.0	0.0	25.0
7	26.0	0.0	3.0	48.0	0.0	3.0	0.0	20.0

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project with Cumulative and Crossroads Business Par
PM Peak Hour Conditions

Turning Movement Report
PM

Volume	Northbound			Southbound			Eastbound			Westbound			Total
Type	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Volume
#1 Crossroads Pkwy N. @ Crossroads Pkwy S.													
Base	257	0	129	0	0	0	0	186	170	168	180	0	1089
Added	16	0	190	0	0	0	0	0	3	21	0	0	230
Other	0	0	183	0	0	0	0	30	0	107	30	0	350
Total	273	0	502	0	0	0	0	216	173	296	210	0	1669
#2 SR-60 @ Crossroads Pkwy S.													
Base	0	0	0	198	7	48	0	137	528	125	262	0	1305
Added	0	0	0	0	0	47	0	206	94	0	24	0	371
Other	0	0	0	168	0	0	0	15	0	92	15	0	290
Total	0	0	0	366	7	95	0	358	622	217	301	0	1966
#3 Workman Mill/Crossroads South @ Workman Mill													
Base	15	14	9	67	8	250	614	547	6	0	258	85	1873
Added	0	0	0	0	0	1	1	33	0	0	77	0	112
Other	0	0	0	0	0	41	29	14	0	0	15	0	99
Total	15	14	9	67	8	292	644	594	6	0	350	85	2084
#4 Pellissier/Workman Mill @ Workman Mill [Signal To Be Constructed]													
Base	18	0	722	0	0	0	0	125	276	471	286	0	1898
Added	0	0	1	0	0	0	0	0	0	1	0	0	2
Other	0	0	29	0	0	0	0	0	0	41	0	0	70
Total	18	0	752	0	0	0	0	125	276	513	286	0	1970
#5 Crossroads Pkwy N. @ Workman Mill													
Base	91	7	534	11	18	3	1	1141	15	140	605	9	2576
Added	0	0	16	0	0	0	0	1	0	3	1	0	21
Other	0	0	30	0	0	0	29	0	0	30	41	0	130
Total	91	7	580	11	18	3	30	1142	15	173	647	9	2727
#6 Peck Rd @ Workman Mill													
Base	0	806	799	99	557	0	0	0	0	320	0	73	2655
Added	0	0	4	13	0	0	0	0	0	19	0	42	78
Other	0	1	15	0	0	0	0	0	0	56	0	0	72
Total	0	807	818	112	557	0	0	0	0	395	0	115	2805
#7 605 NB @ Pellissier													
Base	0	0	0	467	0	236	197	606	0	0	383	130	2020
Added	0	0	0	0	0	2	42	0	0	0	0	0	44
Total	0	0	0	467	0	238	239	606	0	0	383	130	2064
#8 Pellissier @ Peck Rd													
Base	7	567	357	388	536	75	54	56	24	105	8	585	2760
Added	0	0	42	0	11	0	0	0	0	2	0	0	55
Other	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	7	568	399	388	547	75	54	56	24	107	8	585	2816

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project with Cumulative and Crossroads Business Par
PM Peak Hour Conditions

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#9 Rooks @ Peck Rd													
Base	44	822	262	80	985	57	189	31	123	78	34	145	2850
Added	0	0	0	0	0	0	0	0	0	11	0	0	11
Total	44	822	262	80	985	57	189	31	123	89	34	145	2861
#10 Proj Ent East @ Crossroads Pkwy S.													
Base	10	6	60	50	5	14	23	591	5	11	261	50	1085
Added	-10	-6	-61	0	0	0	0	361	-5	-11	82	0	350
Other	0	0	1	0	0	0	0	14	0	0	15	0	30
Total	0	-0	0	50	5	14	23	966	-0	0	358	50	1465
#12 Proj Ent West @ Workman Mill													
Base	0	0	1	0	0	0	0	1146	0	0	543	0	1689
Added	12	0	30	0	0	0	0	5	12	30	48	0	137
Other	0	0	-1	0	0	0	0	44	0	0	56	0	99
Total	12	0	30	0	0	0	0	1195	12	30	647	0	1925

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project with Cumulative and Crossroads Business Par
PM Peak Hour Conditions

5.3

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/Veh	Base V/C	Future LOS	Future Del/Veh	Future V/C	Change in
# 1 Crossroads Pkwy N. @ Crossroad	[illegible]	xxxxx	0.39[illegible]	C	xxxxx	0.720	+ 0.324 V/C
# 2 SR-60 @ Crossroads Pkwy S.	A	xxxxx	0.285	A	xxxxx	0.464	+ 0.179 V/C
# 3 Workman Mill/Crossroads South	B	xxxxx	0.681	C	xxxxx	0.742	+ 0.061 V/C
# 4 Pellissier/Workman Mill @ Work	A	xxxxx	0.445	A	xxxxx	0.471	+ 0.026 V/C
# 5 Crossroads Pkwy N. @ Workman M	C	xxxxx	0.736	C	xxxxx	0.771	+ 0.035 V/C
# 6 Peck Rd @ Workman Mill	B	xxxxx	0.661	B	xxxxx	0.681	+ 0.020 V/C
# 7 605 NB @ Pellissier	B	xxxxx	0.675	C	xxxxx	0.702	+ 0.026 V/C
# 8 Pellissier @ Peck Rd	F	xxxxx	1.066	F	xxxxx	1.079	+ 0.013 V/C
# 9 Rooks @ Peck Rd	B	xxxxx	0.697	B	xxxxx	0.697	+ 0.000 V/C
# 10 Proj Ent East @ Crossroads Pkw	C	1.4	0.000	F	1.7	0.000	+ 0.000 V/C
# 12 Proj Ent West @ Workman Mill	B	0.0	0.000	D	0.8	0.000	+ 0.000 V/C

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project with Cumulative and Crossroads Business Par
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Crossroads Pkwy N. @ Crossroads Pkwy S.

Cycle (sec):	100	Critical Vol./Cap. (X):	0.720
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	53	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 0 0 1			0 0 0 0 0			0 0 1 1 0			1 0 2 0 0		
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	225	0	113	0	0	0	0	163	149	147	158	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	257	0	129	0	0	0	0	186	170	168	180	0
Added Vol:	16	0	190	0	0	0	0	0	3	21	0	0
Other Appro:	0	0	183	0	0	0	0	30	0	107	30	0
Initial Fut:	273	0	502	0	0	0	0	216	173	296	210	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	273	0	502	0	0	0	0	216	173	296	210	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	273	0	502	0	0	0	0	216	173	296	210	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	273	0	502	0	0	0	0	216	173	296	210	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	1.11	0.89	1.00	2.00	0.00
Final Sat.:	3200	0	1600	0	0	0	0	1777	1423	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.09	0.00	0.31	0.00	0.00	0.00	0.00	0.12	0.12	0.19	0.07	0.00
Crit Moves:			****					****		****		

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project with Cumulative and Crossroads Business Par
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 SR-60 @ Crossroads Pkwy S.

Cycle (sec):	100	Critical Vol./Cap. (X):	0.464
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	31	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	[illegible]	0	0	0
Lanes:	0 0 0 0 0			1 1 0 0 1			0 0 [illegible]			1 0 2 0 0		
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	0	0	0	174	6	42	0	120	[illegible]	[illegible]	[illegible]	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	[illegible]	1.14	1.14	1.14
Initial Bse:	0	0	0	198	7	48	0	137	129	125	262	0
Added Vol:	0	0	0	0	0	47	0	206	94	0	24	0
Other Appro:	0	0	0	168	0	0	0	15	0	22	15	0
Initial Fut:	0	0	0	366	7	95	0	358	[illegible]	217	301	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	0	0	366	7	0	0	358	0	217	301	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	366	7	0	0	358	0	217	301	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	0	0	0	366	7	0	0	358	0	217	301	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.96	0.04	1.00	0.00	[illegible]	[illegible]	1.00	2.00	0.00
Final Sat.:	0	0	0	3140	60	1600	0	[illegible]	[illegible]	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.12	0.12	0.00	0.00	0.11	0.00	0.14	0.09	0.00
Crit Moves:				****				****		****		

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project with Cumulative and Crossroads Business Par
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Workman Mill/Crossroads South @ Workman Mill

Cycle (sec): 100 Critical Vol./Cap. (X): 0.742
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 56 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1 0 1			1 0 0 1 1			1 0 1 1 0			0 0 1 1 0		
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	13	12	8	59	7	219	539	480	5	0	226	75
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	15	14	9	67	8	250	614	547	6	0	258	85
Added Vol:	0	0	0	0	0	1	1	33	0	0	77	0
Other Appro:	0	0	0	0	0	41	29	14	0	0	15	0
Initial Fut:	15	14	9	67	8	292	644	594	6	0	350	85
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	15	14	9	67	8	292	644	594	6	0	350	85
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	14	9	67	8	292	644	594	6	0	350	85
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	15	14	9	67	8	292	644	594	6	0	350	85
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.05	1.95	1.00	1.98	0.02	0.00	1.61	0.39
Final Sat.:	1600	1600	1600	1600	85	3115	1600	3168	32	0	2575	625
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.04	0.09	0.09	0.40	0.19	0.19	0.00	0.14	0.14
Crit Moves:	****				****		****				****	

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project with Cumulative and Crossroads Business Par
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Pellissier/Workman Mill @ Workman Mill (Signal To Be Constructed

Cycle (sec): 100 Critical Vol./Cap. (X): 0.471
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 32 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 0 0 1			0 0 0 0 0			0 0 1 1 0			1 0 2 0 0		
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	16	0	633	0	0	0	0	110	242	413	251	0
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	18	0	722	0	0	0	0	125	276	471	286	0
Added Vol:	0	0	1	0	0	0	0	0	0	1	0	0
Other Appro:	0	0	29	0	0	0	0	0	0	41	0	0
Initial Fut:	18	0	752	0	0	0	0	125	276	513	286	0
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1:00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	18	0	0	0	0	0	0	125	0	513	286	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	0	0	0	0	0	0	125	0	513	286	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	18	0	0	0	0	0	0	125	0	513	286	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00	2.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	3200	0	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.32	0.09	0.00
Crit Moves:	****							****		****		

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project with Cumulative and Crossroads Business Par
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 605 NB @ Pellissier

Cycle (sec):	100	Critical Vol./Cap. (X):	0.702
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	1 0	0 0	1	1 0	2 0	0	0 0	1 1	0
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	0	0	0	410	0	207	173	532	0	0	336	114
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	0	0	0	467	0	236	197	606	0	0	383	130
Added Vol:	0	0	0	0	0	2	42	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	467	0	238	239	606	0	0	383	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	467	0	238	239	606	0	0	383	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	467	0	238	239	606	0	0	383	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	467	0	238	239	606	0	0	383	130
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.49	0.51
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	2389	811
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.29	0.00	0.15	0.15	0.19	0.00	0.00	0.16	0.16
Crit Moves:				****			****				****	

Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project with Cumulative and Crossroads Business Par
PM Peak Hour Conditions

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #8 Pellissier @ Peck Rd

Cycle (sec):	100	Critical Vol./Cap. (X):	1.079
Loss Time (sec):	10 (Y+R = 4 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	180	Level Of Service:	F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 1	0	1 0	1 1	0	0 1	0 0	1	0 1	0 0	1
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour												
Base Vol:	6	497	313	340	470	66	47	49	21	92	7	513
Growth Adj:	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Initial Bse:	7	567	357	388	536	75	54	56	24	105	8	585
Added Vol:	0	0	42	0	11	0	0	0	0	2	0	0
Other Appro:	0	1	0	0	0	0	0	0	0	0	0	0
Initial Fut:	7	568	399	388	547	75	54	56	24	107	8	585
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	7	568	399	388	547	75	54	56	24	107	8	585
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	568	399	388	547	75	54	56	24	107	8	585
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	7	568	399	388	547	75	54	56	24	107	8	585
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.17	0.83	1.00	1.76	0.24	0.49	[illegible]	[illegible]	0.93	0.07	1.00
Final Sat.:	1600	1880	1320	1600	2814	386	785	815	1600	1489	111	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.30	0.30	0.24	0.19	0.19	0.07	0.07	0.02	0.07	0.07	0.37
Crit Moves:		****		****			****					****

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-------------------------------------------------------------------------------
                  Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project with Cumulative and Crossroads Business Par
                            PM Peak Hour Conditions
-------------------------------------------------------------------------------
                       Level Of Service Computation Report
           ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
*******************************************************************************
Intersection #9 Rooks @ Peck Rd
*******************************************************************************
Cycle (sec):         100              Critical Vol./Cap. (X):         0.697
Loss Time (sec):      10 (Y+R =  4 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        50              Level Of Service:                   B
*******************************************************************************
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:        Permitted        Permitted        Permitted        Permitted
Rights:          Include          Include          Include          Include
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:         1  0  1  1  0    1  0  1  1  0    1  0  1  1  0    1  0  1  0  1
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour
Base Vol:       39  721   230    70  864    50   166   27   108    68   30   127
Growth Adj:   1.14 1.14  1.14  1.14 1.14  1.14  1.14 1.14  1.14  1.14 1.14  1.14
Initial Bse:    44  822   262    80  985    57   189   31   123    78   34   145
Added Vol:       0    0     0     0    0     0     0    0     0    11    0     0
PasserByVol:     0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    44  822   262    80  985    57   189   31   123    89   34   145
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     44  822   262    80  985    57   189   31   123    89   34   145
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    44  822   262    80  985    57   189   31   123    89   34   145
PCE Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     44  822   262    80  985    57   189   31   123    89   34   145
------------|----------------||----------------||----------------||----------------|
Saturation Flow Module:
Sat/Lane:     1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
Adjustment:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:        1.00 1.52  0.48  1.00 1.89  0.11  1.00 1.00  1.00  1.00 1.00  1.00
Final Sat.:   1600 2427   773  1600 3025   175  1600 1600  1600  1600 1600  1600
------------|----------------||----------------||----------------||----------------|
Capacity Analysis Module:
Vol/Sat:      0.03 0.34  0.34  0.05 0.33  0.33  0.12 0.02  0.08  0.06 0.02  0.09
Crit Moves:        ****        ****             ****                          ****
*******************************************************************************

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                  Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project with Cumulative and Crossroads Business Par
                            PM Peak Hour Conditions
-------------------------------------------------------------------------------
                       Level Of Service Computation Report
             1994 HCM Unsignalized Method (Future Volume Alternative)
*******************************************************************************
Intersection #10 Proj Ent East @ Crossroads Pkwy S.
*******************************************************************************
Average Delay (sec/veh):        1.7           Worst Case Level Of Service:     F
*******************************************************************************
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:         Stop Sign        Stop Sign      Uncontrolled     Uncontrolled
Rights:           Ignore           Include          Include          Include
Lanes:         1  0  1  0  1    0  0  1! 0  0    1  0  1  1  0    1  0  1  1  0
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour
Base Vol:        9    5    53    44    4    12    20  518     4    10  229    44
Growth Adj:   0.00 0.00  0.00  1.14 1.14  1.14  1.14 1.14  0.00  0.00 1.14  1.14
Initial Bse:    10    6    60    50    5    14    23  591     5    11  261    50
Added Vol:     -10   -6   -61     0    0     0     0  361    -5   -11   82     0
Other Appro:     0    0     1     0    0     0     0   14     0     0   15     0
Initial Fut:     0    0     0    50    5    14    23  966     0     0  358    50
User Adj:     0.00 0.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  0.00 1.00  1.00
PHF Adj:      0.00 0.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  0.00 1.00  1.00
PHF Volume:      0    0     0    50    5    14    23  966     0     0  358    50
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:      0    0     0    50    5    14    23  966     0     0  358    50
Adjusted Volume Module:
Grade:             0%               0%               0%               0%
% Cycle/Cars:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
% Truck/Comb:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
PCE Adj:      1.10 1.10  1.10  1.10 1.10  1.10  1.10 1.00  1.00  1.10 1.00  1.00
Cycl/Car PCE:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Trck/Cmb PCE:  xxxx xxxx        xxxx xxxx        xxxx xxxx        xxxx xxxx
Adj Vol.:        0    0     0    55    5    15    25  966     0     0  358    50
Critical Gap Module:
MoveUp Time:xxxxx xxxx xxxxx    3.4  3.3   2.6   2.1 xxxx xxxxx xxxxx xxxx xxxxx
Critical Gp:xxxxx xxxx xxxxx    7.0  6.5   5.5   5.5 xxxx xxxxx xxxxx xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  1371 1371   204   408 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   141  172  1091  1035 xxxx xxxxx  xxxx xxxx xxxxx
Adj Cap:     xxxx xxxx xxxxx  0.98 0.98  1.00  1.00 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   137  168  1091  1035 xxxx xxxxx  xxxx xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
Stopped Del:xxxxx xxxx xxxxx  41.2 22.1   3.3   3.6 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    F    D     A     *    *     *     A    *     *     B    *     *
Movement:      LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  169 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx 32.3 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    E     *     *    *     *     *    *     *
ApproachDel:        0.0              32.3              0.1              0.0

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------------------------------------------------------------------------------------
                    Traffic Analysis for Puente Hills Landfill EIR
Future Conditions Minus the Project with Cumulative and Crossroads Business Par
                           PM Peak Hour Conditions
------------------------------------------------------------------------------------
                      Level Of Service Computation Report
           1994 HCM Unsignalized Method (Future Volume Alternative)
************************************************************************************
Intersection #12 Proj Ent West @ Workman Mill
************************************************************************************
Average Delay (sec/veh):        0.8           Worst Case Level Of Service:        D
************************************************************************************
Approach:       North Bound      South Bound       East Bound        West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
-----------|---------------||---------------||---------------||---------------|
Control:       Stop Sign        Stop Sign       Uncontrolled      Uncontrolled
Rights:          Include          Include          Include           Include
Lanes:        0  0  1! 0  0    0  0  0  0  0    0  0  1  1  0    1  0  2  0  0
-----------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 18 Jul 2000 << PM Peak Hour
Base Vol:       0    0     1     0    0     0     0 1005     0     0  476     0
Growth Adj:  1.14 1.14  1.14  1.14 1.14  1.14  1.14 1.14  1.14  1.14 1.14  1.14
Initial Bse:    0    0     1     0    0     0     0 1146     0     0  543     0
Added Vol:     12    0    30     0    0     0     0    5    12    30   48     0
Other Appro:    0    0    -1     0    0     0     0   44     0     0   56     0
Initial Fut:   12    0    30     0    0     0     0 1195    12    30  647     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    12    0    30     0    0     0     0 1195    12    30  647     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:    12    0    30     0    0     0     0 1195    12    30  647     0
Adjusted Volume Module:
Grade:            0%               0%               0%                0%
Cycle/Cars:    xxxx xxxx        xxxx xxxx        xxxx xxxx         xxxx xxxx
Truck/Comb:    xxxx xxxx        xxxx xxxx        xxxx xxxx         xxxx xxxx
PCE Adj:     1.10 1.10  1.10  1.10 1.10  1.10  1.10 1.00  1.00  1.10 1.00  1.00
Cycl/Car PCE:  xxxx xxxx        xxxx xxxx        xxxx xxxx         xxxx xxxx
Trck/Cmb PCE:  xxxx xxxx        xxxx xxxx        xxxx xxxx         xxxx xxxx
Adj Vol.:      13    0    33     0    0     0     0 1195    12    33  647     0
Critical Gap Module:
MoveUp Time:  3.4 xxxx   2.6 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.1 xxxx xxxxx
Critical Gp:  7.0 xxxx   5.5 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   5.5 xxxx xxxxx
-----------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: 1877 xxxx   603  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1207 xxxx xxxxx
Potent Cap.:   67 xxxx   685  xxxx xxxx xxxxx  xxxx xxxx xxxxx   386 xxxx xxxxx
Adj Cap:     0.91 xxxx  1.00  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1.00 xxxx xxxxx
Move Cap.:     61 xxxx   685  xxxx xxxx xxxxx  xxxx xxxx xxxxx   386 xxxx xxxxx
-----------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del: 73.3 xxxx   5.5 xxxxx xxxx xxxxx xxxxx xxxx xxxxx  10.1 xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     *    *     *     C    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx  175 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Shrd StpDel:xxxxx 24.8 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    D     *     *    *     *     *    *     *     *    *     *
ApproachDel:       24.8             0.0              0.0               0.5
```

APPENDIX D

AIR QUALITY TECHNICAL REPORT

PUENTE HILLS EIR
AIR QUALITY TECHNICAL REPORT

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PUENTE HILLS EIR
AIR QUALITY TECHNICAL REPORT

Appendices

1.0 Introduction

The Los Angeles County Sanitation Districts are proposing the continued operation of the existing Puente Hills Landfill. To comply with the California Environmental Quality Act (CEQA), an air quality impact analysis has been performed for Environmental Impact Report (EIR) purposes. A health risk assessment (HRA) has also been performed. This air quality technical report is intended to provide a description of the methodologies used in the air quality impact analysis and the HRA for the proposed Puente Hills Landfill Draft EIR.

The air quality impact analysis and HRA have been performed using a five-step approach:

- Evaluation of air quality regulatory requirements;
- Characterization of emissions;
- Estimation of projected pollutant concentrations;
- Comparison of projected pollutant concentrations with state and federal pollutant standards, if available; and
- Assessment of carcinogenic and non-carcinogenic health risks from toxic air contaminants.

The air quality regulatory analysis addressed federal, state and local air quality planning and regulatory requirements. These included the air quality planning process for attainment and maintenance of the national and state air quality standards, applicable new source review and permitting requirements for landfills, and other local requirements applicable to landfill construction and operation. The air quality regulatory overview is presented in the Air Quality chapter of the Puente Hills Landfill Draft EIR.

The emissions characterization included identifying and quantifying the criteria pollutant emissions from the combustion of landfill gas (e.g., flare emissions), the customer truck traffic emissions resulting from the operation of the proposed project, and the on-site vehicular exhaust emissions resulting from landfill operations. Section 2.0 of this report discusses and quantifies the criteria pollutant emissions resulting from current operations at the landfill, and anticipated emissions that would result from the implementation of the proposed project. The on-site fugitive dust emissions are discussed and quantified in Section 3.0. The anticipated toxic air emissions will be addressed in Section 4.0 with the HRA.

Emissions resulting from the proposed project were used with computer air dispersion models to analyze potential pollutant impacts. The methodology and results of the air dispersion modeling studies are summarized in Section 4.0. Projected concentrations are compared to established regulatory and guideline air quality standards and measurable impact levels, and toxic air pollutants were evaluated to determine the individual and population risk of contracting cancer. Potential non-carcinogenic acute and chronic toxic effects were also evaluated.

The cumulative health risk assessment included an analysis of the impacts of the new emissions associated with the proposed project combined with the emissions from the existing landfill operations. In addition, an evaluation of the California Air Resources Board (CARB) Air Toxics "Hotspots" Act (AB 2588) database determined that 38 facilities reporting emissions of toxic air contaminants were located within a 2-mile distance of the landfill. The list of these facilities and their reported TAC emissions is presented in Appendix D5. Two of these 38 facilities were required to prepare an HRA for the AB 2588 process. The health risks associated with these facilities were considered in the cumulative health risk assessment. In addition, a cancer risk assessment of the diesel truck traffic on the 60 Freeway near the Puente Hills Landfill was conducted and is discussed in Section 5.0. These results were compared to the risk associated with emissions from the proposed and existing operations of the landfill as discussed in the Air Quality chapter of the Puente Hills Landfill Draft EIR and Section 5.0 of this report.

The potential health impacts of emissions from the landfill operations on sensitive populations was also evaluated. Sensitive populations are people who are more susceptible to the effects of air pollution than are the population at large. These people include children, the elderly, persons with preexisting respiratory or cardiovascular illness, and athletes or others who engage in frequent exercise. Structures that house these persons or places where they gather to exercise are defined as sensitive receptors. Examples of sensitive receptors include: hospitals, convalescent centers, residential care facilities, schools, day-care centers, playgrounds and athletic facilities. Table D6-1 in Appendix D6 of this report presents the calculated cancer risk at sensitive receptor sites located within a five-mile radius of the Puente Hills Landfill. There were 67 sensitive receptor sites identified, including 55 childcare centers and preschools, 5 elementary schools, 6 residential care facilities and 1 hospital. The methodology of the health impact evaluation is presented in Section 4.0.

2.0 Emission Characterization

Emissions of criteria pollutants from the proposed continued operation of the Puente Hills Landfill were evaluated at a fill rate of 13,200 tons per day (TPD). Point source emissions are discussed in Section 2.1, mobile source emissions in Section 2.2, and fugitive emissions in Section 2.3.

2.1 Point Source Emissions

Landfill gas is collected by a gas collection system and then conveyed to energy production facilities where it is used to fire boilers, turbines, microturbines and engines to generate electricity. As an immediate response to the current electrical crisis in California, a new energy recovery facility is being planned at the site. This facility is projected to have landfill-gas-fired internal combustion engines that drive generators capable of generating electrical energy. Existing flares at the site would be converted to backup status, operating only when the engines are undergoing maintenance activities. Separate CEQA documentation for this project is in preparation.

Landfill gas projections for future years at the Puente Hills Landfill indicate that potentially there could be a need for additional landfill gas management capacity of approximately 4,500 scfm of landfill gas. The gas production model assumes that landfill disposal will continue at the current rate through a 10-year period to the year 2013, when the topographic capacity is projected to be fully utilized. To assure adequate landfill gas management capacity should the gas production increase as predicted, additional landfill gas flare back-up capacity of approximately 4,500 scfm would be needed. The design of the flare system is based on the projected landfill gas flow, which, in turn, is a function of the fill rate of the landfill. The landfill gas projection curve and the estimated flare system design capacity are provided in the Air Quality chapter of the Puente Hills Landfill Draft EIR. Also, as site production of landfill gas increases, additional energy recovery facilities will be evaluated. Any subsequent energy production projects would be subject to CEQA documentation prior to implementation.

All energy production facilities at the Puente Hills Landfill to date have been located at the western portion of the site. It is likely that new energy facilities would also be located in this area to take advantage of the in-place infrastructure (e.g., transmission lines) built to support these facilities. This focus on energy production has lead to a re-evaluation of where back-up flare capacity should be located at the landfill. In terms of efficiency of operation, the proximity of flare back-up should be close to the primary landfill gas handling device. Therefore, the project proposed here would be to locate all flaring systems for the landfill at the western portion of the site, the location where the new energy systems are likely to be located.

To accomplish this, it is proposed that the existing 24 smaller flares that are currently designed to combust approximately 1,000 scfm of landfill gas each, be replaced with 24 larger flares that can combust up to 1,600 scfm of landfill gas each. The higher capacity flares would be of the same design as flares that are currently operating at the Sanitation Districts' Calabasas Landfill. The total capacity of the new flares would be 38,400 scfm. This capacity would replace the existing 24,000 scfm capacity of the 24 smaller flares and the 9,000 scfm capacity of the two large flares that make up the eastern canyon flare station, plus provide the additional future capacity needed for the site. The existing two eastern canyon flares would physically remain at their current location, but would not be permitted to operate. If they are needed in the future, the flares would need to be re-permitted with the SCAQMD, and additional CEQA analyses performed.

Combustion of landfill gas in the flares would result in criteria pollutant and toxic air contaminant (TAC) emissions. Source tests have been conducted to estimate emission factors for criteria pollutants emitted by gas combustion in similar flares. These source test data were used to calculate emission rates of criteria pollutants at the projected fill rate of 13,200 TPD. These emission rates are calculated with the following general equation:

Q = (Concentration x 10^9) x (LFG x 10^6) x (stoichiometric ratio) x (molecular weight) / 379ft^3/lb-mole

where,

Q = Emission rate of chemical substance, lb/day,
Concentration = concentration of chemical substance in exhaust flow (ppb),
LFG = landfill gas flow to the flare (or other combustion source) (scf/day),
Stoichiometric ratio = ratio of outlet flue gas (exhaust) to inlet landfill gas,
Molecular weight = molecular weight of chemical substance (lb/lb-mole).

The emission rates are presented in Table 2.1-1.

Table 2.1-1
Potential Landfill Gas Flare Combustion Emissions

Pollutant	Flare Emissions[a] (lb/day)
Sulfur Dioxide (SO_2)	1,413 [c]
Carbon Monoxide (CO)	864 [d]
Nitrogen Oxides (NO_x)	1,344 [b]
Particulate Matter (PM_{10})	1,254 [e]
Reactive Organic Gases (ROG)	538 [d]

Notes: [a] Assumes a 24-flare system operating with a total capacity of 38,400 scfm.
[b] Based on the Rule 1303 NSR/BACT limit – 0.06 lb/MMbtu (NO_x).
[c] Based on the Rule 431.1 limit of 150 ppm (H_2S).
[d] Based on the permit limit requested in change-of-condition application filed for the Western Flare Station, 3/1998.
[e] Based on the maximum mass emissions recorded in all source tests performed on the Western Flare Station, 1977 through 1999.

The TACs evaluated were those specified by SCAQMD as part of the requirements of Rule 1150.1 - Control of Gaseous Emissions from Active Landfills and by CARB as part of the Air Toxics Information and Assessment Act (AB 2588). The TACs emission rates that were used in the Health Risk Assessment are presented and discussed in Section 4.0.

2.2 Mobile Source Emissions

Mobile source emissions are classified into two categories: emissions from on-site heavy-duty equipment and lighter duty trucks and emissions from the daily customer vehicle traffic. The emission factors for all heavy-duty type construction equipment were obtained from the document *California's Off-Road Large Compression Ignition (CI) Engine Emission Inventory* (CARB, 1999) and the SCAQMD *Air Quality Analysis Guidance Handbook*, while the emission factors for the light-duty and heavy-duty trucks were obtained from the CARB *EMFAC2000* model. Emission factors (EF) are available in various units: grams per hour (gm/hr), grams per horsepower-hour (gm/hp-hr), pounds per hour (lb/hr) and pounds per horsepower-hour (lb/hp-hr). The load factor value for heavy-duty equipment used in the emissions estimate calculations was obtained from the CARB's *The Carl Moyer Program Guidelines (February 1, 1999)* or the SCAQMD *Air Quality Analysis Guidance Handbook*. The following general formulas were used to calculate the emissions estimates:

For EF_i units of gm/hr:
Q_i = Criteria EF_i x No. of equipment x hrs/day x (1/454 gm/lb) x Load Factor

For EF_i units of gm/hp-hr:
Q_i = Criteria EF_i x No. of equipment x hrs/day x (1/454 gm/lb) x hp x Load Factor

For EF_i units of lb/hr:
Q_i = Criteria EF_i x No. of equipment x hrs/day

For EF_i units of lb/hp-hr:
Q_i = Criteria EF_i x No. of equipment x hrs/day x hp x Load Factor

Where,
Q_i = emission rate for criteria pollutant *i*, lb/day
EF_i = emission factor for criteria pollutant *i*,
gm = gram
lb = pound
hr = hour
hp = horsepower

Mobile emissions will result from both the construction and operational phases of the proposed project.

2.2.1 Construction Emissions

Construction activities are an ongoing, necessary part of operating a sanitary landfill. Activities that are or have been occurring during the existing operations of the landfill include building roads and installing environmental control systems that include liners, subsurface barriers, stormwater drainage facilities, groundwater monitoring wells, header line installation, as well as landfill gas wells and trenches. These activities would continue under the proposed continued operation of the landfill. New construction activities anticipated under the proposed project include the installation of a tank and sewer connection to the eastern property boundary, the upgrade/relief of two existing sewer lines, and modification of the 24 flares at the western flare station. Criteria pollutant emissions associated with these activities result from the combustion of fuel in the equipment. The equipment used will include the following:

- Crawler tractor (140 to 460 horse power) e.g., D-6, D-9, and D-8/TD25G tractors;
- Scrapers (31 to 44 cubic yards);
- Motor graders (275 horse power) e.g., 16G motor grader;
- Wheeled tractor with 18-foot drag scraper (310 horse power) e.g., 834 BG motor grader;
- 2,500-gallon water trucks;

- Rollers
- Stationary IC engines; and
- Light-duty and heavy-duty trucks.

The equipment usage and the associated emissions estimations from each construction activity are presented in Appendix D1. The emission rates were calculated assuming construction operations for an eight-hour day and utilizing the general formulas for mobile equipment discussed above.

2.2.2 Operations Emissions

Long-term air pollutant emissions are associated with the operational activities at the landfill. These include exhaust emissions from on-site mobile heavy-duty equipment and lighter duty trucks and from the daily customer vehicle traffic. The same general formulas discussed above were used to calculate the emissions estimates.

On-site Mobile Equipment Exhaust Emissions

The basic principle of a landfill operation is to deposit the refuse within a prepared working face area, compact it, and cover the refuse with dirt or other alternative cover material at the conclusion of each day's operation. Heavy-duty equipment is used to prepare the working face, compact the refuse, and excavate, transport and spread the cover material on a daily basis. The equipment used during the daily operations is the same as that used during construction with the same emission factors as those described above. Emissions were calculated using estimations of equipment usage (hours of operation or mileage) based upon existing operational requirements and experience. The equipment usage and associated emissions estimates from the on-site mobile equipment used in the daily operations at the landfill are shown in Appendix D2.

Daily Customer Traffic Emissions

Three main types of trucks are utilized to transport refuse to the project site:

- transfer trucks bring in materials from transfer stations;
- curbside collection trucks obtain wastes from the local collections routes; and
- small stakebed and pick-up trucks are primarily used by private contractors to bring in refuse such as gardening and landscaping green wastes.

Emissions generated by the truck traffic under the existing and proposed project were calculated using emission factors from the CARB *EMFAC2000 Model,* and are presented in Appendix D3. The emissions were calculated for the two-mile round trip on the landfill property and not for the total vehicle miles traveled because the refuse and dirt truck traffic would occur whether or not the Puente Hills Landfill continues operations. In fact, the travel distance would most likely increase as waste haulers would be forced to transport solid wastes to landfills located farther away, and this would lead to greater pollutant emissions.

2.3 Fugitive Emissions

Fugitive emissions will occur during the construction and operational phases of the proposed project. Fugitive emissions will include landfill surface gas emissions and dust emissions associated with excavation and refuse disposal operations. Landfill gas emissions from the landfill surface are discussed in the following section, while fugitive dust emissions are discussed in Section 3.0.

2.3.1 Landfill Surface Gas Emissions

The majority of the landfill gas generated at the proposed project will be controlled and collected using a gas control system. This system consists of a vertical gas well system and a horizontal trench system, which are used in conjunction with lining of the bottom and sidewalls of the site with a low-gas-permeability liner. The collected landfill gas will be combusted in energy recovery facilities and/or flares. A small amount of uncontrolled landfill gas can potentially escape through the landfill surface. The pollutant emission rates associated with landfill surface gas were calculated using a CARB technique developed for the AB 2588 "Hot Spots" Program, in conjunction with the pollutant concentrations data measured from the SCAQMD Rule 1150.1 landfill gas monitoring program.

The CARB AB 2588 landfill emission rate estimation technique is useful for estimating the individual gas average emission rate over the life of a landfill, in order to be suitable for use in a 70-year lifetime exposure risk calculation. The following formula is used to calculate the individual gas average emission rate over the lifetime of the landfill:

$$Q_i = (2)\,(C_i)\,(1\text{-e})\,(L_o)\,(R)\ /\ 70\text{ yrs}\ (MW_i)\,(1\text{ lb mole}/385\text{ ft}^3)$$

where,

Q_i = emission rate for any gas *i* which is a VOC, lbs/yr

2 = a multiplication factor obtained by assuming the landfill gas consists of 50% methane and 50% carbon dioxide

C_i = concentration in the landfill of gas *i*. ppbv x 10^{-9}

e = gas collection system efficiency, 95%

L_o = potential methane generation capacity of the refuse (3000 ft^3/ton of refuse)

R = total mass of refuse in place, 95 MM tons (existing), 133 MM tons (total projected)

MW_i = molecular weight of compound *i*

Presented in Appendix D4 is the gas composition from the Puente Hills Landfill SCAQMD Rule 1150.1 Program and calculated landfill surface gas emission rate.

3.0 Dust Emissions

Fugitive dust (PM_{10}) is defined as the discharge of particulate matter into the atmosphere from non-point sources, or sources without a stack. Fugitive dust is generated either by mechanical disturbance to soil, such as grading operations and vehicle traffic, or by wind-related entrainment of dust particles. Site preparation, clearing, surface grading, excavation, and the use of heavy equipment and vehicles on paved and unpaved surfaces have the potential to generate dust. The actual quantity of fugitive dust emissions generated during operation of the landfill will be governed by the characteristics of the work conducted, the soil type and moisture content, and the prevailing meteorological conditions.

The SCAQMD *Air Quality Analysis Guidance Handbook* (*SCAQMD Handbook*) provides specific methodology to determine fugitive dust emissions from facility construction and operation activities. In addition, the U.S. EPA document *AP-42: Compilation of Air Pollution Emission Factors* (*AP-42*) provides emissions data and emissions factors for specific activities. Also used as references were the *Air Pollution Engineering Manual* published by the Air and Waste Management Association, and the U.S. EPA Publication *Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures.*

3.1 Proposed Project Fugitive Dust Emissions - Unmitigated

3.1.1 Paved Roads

Fugitive dust emissions can occur whenever a vehicle travels over a paved surface. These emissions originate primarily from material previously deposited on the paved surface or through resuspension of material when vehicles travel from unpaved to paved surfaces. Fugitive dust emitted from the paved surface is in turn replenished by other sources, such as pavement wear, deposition of material from vehicles, deposition from other nearby sources, and carryout from surrounding unpaved areas.

In general, fugitive dust emissions correlate with vehicle weight and road surface material loading, measured as mass of material per unit area. *AP-42* Chapter 13.2.1 includes a discussion of the technique to determine paved road emissions, and provides an equation – Equation (1) - and silt loading data in Table 13.2.1-3. This equation was used to calculate the fugitive dust emissions from paved roads as presented in Table 3.1-1.

The paved portion of the landfill access road leads from the landfill site entrance, through the scale house area, up over the north-eastern portion of the site, to the equipment yard where it connects to the unpaved road leading to the active working face. The length of the paved access road is estimated at 0.75 miles, or 1.5 miles, roundtrip. In order to estimate fugitive dust emissions from paved roads, the number of vehicles entering the site must be estimated. During the week of May 15-20, 2000, a vehicle survey was conducted to determine traffic volume through the scale house. Gaps in this data were filled using actual 1999 scale house data. The majority of the vehicles are dirt trucks, roll off bins/transfer trucks, and curbside collection trucks. A key assumption is that the number of vehicles entering the site is not expected to significantly change for the new project. The number of dirt (cover material) trucks necessary for the new project, however, was estimated based upon future cover material needs. Cover material is currently generated primarily from on-site landfill preparation activities. Future cover material supplies will originate from off-site sources. In addition, on-site vehicle usage was inventoried for all of 1999. Vehicle use was determined based upon hours of operation and paved versus unpaved road travel. Paved road travel is estimated at

75% of total on-site vehicle use.

Table 3.1-1 includes an estimate of unmitigated paved road fugitive dust emissions. As specified in *AP-42*, total emissions are calculated based on average vehicle weight and total vehicle miles traveled, as opposed to calculating emissions for each vehicle type and summing them. As shown, approximately 2,264 pounds per day of fugitive dust could be generated from paved road traffic.

3.1.2 Unpaved Roads

As is the case for paved roads, fugitive dust emissions occur whenever a vehicle travels over an unpaved surface. Unlike paved roads, however, the unpaved road itself is the source of the emissions rather than any surface loading. Within the various categories of fugitive dust sources, unpaved roads generally account for the greatest share of particulate matter emissions.

In general, fugitive dust emissions from unpaved surfaces correlate with vehicle weight and road surface material loading, measured as percent silt. In addition, the number of wheels in contact with the unpaved surface, the speed of the vehicle, and the level of precipitation all play an important role in the determination of fugitive dust emissions from unpaved road surfaces. The *SCAQMD Handbook* Table A9-9-D includes a technique to determine unpaved road emissions using the above mentioned variables. *AP-42* Table 13.2.2-1 includes the silt content common for landfill disposal routes.

Unpaved surfaces at Puente Hills Landfill consist of the access roads to the various refuse processing areas (i.e., solid waste, green waste, ash, asphalt, etc.) and the ancillary internal roads used by on-site personnel for miscellaneous activities. The length of the unpaved access roads is estimated at 0.25 miles, or 0.5 miles, roundtrip. As with the estimate of fugitive dust emissions from paved roads, the quantity and type of vehicles that travel on unpaved surfaces must be estimated. The same methodology that was used to characterize paved road traffic was also used for unpaved road traffic, including the estimate of the future cover material trucks. However, unpaved road travel of on-site vehicles is estimated at 25% of total vehicle use. Table 3.1-2 provides an estimate of unmitigated unpaved road fugitive dust emissions. As shown, the project could generate approximately 4,690 pounds per day of fugitive dust from unpaved road traffic.

3.1.3 Heavy Equipment Operations

Heavy equipment operations produce fugitive dust during grading, bulldozing, and compacting activities. Heavy equipment is used throughout the landfill for a variety of purposes, such as managing solid waste at the active working face, providing cover material to the active working face, preparing other areas of the landfill to receive waste, and maintenance in other landfill areas.

Fugitive dust emissions from heavy equipment directly correlate with the level of vehicle use (i.e., hours of operation). The *SCAQMD Handbook* Table A9-9-F includes a technique to determine heavy equipment fugitive dust emissions using the hours of operation for heavy equipment and the underlying soil characteristics. In addition, *AP-42* Table 13.2.4-1 contains typical soil characteristics for municipal solid waste landfills.

Heavy equipment at Puente Hills Landfill are used for a variety of purposes, including: scrapers for cover procurement and excavation and grading; tractors at the working face and cover procurement area; graders and tractors for surface maintenance; and other miscellaneous equipment, such as soil mixers and green waste loaders. Heavy equipment was inventoried and 1999 use was determined based upon the hours of operation. The level of heavy equipment use is not expected to change for the new project. Table 3.1-3 includes an estimate of unmitigated fugitive dust emissions from heavy equipment operations. As shown, the project could generate approximately 138 pounds per day of fugitive dust from heavy equipment operations.

Table 3.1-1

Fugitive Uncontrolled PM_{10} Emissions from Paved Roads

Emissions Source: **Paved Roads**

Introduction: Paved roads at the landfill include the access road and various auxiliary paved roads for site personnel.

Parameters:

Particle Size Multiplier (k) 0.016 *AP-42* Table 13.2.1-1

Silt Content (sL) 7.4 gm/m^2 solid waste landfills *AP-42* Table 13.2.1-3

Mean Vehicle Weight (W)

22	tons	Roll Off Bins/Transfer Trucks
21	tons	Curbside Collection Trucks
27	tons	Ash Transfer Trucks
13	tons	Green Waste Trucks
24	tons	Asphalt Trucks
18	tons	Dump Trucks
27	tons	Cover Material Trucks
3	tons	Light Duty Vehicles
2	tons	On-Site Light Duty Vehicles – gasoline
4	tons	On-Site Light Duty Vehicles – diesel
15.0	tons	Mileage Weighted Average of All Vehicles

Vehicle Miles Traveled (VMT) see table below

Emissions Estimate:

$lb/day = VMT \times k \times (sL/2)^{0.65} \times (W/3)^{1.5}$ *AP-42* Chapter 13.2.1; Equation (1)

Emissions Source	Number of Vehicles[1]	Round Trip Distance[2] (miles)	Total Vehicle Miles Traveled	Paved Vehicle Miles Traveled (VMT)	Uncontrolled PM_{10} Emissions (lb/day)[7]
Roll Off Bins/Transfer Trucks[3]	775	1.5		1,163	--
Curbside Collection Trucks	427	1.5		641	--
Ash Transfer Trueks	37	1.5		56	--
Green Waste Trucks	143	1.5		215	--
Asphalt Trucks	18	1.5		27	--
Dump Trucks	115	1.5		173	--
Cover Material Trucks	690[6]	1.5		1,035	--
Light Duty Vehicles	232	1.5		348	--
On-Site Light Duty Vehicles – gasoline	43		1,308[4]	981[5]	--
On-Site Light Duty Vehicles – diesel	32		1,030[4]	772[5]	--
Average/Total	**2,512**			**5,409**	**2,264**

Continued on next page

1 – Data from vehicle survey conducted on May 15-20, 2000, 1999 scale data, and equipment inventory.
2 – Round trip distance in and out of the site is estimated at 2 miles with 1.5 miles on paved surfaces and 0.5 miles on unpaved surfaces.
3 – Sludge trucks included.
4 – Total on-road and off-road mileage.
5 – Paved vehicle miles traveled estimated at 75% of the total mileage.
6 – Estimated based upon future needs.
7 – Per *AP-42* procedures, emissions are calculated based on total miles and average vehicle weight, and are not calculated individually for each vehicle class.

Conclusion: The uncontrolled PM_{10} emissions that could result from paved roads are 2,264 pounds/day.

Table 3.1-2

Fugitive Uncontrolled PM_{10} Emissions from Unpaved Roads

Emissions Source: **Unpaved Roads**

Introduction: Unpaved roads at the landfill include the access roads to various waste processing locations, the road to the stockpile, and the miscellaneous, infrequently traveled roads. The length of the access roads to the various waste processing locations is assumed the same for each location.

Parameters:

Silt Content (G) 6.4% *AP-42* Table 13.2.2-1; landfill disposal routes

Mean Vehicle Speed (H) 10 mph estimated – maximum of 15 mph allowed on all unpaved surfaces

Mean Vehicle Weight (I)	22	tons	Roll-Off Bins/Transfer Trucks
	21	tons	Curbside Collection Trucks
	27	tons	Ash Transfer Trucks
	13	tons	Green Waste Trucks
	24	tons	Asphalt Trucks
	18	tons	Dump Trucks
	27	tons	Cover Material Trucks
	18	tons	Water Trucks
	73	tons	Water Masters
	3	tons	Light Duty Vehicles
	2	tons	On-Site Light Duty Vehicles – gasoline
	4	tons	On-Site Light Duty Vehicles – diesel
Mean Number of Wheels (J)	18	wheels	Roll Off Bins/Transfer Trucks
	10	wheels	Curbside Collection Trucks
	20	wheels	Ash Transfer Trucks
	10	wheels	Green Waste Trucks
	10	wheels	Asphalt Trucks
	10	wheels	Dump Trucks
	18	wheels	Cover Material Trucks
	6	wheels	Water Trucks
	4	wheels	Water Masters
	4	wheels	Light Duty Vehicles
	4	wheels	On-Site Light Duty Vehicles – gasoline
	6	wheels	On-Site Light Duty Vehicles – diesel

Continued on next page

Table 3.1-2, continued

Fugitive Uncontrolled PM_{10} Emissions from Unpaved Roads

Continued:

Number of days with at least
0.01 inches of precipitation/year (K) 34 days *SCAQMD Handbook* Table A9-9-D-4

Emissions Estimate:

lb/day = VMT x 2.1 x (G/12) x (H/30) x $(I/3)^{0.7}$ x $(J/4)^{0.5}$ x [(365-K)/365)]*SCAQMD Handbook* Table A9-9-D

Emissions Source	Number of Vehicles[1]	Round Trip Distance[2] (miles)	Total Vehicle Miles Traveled	Unpaved Vehicle Miles Traveled (VMT)	Uncontrolled PM_{10} Emissions (lb/day)
Roll Off Bins/Transfer Trucks[3]	775	0.5		388	1,123
Curbside Collection Trucks	427	0.5		214	446
Ash Transfer Trucks	37	0.5		19	65
Green waste Trucks	143	0.5		72	107
Asphalt Trucks	18	0.5		9	21
Dump Trucks	115	0.5		58	108
Cover Material Trucks	690[8]	0.5		350	1,154
Water Trucks	15			862[5]	1,253
Water Masters	3			48[6]	152
Light Duty Vehicles	232	0.5		116	48
On-Site Light Duty Vehicles – gasoline	43		1,308[4]	327[7]	83
On-Site Light Duty Vehicles – diesel	32		1,030[4]	258[7]	131
				Total Uncontrolled PM_{10} Emissions – pounds/day	4,690

1 – Data from vehicle survey conducted on May 15-20, 2000, 1999 scale data, and equipment inventory.
2 – Round trip distance in and out of the site is estimated at 2 miles with 1.5 miles on paved surfaces and 0.5 miles on unpaved surfaces.
3 – Sludge trucks included.
4 – Total on-road and off-road mileage.
5 – Includes a total of eight facility water trucks operating a total of 31 hours per day and an annual average of seven rental water trucks, each operating eight hours per day. Mileage is estimated using an average speed of 10 mph.
6 – Three water masters operate a total of 4.75 hours per day. Mileage is estimated using an average speed of 10 mph.
7 – Unpaved vehicle miles traveled estimated at 25% of the total mileage.
8 – Estimated based upon future needs.

Conclusion: The uncontrolled PM_{10} emissions that could result from unpaved roads are 4,690 pounds/day.

Table 3.1-3

Fugitive Uncontrolled PM_{10} Emissions from Heavy Equipment Operations

Emissions Source: **Heavy Equipment Operations**

Introduction: Heavy equipment operations produce fugitive PM_{10} dust during bulldozing, grading, and compacting activities. Equipment is used to landfill waste at the active working face, provide cover at the active working face, prepare landfill areas for receiving waste, and maintenance in other landfill areas.

Parameters:

Silt Content (G)	9% 1%	cover material solid waste	*AP-42* Table 13.2.4-1; cover material estimated
Moisture Content (H)	12% 25%	cover material solid waste	*AP-42* Table 13.2.4-1; cover material estimated
Ratio of PM_{10} to TSP	0.45	*AP-42*	
Ratio of kg/hr to lb/hr (I)	2.2046		
Hours of Operation (J)	see table below		

Emissions Estimate:

$$\text{lb/day} = 0.45 \times (G^{1.5} / H^{1.4}) \times I \times J$$

SCAQMD Handbook Table A9-9-F

Emissions Source	Location	No. of Equipment	Operating Hours/Day (each piece of equip.)	Operating Hours/day (total)	Uncontrolled PM_{10} Emissions (lb/day)
Scraper	Cover Proc./Landfill Ex.	15	6	90	74
Grader	Other Areas	2	1.5	3	3
Compactor	Active Face	3	0	0	0
Tractor	Active Face	20	4.5	90	1
Tractor	Cover Proc./Landfill Ex.	6	4	24	20
Tractor/Pull Scraper	Other Areas	2	7.5	15	12
Green Waste Loader	Other Areas	4	5.5	22	18
Soil Mixer	Cover Proc./Landfill Ex.	2	6	12	10
				Total Uncontrolled PM_{10} Emissions – pounds/day	138

Conclusion: The uncontrolled PM_{10} emissions that could result from heavy equipment operations are 138 pounds/day.

3.1.4 Material Handling Activities

Fugitive dust emissions occur whenever materials are handled, independently from the fugitive dust created from the movement of vehicles on paved and unpaved surfaces. These emissions originate primarily from handling soils. However, other materials have the capacity to generate fugitive dust. Such materials could include, but are not limited to, solid waste, green waste, and treated ash.

Fugitive dust emissions from material handling correlate directly with the quantity of material processed (i.e., tons). The *SCAQMD Handbook* Table A9-9-G and *AP-42* Section 13.2.4 include the same equation to determine fugitive dust emissions from stockpile filling operations using the average wind speed and moisture content and quantity of material handled. *AP-42* also specifies use of this equation for stockpile emptying operations.

Material handling operations at Puente Hills Landfill consist primarily of the use of cover material and deposit of solid waste. In addition, green waste is processed and mixed with soil to provide an alternative form of daily cover material. Treated ash from two waste-to-energy facilities is accepted and used as a base material for the winter deck area. Asphalt is brought to the site to stabilize the winter deck for vehicle traffic and waste deposition during wet-weather conditions. Construction and demolition debris is directed to a processing area and subsequently used as an alternative daily cover. Lastly, sludge, to a lesser extent, is mixed with the incoming solid waste at the active working face and deposited. Table 3.1-4 includes an estimate of unmitigated fugitive dust emissions from material handling operations. As shown, the project could generate approximately 1.5 pounds per day of fugitive dust from material handling activities.

3.1.5 Wind Erosion

Fugitive dust emissions may be generated by wind erosion of open storage aggregate piles and exposed areas within the facility. These aggregate material surfaces are characterized by a finite availability of erodible material. Any natural crusting of the surface binds the erodible material, thereby reducing erodible potential.

The *SCAQMD Handbook* Table A9-9-E includes a technique to determine fugitive dust emissions from storage piles. Fugitive dust emissions are dependent on local meteorological conditions, such as the quantity of precipitation and wind speed. In addition, the footprint (acreage) of storage piles and material silt content play an important role in the potential for fugitive dust emissions. In addition, *AP-42* Table 11.9-4 includes a procedure to calculate fugitive dust emissions from exposed surface areas using the size of the exposed surface area, in acres.

The Puente Hills Landfill includes three areas in which wind erosion might occur: the dirt stockpile, the winter deck, and the exposed landfill area. There are no fugitive dust emissions from the landscaped portions of the landfill. Table 3.1-5 includes an estimate of unmitigated fugitive dust emissions from wind erosion. As shown, the project has the potential to generate approximately 328 pounds per day of fugitive dust due to wind erosion.

Table 3.1-4

Fugitive Uncontrolled PM_{10} Emissions from Material Handling Activities

Emissions Source: **Material Handling Activities**

Introduction: Material handling consists of the deposition of solid waste, application of daily cover, which can consist of dirt, green waste, and construction and demolition debris, and excavation of the dirt cover stockpile. In addition, treated ash and asphalt are used for the winter deck area.

Parameters:

Mean Wind Speed (G)	2		mph	Pico Rivera Met Station; 1981 Met data used in modeling
Moisture Content (H)	12%		cover material	*AP-42* Table 13.2.4-1; cover
	25%		solid waste	estimated
	35%		green waste	Facility Data
	33%		treated ash	Facility Data
	75%		sludge	estimated
	23%		green waste/cover	average of both materials
Amount of material handled (I)	13,800	tons	daily cover	Facility Data
	12,400	tons	solid waste	Facility Data
	1,000	tons	green waste	Facility Data
	700	tons	C&D debris	Facility Data
	600	tons	treated ash	Facility Data
	460	tons	asphalt	Facility Data
	100	tons	sludge	Facility Data
	4,000	tons	cover/green waste	Facility Data

Emissions Estimate:

Filling (Application) or Emptying (Removal) Operation Emissions Estimate:

$\text{lb/day} = 0.00112 \times [(G/5)^{1.3} / (H/2)^{1.4}] \times I$ — *SCAQMD Handbook* Table A9-9-G

Continued on next page

Table 3.1-4

Fugitive Uncontrolled PM_{10} Emissions from Material Handling Activities

Continued:

Emissions Source	Location	Quantity (tons/day)	Uncontrolled PM_{10} Emissions (lb/day)
Solid Waste Application[1,2]	Active Face	12,400	0.12
Cover Stockpile Filling	Stockpile Area	13,800	0.38
Cover Stockpile Removal	Stockpile Area	13,800	0.38
Cover Application	Active Face	10,400	0.29
Cover Application – Green Waste Mixing[3]	Other Areas	3,400	0.04
Green Waste Production	Other Areas	1,000	0.01
Green Waste Removal	Other Areas	1,000	0.01
Green Waste Application – Mixing[3,4]	Other Areas	600	0
Green Waste/Cover Removal – Mixing	Other Areas	4000	0.04
Green Waste/Cover Application	Active Face	4000	0.04
C&D Receipt[1]	Other Areas	700	0.03
C&D Removal	Other Areas	700	0.03
C&D Application	Active Face	700	0.03
Treated Ash Receipt	Other Areas	600	0
Treated Ash Removal	Other Areas	600	0
Treated Ash Application	Other Areas	600	0
Asphalt Receipt	Other Areas	460	0.04
Asphalt Removal	Other Areas	460	0.04
Asphalt Application	Other Areas	460	0.04
Sludge Application[1]	Active Face	100	0
		Total Uncontrolled PM10 Emissions – pounds/day	1.5

1 – Solid waste, C&D waste, and sludge equal permitted capacity of 13,200 tons/day. Green waste, treated ash, and asphalt are excluded from permitted capacity.
2 – Four tons per day of tires included in the solid waste total.
3 – Cover material and green waste are mixed at a 1:1 ratio, by volume, and approximately a 6:1 ratio, by weight.
4 – Approximately 600 tons of the incoming 1,000 tons per day of green waste are used for alternative daily cover and mixed with cover material – the other 400 tons per day are transported off site.

Conclusion: The uncontrolled PM_{10} emissions that could result from material handling are 1.5 pounds/day.

Table 3.1-5

Fugitive Uncontrolled PM_{10} Emissions from Wind Erosion

Emissions Source: **Wind Erosion**

Introduction: Sources of PM_{10} from wind erosion consist of the stockpile, the active working face and truck turnaround area which encompass the present landfill fill area, the winter deck, and the landfill preparation area that includes the future, or extended, filling area.

Parameters:

Silt Content (G)	9%	*AP-42* Table 13.2.4-1; stockpile
Number of days with at least 0.01 inches of precipitation/year (H)	34 days	*SCAQMD Handbook* Table A9-9-E-2
Time when obstructed wind speed exceeds 12 mph at mean pile height (I)	7.6%	1999 Facility Met Data
Exposed Area – approximate (A)	36 acres	Stockpile Top and Roads
	60 acres	Winter Deck
	164 acres	Present Landfill Fill Area; includes Active Face and Truck Turnaround
Ratio of PM_{10} to TSP (J)	0.45	*AP-42*

Emissions Estimate:

lb/day = 1.7 x (G/100/1.5) x [(365-H)/235] x (I/15) x J x A — *SCAQMD Handbook* Table A9-9-E

or

lb/day = 0.38 x (2000/365) x A x J — *AP-42* Table 11.9-4; wind erosion of exposed areas

Emissions Source	Acreage	Hours/Day	Uncontrolled PM_{10} Emissions (lb/day)
Dirt Stockpile Top and Roads	36	24	118
Winter Deck	60	24	56
Exposed Landfill Area	164	24	154
Total Uncontrolled PM_{10} Emissions – pounds/day			328

Conclusion: The uncontrolled PM_{10} emissions that could result from wind erosion are 328 pounds/day.

3.2 Existing Project Fugitive Dust Emissions – Unmitigated

In 1992, the Sanitation Districts developed an Environmental Impact Report (EIR) for the Puente Hills Landfill expansion. The EIR included an analysis of fugitive dust emissions from the proposed project. At that time, using existing emissions estimate techniques, it was determined that the project would generate approximately 3,933 pounds per day of fugitive dust, excluding the materials recovery facility. However, in May 1993, the SCAQMD issued changes to their *Air Quality Analysis Guidance Handbook*. In addition, the U.S. EPA made a series of revisions to the *AP-42* during the 1990s. Many of these changes resulted in refinements to the calculation procedures as well as changes to specific emission factors as advancements in knowledge were realized.

Table 3.2-1 includes a comparison between the proposed project fugitive dust emissions and those fugitive dust emissions generated from the existing project using the most current, approved *Air Quality Analysis Guidance Handbook* and *AP-42* emissions estimation procedures. Notice that the existing project fugitive dust emissions have increased, primarily due to refinements in paved and unpaved road emissions estimation techniques.

Table 3.2-1

Comparison of Unmitigated Fugitive Dust (PM_{10}) Emissions - Proposed Project Versus Existing Project

Emissions Source	Fugitive Dust Emissions (lb/day)			Proposed Increase In Unmitigated Fugitive Dust (PM_{10}) Emissions (lb/day)
	Existing Project (1992 EIR)	Existing Project (updated estimate)[2]	Proposed Project	
Paved Roads	992	1,665	2,264	599[3]
Unpaved Roads	2,306	3,954	4,690	736[3]
Heavy Equipment	549[1]	138	138	0
Material Handling	0.6	2	472	0
Wind Erosion	85.2	6087	328	0
Total Increase in Unmitigated PM_{10} Emissions – pounds per day				1,334

1 – Includes both grading and construction activities.
2 – Updated estimate the result of changes to the *SCAQMD Handbook* and *AP-42*.
3 – Increase due to additional cover material trucks.

As shown in Table 3.2-1, the proposed project may generate approximately 1,334 pounds per day more fugitive dust (PM_{10}) emissions than the existing project. The increase is due almost entirely to the additional cover material truck traffic. The existing project primarily uses cover material from on-site sources, reducing the need for off-site cover material sources. The proposed project, however, will require an increase in the use of off-site cover material as on-site cover material stockpiles decline.

3.3 Mitigated Project Fugitive Dust Emissions – Existing and New Projects

This section discusses mitigation measures to control fugitive dust emissions. Included in the discussion are measures that are already in place and additional measures that will be implemented as part of the proposed project. A summary of existing and proposed mitigation measures are presented in Tables 3.3-1 and 3.3-2. Table 3.3-1 presents the impact of mitigation measures on the existing project, and Table 3.3-2 shows the impact of mitigation measures on emissions from increased activity associated with the new project. The following subsections discuss the mitigation techniques for each type of activity.

3.3.1 Paved Roads

The existing mitigation measures used to control emissions from paved roads at the Puente Hills Landfill include street sweeping one day per week, ensuring that all trucks are covered, and installation of a curb and gutter on one side of the street. Based on the references, assumptions, and calculations presented in the footnotes to Table 3.3-1, the control efficiency for these three techniques combined is 77%.

Two additional mitigation techniques will be implemented as part of the proposed project. Street sweeping frequency will be increased to twice per day. A new street sweeper will be purchased and dedicated to the Puente Hills Landfill and to the new Materials Recovery Facility. Additionally, chemical stabilizers will be applied to the paved road to further control dust emissions. These two techniques will reduce emissions by an additional 76% beyond the emissions reductions currently achieved.

Net control effectiveness of the existing and proposed mitigation techniques will be 94%, reducing existing project emissions from 1,665 lb/day to 94 lb/day and reducing additional proposed project emissions from 599 lb/day from 33 lb/day.

3.3.2 Unpaved Roads

Watering is currently used to control unpaved road dust emissions. This provides a control efficiency of 65%. Additional controls to be implemented as part of the new project will be paving 50% of the existing unpaved sections with an aggregate/concrete mix, and applying chemical stabilizers to the newly paved sections and to the bench roads. Application of chemical stabilizers to unpaved roadways in the active face area is not practical, since these surfaces are normally regraded on a daily basis. Paving half of the unpaved roadway and applying chemical stabilizers will provide a reduction of 46% beyond existing reductions.

With existing and proposed mitigation techniques, unmitigated dust emissions from unpaved roads will be reduced by 81%. Emissions from the existing project will be reduced from 3,954 lb/day to 738 lb/day, and emissions for the additional proposed activities will be reduced from 736 lb/day to 138 lb/day.

3.3.3 Heavy equipment operations, material handling, and wind erosion.

Watering currently controls all dust emissions from heavy equipment operations, material handling, and wind erosion. This provides a control efficiency of 65%. In addition to watering, there are additional unquantified mitigation techniques that have been used and will continue to be used. These include construction of soil barriers along the perimeter of the working area to reduce wind velocity, conducting storage pile loading and unloading activities on the downwind side of the pile, and landscaping all inactive areas to eliminate wind erosion. All of these mitigation techniques will continue to be implemented as part of the new project.

Table 3.3-1
Fugitive Dust Mitigation Techniques Applied to Existing Project

Source	Unmitigated PM_{10} Emissions (pounds/day)	Control Measure	Existing Or Proposed	Control Efficiency (%)	Residual PM_{10} Emissions (pounds/day)
Paved Roads	1,665	Street sweeping (1 day/week)	Existing	66[1]	566
		Cover all trucks	Existing	7[2]	527
		Curb/gutter on one side of road	Existing	26[3]	390
		Street sweep 2x/day	Proposed	71[4]	113
		Chemical stabilizer	Proposed	17[5]	94
		Total reduction, all control measures		94	94
Unpaved Roads	3,954	Watering	Existing	65[6]	1,384
		Paving	Proposed	45[7]	761
		Chemical stabilizers	Proposed	3[8]	738
		Total reduction, all control measures		81	738
Heavy Equipment	138	Watering	Existing	65[6]	48
Material Handling	2	Watering	Existing	65[6]	1
Wind Erosion	328	Watering	Existing	65[6]	115

1 - Determined using the difference between a surface loading of 7.4 gm/m² (*AP-42* landfill routes) and 1.4 gm/m² (*SCAQMD Handbook* swept industrial roads) in Eq. (1) in *AP-42* Chapter 13.2.1.
2 - 7% reduction by covering all trucks, *SCAQMD Handbook* Table A11-9.
3 – U.S.EPA; *Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures*; September 1992; page 3-11. Surface loadings on streets with curbs/gutters are 75% less than without curbs/gutters; assumed 37.5% reduction in loadings with curb/gutter on one side of road, which equates to a 26% reduction in emissions per Eq. (1) in *AP-42* Chapter 13.2.1.
4 - Increase in street sweeping will reduce 71% of remaining emissions (difference between 66% reduction for 1x/week and 90% reduction for 2x/day). 90% chosen as a conservative value. Using *SCAQMD Handbook* Table A-9-9-C-1, with silt loadings of 300 for uncleaned construction sites and 1.4 for cleaned sites, calculated reduction efficiency is 97%.
5 – U.S.EPA; *Fugitive Dust Background Document and Technical Information Document for Best Available Control* Measures; September 1992; page 3-11.
6 - 65% reduction efficiency used for watering unpaved roads and other surfaces. Reference Air Pollution Engineering Manual, Chapter 4, Figure 5.
7 - 50% of the unpaved road will be improved. A 90% reduction will be achieved for the paved section, per U.S.EPA *Fugitive Dust Background Document and Best Available Control Measure*.
8 - Assumes 20% of light duty vehicle operation is on bench roads and 90% reduction of emissions from bench roads. Net reduction from all unpaved roads is 3%.

Table 3.3-2
Fugitive Dust Mitigation Techniques Applied to Increased Emissions from New Project

Source	Unmitigated PM_{10} Emissions (pounds/day)	Control Measure	Control Efficiency (%)	Residual PM_{10} Emissions (pounds/day)
Paved Roads	599	See Table 3.3-1	94	33
Unpaved Roads	736	See Table 3.3-1	81	138
Heavy Equipment	0	Watering	65	0
Material Handling	0	Watering	65	0
Wind Erosion	0	Watering	65	0

3.4 Net Change in Fugitive Dust Emissions for Proposed Project

Table 3.4-1 summarizes the net impact of the proposed project, the existing mitigation measures, and the proposed mitigation measures on dust emissions. The table shows that the increased number of dirt trucks associated with the new project result in an increase in mitigated emissions of 171 lb/day, but that the mitigation techniques to be implemented in the new project will reduce emissions from existing activities by 1,168 lb/day, for a net project impact of a reduction of fugitive dust emissions by 987 lb/day.

Table 3.4-1

Comparison of Mitigated Fugitive Dust (PM_{10}) Emissions - Proposed Project Versus Existing Project

Emissions Source	Mitigated Fugitive Dust Emissions (lb/day)			Proposed Increase/(Decrease) In Mitigated Fugitive Dust (PM_{10}) Emissions (lb/day)
	Existing Project w/ Existing Mitigation	Existing Project w/ Existing and New Mitigation	Mitigated Emissions Associated with Increased Cover Trucks	
Paved Roads	521	125	33	(362)
Unpaved Roads	1,641	879	138	(624)
Heavy Equipment	48	48	0	0
Material Handling	1	1	0	0
Wind Erosion	115	115	0	0
Total Fugitive Dust	**2,326**	**1,168**	**171**	**(987)**

3.5 Fugitive Dust Emissions from Construction Activities

Construction activities are an integral part of the ongoing operation of the landfill, and many construction activities are included in the operating emissions estimates presented above. CEQA guidelines require separate quantification of emissions from construction and operating activities. Table 3.5-1 presents a summary of fugitive dust emissions from construction activities. Emissions were calculated using the emission factors for heavy equipment, and a control efficiency of 65% by watering was used to calculate mitigated emissions.

Table 3.5-1

Fugitive Uncontrolled and Controlled PM_{10} Emissions from Construction Activities

Emissions Source: **Construction Activities**

Introduction: Heavy equipment operations during construction produce fugitive PM_{10} dust during bulldozing, grading, and compacting activities. Equipment is used to build roads, install liners, dig wells and trenches, and conduct excavation activities.

Parameters:

Silt Content (G)	9%	cover material	*AP-42* Table 13.2.4-1; cover material
Moisture Content (H)	12%	cover material	*AP-42* Table 13.2.4-1; cover material
Ratio of PM_{10} to TSP	0.45	*AP-42*	
Ratio of kg/hr to lb/hr (I)	2.2046		
Hours of Operation (J)	see table below, presented as equipment-hours/day		

Emissions Estimate:

lb/day = $0.45 \times (G^{1.5} / H^{1.4}) \times I \times J$ *SCAQMD Handbook* Table A9-9-F

Continued on next page

Table 3.5-1

Fugitive Uncontrolled and Controlled PM_{10} Emissions from Construction Activities

Continued:

Construction Activity	No. of Equipment	Operating Hours/Day (all equipment)	Uncontrolled PM_{10} Emissions (lb/day)	Mitigated PM_{10} Emissions (lb/day)
Paved Road Construction	13	104	86	30
Unpaved Road Construction	1	8	7	2
Liner Installation	10	64	53	19
Groundwater Monitoring Well	8	46	38	13
Subsurface Barrier	5	40	33	12
Landfill Gas Wells	7	52	43	15
Landfill Gas Trenches	8	55	45	16
Header Line	5	34	28	10
Drainage Facilities Construetion	16	124	102	36
Excavation	24	192	159	56
Tank and Sewer Line Installation	6	44	36	13
Sewer Upgrade – Crossroads Pkw	5	40	33	12
Sewer Upgrade - Scale house	5	40	33	12
Flare Installation	2	12	10	3

4.0 Air Quality Impact Analysis / Health Risk Assessment

4.1 Air Dispersion Modeling

This section describes the air dispersion models and inputs used for the air dispersion modeling conducted to determine the air quality impact of the proposed flare modifications and off-site traffic impact analysis. Air dispersion modeling methodology for the health risk assessment analysis is described separately in Section 4.2.

4.1.1 Model Descriptions

U.S. EPA- and SCAQMD-approved regulatory air dispersion models were used to estimate the potential pollutant impacts from the landfill gas flares and the anticipated increase in vehicular traffic associated with the proposed project. Three air dispersion models were used in this analysis: the Industrial Source Complex Short Term (ISCST) model, and the Rough Terrain Diffusion Model (RTDM) for all on-site emissions modeling; and CALINE4 for vehicular traffic emission analysis. Each model is discussed briefly below.

ISCST is a Gaussian air dispersion model that can model multiple sources and various source types (e.g., stack, volume, and area). When used with hourly meteorological data, preprocessed with the meteorological preprocessor RAMMET, output-averaging times of 1,2,3,4,6,8,12, and 24 hours along with annual averages can be obtained. ISCST is a "flat-terrain" model recommended by the U.S. EPA for estimating impacts that are lower in elevation than the top of the source (stack top height). If a receptor elevation is greater than the lowest stack top height, ISCST will truncate the receptor elevation to the stack top height. Receptors equal to or greater than stack top height should be evaluated using some type of "complex terrain" model. One such complex terrain model that has been approved for regulatory use is RTDM.

RTDM is a co-located point source Gaussian air dispersion model that is especially suited for estimating impacts in rural areas on elevated terrain. Unlike most complex dispersion models that conservatively assume 100% reflection of the pollutant plume from the ground surface, RTDM incorporates a partial reflection algorithm that accounts for plume impaction on elevated terrain. The partial reflection algorithm calculates a partial reflection factor that is dependent on the slope of the terrain and the plume growth rate. The partial reflection factor is then linearly applied to the model calculation to determine the resulting impact concentration.

CALINE4, developed by the California Department of Transportation, is a line source air quality model based on the Gaussian diffusion equation. The model employs a mixing zone concept to characterize pollutant dispersion over the roadway. Traffic conditions, site geometry, and meteorology are used as model inputs. Options for modeling near intersections, parking lots, elevated or depressed freeways, and within canyons are provided. The model can reliably predict pollutant concentrations, primarily of carbon monoxide, within 150 meters of the roadway.

4.2 Model Inputs

Model inputs discussed in this section include meteorology, source parameters, receptor elevations, and model options. Most model inputs did not vary between the ISCST and RTDM models.

Meteorological data provided by the SCAQMD were used in all of the model runs. Hourly surface data for the year 1981 from the Pico Rivera monitoring station was used in the modeling study to best represent conditions in the Puente Hills Landfill area as recommended by SCAQMD. Upper air mixing height information was from the SCAQMD El Monte station.

The source parameters used in the modeling are presented in the Air Quality Analysis and Health Risk Assessment Sections below.

A rectangular coordinate grid was constructed to estimate the off-site ground-level concentrations resulting from the emissions sources. This type of grid is consistent with the grids constructed for other Districts' landfill modeling studies that were previously accepted and approved by the SCAQMD. The receptor grid is presented on Figure 4.2-1. The same grid was used for both criteria pollutants modeling and for the health risk assessment modeling. The receptor coordinates and elevations were obtained from 7.5 minute USGS topographic maps with Universal Transverse Mercator (UTM) coordinates. The grid contains 484 receptor points designated by both line intersections and dots. The receptor spacing varies from 125 m to 1 km intervals. The more closely spaced receptors were placed in sensitive as well as nearby residential and business areas to ensure that a potential maximum concentration was not overlooked.

Based on SCAQMD staff recommendations, all regulatory default options were used in the modeling, with the exception of the calm processing option. Model options used in this air quality impact analysis varied only slightly between the ISCST and RTDM computer models. Model options used are listed in Table 4.2-1.

Table 4.2-1
Model Options Used

Model	Options Used
ISCST	Cartesian coordinate receptor grid Urban mode Gradual plume rise Buoyancy induced dispersion Terrain elevations of receptors used Ground-level receptors
RTDM	Rural mode Transitional plume rise Buoyancy enhanced plume dispersion Partial reflection algorithm used Ground-level receptors 22.5° sector averaging

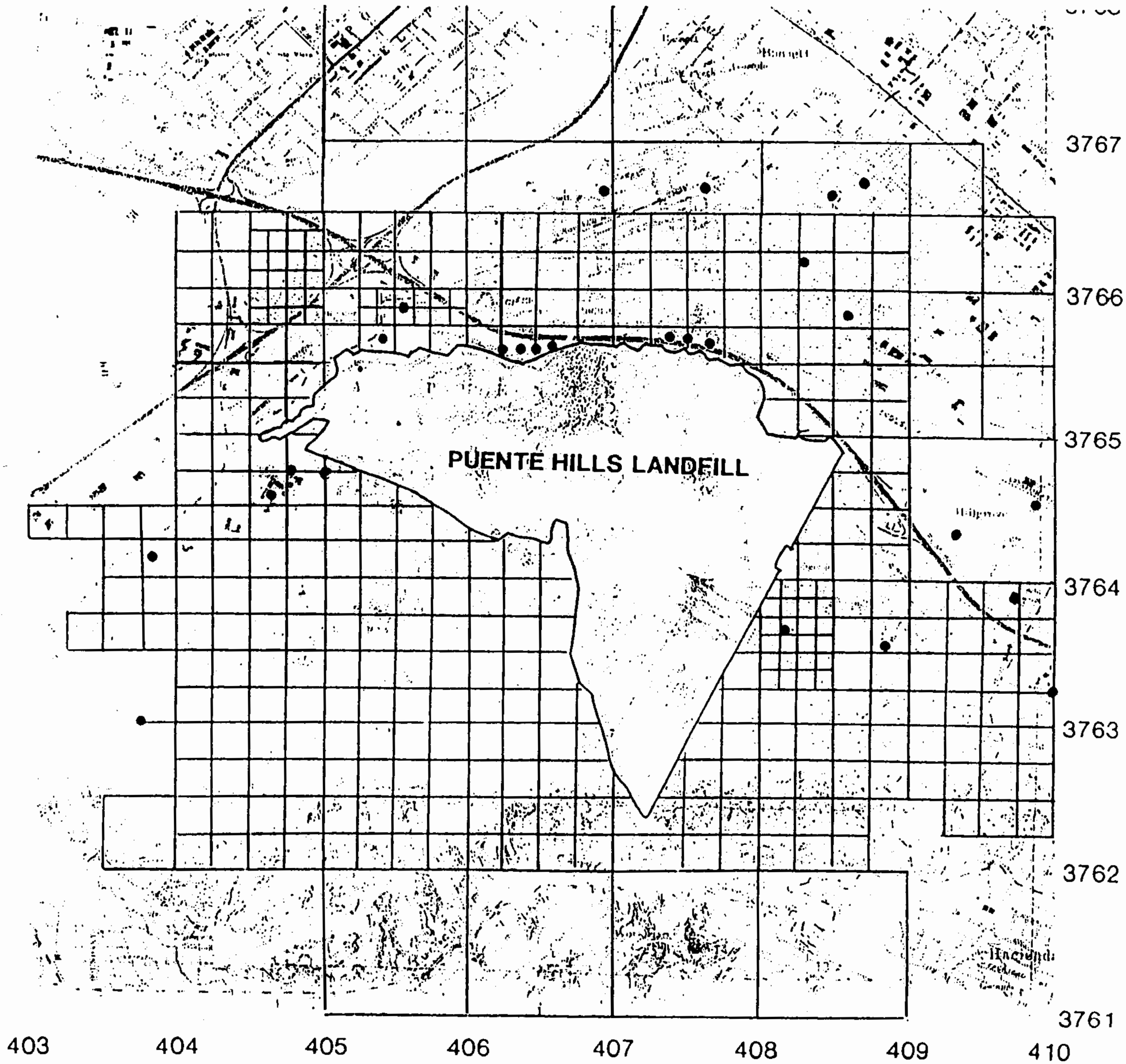

Figure 4.2-1
Air Dispersion Modelling Receptor Grid

4.3 Air Quality Analysis (Criteria Pollutants)

As part of the proposed project, the existing 24 smaller 1,000-scfm flares would be replaced with 24 larger, 1,600 scfm flares. The higher capacity flares would be of the same design as flares that are currently operating at other Sanitation Districts' facilities. The total capacity of the new flares would be 38,400 scfm. This capacity would replace the existing 24,000 scfm capacity of the 24 smaller flares and the 9,000 scfm capacity of the two large flares that make up the eastern canyon flare station, plus provide the additional future capacity needed for the site.

Potential impacts on the local air quality due to emissions of criteria pollutants from the new flares were determined by modeling the estimated incremental emission increase from the flares, and comparing the predicted ground level concentrations with applicable regulatory air quality standards according to SCAQMD guidelines in Rule 1303. The 24 modified flares were modeled using a single flare located in the center of the flare station. The following source parameters were utilized in the modeling effort:

- Source name: flare
- Source type: stack
- Location (UTM coordinates): 405510 (East), 3765061 (North)
- Base elevation: 700 ft
- Source height: 32 ft
- Stack diameter: 8 ft 4 in
- Exhaust flow: 45,210 acfm
- Exhaust temperature: 1500 deg F

Criteria pollutant emission rates were estimated based upon source test data from similar landfill gas flares. Presented in Table 4.3-1 is a summary of the anticipated criteria pollutant emission rates associated with landfill gas combustion in the flares.

Table 4.3-1

Potential Landfill Gas Flare Combustion Emissions

Pollutant	Flare Emissions[a] (lb/day)
Nitrogen Oxides (NO_x)	1,344 [b]
Sulfur Dioxide (SO_2)	1,413 [c]
Carbon Monoxide (CO)	864 [d]
Reactive Organic Gases (ROG)	538 [d]
Particulate Matter (PM_{10})	1,254 [e]

Notes: [a]Assumes a 24 flare capacity system operating with a total capacity of 38,400 scfm.
[b]Based on the Rule 1303 NSR/BACT limit – 0.06 lb/MMbtu (NO_x).
[c]Based on the Rule 431.1 limit of 150 ppm (H_2S).
[d]Based on the permit limit requested in change-of-condition application filed for the Western Flare Station, 3/1998.
[e]Based on the maximum mass emissions recorded in all source tests performed on the Western Flare Station, 1977 through 1999.

To determine if air quality compliance was met for each pollutant and averaging time, the following steps were employed:

- Determine if the existing background concentration already exceeds the "most stringent air quality standard;"
- If the background concentration is in exceedance of the air quality standard, the criteria pollutant will meet air quality compliance if the "project impact" is less than the "measurable impact level;"
- If the background concentration is less than the air quality standard, the criteria pollutant will meet air quality compliance if the "total project impact" is less than the "most stringent air quality standard."

As shown in Table 4.3-2, the estimated project impacts from the proposed flares indicate compliance with all applicable ambient air quality standards and SCAQMD measurable impact levels.

4.4 Health Risk Assessment

4.4.1 Introduction

A health risk assessment (HRA) was conducted to evaluate the carcinogenic and noncarcinogenic risks associated with toxic air contaminant (TAC) emissions from the continued operation of the Puente Hills Landfill. The risks due to the proposed project emissions as well as the cumulative risk due to the proposed project with the surrounding significant project emissions were determined and presented in this section.

The approaches and methodologies used in this risk assessment are taken from

- the SCAQMD guideline document entitled, "Risk Assessment Procedures for Rules 1401 and 212," Version 6.0 August 18, 2000;
- "Air Toxics Hot Spots Program – Revised 1992 Risk Assessment Guidelines", prepared by the Toxics Committee of the California Air Pollution Control Officers Association (CAPCOA), October, 1993; and
- "Supplemental Guidelines for Preparing Risk Assessments to Comply with the Air Toxics Hot Spots Information and Assessment Act [AB 2588]", prepared by the South Coast Air Quality Management District, September, 1991.

In addition, the most recent cancer potency values (June 1999) and chronic and acute noncancer reference exposure levels (May 2000) developed by OEHHA were used in the assessment. All emission estimates used to calculate risk values were from source test methodology approved by the SCAQMD.

Table 4.3-2
Estimated Project Combustion Impacts

Pollutant	Averaging Time	(1)[a] Project Impact ($\mu g/m^3$)	(2)[a] Background Conc. ($\mu g/m^3$)	(3)[a] Total Impact[b] ($\mu g/m^3$)	(4)[a] Measurable Impact Level ($\mu g/m^3$)	(5)[a] Most Stringent Air Quality Standard ($\mu g/m^3$)
CO	8-hour	5.08	7,015	7020[d]	500	10,000[d] (state, national)
	1-hour	33.71	8,050	8,084[d]	1,100	23,000[d] (state)
NO_2	annual	0.39	74	74[d]	1	100[d] (national)
	1-hour	52.51	301	354[d]	20	500[d] (state)
SO_2	annual	0.41	NM[f]	0.41[d]	---	80[d] (national)
	24-hour	2.59	NM[f]	2.59[d]	---	131[d] (state)
	3-hour	20.38	NM[f]	20.38[d]	---	1,330[d] (national, secondary)
	1-hour	55.32	NM[f]	55.32[d]	---	655[d] (state)
PM_{10}	annual (AGM)[e]	0.36	52	0.36	1[d]	30 (state)
	24-hour	2.30	103	2.30	2.5[d]	50 (state)

Notes:
[a] For pollutants that have background concentrations (2) in excess of the air quality standard (5), the project impact (1) must not exceed the measurable impact level (4). For pollutants that have background concentrations (2) lower than the air quality standard (5), the total impact of the project (3) must be less than the air quality standard (5).
[b] Total impact = project impact + background concentration.
[c] Measurable impact levels are guideline levels developed by the SCAQMD for use in determining project significance when background air quality is already in exceedance of the most stringent air quality standard.
[d] Underlined values were used to determine air quality compliance as described in footnote [a].
[e] AGM =Annual geometric mean.
[f] Not measured.

The HRA addressed a total of 16 substances on the AB 2588 and SCAQMD Rule 1401 lists for the risk evaluation for the proposed project, and 18 listed substances were addressed in the cumulative risk evaluation. Two substances, chlorine and formaldehyde, were addressed in the cumulative risk analysis, and not in the proposed project because they are emitted only from the cooling towers and the gasoline-powered mobile equipment, respectively, which are not part of the proposed project. The substances are listed in Table 4.4-1. Of the 18 substances, 13 are considered carcinogenic and were evaluated to determine the associated cancer risk. The noncancer health effects evaluation addressed 12 substances for chronic impacts, and 13 substances for acute impacts.

The lifetime carcinogenic risk was estimated for an individual assumed to reside continuously for 70 years at the off-site location of maximum ground-level concentration (residential maximum) and for an individual assumed to work continuously for 46 years, 240 days-per-year and 8 hours-per-day (employment maximum). Chronic and acute noncarcinogenic health effects were also evaluated for these maximally exposed individuals (MEI). The risk assessment utilizes highly conservative assumptions in regard to duration of exposure and potency. Therefore, the results reported in this document can confidently be referred to as an "upper level of risk", the actual risk is very likely to be much lower.

Both carcinogenic and noncarcinogenic risks were evaluated for the proposed project alone and for the cumulative impact. Cumulative impact includes the proposed project, existing Puente Hills Landfill, the San Jose Creek Water Reclamation Plant (SJCWRP), and Quemetco, a nearby battery recycling facility. However, because of complexity in modeling all sites, for the cumulative impact, air dispersion modeling was performed for the proposed project and existing landfill together to obtain a cumulative risk first. To obtain an overall cumulative impact, this cumulative risk was then added to the risk due to emissions from the SJCWRP and Quemetco as reported under the AB 2588 process.

4.4.2 Modeling Assumptions and Methodology

The quantitative assessment of health risks requires the following steps: (1) determination of facility emissions, (2) evaluation of pollutant transport (air dispersion modeling), (3) assessment of human exposure, and (4) characterization of the resulting risk. This section contains a description of the approaches and assumptions used to derive the quantitative risk estimates.

Emissions

For the purposes of quantifying emissions and later performing air dispersion modeling, emission sources were divided into three categories: (1) point sources (i.e., stacks), (2) landfill surface, and (3) on-site mobile sources. Emission rates from the stack sources and landfill surface were calculated based on source test data and landfill gas analysis from similar operations at the existing Puente Hills Landfill site. Those TACs identified in the source test results as below the limit of detection (LOD) were assumed to be at a concentration level equal to half the LOD for the analytical method, although most compounds were not detected in stack source tests.

Table 4.4-1
Toxic Air Contaminants Included In The
Health Risk Assessment

No.	Substance	Health Impact		
		Carcinogenic	Noncancer	
			Chronic	Acute
1.	Benzene	x	x	x
2.	Carbon Tetrachloride	x		x
3.	Benzyl Chloride	x		x
4.	Ethylene Dibromide	x		
5.	Chloroform	x	x	x
6.	Dichlorobenzene	x		
7.	Ethylene Dichloride	x		
8.	Methyl Chloroform		x	x
9.	Methylene Chloride	x	x	x
10.	Perchloroethylene	x	x	x
11.	Toluene		x	x
12.	Trichloroethylene	x	x	
13.	Vinyl Chloride	x		x
14.	Xylenes		x	x
15.	Hydrogen Sulfide		x	x
16.	Chlorine		x	x
17.	Formaldehyde	x	x	x
18.	Diesel Exhaust	x	x	

The potential toxic air emissions from the proposed project flares, landfill surface, and mobile sources are presented in Tables 4.4-2, 4.4-3, and 4.4-4, respectively. Emissions from the existing landfill that will be used in the cumulative risk evaluation are presented in Tables 4.4-5, 4.4-6, 4.4-7 and 4.4-8 for point sources, landfill surface, cooling tower and fuel dispensing/storage, and mobile sources, respectively. The pollutants listed in these tables are volatile organic compounds that would be in the gaseous phase upon source release. Therefore, health impacts for the majority of these compounds were evaluated assuming that exposure would occur via the inhalation pathway only. However, three substances, p-dichlorobenzene, perchloroethylene, and trichloroethylene were also evaluated for exposure via the oral ingestion pathway as specified in the latest HRA guidelines.

Air Dispersion Modeling

Two air dispersion modeling scenarios were analyzed in the risk evaluation for the proposed continued operation of the Puente Hills Landfill. Scenario one represents the source emissions due to the proposed project only and were modeled to determine the proposed project impacts; and scenario two represents cumulative source emissions due to both the proposed project and current landfill operation, and were modeled together to determine the cumulative impacts. The overall cumulative impact, which includes the reported risk values from nearby facilities, is presented in Subsection 4.4.6. The sources modeled in scenarios one and two are as follows:

Scenario One (proposed project)

1. Landfill gas flares
2. Landfill surface gas
3. Mobile equipment (diesel-powered dirt transport vehicles)

Scenario Two (Cumulative)

1. Landfill gas high-capacity flare
2. Landfill gas Eastern Canyon flares (2)
3. PERG Boiler 300
4. PERG Boiler 400
5. Landfill gas turbine
6. Cooling tower stacks (4)
7. Landfill surface gas
8. Gasoline storage/fueling
9. Mobile equipment (gasoline-powered)
10. Mobile equipment (diesel-powered)
11. All equipment included in Scenario One

Table 4.4-2
Anticipated Landfill Gas Combustion Emissions from the Proposed Project

Substance	Emission Rate[a] (lbs/day)
Benzene[b]	6.88×10^{-2}
Benzyl Chloride[b]	2.31×10^{-1}
Carbon Tetrachloride[b]	7.22×10^{-3}
Chloroform[b]	7.45×10^{-3}
Dichlorobenzene[b]	1.65×10^{-1}
Ethylene Dibromide[b]	1.38×10^{-2}
Ethylene Dichloride[b]	2.96×10^{-2}
Methyl Chloroform[b]	1.02×10^{-2}
Methylene Chloride[b]	6.52×10^{-2}
Perchloroethylene[b]	2.21×10^{-2}
Toluene[b]	1.45×10^{-1}
Trichloroethylene[b]	8.62×10^{-3}
Vinyl Chloride[b]	3.88×10^{-3}
Xylenes[b]	1.01×10^{-1}

a	Assumes a 24 flare capacity system.
b	Source test results for estimates indicate levels below the level of detection (LOD); therefore, emission rates are based on one-half the LOD.
	Source: Source tests performed on the Western Flare Station, 1997 through 1999.

Table 4.4-3

Anticipated Landfill Surface Gas Emissions from the Proposed Project

Toxic Air Pollutant	Emission Rate (lbs/day)
Benzene	0.445
Benzyl Chloride[a]	0.140
Carbon Tetrachloride[a]	0.003
Chloroform[a]	0.003
Dichlorobenzene[a]	0.101
Ethylene Dibromide[a]	0.004
Ethylene Dichloride[a]	0.024
Hydrogen Sulfide	4.448
Methyl Chloroform[a]	0.009
Methylene Chloride[a]	0.179
Perchloroethylene[a]	0.138
Toluene	1.659
Trichloroethylene	0.052
Vinyl Chloride	0.022
Xylenes[a]	1.133

[a] Source test results for estimates indicate levels below the level of detection (LOD); therefore, emission rates are based on one-half the LOD.

Source: Toxic air concentration in landfill surface gas was obtained from the 1999-2000 1150.1 monthly monitoring.

Table 4.4-4

Anticipated On-Site Mobile Equipment Emissions from the Proposed Project (Diesel-Powered Dirt Trucks)

Toxic Air Pollutant	Emission Rate (lbs/day)
Diesel Exhaust PM_{10}	2.25

Source: Emission rates calculated using *EMFAC2000* emission factors and assuming a 2-mile on-site round trip at 10 mph and 5 minutes idling time.

Table 4.4-5
Stack Source Emissions from the Existing Landfill

Substance	Flare Emissions	
	Maximum (lbs/hr)	Average (lbs/day)
Benzene[a]	1.22×10^{-3}	2.19×10^{-2}
Benzyl Chloride[a]	1.09×10^{-2}	1.96×10^{-1}
Carbon Tetrachloride[a]	1.22×10^{-3}	1.55×10^{-2}
Chloroform[a]	9.44×10^{-4}	1.38×10^{-2}
Dichlorobenzene[a]	7.71×10^{-3}	1.36×10^{-1}
Ethylene Dibromide[a]	7.82×10^{-3}	9.78×10^{-2}
Ethylene Dichloride[a]	7.84×10^{-4}	1.45×10^{-2}
Methyl Chloroform[a]	1.06×10^{-3}	1.55×10^{-2}
Methylene Chloride[a]	1.48×10^{-3}	2.58×10^{-2}
Perchloroethylene[a]	1.31×10^{-3}	2.39×10^{-2}
Toluene[a]	3.83×10^{-3}	5.48×10^{-2}
Trichloroethylene[a]	1.04×10^{-3}	1.52×10^{-2}
Vinyl Chloride[a]	9.92×10^{-4}	1.32×10^{-2}
Xylenes[a]	2.80×10^{-3}	6.42×10^{-2}
Source: Source tests performed on the large-capacity flare in 1995 and 1998		

Substance	Turbine Emissions	
	Maximum (lbs/hr)	Average (lbs/day)
Benzene[a]	9.87×10^{-3}	5.85×10^{-2}
Benzyl Chloride[a]	7.69×10^{-4}	1.46×10^{-2}
Carbon Tetrachloride[a]	3.78×10^{-5}	6.87×10^{-4}
Chloroform[a]	4.27×10^{-5}	6.94×10^{-4}
Dichlorobenzene[a]	6.13×10^{-4}	1.47×10^{-2}
Ethylene Dibromide[a]	1.15×10^{-4}	1.46×10^{-3}
Ethylene Dichloride[a]	2.44×10^{-4}	2.52×10^{-3}
Methyl Chloroform[a]	3.28×10^{-5}	7.88×10^{-4}
Methylene Chloride[a]	1.29×10^{-3}	1.61×10^{-2}
Perchloroethylene[a]	1.19×10^{-3}	1.09×10^{-2}
Toluene[a]	1.79×10^{-3}	1.64×10^{-2}
Trichloroethylene[a]	3.47×10^{-4}	3.13×10^{-3}
Vinyl Chloride[a]	3.92×10^{-4}	3.27×10^{-3}
Xylenes[a]	3.95×10^{-4}	9.47×10^{-3}
Source: Source tests performed 1996 and 1998 thru 1999.		

Continued on next page

Table 4.4-5 Stack Source Emissions from the Existing Landfill (continued)

Substance	Emissions for PERG Boiler #300	
	Maximum (lbs/hr)	Average (lbs/day)
Benzene[a]	2.93×10^{-4}	6.48×10^{-3}
Benzyl Chloride[a]	1.68×10^{-3}	4.04×10^{-2}
Carbon Tetrachloride[a]	2.25×10^{-5}	5.41×10^{-4}
Chloroform[a]	6.41×10^{-5}	1.54×10^{-3}
Dichlorobenzene[a]	2.17×10^{-3}	5.19×10^{-2}
Ethylene Dibromide[a]	1.02×10^{-4}	2.45×10^{-3}
Ethylene Dichloride[a]	5.33×10^{-5}	1.28×10^{-3}
Methyl Chloroform[a]	7.18×10^{-5}	1.72×10^{-3}
Methylene Chloride[a]	4.57×10^{-4}	1.10×10^{-2}
Perchloroethylene[a]	2.11×10^{-4}	5.06×10^{-3}
Toluene[a]	1.18×10^{-3}	2.84×10^{-2}
Trichloroethylene[a]	7.07×10^{-5}	1.70×10^{-3}
Vinyl Chloride[a]	3.37×10^{-5}	8.09×10^{-4}
Xylenes[a]	8.64×10^{-4}	2.07×10^{-2}
Source: Source tests performed 1997 thru 1999.		

Substance	Emissions for PERG Boiler #400	
	Maximum (lbs/hr)	Average (lbs/day)
Benzene[a]	1.04×10^{-3}	1.69×10^{-2}
Benzyl Chloride[a]	1.62×10^{-3}	2.76×10^{-2}
Carbon Tetrachloride[a]	8.26×10^{-5}	1.98×10^{-3}
Chloroform[a]	6.41×10^{-5}	1.54×10^{-3}
Dichlorobenzene[a]	1.47×10^{-3}	2.05×10^{-2}
Ethylene Dibromide[a]	2.51×10^{-4}	4.24×10^{-3}
Ethylene Dichloride[a]	5.33×10^{-4}	7.96×10^{-3}
Methyl Chloroform[a]	3.52×10^{-4}	4.07×10^{-3}
Methylene Chloride[a]	1.25×10^{-2}	8.62×10^{-2}
Perchloroethylene[a]	2.11×10^{-4}	3.60×10^{-3}
Toluene[a]	1.18×10^{-3}	2.22×10^{-2}
Trichloroethylene[a]	7.07×10^{-5}	1.70×10^{-3}
Vinyl Chloride[a]	3.37×10^{-5}	8.09×10^{-4}
Xylenes[a]	8.64×10^{-4}	1.52×10^{-2}
Source: Source tests performed 1997 thru 1999.		

[a] Source test results for estimates indicate levels below the level of detection (LOD); therefore, emission rates are based on one-half the LOD

Table 4.4-6
Landfill Surface Gas Emissions from the Existing Landfill

Substance	Emissions Maximum (lbs/hr)	Emissions Average (lbs/day)
Benzene	3.25×10^{-1}	1.11
Benzyl Chloride[a]	5.52×10^{-2}	0.35
Carbon Tetrachloride[a]	3.89×10^{-4}	0.01
Chloroform[a]	6.61×10^{-4}	0.01
Dichlorobenzene[a]	4.12×10^{-2}	0.25
Ethylene Dibromide[a]	4.70×10^{-4}	0.01
Ethylene Dichloride[a]	5.61×10^{-3}	0.06
Hydrogen Sulfide	5.67×10^{-1}	11.12
Methyl Chloroform[a]	2.67×10^{-3}	0.02
Methylene Chloride[a]	5.11×10^{-2}	0.45
Perchloroethylene[a]	2.74×10^{-2}	0.34
Toluene	2.77×10^{-1}	4.15
Trichloroethylene	9.76×10^{-3}	0.13
Vinyl Chloride	5.62×10^{-3}	0.06
Xylenes[a]	3.78×10^{-1}	2.83

[a] Source test results for estimates indicate levels below the level of detection (LOD); therefore, emission rates are based on one-half the LOD.

Source: Toxic air concentration in landfill surface gas was obtained from the 1999-2000 1150.1 monthly monitoring.

Table 4.4-7
Cooling Tower and Fuel Storage Emissions from the Existing Landfill

Substance	Emissions Maximum (lbs/hr)	Emissions Average (lbs/day)
Chlorine[a]	1.95×10^{-5}	2.03×10^{-3}
Benzene[b]	8.95×10^{-5}	5.73×10^{-4}
Toluene[b]	7.67×10^{-5}	4.91×10^{-4}
Xylenes[b]	1.29×10^{-6}	8.18×10^{-5}

Notes: [a] From Cooling Tower.
[b] From Fuel Storage/dispensing.

Table 4.4-8
Anticipated On-Site Mobile Equipment Emissions from the Existing Landfill

Toxic Air Pollutant	Emission Rate (lbs/day)
Benzene (Gasoline-powered)	1.79
Formaldehyde (Gasoline-powered)	0.44
Diesel Exhaust PM	19 to 34

Note: Emission rates were calculated using emission factors from *EMFAC2000*.

Two U.S. EPA approved air dispersion models were utilized for the modeling study. The RTDM model was used to model emissions from point sources for receptors located at or above stack height. The ISCST model was used to model emissions from the point sources for receptors located below stack height, and emissions from area and volume sources for all receptors. The flares, boilers, gas turbines, and cooling tower were modeled as single point sources. Landfill surface gas emissions were modeled as an area source, and the mobile equipment and gasoline storage tanks were modeled as volume sources. Specific stack locations and base elevations can be found in the computer data printouts that are available for review at the Sanitation Districts' Joint Administration Office.

The multipathway risk impacts for p-dichlorobenzene, perchloroethylene, and trichloroethylene, were estimated using the SCAQMD Rule 1401 factor for p-dichlorobenzene and then proportioning this factor for the other two compounds based on their respective slope factors (mg/kg-day).

Source Modeling Parameters

Proposed project

The parameters used to model the sources at the proposed project are listed in Table 4.4-9. The area and volume sources were modeled using only ISCST, since RTDM does not provide these options. The landfill surface was sub-divided into 28 square sub-areas varying in size from 125 m x 125 m to 500m x 500m. The southwest coordinate of each square was input into the model to locate the sources. The elevation at the approximate centroid of each sub-area was used as the base elevation input for each source. Due to geometric constraints the area used in emission rate estimates is slightly higher than the actual disposal area. The landfill areas are presented on Figure 4.4-1. The emission rates were determined based on the total 10-year project disposal capacity of 38 MM tons. The emission rates (g/sec/m^2) of individual pollutants were calculated by dividing the total emissions of the pollutant in landfill gas (g/sec) by the total landfill area (1,375,750 m^2).

The mobile equipment was modeled as a volume source. The sub-area grid as shown on Figure 4.4-1 also denotes the operational area of the landfill where the mobile equipment operate, including idling locations of offsite traffic. The centroid coordinates of each square were input into the model to locate the volume sources. The estimated elevations of the centroids were used as the base elevations of the sources. The estimated source height was 10 feet, the exhaust height for a typical piece of mobile equipment at the landfill. The emission rates (g/sec) of individual pollutants from volume source sub-areas were calculated by dividing the area of each sub-area (m^2) by the total operational area and multiplying by the total pollutant emission rate (g/sec).

Cumulative Impact

The parameters used to model the cumulative risk impacts of the proposed project and the existing operation are discussed in this section and listed in Table 4.4-10. A single flare modeled in the center of the existing eastern canyon flare station was used to estimate the total flare emissions at that location and the hi-capacity flare was modeled from it's location at PERG as was the Solar Gas

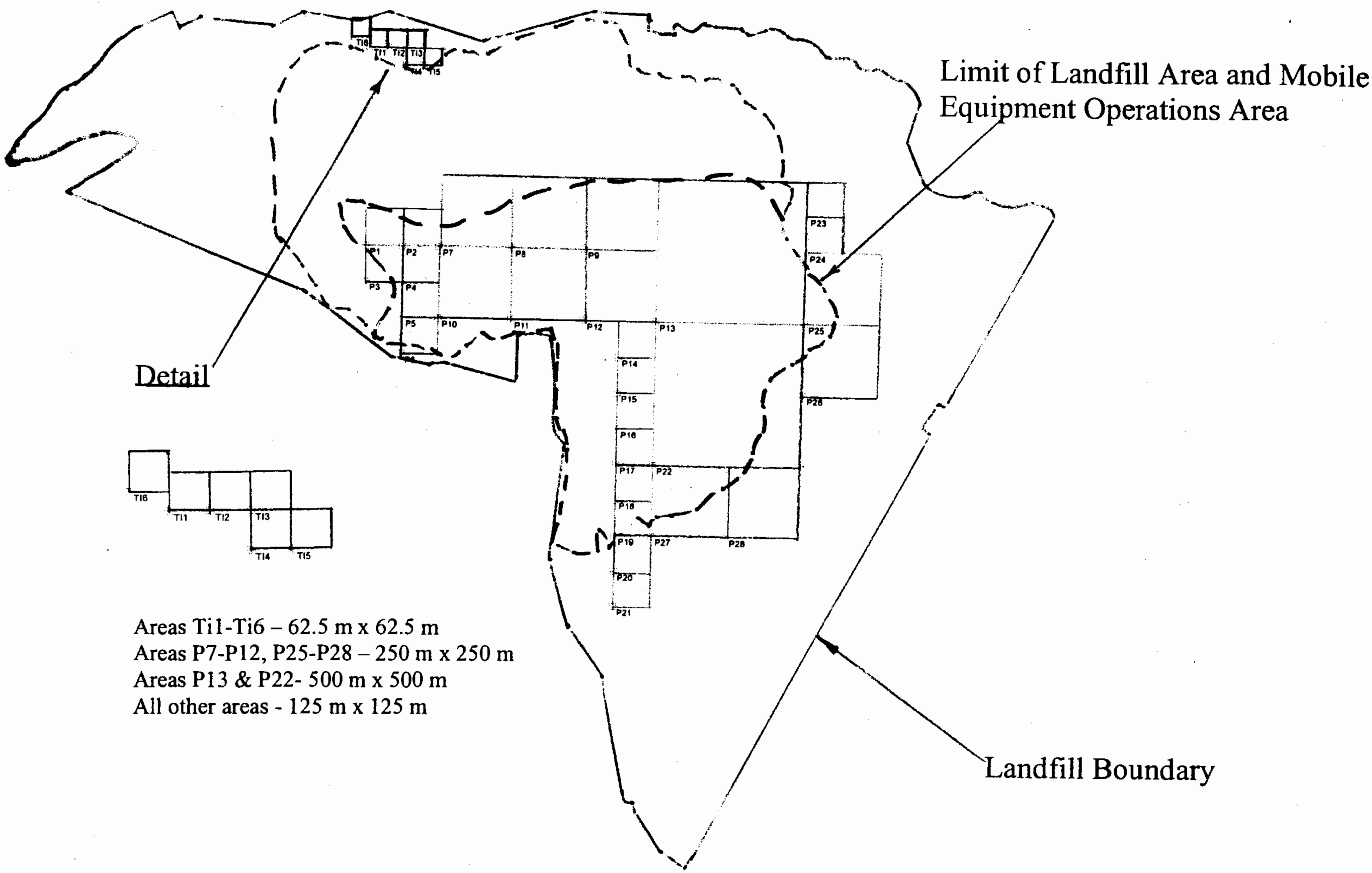

Figure 4.4-1
Proposed Landfill Area Source and Mobile-Equipment Volume Source Grid

Table 4.4-9
Source Input Parameters for the Proposed Project

Source Name	Source Type	Location		Base Elevation (ft)	Source Height (ft)	Stack Diameter (ft)	Source Area (m^2)	Exhaust Flow (acfm)	Exhaust Temp. (deg F)
		East (m)	North (m)						
Flares (24)*	Stack	405510	3765061	700	32	8.3	N/A	45,210	1500
Landfill Surface	Area	N/A	N/A	N/A	0	N/A	1,375,750	N/A	N/A
Mobile Equip.	Volume	N/A	N/A	N/A	10	N/A	1,399,200	N/A	N/A

Notes:
1. N/A denotes parameters which are not applicable to that particular source type.
2. * denotes number of units; in this case 24 high capacity flares.

Table 4.4-10
Source Input Parameters for the Cumulative Analysis

Source Name	Source Type	Location		Base Elevation (ft)	Source Height (ft)	Stack Diameter (ft)	Source Area (m^2)	Exhaust Flow (acfm)	Exhaust Temp. (deg F)
		East (m)	North (m)						
Hi-Capacity Flare	Stack	405475	3765019	700	60	16	N/A	412,170	1540
Boiler 300	Stack	405491	3765053	700	60	6.5	N/A	116,260	310
Boiler 400	Stack	405473	3765041	700	60	6.5	N/A	116,260	310
Turbine	Stack	405543	3765048	700	16.8	3.3	N/A	71,970	785
Flares(24)*	Stack	405510	3765061	700	32	8.3	N/A	45,210	1500
Cooling Tower(4)	Stack	405503	3765014	700	42.6	31.3	N/A	54,140	105
Landfill Surface	Area	N/A	N/A	N/A	N/A	N/A	2,421,875	N/A	N/A
Mobile Equipment	Volume	N/A	N/A	N/A	10	N/A	1,399,200	N/A	N/A
Gasoline St. Tanks(2)*	Volume	405250	3765438	300	4.3	N/A	N/A	N/A	N/A

Notes:
1. N/A denotes parameters which are not applicable to that particular source type.
2. * denotes number of units.

Turbine. Cooling tower total emissions were modeled from a single cell, identical to the four existing cells, at the centroid of the cooling tower.

The existing landfill area source was modeled in the same manner as the proposed landfill area source. Since the proposed landfill capacity will be disposed vertically on the existing landfill area the entire surface area of the landfill was considered as the emissions source. The area was sub-divided into a total of 41 sub-areas. The emission rates of the existing landfill area were based on the projected disposal capacity at completion of fill operations of 133 MM tons. The total surface area of the landfill operation at capacity is approximately 630 acres (2,500,000 m^2). This area was approximated at 2,421,875 m^2 with 41 sub-areas (squares) varying in size from 125m x 125m to 500 m x 500 m, and it is shown in the proposed sub-area grid, Figure 4.4-2. All assumptions previously made in the modeling for the proposed project in regards to source location and geometry were adopted for the cumulative modeling.

The existing mobile equipment emissions and project emissions were combined and modeled over the existing operations area as shown in Figure 4.4-1, since this area will continue to be the operating area for the proposed project.

The total emissions of two gasoline storage tanks were modeled from the location of a single tank. The gasoline storage tank was modeled as a simple volume source. The perimeter of the tank was used to obtain the length of one side of the representative square tank. The actual height, centroid coordinates, base elevation and emission rate for the gasoline storage tank were input into the model.

Dispersion Model Options

All regulatory default options, with the exception of the calms processing option, were used in the models, as specified by SCAQMD. The Breezewake program distributed by Trinity Consultants Incorporated was used to perform preliminary building downwash calculations for the stack sources. The buildings used in calculating downwash are presented in the Plot Plan of the PERG Facility (Figure 4.4-3). UTM coordinates of the corners of each building and parameters for each stack source were input into the Breezewake program. The Breezewake program calculated the maximum projected height and width of each building to determine the dominant building structure for each stack source modeled. The wind direction-specific building dimensions of the dominant structures were included with the respective stack source information as input into the ISCST model. The resultant ground-level concentrations were calculated by the ISCST model using the building downwash option. The RTDM model does not provide a building downwash option.

Dispersion Model Results

Air dispersion modeling was performed for each of the toxic air substances evaluated in the risk assessment. The modeling results were used to calculate the risks associated with each of the TACs as discussed below. The modeling output files are bulky in nature and have not been provided in this document. They are available for review at the Sanitation Districts' Joint Administration Office.

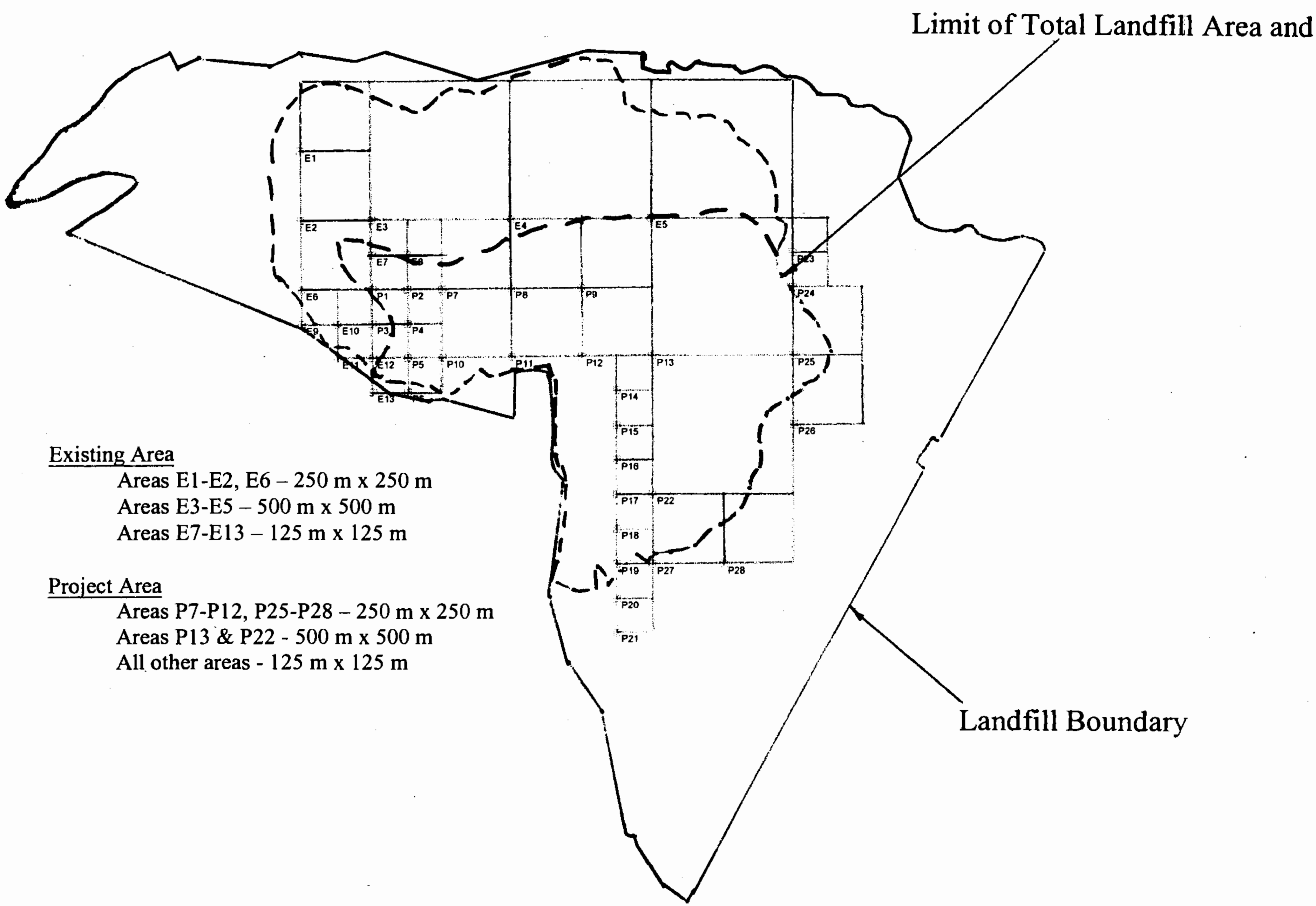

Figure 4.4-2
Cumulative Landfill Area Source Grid

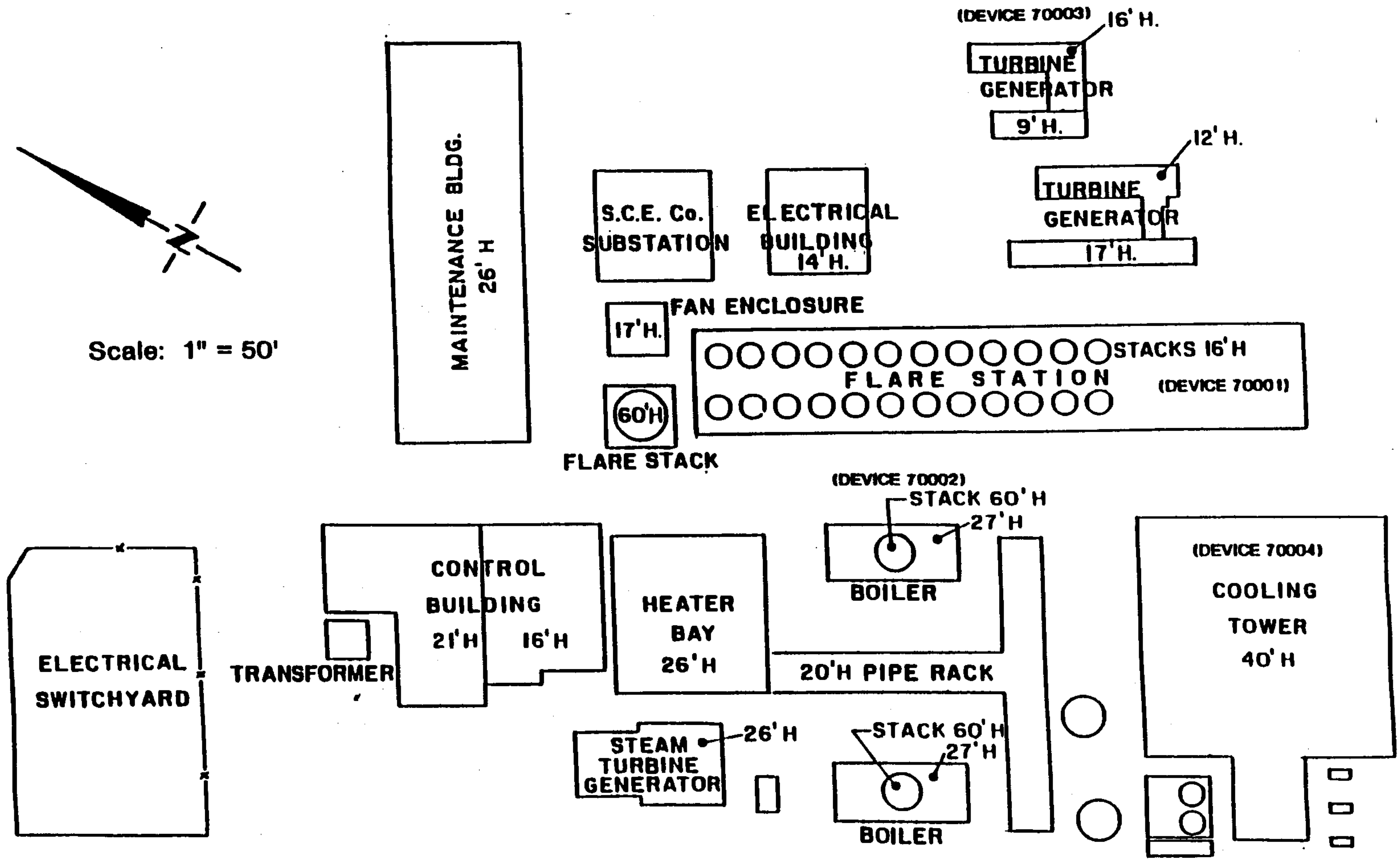

Figure 4.4-3
Plot Plan of the Puente Hills Energy Recovery from Landfill Gas (PERG) Facility

Risk Estimation Methods

Evaluation of human exposure requires consideration of emissions associated with landfill operations along with the transport of those emissions through the atmosphere. The potential risks associated with these emissions are a function of the magnitude of exposure and the toxicity or potency of the substances under evaluation. Results from the air dispersion modeling, which quantified the potential magnitude of exposure in the population surrounding the proposed project site, were used as inputs to the risk assessment model. The risk model uses exposure information in conjunction with toxicity and potency data to generate a final risk value.

The risk assessment considers both carcinogenic and noncarcinogenic health impacts. Carcinogenic assessment involves estimation of risk exposure for a hypothetical maximum exposed individual (MEI) in both a residential and employment area. The MEI was assumed to have characteristics that maximize exposure (i.e., inhales the maximum level of toxics for 70 and 46 years at residential and employment locations, respectively). Carcinogenic assessment also involves estimation of the cancer burden, or the number of excess cancers expected in the population as a result of exposure to emissions associated with the landfill operations. Noncarcinogenic assessment involves three noncancer health impacts: chronic, acute and interactive. Chronic and acute health impacts are due to long-term and short-term exposure, respectively. Acceptability is determined by comparing facility emission impacts at the maximum receptor, for each of these exposure scenarios, to acceptable exposure guidelines.

Cancer Risks

The risks of contracting cancer as a result of exposure to landfill emissions through inhalation and oral pathways over a lifetime were evaluated using the latest unit risk values published by OEHHA. These unit risk factors are listed in Table 4.4-11. The unit risk factors are derived from low dose potency slopes based upon occupational exposure or lifetime animal studies. In this assessment, the following equation is used for the determination of cancer risk.

$$\boxed{\text{Risk} = \text{Unit Risk Factor} \times \text{Dose}}$$

The population excess cancer burden is an estimate of the increased number of cancer cases in a population that result from exposure to emitted substances. The excess cancer burden is calculated for a population unit, usually a census tract. The census tracts considered in the analysis are those that are intersected by the 1 per million risk isopleth. The estimated individual risk for ambient air is determined at the population centroid, which is a location at which a calculated ambient concentration is assumed to represent the entire sub-area. The product of this estimated individual risk and the exposed population determines the excess cancer burden for each census tract. The sum of the excess cancer burden for each census tract gives the total estimate of the population excess cancer burden.

Table 4.4-11
Unit Risk Factors Used in Cancer Risk Calculations

Substance	Unit Risk $(\mu g/m^3)^{-1}$
Benzene	2.90E-05
Benzyl Chloride	4.90E-05
Carbon Tetrachloride	4.20E-05
Chloroform	5.30E-05
p-Dichlorobenzene (1)	1.10E-05
Diesel Exhaust	3.00E-04
Ethylene Dibromide	7.10E-05
Ethylene Dichloride	2.20E-05
Formaldehyse	6.60E-06
Methylene Chloride	1.00E-06
Perchloroethylene (1)	5.90E-06
Trichloroethylene (1)	2.00E-06
Vinyl Chloride	7.80E-05

Note: (1) multipathway compound

Noncancer Risks

The analysis of the noncancer toxic endpoints of substances is conducted on the basis of a no-effect threshold exposure. In other words, for noncancer health effects, there exists a threshold of exposure that must be exceeded for any adverse health impacts to occur. The risk assessment addressed three noncancer health impacts: chronic, acute and interactive.

Interactive health effects are determined by the calculation of a Hazard Index. The Hazard Index model assumes that the effects of a mixture of pollutants are additive as shown by the equation:

$$\text{Hazard Index} = \sum_{i=1}^{n} E_i/S_i$$

Where, E_i = exposure to i^{th} substance

S_i = health standard or guideline for the i^{th} substance

n = number of substances considered

The Hazard Index calculation is applied to groups of substances with a similar toxic endpoint or target organ. The evaluation considers 10 major types of noncancer toxic endpoints. Table 4.4-12 summarizes the major toxic endpoints or target organs for the substances being evaluated for chronic and acute exposure. In applying the Hazard Index model, only the substances categorized in the respiratory system are cumulatively evaluated for both the facility impact and background concentrations.

Table 4.4-12
Target Organs Affected by Toxic Air Contaminants

Substance	BL	CV	CNS/ PNS	EYE	KIDN	AL/ LV	REPR/ DEV	RESP
Benzene	C		C				A,C	
Benzyl chloride				A				A
Carbon tetrachloride							A	
Chlorine								A,C
Chloroform					C	C	A,C	
Diesel Exhaust								C
Formaldehyde				A,C				C
Hydrogen Sulfide								A,C
Methyl Chloroform			A,C					
Methylene Chloride		C	A,C					
Perchloroethylene			A	A	C	C		A
Toluene			A,C	A			C	A,C
Trichloroethylene			C	C				
Vinyl chloride			A	A				A
Xylenes			C	A				A,C

Notes:
- BL: Blood (hematopoietic) system
- CV: Cardiovascular system
- CNS/PNS: Central or peripheral nervous system
- EYE: Eye
- KIDN: Kidney
- AL/LV: Alimentary system and liver
- REPR/DEV: Reproductive system/Development
- RESP: Respiratory system
- A: Acute toxicity effects
- C: Chronic toxicity effects

4.4.3 Risk Characterization

Proposed Project

Cancer Risk

Two impact scenarios were considered in calculating the Maximum Exposed Individual (MEI): residential and employment. As shown in Table 4.4-13, the incremental lifetime risk of the theoretical MEI in a residential area is 1.16 per million, and in an employment area, 0.63 per million. The overall maximum is 3.40 per million and it occurs in an unpopulated area between the landfill boundary and the Rose Hills cemetery.

Table 4.4-13
Health Risk Impacts – Proposed Project

	Total[b]	Stationary[b]	Mobile[b]
Cancer Risk			
Maximum Individual Receptor	3.40	0.56	2.84
Maximum Residential Receptor	1.24	0.19	1.05
Maximum Employment	1.04	0.17	0.87
Non-cancer Risk			
Hazard Index – Chronic[a]	0.0133	0.0054	0.0079
Hazard Index – Acute[a]	0.0143	0.0136	0.0007

Notes: [a]Maximum individual receptor only.
[b]Per million.

The residential and employment maximum impact receptor sites are located approximately 110 meters northeast and 270 meters north of the property line, respectively. The majority of this risk is contributed by the additional dirt transport vehicle traffic, 1.05 per million- residential and 0.87 per million-employment. The UTM coordinates of the MEI at the residential and employment receptor site are (408500,3765000) and (408500,3765500), respectively. The locations of the MEI in residential and employment areas for the proposed project are presented in Figure 4.4-4.

Table 4.4-14 presents the multipathway, excess cancer burden results for the residential population in the 6 census tracts whose boundaries are intersected by the 1 per million cancer risk isopleth. The total cancer burden (0.036) is an order of magnitude below the limit of 0.5 established in SCAQMD Rules 1401 and 1402. This limit is based upon stationary sources. When only stationary sources of the proposed project are considered, the cancer burden is determined to be 0.025. The cancer burden for the proposed project would not be considered to be significant.

Table 4.4-14
Cancer Burden – Proposed Project

Census Tract	Population	Total	Stationary	Mobile
4082.02	2683	0.00085	0.00009	0.00076
4083.03	4556	0.00245	0.00058	0.00187
4084.01	4299	0.00173	0.00015	0.00159
4084.02	5793	0.02912	0.02418	0.00494
5003	3444	0.00066	0.00015	0.00052
5015.01	3144	0.00136	0.00019	0.00117
Total	**23919**	**0.03618**	**0.02534**	**0.01085**

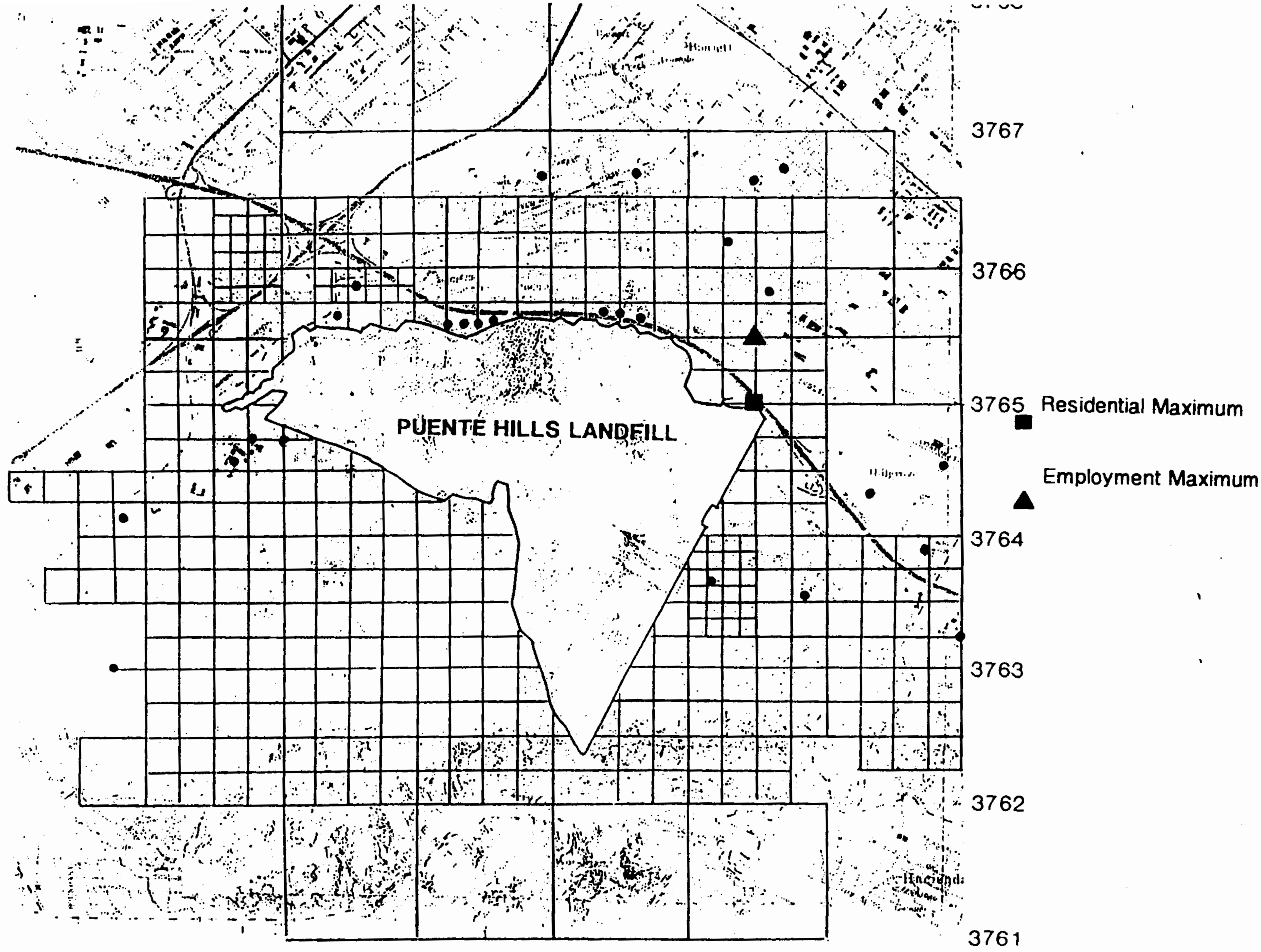

Figure 4.4-4

Locations of the Maximum Exposed Individuals in the Res tial and Employment Areas(Project)

Noncancer Impacts

The potential noncancer impacts were determined by comparing calculated exposure levels to established exposure guidelines. Both chronic and acute exposure assessments are for individual pollutants; thus, the MEI locations for individual pollutants may differ from the residential or employment area MEI discussed above. Therefore, for the noncancer impact assessment, the calculated exposure at the maximum receptor location was used to compare with the exposure guidelines.

Tables 4.4-15 and 4.4-16 present a comparison of the maximum annual and maximum one-hour ground-level impact, due to the proposed project operation, to the respective acceptable chronic and acute exposure levels. For all substances, the facility impact is several orders of magnitude lower than acceptable exposure levels. The annual background level of each substance is also provided for comparison. Background levels under acute exposure conditions were not available for comparison.

In addition to the evaluation of individual substances, a Hazard Index approach was used to evaluate the potential for the interactive impacts of a mixture of pollutants. This approach was utilized in determining chronic exposure at the maximum receptor locations. Results of the Hazard Index calculation for chronic exposure is presented in Table 4.4-17 and for acute exposure in Table 4.4-18. Per CAPCOA guidelines, the background exposure Hazard Index is calculated only for the respiratory system endpoint. For reference, acceptable exposure levels are also provided.

For each target organ, the calculated Hazard Index values were, in most cases, several orders of magnitude below 1.0, which is considered to be an acceptable threshold value by the OEHHA and SCAQMD. For the respiratory system endpoint, the chronic exposure Hazard Index results were well below the calculated background Hazard Index.

In conclusion, when compared to existing guidelines and regulations for acceptable levels of cancer and noncancer risks, the risks associated with the proposed project would not be considered to be significant.

Table 4.4-15
Comparison of Chronic Exposure Resulting from the Proposed Project to the Reference Exposure Levels

Substance	Reference Exposure Level[1] (µg/m³)	Background Level[2] (µg/m³)	Facility Impact (µg/m³)	Maximum Receptor Location X-coordinate (m)	Y-coordinate (m)
Benzene (Stationary)	60	2.87	0.00524	406500	37642500
Benzene (Mobile)	60	2.87	N/A	N/A	N/A
Chlorine	0.2	(3)	N/A	N/A	N/A
Chloroform	300	0.24	0.00005	406500	37642500
Diesel Exhaust	5	4.40	0.00945	406500	37642500
Formaldehyde	3	5.27	N/A	N/A	N/A
Hydrogen Sulfide	10	(3)	0.05219	406500	37642500
Methyl Chloroform	1000	(3)	0.00011	406500	37642500
Methylene Chloride	400	3.12	0.00212	406500	37642500
Perchloroethylene	35	1.49	0.00163	406500	37642500
Toluene	300	12.98	0.01943	406500	37642500
Trichloroethylene	600	0.27	0.00061	406500	37642500
Xylenes	700	(3)	0.01327	406500	37642500

Notes: (1) Obtained from the list entitled "All Chronic Reference Exposure Levels Adopted by OEHHA as of January 2001" published on the OEHHA website
(2) Source: MATES II Final Report, SCAQMD, 2000.
(3) Value not available.

Table 4.4-16
Comparison of Acute Exposure Resulting from the Proposed Project to the Acceptable Guidelines

Substance	Reference Exposure Level[1] (µg/m³)	Facility Impact (µg/m³)	Maximum Receptor Location X-coordinate (m)	Y-coordinate (m)
Benzene (Stationary)	1300	0.26679	405625	3764750
Benzene (Mobile)	1300	N/A	N/A	N/A
Benzyl Chloride	240	0.05821	406750	3763250
Carbon Tetrachloride	1900	0.00065	406500	3764250
Chlorine	210	N/A	N/A	N/A
Chloroform	150	0.00072	406500	3764250
Formaldehyde	94	N/A	N/A	N/A
Hydrogen Sulfide	42	0.55189	405625	3764750
Methyl Chloroform	68000	0.00316	406750	3763250
Methylene Chloride	14000	0.04962	405625	3764750
Perchloroethylene	20000	0.02654	405625	3764750
Toluene	37000	0.27065	405625	3764750
Vinyl Chloride	180000	0.00586	406750	3763250
Xylenes	22000	0.36617	405625	3764750

Notes: (1) Obtained from the list entitled "All Acute Reference Exposure Levels Adopted by OEHHA as of May 2000," published on the OEHHA website.

Table 4.4-17
Chronic Hazard Indices at Maximum Exposed Individual Residential Receptor

Chemical	Ref. Exp. Level ($\mu g/m^3$)	Annual Avg. Conc. ($\mu g/m^3$)	Hazard Index
Alimentary System / Liver			
Chloroform	300	0.000020	0.0000001
Perchloroethylene	35	0.000800	0.000023
		TOTAL=	**0.000023**
Cardiovascular System			
Methylene Chloride	400	0.001040	0.000003
		TOTAL=	**0.000003**
Development			
Benzene	60	0.002580	0.000043
Chloroform	300	0.000020	0.00000007
Toluene	300	0.009600	0.000032
		TOTAL=	**0.000075**
Eyes			
Formaldehyde	3	0.000000	0.000000
Trichloroethylene	600	0.000300	0.000001
		TOTAL=	**0.000001**
Hematopoietic System			
Benzene	60	0.002580	0.000043
		TOTAL=	**0.000043**
Kidneys			
Chloroform	300	0.000020	0.0000001
Perchloroethylene	35	0.000800	0.000023
		TOTAL=	**0.000023**
Nervous System			
Benzene	60	0.002580	0.000043
Methyl Chloroform	1,000	0.000060	0.0000001
Methylene Chloride	400	0.001040	0.000003
Toluene	300	0.009600	0.000032
Trichloroethylene	600	0.000300	0.000001
Xylenes	700	0.006550	0.000009
		TOTAL=	**0.000088**
Respiratory system			
Chlorine	0.2	------	-------
Diesel Exhaust	5	0.003510	0.000702
Formaldehyde	3	0.000000	0.000000
Hydrogen Sulfide	10	0.025760	0.002576
Toluene	300	0.009600	0.000032
Xylenes	700	0.006550	0.000009
		TOTAL	**0.003319**

Table 4.4-18
Acute Hazard Indices at Maximum Exposed Individual Residential Receptor

	Ref. Exp. Level (μg/m³)	Annual Avg. Conc. (μg/m³)	Hazard Index
Eyes			
Benzyl Chloride	240	0.02984	0.000124
Formaldehyde	94	-----	-----
Perchloroethylene	20,000	0.01401	0.000001
Toluene	37,000	0.14747	0.000004
Vinyl Chloride	180,000	0.003	0.000000
Xylenes	22,000	0.19896	0.000009
		TOTAL=	**0.000138**
Nervous System			
Methyl Chloroform	68,000	0.00117	0.000000
Methylene Chloride	14,000	0.02696	0.000002
Perchloroethylene	20,000	0.01401	0.000001
Toluene	37,000	0.14747	0.000004
Vinyl Chloride	180,000	0.003	0.000000
		TOTAL=	**0.000007**
Reproductive/ Development			
Benzene	1,300	0.102	0.000078
Carbon Tetrachloride	1,900	0.00019	0.000000
Chloroform	150	0.00013	0.000001
		TOTAL=	**0.000079**
Respiratory system			
Benzyl Chloride	240	0.02984	0.000124
Chlorine	210	-----	-----
Hydrogen Sulfide	42	0.29999	0.007143
Perchloroethylene	20,000	0.01401	0.000001
Toluene	37,000	0.14747	0.000004
Vinyl Chloride	180,000	0.003	0.000000
Xylenes	22,000	0.19896	0.000009
		TOTAL=	**0.007281**

Cumulative Project Impacts

This section presents the risk evaluation results for the cumulative project impacts, which include the proposed project and the existing landfill activities using the methods described in the previous sections. Two scenarios were considered within the cumulative analysis. In the first scenario, it was assumed that a 70% reduction in the diesel exhaust PM_{10} emissions from on-site non-road equipment would be achieved by mitigation measures that would be implemented over the remaining project life. The second scenario involves a 90% reduction in diesel PM_{10} emissions considering even more aggressive mitigation measures. In addition, an overall cumulative risk, which includes the potential cancer risks from nearby facilities, is discussed.

Cancer Risk

The incremental lifetime risk of the theoretical MEI in a residential area ranges from 9.85 to 17.12 per million (depending upon the degree of reduction in diesel non-road PM_{10} emissions) as shown in Table 4.4-19. For the employment area MEI, the cancer risk ranges from 8.23 to 14.25 per million. The majority of the calculated risk is attributable to diesel equipment PM_{10} emissions, both on-road and non-road. The risk due to diesel exhaust PM emissions ranges from 9.36 to 16.63 at the residential MEI and 7.75 to 13.76 at the employment MEI. The residential and employment maximum impacts are in close proximity to the project MEI locations, as shown in Figure 4.4-5.

Table 4.4-19
Cancer Health Risk Impacts of Combined Proposed and Existing Projects

	Total	Stationary	Mobile
Assuming 90% Diesel Exhaust PM Removal From On-site Heavy Duty Vehicles			
Maximum Residential Receptor	9.85	0.49	9.36
Maximum Employment Receptor	8.23	0.49	7.75
Assuming 70% Diesel Exhaust PM Removal From On-site Heavy Duty Vehicles			
Maximum Residential Receptor	17.12	0.49	16.63
Maximum Employment Receptor	14.25	0.49	13.76

Source: Sanitation Districts, 2000.

To determine the overall cumulative risk, the CARB AB 2588 (Air Toxics "Hotspots" Act) database was examined to obtain the risks reported by facilities located within the vicinity (a 2-mile radius) of the Puente Hills Landfill. It was discovered that there were 38 facilities located within the vicinity of the landfill that submitted AB 2588 Air Toxics Inventory Reports. These facilities and their reported TAC emissions are listed in Table D5-1 in Appendix D5 of this report. Only 2 of the 38 facilities were required to conduct a health risk assessment during the AB 2588 process. The Sanitation Districts' San Jose Creek Water Reclamation Plant (SJCWRP) reported a maximum residential risk of 0.7 per million for the 1991 inventory year. This facility is located about one-half mile north, northwest of the landfill, and approximately one-and-one-half miles from the landfill residential MEI location. The contribution from the SJCWRP to the cumulative risk at this receptor site is estimated to be less than 0.01 per million. The second facility, Quemetco, is a lead battery recycling facility located about one-half mile east, northeast of the Puente Hills Landfill. This facility reported a maximum residential risk of 16 per million for the 1989 inventory year. This maximum was located in the Hillgrove area north of the 60 Freeway, approximately one-half mile from the easternmost boundary of the landfill. The impact of this facility on the landfill residential MEI receptor site is estimated to be 1.1 per million since the receptor site is located only 50 meters inside of the one per million isopleth presented in the Quemetco HRA. Thus, the estimated cumulative risk at the residential MEI ranges from 10.96 to 18.23 per million. The SCAQMD's *Air Quality Analysis Guidance Handbook* and Rule 1401 establish a guideline of 10 per million as an acceptable risk level for new stationary sources of air toxics emissions. SCAQMD Rule 1402 identifies 100 per million as a significant risk level for all of the existing stationary equipment at a facility. The cumulative risk at this residential receptor site due to emissions from the stationary sources at the landfill and Quemetco is approximately 1.6 per million. In conclusion, when compared to existing guidelines and regulations for acceptable levels of cancer risk, the cumulative cancer risk associated with the proposed project would not be considered significant.

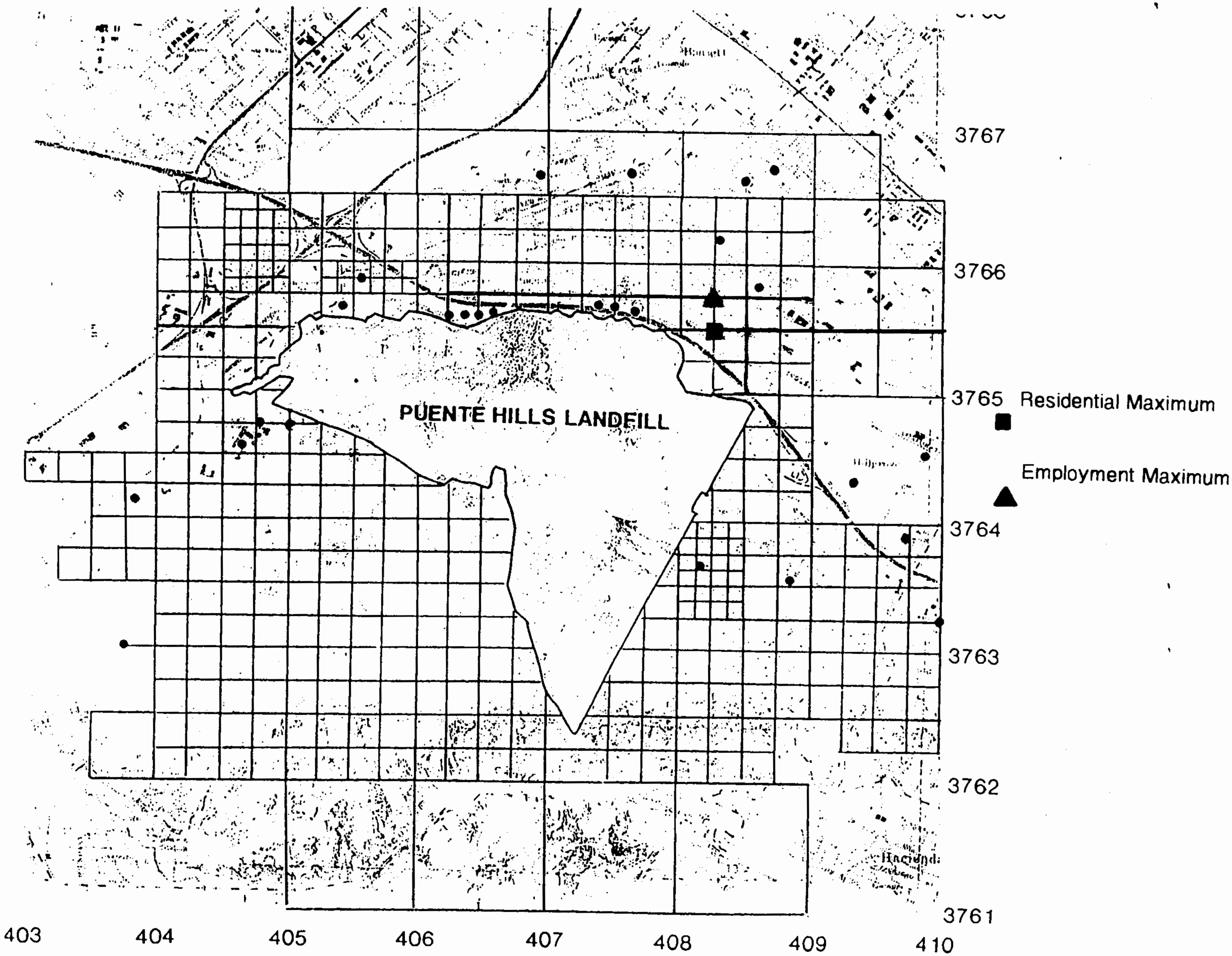

Figure 4.4–5

Locations of the Maximum Exposed Individuals in the Residential and Employment Areas(Cumulative)

To put these risk values into perspective, it is useful to compare with SCAQMD publications listing concentrations of carcinogens and estimated risk values in the background air in the South Coast Air Basin. The SCAQMD MATES-II study indicated that the average carcinogenic risk in the Basin is 1,400 per million, with a range of 1,120 per million to 1,740 per million among the ten fixed monitoring sites. SCAQMD estimated that about 70% of this risk could be attributed to diesel particulate emissions. To further assist the reader of this document in understanding the perspective of the cumulative health risks, an evaluation was conducted to determine the cancer risk due to 1998 diesel truck traffic on the 60 Freeway between the 605 Freeway and 7th Avenue as tabulated by Caltrans. Details of this analysis are presented in Section 5.0 below.

Table 4.4-20 presents the multipathway, excess cancer burden results for the projected 2010 residential and employment population in the 62 census tracts whose boundaries are intersected by the cumulative 1 per million cancer risk isopleth. The stationary source cancer burden (0.077 for the residential population and 0.037 for the employment population) is an order of magnitude below the limit of 0.5 established in SCAQMD Rules 1401 and 1402 for stationary sources. Therefore, the cumulative cancer burden for the proposed project would not be considered to be significant.

Table 4.4-20
Excess Residential and Employment Cancer Burden Due to Combined Proposed and Existing Project

Census Tract	2010 Pop.	Total Multipathway Burden	Stationary Source Burden	2010 Employment Pop.	Total Multipathway Burden	Stationary Source Burden
4040.000	5198	0.01007	0.00018	838	0.00162	0.00003
4041.000	6295	0.01255	0.00023	699	0.00139	0.00003
4042.000	8002	0.01457	0.00026	1101	0.00200	0.00004
4043.000	8546	0.01458	0.00030	1303	0.00222	0.00005
4044.000	10999	0.01583	0.00040	5364	0.00772	0.00020
4045.000	10528	0.02104	0.00043	2139	0.00427	0.00009
4046.000	1480	0.00079	0.00004	39200	0.02104	0.00117
4047.000	16904	0.02031	0.00122	2514	0.00302	0.00018
4048.000	14972	0.02194	0.00100	3013	0.00442	0.00020
4052.000	14091	0.02865	0.00088	4928	0.01002	0.00031
4053.000	8618	0.02634	0.00059	2491	0.00761	0.00017
4054.000	4477	0.01142	0.00025	1056	0.00269	0.00006
4055.000	6548	0.01873	0.00039	1802	0.00516	0.00011
4056.000	5168	0.01280	0.00026	1520	0.00376	0.00008
4057.000	7638	0.01889	0.00037	3399	0.00841	0.00017
4058.000	6345	0.01413	0.00027	1326	0.00295	0.00006
4059.000	3928	0.00797	0.00016	890	0.00181	0.00004
4060.000	5887	0.01322	0.00027	1747	0.00392	0.00008
4061.010	3623	0.00661	0.00013	8108	0.01480	0.00029
4061.020	5478	0.00876	0.00016	4013	0.00642	0.00012
4062.000	5120	0.00887	0.00016	3050	0.00528	0.00010
4065.000	6375	0.01315	0.00023	1236	0.00255	0.00005
4066.010	5048	0.00838	0.00015	813	0.00135	0.00002
4066.020	4765	0.01138	0.00021	848	0.00202	0.00004
4067.000	9143	0.02963	0.00061	10593	0.03433	0.00071

Continued on next page

Table 4.4-20 (Continued)

Census Tract	2010 Pop.	Total Multipathway Burden	Stationary Source Burden	2010 Employment Pop.	Total Multipathway Burden	Stationary Source Burden
4068.000	4279	0.01628	0.00039	1259	0.00479	0.00012
4069.000	8158	0.03415	0.00094	1802	0.00754	0.00021
4070.000	10440	0.02053	0.00121	8676	0.01706	0.00101
4071.020	5874	0.03580	0.00104	321	0.00196	0.00006
4072.000	8156	0.02251	0.00043	589	0.00163	0.00003
4073.000	8079	0.03280	0.00066	851	0.00346	0.00007
4074.000	1603	0.00708	0.00016	403	0.00178	0.00004
4075.000	8605	0.02312	0.00043	1534	0.00412	0.00008
4076.000	8915	0.01928	0.00039	1265	0.00274	0.00005
4071.010	6032	0.03051	0.00092	937	0.00474	0.00014
4077.000	13989	0.02251	0.00024	2666	0.00429	0.00005
4078.000	8956	0.01401	0.00019	2686	0.00420	0.00006
4079.000	5963	0.00983	0.00020	537	0.00089	0.00002
4082.020	3018	0.01333	0.00023	41322	0.18254	0.00320
4083.010	6027	0.01718	0.00115	1661	0.00474	0.00032
4083.020	4457	0.01074	0.00105	4099	0.00988	0.00096
4083.030	5176	0.03533	0.00316	447	0.00305	0.00027
4084.010	4453	0.02548	0.00036	604	0.00346	0.00005
4084.020	6076	0.12675	0.04757	2957	0.06169	0.02315
4085.010	3681	0.00796	0.00008	839	0.00181	0.00002
4085.020	9641	0.01604	0.00017	1145	0.00190	0.00002
4085.030	7234	0.00738	0.00007	608	0.00062	0.00001
4086.010	8986	0.01109	0.00010	666	0.00082	0.00001
4340.000	13139	0.01528	0.00139	2301	0.00268	0.00024
5003.000	3836	0.00939	0.00060	7035	0.01722	0.00110
5010.000	7813	0.01444	0.00050	1387	0.00256	0.00009
5012.000	5151	0.00826	0.00033	728	0.00117	0.00005
5013.000	6827	0.01939	0.00064	554	0.00157	0.00005
5014.000	4080	0.01413	0.00034	1203	0.00417	0.00010
5015.010	4164	0.02434	0.00064	1741	0.01018	0.00027
5015.020	8585	0.03327	0.00064	2885	0.01118	0.00022
5016.000	7802	0.01362	0.00015	1232	0.00215	0.00002
5018.000	10310	0.02170	0.00026	3824	0.00805	0.00010
5020.020	7153	0.01450	0.00021	2477	0.00502	0.00007
5021.000	5942	0.01731	0.00040	6530	0.01902	0.00044
5022.000	6163	0.01274	0.00038	1467	0.00303	0.00009
5023.000	8754	0.01749	0.00048	2725	0.00544	0.00015
Total		**1.16620**	**0.07727**		**0.58394**	**0.03726**

Noncancer Impacts

For the noncancer impact assessment, the calculated exposure at the respective maximum receptor locations was used to compare with the reference acceptable exposure levels for each substance. Tables 4.4-21 and 4.4-22 present the results of the exposure comparison for each substance. For all substances compared, the facility impact is several magnitudes lower than the acceptable exposure levels.

Table 4.4-21
Comparison of Chronic Exposure Resulting from Cumulative Impacts to the Reference Exposure Levels

Substance	Reference Exposure Level[1] (μg/m³)	Background Level[2] (μg/m³)	Facility Impact (μg/m³)	Maximum Receptor Location X-coordinate (m)	Y-coordinate (m)
Benzene (Stationary)	60	2.87	0.02845	406500	3765580
Benzene (Mobile)	60	2.87	0.00580	406500	3764250
Chlorine	0.2	(3)	0.000001	404500	3763250
Chloroform	300	0.24	0.00021	406500	3765580
Diesel Exhaust – 70%	5	4.40	0.14958	406500	3764250
Diesel Exhaust – 90%	5	4.40	0.08402	406500	3764250
Formaldehyde	3	5.27	0.0074	406250	3765580
Hydrogen Sulfide	10	(3)	0.2839	406500	3765580
Methyl Chloroform	1000	(3)	0.0006	406500	3765580
Methylene Chloride	400	3.12	0.01153	406500	3765580
Perchloroethylene	35	1.49	0.00878	406500	3765580
Toluene	300	12.98	0.10620	406500	3765580
Trichloroethylene	600	0.27	0.00330	406500	3765580
Xylenes	700	(3)	0.07248	406500	3765580

Notes: (1) Obtained from the list entitled "All Chronic Reference Exposure Levels Adopted by OEHHA as of January 2001" as published on OEHHA website.
(2) Source: MATES II Final Report, SCAQMD, 2000.
(3) Value not available.

Table 4.4-22
Comparison of Acute Exposure Resulting from Cumulative Impacts to the Acceptable Guidelines

Substance	Reference Exposure Level[1] (μg/m³)	Facility Impact (μg/m³)	Maximum Receptor Location X-coordinate (m)	Y-coordinate (m)
Benzene (Stationary)	1300	0.88215	405625	3764750
Benzene (Mobile)	1300	0.12150	405750	3764500
Benzyl Chloride	240	0.16796	406500	3765580
Carbon Tetrachloride	1900	0.00156	406250	3764250
Chlorine	210	0.00143	405250	3764500
Chloroform	150	0.00186	405750	3764500
Formaldehyde	94	0.11771	406250	3765580
Hydrogen Sulfide	42	1.72552	406500	3765580
Methyl Chloroform	68000	0.00935	405750	3764500
Methylene Chloride	14000	0.18896	405750	3764500
Perchloroethylene	20000	0.08314	406500	3765580
Toluene	37000	0.84396	406500	3765580
Vinyl Chloride	180000	0.01780	405750	3764500
Xylenes	22000	1.14896	406500	3765580

Notes: (1) Obtained from the list entitled "All Acute Reference Exposure Levels Adopted by OEHHA as of May 2000" as published on OEHHA website.

Results of the Hazard Index calculation for chronic exposure are presented in Tables 4.4-23 and 4.4-24. The results varied from 0.00001 to 0.01780 for the 90% reduction scenario and 0.00001 to 0.01860, for the 70% reduction scenario, depending upon the toxic endpoint. Notice that the location of the MEI receptor site changes between the two scenarios. For acute exposure, Hazard Index calculations are presented in Table 4.4-25. The results varied from 0.00002 to 0.03071, depending upon the endpoint. As these Hazard Index results indicate, the calculated values, in most cases, are several orders of magnitude below 1.0, which is considered an acceptable threshold value by the SCAQMD. Therefore, the noncancer impacts of the cumulative project would not be significant.

Table 4.4-23
Chronic Hazard Indices at Maximum Exposed Individual Residential Receptor for Cumulative Project Emissions Assuming 70% PM_{10} Removal from Diesel Exhaust

(UTM - 407500,3766000)

Toxic Endpoint/ Chemical	Ref. Exp. Level (μg/m³)	Annual Avg. Conc. (μg/m³)	Hazard Index
Alimentary System / Liver			
Chloroform	300	0.000080	0.0000003
Perchloroethylene	35	0.003530	0.000101
		TOTAL=	**0.000101**
Cardiovascular System			
Methylene Chloride	400	0.004650	0.000012
		TOTAL=	**0.000012**
Development			
Benzene	60	0.011620	0.000194
Chloroform	300	0.000080	0.00000027
Toluene	300	0.042610	0.000142033
		TOTAL=	**0.000336**
Eyes			
Formaldehyde	3	0.000490	0.000163
Trichloroethylene	600	0.001330	0.000002
		TOTAL=	**0.000166**
Hematopoietic System			
Benzene	60	0.011620	0.000194
		TOTAL=	**0.000194**
Kidneys			
Chloroform	300	0.000080	0.0000003
Perchloroethylene	35	0.003530	0.000101
		TOTAL=	**0.000101**
Nervous System			
Benzene	60	0.011620	0.000194
Methyl Chloroform	1,000	0.000240	0.000000
Methylene Chloride	400	0.004650	0.000012
Toluene	300	0.042610	0.000142
Trichloroethylene	600	0.001330	0.000002
Xylenes	700	0.029090	0.000042
		TOTAL=	**0.000391**
Respiratory system			
Chlorine	0.2	0.000000	0.000000
Diesel Exhaust (70% PM removal)	5	0.034340	0.006868
Formaldehyde	3	0.000490	0.000163
Hydrogen Sulfide	10	0.113880	0.011388
Toluene	300	0.042610	0.000142
Xylenes	700	0.029090	0.000042
		TOTAL=	**0.018603**

Table 4.4-24
Chronic Hazard Indices at Maximum Exposed Individual Residential Receptor for Cumulative Project Emissions Assuming 90% PM_{10} Removal from Diesel Exhaust

(UTM - 407750,3765750)

Toxic Endpoint/ Chemical	Ref. Exp. Level ($\mu g/m^3$)	Annual Avg. Conc. ($\mu g/m^3$)	Hazard Index
Alimentary System / Liver			
Chloroform	300	0.000090	0.0000003
Perchloroethylene	35	0.003720	0.000106
		TOTAL=	**0.000107**
Cardiovascular System			
Methylene Chloride	400	0.004900	0.000012
		TOTAL=	**0.000012**
Development			
Benzene	60	0.012330	0.000206
Chloroform	300	0.000090	0.00000030
Toluene	300	0.044970	0.0001499
		TOTAL=	**0.000356**
Eyes			
Formaldehyde	3	0.000560	0.000187
Trichloroethylene	600	0.001400	0.000002
		TOTAL=	**0.000189**
Hematopoietic System			
Benzene	60	0.012330	0.000206
		TOTAL=	**0.000206**
Kidneys			
Chloroform	300	0.000090	0.0000003
Perchloroethylene	35	0.003720	0.000106
		TOTAL=	**0.000107**
Nervous System			
Benzene	60	0.012330	0.000206
Methyl Chloroform	1,000	0.000260	0.000000
Methylene Chloride	400	0.004900	0.000012
Toluene	300	0.044970	0.000150
Trichloroethylene	600	0.001400	0.000002
Xylenes	700	0.030700	0.000044
		TOTAL=	**0.000414**
Respiratory system			
Chlorine	0.2	0.000000	0.000000
Diesel Exhaust (90% PM removal)	5	0.027000	0.005400
Formaldehyde	3	0.000560	0.000187
Hydrogen Sulfide	10	0.12210	0.012021
Toluene	300	0.044970	0.000150
Xylenes	700	0.030700	0.000044
		TOTAL=	**0.017801**

Table 4.4-25
Acute Hazard Indices at Maximum Exposed Individual Residential Receptor for Cumulative Project Emissions
(UTM-408125, 3764000)

Toxic Endpoint/ Chemical	Ref. Exp. Level ($\mu g/m^3$)	Annual Avg. Conc. ($\mu g/m^3$)	Hazard Index
Eyes			
Benzyl Chloride	240	0.112430	0.000468
Formaldehyde	94	0.028310	0.000301
Perchloroethylene	20,000	0.055650	0.000003
Toluene	37,000	0.564630	0.000015
Vinyl Chloride	180,000	0.011440	0.000000
Xylenes	22,000	0.768550	0.000035
		TOTAL=	**0.000823**
Nervous System			
Methyl Chloroform	68,000	0.005460	0.000000
Methylene Chloride	14,000	0.076920	0.000005
Perchloroethylene	20,000	0.055650	0.000003
Toluene	37,000	0.564630	0.000015
Vinyl Chloride	180,000	0.011440	0.000000
		TOTAL=	**0.000024**
Reproductive/Development			
Benzene	1,300	0.227430	0.000175
Carbon Tetrachloride	1,900	0.000290	0.000000
Chloroform	150	0.000480	0.000003
		TOTAL=	**0.000178**
Respiratory system			
Benzyl Chloride	240	0.112430	0.000468
Chlorine	210	0.000140	0.000001
Hydrogen Sulfide	42	1.154140	0.027480
Perchloroethylene	20,000	0.055650	0.000003
Toluene	37,000	0.564630	0.000015
Vinyl Chloride	180,000	0.011440	0.000000
Xylenes	22,000	0.768550	0.000035
		TOTAL=	**0.028002**

5.0 Risk Assessment of Diesel Truck Traffic on the 60 Freeway

5.1 Introduction

A health risk assessment (HRA) was conducted to determine the potential health impacts of the proposed continued operation of the Puente Hills Landfill (PHLF). The HRA analyzed the health impacts of the new sources of air toxics emissions associated with the proposed continued operations of the PHLF. These new sources included 24 modified flares, and the exhaust emissions from the 450 additional dirt trucks required for meeting the cover material needs of the proposed project. The HRA also examined the cumulative health impacts of the combined emissions from the new and existing sources at the landfill and other facilities in the vicinity that were listed in the CARB Air Toxics "Hot Spots" (AB 2588) database. The results of these analyses for the maximum exposed residential receptor site are presented in Table 5.1-1. Details of the procedures and modeling methodology of the HRA are presented in Section 4.0 of this Appendix.

Table 5.1-1
Risk Results from Three Emission Scenarios under the Proposed Continued Operation of the Puente Hills Landfill

Emission scenario	Maximum risk (residential receptor)
New sources only	1.24
Combined existing landfill sources and newly proposed sources	9.85 to 17.12
Cumulative risk from new and existing landfill sources and surrounding AB2588 facilities	10.96 to 18.23

The magnitude of these risk values can be put into perspective by comparing them to the cancer risks in the South Coast Air Basin as listed in SCAQMD publications. The SCAQMD MATES-II study indicates that the average cancer risk in the basin is 1,400 per million. The risk values ranged from 1,100 to 1,700 per million over the ten fixed monitoring sites used in the study. To provide additional perspective to these cumulative health risk calculations, an evaluation was conducted to determine the cancer risk due to diesel truck traffic on the 60 (Pomona) Freeway in the vicinity of the PHLF. This section describes the procedures used in conducting this risk assessment.

5.2 Description

A 2.3-mile segment of the 60 Freeway between the 605 Freeway and 7th Avenue was selected for this analysis. The CALTRANS average daily truck traffic counts on this freeway segment for 1998 were utilized in this analysis. The truck traffic was divided into three classifications, based on the number of axles: heavy-heavy duty (5 or more axles), medium-heavy duty (4 axles), and light-heavy duty (3 axles). The traffic volumes were as follows:

Table 5.2-1
Average Daily Truck Traffic Volume on the 60 Freeway

Truck Type	Average Daily Traffic
Heavy, heavy duty	25,123
Medium, heavy duty	1,780
Light, heavy duty	4,022

The CARB EMFAC2000 model was used to determine the diesel exhaust emission factor for each of the three diesel truck types (assuming average speed of 40 mph). The following equations were used to determine the emissions generated by the trucks on the freeway segment.

$$Q = EF \times Hours \times Trucks\ per\ hour\ / (61 \times 3600\ sec/hr)$$

Where, Q = emission rate, g/s
EF = emission factor, g/hr
Hours = number of hours that trucks take to traverse the 2.3-mile freeway segment (0.0575 hrs)
Trucks per hour = Total daily truck traffic divided by 24 hours (assumes truck traffic is uniformly distributed throughout the 24-hour period)
61 = the number of volume sources per freeway segment

The emissions are as follows:

Table 5.2-2
Diesel Exhaust PM_{10} Emission Rates from Truck Traffic on the 60 Freeway

Truck Type	Emission Factor (g/hr)	Time in Transit[a] (hr)	No. of trucks/hr	Emissions (g/s/volume source)
Heavy-heavy duty	16.529	0.0575	1047	0.00453
Medium-heavy duty	11.862	0.0575	74	0.000231
Light-heavy duty	2.345	0.0575	168	0.000103

(a) Number of hours truck travels through freeway segment = 2.3 miles/40 mph = 0.0575 hrs

5.3 Modeling Assumptions and Methodology

This truck traffic scenario was modeled as a line source using the U.S. EPA Industrial Source Complex Short-Term (ISC3) model. The freeway segment was divided into 61 adjoining volume sources, each 60 feet long by 60 feet wide, and, utilizing the "mixing zone model" as described in the CALINE4 users manual, the region directly over the freeway lanes was treated as a zone of uniform emissions and turbulence (CALTRANS, 1989). In this "mixing zone," the mechanical turbulence created by moving vehicles and the thermal turbulence created by hot vehicle exhaust are assumed to be the dominant dispersive mechanisms. Vehicle emissions are released and rapidly dispersed in the trailing wake of each vehicle. Further initial dispersion occurs through the action of turbulence created by other passing vehicles. Following this methodology, each volume source was assumed to have a uniform emission rate of 0.00486 grams/second, and an initial vertical dimension of 4.15 meters, which is the stack height for diesel trucks used by the CARB in the "Freeway" scenarios in the Diesel Risk Reduction Program (CARB, 2000). The initial lateral dimension was set at 60 meters, which is the width of the freeway.

All regulatory default options, with the exception of the calm processing option, were used in the modeling run, as recommended by the SCAQMD. Meteorological data consist of hourly surface data for the year 1981 from the SCAQMD Pico Rivera station and upper air mixing height information from the SCAQMD El Monte station.

5.4 Modeling Results

The results of the modeling indicated a maximum calculated cancer risk of 432 per million at a receptor site located within 30 meters of the freeway. Risks of 100 per million were commonly seen within 0.5 miles of the freeway, 200 per million within 0.25 miles, and 300 per million with 100 meters of the freeway.

These results are similar to modeling results obtained by the CARB in the Risk Characterization Scenarios in the Diesel Risk Reduction Program (CARB, 2000). The CARB analysis, which utilized the CALINE4 model and considered receptor sites as close as 20 meters from the edge of the freeway, yielded risks ranging from 100 to 200 per million for "low volume" freeways (2,000 trucks per day) and from 800 to 1,700 per million for "high volume" freeways (20,000 trucks per day).

5.5 Conclusions

This analysis considered risks associated with diesel truck traffic on a 2.3-mile segment of the 60 Freeway. Risks associated with the other vehicular traffic on this freeway or the traffic on the nearby 605 Freeway were not included.

The results of this analysis indicate that the 1.2 per million risk associated with new emission sources under the proposed continued operation of the PHLF are insignificant when compared to the risk associated with diesel truck traffic on the 60 Freeway. The combined risk from the new and existing emission sources at the landfill would increase the risk experienced at receptors near the freeway by between 2 and 4 percent over that from the diesel truck traffic. Therefore, it can be concluded that the health risks associated with emissions from the Puente Hills Landfill are insignificant when compared to background risk levels.

5.6 References

CALTRANS, 1989. CALINE4 – A Dispersion Model For Predicting Air Pollution Concentrations Near Roadways, Revised, June 1989. California Department of Transportation, Division of New Technology and Research.

CARB, 2000. Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-fueled Engines and Vehicles, Appendix VII: Risk Characterization Scenarios, October 2000. California Air Resources Board, Stationary Source Division – Mobile Source Control Division.

Appendix D1

Criteria Pollutant Emission Calculations for the Construction Activities at the Puente Hills Landfill

PUENTE HILLS LANDFILL
UNMITIGATED MOBILE EQUIPMENT EMISSIONS SUMMARY
EXISTING CONSTRUCTION ACTIVITIES

	CRITERIA POLLUTANT EMISSIONS (LBS/DAY)				
Construction Activity	**CO**	**ROG**	**NOx**	**SOx**	**PM10**
Paved Road Construction	45.04	11.54	114.27	4.64	7.64
Unpaved Road Construction	10.32	2.87	30.54	0.69	1.78
Liner Installation - clay	64.82	17.94	183.60	15.41	11.47
Liner Installation - pvc	42.14	10.62	107.92	6.36	6.88
Liner Installation - screen	32.30	8.91	88.63	8.42	6.31
Ground Water Monitoring Well	33.37	5.57	45.24	3.38	3.09
Subsurface Barrier	14.66	3.22	30.80	2.25	2.47
Drainage Facilities Construction	33.35	5.96	59.51	3.26	3.16
Landfill Gas Wells	58.86	10.17	82.14	6.77	5.78
Landfill Gas Trenches	25.74	6.79	63.14	5.36	4.66
Header Line	13.52	3.07	29.42	2.25	2.40

PUENTE HILLS LANDFILL

LANDFILL MOBILE EQUIPMENT EMISSIONS - PAVED ROAD CONSTRUCTION

UNMITIGATED

CRITERIA POLLUTANT EMISSIONS

Equipment Type	Number Used	Operating Units	CO Emissions: Emission Factor	CO Emissions: Total (lbs/day)	ROG Emissions: Emission Factor	ROG Emissions: Total (lbs/day)	NOx Emissions: Emission Factor	NOx Emissions: Total (lbs/day)	SOx Emissions: Emission Factor (3)	SOx Emissions: Total (lbs/day)	PM Emissions: Emission Factor	PM Emissions: Total (lbs/day)	Hp	Load Factor (5)
Rollers (1)	2	8 hrs	3.860 gm/hp-hr	9.17	1.170 gm/hp-hr	2.78	9.560 gm/hp-hr	22.70	0.002 lb/hp-hr	2.15	0.890 gm/hp-hr	2.11	99	0.68
Wheeled Loader (1)	1	8 hrs	3.880 gm/hp-hr	4.72	1.170 gm/hp-hr	1.43	9.580 gm/hp-hr	11.69	0.002 lb/hp-hr	1.11	0.890 gm/hp-hr	1.09	102	0.68
Scrapers (1)	0	6 hrs	3.130 gm/hp-hr	0.00	0.870 gm/hp-hr	0.00	9.280 gm/hp-hr	0.00	0.002 lb/hp-hr	0.00	0.540 gm/hp-hr	0.00	300	0.68
Motor Graders (1)	2	8 hrs	3.130 gm/hp-hr	20.65	0.870 gm/hp-hr	5.74	9.260 gm/hp-hr	61.08	0.086 lb/hr	1.38	0.540 gm/hp-hr	3.56	275	0.68
Tractor, Crawler/Dozer (1)	0	8 hrs	3.130 gm/hp-hr	0.00	0.870 gm/hp-hr	0.00	9.260 gm/hp-hr	0.00	0.002 lb/hp-hr	0.00	0.540 gm/hp-hr	0.00	320	0.68
Drilling Rig (3)	0	8 hrs	0.020 lb/hp-hr	0.00	0.003 lb/hp-hr	0.00	0.024 lb/hp-hr	0.00	0.002 lb/hp-hr	0.00	0.002 lb/hp-hr	0.00	209	0.68
MD Gasoline Truck (2)	1	8 hrs	121.978 gm/hr	2.15	10.469 gm/hr	0.18	10.635 gm/hr	0.19		NV (4)	0.410 gm/hr	0.01		
HD Diesel Truck (2)	7	6 hrs	67.646 gm/hr	8.35	11.379 gm/hr	1.40	150.740 gm/hr	18.61		NV (4)	7.065 gm/hr	0.87		
Total				45.04		11.54		114.27		4.64		7.64		

Notes:

(1) Emission Factors from California's Off-Road Large CI Engine Emission Inventory, CARB, 1999.

(2) Emission Factors from EMFAC2000 for year 1999. Assuming average speed of 5 mph, 70% humidity, summer conditions.

(3) Emission Factors from SCAQMD CEQA Air Quality Handbook

(4) No value calculated by EMFAC2000, but value would be insignificant.

(5) Load Factors from The Carl Moyer Program Guidelines - Incentives for Lower Emission Heavy Duty Engines, CARB, February 1, 1999.

PUENTE HILLS LANDFILL

LANDFILL MOBILE EQUIPMENT EMISSIONS - UNPAVED ROAD CONSTRUCTION

UNMITIGATED

CRITERIA POLLUTANT EMISSIONS

Equipment Type	Number Used	Operating Units	CO Emissions Emission Factor	CO Total (lbs/day)	ROG Emissions Emission Factor	ROG Total (lbs/day)	NOx Emissions Emission Factor	NOx Total (lbs/day)	SOx Emissions Emission Factor (3)	SOx Total (lbs/day)	PM Emissions Emission Factor	PM Total (lbs/day)	Hp	Load Factor (5)
Rollers (1)	0	8 hrs	3.860 gm/hp-hr	0.00	1.170 gm/hp-hr	0.00	9.560 gm/hp-hr	0.00	0.002 lb/hp-hr	0.00	0.890 gm/hp-hr	0.00	99	0.68
Wheeled Loader (1)	0	8 hrs	3.860 gm/hp-hr	0.00	1.170 gm/hp-hr	0.00	9.560 gm/hp-hr	0.00	0.002 lb/hp-hr	0.00	0.890 gm/hp-hr	0.00	102	0.68
Scrapers (1)	0	8 hrs	3.130 gm/hp-hr	0.00	0.870 gm/hp-hr	0.00	9.260 gm/hp-hr	0.00	0.002 lb/hp-hr	0.00	0.540 gm/hp-hr	0.00	300	0.68
Motor Graders (1)	1	8 hrs	3.130 gm/hp-hr	10.32	0.870 gm/hp-hr	2.87	9.260 gm/hp-hr	30.54	0.086 lb/hr	0.69	0.540 gm/hp-hr	1.78	275	0.68
Tractor, Crawler/Dozer (1)	0	8 hrs	3.130 gm/hp-hr	0.00	0.870 gm/hp-hr	0.00	9.260 gm/hp-hr	0.00	0.002 lb/hp-hr	0.00	0.540 gm/hp-hr	0.00	320	0.68
Drilling Rig (3)	0	8 hrs	0.020 lb/hp-hr	0.00	0.003 lb/hp-hr	0.00	0.024 lb/hp-hr	0.00	0.002 lb/hp-hr	0.00	0.002 lb/hp-hr	0.00	209	0.68
MD Gasoline Truck (2)	0	8 hrs	121.978 gm/hr	0.00	10.469 gm/hr	0.00	10.635 gm/hr	0.00		NV (4)	0.410 gm/hr	0.00		
HD Diesel Truck (2)	0	8 hrs	67.648 gm/hr	0.00	11.379 gm/hr	0.00	150.740 gm/hr	0.00		NV (4)	7.065 gm/hr	0.00		
Total				10.32		2.87		30.54		0.69		1.78		

Notes:
(1) Emission Factors from California's Off-Road Large CI Engine Emission Inventory, CARB, 1999.
(2) Emission Factors from EMFAC2000 for year 1999. Assuming average speed of 5 mph, 70% humidity, summer conditions.
(3) Emission Factors from SCAQMD CEQA Air Quality Handbook
(4) No value calculated by EMFAC2000, but value would be insignificant.
(5) Load Factors from The Carl Moyer Program Guidelines - Incentives for Lower Emission Heavy Duty Engines, CARB, February 1, 1999.

PUENTE HILLS LANDFILL
LANDFILL MOBILE EQUIPMENT EMISSIONS - LINER INSTALLATION (CLAY)
UNMITIGATED

CRITERIA POLLUTANT EMISSIONS

Equipment Type	Number Used	Operating Units	CO Emissions Emission Factor	CO Emissions Total (lbs/day)	ROG Emissions Emission Factor	ROG Emissions Total (lbs/day)	NOx Emissions Emission Factor	NOx Emissions Total (lbs/day)	SOx Emissions Emission Factor (3)	SOx Emissions Total (lbs/day)	PM Emissions Emission Factor	PM Emissions Total (lbs/day)	Hp	Load Factor (5)
Rollers (1)	2	8 hrs	3.860 gm/hp-hr	9.17	1.170 gm/hp-hr	2.78	9.560 gm/hp-hr	22.70	0.002 lb/hp-hr	2.15	0.890 gm/hp-hr	2.11	99	0.68
Wheeled Loader (1)	0	8 hrs	3.660 gm/hp-hr	0.00	1.170 gm/hp-hr	0.00	9.560 gm/hp-hr	0.00	0.002 lb/hp-hr	0.00	0.890 gm/hp-hr	0.00	102	0.68
Scrapers (1)	3	6 hrs	3.130 gm/hp-hr	25.34	0.870 gm/hp-hr	7.04	9.260 gm/hp-hr	74.96	0.002 lb/hp-hr	7.34	0.540 gm/hp-hr	4.37	300	0.68
Motor Graders (1)	1	8 hrs	3.130 gm/hp-hr	10.32	0.870 gm/hp-hr	2.87	9.260 gm/hp-hr	30.54	0.086 lb/hr	0.69	0.540 gm/hp-hr	1.78	275	0.68
Tractor, Crawler/Dozer (1)	2	6 hrs	3.130 gm/hp-hr	18.02	0.870 gm/hp-hr	5.01	9.260 gm/hp-hr	53.31	0.002 lb/hp-hr	5.22	0.540 gm/hp-hr	3.11	320	0.68
Drilling Rig (3)	0	8 hrs	0.020 lb/hp-hr	0.00	0.003 lb/hp-hr	0.00	0.024 lb/hp-hr	0.00	0.002 lb/hp-hr	0.00	0.002 lb/hp-hr	0.00	209	0.68
MD Gasoline Truck (2)	1	4 hrs	121.976 gm/hr	1.08	10.469 gm/hr	0.09	10.635 gm/hr	0.09		NV (4)	0.410 gm/hr	0.00		
HD Diesel Truck (2)	1	6 hrs	67.646 gm/hr	0.89	11.379 gm/hr	0.15	150.740 gm/hr	1.99		NV (4)	7.065 gm/hr	0.09		
Total				64.82		17.94		183.60		15.41		11.47		

Notes:
(1) Emission Factors from California's Off-Road Large CI Engine Emission Inventory, CARB, 1999.
(2) Emission Factors from EMFAC2000 for year 1999. Assuming average speed of 5 mph, 70% humidity, summer conditions.
(3) Emission Factors from SCAQMD CEQA Air Quality Handbook
(4) No value calculated by EMFAC2000, but value would be insignificant.
(5) Load Factors from The Carl Moyer Program Guidelines - Incentives for Lower Emission Heavy Duty Engines, CARB, February 1, 1999.

PUENTE HILLS LANDFILL
LANDFILL MOBILE EQUIPMENT EMISSIONS - LINER INSTALLATION (PVC)
UNMITIGATED

CRITERIA POLLUTANT EMISSIONS

Equipment Type	Number Used	Operating Units	CO Emissions Emission Factor	CO Total (lbs/day)	ROG Emissions Emission Factor	ROG Total (lbs/day)	NOx Emissions Emission Factor	NOx Total (lbs/day)	SOx Emissions Emission Factor (3)	SOx Total (lbs/day)	PM Emissions Emission Factor	PM Total (lbs/day)	Hp	Load Factor (5)
Rollers (1)	1	8 hrs	3.860 gm/hp-hr	4.58	1.170 gm/hp-hr	1.39	9.560 gm/hp-hr	11.35	0.002 lb/hp-hr	1.08	0.890 gm/hp-hr	1.06	99	0.68
Wheeled Loader (1)	1	8 hrs	3.860 gm/hp-hr	4.72	1.170 gm/hp-hr	1.43	9.560 gm/hp-hr	11.69	0.002 lb/hp-hr	1.11	0.890 gm/hp-hr	1.09	102	0.68
Scrapers (1)	0	8 hrs	3.130 gm/hp-hr	0.00	0.870 gm/hp-hr	0.00	9.260 gm/hp-hr	0.00	0.002 lb/hp-hr	0.00	0.540 gm/hp-hr	0.00	300	0.68
Motor Graders (1)	1	8 hrs	3.130 gm/hp-hr	10.32	0.870 gm/hp-hr	2.87	9.260 gm/hp-hr	30.54	0.086 lb/hr	0.69	0.540 gm/hp-hr	1.78	275	0.68
Tractor, Crawler/Dozer (1)	1	8 hrs	3.130 gm/hp-hr	12.01	0.870 gm/hp-hr	3.34	9.260 gm/hp-hr	35.54	0.002 lb/hp-hr	3.48	0.540 gm/hp-hr	2.07	320	0.68
Drilling Rig (3)	0	8 hrs	0.020 lb/hp-hr	0.00	0.003 lb/hp-hr	0.00	0.024 lb/hp-hr	0.00	0.002 lb/hp-hr	0.00	0.002 lb/hp-hr	0.00	209	0.68
MD Gasoline Truck (2)	1	8 hrs	121.978 gm/hr	2.15	10.469 gm/hr	0.18	10.635 gm/hr	0.19		NV (4)	0.410 gm/hr	0.01		
HD Diesel Truck (2)	7	8 hrs	67.648 gm/hr	8.35	11.379 gm/hr	1.40	150.740 gm/hr	18.61		NV (4)	7.065 gm/hr	0.87		
Total				42.14		10.62		107.92		6.36		6.88		

Notes:
(1) Emission Factors from California's Off-Road Large CI Engine Emission Inventory, CARB, 1999.
(2) Emission Factors from EMFAC2000 for year 1999. Assuming average speed of 5 mph, 70% humidity, summer conditions.
(3) Emission Factors from SCAQMD CEQA Air Quality Handbook
(4) No value calculated by EMFAC2000, but value would be insignificant.
(5) Load Factors from The Carl Moyer Program Guidelines - Incentives for Lower Emission Heavy Duty Engines, CARB, February 1, 1999.

PUENTE HILLS LANDFILL
LANDFILL MOBILE EQUIPMENT EMISSIONS - LINER INSTALLATION (SCREENING)
UNMITIGATED
CRITERIA POLLUTANT EMISSIONS

Equipment Type	Number Used	Operating Units	CO Emissions Emission Factor	CO Total (lbs/day)	ROG Emissions Emission Factor	ROG Total (lbs/day)	NOx Emissions Emission Factor	NOx Total (lbs/day)	SOx Emissions Emission Factor (3)	SOx Total (lbs/day)	PM Emissions Emission Factor	PM Total (lbs/day)	Hp	Load Factor (5)
Rollers (1)	0	8 hrs	3.860 gm/hp-hr	0.00	1.170 gm/hp-hr	0.00	9.560 gm/hp-hr	0.00	0.002 lb/hp-hr	0.00	0.890 gm/hp-hr	0.00	99	0.68
Wheeled Loader (1)	2	8 hrs	3.860 gm/hp-hr	9.44	1.170 gm/hp-hr	2.86	9.560 gm/hp-hr	23.39	0.002 lb/hp-hr	2.22	0.890 gm/hp-hr	2.18	102	0.68
Scrapers (1)	1	6 hrs	3.130 gm/hp-hr	8.45	0.870 gm/hp-hr	2.35	9.260 gm/hp-hr	24.99	0.002 lb/hp-hr	2.45	0.540 gm/hp-hr	1.46	300	0.68
Motor Graders (1)	0	8 hrs	3.130 gm/hp-hr	0.00	0.870 gm/hp-hr	0.00	9.260 gm/hp-hr	0.00	0.086 lb/hr	0.00	0.540 gm/hp-hr	0.00	275	0.68
Tractor, Crawler/Dozer (1)	1	6 hrs	3.130 gm/hp-hr	9.01	0.870 gm/hp-hr	2.50	9.260 gm/hp-hr	26.65	0.002 lb/hp-hr	2.61	0.540 gm/hp-hr	1.55	320	0.68
Portable I.C. Engine (3)	1	8 hrs	0.675 lb/hr	5.40	0.150 lb/hr	1.20	1.700 lb/hr	13.60	0.143 lb/hr	1.14	0.140 lb/hr	1.12		
MD Gasoline Truck (2)	0	8 hrs	121.978 gm/hr	0.00	10.469 gm/hr	0.00	10.635 gm/hr	0.00		NV (4)	0.410 gm/hr	0.00		
HD Diesel Truck (2)	0	8 hrs	67.646 gm/hr	0.00	11.379 gm/hr	0.00	150.740 gm/hr	0.00		NV (4)	7.065 gm/hr	0.00		
Total				32.30		8.91		88.63		8.42		6.31		

Notes:
(1) Emission Factors from California's Off-Road Large CI Engine Emission Inventory, CARB, 1999.
(2) Emission Factors from EMFAC2000 for year 1999. Assuming average speed of 5 mph, 70% humidity, summer conditions.
(3) Emission Factors from SCAQMD CEQA Air Quality Handbook
(4) No value calculated by EMFAC2000, but value would be insignificant.
(5) Load Factors from The Carl Moyer Program Guidelines - Incentives for Lower Emission Heavy Duty Engines, CARB, February 1, 1999.

PUENTE HILLS LANDFILL

LANDFILL MOBILE EQUIPMENT EMISSIONS - LANDFILL GAS WELL CONSTRUCTION

UNMITIGATED

CRITERIA POLLUTANT EMISSIONS

Equipment Type	Number Used	Operating Units	CO Emissions Emission Factor	CO Total (lbs/day)	ROG Emissions Emission Factor	ROG Total (lbs/day)	NOx Emissions Emission Factor	NOx Total (lbs/day)	SOx Emissions Emission Factor (3)	SOx Total (lbs/day)	PM Emissions Emission Factor	PM Total (lbs/day)	Hp	Load Factor (5)
Rollers (1)	0	8 hrs	3.860 gm/hp-hr	0.00	1.170 gm/hp-hr	0.00	9.560 gm/hp-hr	0.00	0.002 lb/hp-hr	0.00	0.890 gm/hp-hr	0.00	99	0.68
Wheeled Loader (1)	2	8 hrs	3.860 gm/hp-hr	9.44	1.170 gm/hp-hr	2.86	9.560 gm/hp-hr	23.39	0.002 lb/hp-hr	2.22	0.890 gm/hp-hr	2.18	102	0.68
Scrapers (1)	0	8 hrs	3.130 gm/hp-hr	0.00	0.870 gm/hp-hr	0.00	9.260 gm/hp-hr	0.00	0.002 lb/hp-hr	0.00	0.540 gm/hp-hr	0.00	300	0.68
Motor Graders (1)	0	8 hrs	3.130 gm/hp-hr	0.00	0.870 gm/hp-hr	0.00	9.260 gm/hp-hr	0.00	0.086 lb/hr	0.00	0.540 gm/hp-hr	0.00	275	0.68
Tractor, Crawler/Dozer (1)	0	8 hrs	3.130 gm/hp-hr	0.00	0.870 gm/hp-hr	0.00	9.260 gm/hp-hr	0.00	0.002 lb/hp-hr	0.00	0.540 gm/hp-hr	0.00	320	0.68
Drilling Rig (3)	2	8 hrs	0.020 lb/hp-hr	45.48	0.003 lb/hp-hr	6.82	0.024 lb/hp-hr	54.57	0.002 lb/hp-hr	4.55	0.002 lb/hp-hr	3.41	209	0.88
MD Gasoline Truck (2)	1	8 hrs	121.978 gm/hr	2.15	10.469 gm/hr	0.18	10.635 gm/hr	0.19		NV (4)	0.410 gm/hr	0.01		
HD Diesel Truck (2)	1.5	8 hrs	67.646 gm/hr	1.79	11.379 gm/hr	0.30	150.740 gm/hr	3.99		NV (4)	7.065 gm/hr	0.19		
Total				58.86		10.17		82.14		6.77		5.78		

Notes:
(1) Emission Factors from California's Off-Road Large CI Engine Emission Inventory, CARB, 1999.
(2) Emission Factors from EMFAC2000 for year 1999. Assuming average speed of 5 mph, 70% humidity, summer conditions.
(3) Emission Factors from SCAQMD CEQA Air Quality Handbook
(4) No value calculated by EMFAC2000, but value would be insignificant.
(5) Load Factors from The Carl Moyer Program Guidelines - Incentives for Lower Emission Heavy Duty Engines, CARB, February 1, 1999.

PUENTE HILLS LANDFILL

LANDFILL MOBILE EQUIPMENT EMISSIONS - GROUND WATER MONITORING WELL CONSTRUCTION

UNMITIGATED

			CRITERIA POLLUTANT EMISSIONS											
			CO Emissions		ROG Emissions		NOx Emissions		SOx Emissions		PM Emissions			
Equipment Type	Number Used	Operating Units	Emission Factor	Total (lbs/day)	Emission Factor	Total (lbs/day)	Emission Factor	Total (lbs/day)	Emission Factor (3)	Total (lbs/day)	Emission Factor	Total (lbs/day)	Hp	Load Factor (5)
Rollers (1)	0	8 hrs	3.860 gm/hp-hr	0.00	1.170 gm/hp-hr	0.00	9.560 gm/hp-hr	0.00	0.002 lb/hp-hr	0.00	0.890 gm/hp-hr	0.00	99	0.68
Wheeled Loader (1)	1	8 hrs	3.860 gm/hp-hr	4.72	1.170 gm/hp-hr	1.43	9.560 gm/hp-hr	11.69	0.002 lb/hp-hr	1.11	0.890 gm/hp-hr	1.09	102	0.68
Scrapers (1)	0	8 hrs	3.130 gm/hp-hr	0.00	0.870 gm/hp-hr	0.00	9.260 gm/hp-hr	0.00	0.002 lb/hp-hr	0.00	0.540 gm/hp-hr	0.00	300	0.68
Motor Graders (1)	0	8 hrs	3.130 gm/hp-hr	0.00	0.870 gm/hp-hr	0.00	9.260 gm/hp-hr	0.00	0.086 lb/hr	0.00	0.540 gm/hp-hr	0.00	275	0.68
Tractor, Crawler/Dozer (1)	0	8 hrs	3.130 gm/hp-hr	0.00	0.870 gm/hp-hr	0.00	9.260 gm/hp-hr	0.00	0.002 lb/hp-hr	0.00	0.540 gm/hp-hr	0.00	320	0.68
Drilling Rig (3)	1	8 hrs	0.020 lb/hp-hr	22.74	0.003 lb/hp-hr	3.41	0.024 lb/hp-hr	27.29	0.002 lb/hp-hr	2.27	0.002 lb/hp-hr	1.71	209	0.68
MD Gasoline Truck (2)	3	4 hrs	121.978 gm/hr	3.23	10.469 gm/hr	0.28	10.635 gm/hr	0.28		NV (4)	0.410 gm/hr	0.01		
HD Diesel Truck (2)	3	6 hrs	67.646 gm/hr	2.68	11.379 gm/hr	0.45	150.740 gm/hr	5.98		NV (4)	7.065 gm/hr	0.28		
Total				33.37		5.57		45.24		3.38		3.09		

Notes:

(1) Emission Factors from California's Off-Road Large CI Engine Emission Inventory, CARB, 1999.

(2) Emission Factors from EMFAC2000 for year 1999. Assuming average speed of 5 mph, 70% humidity, summer conditions.

(3) Emission Factors from SCAQMD CEQA Air Quality Handbook

(4) No value calculated by EMFAC2000, but value would be insignificant.

(5) Load Factors from The Carl Moyer Program Guidelines - Incentives for Lower Emission Heavy Duty Engines, CARB, February 1, 1999.

PUENTE HILLS LANDFILL
LANDFILL MOBILE EQUIPMENT EMISSIONS - SUBSURFACE BARRIER CONSTRUCTION
UNMITIGATED

CRITERIA POLLUTANT EMISSIONS

Equipment Type	Number Used	Operating Units	CO Emissions Emission Factor	CO Total (lbs/day)	ROG Emissions Emission Factor	ROG Total (lbs/day)	NOx Emissions Emission Factor	NOx Total (lbs/day)	SOx Emissions Emission Factor (3)	SOx Total (lbs/day)	PM Emissions Emission Factor	PM Total (lbs/day)	Hp	Load Factor (5)
Rollers (1)	0	8 hrs	3.860 gm/hp-hr	0.00	1.170 gm/hp-hr	0.00	9.560 gm/hp-hr	0.00	0.002 lb/hp-hr	0.00	0.890 gm/hp-hr	0.00	99	0.68
Wheeled Loader (1)	1	8 hrs	3.860 gm/hp-hr	4.72	1.170 gm/hp-hr	1.43	9.560 gm/hp-hr	11.69	0.002 lb/hp-hr	1.11	0.890 gm/hp-hr	1.09	102	0.68
Scrapers (1)	0	8 hrs	3.130 gm/hp-hr	0.00	0.870 gm/hp-hr	0.00	9.260 gm/hp-hr	0.00	0.002 lb/hp-hr	0.00	0.540 gm/hp-hr	0.00	300	0.68
Motor Graders (1)	0	8 hrs	3.130 gm/hp-hr	0.00	0.870 gm/hp-hr	0.00	9.260 gm/hp-hr	0.00	0.088 lb/hr	0.00	0.540 gm/hp-hr	0.00	275	0.68
Tractor, Crawler/Dozer (1)	0	8 hrs	3.130 gm/hp-hr	0.00	0.870 gm/hp-hr	0.00	9.260 gm/hp-hr	0.00	0.002 lb/hp-hr	0.00	0.540 gm/hp-hr	0.00	320	0.68
Portable I.C. Engine (3)	1	8 hrs	0.675 lb/hr	5.40	0.150 lb/hr	1.20	1.700 lb/hr	13.60	0.143 lb/hr	1.14	0.140 lb/hr	1.12		
MD Gasoline Truck (2)	1	8 hrs	121.978 gm/hr	2.15	10.469 gm/hr	0.18	10.635 gm/hr	0.19		NV (4)	0.410 gm/hr	0.01		
HD Diesel Truck (2)	2	8 hrs	67.646 gm/hr	2.39	11.379 gm/hr	0.40	150.740 gm/hr	5.32		NV (4)	7.065 gm/hr	0.25		
Total				14.66		3.22		30.80		2.25		2.47		

Notes:
(1) Emission Factors from California's Off-Road Large CI Engine Emission Inventory, CARB, 1999.
(2) Emission Factors from EMFAC2000 for year 1999. Assuming average speed of 5 mph, 70% humidity, summer conditions.
(3) Emission Factors from SCAQMD CEQA Air Quality Handbook
(4) No value calculated by EMFAC2000, but value would be insignificant.
(5) Load Factors from The Carl Moyer Program Guidelines - Incentives for Lower Emission Heavy Duty Engines, CARB, February 1, 1999.

PUENTE HILLS LANDFILL
LANDFILL MOBILE EQUIPMENT EMISSIONS - GAS TRENCH CONSTRUCTION
UNMITIGATED
CRITERIA POLLUTANT EMISSIONS

Equipment Type	Number Used	Operating Units	CO Emissions: Emission Factor	CO Emissions: Total (lbs/day)	ROG Emissions: Emission Factor	ROG Emissions: Total (lbs/day)	NOx Emissions: Emission Factor	NOx Emissions: Total (lbs/day)	SOx Emissions: Emission Factor (3)	SOx Emissions: Total (lbs/day)	PM Emissions: Emission Factor	PM Emissions: Total (lbs/day)	Hp	Load Factor (5)
Rollers (1)	0	6 hrs	3.880 gm/hp-hr	0.00	1.170 gm/hp-hr	0.00	9.560 gm/hp-hr	0.00	0.002 lb/hp-hr	0.00	0.890 gm/hp-hr	0.00	99	0.68
Wheeled Loader (1)	3	7 hrs	3.860 gm/hp-hr	12.39	1.170 gm/hp-hr	3.76	9.560 gm/hp-hr	30.70	0.002 lb/hp-hr	2.91	0.890 gm/hp-hr	2.86	102	0.68
Scrapers (1)	1	6 hrs	3.130 gm/hp-hr	8.45	0.870 gm/hp-hr	2.35	9.260 gm/hp-hr	24.99	0.002 lb/hp-hr	2.45	0.540 gm/hp-hr	1.46	300	0.68
Motor Graders (1)	0	8 hrs	3.130 gm/hp-hr	0.00	0.870 gm/hp-hr	0.00	9.260 gm/hp-hr	0.00	0.086 lb/hr	0.00	0.540 gm/hp-hr	0.00	275	0.68
Tractor, Crawler/Dozer (1)	0	8 hrs	3.130 gm/hp-hr	0.00	0.870 gm/hp-hr	0.00	9.260 gm/hp-hr	0.00	0.002 lb/hp-hr	0.00	0.540 gm/hp-hr	0.00	320	0.68
Portable I.C. Engine (3)	0	8 hrs	0.875 lb/hr	0.00	0.150 lb/hr	0.00	1.700 lb/hr	0.00	0.143 lb/hr	0.00	0.140 lb/hr	0.00		
MD Gasoline Truck (2)	1	6 hrs	121.978 gm/hr	1.61	10.469 gm/hr	0.14	10.835 gm/hr	0.14		NV (4)	0.410 gm/hr	0.01		
HD Diesel Truck (2)	2.75	8 hrs	67.646 gm/hr	3.28	11.379 gm/hr	0.55	150.740 gm/hr	7.31		NV (4)	7.065 gm/hr	0.34		
Total				25.74		6.79		63.14		5.36		4.66		

Notes:
(1) Emission Factors from California's Off-Road Large CI Engine Emission Inventory, CARB, 1999.
(2) Emission Factors from EMFAC2000 for year 1999. Assuming average speed of 5 mph, 70% humidity, summer conditions.
(3) Emission Factors from SCAQMD CEQA Air Quality Handbook
(4) No value calculated by EMFAC2000, but value would be insignificant.
(5) Load Factors from The Carl Moyer Program Guidelines - Incentives for Lower Emission Heavy Duty Engines, CARB, February 1, 1999.

PUENTE HILLS LANDFILL

LANDFILL MOBILE EQUIPMENT EMISSIONS - FLARE CONSTRUCTION

UNMITIGATED

CRITERIA POLLUTANT EMISSIONS

Equipment Type	Number Used	Operating Units	CO Emissions Emission Factor	CO Total (lbs/day)	ROG Emissions Emission Factor	ROG Total (lbs/day)	NOx Emissions Emission Factor	NOx Total (lbs/day)	SOx Emissions Emission Factor (3)	SOx Total (lbs/day)	PM Emissions Emission Factor	PM Total (lbs/day)	Hp	Load Factor (5)
Rollers (1)	0	8 hrs	3.860 gm/hp-hr	0.00	1.170 gm/hp-hr	0.00	9.560 gm/hp-hr	0.00	0.002 lb/hp-hr	0.00	0.890 gm/hp-hr	0.00	99	0.68
Wheeled Loader (1)	0	8 hrs	3.860 gm/hp-hr	0.00	1.170 gm/hp-hr	0.00	9.560 gm/hp-hr	0.00	0.002 lb/hp-hr	0.00	0.890 gm/hp-hr	0.00	102	0.68
Scrapers (1)	0	8 hrs	3.130 gm/hp-hr	0.00	0.870 gm/hp-hr	0.00	9.260 gm/hp-hr	0.00	0.002 lb/hp-hr	0.00	0.540 gm/hp-hr	0.00	300	0.68
Motor Graders (1)	0	8 hrs	3.130 gm/hp-hr	0.00	0.870 gm/hp-hr	0.00	9.260 gm/hp-hr	0.00	0.086 lb/hr	0.00	0.540 gm/hp-hr	0.00	275	0.68
Tractor, Crawler/Dozer (1)	0	8 hrs	3.130 gm/hp-hr	0.00	0.870 gm/hp-hr	0.00	9.260 gm/hp-hr	0.00	0.002 lb/hp-hr	0.00	0.540 gm/hp-hr	0.00	320	0.68
Portable I.C. Engine (3)	3	8 hrs	0.675 lb/hr	16.20	0.150 lb/hr	3.60	1.700 lb/hr	40.80	0.143 lb/hr	3.43	0.140 lb/hr	3.36		
MD Gasoline Truck (2)	1	6 hrs	121.978 gm/hr	1.61	10.489 gm/hr	0.14	10.635 gm/hr	0.14		NV (4)	0.410 gm/hr	0.01		
HD Diesel Truck (2)	1	6 hrs	67.646 gm/hr	0.89	11.379 gm/hr	0.15	150.740 gm/hr	1.99		NV (4)	7.065 gm/hr	0.09		
Total				18.71		3.89		42.93		3.43		3.46		

Notes:

(1) Emission Factors from California's Off-Road Large CI Engine Emission Inventory, CARB, 1999.

(2) Emission Factors from EMFAC2000 for year 1999. Assuming average speed of 5 mph, 70% humidity, summer conditions.

(3) Emission Factors from SCAQMD CEQA Air Quality Handbook

(4) No value calculated by EMFAC2000, but value would be insignificant.

(5) Load Factors from The Carl Moyer Program Guidelines - Incentives for Lower Emission Heavy Duty Engines, CARB, February 1, 1999.

PUENTE HILLS LANDFILL

LANDFILL MOBILE EQUIPMENT EMISSIONS - GAS HEADER LINE CONSTRUCTION

UNMITIGATED

CRITERIA POLLUTANT EMISSIONS

Equipment Type	Number Used	Operating Units	CO Emissions Emission Factor	CO Emissions Total (lbs/day)	ROG Emissions Emission Factor	ROG Emissions Total (lbs/day)	NOx Emissions Emission Factor	NOx Emissions Total (lbs/day)	SOx Emissions Emission Factor (3)	SOx Emissions Total (lbs/day)	PM Emissions Emission Factor	PM Emissions Total (lbs/day)	Hp	Load Factor (5)
Rollers (1)	0	8 hrs	3.860 gm/hp-hr	0.00	1.170 gm/hp-hr	0.00	9.560 gm/hp-hr	0.00	0.002 lb/hp-hr	0.00	0.890 gm/hp-hr	0.00	99	0.68
Wheeled Loader (1)	1	8 hrs	3.860 gm/hp-hr	4.72	1.170 gm/hp-hr	1.43	9.560 gm/hp-hr	11.69	0.002 lb/hp-hr	1.11	0.890 gm/hp-hr	1.09	102	0.68
Scrapers (1)	0	6 hrs	3.130 gm/hp-hr	0.00	0.870 gm/hp-hr	0.00	9.260 gm/hp-hr	0.00	0.002 lb/hp-hr	0.00	0.540 gm/hp-hr	0.00	300	0.68
Motor Graders (1)	0	8 hrs	3.130 gm/hp-hr	0.00	0.870 gm/hp-hr	0.00	9.260 gm/hp-hr	0.00	0.086 lb/hr	0.00	0.540 gm/hp-hr	0.00	275	0.68
Tractor, Crawler/Dozer (1)	0	8 hrs	3.130 gm/hp-hr	0.00	0.870 gm/hp-hr	0.00	9.260 gm/hp-hr	0.00	0.002 lb/hp-hr	0.00	0.540 gm/hp-hr	0.00	320	0.68
Portable I.C. Engine (3)	1	8 hrs	0.675 lb/hr	5.40	0.150 lb/hr	1.20	1.700 lb/hr	13.60	0.143 lb/hr	1.14	0.140 lb/hr	1.12		
MD Gasoline Truck (2)	1	6 hrs	121.978 gm/hr	1.61	10.469 gm/hr	0.14	10.635 gm/hr	0.14		NV (4)	0.410 gm/hr	0.01		
HD Diesel Truck (2)	2	6 hrs	67.646 gm/hr	1.79	11.379 gm/hr	0.30	150.740 gm/hr	3.99		NV (4)	7.065 gm/hr	0.19		
Total				13.52		3.07		29.42		2.25		2.40		

Notes:

(1) Emission Factors from California's Off-Road Large CI Engine Emission Inventory, CARB, 1999.

(2) Emission Factors from EMFAC2000 for year 1999. Assuming average speed of 5 mph, 70% humidity, summer conditions.

(3) Emission Factors from SCAQMD CEQA Air Quality Handbook

(4) No value calculated by EMFAC2000, but value would be insignificant.

(5) Load Factors from The Carl Moyer Program Guidelines - Incentives for Lower Emission Heavy Duty Engines, CARB, February 1, 1999.

PUENTE HILLS LANDFILL
LANDFILL MOBILE EQUIPMENT EMISSIONS - DRAINAGE FACILITIES CONSTRUCTION
UNMITIGATED

	CRITERIA POLLUTANT EMISSIONS														
			CO Emissions		ROG Emissions		NOx Emissions		SOx Emissions		PM Emissions				
Equipment Type	Number Used	Operating Units	Emission Factor	Total (lbs/day)	Emission Factor	Total (lbs/day)	Emission Factor	Total (lbs/day)	Emission Factor (3)	Total (lbs/day)	Emission Factor	Total (lbs/day)	Hp	Load Factor (5)
Rollers (1)	0	8 hrs	3.860 gm/hp-hr	0.00	1.170 gm/hp-hr	0.00	9.560 gm/hp-hr	0.00	0.002 lb/hp-hr	0.00	0.890 gm/hp-hr	0.00	99	0.68
Wheeled Loader (1)	0	8 hrs	3.860 gm/hp-hr	0.00	1.170 gm/hp-hr	0.00	9.560 gm/hp-hr	0.00	0.002 lb/hp-hr	0.00	0.890 gm/hp-hr	0.00	102	0.68
Scrapers (1)	1	8 hrs	3.130 gm/hp-hr	11.26	0.870 gm/hp-hr	3.13	9.260 gm/hp-hr	33.32	0.002 lb/hp-hr	3.26	0.540 gm/hp-hr	1.94	300	0.68
Motor Graders (1)	0	8 hrs	3.130 gm/hp-hr	0.00	0.870 gm/hp-hr	0.00	9.260 gm/hp-hr	0.00	0.066 lb/hr	0.00	0.540 gm/hp-hr	0.00	275	0.68
Tractor, Crawler/Dozer (1)	0	8 hrs	3.130 gm/hp-hr	0.00	0.870 gm/hp-hr	0.00	9.260 gm/hp-hr	0.00	0.002 lb/hp-hr	0.00	0.540 gm/hp-hr	0.00	320	0.68
Portable I.C. Engine (3)	0	8 hrs	0.875 lb/hr	0.00	0.150 lb/hr	0.00	1.700 lb/hr	0.00	0.143 lb/hr	0.00	0.140 lb/hr	0.00		
MD Gasoline Truck (2)	5	8 hrs	121.978 gm/hr	10.76	10.469 gm/hr	0.92	10.635 gm/hr	0.94		NV (4)	0.410 gm/hr	0.04		
HD Diesel Truck (2)	9.5	8 hrs	67.646 gm/hr	11.33	11.379 gm/hr	1.91	150.740 gm/hr	25.26		NV (4)	7.065 gm/hr	1.18		
Total				33.35		5.96		59.51		3.26		3.16		

Notes:
(1) Emission Factors from California's Off-Road Large CI Engine Emission Inventory, CARB, 1999.
(2) Emission Factors from EMFAC2000 for year 1999. Assuming average speed of 5 mph, 70% humidity, summer conditions.
(3) Emission Factors from SCAQMD CEQA Air Quality Handbook
(4) No value calculated by EMFAC2000, but value would be insignificant.
(5) Load Factors from The Carl Moyer Program Guidelines - Incentives for Lower Emission Heavy Duty Engines, CARB, February 1, 1999.

PUENTE HILLS LANDFILL
UNMITIGATED MOBILE EQUIPMENT EMISSIONS SUMMARY
PROPOSED CONSTRUCTION ACTIVITIES

Construction Activity	CRITERIA POLLUTANT EMISSIONS (LBS/DAY)				
	CO	ROG	NOx	SOx	PM10
Sewer Connection and Tank	32.60	8.13	77.71	4.45	5.16
Flare Installation	18.71	3.89	42.93	3.43	3.46
Sewer Upgrade (Scale House)	11.56	2.72	23.55	1.70	1.63
Sewer Upgrade (Crossroads Pkwy)	11.56	2.72	23.55	1.70	1.63

PUENTE HILLS LANDFILL

UNMITIGATED LANDFILL MOBILE EQUIPMENT EMISSIONS - SEWER UPGRADE (CROSSROADS PARKWAY)

			CRITERIA POLLUTANT EMISSIONS											
			CO Emissions		ROG Emissions		NOx Emissions		SOx Emissions		PM Emissions			
Equipment Type	Number Used	Operating Units	Emission Factor	Total (lbs/day)	Emission Factor	Total (lbs/day)	Emission Factor	Total (lbs/day)	Emission Factor (3)	Total (lbs/day)	Emission Factor	Total (lbs/day)	Hp	Load Factor (3,5)
Wheeled Loader (1)	1	8 hrs	3.860 gm/hp-hr	4.72	1.170 gm/hp-hr	1.43	9.560 gm/hp-hr	11.69	0.002 lb/hp-hr	1.11	0.890 gm/hp-hr	1.09	102	0.68
Backhoe (3)	1	8 hrs	0.015 lb/hp-hr	4.46	0.003 lb/hp-hr	0.89	0.022 lb/hp-hr	6.53	0.002 lb/hp-hr	0.59	0.001 lb/hp-hr	0.30	79	0.47
HD (Diesel) Truck (2)	2	8 hrs	87.646 gm/hr	2.39	11.379 gm/hr	0.40	150.740 gm/hr	5.32		NV (4)	7.065 gm/hr	0.25		
Total				11.56		2.72		23.55		1.70		1.63		

Notes:
(1) Emission Factors from California's Off-Road Large CI Engine Emission Inventory, CARB, 1999.
(2) Emission Factors from EMFAC2000 for year 1999. Assuming average speed of 5 mph, 70% humidity, summer conditions.
(3) Emission Factors from SCAQMD CEQA Air Quality Handbook
(4) No value calculated by EMFAC2000, but value would be insignificant.
(5) Load Factors from The Carl Moyer Program Guidelines - Incentives for Lower Emission Heavy Duty Engines, CARB, February 1, 1999, and SCAQMD CEQA Air Quality Handbook.

PUENTE HILLS LANDFILL

UNMITIGATED LANDFILL MOBILE EQUIPMENT EMISSIONS - SEWER UPGRADE (SCALEHOUSE)

			CRITERIA POLLUTANT EMISSIONS											
			CO Emissions		ROG Emissions		NOx Emissions		SOx Emissions		PM Emissions			
Equipment Type	Number Used	Operating Units	Emission Factor	Total (lbs/day)	Emission Factor	Total (lbs/day)	Emission Factor	Total (lbs/day)	Emission Factor (3)	Total (lbs/day)	Emission Factor	Total (lbs/day)	Hp	Load Factor (3,5)
Wheeled Loader (1)	**1**	**8 hrs**	**3.860 gm/hp-hr**	**4.72**	**1.170 gm/hp-hr**	**1.43**	**9.560 gm/hp-hr**	**11.69**	**0.002 lb/hp-hr**	**1.11**	**0.890 gm/hp-hr**	**1.09**	**102**	**0.68**
Backhoe (3)	**1**	**8 hrs**	**0.015 lb/hp-hr**	**4.46**	**0.003 lb/hp-hr**	**0.89**	**0.022 lb/hp-hr**	**6.53**	**0.002 lb/hp-hr**	**0.59**	**0.001 lb/hp-hr**	**0.30**	**79**	**0.47**
HD (Diesel) Truck (2)	**2**	**8 hrs**	**67.646 gm/hr**	**2.39**	**11.379 gm/hr**	**0.40**	**150.740 gm/hr**	**5.32**		NV (4)	**7.065 gm/hr**	**0.25**		
Total				**11.56**		**2.72**		**23.55**		**1.70**		**1.63**		

Notes:
(1) Emission Factors from California's Off-Road Large CI Engine Emission Inventory, CARB, 1999.
(2) Emission Factors from EMFAC2000 for year 1999. Assuming average speed of 5 mph, 70% humidity, summer conditions.
(3) Emission Factors from SCAQMD CEQA Air Quality Handbook
(4) No value calculated by EMFAC2000, but value would be insignificant.
(5) Load Factors from The Carl Moyer Program Guidelines - Incentives for Lower Emission Heavy Duty Engines, CARB, February 1, 1999, and SCAQMD CEQA Air Quality Handbook.

PUENTE HILLS LANDFILL

LANDFILL MOBILE EQUIPMENT EMISSIONS - FLARE MODIFICATION

UNMITIGATED

CRITERIA POLLUTANT EMISSIONS

Equipment Type	Number Used	Operating Units	CO Emissions Emission Factor	CO Emissions Total (lbs/day)	ROG Emissions Emission Factor	ROG Emissions Total (lbs/day)	NOx Emissions Emission Factor	NOx Emissions Total (lbs/day)	SOx Emissions Emission Factor (3)	SOx Emissions Total (lbs/day)	PM Emissions Emission Factor	PM Emissions Total (lbs/day)	Hp	Load Factor (5)
Portable I.C. Engine (3)	3	6 hrs	0.675 lb/hr	16.20	0.150 lb/hr	3.60	1.700 lb/hr	40.80	0.143 lb/hr	3.43	0.140 lb/hr	3.36		
MD Gasoline Truck (2)	1	8 hrs	121.978 gm/hr	1.61	10.469 gm/hr	0.14	10.635 gm/hr	0.14		NV (4)	0.410 gm/hr	0.01		
HD Diesel Truck (2)	1	6 hrs	67.646 gm/hr	0.89	11.379 gm/hr	0.15	150.740 gm/hr	1.99		NV (4)	7.065 gm/hr	0.09		
Total				18.71		3.89		42.93		3.43		3.46		

Notes:

(1) Emission Factors from California's Off-Road Large CI Engine Emission Inventory, CARB, 1999.

(2) Emission Factors from EMFAC2000 for year 1999. Assuming average speed of 5 mph, 70% humidity, summer conditions.

(3) Emission Factors from SCAQMD CEQA Air Quality Handbook

(4) No value calculated by EMFAC2000, but value would be insignificant.

(5) Load Factors from The Carl Moyer Program Guidelines - Incentives for Lower Emission Heavy Duty Engines, CARB, February 1, 1999.

PUENTE HILLS LANDFILL

UNMITIGATED LANDFILL MOBILE EQUIPMENT EMISSIONS - SEWER CONSTRUCTION

			CRITERIA POLLUTANT EMISSIONS											
			CO Emissions		ROG Emissions		NOx Emissions		SOx Emissions		PM Emissions			
Equipment Type	Number Used	Operating Units	Emission Factor	Total (lbs/day)	Emission Factor	Total (lbs/day)	Emission Factor	Total (lbs/day)	Emission Factor (3)	Total (lbs/day)	Emission Factor	Total (lbs/day)	Hp	Load Factor (3,5)
Crane (3)	1	4 hrs	0.009 lb/hp-hr	3.00	0.003 lb/hp-hr	1.00	0.023 lb/hp-hr	7.67	0.002 lb/hp-hr	0.67	0.002 lb/hp-hr	0.50	194	0.43
Wheeled Loader (1)	1	8 hrs	3.860 gm/hp-hr	4.72	1.170 gm/hp-hr	1.43	9.560 gm/hp-hr	11.69	0.002 lb/hp-hr	1.11	0.890 gm/hp-hr	1.09	102	0.68
Backhoe (3)	1	8 hrs	0.015 lb/hp-hr	4.46	0.003 lb/hp-hr	0.89	0.022 lb/hp-hr	6.53	0.002 lb/hp-hr	0.59	0.001 lb/hp-hr	0.30	79	0.47
Motor Graders (1)	1	8 hrs	3.130 gm/hp-hr	10.32	0.870 gm/hp-hr	2.87	9.260 gm/hp-hr	30.54	0.086 lb/hr	0.69	0.540 gm/hp-hr	1.78	275	0.68
Compactor (3)	1	8 hrs	0.007 lb/hp-hr	0.19	0.002 lb/hp-hr	0.06	0.020 lb/hp-hr	0.55	0.002 lb/hp-hr	0.06	0.001 lb/hp-hr	0.03	8	0.43
Welding Equipment (3)	1	6 hrs	0.011 lb/hp-hr	1.04	0.002 lb/hp-hr	0.19	0.018 lb/hp-hr	1.70	0.002 lb/hp-hr	0.19	0.001 lb/hp-hr	0.09	35	0.45
Portable I.C. Engine (1)	1	8 hrs	0.675 lb/hr	5.40	0.150 lb/hr	1.20	1.700 lb/hr	13.60	0.143 lb/hr	1.14	0.140 lb/hr	1.12	200	0.68
MD Gasoline Truck (2)	1	4 hrs	121.978 gm/hr	1.08	10.469 gm/hr	0.09	10.635 gm/hr	0.09		NV (4)	0.410 gm/hr	0.00		
HD (Alt. Fuel) Truck (2)	2	8 hrs	67.646 gm/hr	2.39	11.379 gm/hr	0.40	150.740 gm/hr	5.32		NV (4)	7.065 gm/hr	0.25		
Total				32.60		8.13		77.71		4.45		5.16		

Notes:
(1) Emission Factors from California's Off-Road Large CI Engine Emission Inventory, CARB, 1999.
(2) Emission Factors from EMFAC2000 for year 1999. Assuming average speed of 5 mph, 70% humidity, summer conditions.
(3) Emission Factors from SCAQMD CEQA Air Quality Handbook
(4) No value calculated by EMFAC2000, but value would be insignificant.
(5) Load Factors from The Carl Moyer Program Guidelines - Incentives for Lower Emission Heavy Duty Engines, CARB, February 1, 1999, and SCAQMD CEQA Air Quality Handbook.

PUENTE HILLS LANDFILL
MITIGATED MOBILE EQUIPMENT EMISSIONS SUMMARY
EXISTING AND PROPOSED CONSTRUCTION ACTIVITIES

Construction Activity	CRITERIA POLLUTANT EMISSIONS (LBS/DAY)				
	CO	ROG	NOx	SOx	PM10
Paved Road Construction	91.80	9.08	78.56	4.64	1.27
Unpaved Road Construction	8.41	0.99	22.76	0.69	0.40
Liner Installation - clay	58.29	6.60	135.76	15.41	1.89
Liner Installation - pvc	90.15	8.89	74.10	6.36	1.19
Liner Installation - screen	26.58	3.13	71.91	9.45	1.25
Gas Well Drilling/Installation	68.72	9.04	73.53	6.77	3.53
Ground Water Monitoring Well	51.37	6.00	38.85	3.38	1.88
Drainage Facilities Construction	111.95	10.13	37.46	3.26	0.53
Subsurface Barrier	24.56	2.26	11.08	1.11	0.17
Sewer Connection and Tank	43.15	5.29	64.63	7.78	1.55
Landfill Gas Trenches	42.24	4.23	44.15	5.36	0.73
Flare Installation	27.78	2.96	50.79	6.53	0.87
Sewer Upgrade (Scale House)	22.54	2.22	15.19	1.70	0.24
Sewer Upgrade (Crossroads Pkwy)	22.54	2.22	15.19	1.70	0.24
Header Line	25.32	2.51	26.97	3.29	0.45

PUENTE HILLS LANDFILL

LANDFILL MOBILE EQUIPMENT EMISSIONS - PAVED ROAD CONSTRUCTION

MITIGATED

			CRITERIA POLLUTANT EMISSIONS														
			CO Emissions			ROG Emissions			NOx Emissions			SOx Emissions			PM Emissions				
Equipment Type	Number Used	Operating Units	Emission Factor		Total (lbs/day)	Emission Factor		Total (lbs/day)	Emission Factor		Total (lbs/day)	Emission Factor (3)		Total (lbs/day)	Emission Factor		Total (lbs/day)	Hp	Load Factor (5)
Rollers (1)	2	6 hrs	2.550	gm/hp-hr	6.06	0.300	gm/hp-hr	0.71	6.900	gm/hp-hr	16.38	0.002	lb/hp-hr	2.15	0.120	gm/hp-hr	0.28	99	0.68
Wheeled Loader (1)	1	6 hrs	2.550	gm/hp-hr	3.12	0.300	gm/hp-hr	0.37	6.900	gm/hp-hr	8.44	0.002	lb/hp-hr	1.11	0.120	gm/hp-hr	0.15	102	0.68
Motor Graders (1)	2	8 hrs	2.550	gm/hp-hr	16.82	0.300	gm/hp-hr	1.98	6.900	gm/hp-hr	45.51	0.086	lb/hr	1.38	0.120	gm/hp-hr	0.79	275	0.68
MD Gasoline Truck (2)	1	8 hrs	209.500	gm/hr	3.69	13.595	gm/hr	0.24	22.852	gm/hr	0.40			NV(4)	0.563	gm/hr	0.01		
HD Gasoline (Alt. Fuel) Truck (2)	7	8 hrs	503.120	gm/hr	62.11	46.685	gm/hr	5.79	63.365	gm/hr	7.82			NV(4)	0.281	gm/hr	0.03		
Total					91.80			9.08			78.56			4.64			1.27		

Notes:

(1) Emissions calculated using emission factors from California's Off-Road Large CI Engine Emission Inventory (CARB, 1999), and assumed 70% reduction of CO, ROG and PM with use of catalytic oxidation filter traps, 29% reduction of NOx with mix of older engines and new (rebuilt) to meet 1996 U.S. EPA NOx standard.

(2) Emission Factors from EMFAC2000 for gasoline-powered vehicles for year 2001. Assuming average speed of 15 mph, 70% humidity, summer conditions.

(3) Emission Factors from SCAQMD CEQA Air Quality Handbook

(4) No value calculated by EMFAC2000, but value would be insignificant.

(5) Load Factors from The Carl Moyer Program Guidelines - Incentives for Lower Emission Heavy Duty Engines, CARB, February 1, 1999.

PUENTE HILLS LANDFILL
LANDFILL MOBILE EQUIPMENT EMISSIONS - UNPAVED ROAD CONSTRUCTION
MITIGATED

				CRITERIA POLLUTANT EMISSIONS																
				CO Emissions			ROG Emissions			NOx Emissions			SOx Emissions			PM Emissions				
Equipment Type	Number Used	Operating Units		Emission Factor		Total (lbs/day)	Emission Factor		Total (lbs/day)	Emission Factor		Total (lbs/day)	Emission Factor (2)		Total (lbs/day)	Emission Factor		Total (lbs/day)	Hp	Load Factor (3)
Motor Graders (1)	1	8	hrs	2.550	gm/hp-hr	8.41	0.300	gm/hp-hr	0.99	6.900	gm/hp-hr	22.76	0.086	lb/hr	0.69	0.120	gm/hp-hr	0.40	275	0.68
Total						8.41			0.99			22.76			0.69			0.40		

Notes:
(1) Emissions calculated using emission factors from California's Off-Road Large CI Engine Emission Inventory (CARB, 1999), and assumed 70% reduction of CO, ROG and PM with use of catalytic oxidation filter traps, 29% reduction of NOx with mix of older engines and new (rebuilt) to meet 1996 U.S. EPA NOx standard.
(2) Emission Factors from SCAQMD CEQA Air Quality Handbook
(3) Load Factors from The Carl Moyer Program Guidelines - Incentives for Lower Emission Heavy Duty Engines, CARB, February 1, 1999.

PUENTE HILLS LANDFILL
LANDFILL MOBILE EQUIPMENT EMISSIONS - LINER INSTALLATION (CLAY)
MITIGATED

			CRITERIA POLLUTANT EMISSIONS															
			CO Emissions			ROG Emissions			NOx Emissions			SOx Emissions			PM Emissions				
Equipment Type	Number Used	Operating Units		Emission Factor	Total (lbs/day)	Emission Factor		Total (lbs/day)	Emission Factor		Total (lbs/day)	Emission Factor (3)		Total (lbs/day)	Emission Factor		Total (lbs/day)	Hp	Load Factor (5)

Equipment Type	Number Used	Operating Units		CO Emission Factor		CO Total (lbs/day)	ROG Emission Factor		ROG Total (lbs/day)	NOx Emission Factor		NOx Total (lbs/day)	SOx Emission Factor (3)		SOx Total (lbs/day)	PM Emission Factor		PM Total (lbs/day)	Hp	Load Factor (5)
Rollers (1)	2	8	hrs	2.550	gm/hp-hr	6.06	0.300	gm/hp-hr	0.71	6.900	gm/hp-hr	16.38	0.002	lb/hp-hr	2.15	0.120	gm/hp-hr	0.28	99	0.68
Scrapers (1)	3	6	hrs	2.550	gm/hp-hr	20.64	0.300	gm/hp-hr	2.43	6.900	gm/hp-hr	55.86	0.002	lb/hp-hr	7.34	0.120	gm/hp-hr	0.97	300	0.68
Motor Graders (1)	1	8	hrs	2.550	gm/hp-hr	8.41	0.300	gm/hp-hr	0.99	6.900	gm/hp-hr	22.76	0.086	lb/hr	0.69	0.120	gm/hp-hr	0.40	275	0.68
Tractor, Crawler/Dozer (1)	2	6	hrs	2.550	gm/hp-hr	14.68	0.300	gm/hp-hr	1.73	6.900	gm/hp-hr	39.72	0.002	lb/hp-hr	5.22	0.040	gm/hp-hr	0.23	320	0.68
MD Gasoline Truck (2)	1	4	hrs	209.500	gm/mi	1.85	13.595	gm/hr	0.12	22.852	gm/hr	0.20			NV (4)	0.563	gm/hr	0.00		
HD Diesel Truck (2)	1	6	hrs	503.120	gm/hr	6.66	46.865	gm/hr	0.62	63.365	gm/hr	0.84			NV (4)	0.281	gm/hr	0.00		
Total						58.29			6.60			135.76			15.41			1.89		

Notes:
(1) Emissions calculated using emission factors from California's Off-Road Large CI Engine Emission Inventory (CARB, 1999), and assumed 70% reduction of CO, ROG and PM with use of catalytic oxidation filter traps, 29% reduction of NOx with mix of older engines and new (rebuilt) to meet 1996 U.S. EPA NOx standard.
(2) Emission Factors from EMFAC2000 for gasoline-powered vehicles for year 2001. Assuming average speed of 15 mph, 70% humidity, summer conditions.
(3) Emission Factors from SCAQMD CEQA Air Quality Handbook
(4) No value calculated by EMFAC2000, but value would be insignificant.
(5) Load Factors from The Carl Moyer Program Guidelines - Incentives for Lower Emission Heavy Duty Engines, CARB, February 1, 1999.

PUENTE HILLS LANDFILL
LANDFILL MOBILE EQUIPMENT EMISSIONS - LINER INSTALLATION (PVC)
MITIGATED

Equipment Type	Number Used	Operating Units		CO Emissions Emission Factor		CO Total (lbs/day)	ROG Emissions Emission Factor		ROG Total (lbs/day)	NOx Emissions Emission Factor		NOx Total (lbs/day)	SOx Emissions Emission Factor (3)		SOx Total (lbs/day)	PM Emissions Emission Factor		PM Total (lbs/day)	Hp	Load Factor (5)
Rollers (1)	1	8	hrs	2.550	gm/hp-hr	3.03	0.300	gm/hp-hr	0.36	6.900	gm/hp-hr	8.19	0.002	lb/hp-hr	1.08	0.120	gm/hp-hr	0.14	99	0.68
Wheeled Loader (1)	1	8	hrs	2.550	gm/hp-hr	3.12	0.300	gm/hp-hr	0.37	6.900	gm/hp-hr	8.44	0.002	lb/hp-hr	1.11	0.120	gm/hp-hr	0.15	102	0.68
Motor Graders (1)	1	8	hrs	2.550	gm/hp-hr	8.41	0.300	gm/hp-hr	0.99	6.900	gm/hp-hr	22.76	0.086	lb/hr	0.69	0.120	gm/hp-hr	0.40	275	0.68
Tractor, Crawler/Dozer (1)	1	8	hrs	2.550	gm/hp-hr	9.79	0.300	gm/hp-hr	1.15	6.900	gm/hp-hr	26.48	0.002	lb/hp-hr	3.48	0.120	gm/hp-hr	0.46	320	0.68
MD Gasoline Truck (2)	1	8	hrs	209.500	gm/hr	3.69	13.595	gm/hr	0.24	22.852	gm/hr	0.40			NV (4)	0.563	gm/hr	0.01		
HD (Alt. Fuel) Truck (2)	7	8	hrs	503.120	gm/hr	62.11	46.865	gm/hr	5.79	63.365	gm/hr	7.82			NV (4)	0.281	gm/hr	0.03		
Total						90.15			8.89			74.10			6.36			1.19		

Notes:
(1) Emissions calculated using emission factors from California's Off-Road Large CI Engine Emission Inventory (CARB, 1999), and assumed 70% reduction of CO, ROG and PM with use of catalytic oxidation filter traps, 29% reduction of NOx with mix of older engines and new (rebuilt) to meet 1996 U.S. EPA NOx standard.
(2) Emission Factors from EMFAC2000 for gasoline-powered vehicles for year 2001. Assuming average speed of 15 mph, 70% humidity, summer conditions.
(3) Emission Factors from SCAQMD CEQA Air Quality Handbook
(4) No value calculated by EMFAC2000, but value would be insignificant.
(5) Load Factors from The Carl Moyer Program Guidelines - Incentives for Lower Emission Heavy Duty Engines, CARB, February 1, 1999.

PUENTE HILLS LANDFILL
LANDFILL MOBILE EQUIPMENT EMISSIONS - LINER INSTALLATION (SCREENING)
MITIGATED

			CRITERIA POLLUTANT EMISSIONS																
			CO Emissions			ROG Emissions			NOx Emissions			SOx Emissions			PM Emissions				
Equipment Type	Number Used	Operating Units	Emission Factor		Total (lbs/day)	Emission Factor		Total (lbs/day)	Emission Factor		Total (lbs/day)	Emission Factor (2)		Total (lbs/day)	Emission Factor		Total (lbs/day)	Hp	Load Factor (3)
Wheeled Loader (1)	2	8 hrs	2.550	gm/hp-hr	6.24	0.300	gm/hp-hr	0.73	6.900	gm/hp-hr	16.88	0.002	lb/hp-hr	2.22	0.120	gm/hp-hr	0.29	102	0.68
Scrapers (1)	1	6 hrs	2.550	gm/hp-hr	6.88	0.300	gm/hp-hr	0.81	6.900	gm/hp-hr	18.62	0.002	lb/hp-hr	2.45	0.120	gm/hp-hr	0.32	300	0.68
Tractor, Crawler/Dozer (1)	1	6 hrs	2.550	gm/hp-hr	7.34	0.300	gm/hp-hr	0.86	6.900	gm/hp-hr	19.86	0.002	lb/hp-hr	2.61	0.120	gm/hp-hr	0.35	320	0.68
Portable I.C. Engine(1)	1	8 hrs	2.550	gm/hp-hr	6.12	0.300	gm/hp-hr	0.72	6.900	gm/hp-hr	16.55	0.002	lb/hp-hr	2.18	0.120	gm/hp-hr	0.29	200	0.68
Total					26.58			3.13			71.91			9.45			1.25		

Notes:
(1) Emissions calculated using emission factors from California's Off-Road Large CI Engine Emission Inventory (CARB, 1999), and assumed 70% reduction of CO, ROG and PM with use of catalytic oxidation filter traps, 29% reduction of NOx with mix of older engines and new (rebuilt) to meet 1996 U.S. EPA NOx standard.
(2) Emission Factors from SCAQMD CEQA Air Quality Handbook
(3) Load Factors from The Carl Moyer Program Guidelines - Incentives for Lower Emission Heavy Duty Engines, CARB, February 1, 1999.

PUENTE HILLS LANDFILL

LANDFILL MOBILE EQUIPMENT EMISSIONS - LANDFILL GAS WELL CONSTRUCTION

MITIGATED

CRITERIA POLLUTANT EMISSIONS

Equipment Type	Number Used	Operating Units		CO Emissions Emission Factor		CO Total (lbs/day)	ROG Emissions Emission Factor		ROG Total (lbs/day)	NOx Emissions Emission Factor		NOx Total (lbs/day)	SOx Emissions Emission Factor (3)		SOx Total (lbs/day)	PM Emissions Emission Factor		PM Total (lbs/day)	Hp	Load Factor (5)
Wheeled Loader (1)	2	8	hrs	2.550	gm/hp-hr	6.24	0.300	gm/hp-hr	0.73	6.900	gm/hp-hr	16.88	0.002	lb/hp-hr	2.22	0.040	gm/hp-hr	0.10	102	0.68
Drilling Rig (1)	2	8	hrs	0.020	lb/hp-hr	45.48	0.003	lb/hp-hr	6.82	0.024	lb/hp-hr	54.57	0.002	lb/hp-hr	4.55	0.002	lb/hp-hr	3.41	209	0.68
MD Gasoline Truck (2)	1	8	hrs	209.500	gm/hr	3.69	13.595	gm/hr	0.24	22.852	gm/hr	0.40			NV (4)	0.563	gm/hr	0.01		
HD (Alt. Fuel) Truck (2)	1.5	8	hrs	503.120	gm/hr	13.31	48.885	gm/hr	1.24	63.365	gm/hr	1.68			NV (4)	0.281	gm/hr	0.01		
Total						68.72			9.04			73.53			6.77			3.53		

Notes:
(1) Emissions calculated using emission factors from California's Off-Road Large CI Engine Emission Inventory (CARB, 1999), and assumed 70% reduction of CO, ROG and PM with use of catalytic oxidation filter traps, 29% reduction of NOx with mix of older engines and new (rebuilt) to meet 1996 U.S. EPA NOx standard.
(2) Emission Factors from EMFAC2000 for gasoline-powered vehicles for year 2001. Assuming average speed of 15 mph, 70% humidity, summer conditions.
(3) Emission Factors from SCAQMD CEQA Air Quality Handbook
(4) No value calculated by EMFAC2000, but value would be insignificant.
(5) Load Factors from The Carl Moyer Program Guidelines - Incentives for Lower Emission Heavy Duty Engines, CARB, February 1, 1999.

PUENTE HILLS LANDFILL
LANDFILL MOBILE EQUIPMENT EMISSIONS - GROUND WATER MONITORING WELL CONSTRUCTION
MITIGATED

			CRITERIA POLLUTANT EMISSIONS											
			CO Emissions		ROG Emissions		NOx Emissions		SOx Emissions		PM Emissions			
Equipment Type	Number Used	Operating Units	Emission Factor	Total (lbs/day)	Emission Factor	Total (lbs/day)	Emission Factor	Total (lbs/day)	Emission Factor (3)	Total (lbs/day)	Emission Factor	Total (lbs/day)	Hp	Load Factor (5)
Wheeled Loader (1)	1	8 hrs	2.550 gm/hp-hr	3.12	0.300 gm/hp-hr	0.37	6.900 gm/hp-hr	8.44	0.002 lb/hp-hr	1.11	0.120 gm/hp-hr	0.15	102	0.68
Drilling Rig (1)	1	8 hrs	0.020 lb/hp-hr	22.74	0.003 lb/hp-hr	3.41	0.024 lb/hp-hr	27.29	0.002 lb/hp-hr	2.27	0.002 lb/hp-hr	1.71	209	0.68
MD Gasoline Truck (2)	3	4 hrs	209.500 gm/hr	5.54	13.595 gm/hr	0.36	22.852 gm/hr	0.60		NV (4)	0.563 gm/hr	0.01		
HD (Alt. Fuel) Truck (2)	3	6 hrs	503.120 gm/hr	19.97	46.865 gm/hr	1.86	63.365 gm/hr	2.51		NV (4)	0.281 gm/hr	0.01		
Total				51.37		6.00		38.85		3.38		1.88		

Notes:
(1) Emissions calculated using emission factors from California's Off-Road Large CI Engine Emission Inventory (CARB, 1999), and assumed 70% reduction of CO, ROG and PM with use of catalytic oxidation filter traps, 29% reduction of NOx with mix of older engines and new (rebuilt) to meet 1996 U.S. EPA NOx standard.
(2) Emission Factors from EMFAC2000 for gasoline-powered vehicles for year 2001. Assuming average speed of 15 mph, 70% humidity, summer conditions.
(3) Emission Factors from SCAQMD CEQA Air Quality Handbook
(4) No value calculated by EMFAC2000, but value would be insignificant.
(5) Load Factors from The Carl Moyer Program Guidelines - Incentives for Lower Emission Heavy Duty Engines, CARB, February 1, 1999.

PUENTE HILLS LANDFILL
LANDFILL MOBILE EQUIPMENT EMISSIONS - DRAINAGE FACILITIES CONSTRUCTION
MITIGATED

			CRITERIA POLLUTANT EMISSIONS											
			CO Emissions		ROG Emissions		NOx Emissions		SOx Emissions		PM Emissions			
Equipment Type	Number Used	Operating Units	Emission Factor	Total (lbs/day)	Emission Factor	Total (lbs/day)	Emission Factor	Total (lbs/day)	Emission Factor (3)	Total (lbs/day)	Emission Factor	Total (lbs/day)	Hp	Load Factor (5)
Scrapers (1)	1	8 hrs	2.550 gm/hp-hr	9.17	0.300 gm/hp-hr	1.08	6.900 gm/hp-hr	24.83	0.002 lb/hp-hr	3.26	0.120 gm/hp-hr	0.43	300	0.68
MD Gasoline Truck (2)	5	8 hrs	209.500 gm/hr	18.47	13.595 gm/hr	1.20	22.652 gm/hr	2.02		NV (4)	0.563 gm/hr	0.05		
HD (Alt. Fuel) Truck (2)	9.5	8 hrs	503.120 gm/hr	84.30	48.865 gm/hr	7.85	63.365 gm/hr	10.62		NV (4)	0.261 gm/hr	0.05		
Total				111.95		10.13		37.46		3.26		0.53		

Notes:
(1) Emissions calculated using emission factors from California's Off-Road Large CI Engine Emission Inventory (CARB, 1999), and assumed 70% reduction of CO, ROG and PM with use of catalytic oxidation filter traps, 29% reduction of NOx with mix of older engines and new (rebuilt) to meet 1996 U.S. EPA NOx standard.
(2) Emission Factors from EMFAC2000 for gasoline-powered vehicles for year 2001. Assuming average speed of 15 mph, 70% humidity, summer conditions.
(3) Emission Factors from SCAQMD CEQA Air Quality Handbook
(4) No value calculated by EMFAC2000, but value would be insignificant.
(5) Load Factors from The Carl Moyer Program Guidelines - Incentives for Lower Emission Heavy Duty Engines, CARB, February 1, 1999.

PUENTE HILLS LANDFILL

LANDFILL MOBILE EQUIPMENT EMISSIONS - SUBSURFACE BARRIER CONSTRUCTION

MITIGATED

CRITERIA POLLUTANT EMISSIONS

Equipment Type	Number Used	Operating Units		CO Emissions Emission Factor		CO Total (lbs/day)	ROG Emissions Emission Factor		ROG Total (lbs/day)	NOx Emissions Emission Factor		NOx Total (lbs/day)	SOx Emissions Emission Factor (3)		SOx Total (lbs/day)	PM Emissions Emission Factor		PM Total (lbs/day)	Hp	Load Factor (5)
Wheeled Loader (1)	1	8	hrs	2.550	gm/hp-hr	3.12	0.300	gm/hp-hr	0.37	6.900	gm/hp-hr	8.44	0.002	lb/hp-hr	1.11	0.120	gm/hp-hr	0.15	102	0.68
Portable I.C. Engine (1)	1	8	hrs	0.020	lb/hp-hr	0.00	0.003	lb/hp-hr	0.00	0.024	lb/hp-hr	0.00	0.002	lb/hp-hr	0.00	0.002	lb/hp-hr	0.00		
MD Gasoline Truck (2)	1	8	hrs	209.500	gm/hr	3.69	13.595	gm/hr	0.24	22.852	gm/hr	0.40			NV (4)	0.563	gm/hr	0.01		
HD (Alt. Fuel) Truck (2)	2	8	hrs	503.120	gm/hr	17.75	46.865	gm/hr	1.65	63.365	gm/hr	2.24			NV (4)	0.281	gm/hr	0.01		
Total						24.56			2.26			11.08			1.11			0.17		

Notes:

(1) Emissions calculated using emission factors from California's Off-Road Large CI Engine Emission Inventory (CARB, 1999), and assumed 70% reduction of CO, ROG and PM with use of catalytic oxidation filter traps, 29% reduction of NOx with mix of older engines and new (rebuilt) to meet 1996 U.S. EPA NOx standard.

(2) Emission Factors from EMFAC2000 for gasoline-powered vehicles for year 2001. Assuming average speed of 15 mph, 70% humidity, summer conditions.

(3) Emission Factors from SCAQMD CEQA Air Quality Handbook

(4) No value calculated by EMFAC2000, but value would be insignificant.

(5) Load Factors from The Carl Moyer Program Guidelines - Incentives for Lower Emission Heavy Duty Engines, CARB, February 1, 1999.

PUENTE HILLS LANDFILL

MITIGATED LANDFILL MOBILE EQUIPMENT EMISSIONS - SEWER CONSTRUCTION

CRITERIA POLLUTANT EMISSIONS

Equipment Type	Number Used	Operating Units	CO Emissions Emission Factor	CO Emissions Total (lbs/day)	ROG Emissions Emission Factor	ROG Emissions Total (lbs/day)	NOx Emissions Emission Factor	NOx Emissions Total (lbs/day)	SOx Emissions Emission Factor (3)	SOx Emissions Total (lbs/day)	PM Emissions Emission Factor	PM Emissions Total (lbs/day)	Hp	Load Factor (3,5)
Crane (3)	1	4 hrs	0.009 lb/hp-hr	3.00	0.003 lb/hp-hr	1.00	0.023 lb/hp-hr	7.67	0.002 lb/hp-hr	0.67	0.002 lb/hp-hr	0.50	194	0.43
Wheeled Loader (1)	1	8 hrs	2.550 gm/hp-hr	3.12	0.300 gm/hp-hr	0.37	6.900 gm/hp-hr	8.44	0.002 lb/hp-hr	1.11	0.120 gm/hp-hr	0.15	102	0.68
Backhoe (3)	1	8 hrs	2.550 gm/hp-hr	1.67	0.300 gm/hp-hr	0.20	6.900 gm/hp-hr	4.52	0.002 lb/hp-hr	0.59	0.120 gm/hp-hr	0.08	79	0.47
Motor Graders (1)	1	8 hrs	2.550 gm/hp-hr	8.41	0.300 gm/hp-hr	0.99	6.900 gm/hp-hr	22.76	0.002 lb/hp-hr	2.99	0.120 gm/hp-hr	0.40	275	0.68
Compactor (3)	1	8 hrs	0.007 lb/hp-hr	0.19	0.002 lb/hp-hr	0.06	0.020 lb/hp-hr	0.55	0.002 lb/hp-hr	0.06	0.001 lb/hp-hr	0.03	8	0.43
Welding Equipment (3)	1	6 hrs	0.011 lb/hp-hr	1.04	0.002 lb/hp-hr	0.19	0.018 lb/hp-hr	1.70	0.002 lb/hp-hr	0.19	0.001 lb/hp-hr	0.09	35	0.45
Portable I.C. Engine (1)	1	8 hrs	2.550 gm/hp-hr	6.12	0.300 gm/hp-hr	0.72	6.900 gm/hp-hr	16.55	0.002 lb/hp-hr	2.18	0.120 gm/hp-hr	0.29	200	0.68
MD Gasoline Truck (2)	1	4 hrs	209.500 gm/hr	1.85	13.595 gm/hr	0.12	22.852 gm/hr	0.20		NV (4)	0.563 gm/hr	0.00		
HD (Alt. Fuel) Truck (2)	2	8 hrs	503.120 gm/hr	17.75	46.865 gm/hr	1.65	63.365 gm/hr	2.24		NV (4)	0.281 gm/hr	0.01		
Total				43.15		5.29		64.63		7.78		1.55		

Notes:

(1) Emissions calculated using emission factors from California's Off-Road Large CI Engine Emission Inventory (CARB, 1999), and assumed 70% reduction of CO, ROG and PM with use of catalytic oxidation filter traps, 29% reduction of NOx with mix of older engines and new (rebuilt) to meet 1996 U.S. EPA NOx standard.

(2) Emission Factors from EMFAC2000 for gasoline-powered vehicles for year 2001. Assuming average speed of 15 mph, 70% humidity, summer conditions.

(3) Emission Factors from SCAQMD CEQA Air Quality Handbook

(4) No value calculated by EMFAC2000, but value would be insignificant.

(5) Load Factors from The Carl Moyer Program Guidelines - Incentives for Lower Emission Heavy Duty Engines, CARB, February 1, 1999.

PUENTE HILLS LANDFILL

LANDFILL MOBILE EQUIPMENT EMISSIONS - GAS TRENCH CONSTRUCTION

MITIGATED

			CRITERIA POLLUTANT EMISSIONS											
			CO Emissions		ROG Emissions		NOx Emissions		SOx Emissions		PM Emissions			
Equipment Type	Number Used	Operating Units	Emission Factor	Total (lbs/day)	Emission Factor	Total (lbs/day)	Emission Factor	Total (lbs/day)	Emission Factor (3)	Total (lbs/day)	Emission Factor	Total (lbs/day)	Hp	Load Factor (5)
Wheeled Loader (1)	3	7 hrs	2.550 gm/hp-hr	8.19	0.300 gm/hp-hr	0.96	6.900 gm/hp-hr	22.16	0.002 lb/hp-hr	2.91	0.120 gm/hp-hr	0.39	102	0.68
Scrapers (1)	1	6 hrs	2.550 gm/hp-hr	6.88	0.300 gm/hp-hr	0.81	6.900 gm/hp-hr	18.62	0.002 lb/hp-hr	2.45	0.120 gm/hp-hr	0.32	300	0.68
MD Gasoline Truck (2)	1	6 hrs	209.500 gm/hr	2.77	13.595 gm/hr	0.18	22.852 gm/hr	0.30		NV (4)	0.563 gm/hr	0.01		
HD (Alt. Fuel) Truck (2)	2.75	8 hrs	503.120 gm/hr	24.40	46.865 gm/hr	2.27	63.365 gm/hr	3.07		NV (4)	0.281 gm/hr	0.01		
Total				42.24		4.23		44.15		5.36		0.73		

Notes:

(1) Emissions calculated using emission factors from California's Off-Road Large CI Engine Emission Inventory (CARB, 1999), and assumed 70% reduction of CO, ROG and PM with use of catalytic oxidation filter traps, 29% reduction of NOx with mix of older engines and new (rebuilt) to meet 1996 U.S. EPA NOx standard.

(2) Emission Factors from EMFAC2000 for gasoline-powered vehicles for year 2001. Assuming average speed of 15 mph, 70% humidity, summer conditions.

(3) Emission Factors from SCAQMD CEQA Air Quality Handbook

(4) No value calculated by EMFAC2000, but value would be insignificant.

(5) Load Factors from The Carl Moyer Program Guidelines - Incentives for Lower Emission Heavy Duty Engines, CARB, February 1, 1999.

PUENTE HILLS LANDFILL
LANDFILL MOBILE EQUIPMENT EMISSIONS - FLARE MODIFICATION
MITIGATED

				CRITERIA POLLUTANT EMISSIONS																	
				CO Emissions			ROG Emissions			NOx Emissions			SOx Emissions			PM Emissions					
Equipment Type	Number Used	Operating Units		Emission Factor		Total (lbs/day)	Emission Factor		Total (lbs/day)	Emission Factor		Total (lbs/day)	Emission Factor (3)		Total (lbs/day)	Emission Factor		Total (lbs/day)	Hp	Load Factor (5)
Portable I.C. Engine (1)	3	8	hrs	2.550	gm/hp-hr	18.35	0.300	gm/hp-hr	2.16	6.900	gm/hp-hr	49.65	0.002	lb/hp-hr	6.53	0.120	gm/hp-hr	0.86	200	0.68
MD Gasoline Truck (2)	1	6	hrs	209.500	gm/hr	2.77	13.595	gm/hr	0.18	22.852	gm/hr	0.30			NV (4)	0.563	gm/hr	0.01		
HD (Alt. Fuel) Truck (2)	1	6	hrs	503.120	gm/hr	6.66	46.865	gm/hr	0.62	63.365	gm/hr	0.84			NV (4)	0.281	gm/hr	0.00		
Total						27.78			2.96			50.79			6.53			0.87		

Notes:
(1) Emissions calculated using emission factors from California's Off-Road Large CI Engine Emission Inventory (CARB, 1999), and assumed 70% reduction of CO, ROG and PM with use of catalytic oxidation filter traps, 29% reduction of NOx with mix of older engines and new (rebuilt) to meet 1996 U.S. EPA NOx standard.
(2) Emission Factors from EMFAC2000 for gasoline-powered vehicles for year 2001. Assuming average speed of 15 mph, 70% humidity, summer conditions.
(3) Emission Factors from SCAQMD CEQA Air Quality Handbook
(4) No value calculated by EMFAC2000, but value would be insignificant.
(5) Load Factors from The Carl Moyer Program Guidelines - Incentives for Lower Emission Heavy Duty Engines, CARB, February 1, 1999.

PUENTE HILLS LANDFILL

MITIGATED LANDFILL MOBILE EQUIPMENT EMISSIONS - SEWER UPGRADE (SCALE HOUSE TO FIELD OFFICE)

			CRITERIA POLLUTANT EMISSIONS											
			CO Emissions		ROG Emissions		NOx Emissions		SOx Emissions		PM Emissions			
Equipment Type	Number Used	Operating Units	Emission Factor	Total (lbs/day)	Emission Factor	Total (lbs/day)	Emission Factor	Total (lbs/day)	Emission Factor (3)	Total (lbs/day)	Emission Factor	Total (lbs/day)	Hp	Load Factor (3,5)
Wheeled Loader (1)	1	8 hrs	2.550 gm/hp-hr	3.12	0.300 gm/hp-hr	0.37	6.900 gm/hp-hr	8.44	0.002 lb/hp-hr	1.11	0.120 gm/hp-hr	0.15	102	0.68
Backhoe (3)	1	8 hrs	2.550 gm/hp-hr	1.67	0.300 gm/hp-hr	0.20	6.900 gm/hp-hr	4.52	0.002 lb/hp-hr	0.59	0.120 gm/hp-hr	0.08	79	0.47
HD (Alt. Fuel) Truck (2)	2	8 hrs	503.120 gm/hr	17.75	46.865 gm/hr	1.65	63.365 gm/hr	2.24		NV (4)	0.281 gm/hr	0.01		
Total				22.54		2.22		15.19		1.70		0.24		

Notes:
(1) Emissions calculated using emission factors from California's Off-Road Large CI Engine Emission Inventory (CARB, 1999), and assumed 70% reduction of CO, ROG and PM with use of catalytic oxidation filter traps, 29% reduction of NOx with mix of older engines and new (rebuilt) to meet 1996 U.S. EPA NOx standard.
(2) Emission Factors from EMFAC2000 for gasoline-powered vehicles for year 2001. Assuming average speed of 15 mph, 70% humidity, summer conditions.
(3) Emission Factors from SCAQMD CEQA Air Quality Handbook
(4) No value calculated by EMFAC2000, but value would be insignificant.
(5) Load Factors from The Carl Moyer Program Guidelines - Incentives for Lower Emission Heavy Duty Engines, CARB, February 1, 1999.

PUENTE HILLS LANDFILL

MITIGATED LANDFILL MOBILE EQUIPMENT EMISSIONS - SEWER UPGRADE (CROSSROADS PARKWAY)

			CRITERIA POLLUTANT EMISSIONS											
			CO Emissions		ROG Emissions		NOx Emissions		SOx Emissions		PM Emissions			
Equipment Type	Number Used	Operating Units	Emission Factor	Total (lbs/day)	Emission Factor	Total (lbs/day)	Emission Factor	Total (lbs/day)	Emission Factor (3)	Total (lbs/day)	Emission Factor	Total (lbs/day)	Hp	Load Factor (3,5)
Wheeled Loader (1)	1	8 hrs	2.550 gm/hp-hr	3.12	0.300 gm/hp-hr	0.37	6.900 gm/hp-hr	8.44	0.002 lb/hp-hr	1.11	0.120 gm/hp-hr	0.15	102	0.68
Backhoe (3)	1	6 hrs	2.550 gm/hp-hr	1.67	0.300 gm/hp-hr	0.20	6.900 gm/hp-hr	4.52	0.002 lb/hp-hr	0.59	0.120 gm/hp-hr	0.08	79	0.47
HD (Alt. Fuel) Truck (2)	2	8 hrs	503.120 gm/hr	17.75	46.865 gm/hr	1.65	63.365 gm/hr	2.24		NV (4)	0.281 gm/hr	0.01		
Total				22.54		2.22		15.19		1.70		0.24		

Notes:

(1) Emissions calculated using emission factors from California's Off-Road Large CI Engine Emission Inventory (CARB, 1999), and assumed 70% reduction of CO, ROG and PM with use of catalytic oxidation filter traps, 29% reduction of NOx with mix of older engines and new (rebuilt) to meet 1996 U.S. EPA NOx standard.

(2) Emission Factors from EMFAC2000 for gasoline-powered vehicles for year 2001. Assuming average speed of 15 mph, 70% humidity, summer conditions.

(3) Emission Factors from SCAQMD CEQA Air Quality Handbook

(4) No value calculated by EMFAC2000, but value would be insignificant.

(5) Load Factors from The Carl Moyer Program Guidelines - Incentives for Lower Emission Heavy Duty Engines, CARB, February 1, 1999.

PUENTE HILLS LANDFILL
LANDFILL MOBILE EQUIPMENT EMISSIONS - GAS HEADER LINE CONSTRUCTION
MITIGATED

CRITERIA POLLUTANT EMISSIONS

Equipment Type	Number Used	Operating	Units	CO Emissions Emission Factor		CO Total (lbs/day)	ROG Emissions Emission Factor		ROG Total (lbs/day)	NOx Emissions Emission Factor		NOx Total (lbs/day)	SOx Emissions Emission Factor (3)		SOx Total (lbs/day)	PM Emissions Emission Factor		PM Total (lbs/day)	Hp	Load Factor (5)
Wheeled Loader (1)	1	8	hrs	2.550	gm/hp-hr	3.12	0.300	gm/hp-hr	0.37	6.900	gm/hp-hr	8.44	0.002	lb/hp-hr	1.11	0.120	gm/hp-hr	0.15	102	0.68
Portable I.C. Engine (1)	1	8	hrs	2.550	gm/hp-hr	6.12	0.300	gm/hp-hr	0.72	6.900	gm/hp-hr	16.55	0.002	lb/hp-hr	2.18	0.120	gm/hp-hr	0.29	200	0.68
MD Gasoline Truck (2)	1	6	hrs	209.500	gm/hr	2.77	13.595	gm/hr	0.18	22.852	gm/hr	0.30			NV (4)	0.563	gm/hr	0.01		
HD (Alt. Fuel) Truck (2)	2	6	hrs	503.120	gm/hr	13.31	46.865	gm/hr	1.24	63.365	gm/hr	1.68			NV (4)	0.281	gm/hr	0.01		
Total						25.32			2.51			26.97			3.29			0.45		

Notes:
(1) Emissions calculated using emission factors from California's Off-Road Large CI Engine Emission Inventory (CARB, 1999), and assumed 70% reduction of CO, ROG and PM with use of catalytic oxidation filter traps, 29% reduction of NOx with mix of older engines and new (rebuilt) to meet 1996 U.S. EPA NOx standard.
(2) Emission Factors from EMFAC2000 for gasoline-powered vehicles for year 2001. Assuming average speed of 15 mph, 70% humidity, summer conditions.
(3) Emission Factors from SCAQMD CEQA Air Quality Handbook
(4) No value calculated by EMFAC2000, but value would be insignificant.
(5) Load Factors from The Carl Moyer Program Guidelines - Incentives for Lower Emission Heavy Duty Engines, CARB, February 1, 1999.

Appendix D2

Criteria Pollutant Emission Calculations for On-site Mobile Equipment Operations at the Puente Hills Landfill

PUENTE HILLS LANDFILL

LANDFILL MOBILE EQUIPMENT EMISSIONS - UNMITIGATED

		CRITERIA POLLUTANT EMISSIONS											
		CO Emissions		ROG Emissions		NOx Emissions		SOx Emissions		PM Emissions			
Equipment Type	Operating Units	Emission Factor	Total (lbs/day)	Emission Factor	Total (lbs/day)	Emission Factor	Total (lbs/day)	Emission Factor (3)	Total (lbs/day)	Emission Factor	Total (lbs/day)	Horsepower Rating (hp)	Load Factor (5)
Diesel Powered													
Compactors (1)	39 hrs	3.13 gm/hp-hr	0.26	0.87 gm/hp-hr	0.07	9.26 gm/hp-hr	0.78	0.002 lb/hp-hr	0.08	0.54 gm/hp-hr	0.05	450	0.68
Forklift (1)	876 hrs	3.86 gm/hp-hr	1.22	1.17 gm/hp-hr	0.37	9.56 gm/hp-hr	3.02	0.002 lb/hp-hr	0.29	0.89 gm/hp-hr	0.28	75	0.68
Hydraulic Excavators (1)	1888 hrs	3.13 gm/hp-hr	3.89	0.87 gm/hp-hr	1.08	9.30 gm/hp-hr	11.56	0.002 lb/hp-hr	1.13	0.55 gm/hp-hr	0.68	137	0.68
Wheel Loaders (1)	5353 hrs	3.88 gm/hp-hr	10.13	1.17 gm/hp-hr	3.07	9.56 gm/hp-hr	25.08	0.182 lb/hr	3.12	0.89 gm/hp-hr	2.33	102	0.68
Material Handler for Greenwaste(1)	3000 hrs	3.27 gm/hp-hr	10.60	0.93 gm/hp-hr	3.02	9.68 gm/hp-hr	31.39	0.002 lb/hp-hr	2.94	0.60 gm/hp-hr	1.95	225	0.68
Motor Graders (1)	910 hrs	3.13 gm/hp-hr	3.76	0.87 gm/hp-hr	1.05	9.26 gm/hp-hr	11.13	0.086 lb/hr	0.25	0.54 gm/hp-hr	0.65	275	0.68
Portable IC Engines (1)	10,773 hrs		57.98		16.03		168.67		5.47		10.27		
Scrapers - Dual Engine (1)	25,859 hrs	3.13 gm/hp-hr	369.45	0.87 gm/hp-hr	102.69	9.26 gm/hp-hr	1093.02	0.460 lb/hr	38.13	0.54 gm/hp-hr	63.74	950	0.68
Scrapers - Single Engine (1)	161 hrs	3.13 gm/hp-hr	0.73	0.87 gm/hp-hr	0.20	9.26 gm/hp-hr	2.15	0.460 lb/hr	0.24	0.54 gm/hp-hr	0.13	300	0.68
Tractor, Crawler/Dozer (1)	34,294 hrs	3.13 gm/hp-hr	165.04	0.87 gm/hp-hr	45.87	9.26 gm/hp-hr	488.27	0.140 lb/hr	15.39	0.54 gm/hp-hr	28.47	320	0.68
Tractor, Ripper/Dozer (1)	2,789 hrs	3.13 gm/hp-hr	21.81	0.87 gm/hp-hr	6.06	9.26 gm/hp-hr	64.53	0.140 lb/hr	1.25	0.54 gm/hp-hr	3.76	520	0.68
Tractor, Wheeled (1)	4,401 hrs	3.13 gm/hp-hr	19.86	0.87 gm/hp-hr	5.52	9.26 gm/hp-hr	58.74	0.090 lb/hr	1.27	0.54 gm/hp-hr	3.43	300	0.68
Stakebed Truck (2)	65,131 mi	3.68 gm/mi	1.69	0.55 gm/mi	0.25	12.80 gm/mi	5.89		NV (4)	0.64 gm/mi	0.30		
Utility Mechanic Truck (2)	13,672 mi	3.68 gm/mi	0.36	0.55 gm/mi	0.05	12.80 gm/mi	1.24		NV	0.64 gm/mi	0.06		
Utility Truck (2)	31,649 mi	3.68 gm/mi	0.82	0.55 gm/mi	0.12	12.80 gm/mi	2.86		NV	0.64 gm/mi	0.14		
Water Truck (2)	10,885 hrs	55.21 gm/hr	4.25	8.21 gm/hr	0.63	191.96 gm/hr	14.76		NV	9.67 gm/hr	0.74		
Flatbed Dump Truck (2)	84,488 mi	3.88 gm/mi	2.20	0.55 gm/mi	0.33	12.80 gm/mi	7.64		NV	0.64 gm/mi	0.38		
Weld Truck(2)	356 hrs	55.21 gm/hr	0.14	8.21 gm/hr	0.02	191.96 gm/hr	0.48		NV	9.67 gm/hr	0.02		
Boom Truck (2)	513 hrs	55.21 gm/hr	0.20	8.21 gm/hr	0.03	191.96 gm/hr	0.70		NV	9.67 gm/hr	0.04		
Pick-up Trucks (2)	13,122 mi	1.52 gm/mi	0.14	0.90 gm/mi	0.08	1.98 gm/mi	0.18		NV	0.25 gm/mi	0.02		
Vans (2)	12,500 mi	1.52 gm/mi	0.13	0.90 gm/mi	0.08	1.98 gm/mi	0.17		NV	0.25 gm/mi	0.02		
Gasoline Powered													
Personnel Boom Truck (2)	84 hrs	239.29 gm/hr	0.14	15.31 gm/hr	0.01	24.39 gm/mi	0.01		NV	0.60 gm/hr	0.00		
Personnel Carrier (2)	63 hrs	239.29 gm/hr	0.11	15.31 gm/hr	0.01	24.39 gm/mi	0.01		NV	0.60 gm/hr	0.00		
Pick-up Trucks (MD-CAT) (2)	338,521 mi	15.95 gm/mi	38.15	1.02 gm/mi	2.44	1.63 gm/mi	3.89		NV	0.04 gm/mi	0.10		
Station Wagons (2)	32832 mi	11.47 gm/mi	2.64	0.73 gm/mi	0.17	0.82 gm/mi	0.19		NV	0.02 gm/mi	0.01		
Utility Truck (2)	133,526 mi	15.95 gm/mi	15.05	1.02 gm/mi	0.96	1.63 gm/mi	1.53		NV	0.04 gm/mi	0.04		
Vans (2)	167,380 mi	15.95 gm/mi	18.86	1.02 gm/mi	1.21	1.63 gm/mi	1.92		NV	0.04 gm/mi	0.05		
Portable IC Engines	82 hr		1.33		0.25		0.12		NV		0.03		
Total lbs/day			750.95		191.68		1999.95		69.55		117.69		

Notes:
(1) Emission Factors from California's Off-Road Large CI Engine Emission Inventory, CARB, 1999.
(2) Emission Factors from EMFAC2000 for year 1999. Assuming average speed of 15 mph, 70% humidity, summer conditions.
(3) Emissi[illegible]ors from SCAQMD CEQA Air Quality Handbook
(4) No va[illegible]lated by EMFAC2000, but value would be insignificant.
(5) Load Fa[illegible]s from The Carl Moyer Program Guidelines - Incentives for Lower Emission Heavy Duty Engines, CARB, February 1, [illegible]

PUENTE HILLS LANDFILL

LANDFILL MOBILE EQUIPMENT EMISSIONS (MITIGATED - PM reduced by 90%, CO, ROG reduced by 70%)

		CRITERIA POLLUTANT EMISSIONS											
		CO Emissions		ROG Emissions		NOx Emissions		SOx Emissions		PM Emissions			
Equipment Type	Operating Units	Emission Factor	Total (lbs/day)	Emission Factor	Total (lbs/day)	Emission Factor	Total (lbs/day)	Emission Factor (3)	Total (lbs/day)	Emission Factor	Total (lbs/day)	Horsepower Rating (hp)	Load Factor (5)
Diesel Powered													
Compactors (1)	39 hrs	2.55 gm/hp-hr	0.22	0.30 gm/hp-hr	0.03	6.90 gm/hp-hr	0.58	0.002 lb/hp-hr	0.08	0.04 gm/hp-hr	0.00	450	0.68
Forklift (1)	876 hrs	2.55 gm/hp-hr	0.80	0.30 gm/hp-hr	0.09	9.56 gm/hp-hr	3.02	0.002 lb/hp-hr	0.29	0.89 gm/hp-hr	0.28	75	0.68
Hydraulic Excavators (1)	1888 hrs	2.55 gm/hp-hr	3.17	0.30 gm/hp-hr	0.37	9.30 gm/hp-hr	11.56	0.002 lb/hp-hr	1.13	0.55 gm/hp-hr	0.68	137	0.68
Wheel Loaders (1)	5353 hrs	2.55 gm/hp-hr	6.69	0.30 gm/hp-hr	0.79	6.90 gm/hp-hr	18.10	0.182 lb/hr	3.12	0.04 gm/hp-hr	0.10	102	0.68
Material Handler for Greenwaste(1)	3000 hrs	2.55 gm/hp-hr	8.27	0.36 gm/hp-hr	1.17	1.40 gm/hp-hr	4.54	0.002 lb/hp-hr	2.94	0.03 gm/hp-hr	0.10	225	0.68
Motor Graders (1)	910 hrs	2.55 gm/hp-hr	3.07	0.30 gm/hp-hr	0.36	6.90 gm/hp-hr	8.30	0.086 lb/hr	0.25	0.04 gm/hp-hr	0.05	275	0.68
Portable IC Engines (1)	10,773 hrs		17.39		4.81		120.22		5.47		2.26		
Scrapers - Dual Engine (1)	25,859 hrs	2.55 gm/hp-hr	300.99	0.30 gm/hp-hr	35.41	6.90 gm/hp-hr	814.45	0.460 lb/hr	38.13	0.04 gm/hp-hr	4.72	950	0.68
Scrapers - Single Engine (1)	161 hrs	2.55 gm/hp-hr	0.59	0.30 gm/hp-hr	0.07	6.90 gm/hp-hr	1.60	0.460 lb/hr	0.24	0.04 gm/hp-hr	0.01	300	0.68
Tractor, Crawler/Dozer (1)	34,294 hrs	2.55 gm/hp-hr	134.46	0.30 gm/hp-hr	15.82	6.90 gm/hp-hr	363.83	0.140 lb/hr	15.39	0.04 gm/hp-hr	2.11	320	0.68
Tractor, Ripper/Dozer (1)	2,789 hrs	2.55 gm/hp-hr	17.77	0.30 gm/hp-hr	2.09	6.90 gm/hp-hr	48.08	0.140 lb/hr	1.25	0.04 gm/hp-hr	0.28	520	0.68
Tractor, Wheeled (1)	4,401 hrs	2.55 gm/hp-hr	16.18	0.30 gm/hp-hr	1.90	6.90 gm/hp-hr	43.77	0.090 lb/hr	1.27	0.04 gm/hp-hr	0.25	300	0.68
Stakebed Truck (2)	65,131 mi	33.54 gm/mi	15.44	3.12 gm/mi	1.44	4.22 gm/mi	1.94		NV (4)	0.02 gm/mi	0.01		
Utility Mechanic Truck (2)	13,672 mi	33.54 gm/mi	3.24	3.12 gm/mi	0.30	4.22 gm/mi	0.41		NV	0.02 gm/mi	0.00		
Utility Truck (2)	31,649 mi	33.54 gm/mi	7.50	3.12 gm/mi	0.70	4.22 gm/mi	0.94		NV	0.02 gm/mi	0.00		
Water Truck (2)	10,885 hrs	33.54 gm/mi	38.70	3.12 gm/mi	3.60	4.22 gm/mi	4.87		NV	0.02 gm/mi	0.02		
Flatbed Dump Truck (2)	84,488 mi	33.54 gm/mi	20.02	3.12 gm/mi	1.86	4.22 gm/mi	2.52		NV	0.02 gm/mi	0.01		
Weld Truck(2)	356 hrs	33.54 gm/mi	1.27	3.12 gm/mi	0.12	4.22 gm/mi	0.16		NV	0.02 gm/mi	0.00		
Boom Truck (2)	513 hrs	33.54 gm/mi	1.82	3.12 gm/mi	0.17	4.22 gm/mi	0.23		NV	0.02 gm/mi	0.00		
Pick-up Trucks (2)	13,122 mi	2.20 gm/mi	0.20	0.05 gm/mi	0.00	0.20 gm/mi	0.02		NV	0.02 gm/mi	0.00		
Vans (2)	12,500 mi	2.20 gm/mi	0.19	0.05 gm/mi	0.00	0.20 gm/mi	0.02		NV	0.02 gm/mi	0.00		
Gasoline Powered													
Personnel Boom Truck (2)	84 hrs	33.54 gm/mi	0.30	3.12 gm/mi	0.03	4.22 gm/mi	0.04		NV	0.02 gm/hr	0.00		
Personnel Carrier (2)	63 hrs	2.20 gm/mi	0.01	0.05 gm/mi	0.00	0.20 gm/mi	0.00		NV	0.04 gm/hr	0.00		
Pick-up Trucks (MD-CAT) (2)	338,521 mi	2.20 gm/mi	5.26	0.05 gm/mi	0.12	0.20 gm/mi	0.48		NV	0.04 gm/mi	0.10		
Station Wagons (2)	32632 mi	1.70 gm/mi	0.39	0.04 gm/mi	0.01	0.05 gm/mi	0.01		NV	0.02 gm/mi	0.01		
Utility Truck (2)	133,526 mi	2.20 gm/mi	2.08	0.05 gm/mi	0.05	0.20 gm/mi	0.19		NV	0.04 gm/mi	0.04		
Vans (2)	167,360 mi	2.20 gm/mi	2.60	0.05 gm/mi	0.06	0.20 gm/mi	0.24		NV	0.04 gm/mi	0.05		
Portable IC Engines	82 hr		1.33		0.25		0.12		NV		0.03		
Total lbs/day			609.95		71.62		1450.24		69.55		11.12		

Notes:

(1) Emissions calculated using emission factors from California's Off-Road Large CI Engine Emission Inventory (CARB, 1999), and assumed 70% reduction of CO, ROG and 90% reduction of PM with use of catalytic oxidation filter traps. 29% reduction of NOx with mix of older engines and new (rebuilt) to meet 1996 U.S. EPA NOx standard.

(2) Emission Factors from EMFAC2000 for gasoline-powered vehicles for year 2001. Assuming average speed of 15 mph, 70% humidity, summer conditions.

(3) Emission Factors from SCAQMD CEQA Air Quality Handbook

(4) No value calculated by EMFAC2000, but value would be insignificant.

(5) Load Factors from The Carl Moyer Program Guidelines - Incentives for Lower Emission Heavy Duty Engines, CARB, February 1, 1999.

PUENTE HILLS LANDFILL

LANDFILL MOBILE EQUIPMENT EMISSIONS (MITIGATED - PM, CO, ROG reduced by 70%)

	CRITERIA POLLUTANT EMISSIONS												
		CO Emissions		ROG Emissions		NOx Emissions		SOx Emissions		PM Emissions			
Equipment Type	Operating Units	Emission Factor	Total (lbs/day)	Emission Factor	Total (lbs/day)	Emission Factor	Total (lbs/day)	Emission Factor (3)	Total (lbs/day)	Emission Factor	Total (lbs/day)	Horsepower Rating (hp)	Load Factor (5)
Diesel Powered													
Compactors (1)	39 hrs	2.55 gm/hp-hr	0.22	0.30 gm/hp-hr	0.03	6.90 gm/hp-hr	0.58	0.002 lb/hp-hr	0.08	0.12 gm/hp-hr	0.01	450	0.68
Forklift (1)	876 hrs	2.55 gm/hp-hr	0.80	0.30 gm/hp-hr	0.09	9.56 gm/hp-hr	3.02	0.002 lb/hp-hr	0.29	0.89 gm/hp-hr	0.28	75	0.68
Hydraulic Excavators (1)	1888 hrs	2.55 gm/hp-hr	3.17	0.30 gm/hp-hr	0.37	9.30 gm/hp-hr	11.56	0.002 lb/hp-hr	1.13	0.55 gm/hp-hr	0.68	137	0.68
Wheel Loaders (1)	5353 hrs	2.55 gm/hp-hr	6.69	0.30 gm/hp-hr	0.79	6.90 gm/hp-hr	18.10	0.182 lb/hr	3.12	0.12 gm/hp-hr	0.31	102	0.68
Material Handler for Greenwaste(1)	3000 hrs	2.55 gm/hp-hr	8.27	0.36 gm/hp-hr	1.17	1.40 gm/hp-hr	4.54	0.002 lb/hp-hr	2.94	0.03 gm/hp-hr	0.10	225	0.68
Motor Graders (1)	910 hrs	2.55 gm/hp-hr	3.07	0.30 gm/hp-hr	0.36	6.90 gm/hp-hr	8.30	0.086 lb/hr	0.25	0.12 gm/hp-hr	0.14	275	0.68
Portable IC Engines (1)	10,773 hrs		17.39		4.81		120.22		5.47		2.26		
Scrapers - Dual Engine (1)	25,859 hrs	2.55 gm/hp-hr	300.99	0.30 gm/hp-hr	35.41	6.90 gm/hp-hr	814.45	0.460 lb/hr	38.13	0.12 gm/hp-hr	14.16	950	0.68
Scrapers - Single Engine (1)	161 hrs	2.55 gm/hp-hr	0.59	0.30 gm/hp-hr	0.07	6.90 gm/hp-hr	1.60	0.460 lb/hr	0.24	0.12 gm/hp-hr	0.03	300	0.68
Tractor, Crawler/Dozer (1)	34,294 hrs	2.55 gm/hp-hr	134.46	0.30 gm/hp-hr	15.82	6.90 gm/hp-hr	363.83	0.140 lb/hr	15.39	0.12 gm/hp-hr	6.33	320	0.68
Tractor, Ripper/Dozer (1)	2,789 hrs	2.55 gm/hp-hr	17.77	0.30 gm/hp-hr	2.09	6.90 gm/hp-hr	48.08	0.140 lb/hr	1.25	0.12 gm/hp-hr	0.84	520	0.68
Tractor, Wheeled (1)	4,401 hrs	2.55 gm/hp-hr	16.18	0.30 gm/hp-hr	1.90	6.90 gm/hp-hr	43.77	0.090 lb/hr	1.27	0.12 gm/hp-hr	0.76	300	0.68
Stakebed Truck (2)	65,131 mi	33.54 gm/mi	15.44	3.12 gm/mi	1.44	4.22 gm/mi	1.94		NV (4)	0.02 gm/mi	0.01		
Utility Mechanic Truck (2)	13,672 mi	33.54 gm/mi	3.24	3.12 gm/mi	0.30	4.22 gm/mi	0.41		NV	0.02 gm/mi	0.00		
Utility Truck (2)	31,649 mi	33.54 gm/mi	7.50	3.12 gm/mi	0.70	4.22 gm/mi	0.94		NV	0.02 gm/mi	0.00		
Water Truck (2)	10,885 hrs	33.54 gm/mi	38.70	3.12 gm/mi	3.60	4.22 gm/mi	4.87		NV	0.02 gm/mi	0.02		
Flatbed Dump Truck (2)	84,488 mi	33.54 gm/mi	20.02	3.12 gm/mi	1.86	4.22 gm/mi	2.52		NV	0.02 gm/mi	0.01		
Weld Truck(2)	356 hrs	33.54 gm/mi	1.27	3.12 gm/mi	0.12	4.22 gm/mi	0.16		NV	0.02 gm/mi	0.00		
Boom Truck (2)	513 hrs	33.54 gm/mi	1.82	3.12 gm/mi	0.17	4.22 gm/mi	0.23		NV	0.02 gm/mi	0.00		
Pick-up Trucks (2)	13,122 mi	2.20 gm/mi	0.20	0.05 gm/mi	0.00	0.20 gm/mi	0.02		NV	0.02 gm/mi	0.00		
Vans (2)	12,500 mi	2.20 gm/mi	0.19	0.05 gm/mi	0.00	0.20 gm/mi	0.02		NV	0.02 gm/mi	0.00		
Gasoline Powered													
Personnel Boom Truck (2)	84 hrs	33.54 gm/mi	0.30	3.12 gm/mi	0.03	4.22 gm/mi	0.04		NV	0.02 gm/hr	0.00		
Personnel Carrier (2)	63 hrs	2.20 gm/mi	0.01	0.05 gm/mi	0.00	0.20 gm/mi	0.00		NV	0.04 gm/hr	0.00		
Pick-up Trucks (MD-CAT) (2)	336,521 mi	2.20 gm/mi	5.26	0.05 gm/mi	0.12	0.20 gm/mi	0.48		NV	0.04 gm/mi	0.10		
Station Wagons (2)	32632 mi	1.70 gm/mi	0.39	0.04 gm/mi	0.01	0.05 gm/mi	0.01		NV	0.02 gm/mi	0.01		
Utility Truck (2)	133,526 mi	2.20 gm/mi	2.08	0.05 gm/mi	0.05	0.20 gm/mi	0.19		NV	0.04 gm/mi	0.04		
Vans (2)	167,360 mi	2.20 gm/mi	2.60	0.05 gm/mi	0.06	0.20 gm/mi	0.24		NV	0.04 gm/mi	0.05		
Portable IC Engines	82 hr		1.33		0.25		0.12		NV		0.03		
Total lbs/day			609.95		71.62		1450.24		69.55		26.17		

Notes:

(1) Emissions calculated using emission factors from California's Off-Road Large CI Engine Emission Inventory (CARB, 1999), and assumed 70% reduction of CO, ROG and PM with use of catalytic oxidation filter traps, 29% reduction of NOx with mix of older engines and new (rebuilt) to meet 1996 U.S. EPA NOx standard.

(2) Emission F--tors from EMFAC2000 for gasoline-powered vehicles for year 2001. Assuming average speed of 15 mph, 70% humidity, summer condi-- -

(3) Emissic from SCAQMD CEQA Air Quality Handbook

(4) No valu. :ed by EMFAC2000, but value would be insignificant.

(5) Load Factors from The Carl Moyer Program Guidelines - Incentives for Lower Emission Heavy Duty Engines, CARB, February 1, 1999.

Appendix D3

Criteria Pollutant Emission Calculations for Customer Truck Operations at the Puente Hills Landfill

PUENTE HILLS LANDFILL
EXISTING DAILY CUSTOMER TRAFFIC EXHAUST EMISSIONS
UNMITIGATED

			CRITERIA POLLUTANT EMISSIONS									
			CO Emissions		ROG Emissions		NOx Emissions		SOx Emissions		PM Emissions	
Equipment Type	Number (a)	Operating Units (e)	Emission Factor	Total (lbs/day)	Emission Factor	Total (lbs/day)	Emission Factor	Total (lbs/day)	Emission Factor (d)	Total (lbs/day)	Emission Factor	Total (lbs/day)
Heavy Duty Trucks (b)												
Transfer Trucks	775	1550 mi	9.41 gm/mi	32.15	1.81 gm/mi	6.19	24.95 gm/mi	85.26		NV (d)	1.11 gm/mi	3.80
Idling Emissions		0.5 hr	53.50 gm/hr	45.71	12.03 gm/hr	10.27	85.67 gm/hr	73.19		NV (d)	0.60 gm/hr	0.51
Curbside Collection Trucks	427	854 mi	9.41 gm/mi	17.71	1.81 gm/mi	3.41	24.95 gm/mi	46.98		NV (d)	1.11 gm/mi	2.09
Idling Emissions		0.5 hr	53.50 gm/hr	25.18	12.03 gm/hr	5.66	85.67 gm/hr	40.32		NV (d)	0.60 gm/hr	0.28
Ash Transfer Trucks	37	74 mi	9.41 gm/mi	1.53	1.81 gm/mi	0.30	24.95 gm/mi	4.07		NV (d)	1.11 gm/mi	0.18
Idling Emissions		0.5 hr	53.50 gm/hr	2.18	12.03 gm/hr	0.49	85.67 gm/hr	3.49		NV (d)	0.60 gm/hr	0.02
Asphalt Trucks	18	36 mi	9.41 gm/mi	0.75	1.81 gm/mi	0.14	24.95 gm/mi	1.98		NV (d)	1.11 gm/mi	0.09
Idling Emissions		0.5 hr	53.50 gm/hr	1.06	12.03 gm/hr	0.24	85.67 gm/hr	1.70		NV (d)	0.60 gm/hr	0.01
Dump Trucks	115	230 mi	9.41 gm/mi	4.77	1.81 gm/mi	0.92	24.95 gm/mi	12.65		NV (d)	1.11 gm/mi	0.56
Idling Emissions		0.5 hr	53.50 gm/hr	6.78	12.03 gm/hr	1.52	85.67 gm/hr	10.86		NV (d)	0.60 gm/hr	0.08
Cover Material Trucks	250	500 mi	9.41 gm/mi	10.37	1.81 gm/mi	2.00	24.95 gm/mi	27.50		NV (d)	1.11 gm/mi	1.23
Idling Emissions		0.08333 hr	53.50 gm/hr	2.46	12.03 gm/hr	0.55	85.67 gm/hr	3.93		NV (d)	0.60 gm/hr	0.03
Green Waste Trucks	143	286 mi	9.41 gm/mi	5.93	1.81 gm/mi	1.14	24.95 gm/mi	15.73		NV (d)	1.11 gm/mi	0.70
Idling Emissions		0.5 hr	53.50 gm/hr	8.43	12.03 gm/hr	1.90	85.67 gm/hr	13.50		NV (d)	0.60 gm/hr	0.09
Light Duty Trucks (c,f)												
Diesel Powered	23	46 mi	1.52 gm/mi	0.15	0.90 gm/mi	0.09	1.98 gm/mi	0.20		NV (d)	0.25 gm/mi	0.02
Idling Emissions (g)		0.5 hr	11.20 gm/hr	0.28	4.63 gm/hr	0.12	6.67 gm/hr	0.17				NV(h)
Gasoline Powered	209	418 mi	15.95 gm/mi	14.70	1.02 gm/mi	0.94	1.63 gm/mi	1.50		NV (d)	0.04 gm/mi	0.04
Idling Emissions (g)		0.5 hr	339.00 gm/hr	78.10	24.10 gm/hr	5.55	5.71 gm/hr	1.32				NV(h)
Total lbs/day				258.27		41.43		344.36		NV (d)		9.75

Notes:
(a) Number of vehicles from vehicle survey conducted in May, 2000, and 1999 scale data
(b) Running and Idling Emission Factors from EMFAC2000 for year 1999. Assuming average speed of 10 mph (Running). 0 mph (Idling). 70% humidity, summer conditions
(c) Emission Factors from EMFAC2000 for year 1999. Assuming average speed of 15 mph, 70% humidity, summer conditions.
(d) No value calculated by EMFAC2000, but value would be insignificant.
(e) Operating units are calculated by multiplying the number of vehicles times the 2 miles roundtrip within the landfill.
(f) Total number of light duty trucks is 232 - divided by assuming that 10% are diesel, 90% gasoline powered.
(g) Emission factors from "Idling Vehicle Emissions" U S EPA Air and Radiation, Emission Facts, April, 1998.
(h) No PM emission factors for this vehicle category, but emissions are neglible.

PUENTE HILLS LANDFILL

FUTURE CUSTOMER TRAFFIC EMISSIONS (COMBINED EXISTING + PROPOSED PROJECT)
UNMITIGATED

			CRITERIA POLLUTANT EMISSIONS									
			CO Emissions		ROG Emissions		NOx Emissions		SOx Emissions		PM Emissions	
Equipment Type	Number (a)	Operating Units (e)	Emission Factor	Total (lbs/day)	Emission Factor	Total (lbs/day)	Emission Factor	Total (lbs/day)	Emission Factor (d)	Total (lbs/day)	Emission Factor	Total (lbs/day)
Heavy-Heavy Duty Trucks (b)												
Transfer Trucks	775	1550 mi	9.41 gm/mi	32.15	1.81 gm/mi	6.19	24.95 gm/mi	85.26		NV (d)	1.11 gm/mi	3.80
Idling Emissions		0.5 hr	53.50 gm/hr	45.71	12.03 gm/hr	10.27	85.67 gm/hr	73.19		NV (d)	0.60 gm/hr	0.51
Curbside Collection Trucks	427	854 mi	9.41 gm/mi	17.71	1.81 gm/mi	3.41	24.95 gm/mi	46.98		NV (d)	1.11 gm/mi	2.09
Idling Emissions		0.5 hr	53.50 gm/hr	25.18	12.03 gm/hr	5.66	85.67 gm/hr	40.32		NV (d)	0.60 gm/hr	0.28
Ash Transfer Trucks	37	74 mi	9.41 gm/mi	1.53	1.81 gm/mi	0.30	24.95 gm/mi	4.07		NV (d)	1.11 gm/mi	0.18
Idling Emissions		0.5 hr	53.50 gm/hr	2.18	12.03 gm/hr	0.49	85.67 gm/hr	3.49		NV (d)	0.60 gm/hr	0.02
Asphalt Trucks	18	36 mi	9.41 gm/mi	0.75	1.81 gm/mi	0.14	24.95 gm/mi	1.98		NV (d)	1.11 gm/mi	0.09
Idling Emissions		0.5 hr	53.50 gm/hr	1.06	12.03 gm/hr	0.24	85.67 gm/hr	1.70		NV (d)	0.60 gm/hr	0.01
Dump Trucks	115	230 mi	9.41 gm/mi	4.77	1.81 gm/mi	0.92	24.95 gm/mi	12.65		NV (d)	1.11 gm/mi	0.56
Idling Emissions		0.5 hr	53.50 gm/hr	6.78	12.03 gm/hr	1.52	85.67 gm/hr	10.86		NV (d)	0.60 gm/hr	0.08
Cover Material Trucks	690	1,380 mi	9.41 gm/mi	28.62	1.81 gm/mi	5.51	24.95 gm/mi	75.91		NV (d)	1.11 gm/mi	3.38
Idling Emissions		0.08333 hr	53.50 gm/hr	6.78	12.03 gm/hr	1.52	85.67 gm/hr	10.86		NV (d)	0.60 gm/hr	0.08
Green Waste Trucks	143	286 mi	9.41 gm/mi	5.93	1.81 gm/mi	1.14	24.95 gm/mi	15.73		NV (d)	1.11 gm/mi	0.70
Idling Emissions		0.5 hr	53.50 gm/hr	8.43	12.03 gm/hr	1.90	85.67 gm/hr	13.50		NV (d)	0.60 gm/hr	0.09
Light Duty Trucks (c,f)												
Diesel Powered	23	46 mi	1.52 gm/mi	0.15	0.90 gm/mi	0.09	1.98 gm/mi	0.20		NV (d)	0.25 gm/mi	0.02
Idling Emissions (g)		0.5 hr	11.20 gm/hr	0.28	4.63 gm/hr	0.12	6.67 gm/hr	0.17				NV(h)
Gasoline Powered	209	418 mi	15.95 gm/mi	14.70	1.02 gm/mi	0.94	1.63 gm/mi	1.50		NV (d)	0.04 gm/mi	0.04
Idling Emissions (g)		0.5 hr	339.00 gm/hr	78.10	24.10 gm/hr	5.55	5.71 gm/hr	1.32				NV(h)
Total lbs/day				280.85		45.92		399.69		NV (d)		11.96

Notes:

(a) Number of vehicles from vehicle survey conducted in May, 2000, and 1999 scale data

(b) Running and Idling Emission Factors from EMFAC2000 for year 1999. Assuming average speed of 10 mph (Running), 0 mph (Idling), 70% humidity, summer conditions.

(c) Emission Factors from EMFAC2000 for year 1999. Assuming average speed of 15 mph, 70% humidity, summer conditions.

(d) No value calculated by EMFAC2000, but value would be insignificant.

(e) Operating units are calculated by multiplying the number of vehicles times the 2 miles roundtrip within the landfill.

(f) Total number of light duty trucks is 232 - divided by assuming that 10% are diesel, 90% gasoline powered.

(g) Emission factors from "Idling Vehicle Emissions" U S EPA Air and Radiation, Emission Facts, April, 1998.

(h) No PM emission factors for this vehicle category, but emissions are neglible.

PUENTE HILLS LANDFILL

FUTURE DAILY CUSTOMER TRAFFIC EMISSIONS (ASSUMING HALF OF FLEET CONVERTED TO ALTERNATIVE FUELED VEHICLES)
MITIGATED

			CRITERIA POLLUTANT EMISSIONS									
			CO Emissions		ROG Emissions		NOx Emissions		SOx Emissions		PM Emissions	
Equipment Type	Number (a)	Operating Units (e)	Emission Factor	Total (lbs/day)	Emission Factor	Total (lbs/day)	Emission Factor	Total (lbs/day)	Emission Factor (d)	Total (lbs/day)	Emission Factor	Total (lbs/day)
Heavy-Heavy Duty Trucks (b)												
Transfer Trucks	775	1550 mi	50.543 gm/mi	172.71	6.36575 gm/mi	21.75	14.22545 gm/mi	48.61		NV (d)	0.59 gm/mi	2.02
Idling Emissions		0.5 hr	104.367 gm/hr	89.16	19.5475 gm/hr	16.70	43.73 gm/hr	37.36		NV (d)	0.301 gm/hr	0.13
Curbside Collection Trucks	427	854 mi	50.543 gm/mi	95.16	6.36575 gm/mi	11.98	14.22545 gm/mi	26.78		NV (d)	0.59 gm/mi	1.11
Idling Emissions		0.5 hr	104.367 gm/hr	49.12	19.5475 gm/hr	9.20	43.73 gm/hr	20.58		NV (d)	0.301 gm/hr	0.07
Ash Transfer Trucks	37	74 mi	50.543 gm/mi	8.25	6.36575 gm/mi	1.04	14.22545 gm/mi	2.32		NV (d)	0.59 gm/mi	0.10
Idling Emissions		0.5 hr	104.367 gm/hr	4.26	19.5475 gm/hr	0.80	43.73 gm/hr	1.78		NV (d)	0.301 gm/hr	0.01
Asphalt Trucks	18	36 mi	9.41 gm/mi	0.75	1.81 gm/mi	0.14	24.95 gm/mi	1.98		NV (d)	1.11 gm/mi	0.09
Idling Emissions		0.5 hr	53.50 gm/hr	1.06	12.03 gm/hr	0.24	85.67 gm/hr	1.70		NV (d)	0.60 gm/hr	0.01
Dump Trucks	115	230 mi	9.41 gm/mi	4.77	1.81 gm/mi	0.92	24.95 gm/mi	12.65		NV (d)	1.11 gm/mi	0.56
Idling Emissions		0.5 hr	53.50 gm/hr	6.78	12.03 gm/hr	1.52	85.67 gm/hr	10.86		NV (d)	0.60 gm/hr	0.08
Cover Material Trucks	690	1,380 mi	9.41 gm/mi	28.62	1.81 gm/mi	5.51	24.95 gm/mi	75.91		NV (d)	1.11 gm/mi	3.38
Idling Emissions		0.08333 hr	53.50 gm/hr	6.78	12.03 gm/hr	1.52	85.67 gm/hr	10.86		NV (d)	0.60 gm/hr	0.08
Green Waste Trucks	143	286 mi	9.41 gm/mi	5.93	1.81 gm/mi	1.14	24.95 gm/mi	15.73		NV (d)	1.11 gm/mi	0.70
Idling Emissions		0.5 hr	53.50 gm/hr	8.43	12.03 gm/hr	1.90	85.67 gm/hr	13.50		NV (d)	0.60 gm/hr	0.09
Light Duty Trucks (c,f)												
Diesel Powered	23	46 mi	1.52 gm/mi	0.15	0.90 gm/mi	0.09	1.98 gm/mi	0.20		NV (d)	0.25 gm/mi	0.02
Idling Emissions (g)		0.5 hr	11.20 gm/hr	0.28	4.63 gm/hr	0.12	6.67 gm/hr	0.17				NV(h)
Gasoline Powered	209	418 mi	15.95 gm/mi	14.70	1.02 gm/mi	0.94	1.63 gm/mi	1.50		NV (d)	0.04 gm/mi	0.04
Idling Emissions (g)		0.5 hr	339.00 gm/hr	78.10	24.10 gm/hr	5.55	5.71 gm/hr	1.32				NV(h)
Total (in motion) (lbs/day)				331.04		43.52		185.68		NV (d)		8.03
Total (idling) (lbs/day)				165.60		31.88		96.65				0.47

Notes:

(a) Number of vehicles from vehicle survey conducted in May, 2000, and 1999 scale data

(b) Idling and Running Emission Factors from EMFAC2000 for year 1999. Running exhaust assumes average speed of 10 mph, 70% humidity, summer conditions.

(c) Emission Factors from EMFAC2000 for year 1999. Assuming average speed of 15 mph, 70% humidity, summer conditions.

(d) No value calculated by EMFAC2000, but value would be insignificant

(e) Operating units are calculated by multiplying the number of vehicles times the 2 miles roundtrip within the landfill.

(f) Total number of light duty trucks is 232 - divided by assuming that 10% are diesel, 90% gasoline powered.

(g) Emission factors from "Idling Vehicle Emissions" U S EPA Air and Radiation, Emission Facts, April, 1998.

(h) No PM emission factors for this vehicle category, but any calculated value would be insignificant.

Appendix D4

Calculations of Landfill Surface Gas Emission Rates

Puente Hills Landfill Gas
Project Site
Added Landfill Capacity (R)=38 MM Tons

		Emissions							
			Average			Maximum		
Substance	**MW**	**(ppb)**	**(lbs/day)**	**(lbs/yr)**	**(gm/sec/m2)(1)**	**(ppb)**	**(lbs/hr)**	**(gm/sec/m2)(1)**
Benzene	78	4982	0.445	162.28	1.70.E-09	35000	1.30E-01	1.19E-08
Benzyl Chloride	178	* 686	* 0.140	* 50.99	* 5.33.E-10	* 2600	* 2.21E-02	* 2.02E-09
Carbon Tetrachloride	152	* 20	* 0.003	* 1.24	* 1.30.E-11	* 22	* 1.56E-04	* 1.43E-11
Chloroform	118	* 24	* 0.003	* 1.16	* 1.22.E-11	* 47	* 2.64E-04	* 2.42E-11
Dichlorobenzenes (m+o+p)	146	* 602	* 0.101	* 36.70	* 3.84.E-10	2370	1.65E-02	1.51E-09
Ethylene Dibromide	188	* 19	* 0.004	* 1.48	* 1.55.E-11	1000	8.96E-03	8.21E-10
Ethylene Dichloride	98	* 211	* 0.024	* 8.65	* 9.05.E-11	480	2.24E-03	2.05E-10
Hydrogen Sulfide(ppm)	34	114	4.448	1623.51	1.70.E-08	140	2.27E-01	2.08E-08
Methyl Chloroform	132	* 62	* 0.009	* 3.40	* 3.55.E-11	170	1.07E-03	9.80E-11
Methylene Chloride	84	* 1865	* 0.179	* 65.42	* 6.84.E-10	5100	2.04E-02	1.87E-09
Perchloroethylene	164	* 733	* 0.138	* 50.20	* 5.25.E-10	1400	1.09E-02	1.00E-09
Toluene	93	15591	1.659	605.48	6.33.E-09	25000	1.11E-01	1.02E-08
Trichloroethylene	130	347	0.052	18.82	1.97.E-10	630	3.90E-03	3.58E-10
Vinyl Chloride	62	310	0.022	8.03	8.40.E-11	760	2.25E-03	2.06E-10
Xylenes (m+o+p)	106	* 9342	* 1.133	* 413.53	* 4.32.E-09	29900.0	1.51E-01	1.38E-08

*** Denotes that half of the detection limit was used in the calculation because the substance was not detected at the specified detection limit.**

Assumptions used in the calculation:

- **gas collection system efficiency (E) is 95%. The actual gas collection efficiency is 99%.**
- **methane generation rate (L) is 3000 ft^3/ton of refuse.**
- **surface emission (lbs/yr) = 2 * (ppb) * (10^-9) * (1-E) * (L) * (R) * (MW)/390/70.**

(1) Emission rates were determined by dividng lbs/hr by the total project disposal area in square meters-1,375,750.

Puente Hills Landfill Gas

Projected Total Landfill Capacity (R)=133 MM Tons

Substance		Emissions						
			Average			Maximum		
	MW	(ppb)	(lbs/day)	(lbs/yr)	(gm/sec/m2)(1)	(ppb)	(lbs/hr)	(gm/sec/m2)(1)
Benzene	78	4982	1.556	567.97	3.37 E-09	35000	4.55E-01	2.37E-08
Benzyl Chloride	178	* 686	* 0.489	* 178.47	* 1.06 E-09	* 2600	* 7.72E-02	* 4.02E-09
Carbon Tetrachloride	152	* 20	* 0.012	* 4.35	* 2.59 E-11	* 22	* 5.45E-04	* 2.84E-11
Chloroform	118	* 24	* 0.011	* 4.07	* 2.42 E-11	* 47	* 9.25E-04	* 4.81E-11
Dichlorobenzenes (m+o+p)	146	* 602	* 0.352	* 128.44	* 7.63 E-10	2370	5.77E-02	3.00E-09
Ethylene Dibromide	188	* 19	* 0.014	* 5.19	* 3.08 E-11	1000	3.14E-02	1.63E-09
Ethylene Dichloride	98	* 211	* 0.083	* 30.29	* 1.80 E-10	480	7.85E-03	4.08E-10
Hydrogen Sulfide(ppm)	34	114	15.568	5682.30	3.37 E-08	* 140	* 7.94E-01	* 4.13E-08
Methyl Chloroform	132	* 62	* 0.033	* 11.89	* 7.06 E-11	170	3.74E-03	1.95E-10
Methylene Chloride	84	* 1865	* 0.627	* 228.97	* 1.36 E-09	5100	7.15E-02	3.72E-09
Perchloroethylene	164	* 733	* 0.481	* 175.69	* 1.04 E-09	1400	3.83E-02	1.99E-09
Toluene	93	15591	5.806	2119.18	1.26 E-08	25000	3.88E-01	2.02E-08
Trichloroethylene	130	347	0.180	65.88	3.91 E-10	630	1.37E-02	7.11E-10
Vinyl Chloride	62	310	0.077	28.12	1.67 E-10	760	7.86E-03	4.09E-10
Xylenes (m+o+p)	106	* 9342	* 3.965	* 1447.37	* 8.60 E-09	29900.0	5.29E-01	2.75E-08

*** Denotes that half of the detection limit was used in the calculation because the substance was not detected at the specified detection limit.**

Assumptions used in the calculation:

- **gas collection system efficiency (E) is 95%. The actual gas collection efficiency is 99%.**
- **methane generation rate (L) is 3000 ft^3/ton of refuse.**
- **surface emission (lbs/yr) = 2 * (ppb) * (10^-9) * (1-E) * (L) * (R) * (MW)/390/70.**

(1) Emission rates were determined by dividng lbs/hr by the total cumulative disposal area in square meters-2,421,875

Appendix D5

Facilities Located Within 2 Miles of Puente Hills Landfill That Emit AB 2588 Compounds

Table D5-1 - Facilities Within 2 Mile Radius of PHLF that Report AB 2588 TAC Emissions

Facility Name and Location	Pollutant	Emissions (lb/year)
Anvil Cases	1,1,1-TCA	13594 lbs/yr
City of Industry	Methylene Chloride	11642 lbs/yr
	Toluene	4680 lbs/yr
	Zinc Oxide	120 lbs/yr
Industrial Chem Prod/West	Chromium (VI)	27.56
City of Industry	HCl	92
	Methanol	11
	Sodium Hydroxide	8160
	Thiourea	0.4
	Zinc Oxide	298
Macklanburg - Duncan Co.	1,1,1-TCA	55126 lbs/yr
City of Industry	Methanol	20077 lbs/yr
	Toluene	77869
	Xylene	4393
Patina Visuals, Norlaine Inc.	EGBE	2029
City of Industry	Styrene	3797
	Toluene	9.72
Techstar, Inc.	1,1,1-TCA	316
City of Industry	Acetaldehyde	.1

Facility Name and Location	Pollutant	Emissions (lb/year)
Techstar (cont.)	Acrolein	0.4
	Ammonia	112
	Arsenic	0.001
	Benzene	3
	DEGBE	24
	Ethyl Benzene	2
	Formaldehyde	32.7
	HCl	30
	HF	16
	Hexane	0.406
	Methanol	117
	Naphthalene	0.182
	PAHs	0.019
	PGME	4.42
	Propylene	25.546
	Toluene	1.582
	Xylene	0.752
Dexter Corp.	1,1,1-TCA	3221
City of Industry		
Diversey Corp.	1,1,1-TCA	3991
City of Industry	Glycol Ethers	374
	HCl	75

Facility Name and Location	Pollutant	Emissions (lb/year)
E.W. Smith Co.	EGBE	267
City of Industry		
Fairchild Industries, Inc.	Nickel	0.506
City of Industry	Sodium Hydroxide	431
GNB Technologies	Acetaldehyde	0.049
City of Industry	Acrolein	0.031
	Arsenic	0.44
	Benzene	0.09
	Cadmium	1.1
	Copper	0.014
	Chromium (VI)	0.002
	Formaldehyde	0.194
	Lead	28.3
	Manganese	0.001
	PAHs	0.004
	Propylene Oxide	8.343
	Toluene	0.417
	Xylene	0.31
	Selenium Compounds	0.01
Acorn Engineering Co.	1,1,1-TCA	39178
City of Industry	DEGBE	186

Facility Name and Location	Pollutant	Emissions (lb/year)
Acorn Engineering Co. (cont.)	EGBE	371
	Toluene	216
	Xylene	108
Bentley Mills, Inc.	1,1,1-TCA	596
City of Industry	Ammonia	7763
	Chloroform	311
	Sodium Hydroxide	398
Casablanca Fan Co.	1,1,1-TCA	4671
City of Industry	Glycol Ethers	1878
	Toluene	148
	Xylene	135
Decratrend Paints	Ammonia	350
City of Industry	Benzene	453
	Formaldehyde	122
	Glycol Ether	85
	Toluene	105
	Xylene	939
Kern Industries	Glycol Ether	21988
City of Industry	Toluene	8371
	Xylene	3657

Facility Name and Location	Pollutant	Emissions (lb/year)
Magdesian Bros. Inc.	Ammonia	3.32
City of Industry	Benzene	0.8
	Methylene Chloride	23.69
	Toluene	576.91
	Xylene	193.84
	Zinc Oxide	61.06
	Zinc Compounds	7.54
Mercury Plastics	Acetaldehyde	0.033
City of Industry	Acrolein	0.021
	Ammonia	2372
	Benzene	0.061
	Formaldehyde	0.131
	Naphthalene	0.002
	PAHs	0.001
	Toluene	0.281
	Xylene	0.209
Rapid Rack Industries, Inc.	EGBE	4165
City of Industry	Ethylene Glycol	834
	Sec-Butyl Alcohol	8325
Robert H. Peterson Co.	EGBE	166
City of Industry	Methylene Chloride	661

Facility Name and Location	Pollutant	Emissions (lb/year)
Robert H. Peterson Co. (cont.)	Toluene	151
House of Packaging, Inc.	1,1,1-TCA	49590
City of Industry	ButylBenzPhthal	2689
	Isopropyl Alcohol	3246
	t-Butyl Alcohol	631
Quemetco, Inc.	Arsenic	55
City of Industry	Cadmium	29
	Copper	2
	H_2S	1283
	Lead	516
	Manganese	116
	Mercury	65
	Nickel	91
	Selenium	311
	Zinc	3
Size Control Plating Co.	Chromium Trioxide	1.6
City of Industry	Perchloroethylene	5610
Tenneco Packaging Specialty	Styrene	25653
City of Industry		

Facility Name and Location	Pollutant	Emissions (lb/year)
Athens Disposal	Ammonia	670
City of Industry	Gasoline Vapors	475
	Glycol Ethers	1600
	Toluene	814
	Xylene	58
Kushwood Mfg., Inc.	1,1,1-TCA	2832
City of Industry	EGBE	396
	Toluene	8572
Sunset Fireplace Fixtures, Inc.	1,1,1-TCA	2723
City of Industry	Carbon Black Extract	2
	EGBE	56
	Perchloroethylene	12930
	Phosphoric Acid	2
	Toluene	76
	Xylene	100
Rio Hondo Community College	1,1,1-TCA	0.005
Whittier	CCl_4	0.045
	Chloroform	1.153
	Perchloroethylene	0.279
	TCE	0.294
	Toluene	169

Facility Name and Location	Pollutant	Emissions (lb/year)
Rio Hondo Community College (cont.)	Xylene	236
CMC Printed Bag, Inc.	Ammonia	7473
Whittier	Isopropyl Alc.	8028
LACSD SJCWRP	1,1,1-TCA	682
Whittier	Benzene	12
	Chloroform	847
	Methylene Chloride	990
	Perchloroethylene	1221
	Toluene	175
	Xylene	109
	p-Dichlorobenzene	280
Rose Hills Memorial Park Assoc.	2, 4-D	667
Whittier	Diethanolamine	90
	Ethylene Glycol	2231
	Gasoline Vapors	179
	Glycol Ethers	638
	HCl	57
	Naphthalene	295
	Perchloroethylene	54

Facility Name and Location	Pollutant	Emissions (lb/year)
Shepherd Machinery Co.	1,1,1-TCA	7721
City of Industry	Benzene	1
	Toluene	32
	Xylene	703
Unitog Rental Services, Inc.	Perchloroethylene	8235
Whittier	Sodium Hydroxide	212
Eemus Manufacturing Corp	1,1,1-TCA	2326
So. El Monte	Glycol Ethers	607
	HCl	1448
	HF	62
	Xylene	2235
International Medication Systems	Chloroform	52
So. El Monte	Fluorocarbon	1561
	Isopropyl Alcohol	561
	Methanol	188
	Methylene Chloride	107
	TCE	62
Lawson Hughes Co., Inc.	1,1,1-TCA	9816
So. El Monte	Fluorides	300
	Glycol Ethers	83

Facility Name and Location	Pollutant	Emissions (lb/year)
Lawson Hughes Co., Inc. (cont.)	Manganese	383
	Crystalline Silica	255
	Xylene	251
Plastic Dress-Up Co.	1,1,1-TCA	114
So. El Monte	Arsenic	2
	Benzene	43
	Beryllium	2
	Glycol Ethers	118
	HCl	535
	Lead Chromate	4
	Methanol	1395
	Methylene Chloride	3307
	Nickel	2
	Sodium Hydroxide	4025
	Toluene	9538
	Xylene	2596
Texaco's Montebello Technology	Benzene	25
So. El Monte	Formaldehyde	241
	Propylene	133

Facility Name and Location	Pollutant	Emissions (lb/year)
Vacco Industries	1,1,1-TCA	6567
So. El Monte	1,4-Dioxane	171
	CFC-113	8970
	Copper	3
	Cr (VI)	0.001
	DEGDME	2463
	EGBE	742
	Glycol Ethers	8
	HCl	1
	Manganese	0.065
	Nickel	0.372
	PGMEA	20
	Toluene	4
	Xylene	27
	Zinc	0.001

Appendix D6

Cancer Risk at Sensitive Receptor Sites in the Vicinity of Puente Hills Landfill

Table D6-1
Cancer Risk Calculated at Sensitive Receptors Surrounding the Project

Facility Name	Address	UTM COORDINATES		Risk Per Million
		X	Y	
AGUILAR FAMILY DAYCARE	1441 7th Ave	408470	3764161	0.37
BAKER HEAD START/PRESCHOOL	12043 Exline	406239	3769936	0.09
BASSETT HEAD START/DON JULIAN	13855 Don Julian Rd	408281	3766818	0.47
BASSETT HEAD START/ERWIN CHILD DEVELOPMENT CENTER	943 N. Sunkist Ave	410508	3768253	0.30
CHILDREN'S MONTESSORI SCHOOL	802 N. Vineland	409289	3769005	0.18
CHILDTIME CHILDREN'S CENTER	2727 Peck Rd	404895	3769327	0.03
CITY OF SO EL MONTE MINI CENTER TODDLER/PRESCHOOL/SCHOOL AGE SITE	1824 Central Ave	403370	3768123	0.05
COGSWELL HEAD START/STATE PRESCHOOL	11050 Fineview St	404482	3768666	0.04
CONGREGATIONAL CHURCH NURSERY SCHOOL	15750 E. Los Altos Dr	410191	3761076	0.05
CREATIVE CORNERS PRESCHOOL	13628 Lomitas Ave	407572	3766872	0.42
CUMORAH JR. ACADEMY	4561 Durfee Ave	400526	3763392	0.06
ELEGANT LIVING, INC.	12029 Beverly Dr	403098	3762169	0.17
EUGENE OBREGON SCHOOL	3300 Sandoval Ave	401966	3764703	0.08
FIRST PREBYTERIAN CHURCH CHILDCARE & DEV. CENTER	11608 Valley Blvd	405276	3770145	0.04
FLANNER HEAD START PRESCHOOL	1314 N. Leborgne	410229	3769335	0.20
GARDEN HOMES I	12803 E. Orange Dr	403975	3761526	0.23
GOLDEN ACRES MANOR	3447 Gilman Rd	406964	3769875	0.12
GREATER EL MONTE COMMUNITY HOSPITAL	1701 Santa Anita Ave	403784	3767975	0.05
GREENLEAF HEAD START	6355 Greenleaf Blvd	404178	3760870	0.20
HACIENDA CHRISTIAN SCHOOL	15518 E. Gale St	410540	3763980	0.13
HACIENDA HEIGHTS CHRISTIAN PRESCHOOL	2100 S. Stimson Ave	410966	3762031	0.05
HACIENDA LA PUENTE HEAD START/STATE PS-GLENELDER	16234 Folger	412047	3763359	0.07
HACIENDA LA PUENTE USD-PALM ELEMENTARY	14740 E. Palm	408884	3764284	0.30
HACIENDA LA PUENTE/HEAD START - KWIS SITE	1925 S. Kwis Ave	410080	3762611	0.07
HACIENDA LA PUENTE/HEAD START - SHADYBEND SITE	15430 Shadybend	410243	3763844	0.13
HADLEY PRESCHOOL	11703 E. Hadley St	402792	3760740	0.18
HILLGROVE CENTER	1234 Valencia Ave	409595	3764083	0.18

Facility Name	Address	UTM COORDINATES		Risk Per Million
		X	Y	
HOLY TRINITY LUTHERAN CHURCH PRESCHOOL	15710 Newton St	410320	3762240	0.06
LA PUENTE DISCOVERY CENTER	13921 E. Amar Rd	410081	3768507	0.27
LITTLE STAR	12322 Pellissier Rd	404656	3766407	0.11
LOS ALTOS HIGH SCHOOL	15325 E. Los Robles Ave	409750	3763500	0.11
LOS ROBLES SCHOOL	1530 S. Ridley Ave	408749	3763806	0.21
MAGNOLIA	11700 Pilgrim Way	402789	3761358	0.17
MAXON HEAD START/STATE PRESCHOOL	12380 Felipe	405835	3768230	0.09
MILL SCHOOL	4030 S. Workman Mill Rd	403702	3764397	0.14
MONTE VISTA HEAD START/STATE PRESCHOOL	11111 Thienes Ave	404403	3767685	0.06
MONTESSORI CHILD DEVELOPMENT CENTER	15207 Los Robles Ave	409538	3763487	0.12
MOUNTAIN VIEW CHILDREN CENTER	2109 Burkett Rd	405424	3767516	0.08
NEWTON MIDDLE SCHOOL	15616 E. Newton	410000	3762250	0.07
NORTH POST	1338 Ridley Ave	408969	3764130	0.25
NORTH RANCHITO ELEMENTARY SCHOOL SITE	8837 E. Olympic Blvd	399856	3763380	0.05
OPTIONS - STATE PRESCHOOL-NEW TEMPLE	11033 E. Central Ave	403727	3767214	0.06
OPTIONS HEAD START - SHIVELY	1431 N. Central Ave	403382	3767575	0.05
OPTIONS HEAD START/ SURROUND CARE - NEW TEMPLE	11033 E. Central Ave	403727	3767214	0.06
ORANGE GROVE MIDDLE SCHOOL	14505 Orange Grove	408062	3763757	0.30
PALM SCHOOL	14740 Palm Ave	408884	3764284	0.30
PARKVIEW HEAD START/STATE PRESCHOOL	12044 Elliott St	405484	3768879	0.06
PIO PICO ELEMENTARY SCHOOL	4211 Columbia St	399935	3764241	0.05
PLYMOUTH CHRISTIAN NURSERY SCHOOL	12058 Beverly Blvd	403157	3761376	0.19
PUENTE AVENUE PRESCHOOL	14032 Dillerdale Ave	410362	3769586	0.19
SAINT JOSEPH'S HAVEN	11355 Linard	404325	3766890	0.08
SAN GABRIEL VALLEY TRAINING CENTER	339 S. Covina Blvd	407669	3767872	0.23
SO RANCHITO ELEMENTARY SCHOOL SITE	5241 S. Passons Blvd	400271	3762190	0.06
ST . MATTHEW METHODIST COOPERATIVE NURSERY SCHOOL	15653 E. Newton St	410151	3762304	0.07
ST MARK'S PRESCHOOL	2323 Las Lomitas Dr	409338	3762185	0.08
SUNKIST HEAD START/STATE PRESCHOOL	935 Mayland Ave	410129	3768840	0.24

Facility Name	Address	X	Y	Risk Per Million
SUNSHINE POST	1410 Ridley Ave	408893	3763975	0.23
TIFFANY'S BOARD & CARE	12326 Whitley Ave	403434	3761837	0.21
TRINITY LUTHERAN PRESCHOOL	11716 E. Floral Dr	402865	3761744	0.17
UNITED CHRISTIAN EDUCATION CENTER	16152 Gale Ave	411884	3763476	0.08
UNITED MOLOKAN CHRISTIAN ASSOC. PRESCHOOL	16222 E. Soriano Ave	411355	3760852	0.04
UPTOWN PRESCHOOL	6556 Bright Ave	404288	3760665	0.19
VALLEY COMMUNITY CHRISTIAN PRESCHOOL	3039 Santa Anita Ave	403790	3769673	0.03
VALLEY HIGH SCHOOL	14162 E. Lomitas Ave	408500	3766000	0.56
VAN WIG HEAD START/STATE PRESCHOOL	1151 Van Wig Ave	410046	3769287	0.20
VICTORY OUTREACH-CHILDREN'S LEARNING CENTER	454 Coberta Ave	407709	3767459	0.29
WEST WHITTIER	6411 S. Norwalk	401189	3761744	0.09
WHITTIER VILLAGE CHILDREN'S CENTER	13222 E. Bailey St	404420	3760522	0.17
WHITTIER YMCA SUNSHINE PRESCHOOL/SCHOOL AGE SITE	12510 E. Hadley St	403653	3760730	0.19
WILLARD PAYNE HEAD START/ STATE PRESCHOOL	2850 N. Mountain View Rd	405577	3769456	0.06

2000 1150.1 Monitoring Reports

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
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CHARLES W. CARRY
Chief Engineer and General Manager

May 15, 2000
File: 31-380.10B

Mr. Larry Bowen
South Coast Air Quality Management District
21865 E. Copley Drive
Diamond Bar, CA 91765-4182

Dear Mr.Bowen:

Puente Hills Landfill Monitoring Report
for Compliance with
South Coast Air Quality Management District Rule 1150.1
<u>First Quarter, 2000</u>

Enclosed please find the quarterly report for compliance with SCAQMD Rule 1150.1. Rule 1150.1 requires monthly monitoring of the ambient air, gas collection system, integrated surface gas and perimeter gas probes. This work was completed each month at the Puente Hills Landfill and the results are summarized in this report.

Additionally, Rule 1150.1 requires an evaluation of the efficiency of the gas combustion or treatment facility. In a letter dated December 23, 1997, the Sanitation Districts submitted a three year schedule for combustion efficiency testing. In accordance with this schedule, four flares were tested at the Puente Hills Landfill during this quarter. The results are contained in the enclosed report entitled, "Puente Hills Landfill Gas Flares Nos. 17, 19, 21, and 23 Emission Source Testing March 2000".

Please contact the undersigned at this office should you wish to discuss this report.

Very truly yours,

Charles W. Carry

R.L. Huitric

Ray L. Huitric
Division Engineer
Solid Waste Management Department

RLH:TK:eo
Enclosures

EDMS Doc No. 11132

MONITORING REPORT FOR

PUENTE HILLS LANDFILL

FOR COMPLIANCE WITH

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

RULE 1150.1

(JANUARY, FEBRUARY, AND MARCH)

SUBMITTED TO

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

BY

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
MAY 15, 2000

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MONITORING REPORT FOR PUENTE HILLS LANDFILL FOR COMPLIANCE WITH SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1150.1 FIRST QUARTER, 2000 (JANUARY, FEBRUARY, AND MARCH)

INTRODUCTION

This report represents part of the continuing effort by the Los Angeles County Sanitation Districts (Sanitation Districts) to fulfill requirements for the subject landfill as contained in South Coast Air Quality Management District (SCAQMD) Rule 1150.1. According to Rule 1150.1, monthly monitoring of ambient air, integrated surface gas, landfill gas, and perimeter probes has been required for the Puente Hills Landfill since January, 1989. This report summarizes the monitoring results collected for each program during January, February, and March 2000.

DISPOSAL SITE DESCRIPTION

The Puente Hills Landfill has been in operation since 1958, and as of March 2000, has received a total of 88 million tons of refuse. The site operates as a Class III disposal site under the provisions of Subchapter 15, Article 5 of the California Administrative Code, accepting only non-hazardous waste. The site totals 1365 acres of which approximately 630 acres is designated for landfilling purposes. Figure A shows the general location of the landfill. Figure B is a location map of the Puente Hills Landfill, including surrounding cities and local land uses.

MONITORING PROGRAMS

A. Ambient Air Monitoring

Monthly ambient air monitoring was conducted to sample and analyze the air adjacent to the landfill for air contaminants. The sampling arrangement for ambient air monitoring is shown on Figure C.

Ambient air sampling was conducted during three separate 24-hour periods this quarter. Each sampling period began at approximately 10:00 a.m. and ended at approximately 10:00 a.m. the following day. Wind monitoring data were recorded during each ambient air sampling period and are contained in Appendix A-1. The 30-minute average wind speed did not exceed 15 miles per hour during any sampling period. The prevailing and drainage wind direction during sampling is summarized in Table A-1. The percentage of time each sampler was downwind during each sampling period is summarized in Table A-2.

The sampling equipment, methods, and quality control procedures conform to the Guidelines for Implementation of Rule 1150.1 (Guidelines). All samples were collected in stainless steel canisters, which SCAQMD approved by letter dated June 12, 1997. Samples were field analyzed by the Sanitation Districts' laboratory for Total Organic Compounds (TOC) as methane using an Organic Vapor Analyzer (OVA), then analyzed using gas chromatography for the Toxic Air Contaminants (TAC) specified in the Guidelines. Completed chain of custody and quality control forms are attached in Appendix A-2. The analytical results for the TAC analyses are shown in Tables A-3 to A-5.

B. Integrated Surface Gas Monitoring

In a report dated May 15, 1989, the Sanitation Districts presented a detailed comparison made at Puente Hills of two integrated surface gas monitoring programs: grid monitoring based on the Guidelines, and route monitoring as proposed by the Sanitation Districts. The report demonstrated the statistical equivalency of the two monitoring programs. During each month, surface gas monitoring at Puente Hills employed the route method.

A total of 588 routes, each 225 ft. in length, are located on the entire disposal area. All routes are at regular 225 ft. intervals except on the face of the landfill where access is restricted and the routes are on parallel benches. Route spacings between benches are generally less than 225 ft. Figure D shows the layout of surface gas routes at Puente Hills Landfill.

Integrated surface gas samples were collected between 7:50 a.m. and 3:00 p.m. Sampling was terminated whenever the wind speed exceeded 5 miles per hour or when precipitation occurred. The site weather station is located in an exposed area to detect regional wind patterns. However, much of the landfill is sheltered from these regional winds, and local wind speeds on the site are typically significantly less. Therefore, in addition to the data from the stationary weather station, a hand held anemometer is used as a check of local wind speeds while conducting integrated surface gas monitoring. In a letter dated May 17, 1989, the Sanitation Districts submitted specification for the hand held meter and requested approval for its use. The 10 minute average wind speed during each sampling period was recorded and is shown in Appendix B-1.

A total of 558, 145 and 519 routes were sampled in January, February and March, respectively. Some routes could not be sampled because of time limitations stemming from rain and high wind conditions or inaccessibility due to operational or construction activities. The sampling equipment, method, and quality control procedures conform to the Guidelines. All samples were measured for TOC as methane using an OVA or Foxboro TVA-1000; the results are summarized in Tables B-1 to B-3. The overall monthly site averages were 10 ppm in January, 11 ppm in February, and 6 ppm in March.

In compliance with the Guidelines, samples were analyzed monthly by the Sanitation Districts' laboratory for TACs using gas chromatography. Samples could not be collected in February due to rain. The analytical results for January and March are shown in Tables B-4 to B-5. Completed chain of custody and quality control forms are attached in Appendix B-2.

C. Perimeter Probe Monitoring

The thirty two gas migration monitoring probes installed around the perimeter of the landfill are indicated on Figure E. Each gas probe was monitored for TOC measured as methane using a dual range gas indicator. The use of this instrument has been approved by the SCAQMD. The sampling equipment, methods, and quality control procedures conform to the Guidelines.

The TOC monitoring results for each month are shown in Table C-1. No methane was detected in any probe during this quarter. In each month a ten-liter bag sample was collected from one randomly selected probe and analyzed by the Sanitation Districts' laboratory for TACs using gas chromatography. The analytical results are shown in Table C-2. Completed chain of custody and quality control forms for the samples are attached in Appendix C.

D. Landfill Gas Monitoring

Monthly landfill gas samples were collected from each of the three headerlines entering the Main flare station. The gas recovery system at the landfill is indicated on Figure F. Each sample was collected in a tedlar bag over a continuous ten minute period using EPA Method 25. The samples were analyzed by the Sanitation Districts' laboratory for the compounds specified by the Guidelines using gas chromatography. The analytical results are shown in Tables D-1 to D-3. The overall monthly total sulfur content in the landfill gas was determined to be approximately 127 ppm in January, 124 ppm in February and 123 ppm in March. Completed chain of custody and quality control forms for the samples are attached in Appendix D.

E. Combustion Efficiency Testing

The Sanitation Districts submitted a three year schedule in December 1997 for combustion efficiency testing. In accordance with this schedule, four flares were tested at the Puente Hills Landfill during this quarter. The results are contained in the enclosed report entitled, "Puente Hills Landfill Gas Flares No. 17, 19, 21, and 23 Emission Source Testing March 2000"

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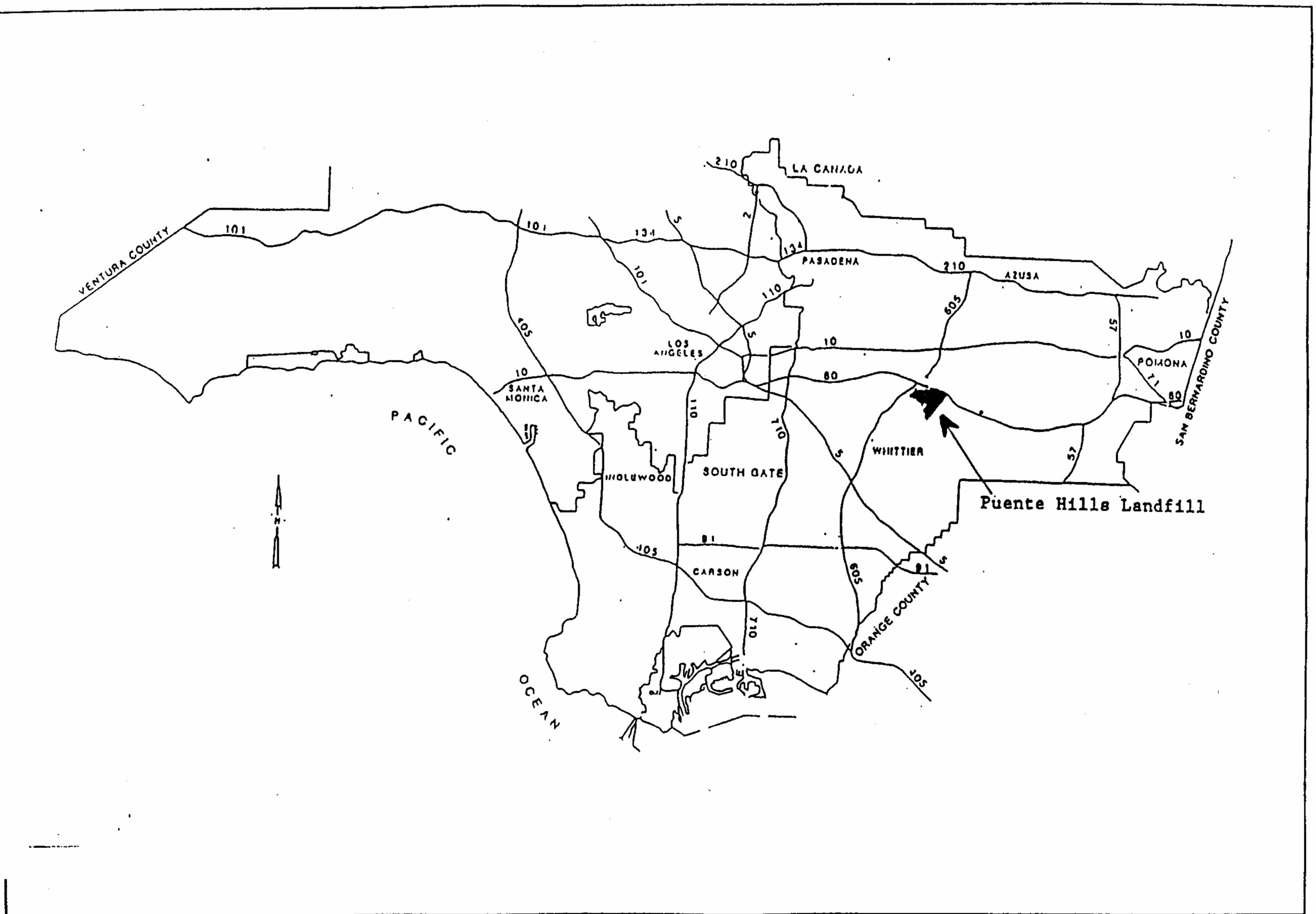
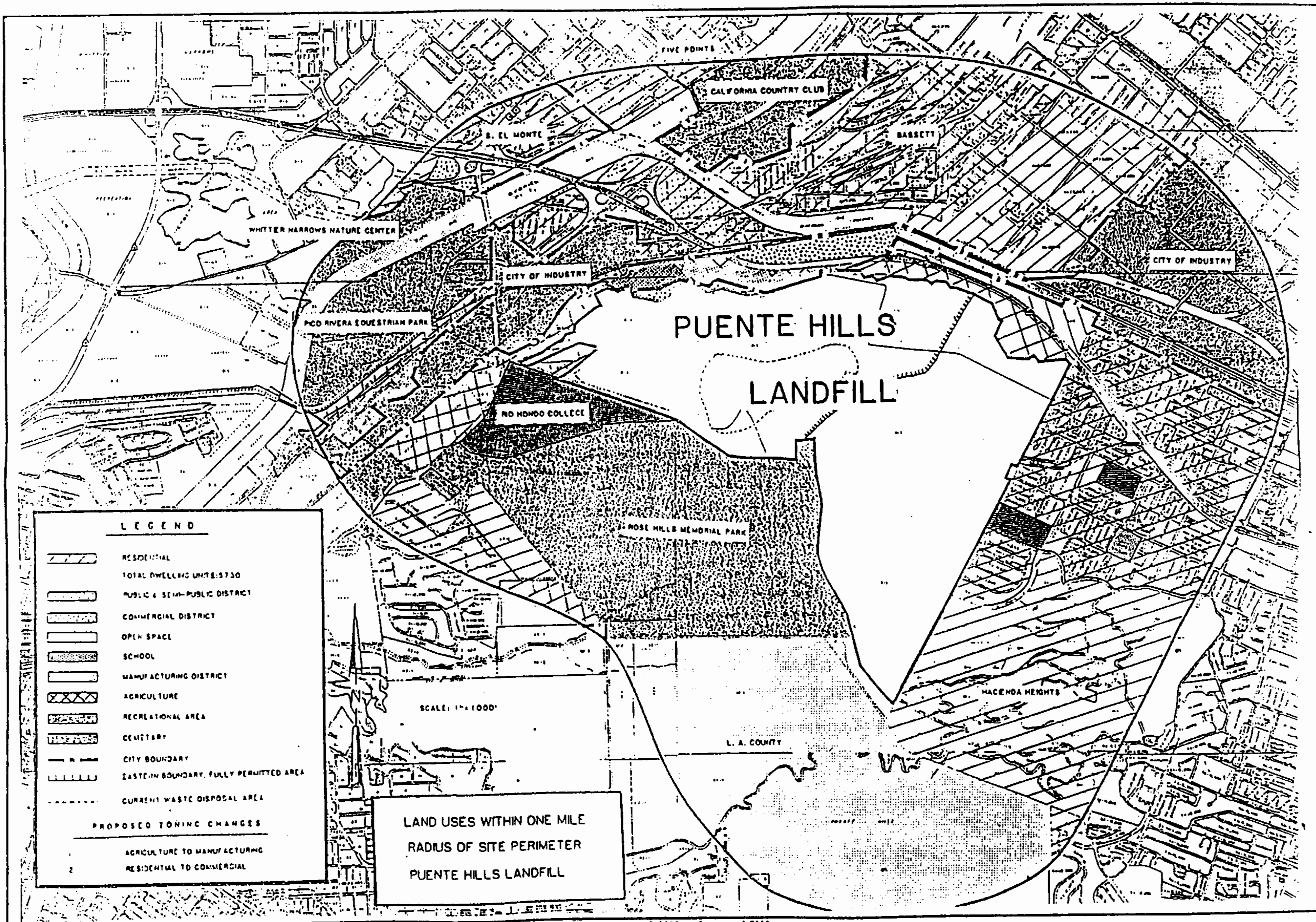


Puente Hills Landfill
AREA MAP
FIGU
Figure no scale.



Puente Hills Landfill
LOCAL LAND USES
FIGURE B
Figure not to scale.

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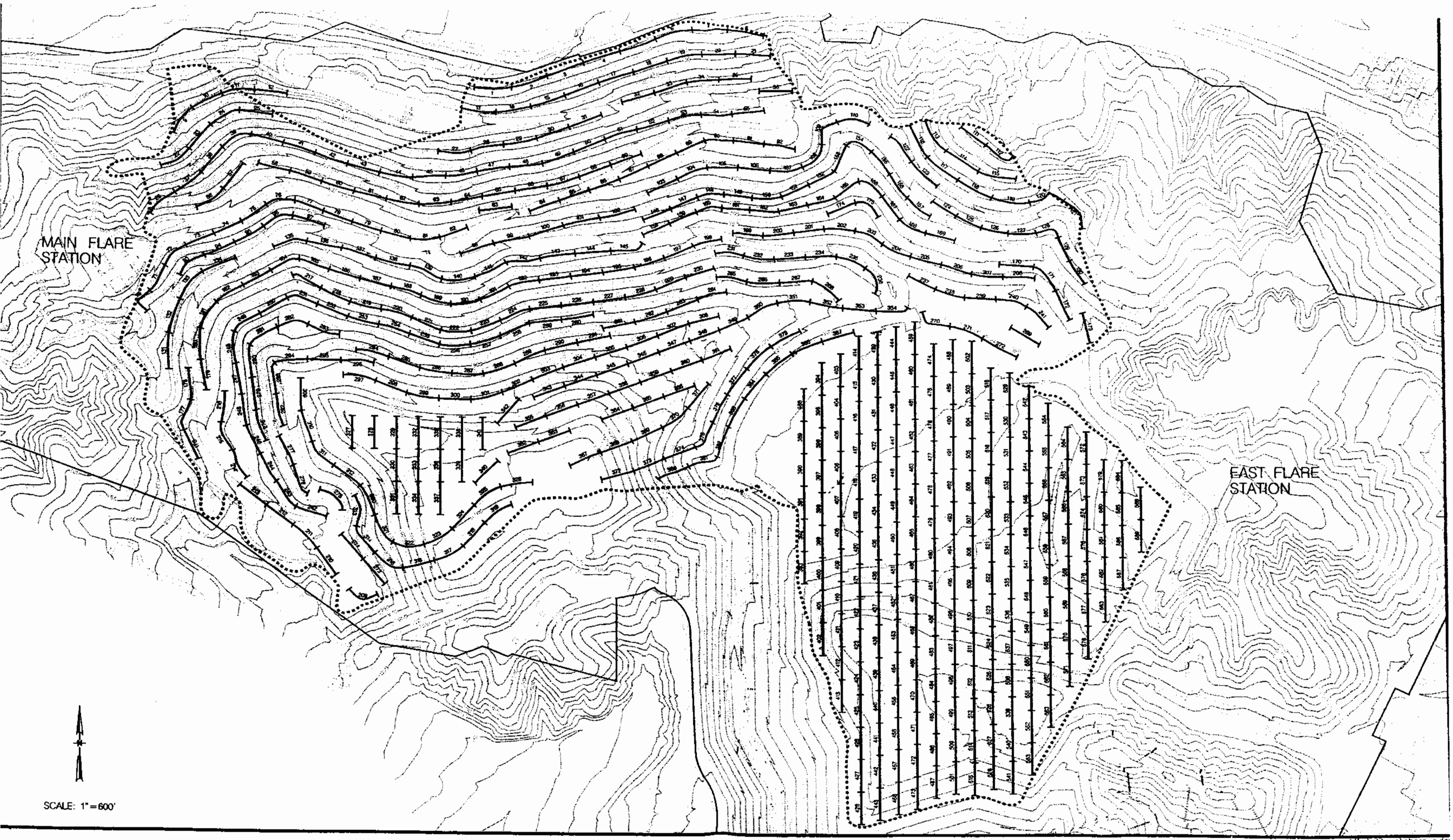
PUENTE HILLS LANDFILL

LOCATIONS OF AMBIENT AIR SAMPLERS AND WEATHER STATION

FIGU

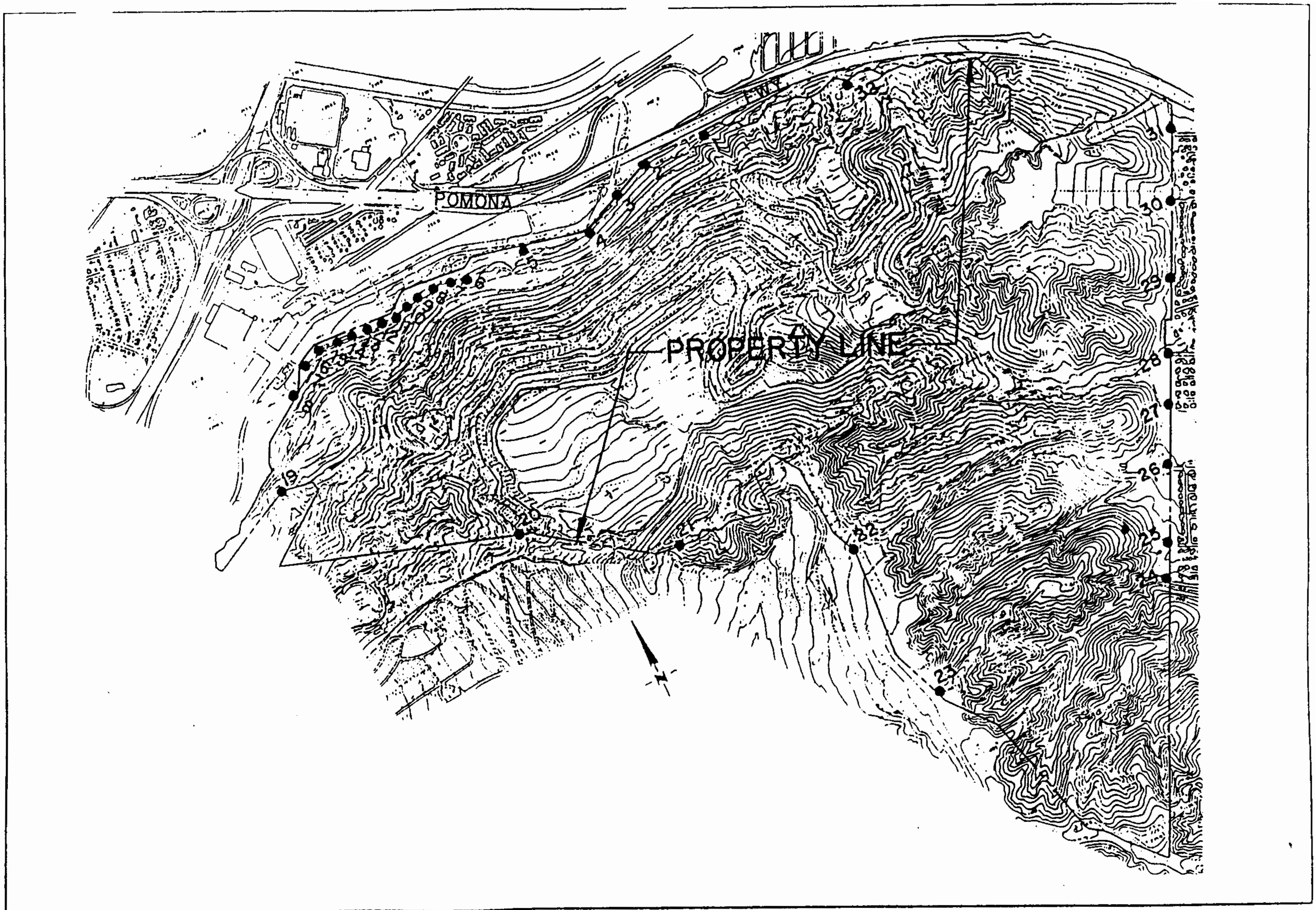


Puente Hills Landfill

SURFACE GAS MONITORING ROUTES - REVISED JANUARY 1999

FIGURE D

Figure not to scale



Puente Hills Landfill

LOCATIONS OF GAS MIGRATION MONITORING PROBES

FIGURE E

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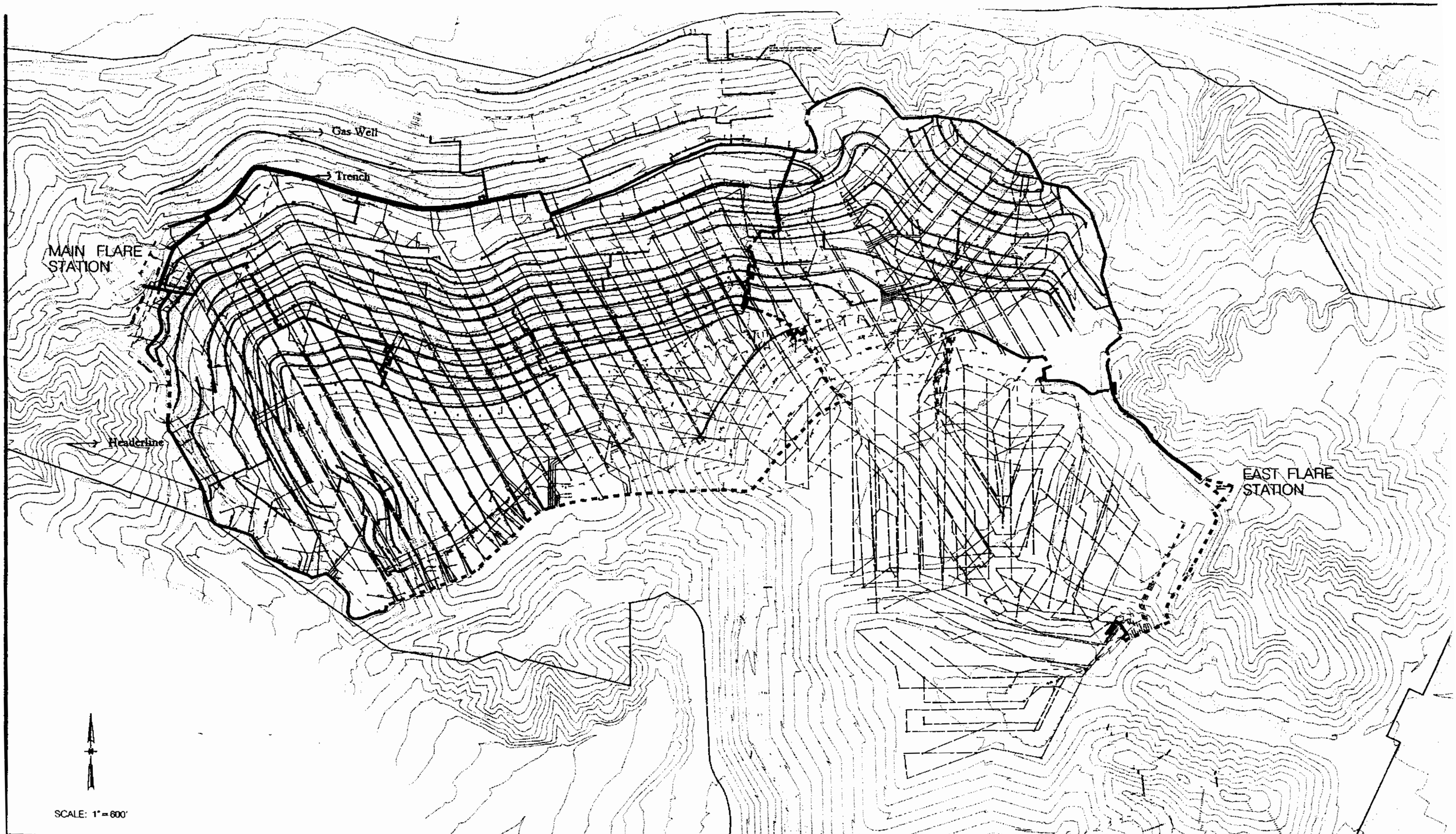

Puente Hills Landfill
LANDFILL GAS COLLECTION SYSTEM
FIGURE F
Figure not to scale

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TABLE A-1

PREVAILING AND DRAINAGE WIND DIRECTION DURING AMBIENT AIR SAMPLING

PUENTE HILLS LANDFILL

FIRST QUARTER 2000

Monitoring Dates	Prevailing and Drainage Wind Direction	
	Prevailing	Drainage
January 3 - 4	Southwest to East	Southeast to South
February 9 - 10	Southwest to North Northwest	Southeast to Southwest
March 14 - 15	Southwest to West	East Southeast to North Northwest

TABLE A-2

PERCENTAGE OF TIME DOWNWIND DURING AMBIENT AIR SAMPLING

PUENTE HILLS LANDFILL

FIRST QUARTER 2000

MONITORING DATES	SAMPLING LOCATIONS		
	1	2	3
JANUARY 3 - 4	60	75	6
FEBRUARY 9 - 10	71	73	2
MARCH 14 - 15	63	69	13

Refer to Appendix A-1 for detailed data.

Note: An ambient air sampling location is defined as downwind of the landfill if the wind in the prevailing di passes over the landfill surface before reaching the sampling location, as follows:

Downwind Wind Directions*	
Location 1	6 to 11
Location 2	3 to 11
Location 3	14 to 3

* Wind Direction is on a 16 point scale (e.g. 1 is NNE, 2 is NE, 3 is ENE, 4 is E, 16 is N, etc.)

TABLE A-3

AMBIENT AIR MONITORING - Toxic Air Contaminants
PUENTE HILLS LANDFILL
JANUARY 2000

Compound, (ppb)	Location 1	Location 2	Location 3	Location 3 (Duplicate)	Field Blank (Location 3)
Methylene Chloride	0.69	0.45	0.45	0.45	< 0.2
Chloroform	0.05	0.06	< 0.04	< 0.04	< 0.04
1,1,1-Trichloroethane	0.09	0.09	0.08	0.09	< 0.04
Carbon Tetrachloride	0.08	0.09	0.09	0.09	< 0.04
1,1-Dichloroethene	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
Trichloroethylene	0.07	0.05	< 0.04	< 0.04	< 0.04
Tetrachloroethylene	0.23	0.22	0.16	0.16	< 0.04
Chlorobenzene	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
Vinyl Chloride	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
1,1-Dichloroethane	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
1,2-Dichloroethane	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42
Benzene	< 1.1	1.2	< 1.1	< 1.1	< 1.1
Toluene	2.7	2.6	1.8	1.9	< 0.11
Acetonitrile	0.18	0.15	0.13	0.16	< 0.11
Benzyl Chloride	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Xylene	2.19	2.17	1.33	1.35	< 0.12
Dichlorobenzene	0.1	0.1	0.06	0.05	< 0.12
TOC as methane, ppm	5.5	6.9	2.2	2.2	NA

Note: "NA" - Not Applicable

TABLE A-4

AMBIENT AIR MONITORING - Toxic Air Contaminants
PUENTE HILLS LANDFILL
FEBRUARY 2000

Compound, (ppb)	Location 1	Location 2	Location 3	Field Blank (Location 2)
Methylene Chloride	0.87	0.63	0.43	< 0.2
Chloroform	0.08	0.06	< 0.04	< 0.04
1,1,1-Trichloroethane	0.11	0.11	0.1	< 0.04
Carbon Tetrachloride	0.08	0.08	0.08	< 0.04
1,1-Dichloroethene	< 0.04	< 0.04	< 0.04	< 0.04
Trichloroethylene	0.04	0.04	< 0.04	< 0.04
Tetrachloroethylene	0.37	0.34	0.27	< 0.04
Chlorobenzene	< 0.04	< 0.04	< 0.04	< 0.04
Vinyl Chloride	< 0.04	< 0.04	< 0.04	< 0.04
1,1-Dichloroethane	< 0.04	< 0.04	< 0.04	< 0.04
1,2-Dichloroethane	< 0.42	< 0.42	< 0.42	< 0.42
Benzene	1.3	1.4	< 1.1	< 1.1
Toluene	3.3	3.2	2.3	< 0.11
Acetonitrile	0.13	0.15	0.25	< 0.11
Benzyl Chloride	< 1.0	< 1.0	< 1.0	< 1.0
Xylene	2.64	2.47	1.64	< 0.12
Dichlorobenzene	0.11	0.11	0.08	< 0.12
TOC as methane, ppm	5.9	7.2	3.7	NA

Note: "NA" - Not Applicable

TABLE A-5

AMBIENT AIR MONITORING - Toxic Air Contaminants
PUENTE HILLS LANDFILL
MARCH 2000

Compound, (ppb)	Location 1	Location 2	Location 3	Location 3 (Duplicate)	Field Blank (Location 1)
Methylene Chloride	0.55	0.52	0.38	0.4	< 0.2
Chloroform	0.04	0.06	< 0.04	0.04	< 0.04
1,1,1-Trichloroethane	0.1	0.15	0.12	0.12	< 0.04
Carbon Tetrachloride	0.08	0.08	0.09	0.08	< 0.04
1,1-Dichloroethene	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
Trichloroethylene	< 0.04	0.04	< 0.04	< 0.04	< 0.04
Tetrachloroethylene	0.24	0.22	0.22	0.23	< 0.04
Chlorobenzene	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
Vinyl Chloride	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
1,1-Dichloroethane	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
1,2-Dichloroethane	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42
Benzene	1.1	< 1.1	< 1.1	< 1.1	< 1.1
Toluene	2.6	2.4	2.0	2.0	< 0.11
Acetonitrile	0.14	0.17	0.13	0.12	< 0.11
Benzyl Chloride	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Xylene	1.91	1.65	1.36	1.35	< 0.12
Dichlorobenzene	0.07	0.07	0.06	0.06	< 0.12
TOC as methane, ppm	7.8	8.7	2.5	2.6	NA

Note: "NA" - Not Applicable

TABLE B-1

SURFACE GAS MONITORING - Total Organic Compounds

PUENTE HILLS LANDFILL

JANUARY 2000

Route	CH_4 (ppm)	Route	CH_4 (ppm)	Route	CH_4 (ppm)	Route	CH_4 (ppm)
1	21	41	9	81	24	121	20
2	20	42	12	82	16	122	6
3	25	43	10	83	16	123	7
4	14	44	15	84	12	124	6
5	7	45	48	85	32	125	10
6	6	46	24	86	47	126	11
7	6	47	36	87	40	127	8
8	6	48	41	88	43	128	6
9	12	49	23	89	21	129	19
10	34	50	13	90	18	130	6
11	16	51	10	91	11	131	6
12	12	52	42	92	8	132	6
13	13	53	34	93	10	133	11
14	10	54	14	94	9	134	43
15	9	55	13	95	22	135	29
16	6	56	6	96	20	136	34
17	10	57	16	97	5	137	42
18	10	58	7	98	30	138	8
19	10	59	10	99	29	139	31
20	10	60	10	100	29	140	8
21	9	61	22	101	NM	141	35
22	26	62	29	102	45	142	28
23	25	63	41	103	27	143	22
24	14	64	33	104	44	144	26
25	22	65	25	105	28	145	33
26	21	66	18	106	11	146	32
27	43	67	24	107	16	147	28
28	31	68	24	108	8	148	17
29	27	69	4	109	8	149	26
30	14	70	12	110	13	150	24
31	10	71	12	111	6	151	5
32	10	72	18	112	48	152	4
33	10	73	7	113	25	153	4
34	10	74	14	114	37	154	5
35	10	75	14	115	21	155	5
36	8	76	11	116	10	156	5
37	28	77	32	117	38	157	6
38	29	78	9	118	45	158	12
39	14	79	8	119	9	159	22
40	46	80	9	120	16	160	6

TABLE B-1

(CONTINUED)

SURFACE GAS MONITORING - Total Organic Compounds

PUENTE HILLS LANDFILL

JANUARY 2000

Route	CH_4 (ppm)	Route	CH_4 (ppm)	Route	CH_4 (ppm)	Route	CH_4 (ppm)
161	8	201	5	241	4	281	4
162	4	202	5	242	4	282	3
163	4	203	5	243	4	283	3
164	6	204	4	244	4	284	3
165	6	205	4	245	4	285	11
166	9	206	4	246	4	286	10
167	10	207	4	247	16	287	19
168	8	208	5	248	5	288	7
169	10	209	4	249	4	289	6
170	5	210	4	250	7	290	21
171	9	211	4	251	4	291	16
172	5	212	4	252	17	292	NM
173	6	213	4	253	29	293	3
174	4	214	3	254	42	294	3
175	4	215	3	255	28	295	3
176	5	216	3	256	13	296	3
177	5	217	28	257	6	297	3
178	6	218	30	258	4	298	3
179	7	219	40	259	4	299	3
180	10	220	16	260	11	300	3
181	14	221	35	261	18	301	4
182	11	222	21	262	30	302	4
183	11	223	46	263	5	303	5
184	23	224	21	264	4	304	6
185	28	225	10	265	4	305	7
186	17	226	9	266	4	306	3
187	15	227	8	267	4	307	6
188	21	228	4	268	4	308	5
189	33	229	4	269	4	309	4
190	33	230	4	270	4	310	4
191	16	231	8	271	4	311	5
192	21	232	6	272	4	312	17
193	17	233	4	273	3	313	7
194	19	234	4	274	3	314	6
195	19	235	4	275	3	315	4
196	13	236	4	276	3	316	4
197	6	237	3	277	3	317	NM
198	4	238	3	278	3	318	NM
199	5	239	3	279	3	319	NM
200	5	240	4	280	5	320	26

NM - not monitored

TABLE B-1

(CONTINUED)

SURFACE GAS MONITORING - Total Organic Compounds

PUENTE HILLS LANDFILL

JANUARY 2000

Route	CH_4 (ppm)	Route	CH_4 (ppm)	Route	CH_4 (ppm)	Route	CH_4 (ppm)
321	5	361	4	401	4	441	3
322	5	362	6	402	4	442	3
323	4	363	4	403	2	443	3
324	5	364	4	404	2	444	17
325	5	365	5	405	2	445	8
326	5	366	9	406	4	446	25
327	9	367	4	407	4	447	11
328	18	368	4	408	4	448	NM
329	14	369	4	409	3	449	4
330	5	370	4	410	3	450	7
331	5	371	4	411	NM	451	3
332	20	372	NM	412	NM	452	7
333	5	373	NM	413	NM	453	5
334	NM	374	NM	414	3	454	7
335	18	375	3	415	NM	455	3
336	4	376	3	416	3	456	3
337	6	377	3	417	2	457	3
338	10	378	3	418	2	458	3
339	6	379	NM	419	2	459	3
340	NM	380	NM	420	4	460	3
341	13	381	4	421	3	461	4
342	5	382	4	422	4	462	4
343	5	383	4	423	NM	463	3
344	6	384	4	424	NM	464	3
345	18	385	4	425	NM	465	3
346	12	386	4	426	NM	466	3
347	4	387	4	427	NM	467	2
348	4	388	3	428	NM	468	2
349	3	389	3	429	3	469	2
350	3	390	4	430	3	470	3
351	3	391	3	431	2	471	3
352	3	392	NM	432	2	472	3
353	3	393	3	433	3	473	2
354	3	394	4	434	4	474	3
355	11	395	4	435	18	475	3
356	6	396	4	436	11	476	3
357	NM	397	4	437	5	477	3
358	NM	398	4	438	3	478	3
359	NM	399	4	439	3	479	3
360	5	400	5	440	3	480	3

NM - not monitored

TABLE B-1

(CONTINUED)

SURFACE GAS MONITORING - Total Organic Compounds

PUENTE HILLS LANDFILL

JANUARY 2000

Route	CH_4 (ppm)	Route	CH_4 (ppm)	Route	CH_4 (ppm)	Route	CH_4 (ppm)
481	4	509	3	537	3	565	3
482	4	510	3	538	3	566	3
483	5	511	7	539	3	567	3
484	6	512	4	540	3	568	3
485	NM	513	4	541	3	569	3
486	3	514	3	542	3	570	3
487	3	515	3	543	3	571	3
488	3	516	2	544	3	572	2
489	3	517	2	545	3	573	2
490	3	518	2	546	4	574	2
491	3	519	2	547	4	575	2
492	3	520	2	548	4	576	2
493	2	521	2	549	4	577	2
494	2	522	2	550	5	578	2
495	2	523	2	551	5	579	3
496	2	524	2	552	NM	580	3
497	3	525	2	553	5	581	3
498	4	526	2	554	1	582	3
499	4	527	2	555	1	583	3
500	NM	528	2	556	1	584	2
501	2	529	2	557	1	585	2
502	3	530	1	558	2	586	2
503	3	531	2	559	4	587	2
504	3	532	3	560	3	588	3
505	3	533	3	561	3	589	4
506	3	534	3	562	3		
507	3	535	4	563	3		
508	3	536	6	564	3		

NM - not monitored

TABLE B-2

SURFACE GAS MONITORING - Total Organic Compounds
PUENTE HILLS LANDFILL
FEBRUARY 2000

Route	CH_4 (ppm)	Route	CH_4 (ppm)	Route	CH_4 (ppm)	Route	CH_4 (ppm)
1	3	41	3	81	7	121	5
2	3	42	4	82	22	122	11
3	3	43	2	83	5	123	10
4	3	44	2	84	20	124	4
5	3	45	16	85	48	125	4
6	3	46	34	86	27	126	3
7	3	47	10	87	20	127	7
8	3	48	3	88	4	128	4
9	5	49	2	89	3	129	6
10	4	50	2	90	16	130	4
11	3	51	2	91	17	131	4
12	3	52	2	92	6	132	4
13	3	53	2	93	4	133	4
14	4	54	2	94	5	134	7
15	4	55	2	95	5	135	8
16	4	56	2	96	6	136	12
17	4	57	2	97	9	137	9
18	3	58	2	98	73	138	7
19	3	59	3	99	35	139	9
20	3	60	3	100	23	140	19
21	3	61	8	101	17	141	15
22	10	62	4	102	56	142	17
23	7	63	32	103	46	143	14
24	8	64	37	104	81	144	10
25	4	65	27	105	89	145	13
26	3	66	3	106	46	146	NM
27	17	67	2	107	13	147	NM
28	7	68	2	108	4	148	NM
29	8	69	1	109	4	149	NM
30	3	70	4	110	9	150	NM
31	3	71	8	111	14	151	NM
32	3	72	3	112	18	152	NM
33	3	73	6	113	39	153	NM
34	3	74	32	114	26	154	NM
35	3	75	29	115	13	155	NM
36	2	76	42	116	3	156	NM
37	9	77	4	117	1	157	NM
38	11	78	5	118	4	158	NM
39	9	79	4	119	12	159	NM
40	32	80	3	120	5	160	NM

TABLE B-2
(CONTINUED)
SURFACE GAS MONITORING - Total Organic Compounds
PUENTE HILLS LANDFILL
FEBRUARY 2000

Route	CH_4 (ppm)	Route	CH_4 (ppm)	Route	CH_4 (ppm)	Route	CH_4 (ppm)
161	NM	201	NM	241	NM	281	NM
162	NM	202	NM	242	NM	282	NM
163	NM	203	NM	243	NM	283	NM
164	NM	204	NM	244	NM	284	NM
165	NM	205	NM	245	NM	285	NM
166	NM	206	NM	246	NM	286	NM
167	NM	207	NM	247	NM	287	NM
168	NM	208	NM	248	NM	288	NM
169	NM	209	NM	249	NM	289	NM
170	NM	210	NM	250	NM	290	NM
171	NM	211	NM	251	NM	291	NM
172	NM	212	NM	252	NM	292	NM
173	NM	213	NM	253	NM	293	NM
174	NM	214	NM	254	NM	294	NM
175	NM	215	NM	255	NM	295	NM
176	NM	216	NM	256	NM	296	NM
177	NM	217	NM	257	NM	297	NM
178	NM	218	NM	258	NM	298	NM
179	NM	219	NM	259	NM	299	NM
180	NM	220	NM	260	NM	300	NM
181	NM	221	NM	261	NM	301	NM
182	NM	222	NM	262	NM	302	NM
183	NM	223	NM	263	NM	303	NM
184	NM	224	NM	264	NM	304	NM
185	NM	225	NM	265	NM	305	NM
186	NM	226	NM	266	NM	306	NM
187	NM	227	NM	267	NM	307	NM
188	NM	228	NM	268	NM	308	NM
189	NM	229	NM	269	NM	309	NM
190	NM	230	NM	270	NM	310	NM
191	NM	231	NM	271	NM	311	NM
192	NM	232	NM	272	NM	312	NM
193	NM	233	NM	273	NM	313	NM
194	NM	234	NM	274	NM	314	NM
195	NM	235	NM	275	NM	315	NM
196	NM	236	NM	276	NM	316	NM
197	NM	237	NM	277	NM	317	NM
198	NM	238	NM	278	NM	318	NM
199	NM	239	NM	279	NM	319	NM
200	NM	240	NM	280	NM	320	NM

NM - not monitored

TABLE B-2

(CONTINUED)

SURFACE GAS MONITORING - Total Organic Compounds

PUENTE HILLS LANDFILL

FEBRUARY 2000

Route	CH_4 (ppm)	Route	CH_4 (ppm)	Route	CH_4 (ppm)	Route	CH_4 (ppm)
321	NM	361	NM	401	NM	441	NM
322	NM	362	NM	402	NM	442	NM
323	NM	363	NM	403	NM	443	NM
324	NM	364	NM	404	NM	444	NM
325	NM	365	NM	405	NM	445	NM
326	NM	366	NM	406	NM	446	NM
327	NM	367	NM	407	NM	447	NM
328	NM	368	NM	408	NM	448	NM
329	NM	369	NM	409	NM	449	NM
330	NM	370	NM	410	NM	450	NM
331	NM	371	NM	411	NM	451	NM
332	NM	372	NM	412	NM	452	NM
333	NM	373	NM	413	NM	453	NM
334	NM	374	NM	414	NM	454	NM
335	NM	375	NM	415	NM	455	NM
336	NM	376	NM	416	NM	456	NM
337	NM	377	NM	417	NM	457	NM
338	NM	378	NM	418	NM	458	NM
339	NM	379	NM	419	NM	459	NM
340	NM	380	NM	420	NM	460	NM
341	NM	381	NM	421	NM	461	NM
342	NM	382	NM	422	NM	462	NM
343	NM	383	NM	423	NM	463	NM
344	NM	384	NM	424	NM	464	NM
345	NM	385	NM	425	NM	465	NM
346	NM	386	NM	426	NM	466	NM
347	NM	387	NM	427	NM	467	NM
348	NM	388	NM	428	NM	468	NM
349	NM	389	NM	429	NM	469	NM
350	NM	390	NM	430	NM	470	NM
351	NM	391	NM	431	NM	471	NM
352	NM	392	NM	432	NM	472	NM
353	NM	393	NM	433	NM	473	NM
354	NM	394	NM	434	NM	474	NM
355	NM	395	NM	435	NM	475	NM
356	NM	396	NM	436	NM	476	NM
357	NM	397	NM	437	NM	477	NM
358	NM	398	NM	438	NM	478	NM
359	NM	399	NM	439	NM	479	NM
360	NM	400	NM	440	NM	480	NM

NM - not monitored

TABLE B-2

(CONTINUED)

SURFACE GAS MONITORING - Total Organic Compounds

PUENTE HILLS LANDFILL

FEBRUARY 2000

Route	CH_4 (ppm)	Route	CH_4 (ppm)	Route	CH_4 (ppm)	Route	CH_4 (ppm)
481	NM	509	NM	537	NM	565	NM
482	NM	510	NM	538	NM	566	NM
483	NM	511	NM	539	NM	567	NM
484	NM	512	NM	540	NM	568	NM
485	NM	513	NM	541	NM	569	NM
486	NM	514	NM	542	NM	570	NM
487	NM	515	NM	543	NM	571	NM
488	NM	516	NM	544	NM	572	NM
489	NM	517	NM	545	NM	573	NM
490	NM	518	NM	546	NM	574	NM
491	NM	519	NM	547	NM	575	NM
492	NM	520	NM	548	NM	576	NM
493	NM	521	NM	549	NM	577	NM
494	NM	522	NM	550	NM	578	NM
495	NM	523	NM	551	NM	579	NM
496	NM	524	NM	552	NM	580	NM
497	NM	525	NM	553	NM	581	NM
498	NM	526	NM	554	NM	582	NM
499	NM	527	NM	555	NM	583	NM
500	NM	528	NM	556	NM	584	NM
501	NM	529	NM	557	NM	585	NM
502	NM	530	NM	558	NM	586	NM
503	NM	531	NM	559	NM	587	NM
504	NM	532	NM	560	NM	588	NM
505	NM	533	NM	561	NM	589	NM
506	NM	534	NM	562	NM		
507	NM	535	NM	563	NM		
508	NM	536	NM	564	NM		

NM - not monitored

TABLE B-3

SURFACE GAS MONITORING - Total Organic Compounds

PUENTE HILLS LANDFILL

MARCH 2000

Route	CH_4 (ppm)	Route	CH_4 (ppm)	Route	CH_4 (ppm)	Route	CH_4 (ppm)
1	3	41	6	81	12	121	11
2	3	42	5	82	11	122	4
3	3	43	5	83	11	123	4
4	4	44	4	84	6	124	4
5	4	45	6	85	5	125	6
6	3	46	10	86	15	126	6
7	3	47	9	87	4	127	6
8	3	48	5	88	6	128	5
9	11	49	4	89	6	129	16
10	12	50	4	90	5	130	8
11	3	51	4	91	5	131	4
12	3	52	4	92	6	132	4
13	3	53	4	93	6	133	5
14	3	54	4	94	9	134	35
15	3	55	4	95	5	135	6
16	3	56	4	96	6	136	5
17	3	57	4	97	25	137	9
18	3	58	4	98	14	138	4
19	3	59	3	99	10	139	10
20	3	60	3	100	21	140	10
21	4	61	5	101	15	141	39
22	3	62	6	102	26	142	9
23	4	63	10	103	24	143	19
24	3	64	10	104	8	144	31
25	9	65	14	105	14	145	49
26	9	66	7	106	11	146	14
27	16	67	7	107	14	147	22
28	4	68	7	108	5	148	6
29	5	69	7	109	6	149	23
30	4	70	10	110	6	150	3
31	4	71	11	111	6	151	3
32	3	72	13	112	16	152	4
33	3	73	8	113	49	153	4
34	3	74	5	114	39	154	4
35	3	75	6	115	40	155	4
36	5	76	8	116	7	156	5
37	6	77	7	117	4	157	6
38	8	78	10	118	4	158	10
39	8	79	9	119	11	159	4
40	22	80	7	120	19	160	4

TABLE B-3
(CONTINUED)
SURFACE GAS MONITORING - Total Organic Compounds
PUENTE HILLS LANDFILL
MARCH 2000

Route	CH_4 (ppm)	Route	CH_4 (ppm)	Route	CH_4 (ppm)	Route	CH_4 (ppm)
161	4	201	4	241	4	281	3
162	3	202	4	242	4	282	3
163	3	203	4	243	3	283	3
164	5	204	3	244	3	284	4
165	5	205	3	245	3	285	6
166	5	206	3	246	4	286	6
167	5	207	3	247	6	287	11
168	5	208	3	248	4	288	12
169	4	209	5	249	3	289	10
170	4	210	5	250	4	290	31
171	4	211	6	251	12	291	41
172	4	212	5	252	32	292	3
173	6	213	5	253	29	293	3
174	3	214	4	254	26	294	3
175	3	215	4	255	37	295	3
176	5	216	4	256	9	296	3
177	4	217	36	257	8	297	2
178	4	218	12	258	5	298	2
179	5	219	15	259	5	299	3
180	6	220	10	260	5	300	3
181	10	221	11	261	15	301	3
182	6	222	42	262	8	302	12
183	6	223	29	263	5	303	7
184	4	224	22	264	4	304	5
185	33	225	6	265	3	305	8
186	10	226	6	266	3	306	6
187	22	227	5	267	3	307	5
188	5	228	4	268	3	308	4
189	5	229	4	269	4	309	2
190	25	230	4	270	4	310	2
191	18	231	4	271	4	311	4
192	20	232	3	272	4	312	7
193	11	233	3	273	3	313	2
194	17	234	3	274	3	314	2
195	24	235	3	275	3	315	2
196	8	236	3	276	4	316	NM
197	10	237	4	277	4	317	NM
198	5	238	4	278	2	318	NM
199	4	239	4	279	3	319	NM
200	4	240	4	280	3	320	4

NM - not monitored

TABLE B-3

(CONTINUED)

SURFACE GAS MONITORING - Total Organic Compounds

PUENTE HILLS LANDFILL

MARCH 2000

Route	CH_4 (ppm)	Route	CH_4 (ppm)	Route	CH_4 (ppm)	Route	CH_4 (ppm)
321	3	361	6	401	3	441	2
322	3	362	2	402	4	442	2
323	3	363	3	403	2	443	3
324	3	364	3	404	2	444	3
325	3	365	2	405	2	445	3
326	3	366	3	406	3	446	3
327	2	367	4	407	2	447	3
328	4	368	4	408	2	448	3
329	7	369	4	409	3	449	3
330	10	370	4	410	2	450	3
331	15	371	4	411	2	451	3
332	13	372	NM	412	2	452	3
333	12	373	NM	413	2	453	3
334	NM	374	NM	414	3	454	3
335	32	375	3	415	3	455	4
336	9	376	3	416	4	456	NM
337	7	377	3	417	4	457	NM
338	20	378	3	418	4	458	NM
339	4	379	3	419	4	459	2
340	7	380	NM	420	4	460	2
341	9	381	3	421	3	461	2
342	18	382	3	422	3	462	2
343	5	383	3	423	2	463	2
344	4	384	3	424	2	464	2
345	5	385	3	425	2	465	2
346	5	386	3	426	2	466	2
347	4	387	3	427	NM	467	2
348	3	388	2	428	NM	468	2
349	2	389	3	429	2	469	2
350	2	390	3	430	2	470	2
351	2	391	3	431	2	471	2
352	2	392	2	432	2	472	2
353	2	393	2	433	2	473	2
354	2	394	3	434	2	474	3
355	13	395	3	435	2	475	3
356	9	396	3	436	2	476	3
357	3	397	3	437	2	477	3
358	NM	398	3	438	2	478	3
359	NM	399	3	439	2	479	3
360	8	400	3	440	2	480	2

NM - not monitored

TABLE B-3

(CONTINUED)

SURFACE GAS MONITORING - Total Organic Compounds

PUENTE HILLS LANDFILL

MARCH 2000

Route	CH_4 (ppm)	Route	CH_4 (ppm)	Route	CH_4 (ppm)	Route	CH_4 (ppm)
481	3	509	4	537	6	565	4
482	3	510	4	538	5	566	4
483	3	511	4	539	5	567	4
484	3	512	4	540	4	568	3
485	3	513	4	541	3	569	3
486	3	514	4	542	4	570	4
487	NM	515	4	543	4	571	6
488	4	516	4	544	3	572	3
489	4	517	4	545	4	573	2
490	5	518	4	546	4	574	2
491	4	519	4	547	3	575	2
492	4	520	4	548	3	576	2
493	3	521	4	549	4	577	2
494	3	522	5	550	4	578	2
495	3	523	5	551	4	579	3
496	3	524	5	552	3	580	3
497	3	525	7	553	3	581	3
498	3	526	4	554	3	582	3
499	3	527	4	555	2	583	3
500	4	528	4	556	3	584	2
501	3	529	3	557	3	585	2
502	3	530	3	558	3	586	2
503	3	531	3	559	3	587	2
504	4	532	3	560	3	588	3
505	7	533	3	561	3	589	3
506	5	534	3	562	3		
507	4	535	3	563	3		
508	4	536	3	564	4		

NM - not monitored

TABLE B-4

SURFACE GAS MONITORING - Toxic Air Contaminants
PUENTE HILLS LANDFILL
JANUARY 2000

Compound, (ppb)	Route 95	Route 98	Route 140
Methylene Chloride	0.3	0.43	0.57
Chloroform	0.08	0.09	0.16
1,1,1-Trichloroethane	0.12	0.13	0.14
Carbon Tetrachloride	0.09	0.09	0.09
1,1-Dichloroethene	< 0.04	< 0.04	< 0.04
Trichloroethylene	< 0.04	0.04	0.05
Tetrachloroethylene	0.19	0.2	0.3
Chlorobenzene	< 0.04	< 0.04	< 0.04
Vinyl Chloride	< 0.04	< 0.04	< 0.04
1,1-Dichloroethane	< 0.04	< 0.04	< 0.04
1,2-Dichloroethane	< 0.42	< 0.42	< 0.42
Benzene	2.2	1.8	2.2
Toluene	6.1	3.5	3.9
Acetonitrile	0.21	0.22	0.24
Benzyl Chloride	< 1.0	< 1.0	< 1.0
Xylene	5.1	2.85	3.15
Dichlorobenzene	0.11	0.11	0.16
TOC as methane, ppm	25	34	72

TABLE B-5

SURFACE GAS MONITORING - Toxic Air Contaminants
PUENTE HILLS LANDFILL
MARCH 2000

Compound, (ppb)	Route 104	Route 105	Route 102	Route 105 (Duplicate)
Methylene Chloride	0.4	0.45	0.35	0.48
Chloroform	< 0.04	< 0.04	< 0.04	< 0.04
1,1,1-Trichloroethane	0.1	0.11	0.12	0.1
Carbon Tetrachloride	0.08	0.08	0.08	0.08
1,1-Dichloroethene	< 0.04	< 0.04	< 0.04	< 0.04
Trichloroethylene	< 0.04	< 0.04	< 0.04	< 0.04
Tetrachloroethylene	0.1	0.08	0.09	0.09
Chlorobenzene	< 0.04	< 0.04	< 0.04	< 0.04
Vinyl Chloride	< 0.04	< 0.04	0.06	< 0.04
1,1-Dichloroethane	< 0.04	< 0.04	< 0.04	< 0.04
1,2-Dichloroethane	< 0.42	< 0.42	< 0.42	< 0.42
Benzene	< 1.1	< 1.1	< 1.1	< 1.1
Toluene	1.6	1.9	1.8	1.8
Acetonitrile	< 0.14	< 0.14	< 0.14	< 0.14
Benzyl Chloride	< 1.0	< 1.0	< 1.0	< 1.0
Xylene	1.24	1.37	1.2	1.34
Dichlorobenzene	< 0.23	< 0.23	< 0.23	< 0.23
TOC as methane, ppm	8.1	7.1	17	8.4

TABLE C-1

PUENTE HILLS LANDFILL
PERIMETER PROBE MONITORING
TOTAL ORGANIC COMPOUNDS
FIRST QUARTER 2000

PROBE	JANUARY CH4(%)	FEBRUARY CH4(%)	MARCH CH4(%)
1	0	0	0
2	0	0	0
3	0	0	0
4	0	0	0
5	0	0	0
6	0	0	0
7	0	0	0
8	0	0	0
9	0	0	0
10	0	0	0
11	0	0	0
12	0	0	0
13	0	0	0
14	0	0	0
15	0	0	0
16	0	0	0
17	0	0	0
18	0	0	0
19	0	0	0
20	0	0	0
21	0	0	0
22	0	0	0
23	0	0	0
24	0	0	0
25	0	0	0
26	0	0	0
27	0	0	0
28	0	0	0
29	0	0	0
30	0	0	0
31	0	0	0
32	0	0	0

TABLE C-2

PERIMETER PROBE MONITORING - Toxic Air Contaminants
PUENTE HILLS LANDFILL
FIRST QUARTER 2000

Compound, (ppb)	January Probe No. 23	February Probe No. 3	February Probe No. 3 (Duplicate)	March Probe No. 18
Methylene Chloride	< 0.53	< 0.53	< 0.53	< 0.53
Chloroform	0.25	< 0.11	< 0.11	0.85
1,1,1-Trichloroethane	0.37	0.45	0.23	0.11
Carbon Tetrachloride	< 0.11	< 0.11	< 0.11	< 0.11
1,1-Dichloroethene	< 0.11	< 0.11	< 0.11	< 0.11
Trichloroethylene	< 0.11	< 0.11	< 0.11	< 0.11
Tetrachloroethylene	0.15	0.12	< 0.11	0.24
Chlorobenzene	< 0.11	< 0.11	< 0.11	< 0.11
Vinyl Chloride	< 0.11	< 0.11	< 0.11	< 0.11
1,1-Dichloroethane	< 0.11	< 0.11	< 0.11	< 0.11
1,2-Dichloroethane	< 1.1	< 1.1	< 1.1	< 1.1
Benzene	< 2.7	< 2.7	< 2.7	< 2.7
Toluene	< 0.47	< 0.47	< 0.47	0.5
Acetonitrile	< 0.35	< 0.35	< 0.35	< 0.35
Benzyl Chloride	< 2.6	< 2.6	< 2.6	< 2.6
Xylene	< 0.67	< 0.67	< 0.67	< 0.67
Dichlorobenzene	< 0.59	< 0.59	< 0.59	< 0.59
TOC as methane, ppm	2.5	3.2	2.9	3.3

TABLE D-1

LANDFILL GAS ANALYSES
PUENTE HILLS LANDFILL
JANUARY 2000

Compound, (ppb)	Northeast Header	27" Header	West Header
Hydrogen Sulfide, ppm	33	121	132
Permanent Gases, total %	97.7	96.9	97.5
Oxygen, %	7.72	3.37	5.9
Argon, %	0.45	0.24	0.37
Nitrogen, %	37.7	20.1	30.8
Methane, %	29.2	38.7	33.5
Carbon Dioxide, %	22.7	34.6	27
Methylene Chloride	< 210	3900	660
Chloroform	< 42	< 42	< 42
1,1,1-Trichloroethane	< 42	150	51
Carbon Tetrachloride	< 43	< 43	< 43
1,1-Dichloroethene	< 42	57	< 42
Trichloroethylene	150	550	180
Tetrachloroethylene	140	1200	420
Chlorobenzene	390	190	110
Vinyl Chloride	620	420	120
1,1-Dichloroethane	88	480	130
1,2-Dichloroethane	< 420	< 420	< 420
Benzene	1400	2100	4900
Toluene	20000	22000	10000
Acetonitrile	< 140	< 140	380
Benzyl Chloride	< 1000	< 1000	< 1000
Xylene	28900	11400	6100
Dichlorobenzene	330	310	200

TABLE D-2

LANDFILL GAS ANALYSES
PUENTE HILLS LANDFILL
FEBRUARY 2000

Compound, (ppb)	Northeast Header	27" Header	West Header
Hydrogen Sulfide, ppm	47	120	125
Permanent Gases, total %	98.2	97.8	98.2
Oxygen, %	9.53	3.94	5.99
Argon, %	0.53	0.26	0.39
Nitrogen, %	44	21.3	32.6
Methane, %	24.5	37.6	32.4
Carbon Dioxide, %	19.7	34.6	26.8
Methylene Chloride	< 210	3800	550
Chloroform	< 42	< 42	< 42
1,1,1-Trichloroethane	< 42	160	< 42
Carbon Tetrachloride	< 43	< 43	< 43
1,1-Dichloroethene	< 42	59	< 42
Trichloroethylene	130	540	180
Tetrachloroethylene	120	1100	420
Chlorobenzene	380	180	110
Vinyl Chloride	500	400	130
1,1-Dichloroethane	79	230	130
1,2-Dichloroethane	< 420	< 420	< 420
Benzene	1100	1900	7000
Toluene	17000	21000	11000
Acetonitrile	< 140	330	1000
Benzyl Chloride	< 1000	< 1000	< 1000
Xylene	26500	10700	5600
Dichlorobenzene	435	300	140

TABLE D-3

LANDFILL GAS ANALYSES
PUENTE HILLS LANDFILL
MARCH 2000

Compound, (ppb)	Northeast Header	27" Header	West Header
Hydrogen Sulfide, ppm	128	42	118
Permanent Gases, total %	98	98.7	98.7
Oxygen, %	3.49	9.59	6.89
Argon, %	0.23	0.53	0.4
Nitrogen, %	19.4	44.2	33.3
Methane, %	39.9	24.9	32.4
Carbon Dioxide, %	35	19.4	25.8
Methylene Chloride	3200	< 210	980
Chloroform	< 42	< 42	< 42
1,1,1-Trichloroethane	110	< 42	< 42
Carbon Tetrachloride	< 43	< 43	< 43
1,1-Dichloroethene	56	< 42	< 42
Trichloroethylene	500	130	160
Tetrachloroethylene	1100	140	350
Chlorobenzene	190	350	97
Vinyl Chloride	380	550	110
1,1-Dichloroethane	430	86	130
1,2-Dichloroethane	< 420	< 420	< 420
Benzene	1800	1200	7300
Toluene	20000	18000	9500
Acetonitrile	360	< 140	570
Benzyl Chloride	< 1000	< 1000	< 1000
Xylene	10300	24300	5000
Dichlorobenzene	220	290	110

File

WATER RECLAMATION
SOLID WASTE MANAGEMENT

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422
www.lacsd.org

JAMES F. STAHL
Chief Engineer and General Manager

August 15, 2000
File: 31-380.10B

Mr. Larry Bowen
South Coast Air Quality Management District
21865 E. Copley Drive
Diamond Bar, CA 91765-4182

Dear Mr. Bowen:

Puente Hills Landfill Monitoring Report
for Compliance with
South Coast Air Quality Management District Rule 1150.1
Second Quarter, 2000

Enclosed please find the quarterly report for compliance with SCAQMD Rule 1150.1 for Puente Hills Landfill. The Rule 1150.1 Compliance Plan for Puente Hills Landfill approved on June 9, 2000 specifies the routine monitoring of the ambient air, gas collection system, surface gas, and perimeter gas probes. In accordance with the Compliance Plan, this report provides the Toxic Air Contaminant (TAC) results for the aforementioned programs and a record of all exceedances, and corrective actions for this quarter.

Rule 1150.1 requires an evaluation of the efficiency of the gas combustion or treatment facility. The Rule 1150.1 Compliance Plan requires the Sanitation District to test each flare at the Puente Hills Landfill for combustion efficiency every three years. In accordance with the Plan, there was no source testing conducted at the Puente Hills Landfill during this quarter.

Please contact the undersigned at this office should you wish to discuss this report.

Very truly yours,

James F. Stahl

R. L. Huitric

Raymond L. Huitric
Division Engineer
Solid Waste Management Department

RLH:TK:eo
Enclosures

EDMS Doc No. 14350

MONITORING REPORT FOR

PUENTE HILLS LANDFILL

FOR COMPLIANCE WITH

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

RULE 1150.1

(APRIL, MAY AND JUNE)

SUBMITTED TO

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

BY

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
AUGUST 15, 2000

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PUENTE HILLS LANDFILL MONITORING REPORT
FOR COMPLIANCE WITH
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1150.1
SECOND QUARTER, 2000
(APRIL, MAY AND JUNE)

INTRODUCTION

This report represents part of the continuing effort by the Los Angeles County Sanitation Districts (Sanitation Districts) to fulfill requirements for the subject landfill as contained in South Coast Air Quality Management District (SCAQMD) Rule 1150.1. The specific requirements for the subject site are contained in the Rule 1150.1 Compliance Plan (Compliance Plan) dated June 9, 2000. This Compliance Plan requires monitoring of the landfill gas collection and disposal system, the ambient air, surface gas, landfill gas, and perimeter probes. Additionally, the plan requires remediation of any exceedances in any of these programs. This report summarizes the monitoring results, and activities for each program during the Second Quarter, 2000.

DISPOSAL SITE DESCRIPTION

The Puente Hills Landfill has been in operation since 1958, and as of June, 2000, has received a total of 88.9 million tons of refuse. The site operates as a Class III disposal site under the provisions of Subchapter 15, Article 5 of the California Administrative Code, accepting only non-hazardous waste. The site totals 1365 acres of which approximately 630 acres is designated for landfilling purposes. Figure A shows the general location of the landfill.

MONITORING PROGRAMS

All samples collected as part of monitoring programs described below were analyzed by the Sanitation Districts' laboratory for Total Organic Compounds (TOC) as methane using an Organic Vapor Analyzer (OVA) or other approved instrument, then analyzed using gas chromatography for the Toxic Air Contaminants (TAC) specified in the rule. The sampling equipment, methods, and quality control procedures conform to the requirements of Rule 1150.1 and the Compliance Plan.

A. Perimeter Probe Monitoring

The thirty-two gas migration monitoring probes installed around the perimeter of the landfill are shown in Figure B. Each gas probe was monitored monthly for TOC measured as methane using a dual range gas indicator. No probes exceeded the 5% methane requirement during this quarter as shown in Appendix A-1.

During this quarter one ten-liter bag sample was collected from a randomly selected probe or the probe with the highest percent concentration of methane and analyzed by the Sanitation Districts' laboratory for TAC's using gas chromatography. The analytical results are shown in Table A.

In addition to monitoring the probes, the Compliance Plan requires surface gas instantaneous monitoring on accessible portions of grids placed between the refuse boundary and probes placed greater than 100 feet from the landfill. This is similar to the instantaneous surface gas monitoring program described below. These grids are shown in Figure C. In accordance with the Rule 1150.1 Compliance Plan, the accessible areas of the grids were monitored during this quarter. There were no exceedances to the 500 ppm requirement, as shown in Appendix A-2.

B. Surface Gas Monitoring

Integrated and instantaneous surface gas monitoring was conducted at Puente Hills Landfill to measure the concentration of gaseous emissions from the landfill surface. Monitoring was terminated whenever the wind speed exceeded 5 miles per hour, or when precipitation occurred. The wind speed was measured at the site weather station, or using a hand held anemometer. The use of the hand held anemometer was an approved alternative in the Compliance Plan, and the specifications were submitted for approval in a letter dated January 31, 2000. A total of 460 grids, each approximately 50,000 square feet in area, are located on the disposal area of the landfill. Figure C shows the layout of the grids at the Puente Hills Landfill. Thirty eight additional grids are shown in future fill areas. These grids will be monitored as filling progresses. Eighteen grids were not monitored because of inaccessibility due to operational and construction activities. These excluded grids are highlighted on Figure C.

The compliance terms for twelve surface gas grids at Puente Hills are currently specified in Variance Case No. 3715-13, granted by the SCAQMD on June 15, 2000. Until August 21, 2000, additional bi-monthly surface gas monitoring is required by this variance. This data is shown in Appendix C.

Integrated Surface Gas Monitoring

Within each grid, integrated monitoring was completed by traversing the entire accessible grid in a serpentine pattern. All samples were measured for TOC as methane using a SEM 500 or other approved instrument. A total of 16 grids exceeded the 50 ppm integrated requirement during this quarter. Fifteen of thes exceedances were remediated within 20 calendar days. One exceedance could not be remediated within 20 calendar days. Prevalent state of affairs at the site did not allow installation of additional gas collectors within subsequent 45 calendar days as required by Rule 1150.1. As a result, the Sanitation Districts' staff have filed a variance petition on August 8, 2000 to allow time to install additional collectors to address the exceedance. The monitoring results and remedial actions for grids that exceeded the 50-ppm limit are reported in Appendix B-1.

During the quarter, samples from two randomly selected grids were collected and analyzed by the Sanitation Districts laboratory for TAC's using gas chromatography. The analytical results are shown in Table B.

Instantaneous Surface Gas Monitoring

All monitoring was conducted using a SEM 500 or other approved instrument. A total of 103 instantaneous exceedances were detected during this quarter. Seventy-six of these exceedances were remediated within 20 calendar days. Remaining exceedances could not be remediated within 20 calendar days. Prevalent state of affairs at the site did not allow installation of additional gas collectors within subsequent 45 calendar days as required by Rule 1150.1. As a result, the Sanitation Districts' staff have filed a variance petition on August 8, 2000 to allow time to install 47 collectors to address the exceedances. All monitoring results and remedial actions for areas that exceeded the 500-ppm requirement are reported in Appendix B-2.

C. Ambient Air Monitoring

Quarterly ambient air monitoring was conducted to sample and analyze the air upwind and downwind of the landfill for air contaminants. The sampling arrangement for ambient air monitoring is shown on Figure D.

Ambient air sampling was conducted during two consecutive 12-hour periods this quarter. The first sampling period began at approximately 10:00 a.m. and ended at approximately 10:00 p.m. on May 30, 2000, and the second sampling period started at approximately 10:00 p.m. and ended at approximately 10:00 a.m. the following day. Wind monitoring data were recorded during each ambient air sampling period. The 30-minute average wind speed did not exceed 15 miles per hour during any sampling period.

All samples were collected in stainless steel canisters and analyzed by the Sanitation Districts laboratory for TAC's using gas chromatography. The analytical results are shown in Table C.

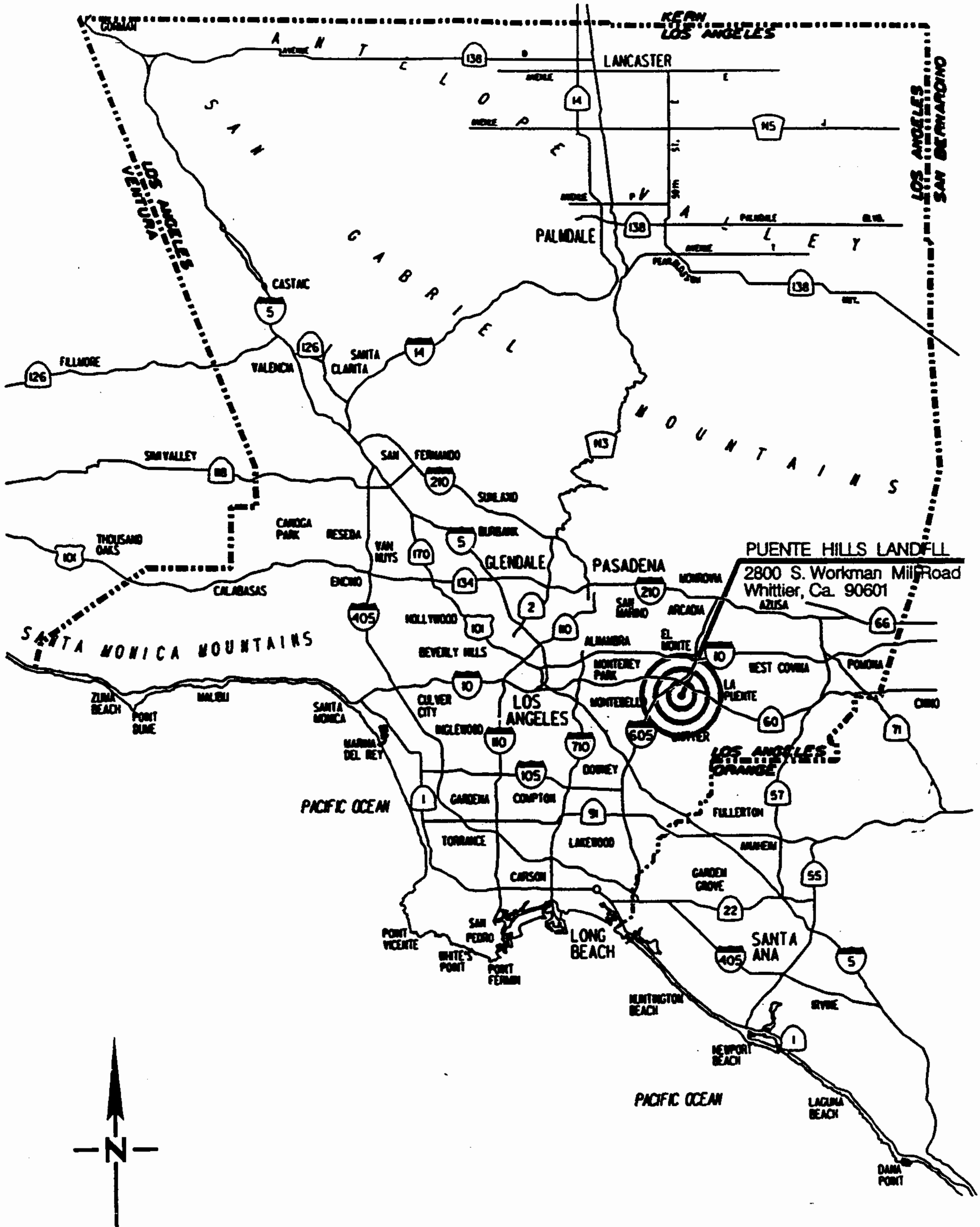
D. Landfill Gas Monitoring

Quarterly landfill gas samples were collected from each of the two headerlines entering the flare station. The gas recovery system at the landfill is indicated on Figure E. Each sample was collected in a tedlar bag over a continuous ten minute period. The analytical results are shown in Table D.

E. Combustion Efficiency Testing

Rule 1150.1 requires an evaluation of the efficiency of the gas combustion or treatment facility. The Rule 1150.1 Compliance Plan requires the Sanitation Districts to test each flare at the Puente Hills Landfill for combustion efficiency every three years. In accordance with the Plan, there was no source testing conducted at the Puente Hills Landfill during this quarter.

List of Figures



PUENTE HILLS LANDFILL

GENERAL LOCATION

FIGURE A

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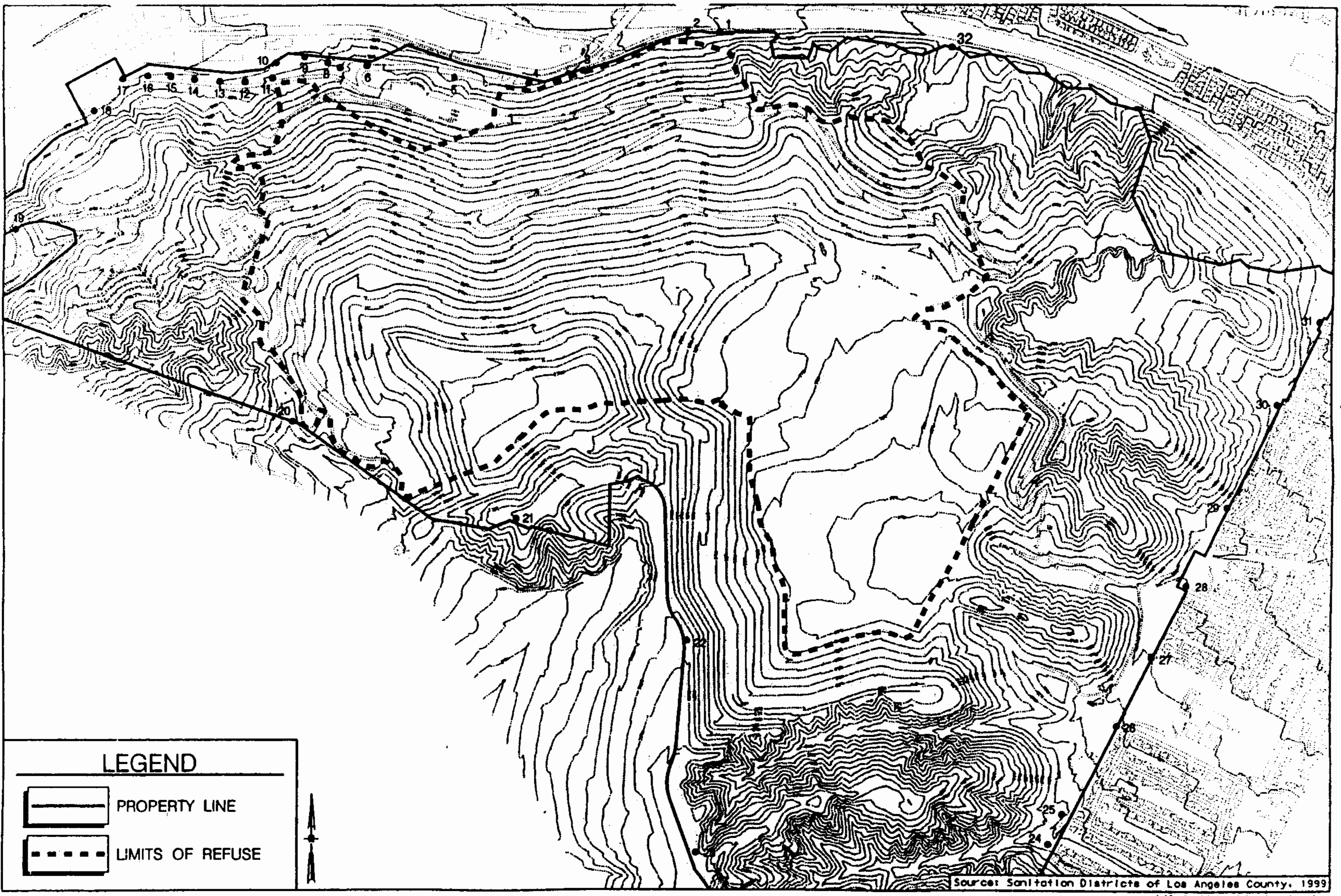

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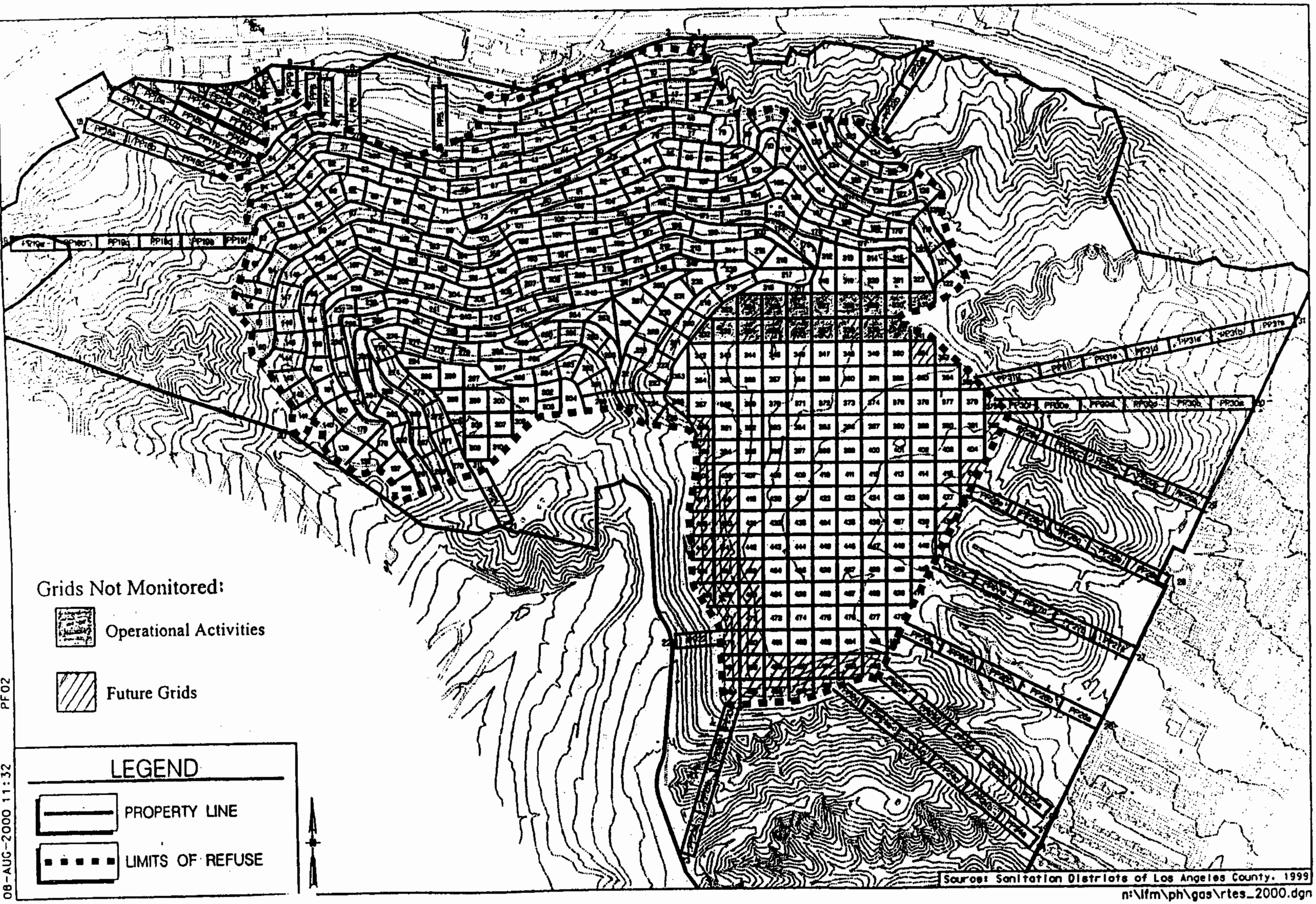
Locations of Perimeter Monitoring Probes

Figure B

PUENTE HILLS LANDFILL
COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

Scale: 1" = 1200'



PP = Perimeter probe surface gas monitoring grid.

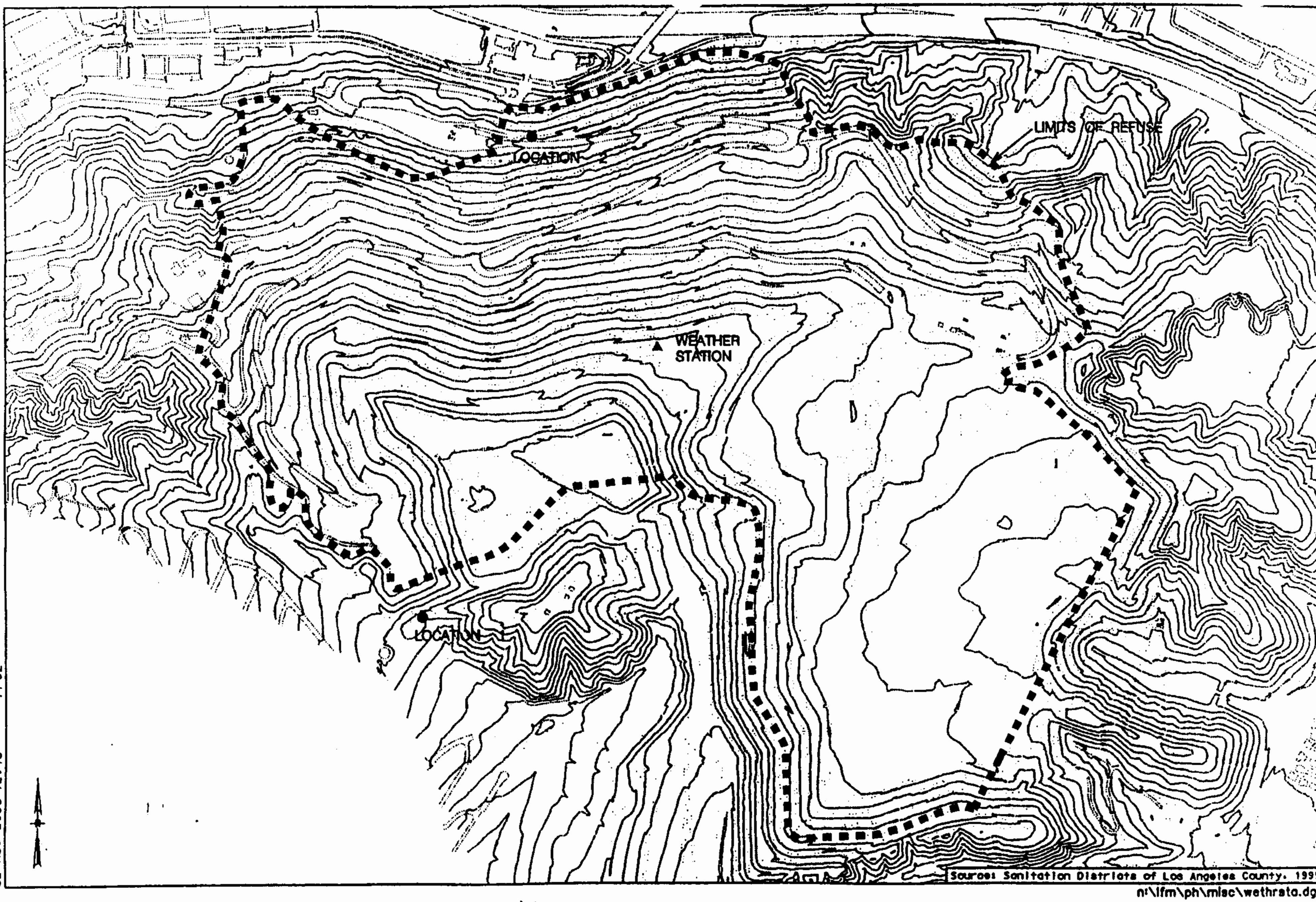
Surface Gas Monitoring Grids

Figure C

PUE E HILLS LANDFILL

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

Scale: 1" = 12



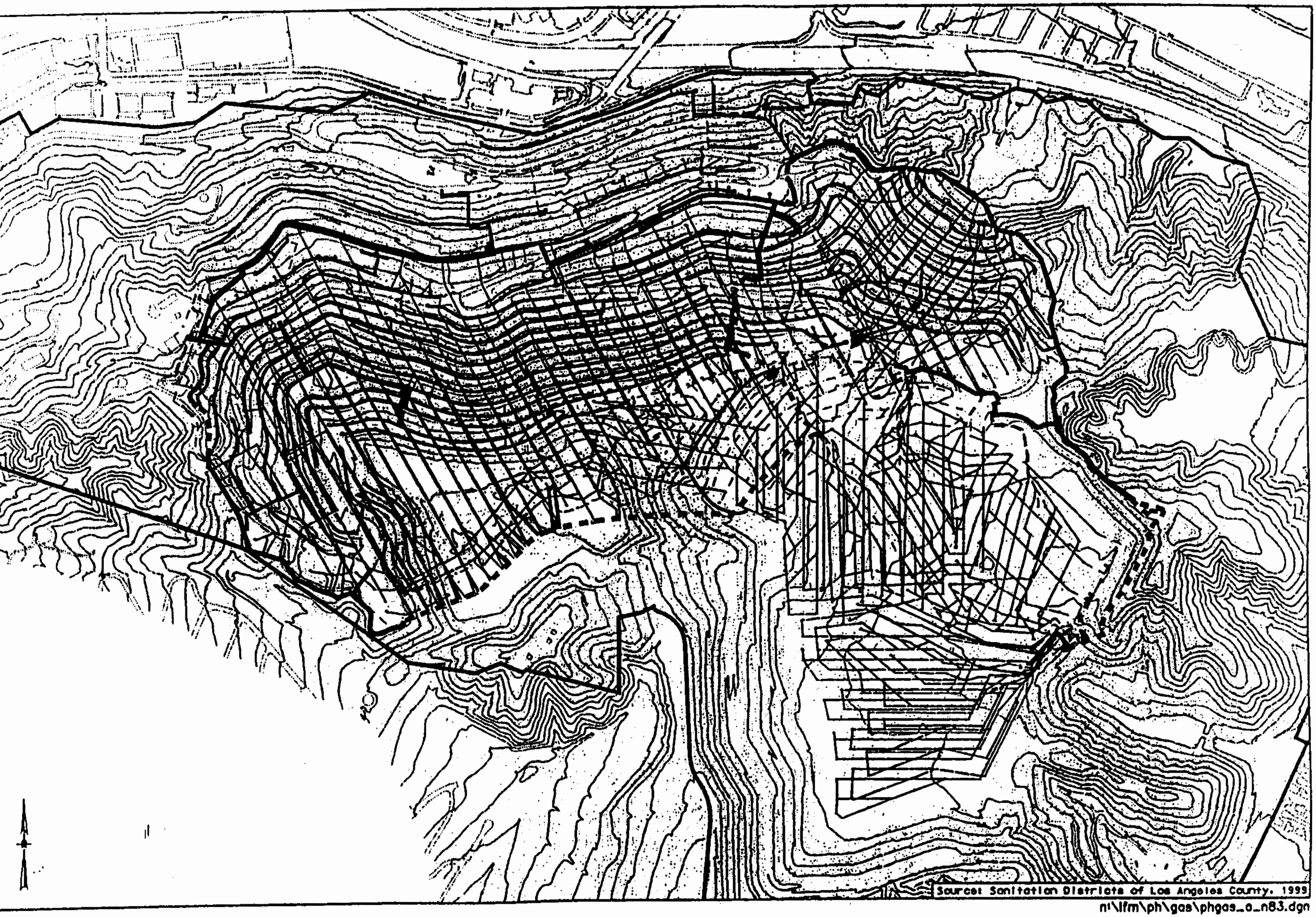
Locations of Ambient Air Samplers and Weather Station

Figure D

PUENTE HILLS LANDFILL

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

Scale: 1" = 1000'



Landfill Gas Collection System

Figure E

PUEN : HILLS LANDFILL

COUNTY SA...ATION DISTRICTS OF LOS ANGELES COUNTY

Scale: 1" = 1000'

List of Tables

TABLE A

PUENTE HILLS LANDFILL
PERIMETER PROBE MONITORING
April 2000

Compounds	PROBE # 32
Methylene Chloride, ppb	< 0.53
Chloroform, ppb	< 0.11
1,1,1-Trichloroethane, ppb	0.52
Carbon Tetrachloride, ppb	< 0.11
1,1-Dichloroethene, ppb	< 0.11
Trichloroethylene, ppb	< 0.11
Tetrachloroethylene, ppb	< 0.26
Chlorobenzene, ppb	< 0.11
Vinyl Chloride, ppb	< 0.11
1,1-Dichloroethane, ppb	< 0.05
Benzene, ppb	< 2.7
Toluene, ppb	< 0.47
Ethylbenzene, ppb	< 0.26
Acetonitrile, ppb	< 0.52
1,2-Dibromoethane, ppb	< 0.11
Benzyl Chloride, ppb	< 5.2
Xylene, ppb	< 0.67
Dichlorobenzene, ppb	< 0.7
TOC as Methane, ppm	3.7

TABLE B

PUENTE HILLS LANDFILL
SURFACE GAS MONITORING
June 2000

Compounds	Grid # 148	Grid # 98
Methylene Chloride, ppb	0.23	< 0.21
Chloroform, ppb	0.06	0.05
1,1,1-Trichloroethane, ppb	0.12	0.09
Carbon Tetrachloride, ppb	0.09	0.1
1,1-Dichloroethene, ppb	< 0.04	< 0.04
Trichloroethylene, ppb	0.02	0.02
Tetrachloroethylene, ppb	0.17	0.16
Chlorobenzene, ppb	< 0.11	< 0.11
Vinyl Chloride, ppb	< 0.02	< 0.02
1,1-Dichloroethane, ppb	< 0.04	< 0.04
Benzene, ppb	< 1.1	< 1.1
Toluene, ppb	1.3	1.5
Ethylbenzene, ppb	0.18	0.2
Acetonitrile, ppb	< 0.42	< 0.42
1,2-Dibromoethane, ppb	< 0.11	< 0.11
Benzyl Chloride, ppb	< 1	< 1
Xylene, ppb	0.81	0.99
Dichlorobenzene, ppb	< 0.84	< 0.84
TOC as Methane, ppm	73.6	18.4

TABLE C

AMBIENT AIR MONITORING - Toxic Air Contaminants
PUENTE HILLS LANDFILL
May 2000

Compounds	FIELD BLANK	Location 1A	Location 1B	Location 2A	Location 2B
Methylene Chloride, ppb	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chloroform, ppb	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
1,1,1-Trichloroethane, ppb	< 0.02	0.06	0.06	0.06	0.06
Carbon Tetrachloride, ppb	< 0.01	0.08	0.09	0.09	0.09
1,1-Dichloroethene, ppb	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
Trichloroethylene, ppb	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Tetrachloroethylene, ppb	< 0.02	0.12	0.06	0.13	0.05
Chlorobenzene, ppb	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11
Vinyl Chloride, ppb	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
1,1-Dichloroethane, ppb	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
Benzene, ppb	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
Toluene, ppb	< 0.1	0.69	0.36	0.76	0.46
Ethylbenzene, ppb	< 0.11	0.12	< 0.11	0.12	< 0.11
Acetonitrile, ppb	< 0.42	< 0.42	< 0.42	< 0.42	< 0.42
1,2-Dibromoethane, ppb	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11
Benzyl Chloride, ppb	< 1	< 1	< 1	< 1	< 1
Xylene, ppb	< 0.32	0.43	< 0.32	0.49	0.23
Dichlorobenzene, ppb	< 0.84	< 0.84	< 0.84	< 0.84	< 0.84
TOC as Methane, ppm	< 1	2.2	1.7	2.4	2.3

Note: Sampling began at approximately 10:00 a.m. for the 'A' labeled locations and 10:00 p.m. for the 'B' labeled locations.

TABLE D

LANDFILL GAS MONITORING
PUENTE HILLS LANDFILL
May 2000

Compounds	27" HEADER	NORTHEAST HEADER	WEST HEADER	WEST HEADER (Duplicate)
Hydrogen Sulfide, ppm	132	49	130	118
Permanent Gases, Total, %	96.9	98.1	97.6	97.2
Oxygen, %	4.19	11.1	5.94	6.02
Argon, %	0.26	0.57	0.38	0.38
Nitrogen, %	21.6	47.4	31.9	32
Methane, %	38.2	22.1	32.9	32.5
Carbon Dioxide, %	32.8	17	26.6	26.3
Methylene Chloride, ppb	3100	< 200	630	610
Chloroform, ppb	< 94	< 94	< 94	< 94
1,1,1-Trichloroethane, ppb	96	< 21	24	25
Carbon Tetrachloride, ppb	< 21	< 21	< 21	< 21
1,1-Dichloroethene, ppb	94	24	39	37
Trichloroethylene, ppb	590	110	170	180
Tetrachloroethylene, ppb	1100	< 110	390	360
Chlorobenzene, ppb	130	230	100	82
Vinyl Chloride, ppb	390	450	160	120
1,1-Dichloroethane, ppb	410	69	150	140
Benzene, ppb	1900	1800	5300	4900
Toluene, ppb	21000	11000	9500	8500
Ethylbenzene, ppb	5700	7200	4300	3500
Acetonitrile, ppb	< 1000	< 1000	< 1000	< 1000
1,2-Dibromoethane, ppb	< 21	< 21	< 21	< 21
Benzyl Chloride, ppb	< 2100	< 2100	< 2100	< 2100
Xylene, ppb	13200	14400	6800	5300
Dichlorobenzene, ppb	< 4200	< 4200	< 4200	< 4200

List of Appendices

Explanation of Surface Gas and Probe Exceedance Tables
(Appendices A-1, A-2, B-1, and B-2)

Areas containing a 500-ppm CH_4 instantaneous or a 50-ppm CH_4 integrated surface gas exceedance, or probes with a 5% CH_4 exceedance at any time during the quarter are listed in one of the following categories:

In Compliance: areas or probes that are now in compliance as a result of corrective actions.

Remediation: areas or probes that are within the 65-day remediation period at the time of this report. These are being corrected by gas collector installation.

Variance: areas or probes which currently have compliance terms dictated by an SCAQMD-issued variance.

The following columns are shown in the surface gas exceedance tables:

Grid Number: a number which identifies each 50,000 sq. ft. monitoring area.

Probe Number: probe identification number.

Exceedance ID: an LACSD internal recordkeeping number that uniquely identifies each exceedance.

Monitoring Date: date of one or more monitoring milestones are listed for each area or probe as follows:

Initial:	first reading taken.
1st follow-up:	readings taken in the first 10-day period.
2nd follow-up:	readings taken in the second 10-day period.
Final:	readings showing compliance after installation of gas collector.

Concentration: ppm CH_4 concentration as recorded by SEM-500 or equivalent (surface gas monitoring), or percent CH_4 as recorded by Gastech NP-204 (perimeter probe monitoring).

Repair action: description of corrective actions taken to remedy each surface gas or probe exceedance. "In Compliance" will be shown when each exceedance is successfully remedied.

Appendix A-1

Exceedance Records for
Perimeter Probe Monitoring

Puente Hills Landfill

Summary of Perimeter Probe Exceedances

From April 1, 2000 to June 30, 2000

Probe Number	Exceedance ID	Monitoring	Date	Conc. (% CH_4)	Repair Action

No Exceedances Found

<u>Appendix A-2</u>

Exceedance Records for
Perimeter Probe Surface Gas Monitoring

Puente Hills Landfill

Summary of Perimeter Probe Surface Gas Exceedances

From April 1, 2000 to June 30, 2000

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action

No Exceedances Found

Appendix C

Notices to Comply and Corrective Actions

South Coast Air Quality Management District
21865 E. Copley Drive, P. O. Box 4941, Diamond Bar 91765-4941

DATE OF INSPECTION: 3/31/00

NOTICE TO COMPLY

The following numbered Notices to Comply (served concurrently herewith) constitute parts of this Notice to Comply: Notice #(s):

FACILITY NAME: L.A. CO. SANITATION		FACILITY ID #: 25070	
LOCATION ADDRESS: 2800 WORKMAN MILL RD.		MAILING ADDRESS: P.O. BOX 4998	
CITY: WHITTIER	ZIP: 90601	CITY: WHITTIER, CA	ZIP: 90607
SECTOR:		TELEPHONE #: (562) 699-7411	

YOU ARE DIRECTED TO COMPLY WITH:				REPLY REPORT BY CITED FACILITY: (attach additional pages as necessary)	
ITEM #	• AQMD Permit # or Equipment Desc. • AQMD Rule # • Cal H&S Code §	A MEANS OF ACHIEVING COMPLIANCE IS:	DATE COMPLIANCE DUE	DATE COMPLIANCE ACHIEVED	DESCRIPTION OF HOW COMPLIANCE WAS ACHIEVED:
1	SEE ATTACHED LIST	RESHEDULE SCOPE, LEACHATE + REPAIR AFFECTED AREAS SO	4/19/00		
2	1150.1	THAT SURFACE EMISSIONS ARE BELOW 500 PPM WHEN MEASURED			
3		INSTANTANEOUSLY			

SERVED TO: FRANK CAPONI	BY INSPECTOR: P. Hoang	SIGNATURE OF OWNER/RESPONSIBLE OFFICIAL:
TITLE: SUPV. ENGINEER	TELEPHONE: (909) 370 2995	
	DATE: 4/5/00	TITLE:
		DATE:

INSTRUCTIONS/INFORMATION:

- For each minor violation cited compliance shall be achieved by the due date specified above for that particular violation.
- Within 5 working days of achieving compliance for each respective violation, the owner/responsible officer of the cited facility must complete and return a signed copy of this Notice to the South Coast Air Quality Management District at the address listed above. Please copy this Notice as many times as necessary to provide the required information. On each copy, include a written statement describing when and how compliance was achieved. Send all completed copies to the attention of the inspector named above.
- Failure to respond or a false statement that compliance has been achieved is a violation subject to further legal action pursuant to the California Health and Safety Code.
- Any person issued a Notice to Comply may appeal the issuance by filing a written appeal, including all reasons for the appeal, with the South Coast Air Quality Management District at the address listed above within 7 days of receipt of the Notice.
- The facility cited in this Notice is subject to reinspection at any time to ensure compliance.

NO. C 56301 **SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

SOURCE COPY

NOTICE TO COMPLY C-56301, SUPPLEMENTAL INFORMATION

A background level of 2 to 3 ppm was established at the field office parking lot.

The following areas were monitored and the locations assigned with the assistance of L.A. County personnel.

1. The down slope area east of bench route #45 and north of bench route #27.
2. The area around well #09-560 including the well casing and attached piping.
3. The area around well #09-600.
4. Well #18-099, leaking around case.
5. Well #18-110, nearby surface cracks.
6. The area down slope of well #19-102.
7. The area between wells #32-058 and #32-059 on bench#7, east of the leachate tank.
8. Bench #9 near marker #99.
9. The slopes above bench route #66 from route #62 to route #66.
10. The slopes above bench routes #43, #44 and #45.
11. The slope below well #19-099, plus the area around the well.
12. The area around the #32-085 header line.
13. The area approximately 100 feet west of well #28-105.

The above locations do not represent discreet point sources, but rather areas where surface emissions were monitored in excess of 500ppm from multiple surface openings. Remonitoring of the general area will be necessary to ensure that the slopes, benches and roads have been successfully remediated.

Appendix B-1

Exceedance Records for
Integrated Surface Gas Monitoring

Puente Hills Landfill

Summary of Integrated Surface Gas Exceedances

From April 1, 2000 to June 30, 2000

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
In Compliance					
63					
	2Q2000-63-27				
		Initial	5/23/00	63	Spot cover maintenance was performed.
		1st Follow-up	6/2/00	5	In compliance.
126					
	2Q2000-126-70				
		Initial	6/2/00	58	Monitored and adjusted well 70-130.
		1st Follow-up	6/12/00	9	In compliance.
133					
	2Q2000-133-95				
		Initial	6/1/00	83	Spot cover maintenance was performed.
		1st Follow-up	6/12/00	12	In compliance
148					
	2Q2000-148-103				
		Initial	6/2/00	74	Spot cover maintenance was perfomed.
		1st Follow-up	6/12/00	11	In compliance.
187					
	2Q2000-187-105				
		Initial	6/6/00	78	Monitored wells 44-034, 44-036, and 48-170. Added dirt and compacted. Reworked area.
		1st Follow-up	6/15/00	4	In compliance.

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
223					
	2Q2000-223-145				
		Initial	6/21/00	60	Area has been reworked with new dirt.
		1st Follow-up	7/5/00	5	In compliance.
226					
	2Q2000-226-139				
		Initial	6/22/00	264	Dirt was added and the site was reworked.
		1st Follow-up	7/5/00	17	In compliance.
242					
	2Q2000-242-119				
		Initial	6/9/00	62	Cover maintenance was performed. Nearby gas system was adjusted.
		1st Follow-up	6/15/00	5	In compliance.
245					
	2Q2000-245-102				
		Initial	6/7/00	107	Trench 76-255 and well 77-250 were monitored. Dirt was added to the slope areas where there is no vegetation. Reworked the area
		1st Follow-up	6/13/00	13	In compliance.
259					
	2Q2000-259-106				
		Initial	5/24/00	62	The wells in this area have been monitored and adjusted.
		1st Follow-up	6/14/00	11	In compliance.
281					
	2Q2000-281-109				
		Initial	6/10/00	288	Monitored wells 55-050 and 55-040. Added dirt and reworked the area.
		1st Follow-up	6/16/00	19	In compliance.
297					
	2Q2000-297-120				
		Initial	6/14/00	161	Dirt was added to cover up all of the fissures, and compacted area.
		1st Follow-up	6/27/00	19	In compliance.

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
298					
	2Q2000-298-123				
		Initial	6/14/00	92	Added dirt to cover up area, and reworked the area.
		1st Follow-up	6/27/00	19	In compliance.
370					
	2Q2000-370-20				
		Initial	5/20/00	176	Area with high emissions was adjusted.
		1st Follow-up	5/30/00	111	The whole grid has been recovered with dirt and reworked.
		2nd Follow-up	6/8/00	5	In compliance.
444					
	2Q2000-444-127				
		Initial	6/16/00	519	Added dirt to the area and compacted the area.
		1st Follow-up	6/26/00	1262	Added more cover
		2nd Follow-up	7/6/00	33	In compliance.
Variance					
98					
	2Q2000-98-48				
		Initial	5/31/00	127	Area was reworked. Adjusted gas wells of 36 series in area
		1st Follow-up	6/10/00	18	Point sources have been excavated and recovered with dirt. In compliance
		2nd Follow-up	6/19/00	138	Site still in exceedance. Will file petition for variance.

Appendix B-2

Exceedance Records for
Instantaneous Surface Gas Monitoring

Puente Hills Landfill

Summary of Instantaneous Surface Gas Exceedances

From April 1, 2000 to June 30, 2000

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
In Compliance					
61					
	2Q2000-61-125				
		Initial	5/24/00	714	Excavated, added and recompacted soil in the area.
		1st Follow-up	6/5/00	27	Compliance achieved.
62					
	2Q2000-62-68				
		Initial	6/2/00	1402	Dirt was added and compacted in area..
		1st Follow-up	6/2/00	43	Compliance achieved.
63					
	2Q2000-63-28				
		Initial	5/23/00	1611	Dirt was added and area was reworked.
		1st Follow-up	6/2/00	179	In compliance.
66					
	2Q2000-66-29				
		Initial	5/23/00	578	Gas system in this area was adjusted.
		1st Follow-up	6/2/00	1089	Area around gas well has been recovered with dirt and compacted. Gas well 19-104 monitored and the vac increased.
		2nd Follow-up	6/9/00	334	In compliance.
68					
	2Q2000-68-25				
		Initial	5/23/00	670	Monitored and adjusted 18 and 19 series wells. Area has been excavated and compacted.
		1st Follow-up	6/3/00	172	In compliance.

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
71					
	2Q2000-71-36				
		Initial	5/24/00	640	Dirt was added and compacted in area.
		1st Follow-up	6/9/00	127	In compliance.
82					
	2Q2000-82-71				
		Initial	6/2/00	624	Monitored and adjusted wells 22-090 and 22-080
		1st Follow-up	6/12/00	421	In compliance.
83					
	2Q2000-83-44				
		Initial	5/30/00	604	Wells 22-080 and 22-070 were adjusted .
		1st Follow-up	6/9/00	416	In compliance
85					
	2Q2000-85-45				
		Initial	5/30/00	1850	Well 22-040 was monitored and adjusted.
		1st Follow-up	6/9/00	2546	The old headerline was replaced in this area.
		2nd Follow-up	6/15/00	4	In compliance
86					
	2Q2000-86-46				
		Initial	5/30/00	3019	Wells 22-040 and 22-050 were monitored and adjusted.
		1st Follow-up	6/9/00	5867	The old headerline in this area was replaced.
		2nd Follow-up	6/15/00	4	In compliance
91					
	2Q2000-91-43				
		Initial	5/24/00	1026	Dirt was added and area was reworked.
		1st Follow-up	6/3/00	634	Wood chips were added to cover.
		2nd Follow-up	6/13/00	114	In compliance.

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
92					
	2Q2000-92-41				
		Initial	5/24/00	591	Trench 31-010 was adjusted
		1st Follow-up	6/3/00	343	In compliance.
93					
	2Q2000-93-90				
		Initial	6/2/00	1155	Dirt was placed and compacted.
		1st Follow-up	6/12/00	617	Area was reworked
		2nd Follow-up	6/20/00	217	In compliance
96					
	2Q2000-96-53				
		Initial	5/31/00	584	Area was reworked.
		1st Follow-up	6/9/00	427	In compliance.

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
98					
	2Q2000-98-129				
		Initial	6/19/00	36163	Well 36-050 was monitored and adjusted.
		1st Follow-up	6/29/00	60528	Site has been reworked
		2nd Follow-up	7/7/00	102	In compliance.
	2Q2000-98-130				
		Initial	6/20/00	9265	Well 36-060 was monitored and adjusted. Added dirt and compacted area.
		1st Follow-up	6/29/00	190	In compliance.
	2Q2000-98-131				
		Initial	6/19/00	867	Wells 36-060 and 36-070 were monitored and adjusted.
		1st Follow-up	6/29/00	94	In compliance.
	2Q2000-98-132				
		Initial	6/19/00	2236	Well 36-070 was monitored and adjusted.
		1st Follow-up	6/29/00	1499	Zone has been reworked
		2nd Follow-up	7/7/00	41	In compliance.
	2Q2000-98-133				
		Initial	6/19/00	633	Monitored well 36-080 and performed adjustment. Added dirt and compacted area.
		1st Follow-up	6/29/00	2863	Site has been reworked.
		2nd Follow-up	7/7/00	51	In compliance.
	2Q2000-98-55				
		Initial	5/31/00	7640	Dirt was added and compacted.
		1st Follow-up	6/10/00	2332	Area was recovered with dirt compacted.
		2nd Follow-up	6/19/00	78	In compliance
	2Q2000-98-56				
		Initial	5/31/00	1377	Dirt was added and compacted.
		1st Follow-up	6/10/00	904	Area was covered with new dirt and recompacted.
		2nd Follow-up	6/19/00	11	In compliance

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
101					
	2Q2000-101-57				
		Initial	5/31/00	1965	Dirt was added and area was reworked.
		1st Follow-up	6/9/00	116	In compliance.
102					
	2Q2000-102-58				
		Initial	5/31/00	2233	Increased flow to nearby gas well.
		1st Follow-up	6/9/00	592	Increased flow to nearby gas well 38-123
		2nd Follow-up	6/19/00	16	In compliance.
104					
	2Q2000-104-59				
		Initial	5/31/00	1219	Wells in area have been monitored and adjusted (increased flow).
		1st Follow-up	6/10/00	7	In compliance
107					
	2Q2000-107-60				
		Initial	5/31/00	673	Nearby gas collectors were monitored and adjusted.
		1st Follow-up	6/10/00	719	Site was reworked.
		2nd Follow-up	6/27/00	6	In compliance
125					
	2Q2000-125-61				
		Initial	6/1/00	510	Spot cover maintenance was performed
		1st Follow-up	6/12/00	438	In compliance
126					
	2Q2000-126-101				
		Initial	6/2/00	2317	Spot cover maintenance was performed.
		1st Follow-up	6/12/00	179	In compliance.
148					
	2Q2000-148-104				
		Initial	6/2/00	7037	Spot cover maintenance was performed.
		1st Follow-up	6/12/00	176	In compliance

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
158					
	2Q2000-158-69				
		Initial	6/3/00	526	Monitored and adjusted well 38-127 and 38-128 and the 38 trench near that area
		1st Follow-up	6/13/00	381	In compliance.
193					
	2Q2000-193-65				
		Initial	6/6/00	1213	Monitored and adjusted trench. Some dirt was added and compacted near trench 44-085
		1st Follow-up	6/13/00	51	In compliance.
203					
	2Q2000-203-92				
		Initial	6/12/00	527	Trenches were monitored and adjusted. Dirt was added and compacted.
		1st Follow-up	6/22/00	145	In compliance.
	2Q2000-203-93				
		Initial	6/12/00	737	Well 48-270 was monitoredand adjusted.
		1st Follow-up	6/22/00	644	Well 48-270 was remonitored and adjusted.
		2nd Follow-up	6/30/00	203	In compliance.
223					
	2Q2000-223-134				
		Initial	6/21/00	2466	More dirt was added and site was reworked.
		1st Follow-up	7/5/00	94	In compliance.
	2Q2000-223-135				
		Initial	6/21/00	814	Dirt was added and area was reworked
		1st Follow-up	7/5/00	28	In compliance.

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
226					
	2Q2000-226-140				
		Initial	6/22/00	2410	More dirt was added and zone has been reworked
		1st Follow-up	7/5/00	28	In compliance.
	2Q2000-226-141				
		Initial	6/22/00	19645	Dirt has been added and compacted and site has been reworked
		1st Follow-up	7/5/00	52	In compliance.
242					
	2Q2000-242-84				
		Initial	6/9/00	744	Well 77-190 was monitored and adjusted. More dirt was added and compacted.
		1st Follow-up	6/15/00	1386	Increase vac. on wells and trench in area.
		2nd Follow-up	6/26/00	442	In compliance
	2Q2000-242-86				
		Initial	6/9/00	791	Trench 77-185 was adjusted. More dirt was added and area was recompacted.
		1st Follow-up	6/15/00	104	In compliance.
244					
	2Q2000-244-74				
		Initial	6/7/00	583	Monitored well 76-180 and did adjustment.
		1st Follow-up	6/13/00	450	Added dirt to cover up the fissures and compacted area.
		2nd Follow-up	6/23/00	448	In compliance.

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
245					
	2Q2000-245-75				
		Initial	6/7/00	608	Added more dirt to the location and reworked the cover.
		1st Follow-up	6/13/00	98	In compliance
	2Q2000-245-76				
		Initial	6/7/00	740	Added dirt to this site and recompacted.
		1st Follow-up	6/13/00	165	In compliance.
	2Q2000-245-78				
		Initial	6/7/00	510	More dirt was added to this site and compacted, and trench 76-255 was monitored and adjusted.
		1st Follow-up	6/13/00	935	More dirt was added.
		2nd Follow-up	6/23/00	169	In compliance
259					
	2Q2000-259-38				
		Initial	5/24/00	1019	Well adjustment was performed.
		1st Follow-up	6/3/00	509	Monitored and adjusted wells 79-180 to 79-210.
		2nd Follow-up	6/14/00	98	In compliance.
	2Q2000-259-39				
		Initial	5/24/00	1271	Well adjustment was performed.
		1st Follow-up	6/3/00	444	Gas wells in this area were monitored and adjusted.
		2nd Follow-up	6/14/00	128	In compliance.
	2Q2000-259-40				
		Initial	5/24/00	1027	Wells adjusted.
		1st Follow-up	6/3/00	440	Gas wells in this area were monitored and adjusted.
		2nd Follow-up	6/14/00	160	In compliance.

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
267					
	2Q2000-267-80				
		Initial	6/5/00	811	Added dirt to the site to cover up the fissure and compacted area. Monitored the effectiveness of well 77-004 and performed adjustment.
		1st Follow-up	6/13/00	55	In compliance
268					
	2Q2000-268-42				
		Initial	5/24/00	844	Area was reworked.
		1st Follow-up	6/3/00	1341	More cover work was performed.
		2nd Follow-up	6/13/00	404	In compliance.
278					
	2Q2000-278-107				
		Initial	6/10/00	2067	Added dirt and compacted.
		1st Follow-up	6/17/00	2747	Added dirt around the down drain and compacted.
		2nd Follow-up	6/27/00	7	In compliance.
281					
	2Q2000-281-110				
		Initial	6/10/00	36753	Wells 55-050 and 55-040 were monitored and adjusted.
		1st Follow-up	6/16/00	1488	Area has been bulldozed over.
		2nd Follow-up	6/23/00	110	In compliance.
285					
	2Q2000-285-142				
		Initial	6/27/00	1334	Area has been reworked by adding dirt and bulldozer.
		1st Follow-up	7/7/00	178	In compliance.

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
290					
	2Q2000-290-115				
		Initial	6/10/00	804	Added dirt to the slope area to cover up the cracks and compacted.
		1st Follow-up	6/20/00	172	In compliance.
	2Q2000-290-116				
		Initial	6/10/00	1494	Added dirt to cover up the cracks and reworked the area.
		1st Follow-up	6/20/00	58	In compliance.
	2Q2000-290-137				
		Initial	6/10/00	804	Dirt was added to cover up all of the cracks and reworked the area.
		1st Follow-up	6/20/00	761	Dirt was added and recompacted.
		2nd Follow-up	6/30/00	30	In compliance.
297					
	2Q2000-297-121				
		Initial	6/14/00	2055	Dirt added to cover the fissure and compacted.
		1st Follow-up	6/23/00	584	Area has been reworked with dirt and track walked.
		2nd Follow-up	7/3/00	134	Site is in compliance.
	2Q2000-297-122				
		Initial	6/14/00	17936	Added dirt to cover up the fissures and compacted.
		1st Follow-up	6/23/00	12190	Site has been completely reworked and track walked.
		2nd Follow-up	7/3/00	90	In compliance
	2Q2000-297-144				
		Initial	6/27/00	670	Parts of the area have been reworked with dirt.
		1st Follow-up	7/3/00	475	In compliance.
298					
	2Q2000-298-124				
		Initial	6/14/00	14922	Added dirt to cover up the fissure and compacted.
		1st Follow-up	6/23/00	1432	Site completely reworked with dirt.
		2nd Follow-up	7/3/00	60	In compliance.

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
346					
	2Q2000-346-23				
		Initial	5/22/00	2073	Cracks were repaired by adding and compacting dirt near the greenwaste cover area.
		1st Follow-up	6/7/00	24	In compliance.
	2Q2000-346-24				
		Initial	5/22/00	722	Dirt has been added and compacted by scraper road.
		1st Follow-up	6/7/00	34	In compliance.
357					
	2Q2000-357-21				
		Initial	5/20/00	1526	Dirt was added to the cover and recompacted.
		1st Follow-up	5/31/00	6100	More dirt was brought in and area was reworked.
		2nd Follow-up	6/8/00	23	In compliance.
	2Q2000-357-22				
		Initial	5/20/00	759	Dirt was added and cover was reworked.
		1st Follow-up	5/31/00	805	Area has been reworked with dirt.
		2nd Follow-up	6/8/00	23	In compliance.

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
370					
	2Q2000-370-30				
		Initial	5/20/00	1181	Wells in area with high emissions on southern edge of grid were adjusted.
		1st Follow-up	5/30/00	1880	More dirt was added to the cover and area was reworked.
		2nd Follow-up	6/8/00	52	In compliance.
	2Q2000-370-31				
		Initial	5/20/00	906	Area with high emissions on southern edge of grid was reworked.
		1st Follow-up	5/30/00	859	Area has been recovered with dirt and reworked.
		2nd Follow-up	6/8/00	53	In compliance.
	2Q2000-370-32				
		Initial	5/20/00	706	Trenches in area were adjusted.
		1st Follow-up	5/30/00	949	Area has been recovered with dirt and compacted.
		2nd Follow-up	6/8/00	53	In compliance.
	2Q2000-370-33				
		Initial	5/20/00	4554	Area with high emissions on southern edge of grid was reworked with dirt.
		1st Follow-up	5/30/00	1022	Dirt was added to the cover and area has been reworked.
		2nd Follow-up	6/8/00	53	In compliance.
	2Q2000-370-34				
		Initial	5/20/00	8969	Area with high emissions on southern edge of grid was reworked.
		1st Follow-up	5/30/00	671	Area has been covered with dirt and compacted.
		2nd Follow-up	6/8/00	53	In compliance.

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
371					
	2Q2000-371-18				
		Initial	5/19/00	1261	Disposal area. Cover was reworked with new dirt.
		1st Follow-up	5/31/00	7824	Area was reworked.
		2nd Follow-up	6/8/00	108	In compliance.
	2Q2000-371-62				
		Initial	5/19/00	913	Disposal area. Cover was reworked.
		1st Follow-up	5/31/00	1178	Area has been remonitored and adjusted.
		2nd Follow-up	6/8/00	108	In compliance
372					
	2Q2000-372-17				
		Initial	5/19/00	659	Disposal area. Area in the vicinity of orginal point source was reworked.
		1st Follow-up	5/30/00	776	The whole grid has been recovered with dirt.
		2nd Follow-up	6/8/00	25	In compliance.
401					
	2Q2000-401-16				
		Initial	5/17/00	524	Disposal area. Dirt was used as cover. Area was covered by trash cell.
		1st Follow-up	5/26/00	437	In compliance.
402					
	2Q2000-402-15				
		Initial	5/17/00	486	Disposal area. Dirt was used as cover. Covered by trash cell.
		1st Follow-up	5/26/00	343	In compliance.
409					
	2Q2000-409-14				
		Initial	5/17/00	798	Area of cracks re-covered and track walked
		1st Follow-up	5/25/00	51	In compliance

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
448					
	2Q2000-448-12				
		Initial	5/12/00	618	Disposal Area. Area was covered by new trash cell on 5/21/00.
		1st Follow-up	5/22/00	157	In compliance
	2Q2000-448-13				
		Initial	5/12/00	798	Disposal Area. Area was covered by new trash fill and new cover on 5/21/00.
		1st Follow-up	5/22/00	157	In compliance
481					
	2Q2000-481-9				
		Initial	5/9/00	524	Fresh dirt dumped and compacted with dozer. Dirt added to adjacent bench. Dirt added and compacted where cracks were present.
		1st Follow-up	5/19/00	16	In compliance
482					
	2Q2000-482-10				
		Initial	5/9/00	486	Fresh dirt dumped and compacted with dozer. Dirt added to ops bench adjacent to point source; dirt added and compacted where cracks were present
		1st Follow-up	5/25/00	21	In compliance

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
Variance					
53					
	2Q2000-53-94				
		Initial	6/12/00	522	Cover maintenance was performed.
		1st Follow-up	6/22/00	4790	Area was reworked.
		2nd Follow-up	6/30/00	14790	Site is still in exceedance. Will file petition for variance.
71					
	2Q2000-71-37				
		Initial	5/24/00	750	Area has been re-covered with dirt and compacted.
		1st Follow-up	6/9/00	787	Area has been reworked with dirt and compacted.
		2nd Follow-up	6/30/00	6	Site is under the PHLF first variance (Case No. 3715-13).
80					
	2Q2000-80-47				
		Initial	5/30/00	593	New headerline construction is ongoing in area
		1st Follow-up	6/9/00	527	Asphalt/dirt layer added around area to surpress gas emission.
		2nd Follow-up	6/15/00	1134	Site is still in exceedance. Will file petition for variance.
97					
	2Q2000-97-51				
		Initial	5/31/00	1319	Area was reworked.
		1st Follow-up	6/9/00	1515	Area was recompacted.
		2nd Follow-up	6/15/00	931	Site is still in exceedance. Will file petition for variance.

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
98					
	2Q2000-98-128				
		Initial	6/19/00	1182	Well 36-060 was monitored.
		1st Follow-up	6/29/00	81499	Added more dirt to the area.
		2nd Follow-up	7/7/00	1044	Site is still in exceedance. Will file petition for variance.
	2Q2000-98-49				
		Initial	5/31/00	1076	Wells adjusted in this area
		1st Follow-up	6/10/00	896	Area was reworked with dirt.
		2nd Follow-up	6/14/00	847	Site is still in exceedance. Will file petition for variance.
101					
	2Q2000-101-54				
		Initial	5/31/00	789	Cover maintenance was performed.
		1st Follow-up	6/9/00	779	More cover maintenance was performed.
		2nd Follow-up	6/27/00	38247	Site is still in exceedance. Will file petition for variance.
127					
	2Q2000-127-72				
		Initial	6/2/00	963	Site has been reworked
		1st Follow-up	6/12/00	3724	More cover work was performed.
		2nd Follow-up	6/20/00	19074	Site is still in exceedance. Will file petition for variance.
133					
	2Q2000-133-98				
		Initial	6/1/00	7288	Cover maintenance was performed
		1st Follow-up	6/12/00	536	More cover maintenance was performed.
		2nd Follow-up	6/20/00	13404	Site is still in exceedance. Will file petition for variance.
135					
	2Q2000-135-112				
		Initial	6/1/00	503	Spot cover maintenance was performed.
		1st Follow-up	6/8/00	816	Trenches in area were adjusted.
		2nd Follow-up	6/15/00	5977	Site is still in exceedance. Will file petition for variance.

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
154					
	2Q2000-154-100				
		Initial	6/3/00	693	Monitored wells 42-300 and 42-305. Added more dirt and compacted.
		1st Follow-up	6/13/00	2756	Area has been re-covered with dirt.
		2nd Follow-up	6/23/00	3895	Site is still in exceedance. Will file petition for variance
187					
	2Q2000-187-66				
		Initial	6/6/00	2095	Monitored and adjusted wells 44-036 and 44-034 and the trench 44-035
		1st Follow-up	6/15/00	2766	Monitor wells 44-036 and 44-034 and the trench 44-035
		2nd Follow-up	6/23/00	3395	Site is still in exceedance. Will file petition for variance
203					
	2Q2000-203-91				
		Initial	6/12/00	737	Well 48-250 was monitored and adjusted.
		1st Follow-up	6/22/00	664	Dirt was added and compacted.
		2nd Follow-up	6/30/00	3025	Site is still in exceedance. Will file petition for variance
242					
	2Q2000-242-87				
		Initial	6/9/00	500	Trench 77-175 was monitored and adjusted.
		1st Follow-up	6/15/00	0	Missing data.
		2nd Follow-up	6/26/00	504	Site is still in exceedance. Will file petition for variance.
244					
	2Q2000-244-73				
		Initial	6/7/00	1006	Monitored well 76-180 and performed adjustment.
		1st Follow-up	6/13/00	1317	Dirt was added and distributed.
		2nd Follow-up	6/23/00	2029	Site is still in exceedance. Will file petition for variance.

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
245					
	2Q2000-245-77				
		Initial	6/7/00	947	Monitored trench 76-255 and performed adjustment.
		1st Follow-up	6/13/00	1311	More dirt added to the site and compacted.
		2nd Follow-up	6/23/00	3660	Site is still in exceedance. Will file petition for variance.
246					
	2Q2000-246-79				
		Initial	6/7/00	710	Added more dirt to cover up the fissures.
		1st Follow-up	6/13/00	1235	Area recompacted.
		2nd Follow-up	6/23/00	807	Site is still in exceedance. Will file petition for variance.
247					
	2Q2000-247-83				
		Initial	6/8/00	727	Dirt was added. Well 49-430 was adjusted.
		1st Follow-up	6/15/00	726	More dirt was added.
		2nd Follow-up	6/23/00	899	Site is still in exceedance. Will file petition for variance.
272					
	2Q2000-272-88				
		Initial	6/9/00	608	Welll 79-020 was monitored and adjusted.
		1st Follow-up	6/15/00	1337	Welll 79-020 was monitored and adjusted.
		2nd Follow-up	6/26/00	764	Site is still in exceedance. Will file petition for variance.
	2Q2000-272-89				
		Initial	6/10/00	538	Monitored well 79-030 and performed adjustment.
		1st Follow-up	6/15/00	1048	Monitored well 79-030 and performed adjustment.
		2nd Follow-up	6/26/00	788	Site is still in exceedance. Will file petition for variance.
284					
	2Q2000-284-111				
		Initial	6/10/00	2448	More dirt was added and walked.
		1st Follow-up	6/27/00	35152	Slope has been bulldozed over.
		2nd Follow-up	7/7/00	1148	Site is still in exceedance. Will file petition for variance.

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
285					
	2Q2000-285-113				
		Initial	6/10/00	576	Added dirt to the area to cover up the cracks and reworked the area.
		1st Follow-up	6/27/00	1502	Area was reworked.
		2nd Follow-up	7/7/00	187	Not cleared within 20 days. Will file petition for variance.
	2Q2000-285-114				
		Initial	6/10/00	520	Added dirt to cover up the cracks and reworked the area..
		1st Follow-up	6/27/00	9437	Site reworked.
		2nd Follow-up	7/7/00	29945	Site is still in exceedance. Will file petition for variance.
290					
	2Q2000-290-138				
		Initial	6/10/00	1494	Added dirt to the area to cover up all of the cracks and holes.
		1st Follow-up	6/20/00	761	Add more dirt to the area
		2nd Follow-up	6/30/00	1493	Site is still in exceedance. Will file petition for variance.
293					
	2Q2000-293-117				
		Initial	6/10/00	1385	Monitored well 55-060 and performed adjustment. Added more dirt to cover up any cracks in the area and compacted.
		1st Follow-up	6/20/00	23	In compliance.
		2nd Follow-up	7/3/00	6538	Site is still in exceedance. Will file petition for variance.
	2Q2000-293-118				
		Initial	6/10/00	570	Monitored well 55-060 and performed adjustment. Added more dirt to cover up any cracks in the area and compacted the area.
		1st Follow-up	6/20/00	28	In compliance.
		2nd Follow-up	7/3/00	874	Site is still in exceedance. Will file petition for variance.

Bimonthly Surface Gas Monitoring For the Areas Under PHLF R1150.1 Variance

First Event (June 1 to June 15)

Grids	Area # in NTC C56301	Integrated (ppm)	Maximum Instantaneous (ppm)
39	*1, 10*	3	9
40	*1, 10*	3	8
55	*3, 9*	6	183
56	*9*	9	167
57	*2, 9*	7	62
58	*9*	3	35
63	*4, 11*	5	179
64	*5*	5	102
65	*6*	5	69
70	*7*	8	139
71	*7*	31	127
79	*8*	3	37
101	*12, 13*	25	779

Bimonthly Surface Gas Monitoring For the Areas Under Puente Hills R1150.1 Variance

Second Event (June 15 to June 30)

Grids	Area # in NTC C56301	Integrated (ppm)	Maximum Instantaneous (ppm)	Repair Action
40	1, 10	31	526	Cover maintenance was performed
55	3, 9	221	2623	Cover maintenance was performed
56	9	94	6755	Cover maintenance was performed
57	2, 9	7	62	
58	9	3	35	
63	4, 11	5	179	
64	5	3	138	
65	6	3	41	
70	7	3	17	
71	7	3	6	
79	8, 13	3	84	
100	12	115	3991	Cover maintenance was performed

Note: The last monitoring event erroneously included grids 39 and 101, and excluded grid 100.

Bimonthly Surface Gas Monitoring For the Areas Under Puente Hills R1150.1 Variance

Third Event (July 1 to July 15)

Grids	Area # in NTC C56301	Integrated (ppm)	Maximum Instantaneous (ppm)	Repair Action
40	*1, 10*	3	15	
55	*3, 9*	16	242	
56	*9*	11	112	
57	*2, 9*	36	140	
58	*9*	7	30	
63	*4, 11*	2	5	
64	*5*	2	15	
65	*6*	3	13	
70	*7*	5	54	
71	*7*	192	11517	Cover maintenance was performed
79	*8, 13*	3	41	
100	*12*	23	248	

Bimonthly Surface Gas Monitoring For the Areas Under Puente Hills R1150.1 Variance

Fourth Event (July 15 to July 31)

Grids	Area # in NTC C56301	Integrated (ppm)	Maximum Instantaneous (ppm)	Repair Action
40	*1, 10*	4	4	
55	*3, 9*	4	16	
56	*9*	7	96	
57	*2, 9*	3	11	
58	*9*	3	56	
63	*4, 11*	2	3	
64	*5*	4	57	
65	*6*	3	238	
70	*7*	4	179	
71	*7*	10	474	
79	*8, 13*	7	95	
100	*12*	6	59	

File

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422
www.lacsd.org

JAMES F. STAHL
Chief Engineer and General Manager

November 15, 2000
File: 31-380.10B

Mr. Larry Bowen
South Coast Air Quality Management District
21865 E. Copley Drive
Diamond Bar, CA 91765-4182

Dear Mr. Bowen:

Puente Hills Landfill Monitoring Report
for Compliance with
South Coast Air Quality Management District Rule 1150.1
Third Quarter, 2000

Enclosed please find the quarterly report for compliance with SCAQMD Rule 1150.1 for Puente Hills Landfill. The Rule 1150.1 Compliance Plan for Puente Hills Landfill approved on June 9, 2000 specifies the routine monitoring of the ambient air, gas collection system, surface gas, and perimeter gas probes. In accordance with the Compliance Plan, this report provides the Toxic Air Contaminant (TAC) results for the aforementioned programs and a record of all exceedances, and corrective actions for this quarter.

Rule 1150.1 requires an evaluation of the efficiency of the gas combustion or treatment facility. The Rule 1150.1 Compliance Plan requires the Sanitation District to test each flare at the Puente Hills Landfill for combustion efficiency every three years. In accordance with the Plan, four flares were tested at Puente Hills Landfill during this quarter. The results are contained in the enclosed report entitled, "Emission Tests on Flare Nos. 2, 20, 22, and 24 at Puente Hills Landfill".

Please contact the undersigned at this office should you wish to discuss this report.

Very truly yours,

James F. Stahl

R. L. Huitric

Raymond L. Huitric
Division Engineer
Solid Waste Management Department

RLH:TK:eo
Enclosures

EDMS Doc No. 22265

MONITORING REPORT FOR

PUENTE HILLS LANDFILL

FOR COMPLIANCE WITH

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

RULE 1150.1

(JULY, AUGUST AND SEPTEMBER)

SUBMITTED TO

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

BY

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
NOVEMBER 15, 2000

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PUENTE HILLS LANDFILL MONITORING REPORT
FOR COMPLIANCE WITH
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1150.1
THIRD QUARTER, 2000
(JULY, AUGUST AND SEPTEMBER)

INTRODUCTION

This report represents part of the continuing effort by the Los Angeles County Sanitation Districts (Sanitation Districts) to fulfill requirements for the subject landfill as contained in South Coast Air Quality Management District (SCAQMD) Rule 1150.1. The specific requirements for the subject site are contained in the Rule 1150.1 Compliance Plan (Compliance Plan) dated June 9, 2000. This Compliance Plan requires monitoring of the landfill gas collection and disposal system, the ambient air, surface gas, landfill gas, and perimeter probes. Additionally, the plan requires remediation of any exceedances in any of these programs. This report summarizes the monitoring results, and activities for each program during the Third Quarter, 2000.

DISPOSAL SITE DESCRIPTION

The Puente Hills Landfill has been in operation since 1958, and as of September, 2000, has received a total of 89.8 million tons of refuse. The site operates as a Class III disposal site under the provisions of Subchapter 15, Article 5 of the California Administrative Code, accepting only non-hazardous waste. The site totals 1365 acres of which approximately 630 acres is designated for landfilling purposes. Figure A shows the general location of the landfill.

MONITORING PROGRAMS

All samples collected as part of monitoring programs described below were analyzed by the Sanitation Districts' laboratory for Total Organic Compounds (TOC) as methane using an Organic Vapor Analyzer (OVA) or other approved instrument, then analyzed using gas chromatography for the Toxic Air Contaminants (TAC) specified in the rule. The sampling equipment, methods, and quality control procedures conform to the requirements of Rule 1150.1 and the Compliance Plan.

A. Perimeter Probe Monitoring

The thirty-two gas migration monitoring probes installed around the perimeter of the landfill are shown in Figure B. Each gas probe was monitored monthly for TOC measured as methane using a dual range gas indicator. No probes exceeded the 5% methane requirement during this quarter as shown in Appendix A-1.

During this quarter one ten-liter bag sample was collected from a randomly selected probe or the probe with the highest percent concentration of methane and analyzed by the Sanitation Districts' laboratory for TAC's using gas chromatography. The analytical results are shown in Table A.

In addition to monitoring the probes, the Compliance Plan requires surface gas instantaneous monitoring on accessible portions of grids placed between the refuse boundary and probes placed greater than 100 feet from the landfill. This is similar to the instantaneous surface gas monitoring program described below. These grids are shown in Figure C. In accordance with the Rule 1150.1 Compliance Plan, the accessible areas of the grids were monitored during this quarter. There were no exceedances to the 500 ppm requirement, as shown in Appendix A-2.

B. Surface Gas Monitoring

Integrated and instantaneous surface gas monitoring was conducted at Puente Hills Landfill to measure the concentration of gaseous emissions from the landfill surface. Monitoring was terminated whenever the wind speed exceeded 5 miles per hour, or when precipitation occurred. The wind speed was measured at the site weather station, or using a hand held anemometer. The use of the hand held anemometer was an approved alternative in the Compliance Plan, and the specifications were submitted for approval in a letter dated January 31, 2000. A total of 462 grids, each approximately 50,000 square feet in area, are located on the disposal area of the landfill. Figure C shows the layout of the grids at the Puente Hills Landfill. Thirty six additional grids are shown in future fill areas. These grids will be monitored as filling progresses. Thirteen grids were not monitored because of inaccessibility due to operational and construction activities. These excluded grids are highlighted on Figure C.

The compliance terms for twelve surface gas grids were specified in Variance Case No. 3715-13, granted by the SCAQMD on June 15, 2000. Until August 21, 2000, additional bi-monthly surface gas monitoring was required by this variance. This data is shown in Appendix C. All the compliance terms for the twelve grids were met before the August 21, 2000 deadline.

The Sanitation Districts filed petition for another variance to allow time to install additional collectors to address twenty eight exceedances not cleared within 20 calendar days. Twenty seven of these exceedances occurred in the second quarter and one exceedance occurred in the third quarter. The variance was granted by the SCAQMD on August 30, 2000. In accordance with the compliance terms of this variance, the Sanitation Districts conducted bi-monthly surface gas monitoring at the specified locations from August 1, 2000 through October 31, 2000 and completed the installation of 47 new gas collectors. All the locations were brought to compliance before the October 31, 2000 deadline. The results of this bi-monthly monitoring are also presented in Appendix C.

Integrated Surface Gas Monitoring

Within each grid, integrated monitoring was completed by traversing the entire accessible grid in a serpentine pattern. All samples were measured for TOC as methane using a SEM 500 or other approved instrument. A total of 6 grids exceeded the 50 ppm integrated requirement during this quarter. All of thes exceedances were remediated within 20 calendar days. The monitoring results and remedial actions for grids that exceeded the 50-ppm limit are reported in Appendix B-1.

During the quarter, samples from two randomly selected grids were collected and analyzed by the Sanitation Districts laboratory for TAC's using gas chromatography. The analytical results are shown in Table B.

Instantaneous Surface Gas Monitoring

All monitoring was conducted using a SEM 500 or other approved instrument. A total of 67 instantaneous exceedances were detected during this quarter. Sixty six of these exceedances were remediated within 20 calendar days. One exceedance could not be remediated within 20 calendar days. This exceedance was included in the variance as already discussed in the report. All monitoring results and remedial actions for areas that exceeded the 500-ppm requirement are reported in Appendix B-2.

C. Ambient Air Monitoring

Quarterly ambient air monitoring was conducted to sample and analyze the air upwind and downwind of the landfill for air contaminants. The sampling arrangement for ambient air monitoring is shown on Figure D.

Ambient air sampling was conducted during two consecutive 12-hour periods this quarter. The first sampling period began at approximately 10:00 a.m. and ended at approximately 10:00 p.m. on August 28, 2000, and the second sampling period started at approximately 10:00 p.m. and ended at approximately 10:00 a.m. the following day. Wind monitoring data were recorded during each ambient air sampling period. The 30-minute average wind speed did not exceed 15 miles per hour during any sampling period.

All samples were collected in stainless steel canisters and analyzed by the Sanitation Districts laboratory for TAC's using gas chromatography. The analytical results are shown in Table C.

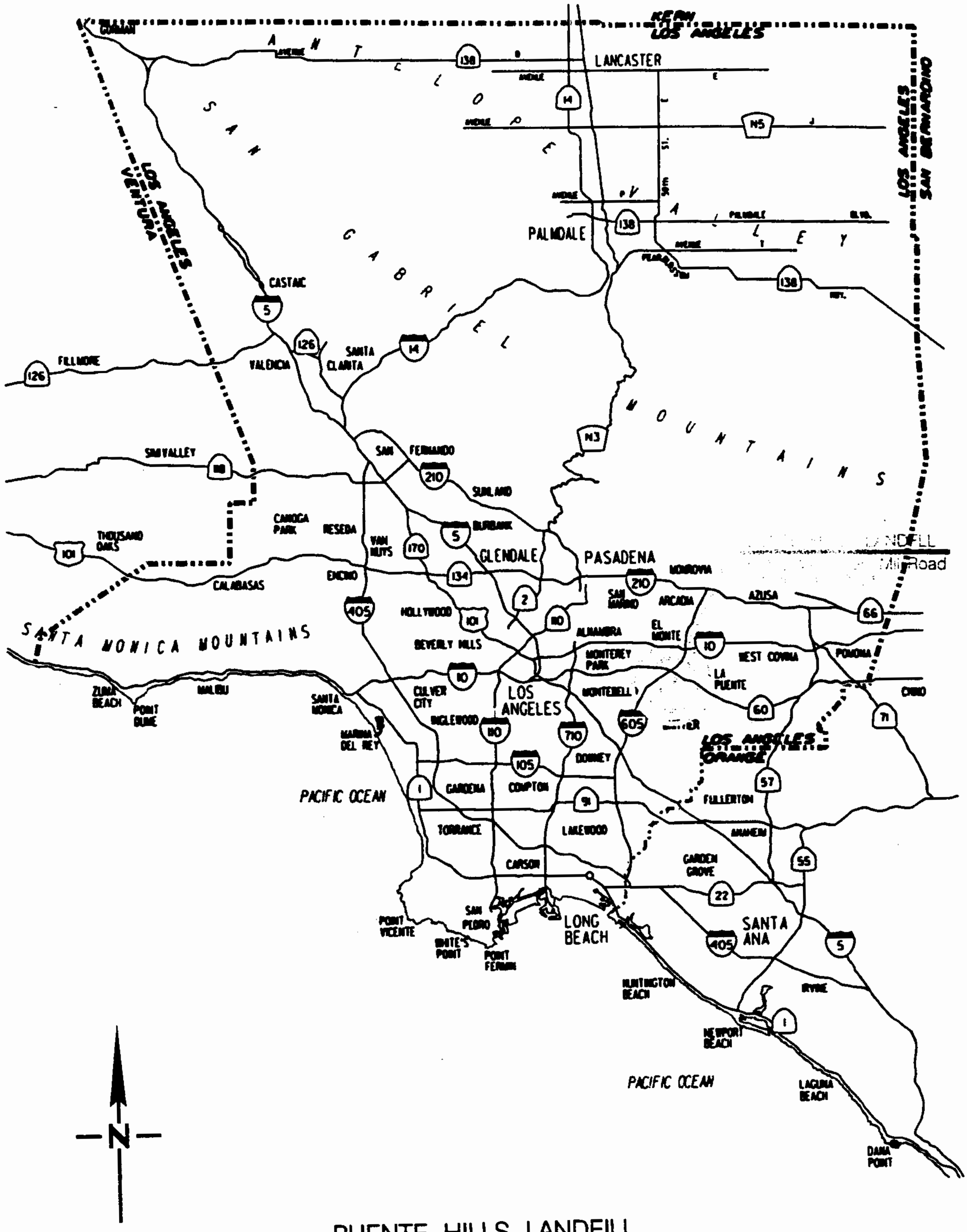
D. Landfill Gas Monitoring

Quarterly landfill gas samples were collected from each of the two headerlines entering the flare station. The gas recovery system at the landfill is indicated on Figure E. Each sample was collected in a tedlar bag over a continuous ten-minute period. The analytical results are shown in Table D.

E. Combustion Efficiency Testing

Rule 1150.1 requires an evaluation of the efficiency of the gas combustion or treatment facility. The Rule 1150.1 Compliance Plan requires the Sanitation Districts to test each flare at the Puente Hills Landfill for combustion efficiency every three years. In accordance with the Plan, four flares were tested at Puente Hills Landfill during this quarter. The results are contained in the enclosed report entitled, "Emission Tests on Flare Nos. 2, 20, 22, and 24 at Puente Hills Landfill".

List of Figures



PUENTE HILLS LANDFILL

GENERAL LOCATION

FIGURE A

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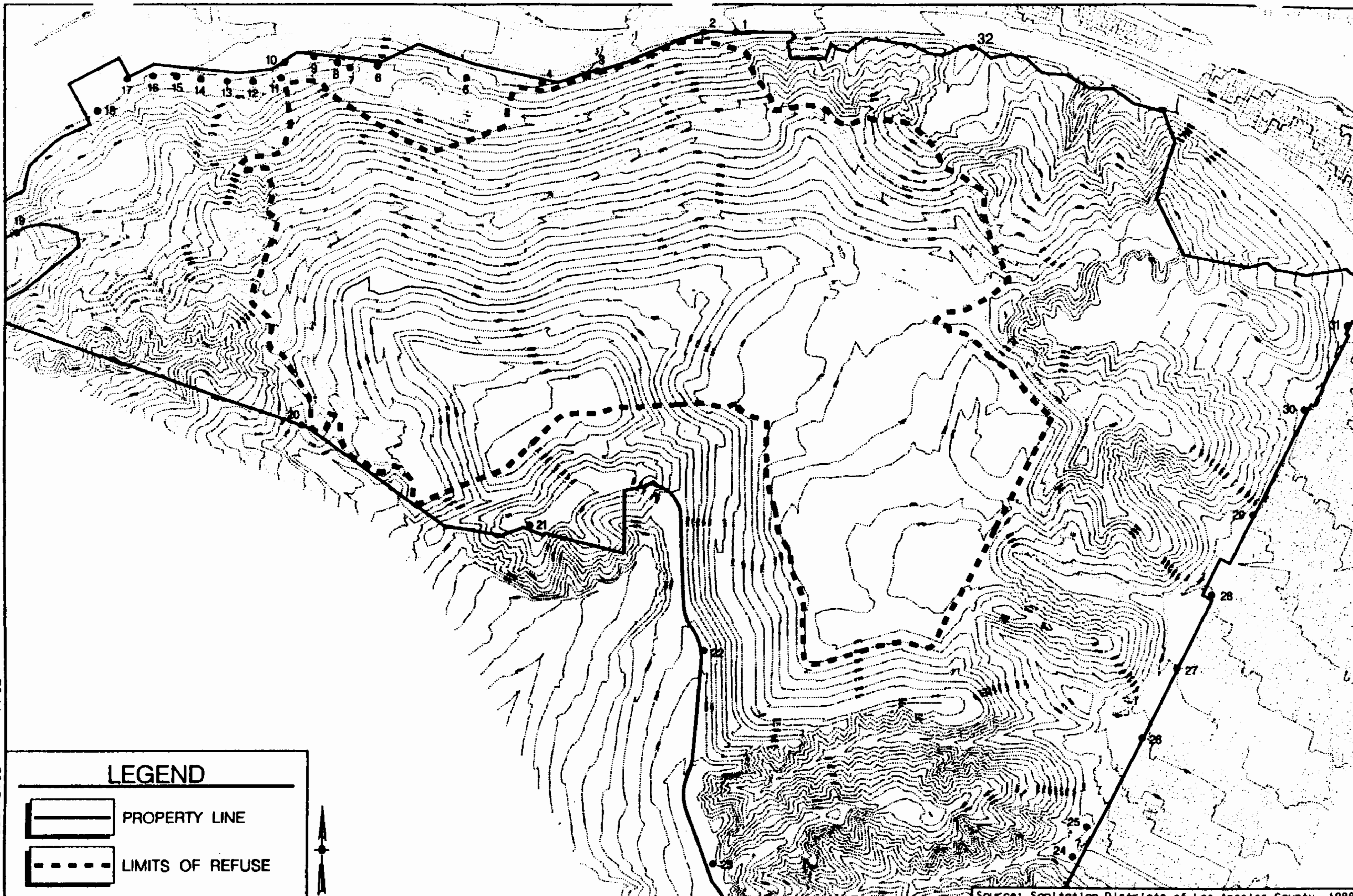

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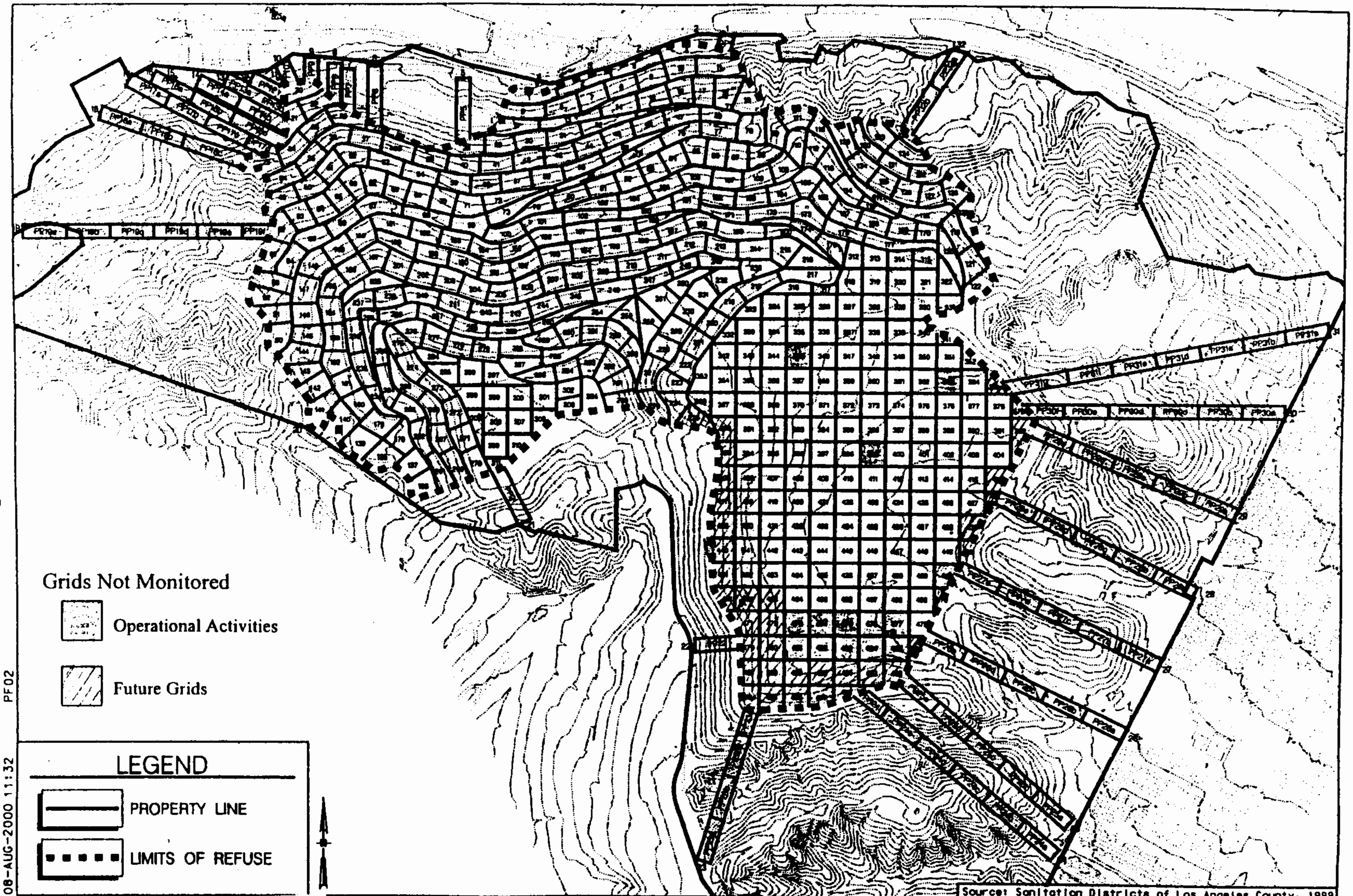
Locations of Perimeter Monitoring Probes

Figure B

PUENTE HILLS LANDFILL

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

Scale: 1" = 1200'



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PP = Perimeter probe surface gas monitoring grid.

Surface Gas Monitoring Grids

Figure C

PUE' TE HILLS LANDFILL

COUNTY ITATION DISTRICTS OF LOS ANGELES COUNTY

Scale: 1" =

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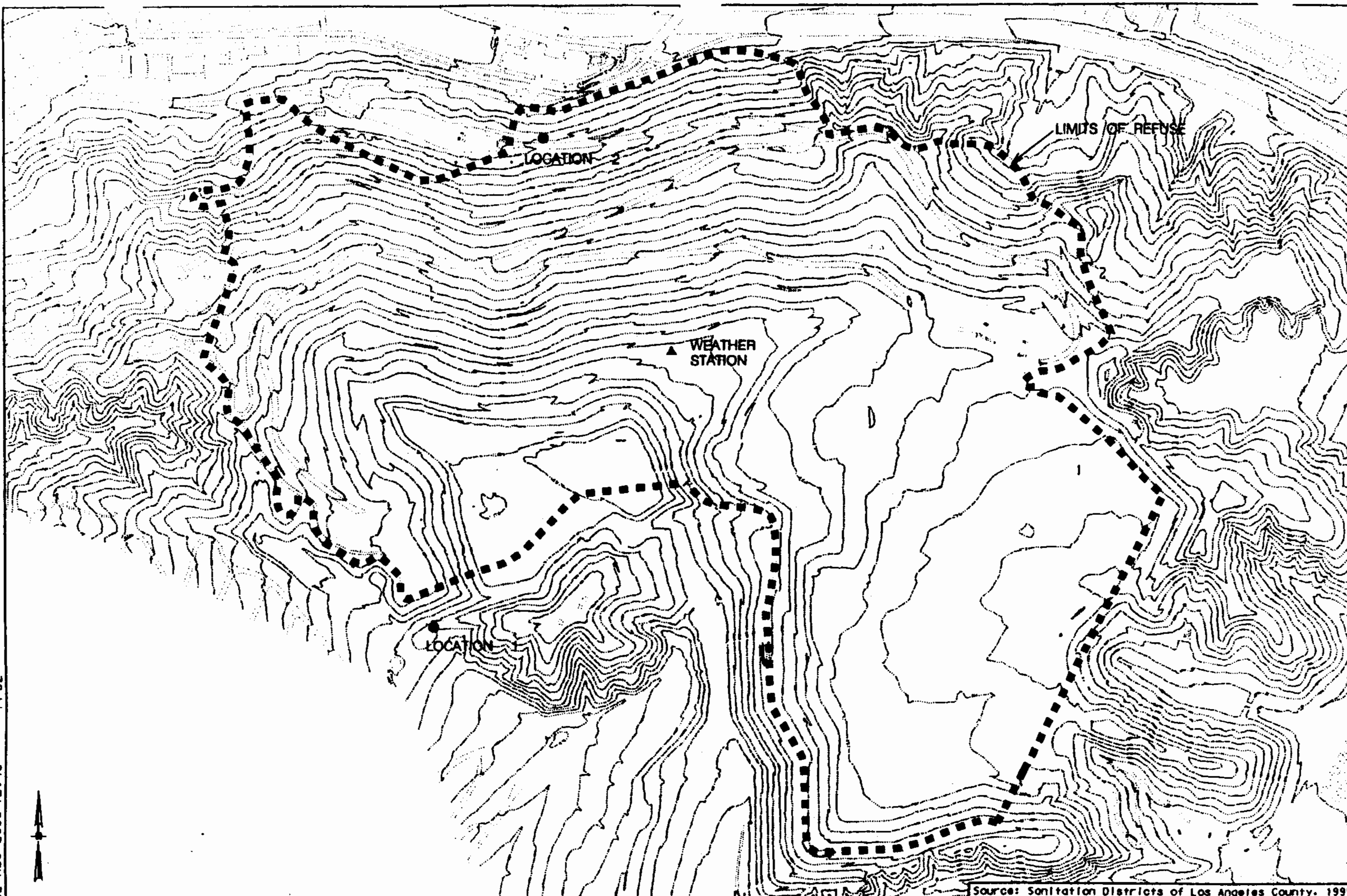

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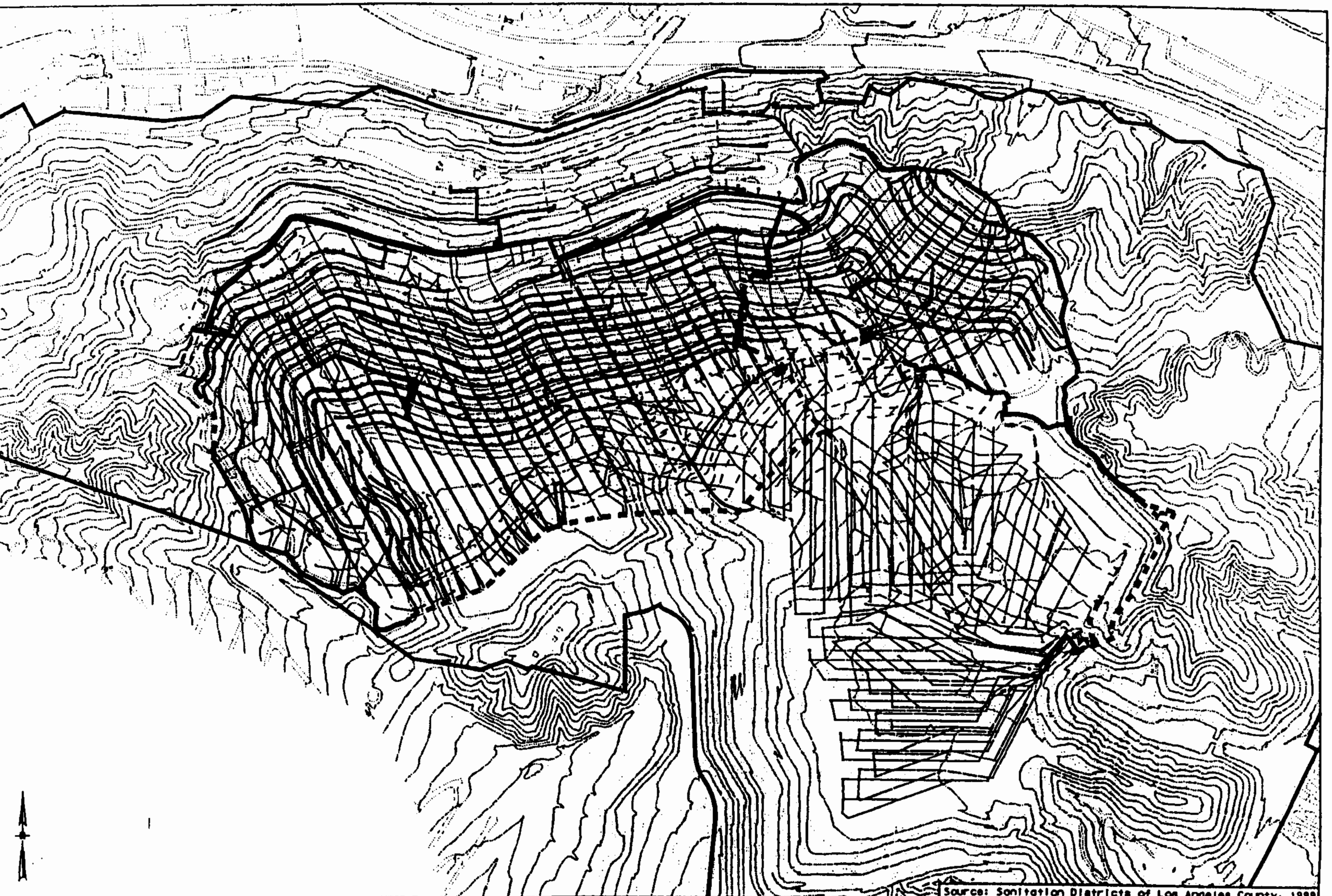
Locations of Ambient Air Samplers and Weather Station

Figure D

PUENTE HILLS LANDFILL
COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

Scale: 1" = 1000'



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Landfill Gas Collection System

Figure E

PUENTE HILLS LANDFILL

COUNTY SA TION DISTRICTS OF LOS ANGELES COUNTY

Scale: 1" = 1000

List of Tables

TABLE A

PERIMETER PROBE MONITORING - Toxic Air Contaminants
PUENTE HILLS LANDFILL
August 2000

Compounds	PROBE # 10	PROBE # 10 (Duplicate)
Methylene Chloride, ppb	< 0.53	< 0.53
Chloroform, ppb	0.07	0.09
1,1,1-Trichloroethane, ppb	0.17	0.15
Carbon Tetrachloride, ppb	0.1	0.1
1,1-Dichloroethene, ppb	< 0.26	< 0.26
Trichloroethylene, ppb	< 0.26	< 0.26
Tetrachloroethylene, ppb	1.5	2.3
Chlorobenzene, ppb	< 0.11	< 0.11
Vinyl Chloride, ppb	< 0.11	< 0.11
1,1-Dichloroethane, ppb	< 0.11	< 0.11
Benzene, ppb	< 2.7	< 2.7
Toluene, ppb	1.4	0.66
Ethylbenzene, ppb	< 0.26	< 0.26
Acetonitrile, ppb	< 0.52	< 0.52
1,2-Dibromoethane, ppb	< 0.11	< 0.11
Benzyl Chloride, ppb	< 0.52	< 0.52
Xylene, ppb	< 0.72	< 0.72
Dichlorobenzene, ppb	< 1.32	< 1.32
TOC as Methane, ppm	2.8	3

TABLE B

SURFACE GAS MONITORING - Toxic Air Contaminants
PUENTE HILLS LANDFILL
August 2000

Compounds	Grid # 242	Grid # 98
Methylene Chloride, ppb	< 0.21	< 0.21
Chloroform, ppb	0.06	0.1
1,1,1-Trichloroethane, ppb	0.11	0.11
Carbon Tetrachloride, ppb	0.1	0.1
1,1-Dichloroethene, ppb	< 0.11	< 0.11
Trichloroethylene, ppb	< 0.11	< 0.11
Tetrachloroethylene, ppb	< 0.11	< 0.11
Chlorobenzene, ppb	< 0.04	< 0.04
Vinyl Chloride, ppb	< 0.04	< 0.04
1,1-Dichloroethane, ppb	< 0.04	< 0.04
Benzene, ppb	< 1.1	< 1.1
Toluene, ppb	0.83	0.78
Ethylbenzene, ppb	< 0.11	0.12
Acetonitrile, ppb	< 0.21	< 0.21
1,2-Dibromoethane, ppb	< 0.04	< 0.04
Benzyl Chloride, ppb	< 0.21	< 0.21
Xylene, ppb	0.48	0.45
Dichlorobenzene, ppb	< 0.53	< 0.53
TOC as Methane, ppm	7.8	13

TABLE C

AMBIENT AIR MONITORING - Toxic Air Contaminants
PUENTE HILLS LANDFILL
August 2000

Compounds	FIELD BLANK	Location 1A	Location 1B	Location 2A	Location 2B
Methylene Chloride, ppb	< 0.2	0.23	< 0.2	0.25	< 0.2
Chloroform, ppb	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
1,1,1-Trichloroethane, ppb	< 0.02	0.08	0.05	0.08	0.05
Carbon Tetrachloride, ppb	< 0.02	0.09	0.09	0.09	0.09
1,1-Dichloroethene, ppb	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Trichloroethylene, ppb	< 0.02	0.03	< 0.02	0.02	< 0.02
Tetrachloroethylene, ppb	< 0.02	0.16	0.08	0.15	0.1
Chlorobenzene, ppb	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11
Vinyl Chloride, ppb	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
1,1-Dichloroethane, ppb	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Benzene, ppb	< 1.1	< 1.1	< 1.1	< 1.1	< 1.1
Toluene, ppb	< 0.1	1.4	1	1.6	1.2
Ethylbenzene, ppb	< 0.06	0.22	0.16	0.22	0.17
Acetonitrile, ppb	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21
1,2-Dibromoethane, ppb	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
Benzyl Chloride, ppb	< 1	< 1	< 1	< 1	< 1
Xylene, ppb	< 0.19	1.06	0.72	1.04	0.81
Dichlorobenzene, ppb	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
TOC as Methane, ppm	< 1	1.2	1.1	1.9	1.9

Note: Sampling began at approximately 10:00 a.m. for the 'A' labeled locations and 10:00 p.m. for the 'B' labeled locations.

TABLE D

LANDFILL GAS MONITORING
PUENTE HILLS LANDFILL
August 2000

Compounds	27" HEADER	NORTHEAST HEADER	WEST HEADER
Hydrogen Sulfide, ppm	113	32	120
Permanent Gases, Total, %	97	97.5	98.2
Oxygen, %	3.98	9.24	5.78
Argon, %	0.22	0.5	0.36
Nitrogen, %	18.8	41.7	30.4
Methane, %	39.4	25.5	33.9
Carbon Dioxide, %	34.5	20.5	27.7
Methylene Chloride, ppb	4300	260	540
Chloroform, ppb	< 21	< 21	< 21
1,1,1-Trichloroethane, ppb	110	< 21	< 21
Carbon Tetrachloride, ppb	< 22	< 22	< 22
1,1-Dichloroethene, ppb	43	22	32
Trichloroethylene, ppb	480	120	150
Tetrachloroethylene, ppb	850	120	380
Chlorobenzene, ppb	110	290	130
Vinyl Chloride, ppb	370	480	120
1,1-Dichloroethane, ppb	440	89	130
Benzene, ppb	1300	1300	6000
Toluene, ppb	17000	17000	10000
Ethylbenzene, ppb	4300	9000	4700
Acetonitrile, ppb	280	< 210	560
1,2-Dibromoethane, ppb	< 42	< 42	< 42
Benzyl Chloride, ppb	< 1000	< 1000	< 1000
Xylene, ppb	8800	21600	6100
Dichlorobenzene, ppb	< 630	260	220

List of Appendices

Appendix A-1

Exceedance Records for
Perimeter Probe Monitoring

Puente Hills Landfill

Summary of Perimeter Probe Exceedances

From July 1, 2000 to September 30, 2000

Probe Number	Exceedance ID	Monitoring	Date	Conc. (% CH_4)	Repair Action

No Exceedances Found

Appendix A-2

Exceedance Records for
Perimeter Probe Surface Gas Monitoring

Puente Hills Landfill

Summary of Perimeter Probe Surface Gas Exceedances

From July 1, 2000 to September 30, 2000

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action

No Exceedances Found

Appendix B-1

Exceedance Records for
Integrated Surface Gas Monitoring

Puente Hills Landfill

Summary of Integrated Surface Gas Exceedances

From July 1, 2000 to September 30, 2000

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
In Compliance					
149					
	3Q2000-149-208				
		Initial	8/14/00	55	Well 44-020 was adjusted. Area was reworked.
		1st Follow-up	8/21/00	6	In compliance.
191					
	3Q2000-191-200				
		Initial	8/8/00	141	Area was reworked.
		1st Follow-up	8/15/00	16	In compliance.
206					
	3Q2000-206-189				
		Initial	8/2/00	233	Area was reworked.
		1st Follow-up	8/4/00	8	In compliance.
268					
	3Q2000-268-150				
		Initial	7/14/00	224	Area was reworked. Gas wells were adjusted.
		1st Follow-up	7/20/00	17	In compliance.
285					
	3Q2000-285-159				
		Initial	7/12/00	395	The entire grid was reworked.
		1st Follow-up	7/20/00	15	In compliance.

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
293					
	3Q2000-293-174				
		Initial	7/18/00	927	Area was reworked.
		1st Follow-up	7/26/00	27	In compliance.

Appendix B-2

Exceedance Records for
Instantaneous Surface Gas Monitoring

Puente Hills Landfill

Summary of Instantaneous Surface Gas Exceedances

From July 1, 2000 to September 30, 2000

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
In Compliance					
20					
	3Q2000-20-178				
		Initial	7/18/00	520	Dirt was added and site was reworked.
		1st Follow-up	7/25/00	7428	Slope was reworked
		2nd Follow-up	8/8/00	443	In compliance.
62					
	3Q2000-62-183				
		Initial	7/28/00	955	Fresh dirt was added and site was reworked.
		1st Follow-up	8/4/00	368	In compliance.
	3Q2000-62-231				
		Initial	9/12/00	1000	Area was reworked.
		1st Follow-up	9/25/00	58	In compliance.
66					
	3Q2000-66-184				
		Initial	7/28/00	766	Fresh dirt was added and site was reworked.
		1st Follow-up	8/3/00	102	In compliance.
71					
	3Q2000-71-151				
		Initial	7/12/00	912	Dirt was added and area was reworked.
		1st Follow-up	7/31/00	49	In compliance.
	3Q2000-71-155				
		Initial	7/14/00	11517	Area was reworked.
		1st Follow-up	7/31/00	21	In compliance.

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
83					
	3Q2000-83-211				
		Initial	8/15/00	634	Area was excavated and re-compacted. Most of the vegetation was removed and fresh dirt was added.
		1st Follow-up	8/28/00	8	In compliance.
	3Q2000-83-219				
		Initial	8/15/00	634	Most of the vegetation was removed and the area was excavated and re-compacted.
		1st Follow-up	8/23/00	47	In compliance.
85					
	3Q2000-85-227				
		Initial	8/23/00	643	Gas system was adjusted.
		1st Follow-up	8/29/00	1054	Ara was excavated and re-compacted with fresh dirt.
		2nd Follow-up	8/30/00	10	In compliance.
91					
	3Q2000-91-191				
		Initial	8/3/00	832	Area was reworked. Fresh dirt was added and compacted.
		1st Follow-up	8/4/00	449	In compliance.
95					
	3Q2000-95-192				
		Initial	8/3/00	681	Area was reworked.
		1st Follow-up	8/9/00	165	In compliance.
96					
	3Q2000-96-193				
		Initial	8/3/00	583	Area was reworked.
		1st Follow-up	8/4/00	143	In compliance.
	3Q2000-96-230				
		Initial	9/13/00	977	Area was excavated and re-compacted with fresh dirt.
		1st Follow-up	9/19/00	252	In compliance.

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
99					
	3Q2000-99-196				
		Initial	8/4/00	936	Area was reworked.
		1st Follow-up	8/9/00	159	In compliance.
100					
	3Q2000-100-197				
		Initial	8/4/00	656	Area was reworked.
		1st Follow-up	8/9/00	44	In compliance.
	3Q2000-100-198				
		Initial	8/4/00	550	Area was reworked.
		1st Follow-up	8/9/00	86	In compliance.
	3Q2000-100-221				
		Initial	8/4/00	656	Gas wells were adjusted.
		1st Follow-up	8/24/00	34	In compliance.
102					
	3Q2000-102-195				
		Initial	8/4/00	621	Area was reworked.
		1st Follow-up	8/9/00	395	In compliance.
125					
	3Q2000-125-176				
		Initial	7/19/00	1027	Area was reworked. Tench 68-045 and well 68-044 were adjusted.
		1st Follow-up	7/21/00	67	In compliance.
128					
	3Q2000-128-177				
		Initial	7/19/00	643	Area was reworked.
		1st Follow-up	7/21/00	7	In compliance.
129					
	3Q2000-129-181				
		Initial	7/24/00	1834	Area was reworked.
		1st Follow-up	7/27/00	122	In compliance.

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
131					
	3Q2000-131-166				
		Initial	7/18/00	764	Area was reworked.
		1st Follow-up	7/21/00	156	In compliance.
133					
	3Q2000-133-167				
		Initial	7/18/00	505	Area was reworked.
		1st Follow-up	7/21/00	488	In compliance.
	3Q2000-133-168				
		Initial	7/18/00	1259	Fresh dirt was added and compacted.
		1st Follow-up	7/21/00	155	In compliance.
134					
	3Q2000-134-169				
		Initial	7/18/00	671	Well 64-041 was adjusted. Area was reworked.
		1st Follow-up	7/21/00	447	In compliance.
	3Q2000-134-170				
		Initial	7/18/00	571	Area was reworked.
		1st Follow-up	7/21/00	432	In compliance.
135					
	3Q2000-135-172				
		Initial	7/18/00	1223	Area was reworked.
		1st Follow-up	7/21/00	214	In compliance.
	3Q2000-135-173				
		Initial	7/18/00	899	Area was reworked.
		1st Follow-up	7/21/00	493	In compliance.
149					
	3Q2000-149-209				
		Initial	8/14/00	1304	Area was excavated and re-compacted.
		1st Follow-up	8/16/00	5	In compliance.

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
151					
	3Q2000-151-210				
		Initial	8/14/00	3914	Area was excavated and re-compacted.
		1st Follow-up	8/16/00	161	In compliance.
153					
	3Q2000-153-186				
		Initial	7/28/00	1724	Well 42-270 and 42-276 were adjusted. Area was reworked.
		1st Follow-up	7/31/00	422	In compliance.
189					
	3Q2000-189-199				
		Initial	8/7/00	1155	Area was reworked.
		1st Follow-up	8/9/00	412	In compliance.
191					
	3Q2000-191-201				
		Initial	8/8/00	1471	Area was reworked.
		1st Follow-up	8/14/00	161	In compliance.
192					
	3Q2000-192-202				
		Initial	8/9/00	1396	Area was reworked.
		1st Follow-up	8/15/00	256	In compliance.
193					
	3Q2000-193-203				
		Initial	8/9/00	719	Area was reworked.
		1st Follow-up	8/15/00	17	In compliance.
194					
	3Q2000-194-207				
		Initial	8/11/00	683	Area was reworked.
		1st Follow-up	8/15/00	174	In compliance.

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
202					
	3Q2000-202-194				
		Initial	8/3/00	778	Well 48-200 was adjusted. Area was reworked.
		1st Follow-up	8/4/00	477	In compliance.
203					
	3Q2000-203-188				
		Initial	8/2/00	674	Area was reworked.
		1st Follow-up	8/4/00	194	In compliance.
206					
	3Q2000-206-190				
		Initial	8/2/00	58197	Area was reworked.
		1st Follow-up	8/3/00	131	In compliance.
224					
	3Q2000-224-182				
		Initial	7/25/00	3594	Area was reworked.
		1st Follow-up	7/28/00	47	In compliance.
245					
	3Q2000-245-179				
		Initial	7/13/00	821	Area was reworked. A new gas well was installed.
		1st Follow-up	9/8/00	8	In compliance.
254					
	3Q2000-254-215				
		Initial	8/21/00	502	Area was excavated and recompacted.
		1st Follow-up	8/24/00	75	In compliance.
259					
	3Q2000-259-149				
		Initial	7/13/00	616	Trench 77-205 was adjusted. Area was reworked.
		1st Follow-up	7/20/00	129	In complliance.

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
268					
	3Q2000-268-156				
		Initial	7/12/00	912	Well 78-017 was adjusted. Area was reworked.
		1st Follow-up	7/20/00	1173	In compliance.
	3Q2000-268-157				
		Initial	7/12/00	20579	Well 78-010 was adjusted. Area was reworked and covered with fresh dirt..
		1st Follow-up	7/20/00	1465	Area was reworked.
		2nd Follow-up	7/21/00	162	In compliance.
	3Q2000-268-180				
		Initial	7/20/00	1786	Area was reworked.
		1st Follow-up	7/21/00	453	In compliance.
272					
	3Q2000-272-228				
		Initial	8/31/00	572	Area was reworked.
		1st Follow-up	9/6/00	163	In compliance.

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
285					
	3Q2000-285-160				
		Initial	7/12/00	5870	Area was reworked.
		1st Follow-up	7/20/00	15	In compliance.
	3Q2000-285-161				
		Initial	7/12/00	39633	Area was reworked.
		1st Follow-up	7/20/00	40	In compliance.
	3Q2000-285-162				
		Initial	7/12/00	1187	Area was reworked.
		1st Follow-up	7/20/00	28	In compliance.
	3Q2000-285-163				
		Initial	7/12/00	18365	Area was reworked.
		1st Follow-up	7/20/00	13	In compliance.
	3Q2000-285-164				
		Initial	7/12/00	2862	Area was reworked.
		1st Follow-up	7/20/00	195	In compliance.
292					
	3Q2000-292-165				
		Initial	7/17/00	2018	Fresh dirt has been added and compacted. The entire slope was reworked.
		1st Follow-up	7/26/00	493	In compliance.
293					
	3Q2000-293-175				
		Initial	7/18/00	80122	Area was reworked.
		1st Follow-up	7/26/00	1232	Fresh dirt was added and the entire slope was reworked.
		2nd Follow-up	7/28/00	54	In compliance.

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
400					
	3Q2000-400-214				
		Initial	8/21/00	525	Fresh dirt was added and compacted.
		1st Follow-up	8/28/00	7	In compliance.
449					
	3Q2000-449-213				
		Initial	8/19/00	625	Area was excavated. Fresh dirt was added and compacted over hot spot.
		1st Follow-up	8/24/00	5	In compliance.

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
Variance					
71					
	3Q2000-71-217				
		Initial	8/14/00	698	Area was reworked. Gas system was adjusted. Area is under variance.
		1st Follow-up	8/23/00	3	Area is under variance.
72					
	3Q2000-72-146				
		Initial	7/7/00	3776	Area was reworked.
		1st Follow-up	7/17/00	1017	Area was reworked again.
		2nd Follow-up	7/28/00	7088	Area is still in exceedance. Petition for variance was filed on August 3, 2000.
80					
	3Q2000-80-218				
		Initial	8/15/00	1148	Vegetation was removed. Area was reworked. New wells were installed. Area is under variance.
		1st Follow-up	8/18/00	167	Area is under variance.
98					
	3Q2000-98-148				
		Initial	7/7/00	864	Area was reworked. Well 36-050 was adjusted.
		1st Follow-up	7/25/00	2788	Area was reworked.
		2nd Follow-up	8/4/00	16176	Area is under variance.
	3Q2000-98-220				
		Initial	8/4/00	16176	Gas wells were adjusted. Area was reworked. Area is under variance.
		1st Follow-up	8/24/00	185	Area is under variance.
	3Q2000-98-229				
		Initial	9/12/00	9295	Area was reworked. Area is under variance.
		1st Follow-up	9/15/00	41	Area is under variance.

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
154					
	3Q2000-154-223				
		Initial	8/15/00	1191	Gas wells were adjusted. Area is under variance.
		1st Follow-up	8/29/00	4408	Area was reworked. Area is under variance.
		2nd Follow-up	8/31/00	832	Area is under variance.
187					
	3Q2000-187-225				
		Initial	8/23/00	1088	Area was reworked. Area is under variance.
		1st Follow-up	8/29/00	907	Area was reworked again. Area is under variance.
		2nd Follow-up	9/12/00	388	Area is under variance.
245					
	3Q2000-245-224				
		Initial	8/23/00	773	Area was reworked. Area is under variance.
		1st Follow-up	9/12/00	7	Area is under variance.
247					
	3Q2000-247-222				
		Initial	8/15/00	614	Cover maintenance was performed. Gas wells were adjusted. Area is under variance.
		1st Follow-up	8/23/00	482	Area is under variance.
272					
	3Q2000-272-226				
		Initial	8/23/00	2025	Area was reworked. Area is under variance.
		1st Follow-up	8/29/00	544	Area was excavated and re-compacted with fresh dirt. Area is under variance..
		2nd Follow-up	8/31/00	396	Area is under variance.

Appendix C

Bi-monthly Variance Surface Gas Monitoring

Bimonthly Surface Gas Monitoring For the Areas Under PHLF R1150.1 Variance

First Event (June 1 to June 15)

Grids	Area # in NTC C56301	Integrated (ppm)	Maximum Instantaneous (ppm)
39	*1, 10*	3	9
40	*1, 10*	3	8
55	*3, 9*	6	183
56	*9*	9	167
57	*2, 9*	7	62
58	*9*	3	35
63	*4, 11*	5	179
64	*5*	5	102
65	*6*	5	69
70	*7*	8	139
71	*7*	31	127
79	*8*	3	37
101	*12, 13*	25	779

Bimonthly Surface Gas Monitoring For the Areas Under Puente Hills R1150.1 Variance

Second Event (June 15 to June 30)

Grids	Area # in NTC C56301	Integrated (ppm)	Maximum Instantaneous (ppm)	Repair Action
40	*1, 10*	31	526	Cover maintenance was performed
55	*3, 9*	221	2623	Cover maintenance was performed
56	*9*	94	6755	Cover maintenance was performed
57	*2, 9*	7	62	
58	*9*	3	35	
63	*4, 11*	5	179	
64	*5*	3	138	
65	*6*	3	41	
70	*7*	3	17	
71	*7*	3	6	
79	*8, 13*	3	84	
100	*12*	115	3991	Cover maintenance was performed

Note: The last monitoring event erroneously included grids 39 and 101, and excluded grid 100.

Bimonthly Surface Gas Monitoring For the Areas Under Puente Hills R1150.1 Variance

Third Event (July 1 to July 15)

Grids	Area # in NTC C56301	Integrated (ppm)	Maximum Instantaneous (ppm)	Repair Action
40	*1, 10*	3	15	
55	*3, 9*	16	242	
56	*9*	11	112	
57	*2, 9*	36	140	
58	*9*	7	30	
63	*4, 11*	2	5	
64	*5*	2	15	
65	*6*	3	13	
70	*7*	5	54	
71	*7*	192	11517	Cover maintenance was performed
79	*8, 13*	3	41	
100	*12*	23	248	

Bimonthly Surface Gas Monitoring For the Areas Under Puente Hills R1150.1 Variance

Fourth Event (July 15 to July 31)

Grids	Area # in NTC C56301	Integrated (ppm)	Maximum Instantaneous (ppm)	Repair Action
40	*1, 10*	4	4	
55	*3, 9*	4	16	
56	*9*	7	96	
57	*2, 9*	3	11	
58	*9*	3	56	
63	*4, 11*	2	3	
64	*5*	4	57	
65	*6*	3	238	
70	*7*	4	179	
71	*7*	10	474	
79	*8, 13*	7	95	
100	*12*	6	59	

Bimonthly Surface Gas Monitoring For the Areas Under Puente Hills R1150.1 Variance

Fifth Event (August 1 to August 21)

Grids	Area # in NTC C56301	Integrated (ppm)	Maximum Instantaneous (ppm)	Repair Action
40	*1, 10*	2	2	
55	*3, 9*	2	2	
56	*9*	2	2	
57	*2, 9*	2	2	
58	*9*	2	2	
63	*4, 11*	8	93	
64	5	4	33	
65	6	3	17	
70	7	6	26	
71	*7*	4	6	
79	*8, 13*	4	11	
100	*12*	3	9	

Bimonthly Surface Gas Monitoring For the Areas Under Puente Hills R1150.1 Second Variance
(petition filed 8/3/00)

First Event (August 3 to August 15)

Grids	Integrated (ppm)	Instantaneous (ppm)	Repair Action
53		5	
72		106	
80		1148	Cover Maintenance was performed
97		459	
98	16	399	
98		16176	Cover Maintenance was performed
101		10	
125		140	
133		230	
135		84	
154		1191	Cover Maintenance was performed
187		102	
203		194	
242		203	
244		100	
245		36	
246		8	
247		614	Cover Maintenance was performed
272		146	
272		104	
284		57	
285		204	
285		209	
290		23	
293		159	
293		14	

ıonthly Surface Gas Monitoring For the Areas Under Puente Hills R1150.1 Second Variance
.ıition filed 8/3/00)

First Event (August 3 to August 15)

Grids	Integrated (ppm)	Instantaneous (ppm)	Repair Action
53		5	
71		698	Cover Maintenance was performed
72		106	
80		1148	Cover Maintenance was performed
97		459	
98	16	399	
98		16176	Cover Maintenance was performed
98		425	
101		10	
127		53	
133		230	
135		84	
154		1191	Cover Maintenance was performed
187		102	
203		194	
242		203	
242		98	
244		100	
245		36	
246		8	
247		614	Cover Maintenance was performed
272		146	
272		104	
284		57	
285		204	
285		209	
290		23	
293		159	
293		14	

Bimonthly Surface Gas Monitoring For the Areas Under Puente Hills R1150.1 Second Variance
(petition filed 8/3/00)

Second Event (August 16 to August 31)

Grids	Integrated (ppm)	Instantaneous (ppm)	Repair Action
53		4	
71		3	
72		3	
80		167	
97		17	
98	16		
98		185	
98		61	
101		14	
127		147	
133		279	
135		272	
154		82	
187		1088	Cover Maintenance was performed
203		426	
242		148	
242		148	
244		458	
245		773	Cover Maintenance was performed
246		221	
247		482	
272		2025	Cover Maintenance was performed
272		151	
284		19	
285		423	
285		174	
290		146	
293		153	
293		25	

ᴮⁱmonthly Surface Gas Monitoring For the Areas Under Puente Hills R1150.1 Second Variance
tition filed 8/3/00)

Monitoring Event (September 1 to September 15)

Grids	Integrated (ppm)	Instantaneous (ppm)	Repair Action
53		7	
71		221	
72		2	
80		44	
97		20	
98	16		
98		119	
98		41	
101		78	
127		31	
133		19	
135		398	
154		139	
187		388	
203		70	
242		97	
242		97	
244		140	
245		7	
246		112	
247		44	
272		266	
272		266	
284		67	
285		11	
285		11	
290		116	
293		24	
293		24	

Bimonthly Surface Gas Monitoring For the Areas Under Puente Hills R1150.1 Second Variance
(petition filed 8/3/00)

Monitoring Event (September 16 to September 30)

Grids	Integrated (ppm)	Instantaneous (ppm)	Repair Action
53		5	
71		2	
72		4	
80		22	
97		3	
98	31		
98		34	
98		31	
101		23	
127		12	
133		804	cover maintenance was performed
135		599	cover maintenance was performed
154		59	
187		1460	cover maintenance was performed
203		234	
242		254	
242		254	
244		138	
245		5	
246		8	
247		3	
272		40	
272		40	
284		6	
285		8	
285		8	
290		22	
293		118	
293		118	

'monthly Surface Gas Monitoring For the Areas Under Puente Hills R1150.1 Second Variance
.tition filed 8/3/00)

Monitoring Event (October 1 to October 15)

Grids	Integrated (ppm)	Instantaneous (ppm)	Repair Action
53		7	
71		4	
72		10	
80		14	
97		6	
98	31		
98		233	
98		14	
101		12	
127		473	
133		147	
135		114	
154		35	
187		194	
203		112	
242		427	
242		427	
244		90	
245		9	
246		27	
247		8	
272		185	
272		110	
284		29	
285		9	
285		84	
290		168	
293		1849	cover maintenance was performed
293		87	

Bimonthly Surface Gas Monitoring For the Areas Under Puente Hills R1150.1 Second Variance
(petition filed 8/3/00)

Monitoring Event (October 15 to October 30)

Grids	Integrated (ppm)	Instantaneous (ppm)	Repair Action
53		2	
71		5	
72		8	
80		10	
97		134	
98	10		
98		332	
98		48	
101		18	
127		228	
133		492	
135		110	
154		36	
187		97	
203		164	
242		451	
242		254	
244		214	
245		37	
246		4	
247		2	
272		149	
272		40	
284		262	
285		7	
285		8	
290		10	
293		77	
293		118	

File

STRICTS
COUNTY

F. STAHL
General Manager

February 15, 2001
File: 31-380.10B

Mr. Larry Bowen
South Coast Air Quality Management District
21865 E. Copley Drive
Diamond Bar, CA 91765-4182

Dear Mr. Bowen:

Puente Hills Landfill Monitoring Report
for Compliance with
South Coast Air Quality Management District Rule 1150.1
Fourth Quarter, 2000

Enclosed please find the quarterly report for compliance with SCAQMD Rule 1150.1 for Puente Hills Landfill. The Rule 1150.1 Compliance Plan for Puente Hills Landfill approved on June 9, 2000 specifies the routine monitoring of the ambient air, gas collection system, surface gas, and perimeter gas probes. In accordance with the Compliance Plan, this report provides the Toxic Air Contaminant (TAC) results for the aforementioned programs and a record of all exceedances, and corrective actions for this quarter.

Rule 1150.1 requires an evaluation of the efficiency of the gas combustion or treatment facility. The Rule 1150.1 Compliance Plan requires the Sanitation District to test each flare at the Puente Hills Landfill for combustion efficiency every three years. In accordance with the Plan, PERG facility No. 300 and Solar Turbine were tested at Puente Hills Landfill during this quarter. The results are contained in the enclosed reports entitled, "Puente Hills Energy Recovery From Landfill Gas Facility No. 300" and "Solar Turbine Puente Hills Landfill".

Please contact the undersigned at this office should you wish to discuss this report.

Very truly yours,

James F. Stahl

Raymond L. Huitric
Division Engineer
Solid Waste Management Department

RLH:TK:eo
Enclosures

MONITORING REPORT FOR

PUENTE HILLS LANDFILL

FOR COMPLIANCE WITH

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

RULE 1150.1

(OCTOBER, NOVEMBER AND DECEMBER)

SUBMITTED TO

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

BY

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
FEBRUARY 15, 2001

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PUENTE HILLS LANDFILL MONITORING REPORT
FOR COMPLIANCE WITH
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1150.1
FOURTH QUARTER, 2001
(OCTOBER, NOVEMBER AND DECEMBER)

INTRODUCTION

This report represents part of the continuing effort by the Los Angeles County Sanitation Districts (Sanitation Districts) to fulfill requirements for the subject landfill as contained in South Coast Air Quality Management District (SCAQMD) Rule 1150.1. The specific requirements for the subject site are contained in the Rule 1150.1 Compliance Plan (Compliance Plan) dated June 9, 2000. This Compliance Plan requires monitoring of the landfill gas collection and disposal system, the ambient air, surface gas, landfill gas, and perimeter probes. Additionally, the plan requires remediation of any exceedances in any of these programs. This report summarizes the monitoring results, and activities for each program during the Fourth Quarter, 2000.

DISPOSAL SITE DESCRIPTION

The Puente Hills Landfill has been in operation since 1958, and as of December, 2000, has received a total of 90.7 million tons of refuse. The site operates as a Class III disposal site under the provisions of Subchapter 15, Article 5 of the California Administrative Code, accepting only non-hazardous waste. The site totals 1365 acres of which approximately 630 acres is designated for landfilling purposes. Figure A shows the general location of the landfill.

MONITORING PROGRAMS

All samples collected as part of monitoring programs described below were analyzed by the Sanitation Districts' laboratory for Total Organic Compounds (TOC) as methane using an Organic Vapor Analyzer (OVA) or other approved instrument, then analyzed using gas chromatography for the Toxic Air Contaminants (TAC) specified in the rule. The sampling equipment, methods, and quality control procedures conform to the requirements of Rule 1150.1 and the Compliance Plan.

A. Perimeter Probe Monitoring

The thirty-two gas migration monitoring probes installed around the perimeter of the landfill are shown in Figure B. Each gas probe was monitored monthly for TOC measured as methane using a dual range gas indicator. No probes exceeded the 5% methane requirement during this quarter as shown in Appendix A-1.

During this quarter one ten-liter bag sample was collected from a randomly selected probe or the probe with the highest percent concentration of methane and analyzed by the Sanitation Districts' laboratory for TAC's using gas chromatography. The analytical results are shown in Table A.

In addition to monitoring the probes, the Compliance Plan requires surface gas instantaneous monitoring on accessible portions of grids placed between the refuse boundary and probes placed greater than 100 feet from the landfill. This is similar to the instantaneous surface gas monitoring program described below. These grids are shown in Figure C. In accordance with the Rule 1150.1 Compliance Plan, the accessible areas of the grids were monitored during this quarter. There were no exceedances to the 500 ppm requirement, as shown in Appendix A-2.

B. Surface Gas Monitoring

Integrated and instantaneous surface gas monitoring was conducted at Puente Hills Landfill to measure the concentration of gaseous emissions from the landfill surface. Monitoring was terminated whenever the wind speed exceeded 5 miles per hour, or when precipitation occurred. Measurable precipitation at the Puente Hills Landfill occurred on October 26 and 27. Per Rule 1150.1 requirements, specified monitoring was delayed for 72 hours after rain events. The wind speed was measured at the site weather station, or using a hand held anemometer. The use of the hand held anemometer was an approved alternative in the Compliance Plan, and the specifications were submitted for approval in a letter dated January 31, 2000. A total of 464 grids, each approximately 50,000 square feet in area, are located on the disposal area of the landfill. Figure C shows the layout of the grids at the Puente Hills Landfill. Thirty-four additional grids are shown in future fill areas. These grids will be monitored as filling progresses. Twenty-five grids were not monitored because of inaccessibility due to operational and construction activities. These excluded grids are highlighted on Figure C.

The compliance terms for twenty-eight surface gas grids were specified in the Variance granted by the SCAQMD on August 30, 2000. Until October 31, 2000, additional bi-monthly surface gas monitoring was required by this variance. This data is shown in Appendix C. All the compliance terms for the twenty-eight grids were met before the October 31, 2000 deadline.

Integrated Surface Gas Monitoring

Within each grid, integrated monitoring was completed by traversing the entire accessible grid in a serpentine pattern. All samples were measured for TOC as methane using a SEM 500 or other approved instrument. A total of 12 grids exceeded the 50 ppm integrated requirement during this quarter. All of these exceedances were remediated within 20 calendar days. The monitoring results and remedial actions for grids that exceeded the 50-ppm limit are reported in Appendix B-1.

During the quarter, samples from two randomly selected grids were collected and analyzed by the Sanitation Districts laboratory for TAC's using gas chromatography. The analytical results are shown in Table B.

Instantaneous Surface Gas Monitoring

All monitoring was conducted using a SEM 500 or other approved instrument. A total of 42 instantaneous exceedances were detected during this quarter. Thirty-six of these exceedances were remediated within 20 calendar days, and six exceedances were remediated within the subsequent 45-day period after installation of gas collectors. All monitoring results and remedial actions for areas that exceeded the 500-ppm requirement are reported in Appendix B-2.

C. Ambient Air Monitoring

Quarterly ambient air monitoring was conducted to sample and analyze the air upwind and downwind of the landfill for air contaminants. The sampling arrangement for ambient air monitoring is shown on Figure D.

Ambient air sampling was conducted during two consecutive 12-hour periods this quarter. The first sampling period began at approximately 10:00 a.m. and ended at approximately 10:00 p.m. on August 18, 2000, and the second sampling period started at approximately 10:00 p.m. and ended at approximately 10:00 a.m. the following day. Wind monitoring data were recorded during each ambient air sampling period. The 30-minute average wind speed did not exceed 15 miles per hour during any sampling period.

All samples were collected in stainless steel canisters and analyzed by the Sanitation Districts laboratory for TAC's using gas chromatography. The analytical results are shown in Table C.

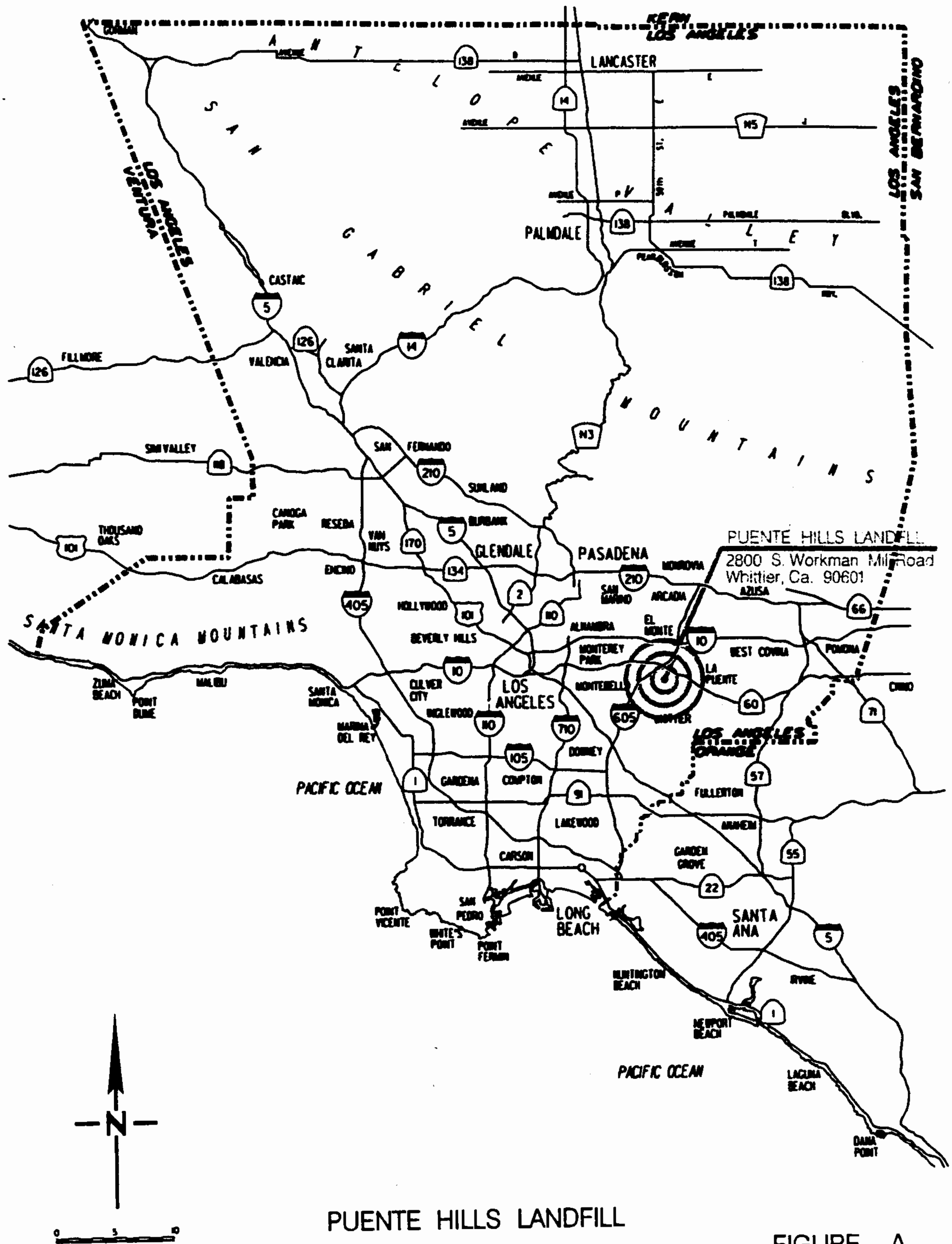
D. Landfill Gas Monitoring

Quarterly landfill gas samples were collected from each of the two headerlines entering the flare station. The gas recovery system at the landfill is indicated on Figure E. Each sample was collected in a tedlar bag over a continuous ten-minute period. The analytical results are shown in Table D.

E. Combustion Efficiency Testing

Rule 1150.1 requires an evaluation of the efficiency of the gas combustion or treatment facility. The Rule 1150.1 Compliance Plan requires the Sanitation Districts to test each flare at the Puente Hills Landfill for combustion efficiency every three years. In accordance with the Plan, PERG facility No. 300 and Solar Turbine were tested at Puente Hills Landfill during this quarter. The results are contained in the enclosed reports entitled, "Puente Hills Energy Recovery From Landfill Gas Facility No. 300" and "Solar Turbine Puente Hills Landfill ".

List of Figures



PUENTE HILLS LANDFILL

GENERAL LOCATION

FIGURE A

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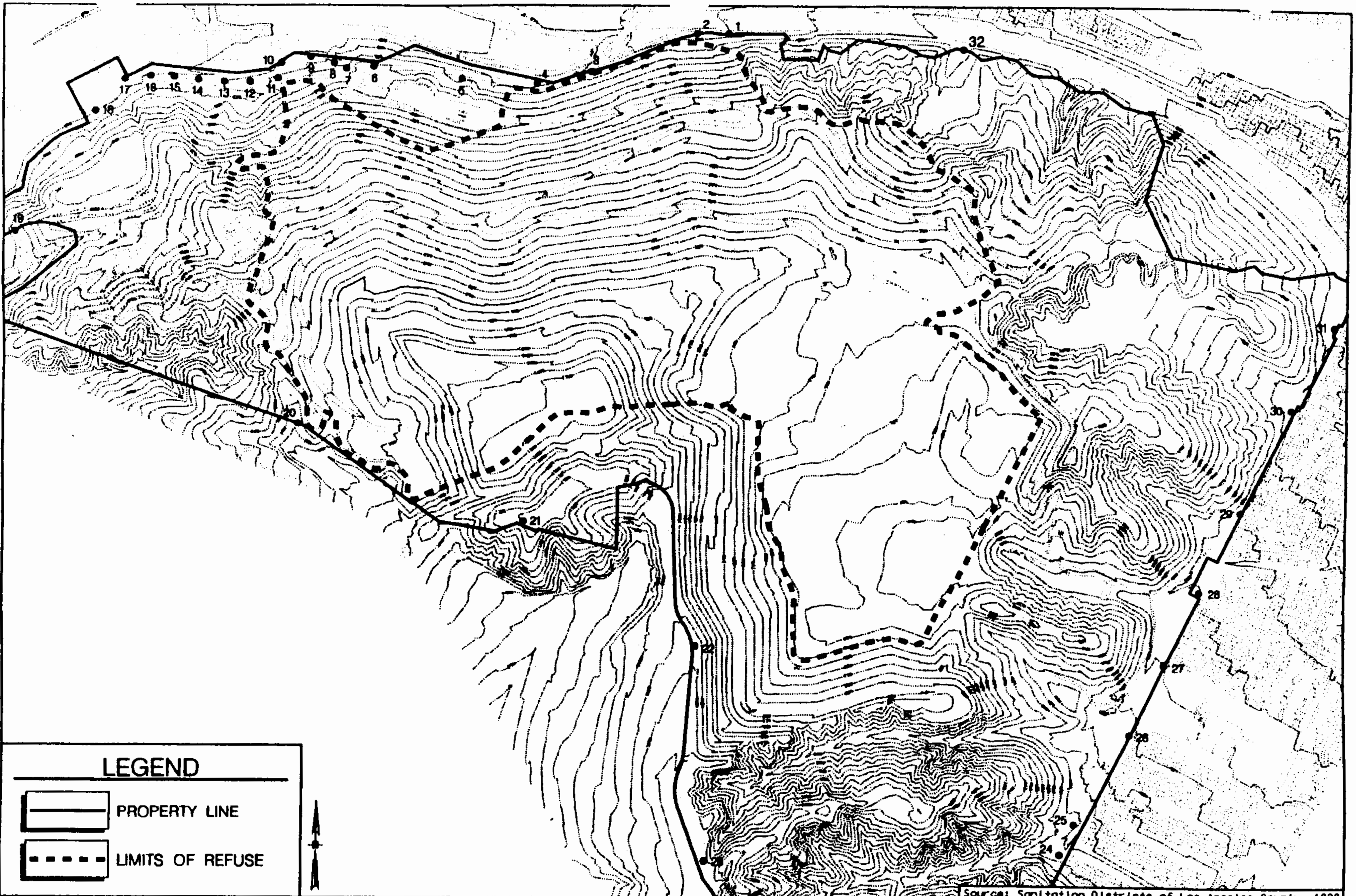

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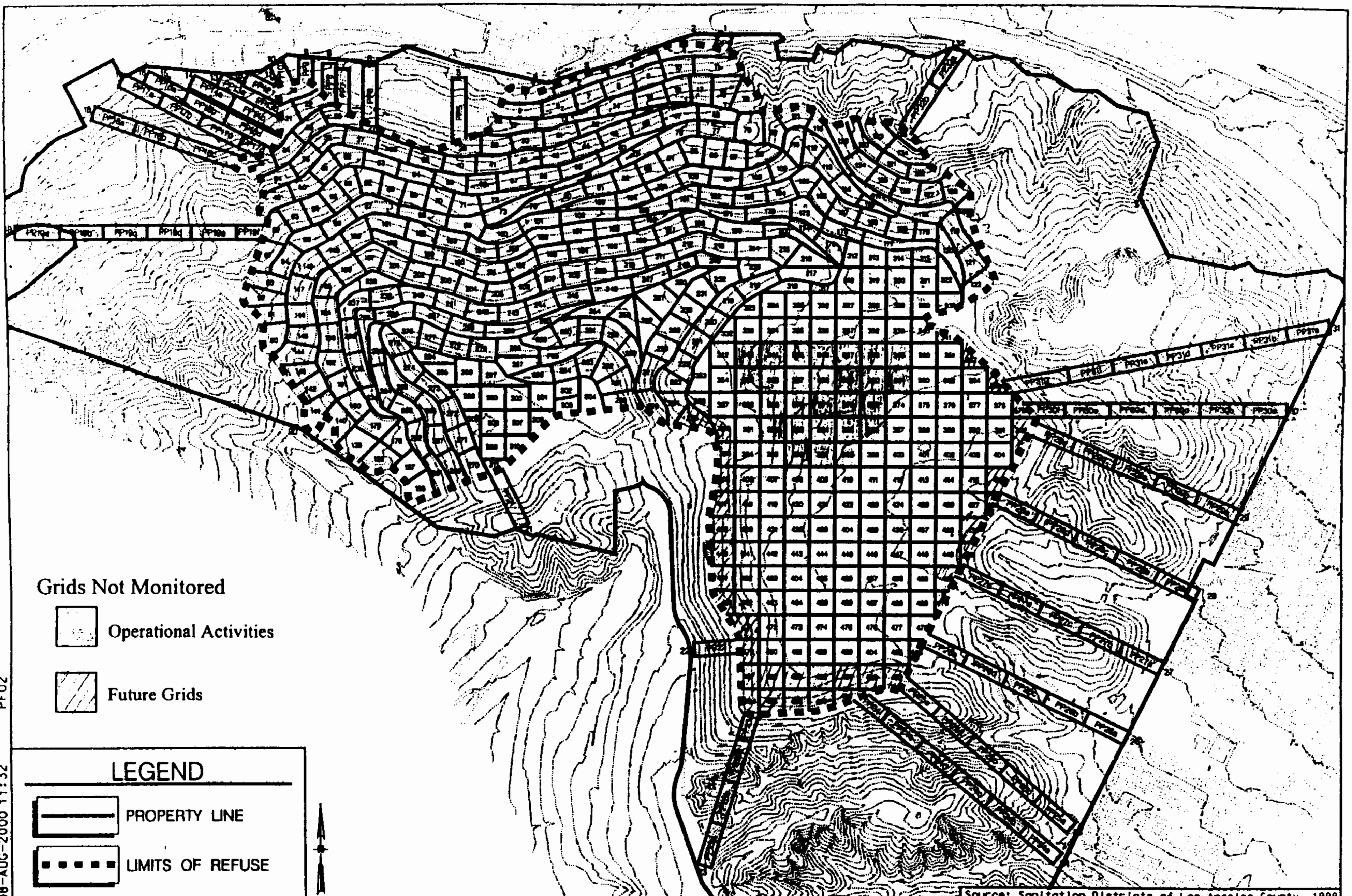
Locations of Perimeter Monitoring Probes

Figure B

PUENTE HILLS LANDFILL

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

Scale: 1" = 1200'



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PP = Perimeter probe surface gas monitoring grid

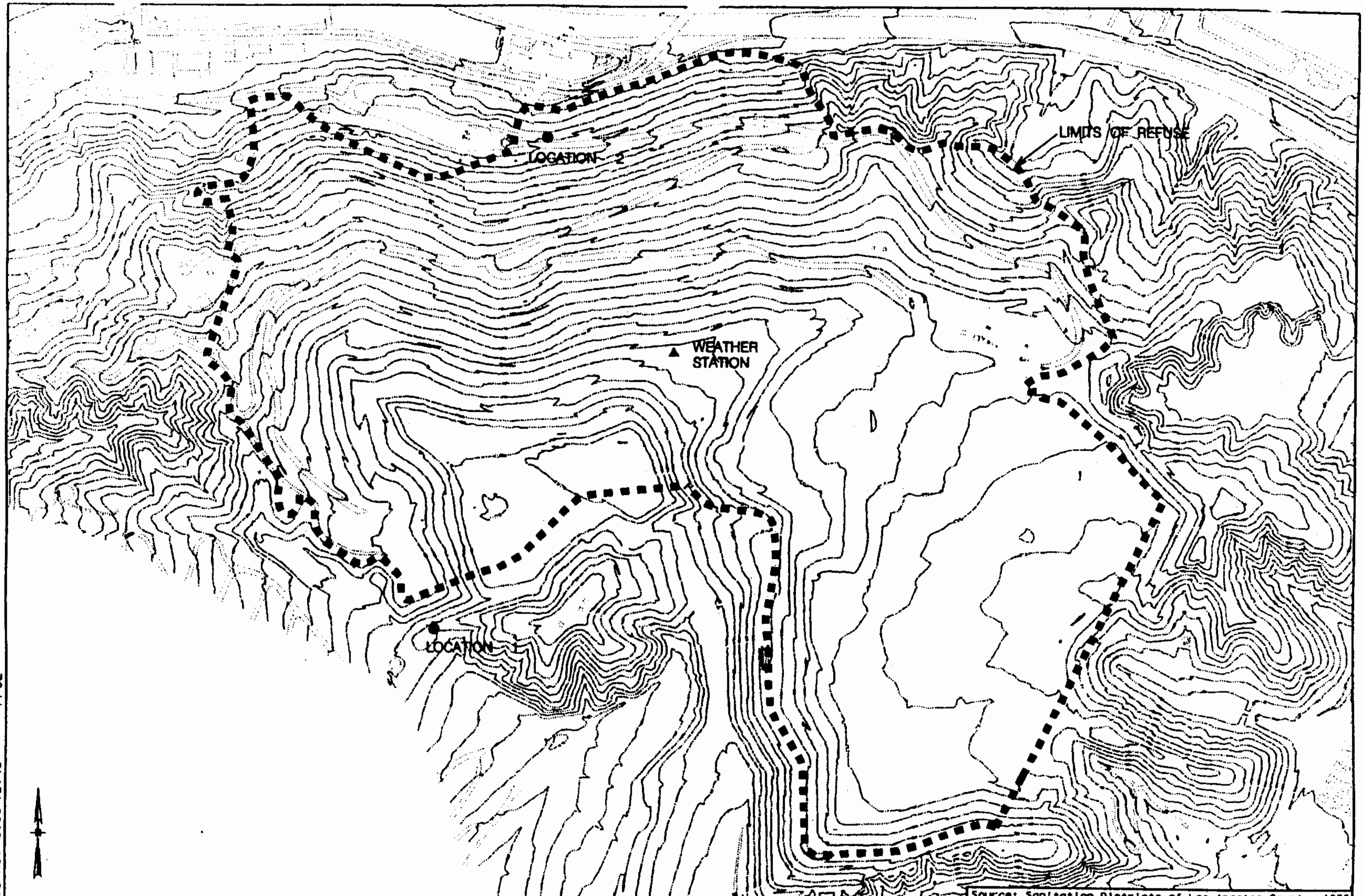
Surface Gas Monitoring Grids

Figure C

PUENTE HILLS LANDFILL

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

Scale: 1" = 12



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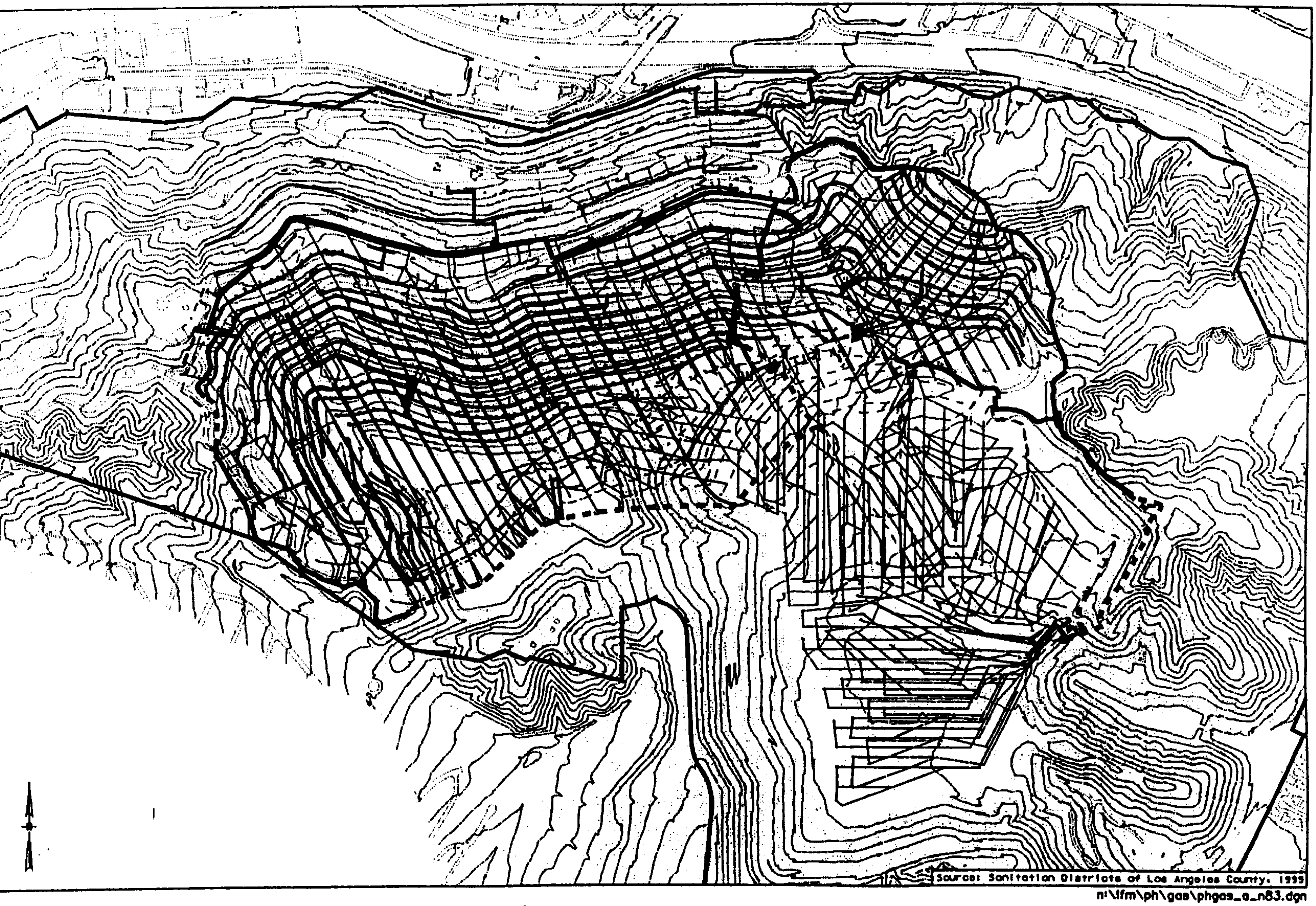
Locations of Ambient Air Samplers and Weather Station

Figure D

PUENTE HILLS LANDFILL

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

Scale: 1" = 1000'



Landfill Gas Collection System

Figure E

PUEN⁻E HILLS LANDFILL

COUNTY SA ITION DISTRICTS OF LOS ANGELES COUNTY

Scale: 1" = 100(

List of Tables

TABLE A

PERIMETER PROBE MONITORING - Toxic Air Contaminants
PUENTE HILLS LANDFILL
October 2000

Compounds	PROBE # 20
Methylene Chloride, ppb	< 0.53
Chloroform, ppb	< 0.05
1,1,1-Trichloroethane, ppb	0.49
Carbon Tetrachloride, ppb	0.08
1,1-Dichloroethene, ppb	< 0.05
Trichloroethylene, ppb	< 0.05
Tetrachloroethylene, ppb	0.1
Chlorobenzene, ppb	< 0.27
Vinyl Chloride, ppb	< 0.05
1,1-Dichloroethane, ppb	< 0.05
Benzene, ppb	< 2.7
Toluene, ppb	2
Ethylbenzene, ppb	< 0.15
Acetonitrile, ppb	< 0.52
1,2-Dibromoethane, ppb	< 0.11
Benzyl Chloride, ppb	< 2.6
Xylene, ppb	< 0.72
Dichlorobenzene, ppb	< 1.58
TOC as Methane, ppm	2

TABLE B

SURFACE GAS MONITORING - Toxic Air Contaminants
PUENTE HILLS LANDFILL
October 2000

Compounds	Grid # 149	Grid # 149 (Duplicate)	Grid # 206
Methylene Chloride, ppb	< 0.21	0.5	< 0.21
Chloroform, ppb	0.03	0.05	0.03
1,1,1-Trichloroethane, ppb	0.42	0.55	0.38
Carbon Tetrachloride, ppb	0.09	0.09	0.09
1,1-Dichloroethene, ppb	< 0.02	< 0.02	< 0.02
Trichloroethylene, ppb	< 0.02	0.02	< 0.02
Tetrachloroethylene, ppb	0.05	0.16	< 0.03
Chlorobenzene, ppb	< 0.11	< 0.11	< 0.11
Vinyl Chloride, ppb	< 0.02	< 0.02	< 0.02
1,1-Dichloroethane, ppb	< 0.02	< 0.02	< 0.02
Benzene, ppb	< 1.1	< 1.1	< 1.1
Toluene, ppb	1	2.8	2.1
Ethylbenzene, ppb	< 0.06	0.18	0.24
Acetonitrile, ppb	< 0.21	< 0.21	< 0.21
1,2-Dibromoethane, ppb	< 0.04	< 0.04	< 0.04
Benzyl Chloride, ppb	< 1	< 1	< 1
Xylene, ppb	0.19	0.83	1.36
Dichlorobenzene, ppb	< 0.63	< 0.63	< 0.63
TOC as Methane, ppm	3.7	6.9	5.5

TABLE C

AMBIENT AIR MONITORING - Toxic Air Contaminants
PUENTE HILLS LANDFILL
October 2000

Compounds	FIELD BLANK	Location 1A	Location 1B	Location 2A	Location 2B
Methylene Chloride, ppb	< 0.2	0.45	0.22	0.47	0.3
Chloroform, ppb	< 0.03	0.04	< 0.03	0.04	0.06
1,1,1-Trichloroethane, ppb	< 0.02	0.08	0.07	0.08	0.07
Carbon Tetrachloride, ppb	< 0.02	0.08	0.09	0.09	0.09
1,1-Dichloroethene, ppb	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Trichloroethylene, ppb	< 0.02	0.04	< 0.02	0.03	0.03
Tetrachloroethylene, ppb	< 0.02	0.26	0.16	0.26	0.17
Chlorobenzene, ppb	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11
Vinyl Chloride, ppb	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
1,1-Dichloroethane, ppb	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Benzene, ppb	< 1.1	< 1.1	< 1.1	1.2	1.1
Toluene, ppb	< 0.1	2.4	1.6	2.5	2.1
Ethylbenzene, ppb	< 0.06	0.28	0.18	0.33	0.27
Acetonitrile, ppb	< 0.21	< 0.21	< 0.21	0.21	0.27
1,2-Dibromoethane, ppb	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
Benzyl Chloride, ppb	< 1	< 1	< 1	< 1	< 1
Xylene, ppb	< 0.19	1.3	0.85	1.5	1.31
Dichlorobenzene, ppb	< 0.63	< 0.63	< 0.63	< 0.63	< 0.63
TOC as Methane, ppm	< 1	2.9	3	3.9	5.5

Note: Sampling began at approximately 10:00 a.m. for the 'A' labeled locations and 10:00 p.m. for the 'B' labeled locations.

TABLE D

LANDFILL GAS MONITORING
PUENTE HILLS LANDFILL
December 2000

Compounds	27" HEADER	NORTHEAST HEADER	WEST HEADER
Hydrogen Sulfide, ppm	112	26	125
Permanent Gases, Total, %	99.1	97.3	98.2
Oxygen, %	3.69	8.29	5.27
Argon, %	0.23	0.47	0.33
Nitrogen, %	19.1	39.1	27.2
Methane, %	40.4	27.5	36.4
Carbon Dioxide, %	35.7	21.9	29
Methylene Chloride, ppb	4100	260	470
Chloroform, ppb	< 21	< 21	< 21
1,1,1-Trichloroethane, ppb	76	< 21	< 21
Carbon Tetrachloride, ppb	< 22	< 22	< 22
1,1-Dichloroethene, ppb	51	22	26
Trichloroethylene, ppb	500	140	150
Tetrachloroethylene, ppb	820	130	280
Chlorobenzene, ppb	< 110	370	< 110
Vinyl Chloride, ppb	350	500	120
1,1-Dichloroethane, ppb	430	98	120
Benzene, ppb	1500	1900	6000
Toluene, ppb	18000	22000	8900
Ethylbenzene, ppb	3600	12000	2900
Acetonitrile, ppb	270	< 210	510
1,2-Dibromoethane, ppb	< 42	< 42	< 42
Benzyl Chloride, ppb	< 1000	< 1000	< 1000
Xylene, ppb	6600	28500	3760
Dichlorobenzene, ppb	< 630	290	< 630

List of Appendices

Appendix A-1

Exceedance Records for
Perimeter Probe Monitoring

Puente Hills Landfill

Summary of Perimeter Probe Exceedances

From October 1, 2000 to December 31, 2000

Probe Number	Exceedance ID	Monitoring	Date	Conc. (% CH_4)	Repair Action

No Exceedances Found

Appendix A-2

Exceedance Records for
Perimeter Probe Surface Gas Monitoring

Puente Hills Landfill

Summary of Perimeter Probe Surface Gas Exceedances

From October 1, 2000 to December 31, 2000

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action

No Exceedances Found

Appendix B-1

Exceedance Records for
Integrated Surface Gas Monitoring

Puente Hills Landfill

Summary of Integrated Surface Gas Exceedances

From October 1, 2000 to December 31, 2000

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
In Compliance					
21					
	4Q2000-21-254				
		Initial	10/19/00	87	Fresh dirt was added and site was reworked.
		1st Follow-up	10/24/00	7	In compliance.
91					
	4Q2000-91-252				
		Initial	10/9/00	70	Area was excavated. Fresh dirt was added and area was reworked.
		1st Follow-up	10/19/00	16	In compliance.
105					
	4Q2000-105-361				
		Initial	11/14/00	70	Fresh dirt was added. Area was reworked.
		1st Follow-up	11/23/00	25	In compliance.
132					
	4Q2000-132-268				
		Initial	10/20/00	196	Fresh dirt was added and site was reworke.
		1st Follow-up	10/24/00	30	In compliance.
134					
	4Q2000-134-265				
		Initial	10/20/00	84	Gas wells were adjusted.
		1st Follow-up	10/30/00	40	In compliance.

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
135					
	4Q2000-135-263				
		Initial	10/20/00	51	Gas wells were adjusted. Area was walked.
		1st Follow-up	10/30/00	21	In compliance.
140					
	4Q2000-140-249				
		Initial	10/18/00	53	Area was reworked.
		1st Follow-up	10/19/00	9	In compliance.
188					
	4Q2000-188-362				
		Initial	11/14/00	56	Fresh dirt was added. Area was reworked.
		1st Follow-up	11/24/00	20	In compliance.
189					
	4Q2000-189-297				
		Initial	11/15/00	69	Excavated existing soil, fresh soil was added and compacted.
		1st Follow-up	11/25/00	23	In compliance.
191					
	4Q2000-191-300				
		Initial	11/15/00	83	Area was excavated. Fresh dirt was added and compacted.
		1st Follow-up	11/22/00	25	In compliance.
203					
	4Q2000-203-272				
		Initial	10/23/00	86	Area was excavated. Fresh soil was added and compacted.
		1st Follow-up	10/24/00	29	In compliance.
242					
	4Q2000-242-250				
		Initial	10/18/00	118	Area was excavated. Fresh dirt was added and compacted.
		1st Follow-up	10/19/00	27	In compliance.

Appendix B-2

Exceedance Records for
Instantaneous Surface Gas Monitoring

Puente Hills Landfill

Summary of Instantaneous Surface Gas Exceedances

From October 1, 2000 to December 31, 2000

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
In Compliance					
21					
	4Q2000-21-253				
		Initial	10/19/00	20618	Fresh dirt added and area was reworked.
		1st Follow-up	10/26/00	1761	More dirt was added and area was walked again.
		2nd Follow-up	11/1/00	86	In compliance.
29					
	4Q2000-29-286				
		Initial	11/6/00	933	Fresh dirt was added and compacted.
		1st Follow-up	11/16/00	2115	More dirt was added and area was reworked.
		2nd Follow-up	11/29/00	37	In compliance. A soil trench was installed on 12/4/00.
52					
	4Q2000-52-307				
		Initial	11/7/00	626	Performed cover maintenance.
		1st Follow-up	11/17/00	1052	Area was excavated, fresh dirt was added and compacted.
		2nd Follow-up	11/21/00	2023	A shallow trench was installed on 12/7/00.
		Final	12/12/00	3	In compliance.
67					
	4Q2000-67-306				
		Initial	11/20/00	1905	Cover maintenance was performed.
		1st Follow-up	11/30/00	382	In compliance.

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
80					
	4Q2000-80-281				
		Initial	11/2/00	517	Area was excavated. Fresh dirt was added and compacted.
		1st Follow-up	11/9/00	432	In compliance.
	4Q2000-80-282				
		Initial	11/2/00	513	Area was excavated. Fresh dirt was added and compacted.
		1st Follow-up	11/9/00	268	In compliance.
81					
	4Q2000-81-283				
		Initial	11/2/00	812	Area was excavated. Fresh dirt was added and compacted.
		1st Follow-up	11/9/00	254	In compliance.
86					
	4Q2000-86-284				
		Initial	11/2/00	507	Performed cover maintenance.
		1st Follow-up	11/9/00	599	Area was excavated. Fresh soil was added and compacted.
		2nd Follow-up	11/12/00	665	A well was installed on 12/4/01.
		Final	12/6/00	105	In compliance.
87					
	4Q2000-87-285				
		Initial	11/2/00	721	Gas well was adjusted.
		1st Follow-up	11/9/00	546	The existing cover was excavated. Fresh soil was added and compacted.
		2nd Follow-up	12/4/00	1619	A soil trench was installed on 1/3/01.
		Final	12/6/00	418	In compliance.
91					
	4Q2000-91-239				
		Initial	10/9/00	1026	The existing cover was excavated. Fresh soil was added and compacted.
		1st Follow-up	10/12/00	477	In compliance.

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
93					
	4Q2000-93-240				
		Initial	10/9/00	827	Performed cover maintenance.
		1st Follow-up	10/12/00	242	In compliance.
	4Q2000-93-246				
		Initial	10/9/00	667	The existing soil was excavated. Fresh dirt was added and compacted.
		1st Follow-up	10/17/00	5217	A tree stump was removed. Area was reworked.
		2nd Follow-up	10/24/00	223	In compliance.
95					
	4Q2000-95-241				
		Initial	10/9/00	629	Area was excavated. Fresh dirt was added and compacted.
		1st Follow-up	10/16/00	283	In compliance.
97					
	4Q2000-97-242				
		Initial	10/9/00	558	The existing cover was excavated. Fresh dirt was added and compacted.
		1st Follow-up	10/17/00	14	In compliance.
98					
	4Q2000-98-305				
		Initial	11/15/00	514	Cover maintenance was performed.
		1st Follow-up	11/15/00	5	In compliance.
105					
	4Q2000-105-289				
		Initial	11/13/00	550	The existing soil was removed. Fresh soil was added and compacted.
		1st Follow-up	11/23/00	500	Continued cover maintenance.
		2nd Follow-up	12/1/00	450	In compliance.

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
127					
	4Q2000-127-278				
		Initial	10/25/00	541	The existing soil was excavated. Fresh soil was added and compacted.
		1st Follow-up	10/30/00	896	More dirt was added and compacted.
		2nd Follow-up	11/4/00	228	In compliance.
128					
	4Q2000-128-279				
		Initial	10/25/00	686	Cover maintenance was performed.
		1st Follow-up	10/30/00	1686	The area was excavated. Fresh dirt was added and compacted.
		2nd Follow-up	11/3/00	420	In compliance.
129					
	4Q2000-129-280				
		Initial	10/25/00	811	Area was excavated. Fresh soil was added and compacted.
		1st Follow-up	10/30/00	181	In compliance.
132					
	4Q2000-132-269				
		Initial	10/20/00	888	Cover maintenance was performed.
		1st Follow-up	10/30/00	1840	Area was excavated. Fresh dirt was added and area was reworked.
		2nd Follow-up	11/9/00	547	A shallow trench was installed on 1/5/01.
		Final	1/5/01	25	In compliance.
	4Q2000-132-270				
		Initial	10/20/00	5650	Area was excavated. Fresh soil was added and compacted.
		1st Follow-up	10/30/00	683	Tree stumps were removed. Area was reworked.
		2nd Follow-up	11/13/00	462	In compliance.

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
134					
	4Q2000-134-266				
		Initial	10/20/00	1085	Cover maintenance was performed.
		1st Follow-up	10/30/00	744	Area was excavated. Fresh soil was added and compacted.
		2nd Follow-up	11/13/00	296	In compliance.
	4Q2000-134-267				
		Initial	10/20/00	1084	Gas well adjustment was done.
		1st Follow-up	10/30/00	952	Area was excavated and reworked with fresh dirt.
		2nd Follow-up	11/9/00	30	In compliance.
135					
	4Q2000-135-264				
		Initial	10/20/00	696	Cover was reworked with fresh dirt and compacted.
		1st Follow-up	10/30/00	12	In compliance.
	4Q2000-135-287				
		Initial	11/4/00	787	Area was reworked.
		1st Follow-up	11/7/00	82	In compliance.
140					
	4Q2000-140-251				
		Initial	10/18/00	5679	Cover maintenance was performed.
		1st Follow-up	10/26/00	3379	Area was excavated. Fresh dirt was added and compacted.
		2nd Follow-up	10/31/00	376	In compliance.
151					
	4Q2000-151-257				
		Initial	10/20/00	1194	Cover maintenance was performed.
		1st Follow-up	10/30/00	373	In compliance.
152					
	4Q2000-152-258				
		Initial	10/20/00	563	Cover maintenance was performed.
		1st Follow-up	10/30/00	249	In compliance.

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
159					
	4Q2000-159-273				
		Initial	10/25/00	1094	Fresh dirt was added with water and recompaction was performed.
		1st Follow-up	10/30/00	263	In compliance.
188					
	4Q2000-188-293				
		Initial	11/14/00	1259	The existing cover soil was removed. New soil was added and compacted.
		1st Follow-up	11/22/00	103	In compliance.
	4Q2000-188-294				
		Initial	11/14/00	509	The existing cover soil was removed. New soil was added and compacted.
		1st Follow-up	11/22/00	31	In compliance.
189					
	4Q2000-189-296				
		Initial	11/15/00	1264	Performed cover maintenance.
		1st Follow-up	11/22/00	2341	The existing soil was excavated and the area was reworked with fresh dirt.
		2nd Follow-up	12/5/00	10087	A soil trench was installed on 1/8/01.
		Final	1/8/01	287	In compliance.
190					
	4Q2000-190-298				
		Initial	11/15/00	1097	Cover was excavated and the existing soil was removed. Fresh dirt was added and compacted.
		1st Follow-up	11/17/00	402	In compliance.

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
191					
	4Q2000-191-299				
		Initial	11/15/00	583	Area was reworked with fresh dirt.
		1st Follow-up	11/25/00	2731	Area was excavated and fresh dirt was added and compacted.
		2nd Follow-up	12/4/00	406	In compliance.
	4Q2000-191-308				
		Initial	12/1/00	1207	Area was reworked with fresh dirt.
		1st Follow-up	12/4/00	406	Area was excavated and reworked with more fresh dirt.
		2nd Follow-up	12/21/00	500	A large slope area was excavated and reworked. New shallow trench was installed.
		Final	12/26/00	257	In compliance.
202					
	4Q2000-202-261				
		Initial	10/23/00	603	Area was excavated. Fresh dirt was added with water and area was reworked.
		1st Follow-up	10/30/00	137	In compliance.
203					
	4Q2000-203-259				
		Initial	10/23/00	5802	Area was reworked.
		1st Follow-up	10/30/00	509	Area was excavated and reworked with fresh soil and water.
		2nd Follow-up	11/13/00	408	In compliance.
	4Q2000-203-260				
		Initial	10/23/00	6287	Area was reworked.
		1st Follow-up	10/30/00	686	Area was excavated and reworked with fresh soil and water.
		2nd Follow-up	11/16/00	250	In compliance.
205					
	4Q2000-205-256				
		Initial	10/20/00	502	Fresh soil was added. Area was reworked with water.
		1st Follow-up	10/30/00	10	In compliance.

Grid Number	Exceedance ID	Monitoring	Date	Conc. (ppm)	Repair Action
242					
	4Q2000-242-248				
		Initial	10/18/00	8355	Area was reworked.
		1st Follow-up	10/26/00	922	Area was excavated. Fresh dirt was added and compacted.
		2nd Follow-up	10/31/00	451	In compliance.
	4Q2000-242-255				
		Initial	10/19/00	541	Area was reworked with fresh soil.
		1st Follow-up	10/26/00	1162	Area was excavated and reworked with more soil and water.
		2nd Follow-up	11/3/00	77	In compliance.
270					
	4Q2000-270-233				
		Initial	10/4/00	571	Area was excavated and recompacted. Fresh soil was added.
		1st Follow-up	10/5/00	89	In compliance.

Appendix C

Bi-monthly Variance Surface Gas Monitoring

Bimonthly Surface Gas Monitoring For the Areas Under Puente Hills R1150.1 Second Variance
(petition filed 8/3/00)

Monitoring Event (October 1 to October 15)

Grids	Integrated (ppm)	Instantaneous (ppm)	Repair Action
53		7	
71		4	
72		10	
80		14	
97		6	
98	31		
98		233	
98		14	
101		12	
127		473	
133		147	
135		114	
154		35	
187		194	
203		112	
242		427	
242		427	
244		90	
245		9	
246		27	
247		8	
272		185	
272		110	
284		29	
285		9	
285		84	
290		168	
293		1849	cover maintenance was performed
293		87	

'monthly Surface Gas Monitoring For the Areas Under Puente Hills R1150.1 Second Variance
ɜtition filed 8/3/00)

Monitoring Event (October 15 to October 30)

Grids	Integrated (ppm)	Instantaneous (ppm)	Repair Action
53		2	
71		5	
72		8	
80		10	
97		134	
98	10		
98		332	
98		48	
101		18	
127		228	
133		492	
135		110	
154		36	
187		97	
203		164	
242		451	
242		254	
244		214	
245		37	
246		4	
247		2	
272		149	
272		40	
284		262	
285		7	
285		8	
290		10	
293		77	
293		118	

SCEC

PUENTE HILLS LANDFILL GAS FLARES No. 17, 19, 21 AND 23 EMISSION SOURCE TESTING MARCH 2000

PREPARED FOR:
County Sanitation Districts of Los Angeles County
1955 Workman Mill Road
Whittier, California 90607

FOR SUBMITTAL TO:
South Coast Air Quality Management District
21865 East Copley Drive
Diamond Bar, California 91765

TEST DATE:
March 13-16, 2000

ISSUE DATE:
April 24, 2000

PREPARED BY:
Leslie A Johnson
SCEC
1582-1 North Batavia Street
Orange, California 92867

Project No: 2025.1004
Report No: 2025.1004.rpt3

Tested By: ____________
Leslie A Johnson

Reviewed By: ____________
Bipul K Saraf

4.0 RESULTS

The results of the source testing are presented in the following tables:

Table Number	Table Title
4-1	General Results, Flare No.17
4-2	Trace Organic Species Destruction Efficiency Results, Flare No. 17, Test No.1
4-3	Trace Organic Species Destruction Efficiency Results, Flare No. 17, Test No. 2
4-4	General Results, Flare No. 19
4-5	Trace Organic Species Destruction Efficiency Results, Flare No. 19, Test No. 1
4-6	Trace Organic Species Destruction Efficiency Results, Flare No. 19, Test No. 2
4-7	General Results, Flare No. 21
4-8	Trace Organic Species Destruction Efficiency Results, Flare No. 21, Test No. 1
4-9	Trace Organic Species Destruction Efficiency Results, Flare No. 21, Test No. 2
4-10	General Results, Flare No. 23
4-11	Trace Organic Species Destruction Efficiency Results, Flare No. 23, Test No. 1
4-12	Trace Organic Species Destruction Efficiency Results, Flare No. 23, Test No. 2

4.0 RESULTS (Continued)

TABLE 4-1
GENERAL RESULTS
PUENTE HILLS LANDFILL GAS FLARE No. 17
LOS ANGELES COUNTY SANITATION DISTRICT
MARCH 13, 2000

	INLET			EXHAUST			
Parameter	**First Run**	**Second Run**	**Average**	**First Run**	**Second Run**	**Third Run[1]**	**Average**
Test No.	1-IN	2-IN	–	PM-1	PM-2		–
Time	1022/1052	1205/1235	–	1017/1137	1201/1319		–
O_2, %	4.46	4.65	4.56	13.17	13.11		13.14
CO_2, %	31.4	30.4	30.9	7.22	7.21		7.21
N_2, %	23.8	24.6	24.2	79.6	79.7		79.7
H_20, %	5.13	5.76	5.44	9.24	9.07		9.15
Flow Rate, dscfm	737	752	744	9,860	9,246		9,553
Temperature, °F				1,561	1,576		1,569
Btu/scf	397	411	404				
NO_X:							
ppm				13.4	13.5		13.4
ppm @ 3% O_2				30.8	30.9		30.9
lb/hr (as NO_2)				0.96	0.91		0.93
lb/mmBTU				0.055	0.050		0.052
CO:							
ppm				2.1	1.7		1.9
ppm @ 3% O_2				4.9	3.8		4.4
lb/hr				0.092	0.069		0.080
lb/mmBTU				0.0052	0.0037		0.0045
Hydrocarbons:[2]							
TGNMO, ppm				1.00	1.10	0.97	1.05
TGNMO, ppm @ 3% O_2 (as Hexane)				0.38	0.42	0.37	0.39
Hydrocarbons:[3]							
CH_4 ppm	388,000	402,000	395,000	ND< 1	ND< 1		ND< 1.00
TGNMO, ppm (as CH_4)	4,390	4,400	4,395	ND< 1	ND< 1.00		ND< 1.00
TGNMO, lb/hr (as CH_4)				< 0.025	< 0.023		< 0.024
Particulate:							
Organic fraction, gr/dscf				0.0000	0.0003		0.0002
Inorganic fraction, gr/dscf				0.0029	0.0022		0.0026
Total Particulate, gr/dscf				0.0029	0.0026		0.0027
gr/dscf @12% CO_2				0.0049	0.0043		0.0046
lb/hr				0.247	0.204		0.225
Sulfur Compounds:							
H_2S, ppm	122	123	123				
Methyl Mercaptan, ppm	1.3	1.3	1.3				
Ethyl Mercaptan, ppm	ND< 0.5	ND< 0.5	ND< 0.5				
Carbonyl Sulfide, ppm	ND< 0.5	ND< 0.5	ND< 0.5				
Carbon Disulfide, ppm	ND< 0.5	ND< 0.5	ND< 0.5				
Dimethyl Sulfide, ppm	2.00	2.00	ND< 0.5				
Dimethyl Disulfide,ppm	ND< 0.5	ND< 0.5	ND< 0.5				
Total Sulfur Compounds:							
Total Reduced Sulfur Inlet, ppm	125.3	126.3	125.8				

Notes:
1) The third EPA Method 18 test run was conducted during the second test for all the parameters.
2) Hydrocarbon analysis by EPA Method 18.
3) - Inlet and exhaust test results by SCAQMD Draft Method 25.2.

4.0 RESULTS (Continued)

TABLE 4-2
TRACE ORGANIC SPECIES DESTRUCTION EFFICIENCY RESULTS, TEST No. 1
PUENTE HILLS LANDFILL GAS FLARE No. 17
LOS ANGELES COUNTY SANITATION DISTRICT
MARCH 13, 2000

Sample Location:	INLET		EXHAUST		
Test No.:	1-HC-IN		1-THC-OUT		
Time:	1022/1052		1017/1137		Destruction
Flow Rate, dscfm:	737		9,860		Efficiency
Species	**ppb**	**lb/hr**	**ppb**	**lb/hr**	**%**
Methylene Chloride:	2100	2.08E-02	ND< 0.5	< 6.62E-05	> 99.68%
Chloroform:	ND< 94	< 1.31E-03	ND< 0.11	< 2.05E-05	NA
1,1,1 Trichloroethane:	88	1.37E-03	ND< 0.11	< 2.29E-05	> 98.33%
Carbon Tetrachloride:	ND< 21	< 3.76E-04	ND< 0.11	< 2.64E-05	NA
1,1-Dichloroethene:	97	1.10E-03	ND< 0.11	< 1.66E-05	> 98.48%
Trichloroethylene:	390	5.97E-03	ND< 0.11	< 2.25E-05	> 99.62%
Tetrachloroethylene:	870	1.68E-02	ND< 0.11	< 2.84E-05	> 99.83%
Chlorobenzene:	190	2.49E-03	ND< 0.11	< 1.93E-05	> 99.23%
Vinyl Chloride:	290	2.11E-03	ND< 0.11	< 1.07E-05	> 99.49%
o-Dichlorobenzene:	ND< 450	< 7.71E-03	ND< 0.11	< 2.52E-05	NA
m-Dichlorobenezene:	ND< 210	< 3.60E-03	ND< 0.11	< 2.52E-05	NA
p-Dichlorobenezene:	690	1.18E-02	ND< 0.10	< 2.29E-05	> 99.81%
1,1-Dichloroethane:	320	3.69E-03	ND< 0.11	< 1.70E-05	> 99.54%
1,2-Dichloroethane:	ND< 420	< 4.84E-03	ND< 1.10	< 1.70E-04	NA
Benzene:	3500	3.19E-02	ND< 2.7	< 3.29E-04	> 98.97%
Toluene:	18000	1.93E-01	0.62	8.90E-05	99.95%
Ethyl Benzene:	7600	9.40E-02	ND< 0.26	< 4.30E-05	> 99.95%
o-Xylene:	3700	4.58E-02	ND< 0.11	< 1.36E-06	> 100.00%
Methyl-Tert-Butyl-Ether:	540	5.55E-03	ND< 1.0	< 1.37E-04	> 97.52%
Acetonitrile:	ND< 1000	< 4.78E-03	0.51	3.26E-05	NA
Freon 11 (CCL3F):	450	7.20E-03	0.24	5.14E-05	99.29%
1,2-Dibromoethane:	ND< 21	< 4.60E-04	ND< 0.11	< 3.22E-05	NA
1,3-Butadiene:	130	8.19E-04	ND< 0.11	< 9.28E-06	> 98.87%
cis-1,2-Dichloroethylene:	930	1.05E-02	ND< 0.11	< 1.66E-05	> 99.84%
Benzyl Chloride:	ND< 2100	< 3.10E-02	ND< 2.6	< 5.13E-04	NA
m+p-Xylene:	13000	1.61E-01	0.28	4.63E-05	99.97%

ND< - indicates that the species was not detected in the sample above the analytical detection limit for this species.
The values reported is this table are the detection limit for this species and the actual concentration is lower.
NA - indicates that the destruction efficiency cannot be calculated because the inlet concentration is below the detection limit.

4.0 RESULTS (Continued)

TABLE 4-3
TRACE ORGANIC SPECIES DESTRUCTION EFFICIENCY RESULTS, TEST No. 2
PUENTE HILLS LANDFILL GAS FLARE No. 17
LOS ANGELES COUNTY SANITATION DISTRICT
MARCH 13, 2000

Sample Location:	INLET		EXHAUST		
Test No.:	2-HC-IN		2-THC-OUT		
Time:	1205/1235		1201/1319		Destruction
Flow Rate, dscfm:	752		9,246		Efficiency
Species	**ppb**	**lb/hr**	**ppb**	**lb/hr**	**%**
Methylene Chloride:	2400	2.42E-02	ND< 0.5	< 6.21E-05	> 99.74%
Chloroform:	ND< 94	< 1.33E-03	ND< 0.11	< 1.92E-05	NA
1,1,1 Trichloroethane:	87	1.38E-03	ND< 0.11	< 2.15E-05	> 98.44%
Carbon Tetrachloride:	ND< 21	< 3.84E-04	ND< 0.11	< 2.47E-05	NA
1,1-Dichloroethene:	140	1.61E-03	ND< 0.11	< 1.56E-05	> 99.03%
Trichloroethylene:	380	5.93E-03	ND< 0.11	< 2.11E-05	> 99.64%
Tetrachloroethylene:	940	1.85E-02	ND< 0.11	< 2.67E-05	> 99.86%
Chlorobenzene:	220	2.94E-03	0.32	5.27E-05	98.21%
Vinyl Chloride:	290	2.15E-03	ND< 0.11	< 1.01E-05	> 99.53%
o-Dichlorobenzene:	ND< 450	< 7.86E-03	ND< 0.11	< 2.36E-05	NA
m-Dichlorobenezene:	ND< 210	< 3.67E-03	ND< 0.11	< 2.36E-05	NA
p-Dichlorobenezene:	900	1.57E-02	ND< 0.10	< 2.15E-05	> 99.86%
1,1-Dichloroethane:	340	4.00E-03	ND< 0.11	< 1.59E-05	> 99.60%
1,2-Dichloroethane:	ND< 420	< 4.94E-03	ND< 1.10	< 1.59E-04	NA
Benzene:	3700	3.43E-02	19.0	2.17E-03	93.68%
Toluene:	17000	1.86E-01	3.0	4.04E-04	99.78%
Ethyl Benzene:	8000	1.01E-01	ND< 0.26	< 4.03E-05	> 99.96%
o-Xylene:	3900	4.92E-02	0.15	1.89E-06	100.00%
Methyl-Tert-Butyl-Ether:	550	5.76E-03	ND< 1.0	< 1.29E-04	> 97.76%
Acetonitrile:	ND< 1000	< 4.88E-03	6.6	3.96E-04	NA
Freon 11 (CCL3F):	450	7.35E-03	0.25	5.02E-05	99.32%
1,2-Dibromoethane:	ND< 21	< 4.69E-04	ND< 0.11	< 3.02E-05	NA
1,3-Butadiene:	240	1.54E-03	ND< 0.11	< 8.70E-06	> 99.44%
cis-1,2-Dichloroethylene:	930	1.07E-02	ND< 0.11	< 1.56E-05	> 99.85%
Benzyl Chloride:	ND< 2100	< 3.16E-02	ND< 2.6	< 4.81E-04	NA
m+p-Xylene:	14000	1.77E-01	0.33	5.12E-05	99.97%

ND< - indicates that the species was not detected in the sample above the analytical detection limit for this species.
The values reported is this table are the detection limit for this species and the actual concentration is lower.
NA - indicates that the destruction efficiency cannot be calculated because the inlet concentration is below the detection limit.

4.0 RESULTS (Continued)

TABLE 4-4
GENERAL RESULTS
PUENTE HILLS LANDFILL GAS FLARE No. 19
LOS ANGELES COUNTY SANITATION DISTRICT
MARCH 14, 2000

	INLET			EXHAUST			
Parameter	**First Run**	**Second Run**	**Average**	**First Run**	**Second Run**	**Third Run** [1]	**Average**
Test No.	3-IN	4-IN	–	3-PM-1	4-PM-1		–
Time	0959/1029	1150/1220	--	0957/1118	1143/1305		--
O_2, %	4.40	4.58	4.49	13.48	13.82		13.65
CO_2, %	31.1	30.9	31.0	6.87	6.54		6.70
N_2, %	23.5	24.1	23.8	79.7	79.6		79.6
H_20, %	4.27	6.79	5.53	7.88	7.60		7.74
Flow Rate, dscfm	831	803	817	10,035	9,629		9,832
Temperature, °F				1,486	1,486		1,486
Btu/scf	399	409	404				
NO_X:							
ppm				13.5	12.4		12.9
ppm @ 3% O_2				32.3	31.3		31.8
lb/hr (as NO_2)				0.98	0.87		0.93
lb/mmBTU				0.049	0.044		0.047
CO:							
ppm				2.1	2.0		2.1
ppm @ 3% O_2				5.1	5.0		5.0
lb/hr				0.094	0.085		0.089
lb/mmBTU				0.0047	0.0043		0.0045
Hydrocarbons: [2]							
TGNMO, ppm				0.96	1.47	1.55	1.22
TGNMO, ppm @ 3% O_2 (as Hexane)				0.39	0.62	0.65	0.55
Hydrocarbons: [3]							
CH_4, ppm	390,000	400,000	395,000	ND< 1	ND< 1		ND< 1.00
TGNMO, ppm (as CH_4)	3,820	4,100	3,960	ND< 1	ND< 1.00		ND< 1.00
TGNMO, lb/hr (as CH_4)				< 0.025	< 0.024		< 0.025
Particulate:							
Organic fraction, gr/dscf				0.0005	0.0001		0.0003
Inorganic fraction, gr/dscf				0.0002	0.0026		0.0014
Total Particulate, gr/dscf				0.0007	0.0027		0.0017
gr/dscf @12% CO_2				0.0013	0.0050		0.0031
lb/hr				0.062	0.226		0.144
Sulfur Compounds:							
H_2S, ppm	122	120	121				
Methyl Mercaptan, ppm	1.3	1.3	1.3				
Ethyl Mercaptan, ppm	ND< 0.5	ND< 0.5	ND< 0.5				
Carbonyl Sulfide, ppm	ND< 0.5	ND< 0.5	ND< 0.5				
Carbon Disulfide, ppm	ND< 0.5	ND< 0.5	ND< 0.5				
Dimethyl Sulfide, ppm	2.10	2.00	ND< 0.5				
Dimethyl Disulfide,ppm	ND< 0.5	ND< 0.5	ND< 0.5				
Total Sulfur Compounds:							
Total Reduced Sulfur Inlet, ppm	125.4	123.3	124.4				

Notes:

1) The third EPA Method 18 test run was conducted during the second test for all the parameters.

2) Hydrocarbon analysis by EPA Method 18.

3) - Inlet and exhaust test results by SCAQMD Draft Method 25.2.

4.0 RESULTS (Continued)

TABLE 4-5
TRACE ORGANIC SPECIES DESTRUCTION EFFICIENCY RESULTS, TEST No. 1
PUENTE HILLS LANDFILL GAS FLARE No. 19
LOS ANGELES COUNTY SANITATION DISTRICT
MARCH 14, 2000

Sample Location:	**INLET**		**EXHAUST**		
Test No.:	3-HC-IN		3-THC-OUT		
Time:	0959/1029		0957/1118		**Destruction**
Flow Rate, dscfm:	831		10,035		**Efficiency**
Species	**ppb**	**lb/hr**	**ppb**	**lb/hr**	**%**
Methylene Chloride:	2100	2.34E-02	ND< 0.5	< 6.74E-05	> 99.71%
Chloroform:	ND< 42	< 6.58E-04	ND< 0.11	< 2.08E-05	NA
1,1,1 Trichloroethane:	78	1.37E-03	ND< 0.11	< 2.33E-05	> 98.30%
Carbon Tetrachloride:	ND< 43	< 8.69E-04	ND< 0.11	< 2.68E-05	NA
1,1-Dichloroethene:	53	6.75E-04	ND< 0.11	< 1.69E-05	> 97.49%
Trichloroethylene:	360	6.21E-03	ND< 0.11	< 2.29E-05	> 99.63%
Tetrachloroethylene:	710	1.55E-02	ND< 0.11	< 2.89E-05	> 99.81%
Chlorobenzene:	180	2.66E-03	ND< 0.11	< 1.96E-05	> 99.26%
Vinyl Chloride:	320	2.63E-03	ND< 0.11	< 1.09E-05	> 99.58%
o-Dichlorobenzene:	ND< 83	< 1.60E-03	ND< 0.11	< 2.57E-05	NA
m-Dichlorobenezene:	ND< 61	< 1.18E-03	ND< 0.11	< 2.57E-05	NA
p-Dichlorobenezene:	400	7.72E-03	ND< 0.10	< 2.33E-05	> 99.70%
1,1-Dichloroethane:	290	3.77E-03	ND< 0.11	< 1.73E-05	> 99.54%
1,2-Dichloroethane:	ND< 420	< 5.46E-03	ND< 1.10	< 1.73E-04	NA
Benzene:	3400	3.49E-02	ND< 2.7	< 3.35E-04	> 99.04%
Toluene:	17000	2.06E-01	0.34	4.97E-05	99.98%
Ethyl Benzene:	6100	8.50E-02	ND< 0.26	< 4.38E-05	> 99.95%
o-Xylene:	2400	3.35E-02	ND< 0.11	< 1.53E-06	> 100.00%
Methyl-Tert-Butyl-Ether:	650	7.52E-03	ND< 1.0	< 1.40E-04	> 98.14%
Acetonitrile:	430	2.32E-03	ND< 0.27	< 1.76E-05	> 99.24%
Freon 11 (CCL3F):	440	7.94E-03	ND< 0.11	< 2.40E-05	> 99.70%
1,2-Dibromoethane:	ND< 42	< 1.04E-03	ND< 0.11	< 3.28E-05	NA
1,3-Butadiene:	ND< 42	< 2.98E-04	ND< 0.11	< 9.44E-06	NA
cis-1,2-Dichloroethylene:	940	1.20E-02	ND< 0.11	< 1.69E-05	> 99.86%
Benzyl Chloride:	ND< 1000	< 1.66E-02	ND< 2.6	< 5.22E-04	NA
m+p-Xylene:	7500	1.05E-01	ND< 0.21	< 3.54E-05	> 99.97%

ND< - indicates that the species was not detected in the sample above the analytical detection limit for this species.
The values reported is this table are the detection limit for this species and the actual concentration is lower.
NA - indicates that the destruction efficiency cannot be calculated because the inlet concentration is below the detection limit.

4.0 RESULTS (Continued)

TABLE 4-6
TRACE ORGANIC SPECIES DESTRUCTION EFFICIENCY RESULTS, TEST No. 2
PUENTE HILLS LANDFILL GAS FLARE No. 19
LOS ANGELES COUNTY SANITATION DISTRICT
MARCH 14, 2000

Sample Location:	INLET		EXHAUST		
Test No.:	4-HC-IN		4-THC-OUT		
Time:	1150/1220		1143/1305		Destruction
Flow Rate, dscfm:	803		9,629		Efficiency
Species	**ppb**	**lb/hr**	**ppb**	**lb/hr**	**%**
Methylene Chloride:	2000	2.16E-02	ND< 0.50	< 6.47E-05	> 99.70%
Chloroform:	ND< 42	< 6.37E-04	ND< 0.11	< 2.00E-05	NA
1,1,1 Trichloroethane:	77	1.31E-03	ND< 0.11	< 2.23E-05	> 98.29%
Carbon Tetrachloride:	ND< 43	< 8.40E-04	ND< 0.11	< 2.58E-05	NA
1,1-Dichloroethene:	48	5.91E-04	ND< 0.11	< 1.62E-05	> 97.25%
Trichloroethylene:	350	5.84E-03	ND< 0.11	< 2.20E-05	> 99.62%
Tetrachloroethylene:	730	1.54E-02	ND< 0.11	< 2.78E-05	> 99.82%
Chlorobenzene:	200	2.86E-03	ND< 0.11	< 1.88E-05	> 99.34%
Vinyl Chloride:	290	2.30E-03	ND< 0.11	< 1.05E-05	> 99.55%
o-Dichlorobenzene:	ND< 83	< 1.55E-03	ND< 0.11	< 2.46E-05	NA
m-Dichlorobenezene:	ND< 61	< 1.14E-03	ND< 0.11	< 2.46E-05	NA
p-Dichlorobenezene:	410	7.66E-03	ND< 0.10	< 2.24E-05	> 99.71%
1,1-Dichloroethane:	260	3.27E-03	ND< 0.11	< 1.66E-05	> 99.49%
1,2-Dichloroethane:	ND< 420	< 5.28E-03	ND< 1.10	< 1.66E-04	NA
Benzene:	3500	3.47E-02	ND< 2.7	< 3.21E-04	> 99.08%
Toluene:	17000	1.99E-01	0.35	4.91E-05	99.98%
Ethyl Benzene:	6500	8.77E-02	ND< 0.26	< 4.20E-05	> 99.95%
o-Xylene:	2500	3.37E-02	ND< 0.11	< 1.48E-06	> 100.00%
Methyl-Tert-Butyl-Ether:	620	6.94E-03	ND< 1.0	< 1.34E-04	> 98.07%
Acetonitrile:	370	1.93E-03	ND< 0.27	< 1.69E-05	> 99.13%
Freon 11 (CCL3F):	430	7.50E-03	0.15	3.14E-05	99.58%
1,2-Dibromoethane:	ND< 42	< 1.00E-03	ND< 0.11	< 3.15E-05	NA
1,3-Butadiene:	ND< 42	< 2.89E-04	ND< 0.11	< 9.06E-06	NA
cis-1,2-Dichloroethylene:	920	1.13E-02	ND< 0.11	< 1.62E-05	> 99.86%
Benzyl Chloride:	ND< 1000	< 1.61E-02	ND< 2.6	< 5.01E-04	NA
m+p-Xylene:	8000	1.08E-01	ND< 0.21	< 3.39E-05	> 99.97%

ND< - indicates that the species was not detected in the sample above the analytical detection limit for this species.
The values reported is this table are the detection limit for this species and the actual concentration is lower.
NA - indicates that the destruction efficiency cannot be calculated because the inlet concentration is below the detection limit.

4.0 RESULTS (Continued)

TABLE 4-7
GENERAL RESULTS
PUENTE HILLS LANDFILL GAS FLARE No. 21
LOS ANGELES COUNTY SANITATION DISTRICT
MARCH 15, 2000

Parameter	INLET First Run	INLET Second Run	INLET Average	EXHAUST First Run	EXHAUST Second Run	EXHAUST Third Run[1]	EXHAUST Average
Test No.	5-IN	6-IN	--	5-PM-1	6-PM-1		--
Time	0840/0910	1020/1050	--	0834/0955	1020/1141		--
O_2, %	5.31	4.73	5.02	12.25	13.69		12.97
CO_2, %	30.2	30.4	30.3	8.04	6.80		7.42
N_2, %	26.7	24.6	25.7	79.7	79.5		79.6
H_20, %	2.84	4.58	3.71	9.03	8.03		8.53
Flow Rate, dscfm	810	749	779	10,185	10,045		10,115
Temperature, °F				1,578	1,465		1,522
Btu/scf	406	400	403				
NO_X:							
ppm				15.7	12.7		14.2
ppm @ 3% O_2				32.4	31.4		31.9
lb/hr (as NO_2)				1.16	0.93		1.05
lb/mmBTU				0.059	0.049		0.054
CO:							
ppm				1.4	1.3		1.4
ppm @ 3% O_2				2.9	3.3		3.1
lb/hr				0.063	0.060		0.061
lb/mmBTU				0.0032	0.0033		0.0033
Hydrocarbons:[2]							
TGNMO, ppm				0.79	0.66	0.82	0.73
TGNMO, ppm @ 3% O_2 (as Hexane)				0.27	0.27	0.34	0.29
Hydrocarbons:[3]							
CH_4, ppm	397,000	391,000	394,000	ND< 1	ND< 1		ND< 1.00
TGNMO, ppm (as CH_4)	4,600	4,460	4,530	ND< 1	2.14		ND< 1.57
TGNMO, lb/hr (as CH_4)				< 0.026	0.054		< 0.040
Particulate:							
Organic fraction, gr/dscf				0.0007	0.0006		0.0007
Inorganic fraction, gr/dscf				0.0009	0.0023		0.0016
Total Particulate, gr/dscf				0.0016	0.0029		0.0023
gr/dscf @12% CO_2				0.0024	0.0052		0.0038
lb/hr				0.141	0.252		0.197
Sulfur Compounds:							
H_2S, ppm	111	114	113				
Methyl Mercaptan, ppm	1.2	1.2	1.2				
Ethyl Mercaptan, ppm	ND< 0.5	ND< 0.5	ND< 0.5				
Carbonyl Sulfide, ppm	ND< 0.5	ND< 0.5	ND< 0.5				
Carbon Disulfide, ppm	ND< 0.5	ND< 0.5	ND< 0.5				
Dimethyl Sulfide, ppm	2.00	2.00	ND< 0.5				
Dimethyl Disulfide, ppm	ND< 0.5	ND< 0.5	ND< 0.5				
Total Sulfur Compounds:							
Total Reduced Sulfur Inlet, ppm	114.2	117.2	115.7				

Notes:
1) The third EPA Method 18 test run was conducted during the second test for all the parameters.
2) Hydrocarbon analysis by EPA Method 18.
3) - Inlet and exhaust test results by SCAQMD Draft Method 25.2.

4.0 RESULTS (Continued)

TABLE 4-8
TRACE ORGANIC SPECIES DESTRUCTION EFFICIENCY RESULTS, TEST No. 1
PUENTE HILLS LANDFILL GAS FLARE No. 21
LOS ANGELES COUNTY SANITATION DISTRICT
MARCH 15, 2000

Sample Location:	INLET		EXHAUST		
Test No.:	5-HC-IN		5-THC-OUT		
Time:	0840/0910		0834/0955		Destruction
Flow Rate, dscfm:	810		10,185		Efficiency
Species	ppb	lb/hr	ppb	lb/hr	%
Methylene Chloride:	2100	2.29E-02	ND< 0.5	< 6.84E-05	> 99.70%
Chloroform:	ND< 42	< 6.42E-04	ND< 0.11	< 2.11E-05	NA
1,1,1 Trichloroethane:	76	1.30E-03	ND< 0.11	< 2.36E-05	> 98.18%
Carbon Tetrachloride:	ND< 43	< 8.47E-04	ND< 0.11	< 2.73E-05	NA
1,1-Dichloroethene:	47	5.84E-04	ND< 0.11	< 1.72E-05	> 97.06%
Trichloroethylene:	340	5.72E-03	ND< 0.11	< 2.33E-05	> 99.59%
Tetrachloroethylene:	710	1.51E-02	ND< 0.11	< 2.94E-05	> 99.81%
Chlorobenzene:	190	2.74E-03	ND< 0.11	< 1.99E-05	> 99.27%
Vinyl Chloride:	300	2.40E-03	ND< 0.11	< 1.11E-05	> 99.54%
o-Dichlorobenzene:	ND< 83	< 1.56E-03	ND< 0.11	< 2.60E-05	NA
m-Dichlorobenezene:	ND< 61	< 1.15E-03	ND< 0.11	< 2.60E-05	NA
p-Dichlorobenezene:	350	6.59E-03	ND< 0.10	< 2.37E-05	> 99.64%
1,1-Dichloroethane:	250	3.17E-03	ND< 0.11	< 1.75E-05	> 99.45%
1,2-Dichloroethane:	ND< 420	< 5.32E-03	ND< 1.1	< 1.75E-04	NA
Benzene:	3000	3.00E-02	ND< 2.7	< 3.40E-04	> 98.87%
Toluene:	16000	1.89E-01	ND< 0.26	< 3.86E-05	> 99.98%
Ethyl Benzene:	5900	8.02E-02	ND< 0.26	< 4.44E-05	> 99.94%
o-Xylene:	2400	3.26E-02	ND< 0.11	< 1.50E-06	> 100.00%
Methyl-Tert-Butyl-Ether:	630	7.11E-03	ND< 1.0	< 1.42E-04	> 98.00%
Acetonitrile:	380	2.00E-03	ND< 0.27	< 1.78E-05	> 99.11%
Freon 11 (CCL3F):	440	7.74E-03	ND< 0.11	< 2.43E-05	> 99.69%
1,2-Dibromoethane:	ND< 42	< 1.01E-03	ND< 0.11	< 3.33E-05	NA
1,3-Butadiene:	ND< 42	< 2.91E-04	ND< 0.11	< 9.58E-06	NA
cis-1,2-Dichloroethylene:	820	1.02E-02	ND< 0.11	< 1.72E-05	> 99.83%
Benzyl Chloride:	ND< 1000	< 1.62E-02	ND< 2.6	< 5.30E-04	NA
m+p-Xylene:	7500	1.02E-01	0.27	4.62E-05	99.95%

ND< - indicates that the species was not detected in the sample above the analytical detection limit for this species.
The values reported is this table are the detection limit for this species and the actual concentration is lower.
NA - indicates that the destruction efficiency cannot be calculated because the inlet concentration is below the detection limit.

4.0 RESULTS (Continued)

TABLE 4-9
TRACE ORGANIC SPECIES DESTRUCTION EFFICIENCY RESULTS, TEST No. 2
PUENTE HILLS LANDFILL GAS FLARE No. 21
LOS ANGELES COUNTY SANITATION DISTRICT
MARCH 15, 2000

Sample Location:	INLET		EXHAUST		
Test No.:	6-HC-IN		6-THC-OUT		
Time:	1020/1050		1020/1141		Destruction
Flow Rate, dscfm:	749		10,045		Efficiency
Species	**ppb**	**lb/hr**	**ppb**	**lb/hr**	**%**
Methylene Chloride:	2100	2.11E-02	ND< 0.5	< 6.75E-05	> 99.68%
Chloroform:	ND< 42	< 5.93E-04	ND< 0.11	< 2.09E-05	NA
1,1,1 Trichloroethane:	81	1.28E-03	ND< 0.11	< 2.33E-05	> 98.18%
Carbon Tetrachloride:	ND< 43	< 7.83E-04	ND< 0.11	< 2.69E-05	NA
1,1-Dichloroethene:	46	5.28E-04	ND< 0.11	< 1.69E-05	> 96.79%
Trichloroethylene:	330	5.13E-03	ND< 0.11	< 2.30E-05	> 99.55%
Tetrachloroethylene:	780	1.53E-02	ND< 0.11	< 2.90E-05	> 99.81%
Chlorobenzene:	220	2.93E-03	ND< 0.11	< 1.97E-05	> 99.33%
Vinyl Chloride:	300	2.22E-03	ND< 0.11	< 1.09E-05	> 99.51%
o-Dichlorobenzene:	ND< 83	< 1.44E-03	ND< 0.11	< 2.57E-05	NA
m-Dichlorobenezene:	ND< 61	< 1.06E-03	ND< 0.11	< 2.57E-05	NA
p-Dichlorobenezene:	410	7.13E-03	ND< 0.10	< 2.33E-05	> 99.67%
1,1-Dichloroethane:	260	3.05E-03	ND< 0.11	< 1.73E-05	> 99.43%
1,2-Dichloroethane:	ND< 420	< 4.92E-03	ND< 1.10	< 1.73E-04	NA
Benzene:	3200	2.96E-02	ND< 2.7	< 3.35E-04	> 98.87%
Toluene:	17000	1.85E-01	0.38	5.56E-05	99.97%
Ethyl Benzene:	6500	8.17E-02	ND< 0.26	< 4.38E-05	> 99.95%
o-Xylene:	2600	3.27E-02	ND< 0.11	< 1.38E-06	> 100.00%
Methyl-Tert-Butyl-Ether:	640	6.68E-03	ND< 1.0	< 1.40E-04	> 97.90%
Acetonitrile:	330	1.60E-03	ND< 0.27	< 1.76E-05	> 98.90%
Freon 11 (CCL3F):	440	7.15E-03	ND< 0.11	< 2.40E-05	> 99.66%
1,2-Dibromoethane:	ND< 42	< 9.34E-04	ND< 0.11	< 3.28E-05	NA
1,3-Butadiene:	ND< 42	< 2.69E-04	ND< 0.11	< 9.45E-06	NA
cis-1,2-Dichloroethylene:	900	1.03E-02	ND< 0.11	< 1.69E-05	> 99.84%
Benzyl Chloride:	ND< 1000	< 1.50E-02	ND< 2.6	< 5.23E-04	NA
m+p-Xylene:	8100	1.02E-01	ND< 0.21	< 3.54E-05	> 99.97%

ND< - indicates that the species was not detected in the sample above the analytical detection limit for this species.
The values reported is this table are the detection limit for this species and the actual concentration is lower.

4.0 RESULTS (Continued)

TABLE 4-10
GENERAL RESULTS
PUENTE HILLS LANDFILL GAS FLARE No. 23
LOS ANGELES COUNTY SANITATION DISTRICT
MARCH 16, 2000

Parameter	INLET First Run	INLET Second Run	INLET Average	EXHAUST First Run	EXHAUST Second Run	EXHAUST Third Run[1]	EXHAUST Average
Test No.	7-IN	8-IN	–	PM-7	PM-8		–
Time	0846/0916	1041/1111	–	0844/1002	1039/1157		–
O_2, %	5.53	5.03	5.28	12.69	12.74		12.71
CO_2, %	29.9	29.8	29.9	7.47	7.56		7.51
N_2, %	27.7	26.1	26.9	79.8	79.7		79.8
H_2O, %	2.40	5.28	3.84	7.90	8.43		8.16
Flow Rate, dscfm	907	827	867	10,477	10,445		10,461
Temperature, °F				1,542	1,521		1,532
Btu/scf	380	402	391				
NO_X:							
ppm				14.7	14.9		14.8
ppm @ 3% O_2				32.0	32.5		32.2
lb/hr (as NO_2)				1.12	1.13		1.12
lb/mmBTU				0.054	0.056		0.055
CO:							
ppm				0.5	0.0		0.3
ppm @ 3% O_2				1.1	0.0		0.6
lb/hr				0.024	0.000		0.012
lb/mmBTU				0.0012	0.0000		0.0006
Hydrocarbons:[2]							
TGNMO, ppm				0.73	0.76	0.71	0.74
TGNMO, ppm @ 3% O_2 (as Hexane)				0.26	0.28	0.26	0.27
Hydrocarbons:[3]							
CH_4, ppm	372,000	393,000	382,500	ND< 1	ND< 1		ND< 1.00
TGNMO, ppm (as CH_4)	3,920	4,260	4,090	0 2.55	0 1.68		ND< 1.41
TGNMO, lb/hr (as CH_4)				0.068	0.044		< 0.056
Particulate:							
Organic fraction, gr/dscf				0.0000	0.0008		0.0004
Inorganic fraction, gr/dscf				0.0018	0.0028		0.0023
Total Particulate, gr/dscf				0.0018	0.0036		0.0027
gr/dscf @12% CO_2				0.0029	0.0057		0.0043
lb/hr				0.162	0.320		0.241
Sulfur Compounds:							
H_2S, ppm	109	113	111				
Methyl Mercaptan, ppm	1.1	1.2	1.2				
Ethyl Mercaptan, ppm	ND< 0.5	ND< 0.5	ND< 0.5				
Carbonyl Sulfide, ppm	ND< 0.5	ND< 0.5	ND< 0.5				
Carbon Disulfide, ppm	ND< 0.5	ND< 0.5	ND< 0.5				
Dimethyl Sulfide, ppm	1.8	1.9	1.9				
Dimethyl Disulfide, ppm	ND< 0.5	ND< 0.5	ND< 0.5				
Total Sulfur Compounds:							
Total Reduced Sulfur Inlet, ppm	111.9	116.1	114.0				

Notes:
1) The third EPA Method 18 test run was conducted during the second test for all the parameters.
2) Hydrocarbon analysis by EPA Method 18.
3) - Inlet and exhaust test results by SCAQMD Draft Method 25.2.

4.0 RESULTS (Continued)

TABLE 4-11
TRACE ORGANIC SPECIES DESTRUCTION EFFICIENCY RESULTS, TEST No. 1
PUENTE HILLS LANDFILL GAS FLARE No. 23
LOS ANGELES COUNTY SANITATION DISTRICT
MARCH 16, 2000

Sample Location:	INLET		EXHAUST		
Test No.:	7-HC-IN		7-THC-OUT		
Time:	0846/0916		0844/1002		**Destruction**
Flow Rate, dscfm:	907		10,477		**Efficiency**
Species	**ppb**	**lb/hr**	**ppb**	**lb/hr**	**%**
Methylene Chloride:	2100	2.56E-02	ND< 0.5	< 7.03E-05	> 99.73%
Chloroform:	ND< 42	< 7.19E-04	ND< 0.11	< 2.18E-05	NA
1,1,1 Trichloroethane:	69	1.32E-03	ND< 0.11	< 2.43E-05	> 98.16%
Carbon Tetrachloride:	ND< 43	< 9.49E-04	ND< 0.11	< 2.80E-05	NA
1,1-Dichloroethene:	43	5.98E-04	ND< 0.11	< 1.77E-05	> 97.05%
Trichloroethylene:	310	5.84E-03	ND< 0.11	< 2.39E-05	> 99.59%
Tetrachloroethylene:	690	1.64E-02	ND< 0.11	< 3.02E-05	> 99.82%
Chlorobenzene:	210	3.39E-03	ND< 0.11	< 2.05E-05	> 99.40%
Vinyl Chloride:	300	2.69E-03	ND< 0.11	< 1.14E-05	> 99.58%
o-Dichlorobenzene:	ND< 83	< 1.75E-03	ND< 0.11	< 2.68E-05	NA
m-Dichlorobenezene:	ND< 61	< 1.29E-03	ND< 0.11	< 2.68E-05	NA
p-Dichlorobenezene:	410	8.65E-03	ND< 0.10	< 2.44E-05	> 99.72%
1,1-Dichloroethane:	240	3.41E-03	ND< 0.11	< 1.80E-05	> 99.47%
1,2-Dichloroethane:	ND< 420	< 5.96E-03	ND< 1.10	< 1.80E-04	NA
Benzene:	3000	3.36E-02	ND< 2.7	< 3.49E-04	> 98.96%
Toluene:	16000	2.11E-01	ND< 0.26	< 3.97E-05	> 99.98%
Ethyl Benzene:	6200	9.44E-02	ND< 0.26	< 4.57E-05	> 99.95%
o-Xylene:	2400	3.65E-02	ND< 0.11	< 1.68E-06	> 100.00%
Methyl-Tert-Butyl-Ether:	580	7.33E-03	ND< 1.0	< 1.46E-04	> 98.01%
Acetonitrile:	ND< 100	< 5.89E-04	ND< 0.27	< 1.84E-05	NA
Freon 11 (CCL3F):	420	8.28E-03	ND< 0.11	< 2.50E-05	> 99.70%
1,2-Dibromoethane:	ND< 42	< 1.13E-03	ND< 0.11	< 3.42E-05	NA
1,3-Butadiene:	50	3.88E-04	ND< 0.11	< 9.86E-06	> 97.46%
cis-1,2-Dichloroethylene:	750	1.04E-02	ND< 0.11	< 1.77E-05	> 99.83%
Benzyl Chloride:	ND< 1000	< 1.82E-02	ND< 2.6	< 5.45E-04	NA
m+p-Xylene:	7700	1.17E-01	ND< 0.21	< 3.69E-05	> 99.97%

ND< - indicates that the species was not detected in the sample above the analytical detection limit for this species.
The values reported is this table are the detection limit for this species and the actual concentration is lower.
NA - indicates that the destruction efficiency cannot be calculated because the inlet concentration is below the detection limit.

4.0 RESULTS (Continued)

TABLE 4-12
TRACE ORGANIC SPECIES DESTRUCTION EFFICIENCY RESULTS, TEST No. 2
PUENTE HILLS LANDFILL GAS FLARE No. 23
LOS ANGELES COUNTY SANITATION DISTRICT
MARCH 16, 2000

Sample Location:	INLET		EXHAUST		
Test No.:	8-HC-IN		8-THC-OUT		
Time:	1041/1111		1039/1157		Destruction
Flow Rate, dscfm:	827		10,445		Efficiency
Species	**ppb**	**lb/hr**	**ppb**	**lb/hr**	**%**
Methylene Chloride:	2000	2.22E-02	ND< 0.5	< 7.01E-05	> 99.68%
Chloroform:	ND< 42	< 6.56E-04	ND< 0.11	< 2.17E-05	NA
1,1,1 Trichloroethane:	78	1.36E-03	ND< 0.11	< 2.42E-05	> 98.22%
Carbon Tetrachloride:	ND< 43	< 8.65E-04	ND< 0.11	< 2.79E-05	NA
1,1-Dichloroethene:	47	5.96E-04	ND< 0.11	< 1.76E-05	> 97.04%
Trichloroethylene:	350	6.01E-03	ND< 0.11	< 2.39E-05	> 99.60%
Tetrachloroethylene:	750	1.63E-02	ND< 0.11	< 3.01E-05	> 99.81%
Chlorobenzene:	180	2.65E-03	ND< 0.11	< 2.04E-05	> 99.23%
Vinyl Chloride:	310	2.53E-03	ND< 0.11	< 1.14E-05	> 99.55%
o-Dichlorobenzene:	ND< 83	< 1.60E-03	ND< 0.11	< 2.67E-05	NA
m-Dichlorobenezene:	ND< 61	< 1.17E-03	ND< 0.11	< 2.67E-05	NA
p-Dichlorobenezene:	520	9.99E-03	ND< 0.10	< 2.43E-05	> 99.76%
1,1-Dichloroethane:	250	3.23E-03	ND< 0.11	< 1.80E-05	> 99.44%
1,2-Dichloroethane:	ND< 420	< 5.43E-03	ND< 1.10	< 1.80E-04	NA
Benzene:	3200	3.27E-02	ND< 2.7	< 3.48E-04	> 98.93%
Toluene:	17000	2.05E-01	ND< 0.26	< 3.96E-05	> 99.98%
Ethyl Benzene:	7000	9.72E-02	ND< 0.26	< 4.56E-05	> 99.95%
o-Xylene:	2700	3.75E-02	ND< 0.11	< 1.53E-06	> 100.00%
Methyl-Tert-Butyl-Ether:	590	6.80E-03	ND< 1.0	< 1.46E-04	> 97.86%
Acetonitrile:	410	2.20E-03	ND< 0.27	< 1.83E-05	> 99.17%
Freon 11 (CCL3F):	430	7.72E-03	ND< 0.11	< 2.50E-05	> 99.68%
1,2-Dibromoethane:	ND< 42	< 1.03E-03	ND< 0.11	< 3.41E-05	NA
1,3-Butadiene:	ND< 42	< 2.97E-04	ND< 0.11	< 9.83E-06	NA
cis-1,2-Dichloroethylene:	830	1.05E-02	ND< 0.11	< 1.76E-05	> 99.83%
Benzyl Chloride:	ND< 1000	< 1.65E-02	ND< 2.6	< 5.44E-04	NA
m+p-Xylene:	8600	1.19E-01	ND< 0.21	< 3.68E-05	> 99.97%

ND< - indicates that the species was not detected in the sample above the analytical detection limit for this species.
The values reported is this table are the detection limit for this species and the actual concentration is lower.
NA - indicates that the destruction efficiency cannot be calculated because the inlet concentration is below the detection limit.

2000 Source Tests

TABLE 4-1
DETAILED TEST RESULTS
PUENTE HILLS ENERGY RECOVERY FROM LANDFILL GAS, UNIT No. 300
COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
OCTOBER 31, 2000

	INLET			EXHAUST		
Parameter	**First Run**	**Second Run**	**Average**	**First Run**	**Second Run**	**Average**
Test No.	1-IN-PG	2-IN-PG	--	3-PM-PG	4-PM-PG	--
Time	1015/1131	1156/1311	--	1015/1131	1156/1311	--
O_2, %	4.41	4.54	4.48	6.03	6.04	6.04
CO_2, %	31.5	31.5	31.5	14.1	14.1	14.1
N_2, %	23.2	23.9	23.6	79.9	79.9	79.9
H_2O, %	3.64	5.16	4.40	13.7	14.0	13.9
Inlet Flow Rate, scfm(1)	11,442	11,302	11,372			
Corrected Flow Rate, dscfm	11,025	10,719	10,872	67,412	67,365	67,389
Temperature, ^oF				310	310	310
Btu/scf	340	340	340			
NO_X:						
ppm				15.7	15.8	15.8
ppm @ 3% O_2				18.9	19.0	19.0
lb/hr (as NO_2)				7.71	7.73	7.72
lb/MM Btu (as NO_2)				0.034	0.035	0.035
CO:						
ppm				5.0	5.4	5.2
ppm @ 3% O_2				6.0	6.5	6.3
lb/hr				1.50	1.61	1.55
lb/MM Btu				0.007	0.007	0.007
Hydrocarbons:						
CH_4, ppm	330,000	330,000	330,000	2.22	2.25	2.24
TGNMO, ppm (as CH_4)	5,960	5,540	5,750	4.44	6.64	5.54
TGNMO, ppm @ 3% O_2 (as Hexane)				0.89	1.34	1.12
TGNMO, lb/hr (as CH_4)	166.2	150.2	158.2	0.76	1.13	0.94
Destruction Eff. %				99.54	99.25	99.40
Particulate:						
Organic fraction, gr/dscf				0.0001	0.0000	0.0000
Inorganic fraction, gr/dscf				0.0057	0.0114	0.0086
Total Particulate, gr/dscf				0.0058	0.0114	0.0086
gr/dscf 3% O_2				0.0070	0.0138	0.0100
gr/dscf 12% CO_2				0.0049	0.0097	0.0073
lb/hr				3.35	6.60	4.98
Sulfur Compounds:						
H_2S, ppm	102	108	105			
Methyl Mercaptan, ppm	1.2	1.3	1.3			
Ethyl Mercaptan, ppm	ND< 0.5	ND< 0.5	ND< 0.5			
Carbonyl Sulfide, ppm	ND< 0.5	ND< 0.5	ND< 0.5			
Carbon Disulfide, ppm	ND< 0.5	ND< 0.5	ND< 0.5			
Dimethyl Sulfide, ppm	2.4	2.4	2.4			
Dimethyl Disulfide,ppm	ND< 0.5	ND< 0.5	ND< 0.5			
Total Sulfur Compounds:						
Total Reduced Sulfur, ppm	105.6	111.7	108.7			

1) The inlet flow rate was recorded from the plant flow rate monitor in scfm.

TABLE 4-2
TRACE ORGANIC SPECIES DESTRUCTION EFFICIENCY RESULTS, TEST 1
PUENTE HILLS ENERGY RECOVERY FROM LANDFILL GAS, UNIT No. 300
COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
OCTOBER 31, 2000

Sample Location:	INLET		EXHAUST		
Test No.:	1-IN-PG		1-THC-OUT		
Time:	1015/1131		1015/1131		Destruction
Flow Rate, dscfm:	11,025		67,412		Efficiency
Species	ppb	lb/hr	ppb	lb/hr	%
Methylene Chloride:	2,700	4.00E-01	1.7	1.54E-03	99.62%
Chloroform:	ND< 21	< 4.37E-03	ND< 0.08	< 1.02E-04	NA
1,1,1-Trichloroethane:	58	1.35E-02	0.25	3.55E-04	97.36%
Carbon Tetrachloride:	ND< 22	< 5.90E-03	ND< 0.05	< 8.20E-05	NA
1,1-Dichloroethene:	46	7.77E-03	ND< 0.05	< 5.17E-05	> 99.34%
Trichloroethylene:	390	8.93E-02	ND< 0.05	< 7.00E-05	> 99.92%
Tetrachloroethylene:	790	2.28E-01	ND< 0.05	< 8.84E-05	> 99.96%
Chlorobenzene:	170	3.34E-02	ND< 0.27	< 3.24E-04	> 99.03%
Vinyl Chloride:	300	3.27E-02	ND< 0.05	< 3.33E-05	> 99.90%
o-Dichlorobenzene:	ND< 210	< 5.38E-02	ND< 0.53	< 8.30E-04	NA
m-Dichlorobenzene:	ND< 210	< 5.38E-02	ND< 0.52	< 8.15E-04	NA
p-Dichlorobenzene:	570	1.46E-01	ND< 0.53	< 8.30E-04	> 99.43%
1,1-Dichloroethane:	320	5.52E-02	ND< 0.05	< 5.27E-05	> 99.90%
1,2-Dichloroethane:	ND< 420	< 7.24E-02	ND< 1.1	< 1.16E-03	NA
Benzene:	2,700	3.68E-01	ND< 2.7	< 2.25E-03	> 99.39%
Toluene:	18,000	2.89E+00	0.50	4.91E-04	99.98%
Ethyl Benzene:	6,800	1.26E+00	ND< 0.15	< 1.70E-04	> 99.99%
o-Xylene:	3,400	6.29E-01	ND< 0.27	< 3.05E-04	> 99.95%
Methyl-Tert-Butyl-Ether:	640	9.83E-02	ND< 0.18	< 1.69E-04	> 99.83%
Acetronitrile:	390	2.79E-02	ND< 0.52	< 2.28E-04	> 99.18%
Freon 11 (CCL3F):	530	1.27E-01	0.06	8.79E-05	99.93%
1,2-Dibromoethane:	ND< 42	< 1.38E-02	ND< 0.11	< 2.20E-04	NA
1,3-Butadiene:	57	5.37E-03	ND< 0.08	< 4.61E-05	> 99.14%
cis-1,2-Dichloroethylene:	840	1.42E-01	ND< 0.05	< 5.17E-05	> 99.96%
Benzyl Chloride:	ND< 1,000	< 2.21E-01	ND< 2.6	< 3.51E-03	NA
m,p-Xylene:	11,000	2.04E+00	ND< 0.21	< 2.38E-04	> 99.99%
Total:		< 9.01		< 0.0141	
Total Destruction Efficiency:					> 99.84%

ND< - indicates that the species was not detected in the sample above the analytical detection limit. In this case the detection limit for the species is reported and the actual concentration maybe lower.
NA - indicates that the destruction efficiency cannot be calculated because the inlet concentration is below the detection limit.

TABLE 4-3
TRACE ORGANIC SPECIES DESTRUCTION EFFICIENCY RESULTS, TEST 2
PUENTE HILLS ENERGY RECOVERY FROM LANDFILL GAS, UNIT No. 300
COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
OCTOBER 31, 2000

Sample Location:	INLET		EXHAUST		
Test No.:	2-IN-PG		2-THC-PG		
Time:	1015/1131		1015/1131		Destruction
Flow Rate, dscfm:	10,719		67,365		Efficiency
Species	**ppb**	**lb/hr**	**ppb**	**lb/hr**	**%**
Methylene Chloride:	2,500	3.60E-01	3.5	3.17E-03	99.12%
Chloroform:	ND< 21	< 4.25E-03	ND< 0.08	< 1.02E-04	NA
1,1,1-Trichloroethane:	58	1.31E-02	0.59	8.38E-04	93.61%
Carbon Tetrachloride:	ND< 22	< 5.74E-03	ND< 0.05	< 8.19E-05	NA
1,1-Dichloroethene:	35	5.75E-03	ND< 0.05	< 5.16E-05	> 99.10%
Trichloroethylene:	350	7.79E-02	ND< 0.05	< 7.00E-05	> 99.91%
Tetrachloroethylene:	690	1.94E-01	ND< 0.05	< 8.83E-05	> 99.95%
Chlorobenzene:	160	3.05E-02	ND< 0.27	< 3.24E-04	> 98.94%
Vinyl Chloride:	280	2.97E-02	ND< 0.05	< 3.33E-05	> 99.89%
o-Dichlorobenzene:	ND< 210	< 5.23E-02	ND< 0.53	< 8.30E-04	NA
m-Dichlorobenzene:	ND< 210	< 5.23E-02	ND< 0.52	< 8.14E-04	NA
p-Dichlorobenzene:	410	1.02E-01	ND< 0.53	< 8.30E-04	> 99.19%
1,1-Dichloroethane:	290	4.86E-02	ND< 0.05	< 5.27E-05	> 99.89%
1,2-Dichloroethane:	ND< 420	< 7.04E-02	ND< 1.1	< 1.16E-03	NA
Benzene:	2,400	3.18E-01	ND< 2.7	< 2.25E-03	> 99.29%
Toluene:	16,000	2.50E+00	0.55	5.40E-04	99.98%
Ethyl Benzene:	5,800	1.04E+00	ND< 0.15	< 1.70E-04	> 99.98%
o-Xylene:	2,500	4.50E-01	ND< 0.27	< 3.05E-04	> 99.93%
Methyl-Tert-Butyl-Ether:	570	8.51E-02	ND< 0.18	< 1.69E-04	> 99.80%
Acetronitrile:	250	1.74E-02	0.57	2.49E-04	98.57%
Freon 11 (CCL3F):	490	1.14E-01	ND< 0.05	< 7.32E-05	> 99.94%
1,2-Dibromoethane:	ND< 42	< 1.34E-02	ND< 0.11	< 2.20E-04	NA
1,3-Butadiene:	56	5.13E-03	ND< 0.08	< 4.61E-05	> 99.10%
cis-1,2-Dichloroethylene:	750	1.23E-01	ND< 0.05	< 5.16E-05	> 99.96%
Benzyl Chloride:	ND< 1,000	< 2.15E-01	ND< 2.6	< 3.51E-03	NA
m,p-Xylene:	9,400	1.69E+00	ND< 0.21	< 2.37E-04	> 99.99%
Total:		< 7.62		< 0.0163	
Total Destruction Efficiency:					> 99.79%

ND< - indicates that the species was not detected in the sample above the analytical detection limit. In this case the detection limit for the species is reported and the actual concentration maybe lower.
NA - indicates that the destruction efficiency cannot be calculated because the inlet concentration is below the detection limit.

TABLE 1-1
SUMMARY OF TEST RESULTS
SOLAR LANDFILL GAS TURBINE, PUENTE HILLS LANDFILL
COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
NOVEMBER 1, 2000

PARAMETER	INLET	EXHAUST	LIMIT	APPLICABLE SCAQMD Rule
O_2, %	5.12	17.54		
CO_2, %	30.4	2.7		
N_2, %	26.0	79.8		
H_2O, %	4.33	4.4		
Flow Rate, dscfm[1]	1,073	29,400		
Temperature, °F		627		
Btu/scf	345			
NO_x:				
ppm		13.2		
ppm @ 15% O_2		23.2	25	1134
lb/hr (as NO_2)		2.82		
lb/MM Btu (as NO_2)		0.128		
CO:				
ppm		17.0	2000	407
ppm @ 15% O_2		29.9		
lb/hr		2.22		
Hydrocarbons:				
CH_4, ppm	335,000	ND< 3		
TGNMO, ppm (as CH_4)	5,495	3.77		
TGNMO, ppm @ 3% O_2 (as Hexane)		3.34	20	1150.1
TGNMO, lb/hr (as CH_4)	14.9	0.28		
Destruction Eff. %		98.12		
Total Particulate:				
gr/dscf		0.0048		
gr/dscf 15% O_2		0.0084		
gr/dscf 12% CO_2		0.0212	0.1	409
lb/hr		1.20		
Total Sulfur Compounds:				
Total Reduced Sulfur, ppm	106.5		150	431.1

Notes:
The results in this table are the averages of all measurements. See Section 4.0 for complete test results of all measurements.
P/O - SCAQMD Permit To Operate No. M44593
1) The inlet flow rate was recorded from on-site flow rate monitor.

1.0 INTRODUCTION (Continued)

TABLE 1-2
SUMMARY OF TEST RESULTS
PUENTE HILLS LANDFILL GAS FLARE No. 17
LOS ANGELES COUNTY SANITATION DISTRICT
MARCH 13, 2000

PARAMETER	INLET		EXHAUST	PERMIT LIMIT	APPLICABLE SCAQMD Rule
O_2, %	4.56		13.14		
CO_2, %	30.9		7.21		
N_2, %	24.2		79.7		
H_2O, %	5.44		9.15		
Flow Rate, dscfm	744		9,553	Inlet <1000	P/O
Temperature, °F			1,569	>1400	P/O
Btu/scf	404				
NO_X:					
ppm			13.4		
ppm @ 3% O_2			30.9		
lb/hr (as NO_2)			0.93		
lb/mmBTU			0.052		
CO:					
ppm			1.9	2000	407
ppm @ 3% O_2			4.4		
lb/hr			0.080		
lb/mmBTU			0.0045		
Hydrocarbons:(1)					
TGNMO, ppm @ 3% O_2 (as Hexane)			0.39	20	1150.1
Hydrocarbons:(2)					
CH_4, ppm	395,000	ND<	1.00		
TGNMO, ppm (as CH_4)	4,395	ND<	1.00		
TGNMO, lb/hr (as CH_4)		<	0.024		
Total Particulate:					
gr/dscf			0.0027	0.08	404
gr/dscf @3% O_2			0.0063		
gr/dscf @12% CO_2			0.0046	0.1	409
lb/hr			0.225		
Total Sulfur Compounds:					
Total Reduced Sulfur Inlet, ppm	125.8			150	431.1

Notes:

The results in this table are the averages of all measurements. See Section 4.0 for complete test results of all measurements.

P/O - SCAQMD Permit To Operate No. D-82219

1) Hydrocarbon analysis by EPA Method 18.

2) - Inlet and exhaust test results by SCAQMD Draft Method 25.2.

1.0 INTRODUCTION (Continued)

TABLE 1-3
SUMMARY OF TEST RESULTS
PUENTE HILLS LANDFILL GAS FLARE No. 19
LOS ANGELES COUNTY SANITATION DISTRICT
MARCH 14, 2000

PARAMETER	INLET	EXHAUST	PERMIT LIMIT	APPLICABLE SCAQMD Rule
O_2, %	4.49	13.65		
CO_2, %	31.0	6.70		
N_2, %	23.8	79.6		
H_20, %	5.53	7.74		
Flow Rate, dscfm	817	9,832	Inlet <1000	P/O
Temperature, °F		1,486	>1400	P/O
Btu/scf	404			
NO_X:				
ppm		12.9		
ppm @ 3% O_2		31.8		
lb/hr (as NO_2)		0.93		
lb/mmBTU		0.047		
CO:				
ppm		2.1	2000	407
ppm @ 3% O_2		5.0		
lb/hr		0.089		
lb/mmBTU		0.0045		
Hydrocarbons:[1]				
TGNMO, ppm @ 3% O_2 (as Hexane)		0.55	20	1150.1
Hydrocarbons:[2]				
CH_4, ppm	395,000	ND< 1.00		
TGNMO, ppm (as CH_4)	3,960	ND< 1.00		
TGNMO, lb/hr (as CH_4)		< 0.025		
Total Particulate:				
gr/dscf		0.0017	0.08	404
gr/dscf @3% O_2		0.0042		
gr/dscf @12% CO_2		0.0031	0.1	409
lb/hr		0.144		
Total Sulfur Compounds:				
Total Reduced Sulfur Inlet, ppm	124.4		150	431.1

Notes:

The results in this table are the averages of all measurements. See Section 4.0 for complete test results of all measurements.

P/O - SCAQMD Permit To Operate No. D-82219

1) Hydrocarbon analysis by EPA Method 18.

2) - Inlet and exhaust test results by SCAQMD Draft Method 25.2.

1.0 INTRODUCTION (Continued)

TABLE 1-4
SUMMARY OF TEST RESULTS
PUENTE HILLS LANDFILL GAS FLARE No. 21
LOS ANGELES COUNTY SANITATION DISTRICT
MARCH 15, 2000

PARAMETER	INLET	EXHAUST	PERMIT LIMIT	APPLICABLE SCAQMD Rule
O_2, %	5.02	12.97		
CO_2, %	30.3	7.42		
N_2, %	25.7	79.6		
H_20, %	3.71	8.53		
Flow Rate, dscfm	779	10,115	Inlet <1000	P/O
Temperature, °F		1,522	>1400	P/O
Btu/scf	403			
NO_X:				
ppm		14.2		
ppm @ 3% O_2		31.9		
lb/hr (as NO_2)		1.05		
lb/mmBTU		0.054		
CO:				
ppm		1.4	2000	407
ppm @ 3% O_2		3.1		
lb/hr		0.061		
lb/mmBTU		0.0033		
Hydrocarbons:(1)				
TGNMO, ppm @ 3% O_2 (as Hexane)		0.29	20	1150.1
Hydrocarbons:(2)				
CH_4, ppm	394,000	ND< 1.00		
TGNMO, ppm (as CH_4)	4,530	ND< 1.57		
TGNMO, lb/hr (as CH_4)		< 0.040		
Total Particulate:				
gr/dscf		0.0023	0.08	404
gr/dscf @3% O_2		0.0051		
gr/dscf @12% CO_2		0.0038	0.1	409
lb/hr		0.197		
Total Sulfur Compounds:				
Total Reduced Sulfur Inlet, ppm	115.7		150	431.1

Notes:

The results in this table are the averages of all measurements. See Section 4.0 for complete test results of all measurements.
P/O - SCAQMD Permit To Operate No. D-82219
1) Hydrocarbon analysis by EPA Method 18.
2) - Inlet and exhaust test results by SCAQMD Draft Method 25.2.

1.0 INTRODUCTION (Continued)

TABLE 1-5
SUMMARY OF TEST RESULTS
PUENTE HILLS LANDFILL GAS FLARE No. 23
LOS ANGELES COUNTY SANITATION DISTRICT
MARCH 16, 2000

PARAMETER	INLET	EXHAUST	PERMIT LIMIT	APPLICABLE SCAQMD Rule
O_2, %	5.28	12.71		
CO_2, %	29.9	7.51		
N_2, %	26.9	79.8		
H_20, %	3.84	8.16		
Flow Rate, dscfm	867	10,461	Inlet <1000	P/O
Temperature, °F		1,532	>1400	P/O
Btu/scf	391			
NO_X:				
ppm		14.8		
ppm @ 3% O_2		32.2		
lb/hr (as NO_2)		1.12		
lb/mmBTU		0.055		
CO:				
ppm		0.3	2000	407
ppm @ 3% O_2		0.6		
lb/hr		0.012		
lb/mmBTU		0.0006		
Hydrocarbons:(1)				
TGNMO, ppm @ 3% O_2 (as Hexane)		0.27	20	1150.1
Hydrocarbons:(2)				
CH_4, ppm	382,500	ND< 1.00		
TGNMO, ppm (as CH_4)	4,090	ND< 1.41		
TGNMO, lb/hr (as CH_4)		< 0.056		
Total Particulate:				
gr/dscf		0.0027	0.08	404
gr/dscf @3% O_2		0.0059		
gr/dscf @12% CO_2		0.0043	0.1	409
lb/hr		0.241		
Total Sulfur Compounds:				
Total Reduced Sulfur Inlet, ppm	114.0		150	431.1

Notes:

The results in this table are the averages of all measurements. See Section 4.0 for complete test results of all measurements.

P/O - SCAQMD Permit To Operate No. D-82219

1) Hydrocarbon analysis by EPA Method 18.

2) - Inlet and exhaust test results by SCAQMD Draft Method 25.2.

TABLE 1-1
SUMMARY OF TEST RESULTS
PUENTE HILLS LANDFILL GAS FLARE No. 2
COUNTY SANITANTION DISTRICTS OF LOS ANGELES COUNTY
SEPTEMBER 8, 2000

PARAMETER	INLET	EXHAUST	LIMIT	APPLICABLE SCAQMD Rule
O_2, %	5.64	13.96		
CO_2, %	30.0	6.2		
N_2, %	26.4	79.8		
H_2O, %	4.18	8.1		
Flow Rate, dscfm	795	8,800	Inlet < 1000	P/O
Temperature, °F		1,459	> 1400	P/O
Btu/scf	396			
NO_X:				
ppm		13.2		
lb/hr (as NO_2)		0.85		
lb/MM Btu (as NO_2)		0.045		
CO:				
ppm		7.9	2000	407
lb/hr		0.30		
lb/MM Btu		0.016		
Non-Methane Organics:(1)				
TGNMO, ppm @ 3% O_2 (as Hexane)		0.53	20	1150.1
Hydrocarbons:(2)				
CH_4, ppm	387,000	ND< 1		
TGNMO, ppm (as CH_4)	4,490	3.15		
TGNMO, lb/hr (as CH_4)	9.0	0.07		
Destruction Eff. %		99.22		
Total Particulate:				
gr/dscf		0.0137	0.08	404
gr/dscf 12% CO_2		0.0263	0.1	409
lb/hr		1.03		
Total Sulfur Compounds:				
Total Reduced Sulfur, ppm	105.3		150	431.1

Notes:

The results in this table are the averages of all measurements. See Section 4.0 for complete test results of all measurements.

P/O - SCAQMD Permit To Operate No. D 82219

1) Total gaseous non-methane organic analysis by EPA Method 18.

2) The inlet results are from the SCAQMD draft Method 25.2 sample analysis, the exhaust results are from the SCAQMD draft Method 25.3 sample analysis.

TABLE 1-2
SUMMARY OF TEST RESULTS
PUENTE HILLS LANDFILL GAS FLARE No. 20
COUNTY SANITANTION DISTRICTS OF LOS ANGELES COUNTY
SEPTEMBER 7, 2000

PARAMETER	INLET		EXHAUST	LIMIT	APPLICABLE SCAQMD Rule
O_2, %	5.15		13.08		
CO_2, %	30.3		7.1		
N_2, %	25.2		79.9		
H_2O, %	4.82		8.6		
Flow Rate, dscfm	784		7,722	Inlet < 1000	P/O
Temperature, ^oF			1,526	> 1400	P/O
Btu/scf	395				
NO_X:					
ppm			14.7		
lb/hr (as NO_2)			0.82		
lb/MM Btu (as NO_2)			0.044		
CO:					
ppm			1.2	2000	407
lb/hr			0.04		
lb/MM Btu			0.002		
Non-Methane Organics:(1)					
TGNMO, ppm @ 3% O_2 (as Hexane)			0.44	20	1150.1
Hydrocarbons:(2)					
CH_4, ppm	386,500	ND<	1		
TGNMO, ppm (as CH_4)	4,310		5.17		
TGNMO, lb/hr (as CH_4)	8.6		0.10		
Destruction Eff. %			98.83		
Total Particulate:					
gr/dscf			0.0102	0.08	404
gr/dscf 12% CO_2			0.0173	0.1	409
lb/hr			0.67		
Total Sulfur Compounds:					
Total Reduced Sulfur, ppm	110.0			150	431.1

Notes:
The results in this table are the averages of all measurements. See Section 4.0 for complete test results of all measurements.
P/O - SCAQMD Permit To Operate No. D 82219
1) Total gaseous non-methane organic analysis by EPA Method 18.
2) The inlet results are from the SCAQMD draft Method 25.2 sample analysis,
the exhaust results are from the SCAQMD draft Method 25.3 sample analysis.

TABLE 1-3
SUMMARY OF TEST RESULTS
PUENTE HILLS LANDFILL GAS FLARE No. 22
COUNTY SANITANTION DISTRICTS OF LOS ANGELES COUNTY
SEPTEMBER 6, 2000

PARAMETER	INLET	EXHAUST	LIMIT	APPLICABLE SCAQMD Rule
O_2, %	5.45	12.86		
CO_2, %	29.7	7.4		
N_2, %	26.2	79.8		
H_2O, %	5.01	9.2		
Flow Rate, dscfm	812	7,299	Inlet < 1000	P/O
Temperature, ^oF		1,544	> 1400	P/O
Btu/scf	368			
NO_X:				
ppm		14.9		
lb/hr (as NO_2)		0.79		
lb/MM Btu (as NO_2)		0.044		
CO:				
ppm		0.7	2000	407
lb/hr		0.02		
lb/MM Btu		0.001		
Non-Methane Organics:(1)				
TGNMO, ppm @ 3% O_2 (as Hexane)		0.29	20	1150.1
Hydrocarbons:(2)				
CH_4, ppm	359,000	ND< 1		
TGNMO, ppm (as CH_4)	4,155	3.25		
TGNMO, lb/hr (as CH_4)	8.6	0.06		
Destruction Eff. %		99.30		
Total Particulate:				
gr/dscf		0.0134	0.08	404
gr/dscf 12% CO_2		0.0219	0.1	409
lb/hr		0.85		
Total Sulfur Compounds:				
Total Reduced Sulfur, ppm	108.5		150	431.1

Notes:
The results in this table are the averages of all measurements. See Section 4.0 for complete test results of all measurements.
P/O - SCAQMD Permit To Operate No. D 82219
1) Total gaseous non-methane organic analysis by EPA Method 18.
2) The inlet results are from the SCAQMD draft Method 25.2 sample analysis, the exhaust results are from the SCAQMD draft Method 25.3 sample analysis.

TABLE 1-4
SUMMARY OF TEST RESULTS
PUENTE HILLS LANDFILL GAS FLARE No. 24
COUNTY SANITANTION DISTRICTS OF LOS ANGELES COUNTY
SEPTEMBER 5, 2000

PARAMETER	INLET		EXHAUST	LIMIT	APPLICABLE SCAQMD Rule
O_2, %	5.21		12.65		
CO_2, %	29.8		7.5		
N_2, %	25.3		79.9		
H_2O, %	6.16		9.5		
Flow Rate, dscfm	801		7,316	Inlet < 1000	P/O
Temperature, ^oF			1,579	> 1400	P/O
Btu/scf	392				
NO_X:					
ppm			15.1		
lb/hr (as NO_2)			0.80		
lb/MM Btu (as NO_2)			0.043		
CO:					
ppm			0.7	2000	407
lb/hr			0.02		
lb/MM Btu			0.001		
Non-Methane Organics:(1)					
TGNMO, ppm @ 3% O_2 (as Hexane)			0.28	20	1150.1
Hydrocarbons:(2)					
CH_4, ppm	383,000	ND<	1		
TGNMO, ppm (as CH_4)	4,230		3.32		
TGNMO, lb/hr (as CH_4)	8.6		0.06		
Destruction Eff. %			99.28		
Total Particulate:					
gr/dscf			0.0285	0.08	404
gr/dscf 12% CO_2			0.0459	0.1	409
lb/hr			1.78		
Total Sulfur Compounds:					
Total Reduced Sulfur, ppm	112.8			150	431.1

Notes:
The results in this table are the averages of all measurements. See Section 4.0 for complete test results of all measurements.
P/O - SCAQMD Permit To Operate No. D 82219
1) Total gaseous non-methane organic analysis by EPA Method 18.
2) The inlet results are from the SCAQMD draft Method 25.2 sample analysis,
the exhaust results are from the SCAQMD draft Method 25.3 sample analysis.

APPENDIX E

PUENTE HILLS LANDFILL GROUNDWATER SAMPLING AND ANALYSIS PROGRAM

PUENTE HILLS LANDFILL GROUNDWATER SAMPLING AND ANALYSIS PROGRAM

Introduction

The Sanitation Districts' groundwater sampling and analysis program is designed to ensure that an accurate and reliable representation of groundwater quality is obtained at each monitoring well. The program is developed based on requirements in federal Subtitle D (Title 40, Code of Federal Regulations, Part 258) and state of California Title 27 (Code of California Regulations, §20415(e)) regulations, and in Order No. 93-070 adopted by the Regional Water Quality Control Board, Los Angeles Regions (RWQCB) in 1993.

Subtitle D specifically requires that the groundwater monitoring program include procedures and techniques for (1) sample collection, (2) sample preservation and shipment, (3) sample analysis, (4) chain of custody control, and (5) quality assurance and quality control. The following sections describe these issues in detail. In developing the ground water sampling and analysis program, the Sanitation Districts used the following documents as references:

- California Environmental Protection Agency (CEPA), *Representative Sampling of Ground Water for Hazardous Substances: Guidance Manual for Ground Water Investigations*, 1994;
- United States Environmental Protection Agency (USEPA), *RCRA Ground-water Monitoring: Draft Technical Guidance*, 1992; and
- USEPA, *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods* (USEPA Publication SW-846), July 1992.

The USEPA and CEPA documents provide guidance for implementing groundwater monitoring at regulated hazardous waste land disposal facilities. The Sanitation Districts believe sampling procedures developed based on these documents meet or exceed the requirements contained in Subtitle D, Title 27, and Order No. 93-070. USEPA Publication SW-846 contains procedures for field and laboratory quality control, sampling, determining hazardous constituents in wastes, determining the hazardous characteristics of wastes, and for determining physical properties of wastes. Test methods contained in this document are approved by USEPA for obtaining data that satisfy the requirements of Subtitle D.

Sample Collection

This section describes the equipment, containers, and procedures used for the groundwater sampling program.

Sampling Equipment

The Sanitation Districts select sampling equipment in accordance with the recommendations contained in *RCRA Ground-water Monitoring: Draft Technical Guidance* (USEPA, 1992). The choice of sampling equipment considers the analytes of interest and the characteristics and depth of the saturated zone from which the sample is withdrawn. Sampling equipment is constructed of inert material to minimize the potential for analyte concentrations to be affected by adsorption to or desorption from the equipment. Acceptable materials that may contact groundwater samples are stainless steel and fluorocarbon resins such as Teflon, PTFE (polytetra-fluoroethylene), FEP (fluorinated ethylene propylene), or PFA (perfluoroalkoxy). Sampling equipment is selected to prevent sample agitation and to reduce/eliminate sample contact with the atmosphere during sample transfer. In addition, sampling equipment is selected to minimize volatilization or aeration of samples, which may alter analyte concentrations.

The Sanitation Districts use a dedicated sampling system (bladder pump and associated tubing) for all the monitoring wells at the Puente Hills Landfill. The use of dedicated sampling equipment eliminates the possibility of cross contamination between wells. As a result, decontamination of sampling equipment between wells becomes unnecessary, as does the collection and analysis of equipment blank samples to test for possible cross-contamination. Use of dedicated sampling pumps also eliminates the "plunger" effect caused by continually lowering and raising portable sampling equipment into wells. Research has shown that the "plunger" effect can affect the accuracy of the sampling results.

The dedicated system used by the Sanitation Districts includes a bladder pump that typically sits several feet above the well bottom, a tube that supplies compressed air to operate the pump, and a second tube that conveys groundwater from the pump discharge to the surface where it collected. Bladder pumps prevent contact between the compressed gas and groundwater sample, and are generally recognized as the best overall sampling device for both inorganic and organic constituents (USEPA 1992). The bladder pumps used by the Sanitation Districts consist of a Teflon bladder enclosed in a stainless steel housing. During operation, the internal bladder is compressed and expanded by the compressed air. A strainer or screen attaches below the bladder to filter any large particles that might clog the check valves that are located above and below the bladder. Groundwater enters the bladder through the lower check valve as compressed air is injected into the cavity between the housing and bladder. The water sample is then transferred through the upper check valve and into the discharge line through compression of the bladder. All tubes transferring water from the bladder pump to sample containers are Teflon coated polyethylene.

Portable equipment used during groundwater sampling includes a gasoline powered air compressor, a pump cycle controller, and an in-line multi-probe monitor. This equipment is carried in a sampling truck. To sample a monitoring well, the technician connects the air compressor to the tube leading to bladder pump housing, and the multi-probe monitor to the tube that is connected to the pump discharge line. Once the connections are made, the air compressor is turned on to initiate pre-sampling purging. Air flow rate is regulated by a pump cycle controller. Groundwater from the well is transported through the water tubing to the in-line multi-probe monitor where field parameters are continuously monitored to determine whether the groundwater has stabilized and is ready to be sampled. Exhibit 1 shows the typical setup of the Sanitation Districts' dedicated sampling system.

In addition to the above mentioned sampling equipment, the Sanitation Districts also use field instruments such as an electronic water level sounder and gas meter during sampling. The use of these instruments is discussed below in Groundwater Sampling Procedures.

Sample Containers

Appropriate types of sample containers, as specified in *Standard Methods for the Examination of Water and Wastewater* (American Public Health Association, 19th edition, 1995), are used for groundwater sampling. A specific container type is used for each group of water quality parameters to be analyzed to ensure that the container itself does not affect the analytical results. Sample bottles are prepared by the Sanitation Districts' San Jose Creek Water Quality Laboratory (SJCWQL), a California state certified laboratory. Typically, the Sanitation Districts' sampling crew obtains sample bottles from the SJCWQL on the day of groundwater sampling. Table 1 lists the containers used for analyses of various water quality parameters.

Scheduling

Groundwater monitoring wells at the Puente Hills Landfill are usually sampled in the months of March, June, September, and December. A sampling schedule including the wells to be sampled, the constituents to be analyzed for each well, and the sampling date for each well, is usually prepared by the water quality engineer in charge of sampling approximately one to two weeks before the month of sampling. The schedule is provided to the SJCWQL in advance to facilitate the preparation of proper sample bottles for the sampling crew at the beginning of each sampling date. The constituents to be analyzed are usually grouped into project codes. For example, one project code may include all volatile organic compounds listed under Appendix I of the Subtitle D because these constituents are usually analyzed together.

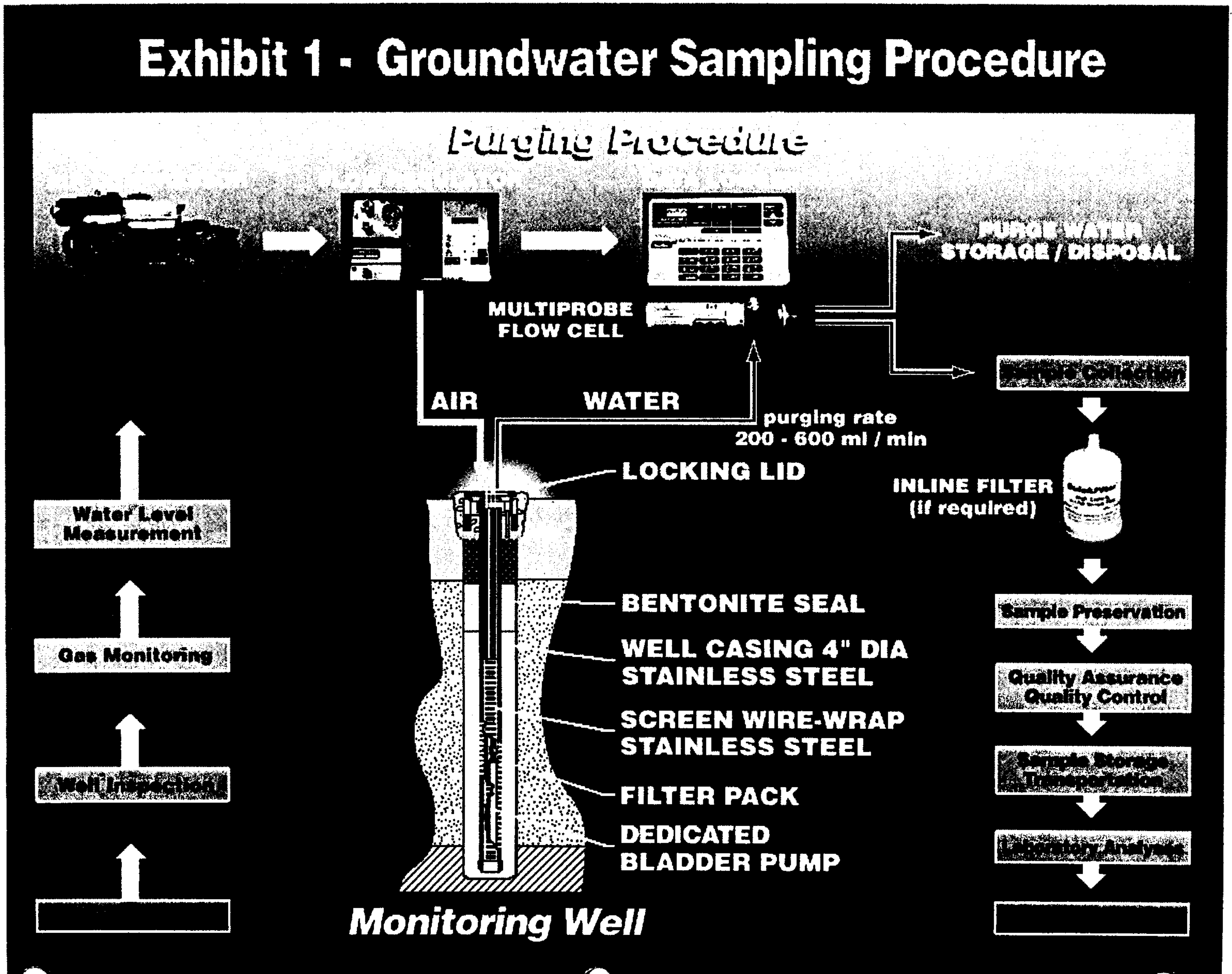


Exhibit 1 - Groundwater Sampling Procedure
Purging Procedure
MULTIPROBE FLOW CELL
PURGE WATER STORAGE / DISPOSAL
AIR
WATER
purging rate 200 - 600 ml / min
LOCKING LID
BENTONITE SEAL
WELL CASING 4" DIA STAINLESS STEEL
SCREEN WIRE-WRAP STAINLESS STEEL
FILTER PACK
DEDICATED BLADDER PUMP
Monitoring Well
Water Level Measurement
Gas Monitoring
Well Inspection
Sample Collection
INLINE FILTER (if required)
Sample Preservation
Quality Assurance Quality Control
Laboratory Analysis

TABLE 1
CONTAINERS FOR GROUNDWATER SAMPLES

PARAMETERS	CONTAINER
pH, Electrical Conductivity, Total Dissolved Solids, Chloride, Sulfate, Total Alkalinity, Bicarbonate Alkalinity, Nitrate Nitrogen, Soluble BOD, and Soluble COD	Plastic or Glass
Boron and Fluoride	Plastic
Ammonia Nitrogen	Plastic
Total Organic Carbon	Amber Glass Vial
Total Organic Halogen	Glass, Teflon lined cap
Cyanide and Sulfide	Plastic
Metals (includes Calcium Hardness, Magnesium Hardness, Sodium, Potassium, and Total Hardness)	Plastic (Acid Washed)
Volatile Organic Compounds (VOCs)	Glass Septum, Teflon lined cap
Base Neutral Acid Extractable Compounds (BNAs)	Amber Glass, Teflon lined cap
Pesticides, Herbicides, and Organophosphorus Compounds	Glass, Teflon lined cap
Polychlorinated Biphenyls (PCBs)	Glass, Teflon lined cap

Groundwater Sampling Procedures

Each monitoring well is typically sampled according to the following procedures: inspection of monitoring well conditions, measurement of gases, measurement of static water levels, pre-sampling purging, sample collection and field analysis, and disposal of purged water. These steps are described below.

Inspection of Well Conditions

Prior to opening the well casing, sampling personnel first inspect the exterior conditions of the outer casing/vault box. Condition of the well is noted on the water quality well monitoring form (Table 2). A monitoring well will not be sampled if there are obvious indications of external contamination that may affect the water quality sampling results. Unusual conditions are reported to the Sanitation Districts' water quality engineer in charge of groundwater sampling for proper actions.

Measurement of Gases

The methane and oxygen concentrations in the well head space at a depth of approximately 10 feet from the ground surface are measured using a gas meter. The concentrations are recorded on the water quality well monitoring form (Table 2). If depressed oxygen level or the presence of methane is detected, then the groundwater in the well may be affected by landfill gas migration.

Each day before use, the gas meter is calibrated in accordance with manufacturer's recommendations with methane gas at both high (45%) and low (2.5%) levels and with oxygen gas at a fixed concentration of 21%. The calibration results are also recorded on the water quality well monitoring form.

Measurement of Static Water Level

The static water level is next measured following the head space gas measurement. The water level is measured from the survey mark on top of the well casing or cap with an electronic portable water level sounder to a precision of one-hundredth of one foot. The sounder is equipped with an audio alarm that sounds when water surface is encountered. Measurement of the static water level is recorded on the water quality well monitoring form.

TABLE 2
WATER QUALITY WELL MONITORING FORM

LANDFILL *Monitoring Well No.*

Sampling Crew:

Methane : ____ %
Oxygen : ____ %
Depth to Water : ____ ft.
Depth to Bottom : ____ ft.
As-Built Depth to Bottom : ____ ft.
Min Purge Volume : ____ gal.
Recommended Pressure : ____ psi.
Maximum Purging Rate: ____
Additional DTW @ __ : __ ____ ft.
Additional DTW @ __ : __ ____ ft.
Additional DTW @ __ : __ ____ ft.

Date :
Weather
Well Condition:

Notes:

Log Numbers :

SJ	(unfiltered)
SJ	(filtered)

Calibration

pH	
pH 4.00	
pH 7.00	
pH	
CONDUCTIVITY	
umhos/cm	
DISSOLVED OXYGEN	
100% Saturation	
REDOX	
Standard: @ deg. C	
@ deg. C	
TURBIDITY	
NTU	NTU
NTU	NTU
Gas Meter	
High: 45% CH4	%
Low: 2.5% CH4	%
21% O2	%

Purging

Final Settings : _____ psi Discharge : _______ Refill : _______
Purging Rates : _____ @ __ : __ _____ @ __ : __ _____ @ __ : __

Time	Temperature (deg. C)	pH	Conductivity (uS/cm)	DO (mg/L)	Redox (mV)	Turbidity (NTU)
@ ~3 minute intervals ***Start Time:***						
After Minimum Volume (@ ~ 3 minute intervals) ***Total vol. purged (approx.)*** ____ gals.						

Hand-held Turbidity Meter Reading (NTU) :
(1) (2) (3) (4)

Depth to Water (900)	% Methane (902)	% Oxygen (903)	Temperature (904)	pH (905)	Conductivity (906)	DO (907)

Pre-sampling purging

After the water level measurement, the sampling crew begins to purge the monitoring well. The purpose of pre-sampling purging is to ensure that samples collected from the well are representative of the groundwater in the monitored water bearing zones. USEPA recommends the use of low flow rates during purging (*RCRA Ground-water Monitoring: Draft Technical Guidance*, 1992). According to USEPA, the ideal purging rate is less than 200 to 300 milliliters per minute (mL/min). Wells should be purged at or below their recovery rate to minimize drawing in stagnant water above the well screen. A low purging rate reduces the possibility of stripping volatile organic compounds from the water and the likelihood of mobilizing colloids in the subsurface that are immobile under natural flow conditions.

USEPA also recommends that purging continues until measurements of turbidity, redox potential, and dissolved oxygen have stabilized to within approximately 10% over two successive measurements made three minutes apart. CEPA, on the other hand, recommends that a minimum of three casing volumes of water (determined from the total column of water in the well) be removed during purging. CEPA allows the use of packer to reduce the casing volume (in this case, casing volumes are calculated from the pumped interval only). CEPA recommends that purging continue until measurements of temperature, pH, specific conductivity, and dissolved oxygen have stabilized. CEPA also recommends purging at slow rates to reduce the possibilities of stripping volatile organic compounds from the water and mobilizing solids in the subsurface. No specific range of purging rates is mentioned by CEPA. Finally, Title 27 (§20415(e)(13)) requires monitoring of temperature, electrical conductivity, turbidity, and pH each time groundwater is sampled.

Following a review of these recommendations, the Sanitation Districts have adopted the purging procedures recommended by USEPA. These procedures are described by Puls and Barcelona in *Low-Flow (Minimum Drawdown) Ground-Water Sampling Procedures*, EPA/540/S-95/504, April 1996. The procedures are also known as "micro-purging." For wells at Puente Hills Landfill, the initial purging rates typically range from 200 to 600 mL/min. These rates depend on the well specific characteristics (such as well recharge rate). An in-line monitor (Hydrolab H_20 Multiprobe and Hydrolab Survey 3 data logger) is used to measure field parameters including pH, temperature, conductivity, dissolved oxygen, redox potential, and turbidity. The values of these field parameters are recorded on the water quality well monitoring form

(Table 2) at approximately three minutes intervals until (1) stabilization conditions have been achieved; or (2) the maximum purging time has been reached; or (3) the well has been purged dry. The following criteria are typically used to determine stabilization conditions:

pH	± 0.1 units
conductivity	± 3%
turbidity	± 10%
dissolved oxygen	± 10%

The above stabilization criteria for turbidity and dissolved oxygen may not be applicable when these values are on the same order of magnitude as the instrument accuracy. For example, it is difficult to determine a 10% change if the turbidity is 1.5 nephelometric turbidity units (NTU), or the dissolved oxygen is 0.9 milligrams/liter. When the groundwater has these low turbidity or dissolved oxygen values, the Sanitation Districts may opt for purging up to a pre-determined time limit, typically one hour, and then proceed with sample collection.

The micro-purging process conforms to all the recommendations by USEPA and CEPA except for CEPA's recommendation of purging a minimum of three casing volumes. USEPA (Puls and Barcelona) has found no technical basis for purging a minimum number of casing volumes and considers such a criterion as arbitrary. In addition, implementation of this condition is infeasible practically because the time required for purging would be excessive, even with the use of a packer. For example, a 4-inch diameter well with a 10-foot long screen and a packer will require approximately five hours of purging at a typical purging rate of 250 mL/min. Field parameters (pH, temperature, dissolved oxygen, redox potential, turbidity, etc.) will have long stabilized before the three casing volumes are purged. The Sanitation Districts concur with USEPA's opinion, and consequently have decided not to follow the CEPA's recommendation of purging at least three casing volumes.

Low yielding monitoring wells screened in tight geologic formations may become dry during purging. When this happens, the wells are allowed to recharge for several days before samples are collected. The freshly recharged groundwater in the wells is then bailed directly without purging.

Sample Collection and Field Analysis

As mentioned earlier, the Sanitation Districts use an in-line monitor (Hydrolab H_20 Multiprobe and Hydrolab Survey 3 data logger) during pre-sampling purging to determine when groundwater has stabilized and is ready for sampling. The in-line monitor measures pH, temperature, conductivity, dissolved oxygen, redox potential, and turbidity. Once groundwater has stabilized or the maximum purging time has been reached, the sampling crew measures the turbidity again using a hand-held turbidity meter (Hach Model 2100P). Turbidity has been reported as the most indicative parameter for establishing that stabilization has occurred. The turbidity values obtained using the hand-held meter are more accurate than those from the in-line monitor. Typically at least two measurements are obtained and compared. A good agreement between these values confirms that the groundwater in the well has reached stabilization and is ready for sample collection. The values of field parameters at stabilization are recorded on the water quality monitoring form.

Groundwater samples are collected using containers described in Table 1. Whenever metals are to be analyzed, the Sanitation Districts collect both unfiltered and field filtered samples. Field filtered samples are collected for dissolved metals analyses using a 0.45 micron (μm) in-line filter. The purpose of collecting both unfiltered and field filtered samples for metal analyses is to ensure that the solids in the samples do not bias the sampling results as many metals are naturally present in soil sediment.

Disposal of Purge Water

Water produced from pre-sampling purging is collected and discharged to the sewer system at the Puente Hills Landfill pursuant to an industrial waste discharge permit. The discharge to the sewer system is routinely monitored to ensure compliance with the discharge limits.

Sample Preservation, Shipment, and Chain-of-Custody

After the groundwater samples are collected, they are transferred, usually on the same day of sampling, to the Sanitation Districts' SJCWQL under proper chain of custody. Generally, the sampling crew performs sample preservation in the field using appropriate preservatives provided by the SJCWQL. If the samples are not preserved in the field, appropriate preservatives are added to the sample containers as soon as they are received by laboratory personnel. All sample containers are kept on ice until they are delivered to the laboratory. All samples are kept refrigerated in the laboratories until analysis. All required analyses are performed within the holding time specified in the corresponding analytical procedures. Table 3 summarizes the preservatives used for various analyses and the holding time limitations.

TABLE 3
SAMPLE PRESERVATION TECHNIQUES AND HOLDING TIME REQUIREMENTS FOR GROUNDWATER SAMPLES

PARAMETER	PRESERVATIVE	MAX. HOLDING TIME
pH	None	Immediately
Electrical Conductivity, Sulfate, and Soluble COD	Cool 4 °C	28 Days
Total Dissolved Solids	Cool 4 °C	7 Days
Chloride	None Required	28 Days
Total Alkalinity and Bicarbonate Alkalinity	Cool 4 °C	14 Days
Nitrate Nitrogen and Soluble BOD	Cool 4 °C	48 Hours
Boron	Cool 4 °C	6 Months
Fluoride	Cool 4 °C	28 Days
Ammonia Nitrogen	H_2SO_4 to pH<2, Cool 4 °C	28 Days
Total Organic Carbon	H_2SO_4 to pH<2, Cool 4 °C	28 Days
Total Organic Halogen	H_2SO_4 to pH<2, Cool 4 °C	7 Days
Cyanide	NaOH to pH>12, Cool 4 °C	14 Days
Sulfide	NaOH to pH>12, Cool 4 °C	7 Days
Metals, except Mercury (includes Calcium Hardness, Magnesium Hardness, Sodium, Potassium, and Total Hardness)	HNO_3 to pH<2	6 Months
Mercury	HNO_3 to pH<2	28 Days
Volatile Organic Compounds (VOCs)	Cool 4 °C	14 Days
Base Neutral Acid Extractable Compounds (BNAs)	Cool 4 °C	7 Days until extraction 40 Days after extraction
Pesticides, Herbicides, and Organophosphorus Compounds	Cool 4 °C	7 Days until extraction 40 Days after extraction
Polychlorinated Biphenyls (PCBs)	Adjust pH 5-7, Cool 4 °C	7 Days until extraction 40 Days after extraction

Samples are labeled with waterproof labels prior to the sampling event by the field technicians. Information is recorded on each label with indelible ink. A Sanitation Districts' standardized sample labeling system is used to identify all samples. This system is designed to be compatible with the data input procedures used by the laboratory. The system identifies the site and provides information on sample location, sample type, and sample number. Laboratory receiving personnel assign each sample a unique job number. This expedites sample tracking from the field, to laboratory analysis, to database inputs, and into reports.

Sample request/chain-of-custody forms (Table 4) are used to track all pertinent information during sample collection. This form describes the sample number, location, type (blank, duplicate), collection time and date, analyses to be performed, sampler's name, and general comments. It is prepared for each sampled well and is given to the sampling crew prior to the sampling event. This form is filled out by all persons who handle the sample and accompanies the sample to the SJCWQL. When transferring possession, the individuals relinquishing and receiving the samples sign, date, and note the time on the form. Sample receiving personnel at SJCWQL receive and inspect submitted samples to ensure the seals are intact, the labels are affixed and legible, the physical condition of the samples is acceptable, and the samples being transferred directly correspond to those listed on the sample request/chain of custody form. If the integrity of any samples is questionable, the laboratory technician notifies the Sanitation Districts' water quality engineer in charge of sampling, segregates the unacceptable samples and identifies them on the sample request/chain of custody form. Otherwise, the laboratory sample receiving personnel and the transporter sign and date the sample request/chain of custody form. The laboratory sample receiving personnel then enters the information about the sample on the Sanitation Districts' computer system, and retains a copy of the form. The original form is forwarded to the Sanitation Districts' main office for filing. If the analyses are to be performed by certified laboratories other than SJCWQL, the samples are properly packaged for shipment and dispatched to the appropriate laboratories.

Water quality well monitoring forms (Table 2) are used by the sampling crew to record field data collected during the sampling the monitoring wells. The original forms are stored at the Sanitation Districts' main office in Whittier, California.

Laboratory Analysis

Subtitle D (§258.53) requires the implementation of appropriate analytical methods for groundwater sampling in order to accurately measure monitoring parameters in groundwater samples. RWQCB Order No. 93-062 (§12A) specifies that sample analysis shall be performed according to the most recent version of *Test Methods for Evaluating Solid Waste,*

TABLE 4
SAMPLE REQUEST/CHAIN OF CUSTODY FORM

Los Angeles County Sanitation Districts
San Jose Creek Water Quality Laboratory
Sample Request Form / Chain of Custody Record

Lab Job Nos.: 1)   2)   3)   4)

Charge Nos.: 1)   2)   3)   4)

Requested By: **Sampling Approved by:** ____________________
Report To: 1)   2)   3)   4)
Date and Time - Grab Samples:
1) _____ / _____ / _____ | _____:_____ 2) _____ / _____ / _____ | _____:_____
3) _____ / _____ / _____ | _____:_____ 4) _____ / _____ / _____ | _____:_____
Date and Time - Composite Samples:
FROM: TO:
1) _____ / _____ / _____ | _____:_____ 1) _____ / _____ / _____ | _____:_____
2) _____ / _____ / _____ | _____:_____ 2) _____ / _____ / _____ | _____:_____
3) _____ / _____ / _____ | _____:_____ 3) _____ / _____ / _____ | _____:_____
4) _____ / _____ / _____ | _____:_____ 4) _____ / _____ / _____ | _____:_____

Sample Locations:
1) - -   Type: Volume: liters
2) - -   Type: Volume: liters
3) - -   Type: Volume: liters
4) - -   Type: Volume: liters

Descriptions:
1)
2)
3)
4)

Project No.:   No. of Samples: Locations: 1)   2)   3)   4)
Project Title:

Additional Tests Required

Code	Test Name	Code	Test Name	Code	Test Name
1:	-	10:	-	19:	-
2:	-	11:	-	20:	-
3:	-	12:	-	21:	-
4:	-	13:	-	22:	-
5:	-	14:	-	23:	-
6:	-	15:	-	24:	-
7:	-	16:	-	25:	-
8:	-	17:	-	26:	-
9:	-	18:	-	27:	-

Notes to Analyst:

Relinquished By:	Date:	Time:	Received By:
____________	___/___/___	___:___	____________
____________	___/___/___	___:___	____________
____________	___/___/___	___:___	____________

Physical/Chemical Methods (USEPA Publication SW-846, July 1992). It further requires that water and waste analysis be performed by laboratories approved for these analyses by the State of California.

Groundwater samples are normally analyzed by the Sanitation Districts' SJCWQL and Joint Water Pollution Control Plant Laboratories, using analytical methods described in *Procedures for the Characterization of Water and Wastes, Fourth Edition*, prepared by the Sanitation Districts' laboratories. These procedures are all certified by California's Department of Health Services and conform with USEPA Publication SW-846 and *Standard Methods for the Examination of Water and Wastewater* (American Public Health Association, 19th edition, 1995). If the Sanitation Districts' laboratories can not perform a certain test, a qualified commercial laboratory is retained to conduct the test. The commercial laboratory is required to have a valid certification issued by the California's Department of Health Services for the test.

Two types of detection limits are used for the analysis and reporting of analytical results. The Method Detection Limit (MDL) is an assessment of the ability of an analytical method (i.e., sample preparation and instrument analysis) to distinguish between "signal" and "noise". The determination of the MDL involves a statistical characterization of the random noise level. The MDL is the lowest concentration associated with a 99% reliability of a non-zero (or "non-noise") analytical result. The use of MDLs for laboratory reporting was promulgated by the USEPA in 1984 (Title 40, Code of Federal Regulations, Part 136). When the laboratory results are reported as less than the MDL, there is no information concerning the actual concentration of the compound being analyzed; the actual concentration may range from zero to a value less than the MDL, but it is not equal to the MDL.

The Practical Quantitation Limits (PQL) is defined in RWQCB Order No. 93-062 as "the lowest constituent concentration at which a numerical concentration can be assigned with a 99% certainty that its value is within 10% of the constituent's actual concentration in the sample." USEPA, American Chemical Society, American Society of Testing Materials, and California Department of Health Services define PQL differently, however. RWQCB Order No. 93-062 specifies that the constituent concentration be reported as "trace" if it is between the MDL and PQL. This Order also requires that MDLs and PQLs be developed by the laboratory for each analytical procedure according to California laboratory accreditation procedures.

On November 7, 1994, Sanitation Districts staff met with RWQCB staff and discussed specific laboratory analyses and data reporting requirements in a phone conversation with Mr. Ed Wosika of the California State Water Resources Control Board. Results of the meeting were documented in a letter dated November 21, 1994 to Mr. Rodney Nelson of RWQCB; a copy of which is attached at the end of this document. It was agreed at the meeting that PQL would be defined in a manner consistent with the California Ocean Plan, i.e., five times the MDL for carcinogens and ten times the MDL for non-carcinogens. Landfill water quality data would be reported as "uncensored" using the following general guidelines:

- all constituents meeting qualitative detection criteria would be reported as numeric values;
- numeric values below the calculated MDLs would be so noted; numeric values below calculated PQLs would also be noted.
- nominal MDL and PQL values, or matrix specific MDL and PQL where analytically justified, would be reported with all data so that the RWQCB can identify clearly results below either MDL or PQL.

In addition, the Sanitation Districts discussed with RWQCB at the meeting the issue of having MDLs below any maximum contaminant levels (MCLs) promulgated by the California Department of Health Services, or minimum limits of detection specified in USEPA methods or Appendix A to Title 40, Code of Federal Regulations, Part 136. It was agreed that if a particular sample matrix interferes with the ability to detect a target constituent at the MCL, such result will be noted and the matrix specific detection limit analytically justified in accordance with USEPA guidelines. Matrix interference can be caused by high levels of dissolved solids in the ground water. These levels are naturally occurring because of site specific geologic conditions. These interferences may require sample dilution before analysis can be completed. Sample dilution can result in reported detection limits that are higher than the compound's MCL. In practice, the Sanitation Districts make every effort, short of instrument damage or unauthorized method changes, to avoid such sample dilution.

Tables 5 through 9 summarize the laboratory methods and the MDLs and PQLs typically used by the Sanitation Districts for the analysis of general water quality parameters (Table 5), metals and inorganic compounds (Table 6), volatile organic compounds (Table 7), base, neutral, acid extractable compounds (Table 8), and pesticides, herbicides, and organophosphorus compounds (Table 9). The MDLs and PQLs listed in Tables 5 through 9 are the most current levels developed by the Sanitation Districts' laboratories and their contract laboratories. The MDLs and PQLs are laboratory specific and are subject to periodic review and revision. If changes of MDLs or PQLs are made during periodic review, the new/revised MDLs and PQLs will be reported in the quarterly reports. Generally the selected laboratory methods follow the recommendations of the State Water Resources Control Board (SWRCB) (*Chapter 15 Program Notes #7: Suggested Laboratory Methods for Analyzing Appendix I and Appendix II Constituents,* August 2, 1993; a copy is attached). If a laboratory method other than that recommended by the SWRCB is proposed for use by the Sanitation Districts, the proposed method typically has equivalent or lower detection limits than that of the recommended method.

TABLE 5
LABORATORY METHODS AND DETECTION LIMITS FOR GENERAL PARAMETERS

Group	Water Quality Parameter	Laboratory Method	MDL* (mg/L)	PQL* (mg/L)
General	pH	9040 (1)	NA	NA
General	Conductivity	2510 (3)	0.4	4
General	Total Dissolved Solids	2540 C (3)	10	100
General	Chloride	9056 (1)	0.2	2
General	Sulfate	9056 (1)	0.5	5
General	Boron	4500 BB (3)	0.2	2
General	Calcium-hardness	6010B (1)	0.8	8
General	Magnesium-hardness	6010B (1)	0.8	8
General	Sodium	6010B (1)	0.2	2
General	Potassium	3500 K D (3)	0.6	6
General	Total Alkalinity	2320B (3)	10	100
General	Bicarbonate Alkalinity	2320B (3)	10	100
General	Nitrate Nitrogen	9056 (1)	0.05	0.5
General	Ammonia Nitrogen	4500 NH3E (3)	0.1	1
General	Soluble BOD	5210B (3)	2	20
General	Soluble COD	5220B (3)	10	100
General	Total Organic Carbon	9060 (1)	0.5	5
General	Dissolved CO2	(4)		
General	Total Iron	6010B (1)	0.05	0.5
General	Soluble Iron	6010B (1)	0.05	0.5
General	Total Organic Halogen	9020A (1)	0.003	0.03
General	Total Hardness	(5)		
General	Fluoride	450 FC (2)	0.1	1

NOTES:

(1) "Test Methods for Evaluating Solid Waste - Physical/Chemical Methods" (SW-846), 3rd Ed, U.S. EPA
(2) "Methods For Chemical Analysis of Water and Wastes", Rev. 1983, U.S. EPA
(3) "Standard Methods for the Examination of Water and Wastewater", 19th Ed., 1995
(4) Calculated based on total alkalinity and pH
(5) Calculated from calcium hardness and magnesium hardness

* MDLs and PQLs are laboratory specific and are subject to periodic review and revision.

TABLE 6
LABORATORY METHODS AND DETECTION LIMITS FOR METALS AND INORGANICS

Group	Constituent	Recommended EPA Method No.	Proposed Lab Method	Analytical Instrument	MDL* (ug/L)	PQL* (ug/L)
Metals	***Antimony***	7041	7062	HGAA	0.5	5
Metals	***Arsenic***	7061	7062	HGAA	0.1	0.5
Metals	***Barium***	6010	6010B	ICP	10	100
Metals	***Beryllium***	6010	7091	GFAA	0.5	2.5
Metals	***Cadmium***	7131	7131	ICP	2	20
Metals	***Chromium***	6010	6010B	ICP	10	100
Metals	***Cobalt***	6010	6010B	ICP	10	100
Metals	***Copper***	6010	6010B	ICP	10	100
Metals	***Lead***	7421	7431	FLAA	10	100
Metals	Mercury	7470	7470A	CVAA	0.1	1
Metals	***Nickel***	7520	6010B	ICP	20	200
Metals	***Selenium***	7741	7742	HGAA	0.2	2
Metals	***Silver***	6010	7760A	FLAA	10	100
Metals	***Thallium***	7841	7841	GFAA	1	10
Metals	Tin	6010	6010B	ICP	60	600
Metals	***Vanadium***	6010	6010B	ICP	50	500
Metals	***Zinc***	6010	6010B	ICP	10	100
Inorganics	Cyanide	9010	9010A	UV/VIS	5	50
Inorganics	Sulfide	9030	4500S D	UV/VIS	100	1000

NOTES:
Constituents in italics are Appendix I compounds in Title 40, Code of Federal Regulations, Part 258

HGAA	hydride generation atomic absorption
ICP	inductively coupled plasma
FLAA	flame atomic absorption
GFAA	graphite furnace atomic absorption
CVAA	cold vapor atomic absorption
UV/VIS	ultraviolet / visible colorimetry
*	MDLs and PQLs are laboratory specific and are subject to periodic review and revision.

All procedures with the exception of that for sulfide (Standard Methods, 19th Ed.) are from SW-846, 3rd Ed.

TABLE 7
LABORATORY METHODS AND DETECTION LIMITS
FOR VOLATILE ORGANIC COMPOUNDS

Group	Constituent	Recommended EPA Method No.	Proposed Lab Method	Analytical Instrument	MDL* (ug/L)	PQL* (ug/L)
VOC	***Acetone***	8260	8260	GC/MS	10	100
VOC	Acetonitrile	8015	8260	GC/MS	20	200
VOC	Acrolein	8260	8260	GC/MS	10	100
VOC	***Acrylonitrile***	8260	8260	GC/MS	10	50
VOC	Allyl chloride	8260	8260	GC/MS	1	10
VOC	***Benzene***	8260	8260	GC/MS	0.5	2.5
VOC	***Bromochloromethane***	8260	8260	GC/MS	1	10
VOC	***Bromodichloromethane***	8260	8260	GC/MS	1	10
VOC	***Bromoform***	8260	8260	GC/MS	1	10
VOC	***Carbon disulfide***	8260	8260	GC/MS	1	10
VOC	***Carbon tetrachloride***	8260	8260	GC/MS	0.3	1.5
VOC	***Chlorobenzene***	8260	8260	GC/MS	1	5
VOC	***Chloroethane***	8260	8260	GC/MS	1	10
VOC	***Chloroform***	8260	8260	GC/MS	1	5
VOC	Chloroprene	8260	8260	GC/MS	1	10
VOC	***Dibromochloromethane***	8260	8260	GC/MS	1	10
VOC	***1,2-Dibromo-3-Chloropropane***	8260	8011	GC/ECD	0.01	0.05
VOC	***1,2-Dibromoethane***	8260	8011	GC/ECD	0.01	0.05
VOC	***o-Dichlorobenzene***	8260	8260	GC/MS	1	5
VOC	m-Dichlorobenzene	8260	8260	GC/MS	1	10
VOC	***p-Dichlorobenzene***	8260	8260	GC/MS	1	5
VOC	***trans-1,4-Dichloro-2-butene***	8260	8260	GC/MS	1	10
VOC	Dichlorodifluoromethane(CFC12)	8260	8260	GC/MS	1	10
VOC	***1,1-Dichloroethane***	8260	8260	GC/MS	1	5
VOC	***1,2-Dichloroethane***	8260	8260	GC/MS	0.3	1.5
VOC	***1,1-Dichloroethylene***	8260	8260	GC/MS	1	5
VOC	***cis-1,2 Dichloroethylene***	8260	8260	GC/MS	1	5
VOC	***trans-1,2 Dichloroethylene***	8260	8260	GC/MS	1	5
VOC	***1,2-Dichloropropane***	8260	8260	GC/MS	1	5
VOC	1,3-Dichloropropane	8260	8260	GC/MS	0.3	1.5
VOC	2,2-Dichloropropane	8260	8260	GC/MS	1	5
VOC	1,1-Dichloropropene	8260	8260	GC/MS	1	5
VOC	***cis-1,3-Dichloropropene***	8260	8260	GC/MS	0.5	5
VOC	***trans-1,3-Dichloropropene***	8260	8260	GC/MS	0.5	5
VOC	***Ethyl benzene***	8260	8260	GC/MS	1	5
VOC	Ethyl methacrylate	8270	8260	GC/MS	5	50
VOC	***2-Hexanone***	8260	8260	GC/MS	5	50
VOC	Isobutyl alcohol	8015	8260	GC/MS	10	100
VOC	Methacrylontrile	8260	8260	GC/MS	10	100

TABLE 7
LABORATORY METHODS AND DETECTION LIMITS
FOR VOLATILE ORGANIC COMPOUNDS

Group	Constituent	Recommended EPA Method No.	Proposed Lab Method	Analytical Instrument	MDL* (ug/L)	PQL* (ug/L)
VOC	***Methyl bromide***	8010	8260	GC/MS	1	10
VOC	***Methyl chloride***	8010	8260	GC/MS	1	10
VOC	***Methyl Ethyl Ketone***	8260	8260	GC/MS	10	100
VOC	***Methyl iodide***	8260	8260	GC/MS	1	10
VOC	Methyl methacrylate	8260	8260	GC/MS	10	100
VOC	***4-Methyl-2-pentanone***	8260	8260	GC/MS	10	100
VOC	***Methylene bromide***	8260	8260	GC/MS	1	10
VOC	***Methylene chloride***	8260	8260	GC/MS	1	5
VOC	Proponitrile	8260	8260	GC/MS	10	100
VOC	***Styrene***	8260	8260	GC/MS	1	5
VOC	***1,1,1,2-Tetrachloroethane***	8260	8260	GC/MS	1	10
VOC	***1,1,2,2-Tetrachloroethane***	8260	8260	GC/MS	0.5	2.5
VOC	***Tetrachloroethylene***	8260	8260	GC/MS	1	5
VOC	***Toluene***	8260	8260	GC/MS	1	5
VOC	***1,1,1-Trichloroethane***	8260	8260	GC/MS	1	5
VOC	***1,1,2-Trichloroethane***	8260	8260	GC/MS	1	5
VOC	***Trichloroethylene***	8260	8260	GC/MS	1	5
VOC	***Trichlorofluoromethane(CFC 11)***	8260	8260	GC/MS	1	5
VOC	***1,2,3-Trichloropropane***	8260	8260	GC/MS	1	10
VOC	***Vinyl acetate***	8260	8260	GC/MS	10	100
VOC	***Vinyl Chloride***	8260	8260	GC/MS	0.3	1.5
VOC	***Xylenes, m- & o+p***	8260	8260	GC/MS	1	5

Notes:
Constituents in bold italic are Appendix I compounds in Title 40, Code of Federal Regulations, Part 258

VOC	Volatile Organic Compounds
GC/MS	Gas Chromatography/Mass Spectrometry
GC/ECD	Gas Chromatography/Electron Capture Detector
*	MDLs and PQLs are laboratory specific and are subject to periodic review and revision.

TABLE 8
LABORATORY METHODS AND DETECTION LIMITS FOR BASE/NEUTRAL AND ACID EXTRACTABLE (BNA) COMPOUNDS

Group	Constituent	Recommended EPA Method No.	Proposed Lab Method	Analytical Instrument	MDL* (ug/L)	PQL* (ug/L)
BNA	Acenaphthene	8270	8270	GC/MS	1	5
BNA	Acenaphthylene	8270	8270	GC/MS	1	5
BNA	Acetophenone	8270	8270	GC/MS	1	10
BNA	2-Acetylaminofluorene	8270	8270	GC/MS	1	10
BNA	4-Aminobiphenyl	8270	8270	GC/MS	1	10
BNA	Anthracene	8270	8270	GC/MS	1	10
BNA	Benzo(a)anthrancene	8270	8270	GC/MS	1	5
BNA	Benzo(b)fluoranthene	8270	8270	GC/MS	1	5
BNA	Benzo(k)fluoranthene	8270	8270	GC/MS	1	5
BNA	Benzo(ghi)perylene	8270	8270	GC/MS	1	5
BNA	Benzo(a)pyrene	8270	8270	GC/MS	0.2	1
BNA	Benzyl alcohol	8270	8270	GC/MS	1	10
BNA	Bis(2-chloroethoxy) methane	8270	8270	GC/MS	1	10
BNA	Bis(2-chloroethyl) ether	8270	8270	GC/MS	1	5
BNA	Bis(2-chloro-1-methylethyl) ether (Bis(2-chlorosopropyl) ether)	8270	8270	GC/MS	1	10
BNA	Bis(2-ethylhexyl) phthalate	8060	8270	GC/MS	1	10
BNA	4-Bromophenyl phenyl ether	8270	8270	GC/MS	1	10
BNA	Butyl benzyl phthalate	8270	8270	GC/MS	1	10
BNA	p-Chloroaniline	8270	8270	GC/MS	1	10
BNA	Chlorobenzilate	8270	8270	GC/MS	1	10
BNA	p-Chloro-m-cresol (4-chloro-3-methyl-phenol)	8270	8270	GC/MS	1	10
BNA	2-Chloronaphthalene	8270	8270	GC/MS	1	10
BNA	2-Chlorophenol	8270	8270	GC/MS	1	10
BNA	4-Chlorophenyl phenyl ether	8270	8270	GC/MS	1	10
BNA	Chrysene	8270	8270	GC/MS	1	5
BNA	m+p-Cresol	8270	8270	GC/MS	1	10
BNA	o- Cresol	8270	8270	GC/MS	1	10
BNA	Diallate	8270	8270	GC/MS	1	10
BNA	Dibenz(a,h)anthracene	8270	8270	GC/MS	1	5
BNA	Dibenzofuran	8270	8270	GC/MS	1	10
BNA	Di-n-butyl phthalate	8270	8270	GC/MS	1	10
BNA	3,3'-Dichlorobenzidine	8270	8270	GC/MS	1	5
BNA	2,4-Dichlorophenol	8270	8270	GC/MS	1	5
BNA	2,6-Dichlorophenol	8270	8270	GC/MS	1	10
BNA	Diethyl phthalate	8270	8270	GC/MS	1	10
BNA	p-(Dimethylamino)azobenzene	8270	8270	GC/MS	1	10

TABLE 8
LABORATORY METHODS AND DETECTION LIMITS
FOR BASE/NEUTRAL AND ACID EXTRACTABLE (BNA) COMPOUNDS

Group	Constituent	Recommended EPA Method No.	Proposed Lab Method	Analytical Instrument	MDL* (ug/L)	PQL* (ug/L)
BNA	7,12-Dimethylbenz(a)anthracene	8270	8270	GC/MS	10	100
BNA	3,3'-Dimethylbenzidine	8270	8270	GC/MS	1	10
BNA	2,4-Dimethylphenol	8270	8270	GC/MS	1	10
BNA	Dimethyl phthalate	8270	8270	GC/MS	1	10
BNA	m-Dinitrobenzene	8270	8270	GC/MS	1	10
BNA	4,6-Dinitro-o-cresol (2-methyl-4,6-dinitrophenol)	8270	8270	GC/MS	1	10
BNA	2,4-Dinitrophenol	8270	8270	GC/MS	6	60
BNA	2,4-Dinitrotoluene	8270	8270	GC/MS	1	10
BNA	2,6-Dinitrotoluene	8270	8270	GC/MS	1	10
BNA	Di-n-octyl phthalate	8270	8270	GC/MS	1	10
BNA	Diphenylamine	8270	8270	GC/MS	1	10
BNA	Ethyl methanesulfonate	8270	8270	GC/MS	1	10
BNA	Famphur	8270	8270	GC/MS	1	10
BNA	Fluoranthene	8270	8270	GC/MS	1	10
BNA	Fluorene	8270	8270	GC/MS	1	10
BNA	Hexachlorobenzene	8270	8270	GC/MS	1	10
BNA	Hexachlorobutadiene	8270	8270	GC/MS	1	5
BNA	Hexachlorocyclopentadiene	8270	8270	GC/MS	5	50
BNA	Hexachloroethane	8270	8270	GC/MS	1	10
BNA	Hexachloropropene	8270	8270	GC/MS	5	50
BNA	Indeno(1,2,3-c,d)pyrene	8270	8270	GC/MS	1	10
BNA	Isodrin	8270	8270	GC/MS	1	10
BNA	Isophorone	8270	8270	GC/MS	1	10
BNA	Isosafrole	8270	8270	GC/MS	1	10
BNA	Kepone	8270	8270	GC/MS	10	100
BNA	Methapyrilene	8270	8270	GC/MS	20	200
BNA	3-Methylcholanthrene	8270	8270	GC/MS	1	10
BNA	Methyl methanesulfonate	8270	8270	GC/MS	1	10
BNA	2-Methylnaphthalene	8270	8270	GC/MS	1	10
BNA	Naphthalene	8270	8270	GC/MS	1	10
BNA	1,4-Naphthoquinone	8270	8270	GC/MS	1	10
BNA	1-Naphthylamine	8270	8270	GC/MS	1	10
BNA	2-Naphthylamine	8270	8270	GC/MS	1	10
BNA	o-Nitroaniline	8270	8270	GC/MS	1	10
BNA	m-Nitroaniline	8270	8270	GC/MS	1	10
BNA	p-Nitroaniline	8270	8270	GC/MS	1	10
BNA	Nitrobenzene	8270	8270	GC/MS	1	10

TABLE 8
LABORATORY METHODS AND DETECTION LIMITS
FOR BASE/NEUTRAL AND ACID EXTRACTABLE (BNA) COMPOUNDS

Group	Constituent	Recommended EPA Method No.	Proposed Lab Method	Analytical Instrument	MDL* (ug/L)	PQL* (ug/L)
BNA	2-Nitrophenol	8270	8270	GC/MS	1	10
BNA	4-Nitrophenol	8270	8270	GC/MS	1	10
BNA	N-Nitrosodi-n-butylamine	8270	8270	GC/MS	1	10
BNA	N-Nitrosodiethylamine	8270	8270	GC/MS	1	10
BNA	N-Nitrosodimethylamine	8070	8270	GC/MS	1	5
BNA	N-Nitrosodiphenylamine	8070	8270	GC/MS	1	10
BNA	N-Nitrosodipropylamine	8070	8270	GC/MS	1	10
BNA	N-Nitrosomethylethylamine	8270	8270	GC/MS	1	10
BNA	N-Nitrorsopiperidine	8270	8270	GC/MS	1	10
BNA	N-Nitrosopyrrolidine	8270	8270	GC/MS	1	10
BNA	5-Nitro-o-toluidine	8270	8270	GC/MS	1	10
BNA	Pentachlorobenzene	8270	8270	GC/MS	1	10
BNA	Pentachloronitrobenzene	8270	8270	GC/MS	5	50
BNA	Pentachlorophenol	8270	8151	GC/MS	1	10
BNA	Phenacetin	8270	8270	GC/MS	1	10
BNA	Phenanthrene	8270	8270	GC/MS	1	10
BNA	Phenol	8040	8270	GC/MS	1	10
BNA	p-Phenylenediamine	8270	8270	GC/MS	20	200
BNA	Pronamide	8270	8270	GC/MS	1	10
BNA	Pyrene	8270	8270	GC/MS	1	5
BNA	Safrole	8270	8270	GC/MS	1	10
BNA	1,2,4,5-Tetrachlorobenzene	8270	8270	GC/MS	1	10
BNA	2,3,4,6-Tetrachlorophenol	8270	8270	GC/MS	1	10
BNA	o-Toluidine	8270	8270	GC/MS	1	10
BNA	1,2,4-Trichlorobenzene	8260	8270	GC/MS	1	10
BNA	2,4,5-Trichlorophenol	8270	8270	GC/MS	1	10
BNA	2,4,6-Trichlorophenol	8270	8270	GC/MS	1	10
BNA	0,0,0-Triethyl Phosphorothioate (0,0,0-Triethylphosphorthioate)	8270	8270	GC/MS	1	10
BNA	sym-Trinitrobenzene	8270	8270	GC/MS	5	50

Notes:
BNA Base, neutral, & acid extractables, or semivolatile organic compounds
GC/MS Gas Chromatography / Mass Spectrometry.
* MDLs and PQLs are laboratory specific and are subject to periodic review and revision.

TABLE 9
LABORATORY METHODS AND DETECTION LIMITS FOR PESTICIDES, HERBICIDES, AND ORGANOPHOSPHORUS COMPOUNDS

Group	Constituent	Recommended EPA MethodNo.	Proposed Lab Method	Analytical Instrument	MDL* (ug/L)	PQL* (ug/L)
Pesticide	Aldrin	8270	8080	GC/ECD	0.01	0.05
Pesticide	alpha-BHC	8270	8080	GC/ECD	0.01	0.05
Pesticide	beta-BHC	8270	8080	GC/ECD	0.01	0.05
Pesticide	delta-BHC	8270	8080	GC/ECD	0.01	0.1
Pesticide	gamma-BHC (Lindane)	8270	8080	GC/ECD	0.01	0.05
Pesticide	Chlordane	8270	8080	GC/ECD	0.05	0.25
Pesticide	4,4'-DDD	8270	8080	GC/ECD	0.01	0.05
Pesticide	4,4'-DDE	8270	8080	GC/ECD	0.01	0.05
Pesticide	4,4'-DDT	8270	8080	GC/ECD	0.01	0.05
Pesticide	Dieldrin	8270	8080	GC/ECD	0.01	0.05
Pesticide	Endosulfan I	8270	8080	GC/ECD	0.01	0.1
Pesticide	Endosulfan II	8270	8080	GC/ECD	0.01	0.1
Pesticide	Endosulfan sulfate	8270	8080	GC/ECD	0.1	1
Pesticide	Endrin	8270	8080	GC/ECD	0.01	0.1
Pesticide	Endrin aldehyde	8270	8080	GC/ECD	0.01	0.1
Pesticide	Heptachlor	8270	8080	GC/ECD	0.01	0.05
Pesticide	Heptachlor epoxide	8270	8080	GC/ECD	0.01	0.05
Pesticide	Polychlorinated biphenyls (PCBs):					
Pesticide	Aroclor 1016	8270	8080	GC/ECD	0.1	0.5
Pesticide	Aroclor 1221	8270	8080	GC/ECD	0.1	0.5
Pesticide	Aroclor 1232	8270	8080	GC/ECD	0.1	0.5
Pesticide	Aroclor 1242	8270	8080	GC/ECD	0.1	0.5
Pesticide	Aroclor 1248	8270	8080	GC/ECD	0.1	0.5
Pesticide	Aroclor 1254	8270	8080	GC/ECD	0.05	0.25
Pesticide	Aroclor 1260	8270	8080	GC/ECD	0.1	0.5
Pesticide	Methoxychlor	8080	8080	GC/ECD	0.01	0.05
Pesticide	Toxaphene	8080	8080	GC/ECD	0.5	2.5
Herbicide	2,4-D	8150	8151	GC/ECD	0.5	5
Herbicide	Dinoseb	8150	8151	GC/ECD	0.1	1
Herbicide	Silvex	8150	8151	GC/ECD	0.05	0.5
Herbicide	2,4,5-Trichlorophenoxyacetic acid	8150	8151	GC/ECD	0.05	0.5
OPC	Thionazin	8141	8141	GC/NPD	1	10
OPC	Dimethoate	8141	8141	GC/NPD	1	10
OPC	Disulfoton	8141	8141	GC/NPD	1	10

TABLE 9
LABORATORY METHODS AND DETECTION LIMITS FOR PESTICIDES, HERBICIDES, AND ORGANOPHOSPHORUS COMPOUNDS

Group	Constituent	Recommended EPA MethodNo.	Proposed Lab Method	Analytical Instrument	MDL* (ug/L)	PQL* (ug/L)
OPC	Methyl parathion	8141	8141	GC/NPD	1	10
OPC	Parathion	8141	8141	GC/NPD	1	10
OPC	Phorate	8141	8141	GC/NPD	1	10

OPC Organophosphorus Compounds
GC/ECD Gas Chromatography/Electron Capture Detector
GC/NPD Gas Chromatography/Nitrogen-Phosphorus Detector
* MDLs and PQLs are laboratory specific and are subject to periodic review and revision.

Quality Assurance and Quality Control

Field Quality Assurance/Quality Control

Field quality assurance/quality control (QA/QC) procedures ensure that the sample collection procedures maintain the integrity of the sample. USEPA Publication SW-846 recommends that a trip blank, an equipment blank, and a field duplicate be collected each day. For ground water sampling at the Puente Hills Landfill, field QA/QC procedures include trip blank and field duplicate samples. Since dedicated sampling equipment is used for sampling, collection of an equipment blank samples is unnecessary.

Each day of sampling, a trip blank is prepared at the laboratory and given to the sampling personnel to carry throughout the day. Trip blanks provide a check against inadvertent contamination of volatile organic compounds in groundwater samples which may occur during sample handling and transportation activities, and/or in the laboratory. Trip blanks are prepared by Sanitation Districts' SJCWQL using certified organic free water placed into 40 ml glass vials. The trip blank is numbered, packaged, sealed, and transported to the sampling location and returned to the laboratory in a manner identical to the handling procedures used for the groundwater samples. Trip blanks are analyzed for all the volatile organic compounds listed in Appendix I to Title 40, Code of Federal Regulations, Part 258.

On each day of sampling, a field duplicate is collected by the sampling personnel. The purpose of the field duplicate is to verify the precision of the sampling procedures. The field duplicate samples are prepared in the same manner as regular samples including sample collection, sample containers, sample handling, and preservation. The collection of a field duplicate is a complete re-iteration of the sample collection procedures. All sample containers associated with regular well sampling protocols are filled first, then the same procedures are executed with a second set of containers. Field duplicates are subject to the same chemical analyses as regular samples taken for the day.

Laboratory Quality Assurance and Quality Control

Laboratory QA/QC procedures follow those described in *Quality Assurance/Quality Control Manual* for Sanitation Districts' laboratories or approved outside laboratories. The Sanitation Districts' laboratories adhere to stringent QA/QC procedures to ensure the reliability of the analytical results. The California State Department of Health Services has reviewed the QA/QC procedures implemented at the Sanitation Districts' laboratories and certified the laboratories for hazardous waste and wastewater analyses. If other laboratories are used, these laboratories are also certified by the Department of Health Services.

As a check on the quality and reliability of the laboratory analytical equipment, laboratory blanks, matrix spikes/matrix spike duplicates, and surrogate spikes are prepared and analyzed. The following sections discuss these laboratory QA/QC procedures performed at the Sanitation Districts' laboratories.

Laboratory Blanks

Laboratory blanks, sometimes called reagent blanks or method blanks, are run daily to check for contamination in laboratory equipment. Any contamination present could be indicative of improper laboratory decontamination procedures. The laboratory blanks are prepared by extracting and analyzing deionized water.

Matrix Spikes/Matrix Spike Duplicates

Since the sample matrix (water or sediment) may have an impact on the accuracy and precision of the laboratory results, matrix spikes are performed to evaluate the efficiency of the sample extraction and analysis procedures. The matrix spike is prepared by adding known concentrations of target compounds to a sample, and then extracting and analyzing the sample to determine if the known concentrations were detected. The recovered target compounds must fall within an acceptable range of their original concentrations for the results to be considered valid. Matrix spikes are typically run in duplicates to evaluate both the precision as well as the accuracy of the laboratory procedures and the equipment. One matrix spike is for every 20 samples analyzed at the laboratory.

Surrogate Spikes

Surrogate spikes are used to determine the accuracy of analytical methods in the sample matrix. They differ from normal spiked samples in that the spiking compounds are not ones expected to be found in the field samples. The spiking compounds are called surrogates because they are chemically similar to classes of compounds that are analyzed. Surrogate spikes allow for tests of analytical accuracy without the interference problems that may occur with normal spikes due to the presence of the spiked compounds in the sample. Known amounts of the surrogate compounds are added to the field samples. The sample is analyzed for the surrogate compounds and the results are compared to the spiked amounts. The results are expressed as a percent recovery. The percent recovery must fall within acceptable limits established for each surrogate compound. Surrogate spikes are performed when the analysis is of organic compounds such as VOCs, base neutral acid extractable compounds, and pesticides are performed.

Subtitle D does not have specific requirement for reporting QA/QC data. RWQCB Order 93-062 (§12.A.4), however, requires that all QA/QC data be submitted along with the sample results to which it applies. Currently, the Sanitation Districts report QA/QC data using an existing industry standard of laboratory information management, such as the USEPA contract laboratory program (CLP) reporting format.

2000 Puente Hills Landfill Annual Water Quality Monitoring Report

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

. . .5 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422
www.lacsd.org

JAMES F. STAHL
Chief Engineer and General Manager

May 10, 2001
File : 31R-102.10B

Mr. Rodney Nelson
Head, Landfill Unit
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Dear Mr. Nelson:

Puente Hills Landfill
2000 Water Quality Monitoring Annual Report
Order Nos. 93-062, 90-046, and 93-070
File No. 57-220, C.I. Nos. 2294 and 7336

Enclosed please find ***2000 Water Quality Monitoring Annual Report for the Puente Hills Landfill.*** If you have any questions regarding this report, please contact Dr. Chi-Chung Tang of this office.

I certify that all wastes deposited at the Puente Hills Landfill during 2000 were deposited in compliance with the requirements of the Los Angeles Regional Water Quality Control Board (RWQCB), and that no wastes were deposited outside of the boundaries of the waste management area as specified in the RWQCB's requirements. In addition, I certify that the Sanitation Districts have complied with all monitoring and reporting requirements which apply to the Puente Hills Landfill, pursuant to Order Nos. 93-062, 90-046, and 93-070; and Monitoring and Reporting Programs 2294 and 7336. All laboratory analyses performed as part of the required water quality monitoring program were conducted at laboratories certified for such analyses, and in accordance with current guideline procedures contained in SW-846 and approved by USEPA.

I declare, under penalty of perjury, that to the best of my knowledge the foregoing statements are true, complete, and correct. Executed on the 23rd day of May, 2001, at Whittier, California.

Very truly yours,

James F. Stahl

David W. Snyder

David W. Snyder
Division Engineer
Solid Waste Management Department

DWS:CJH:my

Recycled Paper

2000 WATER QUALITY MONITORING ANNUAL REPORT FOR THE PUENTE HILLS LANDFILL

PREPARED BY

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
1955 WORKMAN MILL ROAD
WHITTIER, CALIFORNIA

MAY, 2001

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LISTS OF TABLES, EXHIBITS, FIGURES, AND APPENDICES

LISTS OF TABLES, EXHIBITS, FIGURES, AND APPENDICES (CONTINUED)

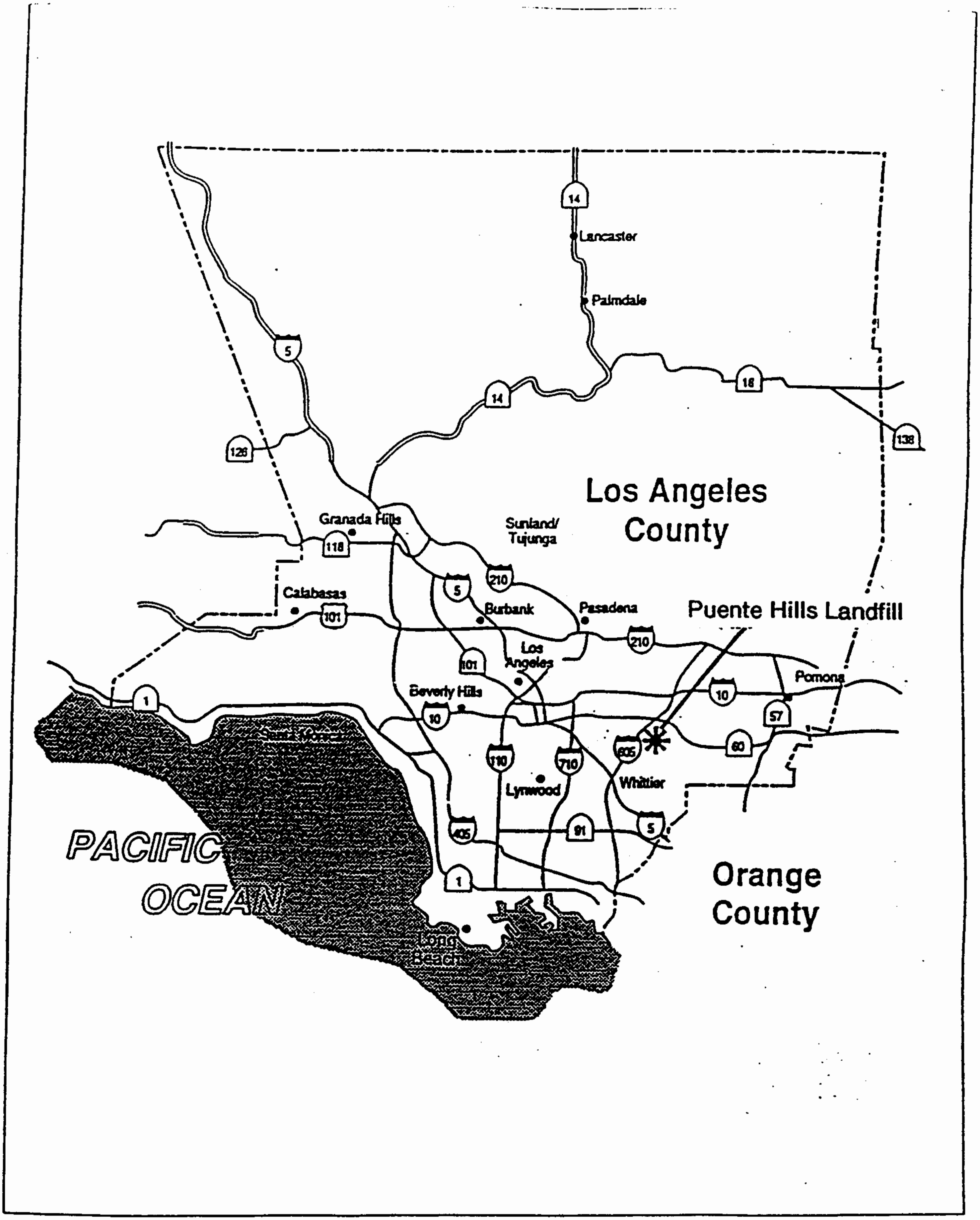
2000 WATER QUALITY MONITORING ANNUAL REPORT FOR THE PUENTE HILLS LANDFILL

1.0 INTRODUCTION

The County Sanitation Districts of Los Angeles County (Sanitation Districts) own and operate the Puente Hills Landfill as a Class III municipal solid waste disposal facility. The site is located in unincorporated Los Angeles County, southeast of the intersection of the Pomona (SR-60) and San Gabriel River (I-605) freeways, as depicted in Exhibit 1. The site address is 2800 Workman Mill Road, Whittier, California. As shown in Exhibit 2, three general landfill areas are located at the Puente Hills Landfill: the Main Canyon, Canyon 9, and the Eastern Canyons.

The Sanitation Districts operate the Puente Hills Landfill in accordance with permits, Waste Discharge Requirements (WDRs) and Monitoring and Reporting Programs (MRPs), issued by the Regional Water Quality Control Board, Los Angeles Region (RWQCB). The Puente Hills Landfill is currently subject to the following WDRs: (1) Order No. 93-062 which applies to all active municipal solid waste disposal sites in the Los Angeles Region; (2) Order Nos. 90-046 and 91-035 which apply to the Main Canyon and Canyon 9 of the Puente Hills Landfill; (3) Order Nos. 93-070 and 94-103 which apply to the Eastern Canyons expansion area of the Puente Hills Landfill; and (4) Order No. 99-059 which contains the requirements of the Corrective Action Program for the Main Canyon of the Puente Hills Landfill. Groundwater monitoring requirements are specified in MRP No. 2294 for the Main Canyon and Canyon 9, most recently revised on June 30, 1999; and MRP No. 7336 for the Eastern Canyon expansion area, most recently revised on May 24, 2000.

This annual report is prepared to comply with Section 13B(2) of RWQCB Order No. 93-062. Included in this report is site information, waste disposal information, facility changes, all water quality monitoring data collected in 2000 and a discussion of these data. The report also includes a graphical presentation of the groundwater quality data collected during the period from 1996 through 2000.

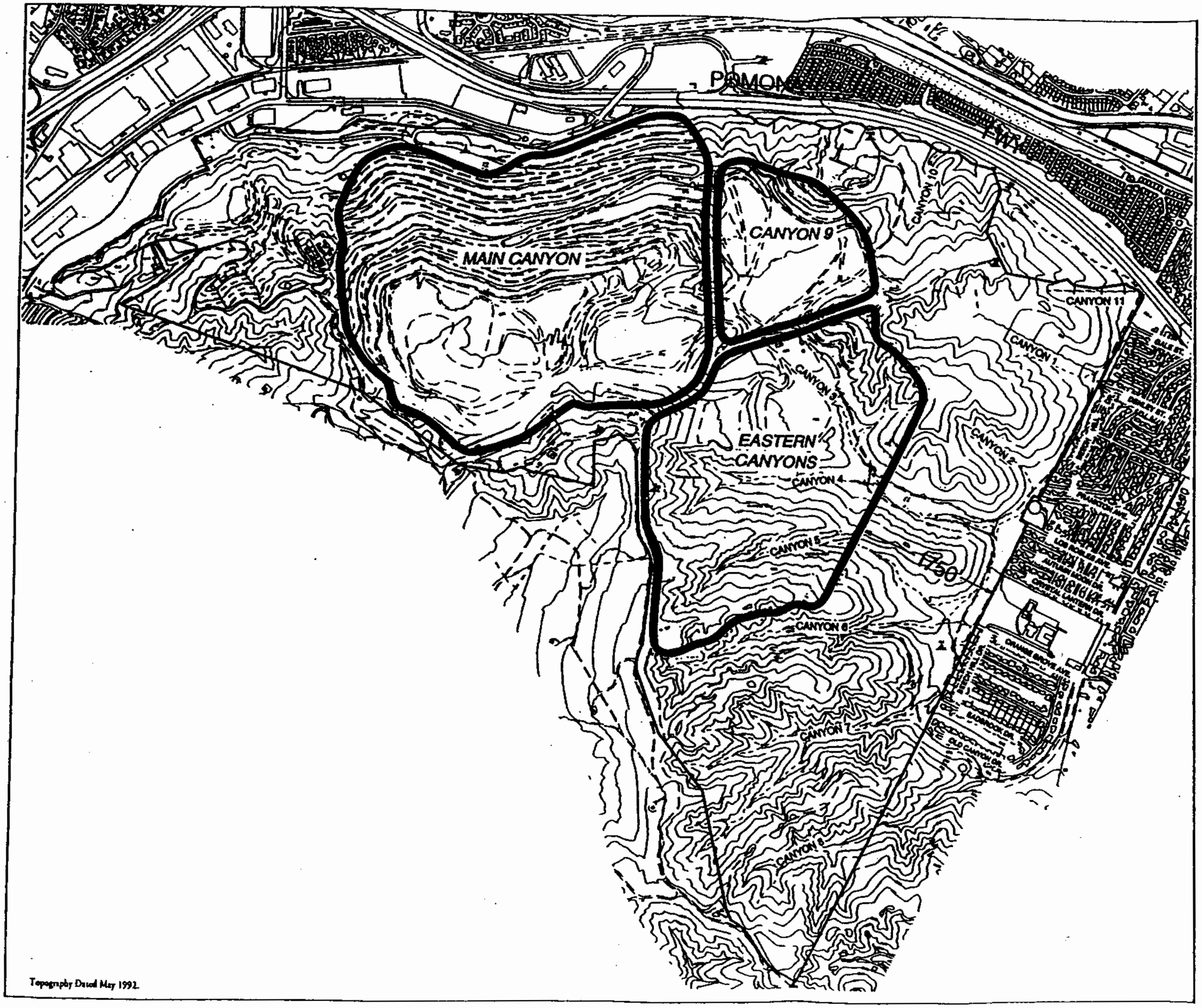


Site Location

EXHIBIT 1

N

NOT TO SCALE



Topography Dated May 1992.

LEGEND

Property Boundary

Site Topography and Identified Site Areas

EXHIBIT 2

N

0 600 1200 FT.

2.0 SITE INFORMATION

2.1 GENERAL INFORMATION

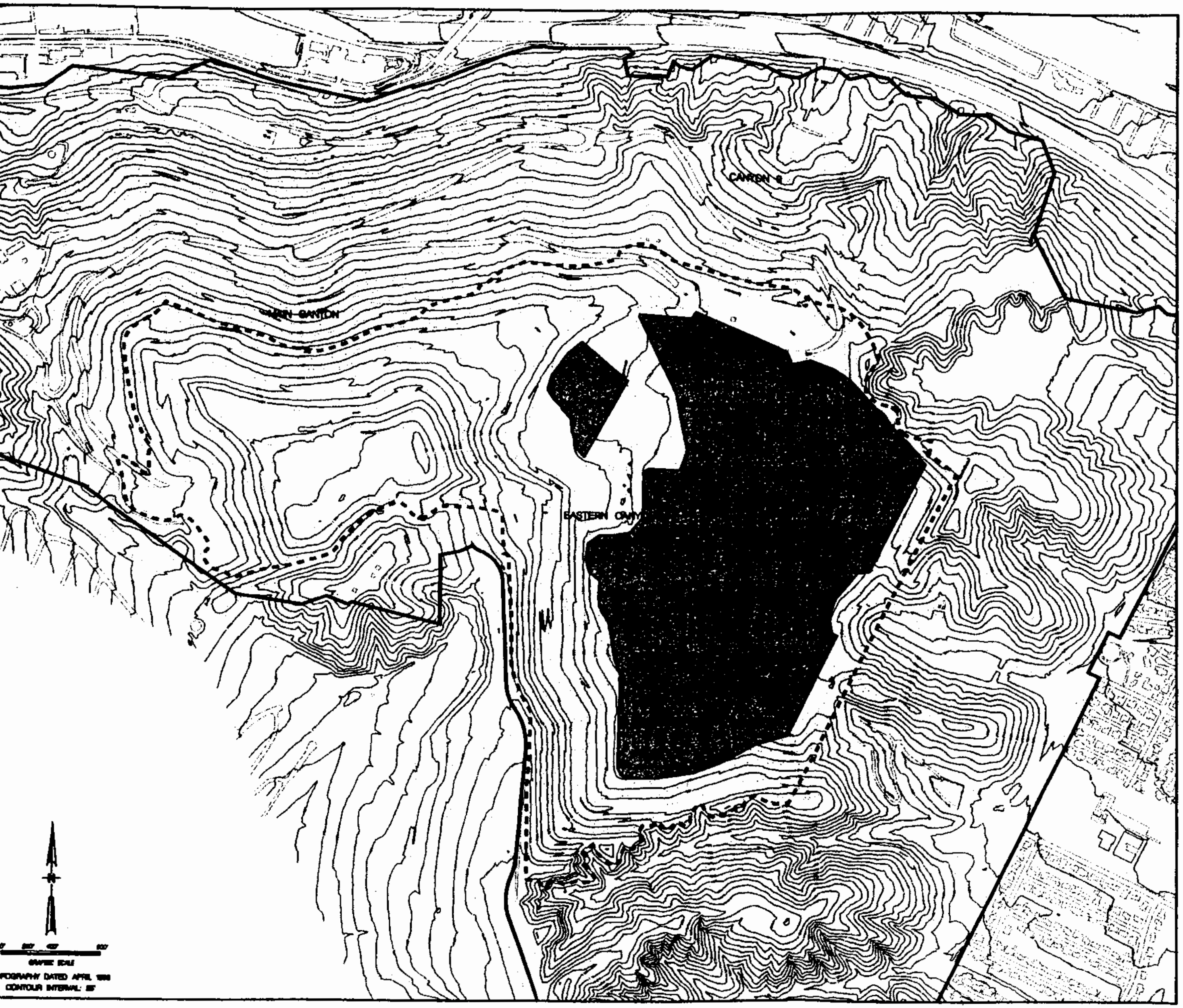
The Puente Hills Landfill is located immediately east of the San Gabriel River Freeway (I-605) and immediately south of the Pomona Freeway (SR-60) on Workman Mill Road (refer to Exhibit 1). The principal land acquisition for what is now known as the Puente Hills Landfill was completed in 1970 with the Sanitation Districts' purchase of a 1,214 acre parcel of the Pellissier Ranch. This portion of the Pellissier Ranch included a landfill operation that began in 1957 by the San Jose Development Company. At the time of the 1970 purchase by the Sanitation Districts, approximately six million tons of waste had been placed on the property. Since June 1970, the Sanitation Districts have remained the sole owner and operator of the Puente Hills Landfill. In May 1981, an additional 151 acres of land along the north side of the site was purchased bringing the site acreage to its present 1,365 acres. Refuse operation in the Main Canyon began in 1957. Refuse operations in Canyon 9 began in 1990. In July 1995, refuse operations were expanded into the Eastern Canyons.

The placement of refuse at the site is pursuant to the Conditional Use Permit (CUP) issued by the Los Angeles County Regional Planning. Exhibit 3 shows the current permitted landfill operation boundaries under CUP 92-250(4) and the 2000 disposal areas. The Puente Hills Landfill received approximately 3.6 million tons of solid waste in 2000. The 2000 average daily disposal rate was approximately 11,762 tons. Table 1 summarizes the monthly solid waste disposal rate. As of December 31, 2000, approximately 84.5 million tons of refuse have been deposited since the Sanitation Districts began landfilling in 1970. The Sanitation Districts estimate that as of December 31, 2000, approximately 12.2 million tons of capacity remain at the Puente Hills Landfill under the current CUP. CUP 92-250(4) expires on November 1, 2003, at which time approximately 10 years of additional capacity will remain.

2.2 GEOLOGY AND HYDROGEOLOGY

This section describes the regional geologic and hydrogeologic setting in the vicinity of the Puente Hills Landfill, and geologic and hydrogeologic conditions at the site. The discussion is primarily based on information found in the following reports.

- LeRoy Crandall and Associates, *Report of Geologic and Hydrogeologic Investigation, Puente Hills Landfill Site*, October 1981
- ENVIRON Corporation, *Hydrogeologic Investigation along Subsurface Barrier Systems, Puente Hills Landfill*, July 1996
- Dames & Moore, *Puente Hills Landfill Geotechnical Investigation and Hydrogeological Study, Phase 2 and Phases 3 through 5 Expansion Areas*, January 1997
- IT Corporation, *Detection and Evaluation Monitoring Programs for the Main Canyon at Puente Hills Landfill*, March 1998



LEGEND

PROPERTY LINE

PERMITTED LANDFILL OPERATIONS LIMIT

2000 DISPOSAL AREA

EXHIBIT 3

PERMITTED FILL AND
2000 DISPOSAL AREA

PUENTE HILLS LANDFILL
SANITATION DISTRICTS

\gas\perfill00_n83.dgn

TABLE 1
2000 SOLID WASTE DISPOSAL SUMMARY
PUENTE HILLS LANDFILL

Month	Nonhazardous Waste (Tons)	Inert Waste (Tons)	Total (Tons)
January	282,252	23	282,275
February	274,234	70	274,304
March	326,258	79	326,337
April	293,757	73	293,830
May	317,760	69	317,829
June	319,881	48	319,929
July	301,831	59	301,890
August	326,524	62	326,586
September	303,256	110	303,366
October	312,648	67	312,715
November	302,115	47	302,162
December	284,780	73	284,853
Total	3,645,296	780	3,646,076

Note: Nonhazardous waste includes dewatered biosolids and water treatment sludge.

2.2.1 Regional Geologic Setting

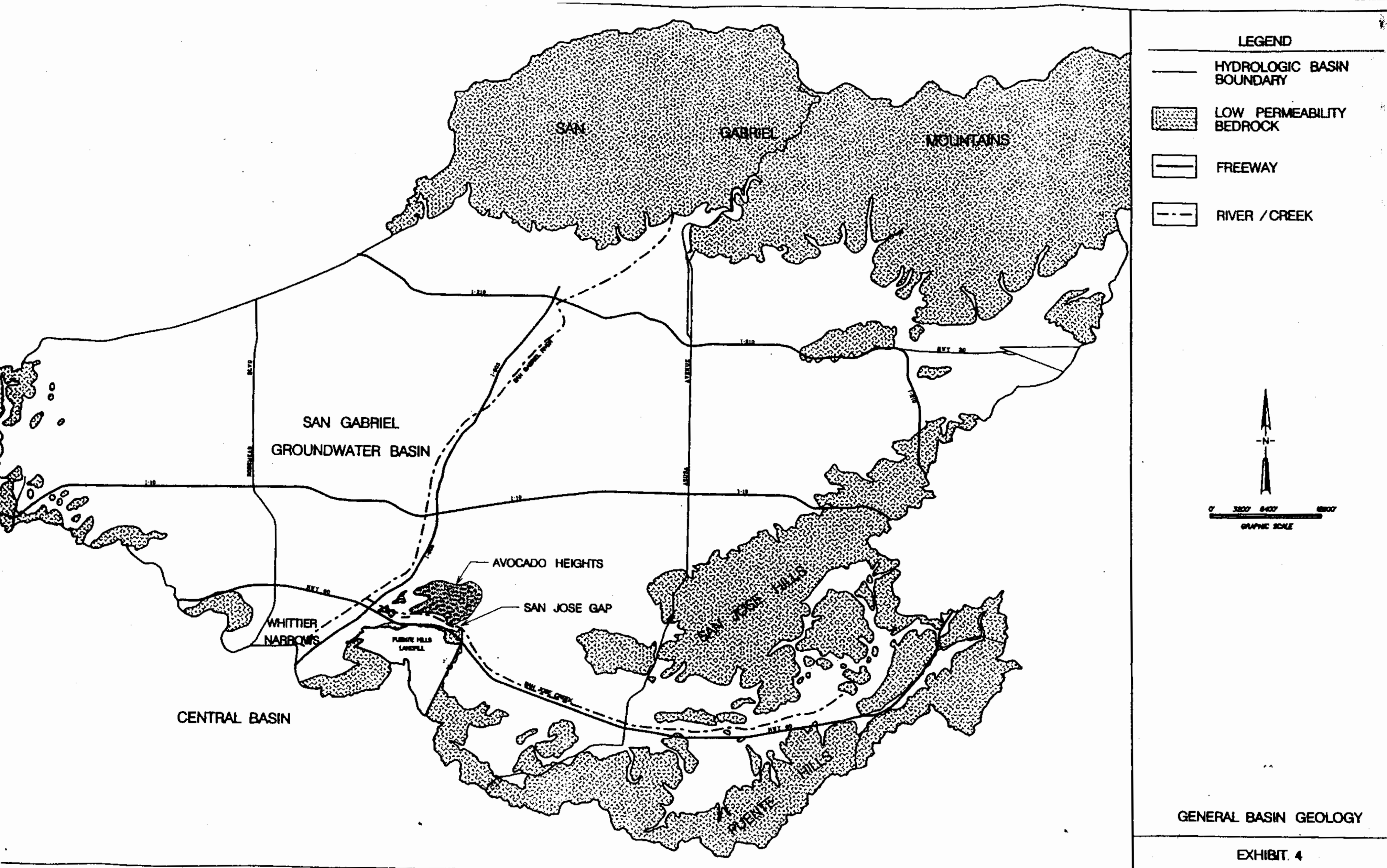
The Puente Hills, together with the San Jose Hills, are a topographic extension of the Santa Ana Mountains in the northern end of the Peninsular Ranges geomorphic province. The Puente Hills are underlain by a sequence of upper Cenozoic sedimentary and volcanic rocks, which in turn overlie a basement of Mesozoic plutonic and metamorphic rocks. Exposed in the hills are marine sedimentary rocks of the La Vida, Soquel, Yorba, and Sycamore Canyon members of the Miocene Puente Formation and Repetto and Pico Formations. The Pico Formation is the dominant geologic unit in the Main Canyon and Canyon 9. The Repetto Formation is the dominant geologic unit in the Eastern Canyons.

Bedrock structure in the Puente Hills Landfill area is dominated by the north-dipping, northwest-trending Whittier-Elsinore Fault Zone located approximately two miles south of the Puente Hills Landfill. The western portion of the Puente Hills contains two principal northwest-trending anticlinoria. Bedrock exposed at the Main Canyon area is situated along the north-dipping limb of the northern anticlinorium. Several outcrops of the Pico Formation bedrock occur to the north of the Puente Hills Landfill in an area known as the Avocado Heights. The area between Avocado Heights and the site has been referred to as the San Jose Gap. The historical San Jose Creek flowed through the San Jose Gap and deposited alluvial material on the stream bed. Exhibit 4 shows the location of Avocado Heights and San Jose Gap.

2.2.2 Regional Hydrogeology

The Puente Hills Landfill is located on the northern tip of the western Puente Hills, which are part of the Santa Ana Mountains. The western Puente Hills are bounded to the north by flood plain deposits (including San Jose Creek and the San Gabriel Groundwater Basin); to the west by the Whittier Narrows and the San Gabriel River areas; and to the southwest by the Central Basin (see Exhibit 4). It is a major barrier to groundwater flow and separates the San Gabriel Groundwater Basin from the Central Basin. The rocks or geologic units of the western Puente Hills area, which include the Puente Hills Landfill, are considered non-water bearing by the Department of Water Resources because they do not contain or store groundwater in economically recoverable quantities. Natural groundwater found in the western Puente Hills contains high levels of minerals (as measured by total dissolved solids) and metals. Because of the naturally poor water quality and limited quantities, this groundwater is not considered to be a suitable drinking water supply. These characteristics make the groundwater found at the Puente Hills Landfill very different from that in the adjacent groundwater basins.

The San Gabriel Groundwater Basin lies beneath approximately 170 square miles of the San Gabriel Valley and is the primary drinking water source for more than one million people in the Los Angeles County. It consists of very permeable sands and gravel originating from the San Gabriel Mountains which are capable of transmitting groundwater at high rates. Recharge to the San Gabriel Groundwater Basin occurs by percolation of rainfall and stream flow, principally from the San Gabriel River, Rio Hondo, and San Jose Creek. Artificial recharge also takes place in the San Gabriel Groundwater Basin. San Gabriel Groundwater Basin discharge occurs by groundwater



GENERAL BASIN GEOLOGY

EXHIBIT 4

pumping and outflow at the Whittier Narrows area at the southwest corner of the basin. Through the Whittier Narrows gap and San Gabriel River the groundwater from the San Gabriel Groundwater Basin drains into the Central Basin. Exhibit 5 is a July 1999 groundwater elevation contour map which depicts groundwater flow directions in the portion of the San Gabriel Groundwater Basin close to the Puente Hills Landfill. As indicated on Exhibit 5, a major pumping area is located approximately one and a half miles to the northeast of the Puente Hills Landfill.

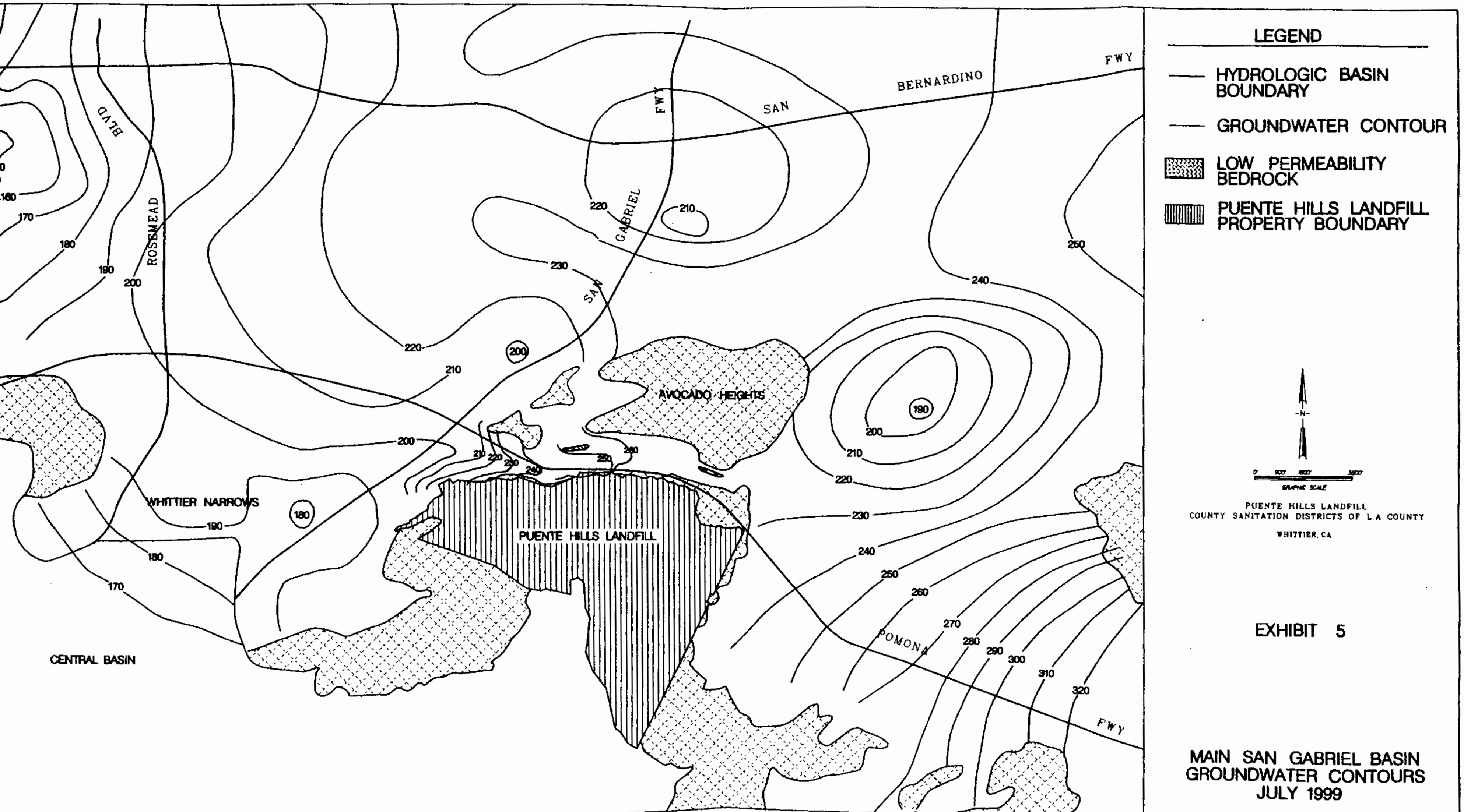
Regional groundwater contamination by volatile organic compounds (VOCs) prompted the United States Environmental Protection Agency (EPA) to place the entire San Gabriel Valley on its National Priorities List (NPL) in 1984. The NPL identifies the highest priority hazardous waste sites in the United States for investigation and cleanup. Sources of the groundwater contamination, according to the EPA, include industries engaged in metal cleaning, coating and manufacturing, printing, rubber manufacturing, die casting, plastic molding, and petroleum storage and distribution. The most commonly found VOCs in the basin groundwater are tetrachloroethylene (PCE) and trichloroethylene (TCE). Other VOCs such as 1,1,1-trichloroethane (1,1,1-TCA), 1,1-dichloroethane (1,1-DCA), 1,1-dichloroethylene, and 1,2-dichloroethylene have also been found. Exhibit 6 depicts groundwater contamination in the San Gabriel Groundwater Basin as determined by the EPA.

The low permeability material of Avocado Heights provides a natural barrier for onsite groundwater at the Puente Hills Landfill to flow into the Main San Gabriel Groundwater Basin to the north. The most significant groundwater system near the Main Canyon is in the San Jose Gap between Avocado Heights and the landfill. The San Jose Gap consists of a veneer of 50 to 60 feet of alluvial sediments within the historical San Jose Creek. Exhibit 7 shows the extent of saturated alluvial sediments that is greater than 10 feet thick in the San Jose Gap. As shown in this exhibit, groundwater in this system flows in a westerly direction towards Whittier Narrows. The groundwater elevations observed for the Main Canyon area for 2000 were similar to those shown in Exhibit 7, which was prepared based on data collected in September 23, 1997. This indicates that the groundwater flow direction has not changed since 1997.

2.2.3 Site Geology

As described above, three general landfill areas are located at the Puente Hills Landfill: the Main Canyon, Canyon 9, and the Eastern Canyons. Prior to landfilling activities, several canyons oriented toward the north, existed in the Main Canyon and Canyon 9 areas as shown in Exhibit 8. Similarly, several east trending canyons existed in the Eastern Canyons area prior to landfilling as shown in Exhibit 9.

The landfill site is underlain by a thick sequence of north-northwest dipping marine sedimentary bedrock units. Exhibit 10 shows the general geologic conditions of the entire site. Unconsolidated surficial deposits which can be found overlying bedrock units at the site include artificial fill, alluvium, colluvium, and landslides which typically occur on north facing slopes due to the predominant north dipping bedding. The distribution of surficial deposits has been modified as a result of grading operations associated with landfill development. Within the Eastern Canyons



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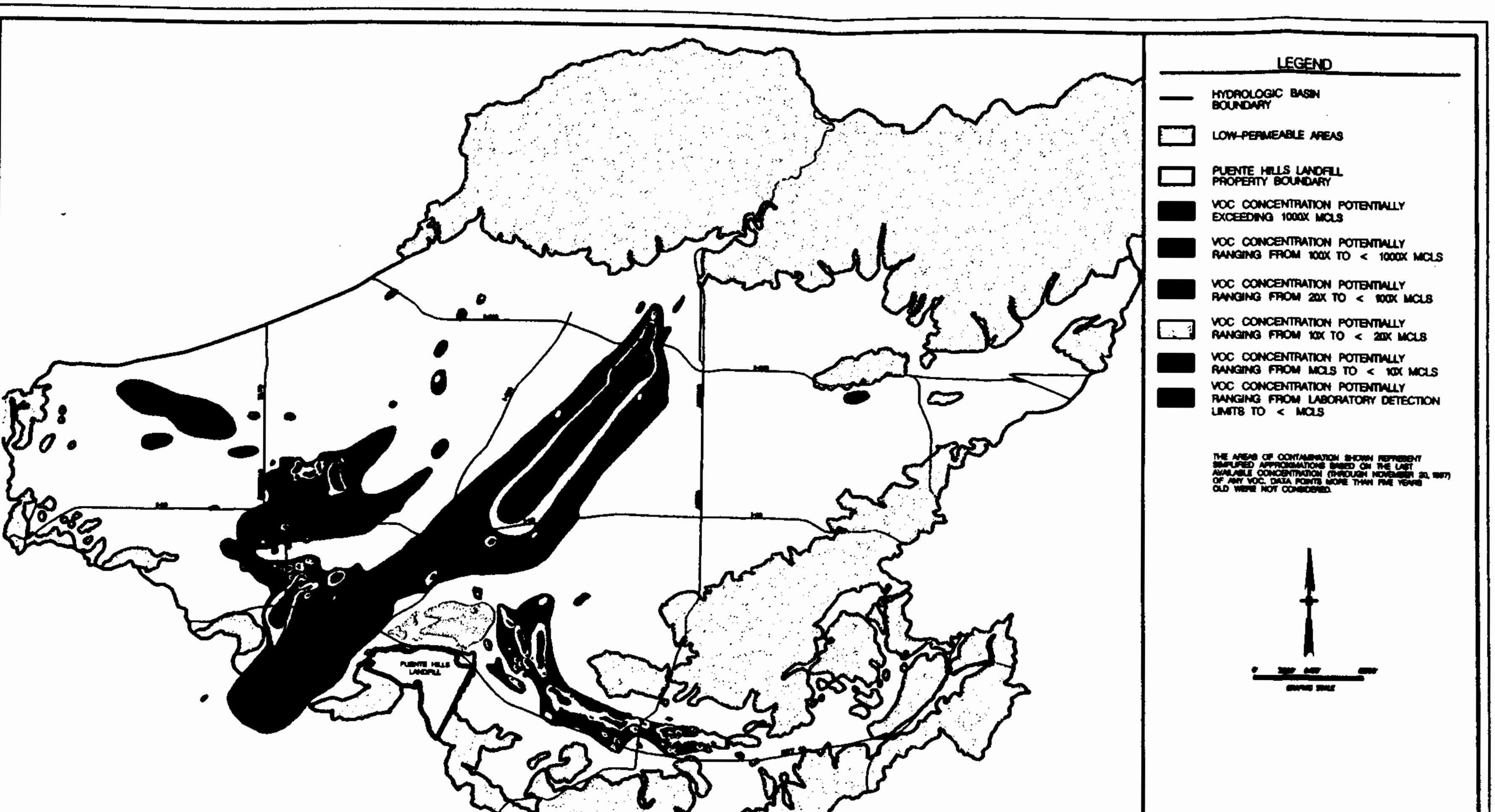
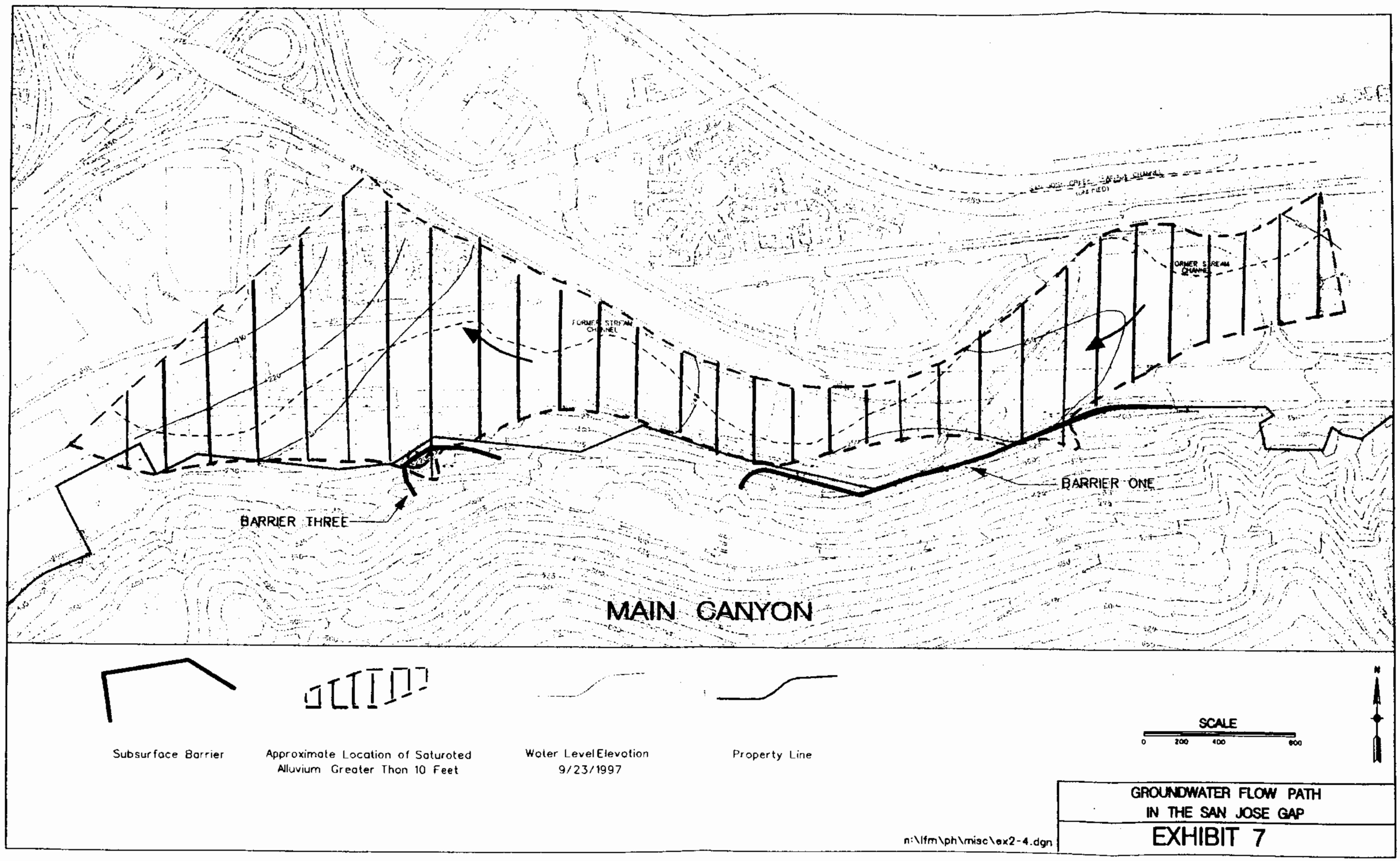


EXTENT OF VOC CONTAMINATION
SAN GABRIEL GROUNDWATER BASIN

EXHIBIT 6



FORMER STREAM CHANNEL
BARRIER ONE
BARRIER THREE
MAIN CANYON
Subsurface Barrier
Approximate Location of Saturated Alluvium Greater Than 10 Feet
Water Level Elevation 9/23/1997
Property Line
SCALE
0 200 400 800
N
GROUNDWATER FLOW PATH IN THE SAN JOSE GAP
EXHIBIT 7
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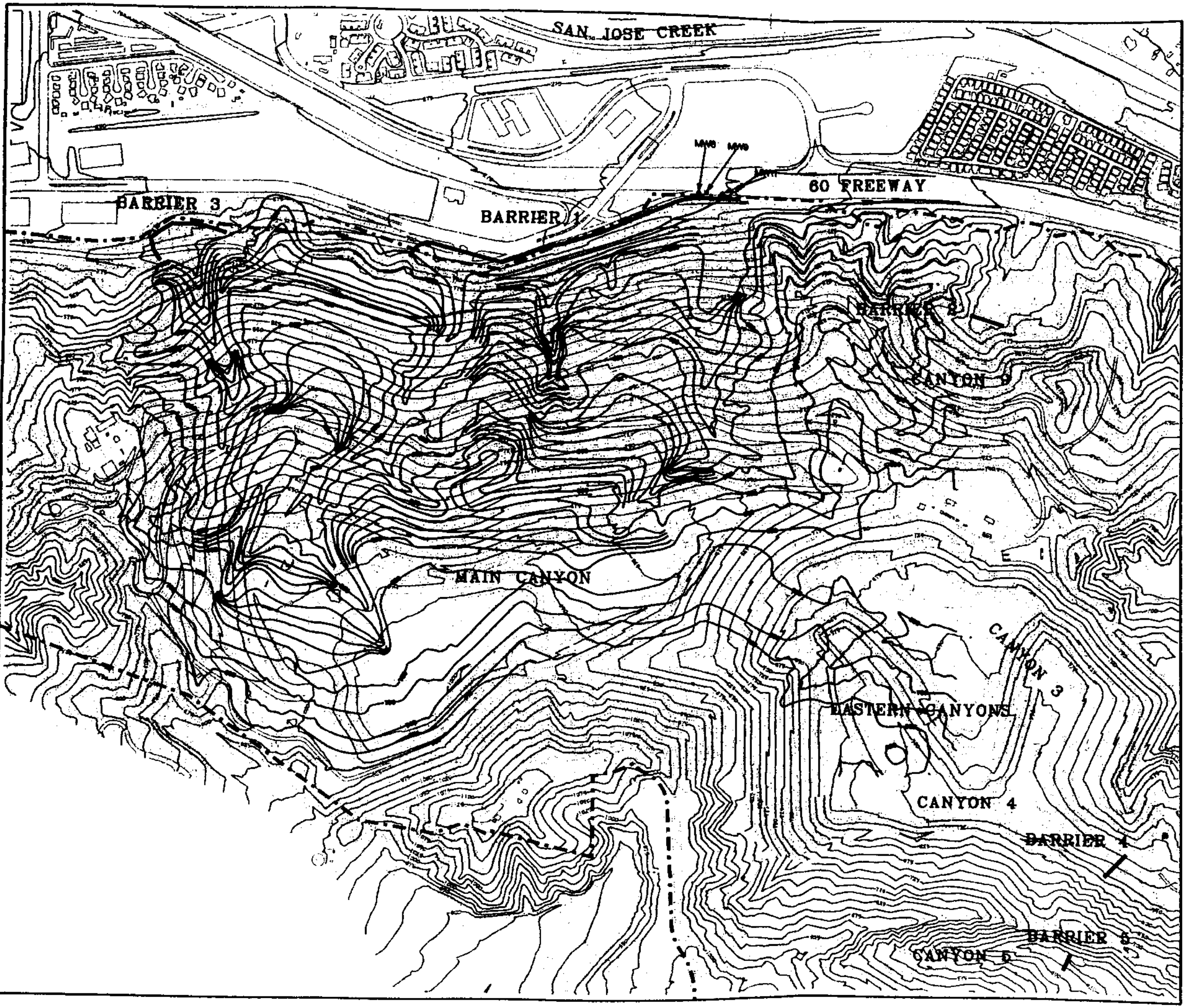

LEGEND

PROPERTY LINE

PRE-DEVELOPMENT CONTOUR

GRAPHIC SCALE

TOPOGRAPHY DATE: MAY 1966

EXHIBIT 8

MAIN CANYON AND CANYON 9
TOPOGRAPHY PRIOR TO EXCAVATION

PUENTE HILLS LANDFILL
SANITATION DISTRICTS

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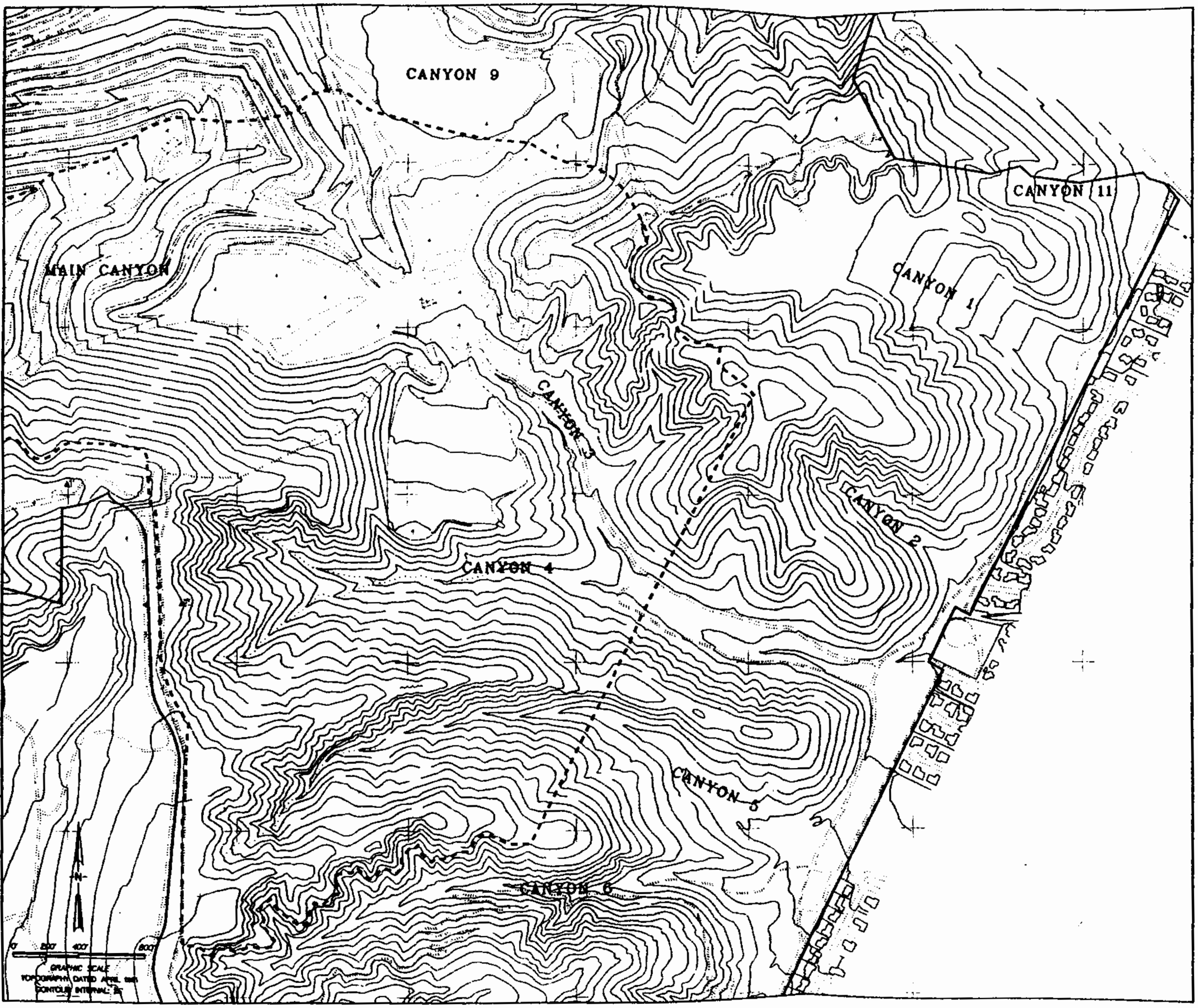


LEGEND

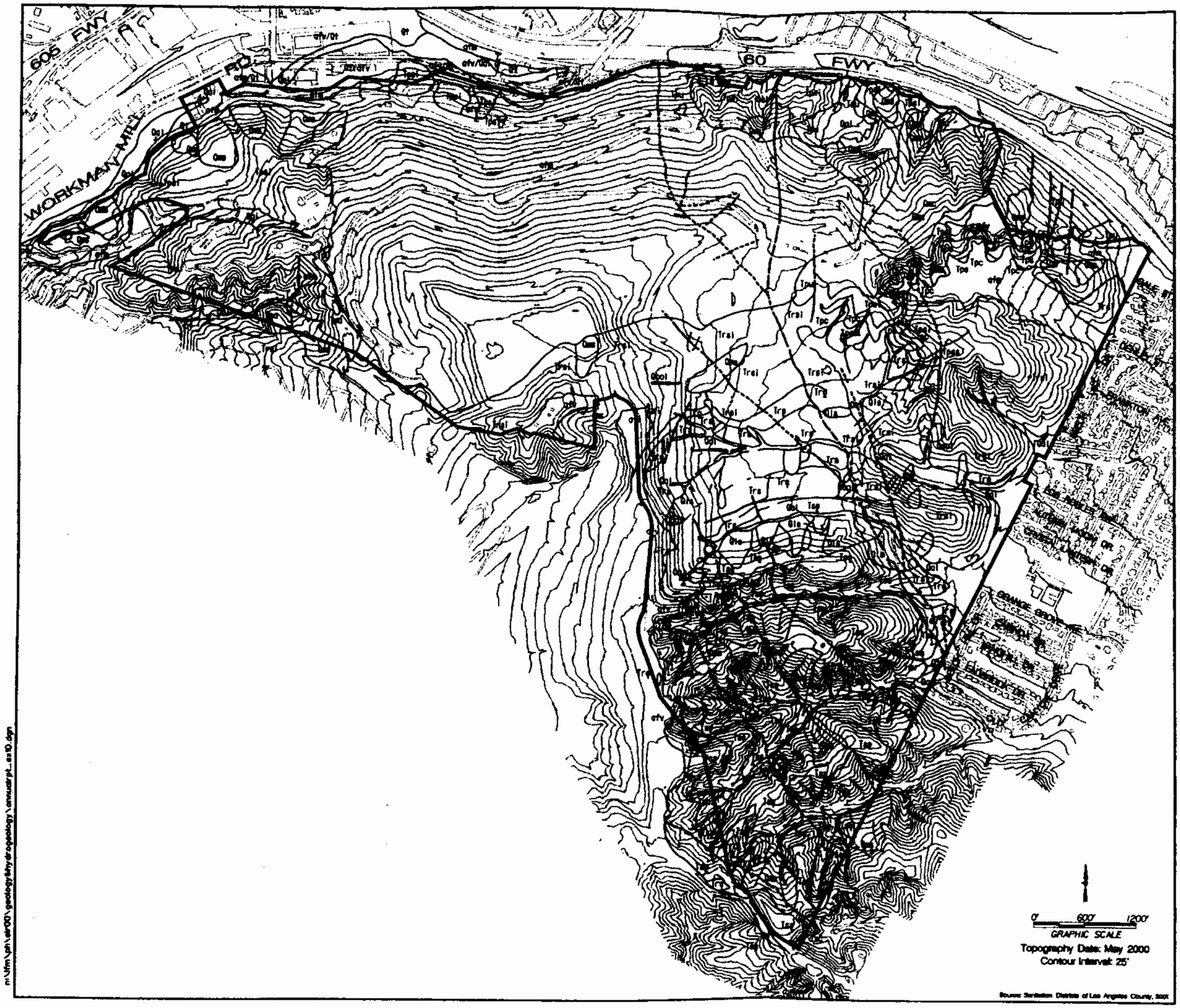
PROPERTY LINE

PERMITTED LANDFILL OPERATIONS AREA

EXHIBIT 9

EASTERN CANYONS TOPOGRAPHY PRIOR TO EXCAVATION

PUENTE HILLS LANDFILL
SANITATION DISTRICTS



LEGEND

(box)	Property Line
af	Artificial Fill: v–veneer; m–massive
Qm	Mass Movement Debris: c–colluvium; f–flow; s–slump
Qal	Stream Alluvium
Qt	Terrace, Fan or Older Alluvium
Tp	Pico Member, Fernando Formation: c–predominantly conglomerate some sandstone; sc–predominantly sandstone some conglomerate; sl–siltstone and fine-grained sandstone; u–undifferenciated sandstone and conglomerate, and some sandstone
Tr	Repetto Member, Fernando Formation: ss–fine to medium grained sandstone some siltstone; cs–predominantly conglomerate some sandstone; (1,2,–units oldest to youngest respectively); sl–siltstone and fine grained sandstone
Ts	Sycamore Canyon Member, Puente Formation: c–conglomerate with thin lenses of sandstone; s–fine to coarse-grained sandstone with thin lenses of conglomerate; u–undifferentiated sandstone and conglomerate; (1,2,–units oldest to youngest respectively)

EXHIBIT 10

SITE GEOLOGIC MAP

PUENTE HILLS LANDFILL
SANITATION DISTRICTS

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and Canyon 9 areas, surficial deposits and underlying bedrock have been excavated to provide a suitable foundation for the construction of the underdrain and composite liner containment systems. Narrow alluvial channels outside the landfill's footprint remain generally unaltered.

From oldest to youngest, the bedrock units found at the site consist of the Sycamore Canyon member of the Puente Formation, and the Repetto and Pico members of the Fernando Formation. The Sycamore Canyon member outcrops in the southern portion of the Eastern Canyons and includes three subunits which are designated as: lower conglomerate (Tsc_1), siltstone and claystone with minor sandstone interbeds (Tss), and upper conglomerate (Tsc_2). The Repetto member outcrops in the central portion of the Eastern Canyons and underlies the southern portions of Canyon 9 and the Main Canyon. The Repetto member includes three subunits: a lower conglomerate unit (Trc_1), a siltstone unit (Trsi), and an upper conglomerate unit (Trc_2). Within the Trsi subunit, there are two small subunits ($Trss_1$ and $Trss_2$) that have distinct sandstone beds. The Pico member occurs at the surface in the northern portion of the site and underlies landfill material in the northern portion of the Main Canyon and Canyon 9. Stratigraphically, the Pico Formation bedrock consists of, from top to bottom, five subunits: upper siltstone ($Tpsi_u$), undifferentiated conglomerate and sandstone (Tpu), lower siltstone ($Tpsi_l$), sandstone (Tps), and basal conglomerate (Tpc). A small block of Pico member sandstone has also been mapped in the central portion of the Eastern Canyons area within the Whittier Heights fault zone. The Pico member in the Eastern Canyons area, where exposed, has been mapped as an undifferentiated subunit.

Bedrock units have been displaced by the Whittier Heights fault zone that transects the eastern portion of the property and is the major structural feature of the site. The northwest-trending Whittier Heights Fault is a normal fault with the east side downthrown. Maximum vertical displacement on the fault is 3,800 feet. There has been no recent movement (within the last 11,000 years) on the fault within the site boundary. Secondary and apparently less continuous faulting is found elsewhere throughout the area on similar, generally north-south trends. As-built mapping in the northern portion of the Eastern Canyons demonstrates that the main strand of the Whittier Heights zone is a narrow trace of slickensided clay gouge where Repetto member siltstone is on both sides of the fault. This trace widens southward into several splays in the ridge between Canyons 4 and 5, where it apparently incorporates slivers of the Pico member of the Fernando Formation between juxtaposed upper and lower portions of the Repetto member of the Fernando Formation. Investigations performed by the Sanitation Districts' consultants indicate that portions of the Whittier Heights fault zone may impede groundwater flow in the Eastern Canyons area.

2.2.4 Site Hydrogeology

Groundwater flow regimes at the site have been characterized by Levine Fricke (1994), Earth Tech (1995), ENVIRON Corporation (1996), IT Corporation (1996), Dames and Moore (1997), and IT Corporation (1998). Results obtained from these studies have been used to update the hydrogeologic description of the site previously contained in Geotechnical Consultants (1987) and LeRoy Crandall (1981). As mentioned earlier, although the groundwater system found at the Puente Hills Landfill can hardly be characterized as "aquifers" due to its low yield, the term "aquifer" is used in the following discussion to conform with the terminologies in Subtitle D, Code of Federal Regulations and in Title 27, California Code of Regulations.

2.2.4.1 Main Canyon

As mentioned earlier, the Main Canyon portion of the Puente Hills Landfill consists of four original canyons that are oriented toward the north. The Sanitation Districts installed two cement bentonite subsurface barriers (Barriers 1 and 3) along the north site boundary to sever all historic drainage in the alluvium. Exhibit 8 shows the original topography of the Main Canyon and locations of Barriers 1 and 3. The area between Barriers 1 and 3 is a low permeability bedrock ridge and is therefore not a significant groundwater flow pathway.

The Barrier 1 area is underlain by unconsolidated fill, alluvium, and Pico Formation siltstone, sandstone, and conglomerate. The thickness of alluvium increases along the thalwegs of three historic drainage channels which were cut off by Barrier 1. Generally, bedrock units strike northeast to northwest, dipping to the northwest to northeast from 5 to 46 degrees, however, dips between 20 and 35 degrees are more common.

Unweathered Pico Formation siltstone acts as an aquitard to groundwater flow in the Barrier 1 area. The mean hydraulic conductivity of unfractured, unweathered Pico Formation siltstone is 1.5×10^{-7} (laboratory test) and 7.3×10^{-7} (packer test) centimeters per second (cm/sec). Groundwater flow at Barrier 1 is controlled by the occurrence and distribution of coarse grained and weathered fill, alluvium and bedrock units. Fractures are not a significant mechanism of groundwater transport in the area because any fractures in the alluvium and bedrock are closed due to increasing intergranular pressure with depth.

The uppermost aquifer in the westernmost 700 feet of Barrier 1 occurs under unconfined conditions in fill and weathered siltstone. It has a mean hydraulic conductivity of 6.3×10^{-4} cm/sec, average transmissivity of 493 gallons per day per foot (gpd/ft), and storativity between 1.5×10^{-3} and 5.8×10^{-3}. The uppermost aquifer is confined below by unweathered Pico Formation siltstone which acts as an aquitard to groundwater flow. Deeper sandstone lenses within the unweathered siltstone also contain limited amounts of groundwater under confined or semiconfined conditions which are hydraulically connected to the uppermost aquifer. Water levels in general indicate an upward hydraulic gradient from lower to upper saturated zones.

The uppermost aquifer in the next 1,150 feet of the Barrier 1 area occurs in fill, alluvium and weathered siltstone under unconfined condition. The aquifer is not productive based on pumping test results conducted by the Sanitation Districts' consultant. It is confined below by unweathered Pico Formation siltstone which acts as an aquitard to groundwater flow.

In the easternmost 550 feet of the Barrier 1 area, the uppermost aquifer occurs in sandstone and conglomerate units of the Pico Formation. This aquifer appears to be unconfined, however, semiconfined conditions may exist. The hydraulic conductivity of the uppermost aquifer ranges from 1.1×10^{-4} to 1.8×10^{-3} cm/sec, and the average transmissivity ranges from 857 to 5,400 gpd/ft. This aquifer is confined below by the lower siltstone subunit which was encountered at approximately 220 feet below ground surface. An upward hydraulic gradient exists in the uppermost aquifer, i.e., groundwater in the conglomerate unit tends to rise up to the overlying alluvium.

The alluvium represents a potential pathway for groundwater in the uppermost aquifer in the Barrier 1 area to migrate offsite into the San Jose Gap immediately north of the site. Groundwater flow velocity in the San Jose Gap is very low, ranging from 0.6 to 19 feet per year (ft/yr) immediately north of the eastern Barrier 1 area, and from 1.4 to 67 ft/yr immediately north of the western Barrier 1 area.

The uppermost aquifer at Barrier 3 occurs in the sand and silty sand alluvium under confined conditions. The uppermost aquifer is approximately 50 feet from ground surface and has a mean hydraulic conductivity of 7.7×10^{-3} cm/sec. It is confined above by alluvial silts and clays and below by Pico Formation siltstone. The hydraulic conductivity values for both of these materials are very low (in the 10^{-6} cm/sec range). Groundwater monitoring shows that the barrier and groundwater extraction system are effective in controlling landfill affected groundwater from migrating offsite. Similar to western Barrier 1, groundwater downgradient of Barrier 3 is connected to the alluvial groundwater in the historical San Jose Creek stream bed which continues to flow towards Whittier Narrows to the west. In this portion of the channel, the groundwater flow velocity is estimated to range from 8 to 81 feet per year.

2.2.4.2 Canyon 9

The Canyon 9 area is underlain by unconsolidated fill, alluvium, and Pico Formation siltstone, sandstone, and conglomerate. The uppermost aquifer occurs in sandstone and conglomeratic sandstone units under confined or semiconfined conditions. The groundwater flow direction in Canyon 9 is toward the northeast. The uppermost aquifer has a mean hydraulic conductivity of 1.9×10^{-4} cm/sec and an average transmissivity of 60 gpd/ft. The uppermost aquifer is confined above and below by Pico Formation siltstone, which acts as an aquitard to groundwater flow in this area. The Pico Formation siltstone has a hydraulic conductivity less than 4.9×10^{-6} cm/sec.

2.2.4.3 Eastern Canyons Area

In general, groundwater encountered in the Eastern Canyons area flows in a pattern which mimics surface topography. Water elevation data collected from this area fit this pattern, which shows groundwater flowing from ridges towards canyons. Thus, most rainfall which infiltrates to the bedrock across the Eastern Canyons will subsequently flow toward and discharge to canyon alluvium. Some groundwater may flow toward canyons but remain within bedrock units beneath canyon alluvium as it travels downgradient.

The Canyons 3 and 4 area is underlain by artificial fill, alluvium, and bedrock of the Repetto member of the Fernando Formation. The Repetto member of the Fernando Formation consists predominantly of siltstone. The uppermost aquifer occurs in alluvium and weathered bedrock under unconfined conditions. The thickness of the alluvium at the confluence of Canyons 3 and 4 near Barrier 4 is approximately 40 feet. The depth of the weathered bedrock near Barrier 4 ranges from 4 to 22 feet. The hydraulic conductivity values for the alluvium and weathered bedrock in Canyons

3 and 4 vary from approximately 10^{-3} to 10^{-6} cm/sec with a geometric mean value of 1.3×10^{-3} cm/sec. The alluvium/weathered bedrock near Barrier 4 is underlain by Repetto member siltstone. Slug test results indicate that the Repetto member siltstone has a geometric mean hydraulic conductivity of 1.5×10^{-6} cm/sec.

The Canyon 5 area is underlain by alluvium, landslide deposits, and Sycamore Canyon member sandstones and siltstones. The uppermost aquifer occurs under unconfined conditions within the landslide deposits and the weathered horizon of the Sycamore Canyon bedrock underlying the alluvium. In the vicinity of Barrier 5, the alluvium and landslide deposits are approximately 20 feet thick. The depth of weathered bedrock in this area ranges from 25 to 40 feet. The geometric mean value for the hydraulic conductivity of the weathered bedrock is 4.7×10^{-5} cm/sec. The alluvium/weathered bedrock near Barrier 5 is underlain by Sycamore Canyon member sandstone and siltstone. Slug testing results indicate that the Sycamore Canyon member sandstones and siltstones have a geometric mean hydraulic conductivity of 4.8×10^{-6} cm/sec.

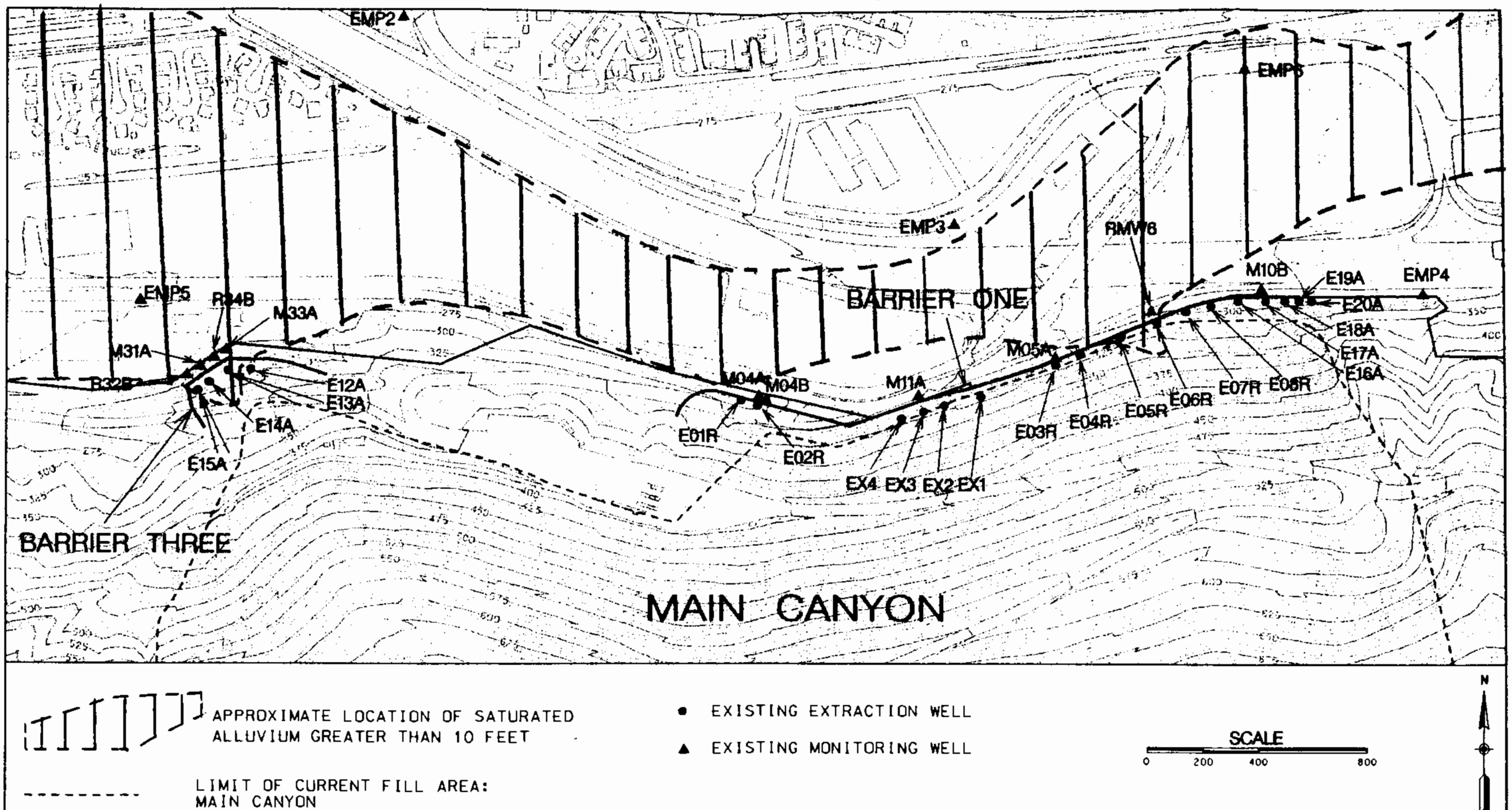
2.3 WATER QUALITY PROTECTION SYSTEMS

The water quality protection systems currently in place at the Puente Hills Landfill include five cement bentonite subsurface barrier and groundwater extraction systems, and two composite liner systems. The purpose for the water quality protection systems is to mitigate the potential for any landfill affected groundwater to migrate offsite. The water protection systems for each of the landfill areas are discussed below.

Main Canyon

The groundwater protection systems currently installed at the Main Canyon include Barriers 1 and 3 and their corresponding extraction systems. Upgradient of each barrier, the Sanitation Districts have installed extraction wells to collect groundwater that builds up against the barriers. Extraction wells are designed to have overlapping zones of influence in areas where potential migration pathways have been identified and are operated to create hydraulic low points. Together, the passive barrier and active extraction wells form a groundwater containment feature that effectively controls offsite migration of groundwater. Groundwater monitoring wells have been installed downgradient of Barriers 1 and 3 to monitor groundwater quality. Exhibit 11 shows the locations of groundwater extraction wells and monitoring wells downgradient of the Main Canyon at Barriers 1 and 3.

Subsurface Barrier 1 was installed in 1980 by Bencor Corporation of America. The Sanitation Districts commissioned LeRoy Crandall and Associates to develop design depths for the barrier system and to perform third party construction quality assurance (CQA) for the installation of the barrier. The barrier was designed and installed into bedrock to cut off alluvial pathways which could serve as a potential conduit for migration from the landfill. The design hydraulic conductivity of the subsurface barrier is less than 1×10^{-6} cm/sec. The design and construction of Barrier 1 was approved by the RWQCB and the State Water Resources Control Board under a Federal Clean Water Grant.



SUBSURFACE BARRIERS, EXTRACTION WELLS, AND MONITORING WELLS

EXHIBIT 11

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A total of 17 extraction wells have been installed to remove canyon water that collects upgradient of Barrier 1. In 1998, eight of the original Barrier 1 extraction wells were replaced with new wells to reduce maintenance and ensure optimal performance. In 1999, extraction well E20A was installed at the eastern end of Barrier 1 to serve as a backup extraction well for the existing groundwater extraction system already in place for this area. Typically, the combined total production from these 17 wells is approximately 11 gallons per minute (gpm). The highest flow from a single well is usually about three (3) gpm. This relatively low yield is characteristic of the uppermost aquifer system within the Main Canyon. In comparison, a single production well in the San Gabriel Groundwater Basin typically yields between 700 to 2,500 gpm.

Subsurface Barrier 3 was installed in 1993 by Foster Wheeler Environmental Services. The Sanitation Districts retained the Earth Technology Corporation to perform third party construction quality assurance for the installation of the barrier. The barrier was installed at least five feet into unweathered bedrock to cut off potential alluvial and weathered bedrock pathways. The hydraulic conductivity of the subsurface barrier is less than 1×10^{-6} cm/sec.

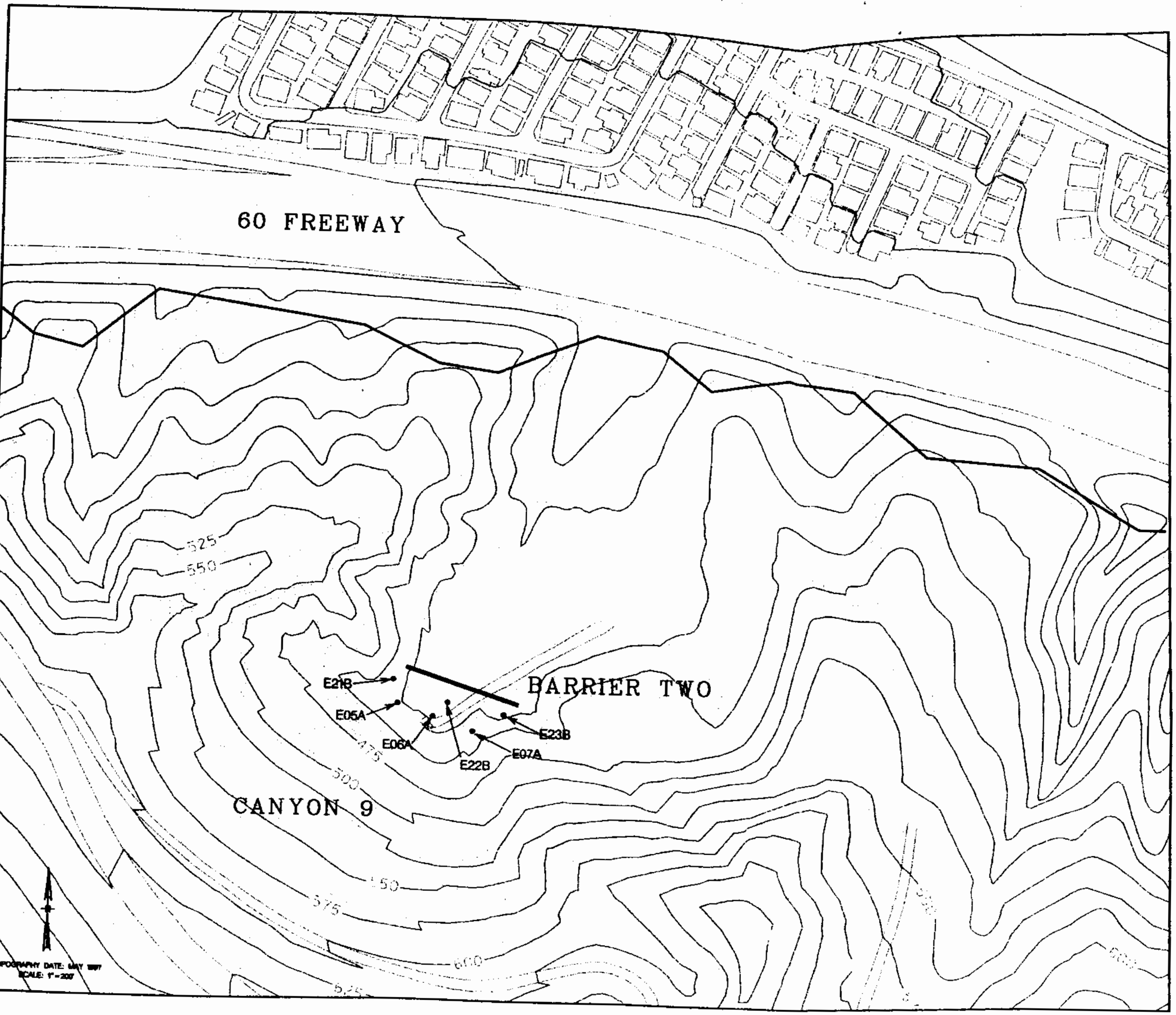
Barrier 3 is equipped with four extraction wells to remove water that collects upgradient of the barrier. The combined total flow from these four extraction wells is approximately 11 gpm. Again, these wells are low yielding in comparison to the production wells in the San Gabriel Groundwater Basin.

Canyon 9

The groundwater protection systems currently installed at Canyon 9 include Barrier 2 with its corresponding extraction system and a composite liner system. Alluvial materials in the original Canyon 9 area have the potential for groundwater outflow (see Exhibit 8 for topography prior to excavation). Although no significant alluvial groundwater occurs in the Canyon 9 area, Barrier 2 was installed to sever potential alluvial flow in the historic drainage in this area. Barrier 2 is equipped with six groundwater extraction wells to remove water from behind the barrier. Exhibit 12 shows the location of Barrier 2 and the extraction wells upgradient of this barrier.

Subsurface Barrier 2 was installed in 1988 by Case International. The Sanitation Districts commissioned Geofon Incorporated to perform third party construction quality assurance for the barrier installation. The barrier was designed and installed at least five feet into unweathered bedrock to cut off any potential alluvial pathways. Six extraction wells have been installed upgradient of Barrier 2. Three of the extraction wells are screened in the alluvium and have observed no water since installation in 1988. The other three extraction wells were installed in 1998 and are screened in the bedrock formation. The combined total flow from these three extraction wells is approximately one (1) gpm.

A composite liner system was installed in the Canyon 9 area in 1989 and 1990 prior to refuse placement in Canyon 9. The floor of the Canyon 9 composite liner system consists of the following components: subdrain, clay liner (minimum one foot thick with a hydraulic conductivity of less than 1×10^{-6} cm/sec), geomembrane liner (80 mil high density polyethylene), liquid collection and



LEGEND

PROPERTY LINE

EXISTING SUBSURFACE BARRIER

EXTRACTION WELL

EXHIBIT 12

CANYON 9
EXISTING SUBSURFACE BARRIER
AND EXTRACTION WELL SYSTEM

PUENTE HILLS LANDFILL
SANITATION DISTRICTS

removal system (LCRS), geotextile filter, and protective soil layer. The side slope of the Canyon 9 composite liner system consists of the following components: geomembrane liner, geotextile, and protective soil layer. These components, together, effectively prevent landfill affected liquid from entering the underlying strata. All components of the Canyon 9 composite liner system were subjected to rigorous quality assurance tests to ensure that all materials used met the design criteria and specifications. The design specifications for each phase of the liner system were approved by the RWQCB prior to construction. The construction quality assurance for each phase of the liner system was performed by an independent consultant. The RWQCB inspected and approved each liner system before waste placement.

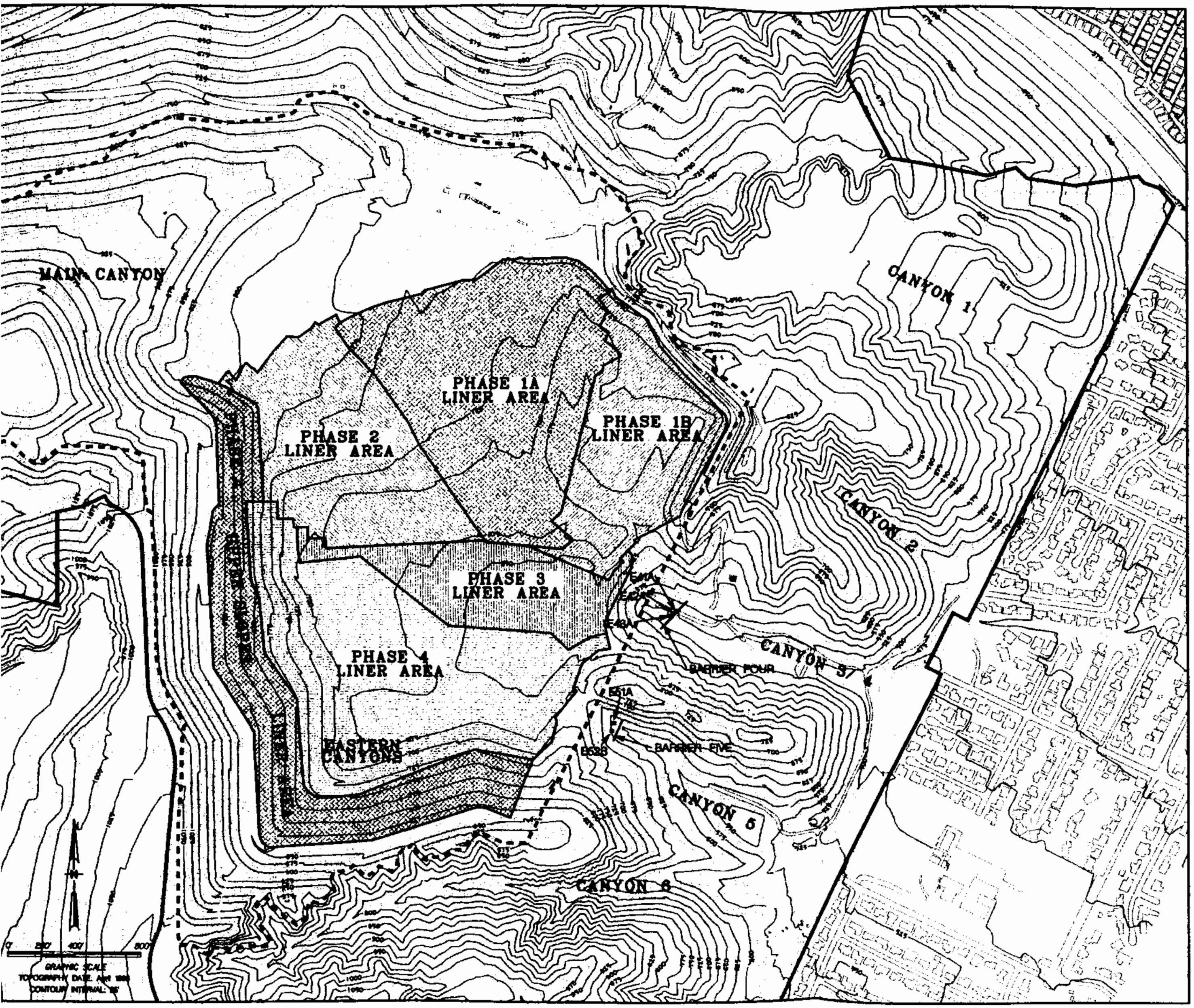
Eastern Canyons

The groundwater protection systems currently installed at the Eastern Canyons include Barriers 4 and 5 with their corresponding extraction systems and a composite liner system. A number of canyons existed in the Eastern Canyons area prior to grading modifications and landfill development (see Exhibit 9). Before landfilling activities commenced in Canyons 3 and 4, the Sanitation Districts installed subsurface Barrier 4 to control alluvial groundwater flow. As landfill development proceeded to the south, subsurface Barrier 5 was installed to control potential alluvial groundwater flow in Canyon 5. Groundwater monitoring wells have been installed downgradient of Barriers 4 and 5 to monitor groundwater quality. These monitoring wells are discussed in Section 3.2.

Subsurface Barrier 4 was installed in 1995 by Clarke Contracting Corporation. The Sanitation Districts commissioned Earth Tech, Inc. to perform geologic observation and construction quality assurance services for the installation of the barrier. The barrier was designed and installed at least five feet into unweathered bedrock to cut off potential alluvial and weathered bedrock pathways. Three groundwater extraction wells were installed upgradient of Barrier 4 to remove water from behind the barrier.

Subsurface Barrier 5 was installed in late 1998 by Wiley Construction Company. The Sanitation Districts commissioned Knollwood Associates to perform geologic observation and construction quality assurance services for the installation of the barrier. The barrier was designed and installed at least five feet into unweathered bedrock to cut off potential alluvial and weathered bedrock pathways. No groundwater has been observed in the alluvium. Two groundwater extraction wells were installed upgradient of Barrier 5 in the first quarter of 1999. Since their installation, no water has been collected from these two extraction wells because the wells are either dry or have a limited water column for extraction.

The composite liner system for the Eastern Canyons area was installed in phases. The existing liner areas for the Eastern Canyons area are shown in Exhibit 13 and include Phase 1A, Phase 1B, Phase 2, Phase 3, Phase 4, and Phase 4 upper slopes. The design specifications for the



LEGEND

- PROPERTY LINE
- PERMITTED LANDFILL OPERATION AREA
- EXTRACTION WELL

EXHIBIT 13

EASTERN CANYONS LANDFILL AREA

EXISTING SUBSURFACE BARRIERS AND EXTRACTION WELL SYSTEMS

PUENTE HILLS LANDFILL
SANITATION DISTRICTS

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Eastern Canyons composite liner system exceed the Subtitle D requirements described in RWQCB Order No. 93-062. The floor of the Eastern Canyons composite liner system consists of the following components: subdrain, clay liner (minimum two foot thick with a hydraulic conductivity of less than 1 x 10^{-7} cm/sec), geomembrane liner (80 mil high density polyethylene), LCRS, geotextile filter, and protective soil layer. The side slope of the Eastern Canyons composite liner system consists of the following components: geosynthetic clay liner, geomembrane liner, geosynthetic drainage layer, geotextile filter, and protective soil layer. The design specifications for each phase of the liner system were approved by the RWQCB prior to construction. The construction quality assurance for each phase of the liner system was performed by an independent consultant. The RWQCB inspected and approved each liner system before waste placement.

3.0 COMPLIANCE RECORD

RWQCB Order No. 93-062, §13(B)(2)(c) requires a comprehensive discussion of the compliance record, and of any corrective actions taken or planned which may be needed to bring the discharger into full compliance with the landfill's waste discharge requirements. As discussed in Section 1.0, operations at the Puente Hills Landfill follow the conditions specified in various waste discharge requirements and monitoring and reporting programs issued by the RWQCB. In 2000, the Sanitation Districts were in full compliance with these conditions. This section discusses the Sanitation Districts' compliance with these operating conditions.

The requirements in various permits issued by the RWQCB that are applicable to the operations of the Puente Hills Landfill during 2000 can be summarized into three major categories: landfill operations, water quality monitoring and response program, and containment systems. The Sanitation Districts' compliance with these conditions in 2000 is discussed below:

3.1 LANDFILL OPERATIONS

During 2000, the Puente Hills Landfill accepted nonhazardous solid wastes, inert solid wastes, biosolids, and treated municipal solid waste incinerator ash. The site did not accept any of the unacceptable wastes specified in WDR Order Nos. 90-046, 91-035, or 93-070. The minimum solids-to-liquids ratio of 5:1 by weight, as specified in the WDRs, was always maintained in 2000. In fact, the typical solids-to-liquids ratio at the Puente Hills Landfill during 2000 was approximately 300:1.

Landfill gas condensate is collected at the Puente Hills Landfill, treated, and discharged to the sewer system pursuant to an industrial waste discharge permit for the site. Liquid collected from the Canyon 9 LCRS and the Eastern Canyons LCRS is also discharged to the sewer system pursuant to the permit. In 2000, the quality of the discharged wastewater met the discharge requirements specified in the permit. No LCRS liquid or condensate was reused on site in 2000.

Extracted groundwater is collected from the Canyon 9 underdrain, the underdrain and horizontal drain systems installed beneath the Eastern Canyons protection liner system, and from extraction wells located upgradient of Subsurface Barriers 1, 2, 3, and 4. The underdrains are installed at least five feet below the liner to prevent groundwater from rising up to the liner. The Eastern Canyons underdrain is connected to the horizontal drains located along the slopes of the landfill under the liner. The horizontal drains are used to dewater the cut slopes to ensure stability. The groundwater from the Eastern Canyons underdrain and Barrier 4 extraction system is either used for dust control (no treatment required) or discharged to the sanitary sewer. In 2000, the reused water met the onsite water reuse requirements specified in Provision E of RWQCB Order No. 93-070. The groundwater from the Canyon 9 underdrain and Barriers 1, 2, and 3 extraction systems was discharged to the sewer system. In 2000, the quality of all discharged groundwater to the sewer system met the discharge requirements specified in the industrial waste discharge permit.

The Sanitation Districts operate the Puente Hills Landfill in accordance with all other requirements for disposal site operations set forth in WDR Order Nos. 90-046, 91-035, and 93-070. A periodic waste-load checking program has been implemented at the landfill to ensure that unauthorized hazardous materials are not disposed of at the landfill. The Sanitation Districts adequately cover all waste at the end of each operating day. The County of Los Angeles Department of Health Services conducts a solid waste facility inspection of the Puente Hills Landfill on a monthly basis. The California Integrated Waste Management Board and the RWQCB also conduct periodic inspections of the site. All Federal, State, County and City sanitary health codes, rules, regulations, and ordinances pertinent to the disposal of wastes at the landfill are complied with in the operation and maintenance of the landfill.

Surface water drainage controls are installed at the landfill to adequately divert rainfall runoff away from the site to prevent ponding over the waste-filled areas of the landfill and control the potential for cover erosion. Any surface water that leaves the site is permitted by a National Pollutant Discharge Elimination System (NPDES) permit. Pursuant to the NPDES, a Storm Water Pollution Prevention Plan (SWPPP) was developed to prevent surface water runoff from being affected by industrial activities at the site such as earth moving; refuse disposal; equipment maintenance; storage of chemicals, fuels, and recovered hazardous materials from the waste load checking program; operation and maintenance of various environmental control systems; and energy facility operations. The SWPPP includes a description of surface water and flow control facilities, storage and use of industrial materials, best management practices to protect surface water quality, a storm water runoff monitoring program, and a list of the personnel responsible for implementing the SWPPP.

3.2 WATER QUALITY MONITORING AND RESPONSE PROGRAM

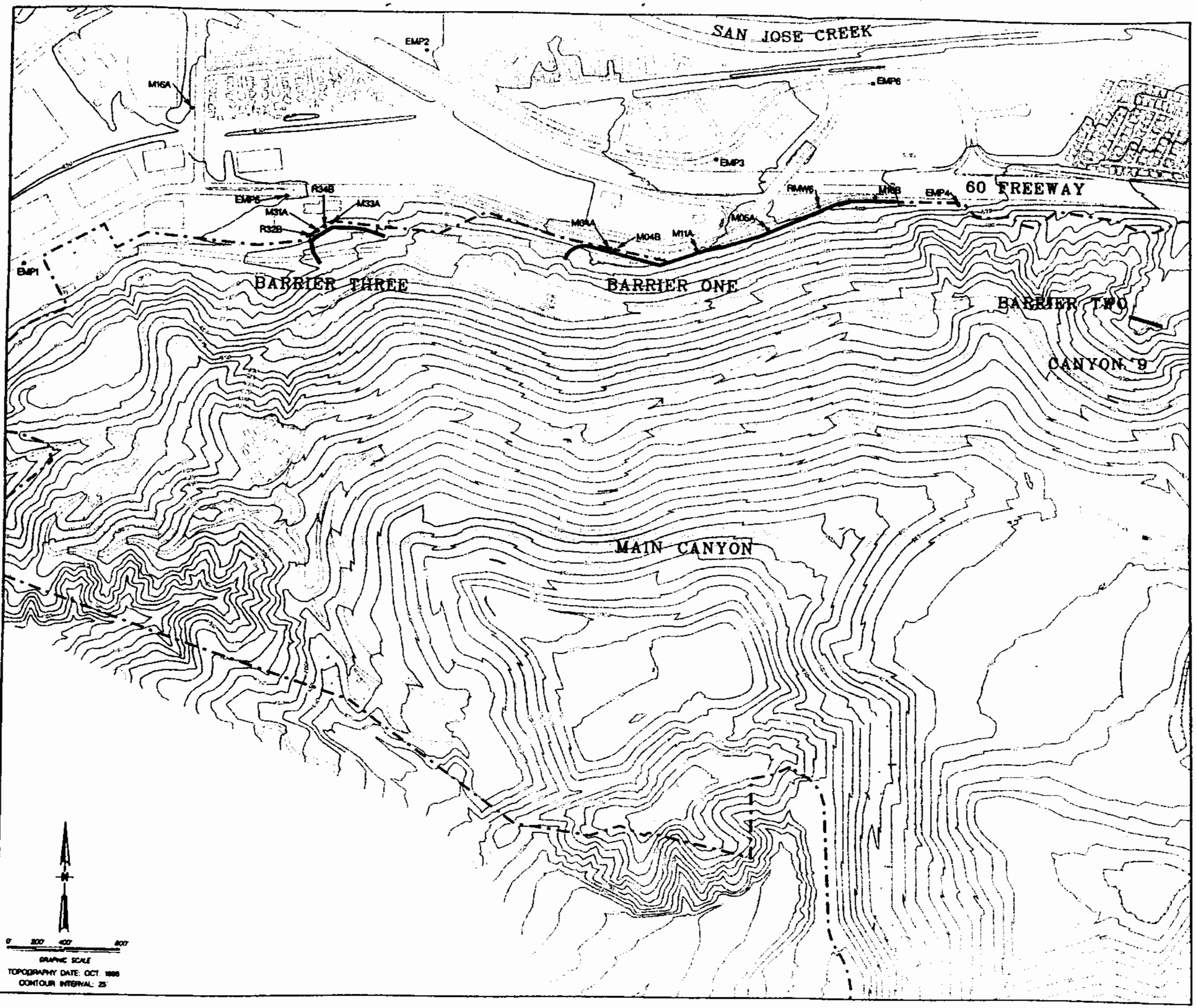
The Sanitation Districts submitted *Puente Hills Landfill Water Quality Monitoring System Report for Compliance with RWQCB Order No. 93-062* (herein referred to as the Subtitle D Report) to the RWQCB on August 9, 1994. This report includes a complete water quality monitoring program for the Puente Hills Landfill. It presents, for both groundwater and surface water monitoring, the detection monitoring systems, monitoring parameters, constituents of concern, monitoring and reporting frequency, sampling and analysis plans (including both field and laboratory quality assurance and quality control program), statistical methods for data analysis, and concentration limits developed for all monitoring parameters and constituents of concern (if available data allowed the calculations of these limits). The water quality monitoring program was amended based on the Sanitation Districts' discussion with the RWQCB staff on November 7, 1994. Two letters dated November 21, 1994 (one on Laboratory Analyses and Reporting of Water Quality and Ash Sampling Results, the other on Water Quality Monitoring and Reporting Program) documented the meeting discussion. The Sanitation Districts have been implementing the program described in the Subtitle D Report since the fourth quarter of 1994 for the Main Canyon and Canyon 9 areas of the Puente Hills Landfill. Quarterly monitoring reports were submitted to the RWQCB in 2000 to present detailed water quality monitoring activities and monitoring results at the Puente Hills Landfill. Each quarterly report includes waste disposal information, results from the waste load checking programs, sludge and treated ash analysis results, descriptions of water and wastewater management, groundwater monitoring data including sampling information, surface water monitoring data, if any, and a discussion of water quality monitoring results. Also included in the report as an appendix are all laboratory analysis results and quality assurance/quality control information required by Order No. 93-062, § 13(A).

Main Canyon

For the Main Canyon area of the landfill, there have been several modifications to the water quality monitoring program since 1994 as a result of volatile organic compound (VOC) detections in groundwater downgradient of Barriers 1 and 3. The Sanitation Districts submitted *Puente Hills Landfill - Main Canyon and Canyon 9, Revised Detection and Evaluation Monitoring Program* to the RWQCB on November 15, 1996. The report proposed revised groundwater detection and evaluation monitoring programs for the Main Canyon and Canyon 9, as required by the State Water Resources Control Board's Order No. WQ 96-10. For the Main Canyon area, the Sanitation Districts proposed an evaluation monitoring system that included seven existing monitoring wells (RMW6, M31A, R32B, M33A, R34B, EMP5 and M16A) and nine new monitoring wells (M04A, M04B, M05A, M10B, M11A, EMP1, EMP2, EMP3, and EMP4). The locations of the monitoring wells for the Main Canyon are shown in Exhibit 14. The RWQCB approved the evaluation monitoring program for the Main Canyon and the installation of the proposed new monitoring wells on December 30, 1996. During the third quarter of 1997, the Sanitation Districts completed installation of the nine new monitoring wells and began quarterly monitoring of these wells. Details about the installation of the new monitoring wells are included in *Detection and Evaluation Monitoring Programs for the Main Canyon at Puente Hills Landfill* (IT Corporation, March 1998), submitted to the RWQCB on April 10, 1998.

On September 30, 1998, the Sanitation Districts submitted *Puente Hills Landfill Main Canyon Final Evaluation Monitoring Program* to the RWQCB. This report included a detailed discussion of the regional and site geology and hydrogeology at and near the Puente Hills Landfill Main Canyon and of the nature and extent of VOCs in the groundwater. It also presented the final evaluation monitoring program (EMP) proposed for the Main Canyon. The proposed final EMP kept all of the existing monitoring wells except for M16A (because M16A was found to be affected by industrial contamination from the San Gabriel Groundwater Basin), and added one additional offsite monitoring well, EMP6. The locations of these monitoring wells are shown in Exhibit 14. The RWQCB approved the final EMP on October 7, 1998; and the Sanitation Districts began implementing the final EMP in the fourth quarter of 1998.

After the final EMP was approved, the Sanitation Districts prepared the *Puente Hills Landfill Main Canyon Draft Engineering Feasibility Study and Amended Report of Waste Discharge for Corrective Action Program* report in December 1998 pursuant to Title 27, California Code of Regulations. The proposed Corrective Action Program (CAP) was based on the following groundwater quality findings obtained from the EMP:



LEGEND

PROPERTY LINE

MONITORING WELL

EXISTING SUBSURFACE BARRIER

EXHIBIT 14

GROUNDWATER QUALITY MONITORING LOCATIONS FOR THE MAIN CANYON LANDFILL AREA

PUENTE HILLS LANDFILL
SANITATION DISTRICTS

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- The landfill is located on non-water bearing bedrock that yields limited amounts of groundwater;
- Groundwater found at the site has naturally poor quality and is not suitable for drinking;
- VOCs represent the only water quality concern;
- The source of the VOCs is landfill gas contact with water. The levels of VOCs in onsite groundwater range from below the maximum contaminant levels (MCLs) for drinking water to less than ten times the MCLs.
- The vertical extent of VOCs affected groundwater is up to 120 feet in the eastern Barrier 1 area, 70 feet in the western Barrier 1 area, and 80 feet at Barrier 3;
- There are two offsite areas where VOCs are found in groundwater: (1) the area immediately north of the eastern Barrier 1 area, and (2) the portion of the historical San Jose Creek stream bed between western Barrier 1 and offsite monitoring well EMP5;
- The lateral extent of VOCs for the area north of eastern Barrier 1 is less than 200 feet from the property line. The total VOC level in groundwater is approximately 30 μg/L (or parts per billion) with no VOCs detected at levels over four times their MCLs;
- Well EMP5 is about 350 feet from Barrier 3 and represents the downgradient edge of landfill affected groundwater. It is located more than 2,000 feet from the nearest production well. Only one VOC, 1,2-dichloroethane, is occasionally detected at levels below 1 μg/L;
- The Puente Hills Landfill has not impaired any beneficial uses of groundwater.

On December 7, 1998, the Sanitation Districts announced a public workshop and public comment period for the proposed CAP for the Puente Hills Landfill Main Canyon. A copy of the notice was published in the December 7, 1998 edition of the San Gabriel Valley Tribune. The Sanitation Districts placed copies of the *Puente Hills Landfill Main Canyon Draft Engineering Feasibility Study and Amended Report of Waste Discharge for Corrective Action Program* report at two local libraries (Hacienda Heights Public Library in Hacienda Heights and Sunkist Public Library in La Puente) from December 7, 1998 to January 7, 1999 for review by the public. On December 17, 1998, the Sanitation Districts held a public workshop at its Joint Administration Office in Whittier and presented information regarding groundwater quality conditions at the site and the proposed CAP. The proposed CAP consists of the following components:

- continued operation of existing subsurface Barrier 1 and Barrier 3 groundwater extraction systems to protect groundwater quality;
- continued operation and maintenance of the existing landfill gas collection system to minimize the potential landfill gas contact with groundwater;
- the use of natural attenuation for remediating offsite areas where low levels of VOCs are found in the groundwater;
- installation of additional gas extraction wells in the Main Canyon area to further reduce the potential of landfill gas contact with groundwater; and
- conducting a monitoring program to ensure the landfill continues to have no adverse effect on the beneficial uses of groundwater in the adjacent basins.

On January 11, 1999, the Sanitation Districts submitted the *Puente Hills Landfill Main Canyon Final Engineering Feasibility Study and Amended Report of Waste Discharge for Corrective Action Program* report to the RWQCB. In an appendix of this report, the Sanitation Districts included all comments on the CAP received during the public review period and the Sanitation Districts' responses to these comments.

On May 28, 1999, the RWQCB found *Puente Hills Landfill Main Canyon Final Engineering Feasibility Study and Amended Report of Waste Discharge for Corrective Action Program* to be complete and acceptable, and distributed, for review by interested and affected parties, tentative revised waste discharge requirements for the proposed CAP and a revised monitoring and reporting program under the proposed CAP. On June 30, 1999, the RWQCB adopted Order No. 99-059 and revised Monitoring and Reporting Program No. 2294 at its regular board meeting. The Sanitation Districts began implementing the new CAP for the Puente Hills Landfill Main Canyon in the third quarter of 1999.

Pursuant to the requirements in Order No. 99-059, on July 28, 1999, the Sanitation Districts submitted a timetable for implementation of the proposed CAP to the RWQCB. The plans and specifications to implement the 15 new gas extraction wells proposed in the CAP, *Puente Hills Landfill Main Canyon Gas Control Wells - 1999* (Drawing No. 69D-g-116) and *Special Provisions for Construction of Puente Hills Landfill Main Canyon Gas Control Wells - 1999*, dated July 1999, were also submitted for the RWQCB's review. These plans and specifications, as well as the schedule for their implementation were approved by the RWQCB in a letter dated August 11, 1999. The construction of the gas control wells began in October 1999 and was completed in the middle of January 2000. The new wells were placed into operation immediately after each well was constructed. Performance of these gas extraction wells has been monitored by the Sanitation Districts to ensure their operation is optimized for gas control purposes.

Canyon 9

For the Canyon 9 portion of the landfill, the Sanitation Districts proposed a revised detection monitoring program in 1996 in *Puente Hills Landfill - Main Canyon and Canyon 9, Revised Detection and Evaluation Monitoring Program.* The revised evaluation monitoring program proposed in this report was approved by the RWQCB on December 30, 1996. However, the RWQCB deferred the review of the detection monitoring program proposed by the Sanitation Districts for Canyon 9. Therefore, the Sanitation Districts continued to monitor the five compliance monitoring wells (M24A, M27B, M28B, M29B, and M30B) in 2000 according to the program proposed in the Subtitle D Report. Wells M28A and M30B are typically dry. The locations of the monitoring wells for Canyon 9 are shown in Exhibit 15.

In June 2000, the RWQCB requested the Sanitation Districts to propose an updated detection monitoring program for the Canyon 9 area. This request was necessary not only because the detection monitoring program proposed in 1996 had not been formally approved, but also because of a change in groundwater flow conditions downgradient of Barrier 2. The Sanitation Districts began to operate three bedrock groundwater extraction wells upgradient of Barrier 2 in October 1998

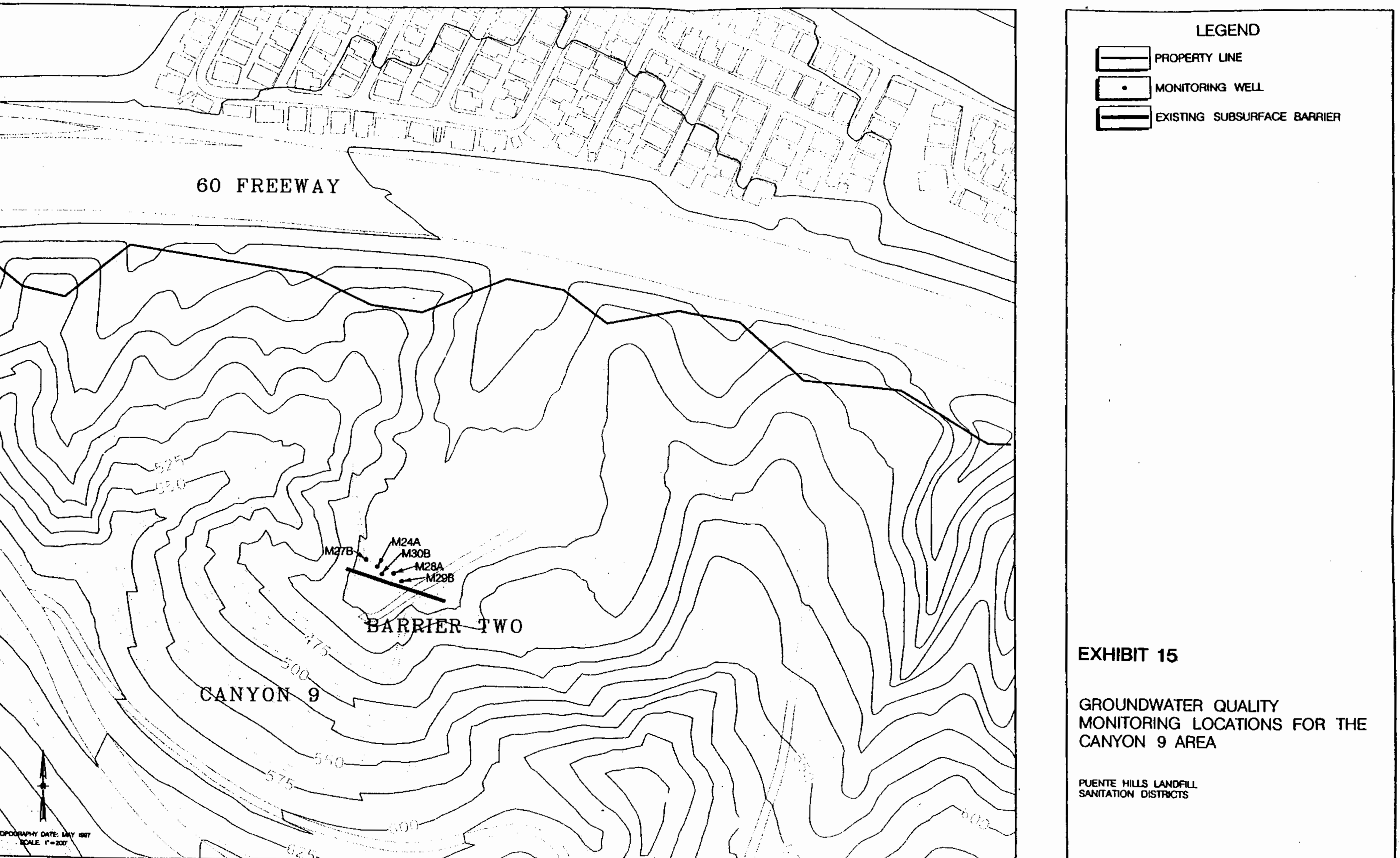


EXHIBIT 15

GROUNDWATER QUALITY MONITORING LOCATIONS FOR THE CANYON 9 AREA

PUENTE HILLS LANDFILL
SANITATION DISTRICTS

to provide groundwater control in the uppermost aquifer in the bedrock. The operation of these extraction wells has resulted in a pronounced reduction of water columns in wells M24A and M27B, making it difficult to collect samples from these wells. In a letter to the RWQCB dated March 29, 2001, the Sanitation Districts proposed an updated detection monitoring program for the Canyon 9 area. This updated detection monitoring program is under review.

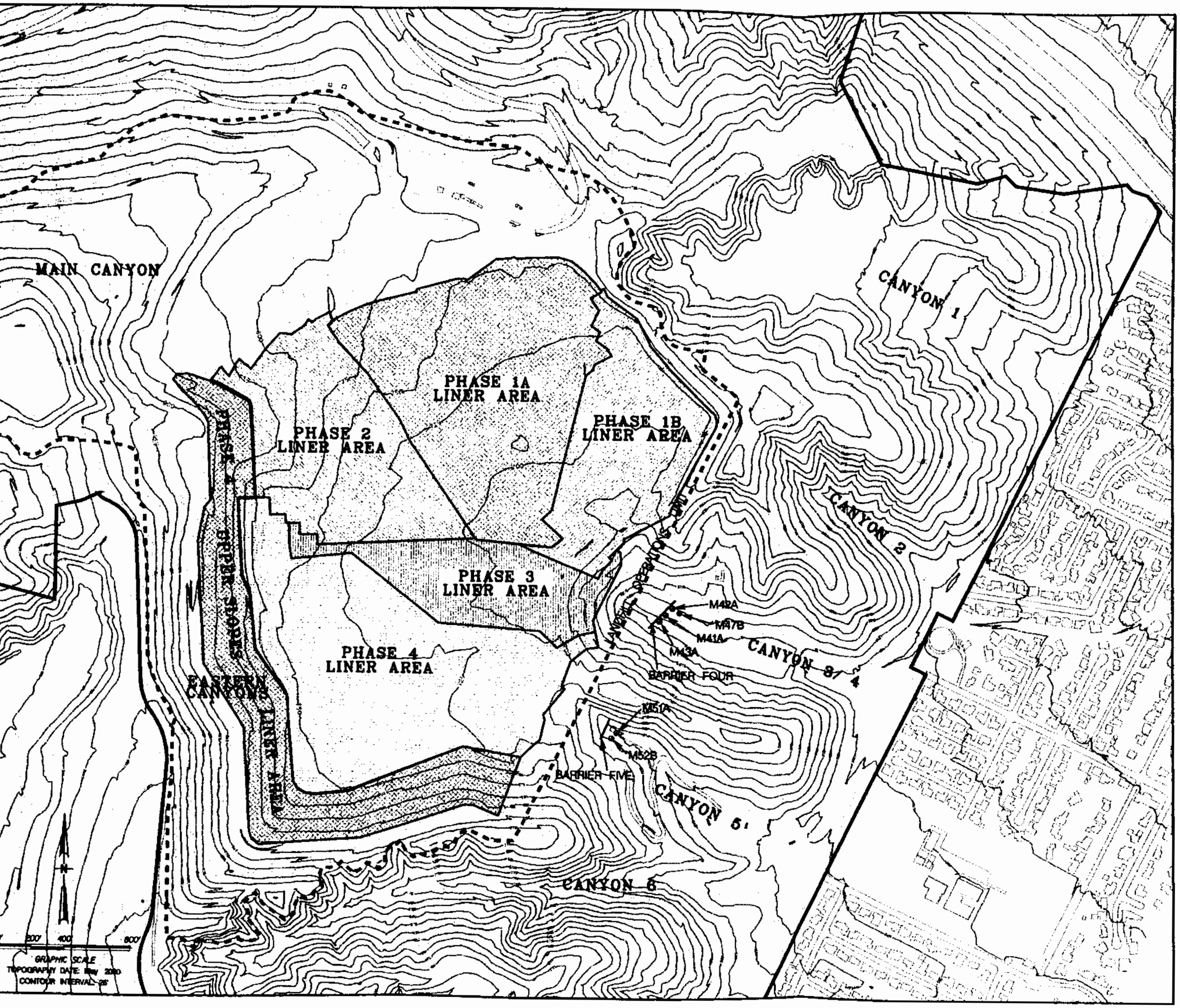
Eastern Canyons

The Sanitation Districts initiated groundwater monitoring at wells M41A, M42A, and M43A, located downgradient of Barrier 4, in 1995, before refuse operations were initiated in this area. In February 1998, the Sanitation Districts submitted *Puente Hills Landfill Eastern Canyons Groundwater Quality Detection Monitoring Program* to the RWQCB. This report proposed an updated detection monitoring program for the entire Eastern Canyons area including areas monitored by wells M41A, M42A, and M43A. An additional bedrock monitoring well M47B was proposed in the Canyons 3 and 4 area. In addition, the Sanitation Districts proposed to install an alluvial monitoring well M51A and a bedrock monitoring well M52B downgradient of the proposed Barrier 5. The locations of the monitoring wells for the Eastern Canyons are shown in Exhibit 16. On April 21, 1998, the Sanitation Districts received approval from the RWQCB to install bedrock groundwater monitoring well M47B in Canyons 3 and 4. M47B was installed in July 1998, and the first groundwater sample from this monitoring well was collected in the third quarter of 1998. On October 7, 1998, the RWQCB approved the proposed detection monitoring program contained in the *Puente Hills Landfill Eastern Canyons Groundwater Quality Detection Monitoring Program* report including the installation of wells M51A and M52B in Canyon 5. The Sanitation Districts installed monitoring wells M51A and M52B in October and November 1999 after Subsurface Barrier 5 and storm channel improvements in Canyon 5 were completed. The first groundwater samples from these two wells were collected in the fourth quarter of 1999.

Surface Water Monitoring

The Puente Hills Landfill drainage system consists of graded benches, drainage channels, debris basins, and downdrains. The surface water drainage system minimizes surface water infiltration, ponding, and slope erosion by providing a means for rainfall runoff to be diverted from the front face and top deck of the landfill and channeled into desilting basins, and eventually, into storm drains. The surface water drainage system is depicted on Exhibit 17. In 2000, the drainage system functioned effectively as designed.

In 1992, the Sanitation Districts prepared a Storm Water Pollution Prevention Plan (SWPPP) for the Puente Hills Landfill pursuant to the California General Permit requirements for compliance with the National Pollutant Discharge Elimination System (NPDES) rules. The SWPPP calls for the use of best management practices to minimize the potential for runoff contamination by landfill operations. To fulfill the requirements of the General Permit and to determine the effectiveness of the SWPPP, the Sanitation Districts developed a runoff monitoring program in December 1992. The implementation of this program began in 1993 and continued during 2000. The NPDES permit was revised by the State Water Resources Control Board on April 17, 1997. Pursuant to the revised NPDES permit, the Sanitation Districts updated the SWPPP on August 1, 1997.



LEGEND

- PROPERTY LINE
- PERMITTED LANDFILL OPERATION AREA
- MONITORING WELL

EXHIBIT 16

GROUND WATER QUALITY MONITORING LOCATIONS FOR THE EASTERN CANYONS LANDFILL AREA

PUENTE HILLS LANDFILL
SANITATION DISTRICTS

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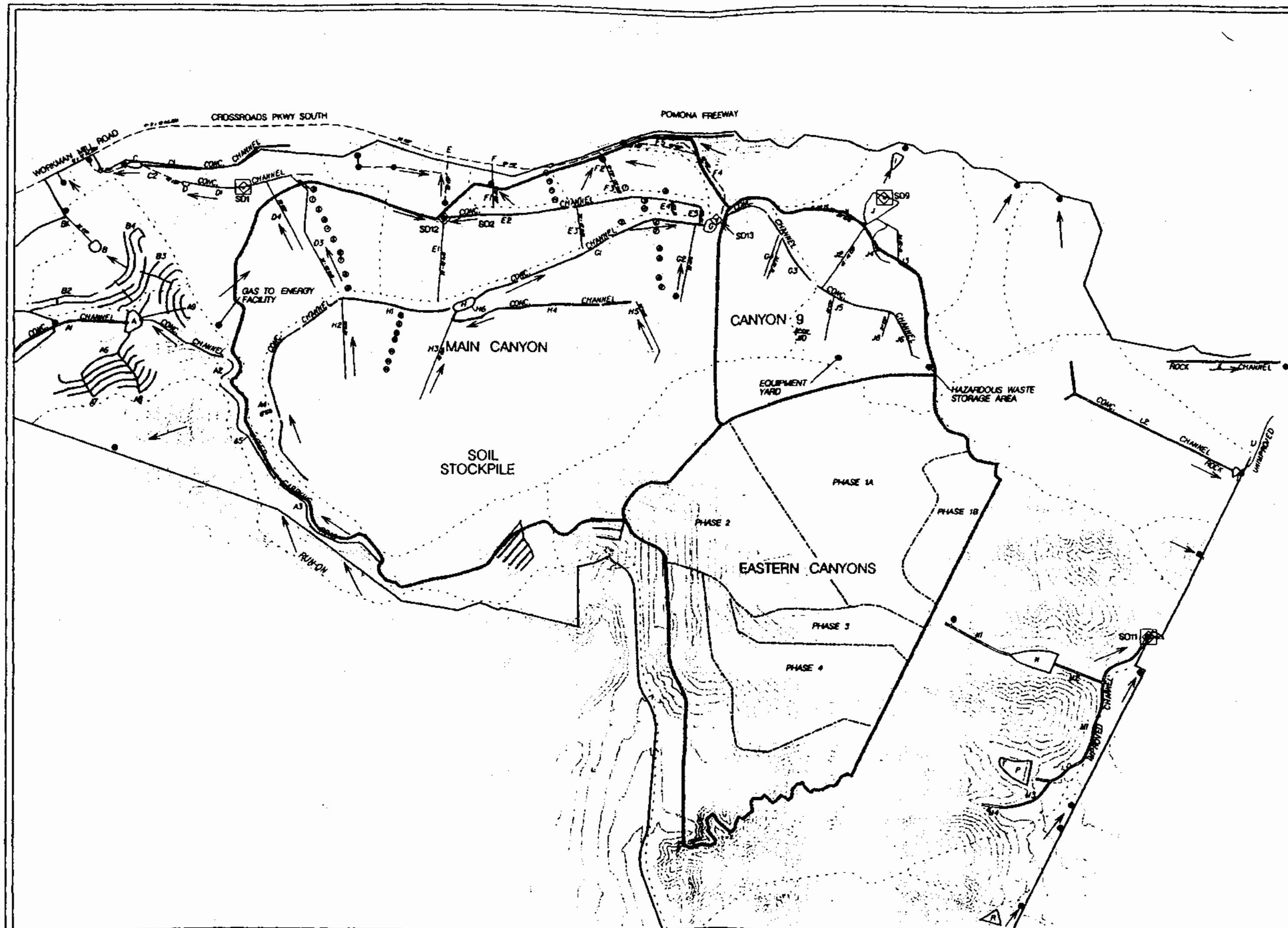


PUENTE HILLS LANDFILL
COUNTY SANITATION DISTRICTS OF L.A. COUNTY
WHITTIER, CA.

PROPERTY LINE
CANYON SUBDIVISION LINE
DEBRIS BASIN (LABELED A THROUGH R)
TRIBUTARY LINE OR CHANNEL (LABELED A1 THROUGH N6)
UNDERGROUND TRIBUTARY LINE
PAVED ACCESS
DRAINAGE AREA BOUNDARY
SURFACE WATER FLOW DIRECTION
SURFACE WATER SAMPLING OR OBSERVATION LOCATION
POINTS OF SURFACE WATER DISCHARGE
NPDES STORMWATER DISCHARGE VISUAL OBSERVATION LOCATION
NPDES SURFACE WATER SAMPLING LOCATION

EXHIBIT 17

DRAINAGE SYSTEM AND SURFACE WATER SAMPLING LOCATIONS

PUENTE HILLS LANDFILL
SANITATION DISTRICTS, AUGUST

SOURCE: AERIAL PHOTOGRAMMETRY TAKEN APRIL

3.3 CONTAINMENT SYSTEMS

The Sanitation Districts completed the design and installation of the composite liner system for the upper slopes of the Eastern Canyons Phase 4 area (shown in Exhibit 16) in January 2000. The following technical design plans were submitted to the RWQCB for the Phase 4 upper slopes composite liner system before construction:

1) "Special Provisions and Contract Drawings for Construction of Puente Hills Landfill Composite Liner System Phase 4 - Upper Slopes", dated February 1999;
2) "Soil and Rock Components Quality Assurance Manual for Construction of Puente Hills Landfill Composite Liner System Phase 4 - Upper Slopes", dated February 1999;
3) "Geosynthetics Quality Assurance Manual for Construction of Puente Hills Landfill Composite Liner System Phase 4 - Upper Slopes", dated February 1999.

These design plans supplemented the technical design plans for the Phase 4 liner system which was previously approved by the RWQCB on August 18, 1998. The RWQCB reviewed the documents and approved the design plans for the Phase 4 upper slopes composite liner system in a letter dated April 8, 1999. Construction of the liner system took place from May 1999 through January 2000. Construction quality assurance services were performed by the Sanitation Districts' consultant, Advanced Earth Sciences, Inc. The final construction quality assurance report for this project was completed in April 2000 and submitted to the RWQCB in May 2001.

4.0 WATER QUALITY MONITORING PROGRAMS

Water quality monitoring programs implemented at the Puente Hills Landfill during 2000 include groundwater monitoring, surface water monitoring, monitoring of liquid collection and removal systems (LCRS) of the Canyon 9 and Eastern Canyons liner systems, monitoring of reused water, and monitoring of dewatered biosolids and treated incinerator ash disposed of at the landfill.

4.1 GROUNDWATER

At the Puente Hills Landfill, different groundwater monitoring programs are implemented in different operating areas. This discussion on the groundwater monitoring programs is divided into two sections. The first section discusses those areas of the landfill under a detection monitoring program, and the second section discusses those areas of the landfill under a corrective action program.

4.1.1 Detection Monitoring Program

The groundwater monitoring wells at Canyon 9 and the Eastern Canyons areas of the Puente Hills Landfill have not detected any landfill effect. Therefore, they are monitored in accordance to a detection monitoring program.

Canyon 9

Monitoring Wells

Based on the Subtitle D Report, the compliance monitoring wells for the Canyon 9 area are M24A, M27B, M28A, M29B, and M30B (refer to Exhibit 15). No landfill effect has been observed at these monitoring wells since monitoring began. These wells are situated in alluvium and bedrock of the Pico Formation at the mouth of Canyon 9. Monitoring wells M28A and M30B have had insufficient water for sampling purposes since their installation. During 2000, these wells were tested on a quarterly basis for metal surrogates (pH, total dissolved solids, sulfate, chloride, and nitrate) and Appendix I VOCs (the VOCs contained in Appendix I to Title 40, Code of Federal Regulations, Part 258).

As mentioned in Section 2.3, three bedrock extraction wells were installed upgradient of Barrier 2 in 1998. The groundwater extraction resulted in lowered groundwater levels in this area. Consequently, it is not always possible to obtain a sufficient water volume to analyze for all of the monitoring parameters. During the fourth quarter of 2000, a groundwater sample could not be obtained from monitoring well M27B because it was dry.

Eastern Canyons

The detection monitoring program for the Eastern Canyons area follows the program described in the *Puente Hills Landfill Eastern Canyons Groundwater Quality Detection Monitoring Program* report which was approved by the RWQCB on October 8, 1999 and later amended on May 24, 2000. The groundwater monitoring system for the Eastern Canyons area includes detection monitoring wells located downgradient of Barriers 4 and 5.

Barrier 4 Monitoring Wells

Monitoring wells M41A, M42A, M43A, and M47B are located downgradient of Barrier 4. The Sanitation Districts began to monitor M41A, M42A, and M43A in July 1995 and began to monitor M47B in October 1998. To date, no landfill effect has been observed at these monitoring wells since monitoring began. Monitoring wells M41A, M42A, and M43A monitor the uppermost aquifer, which is in the alluvium, downgradient of Barrier 4; while monitoring well M47B monitors the bedrock formation downgradient of Barrier 4. The locations of these monitoring wells are shown in Exhibit 16. For the first and second quarters of 2000, monitoring wells M41A, M42A, and M43A were tested for all general parameters, seven metals including iron (both total and filtered), one inorganic, and the Appendix I VOCs. Well M41A became dry during the first quarter sampling event; therefore, there was insufficient water to analyze for all quarterly monitoring parameters. For the first and second quarters of 2000, monitoring well M47B was tested for all general parameters, metals (both total and filtered), inorganics, and Appendix I VOCs. Beginning in the third quarter of 2000, all Barrier 4 monitoring wells were tested for 16 general parameters and the Appendix I VOCs pursuant to an amended Monitoring and Reporting Program for the Eastern Canyons Expansion area which was approved by the RWQCB on May 24, 2000.

Barrier 5 Monitoring Wells

Monitoring wells M51A and M52B are located downgradient of Barrier 5. The installation of these two wells was completed in October 1999, and the Sanitation Districts began to monitor these two wells in December 1999. Monitoring well M51A monitors the uppermost aquifer, which is in the alluvium, downgradient of Barrier 5; while monitoring well M52B monitors the bedrock formation downgradient of Barrier 5. The locations of these monitoring wells are shown in Exhibit 16. During 2000, monitoring wells M51A and M52B were tested for all general parameters, metals (both total and filtered), inorganics, and Appendix I VOCs. During the first quarter of 2000, well M51A became dry during sampling; therefore, there was insufficient water to analyze for all quarterly monitoring parameters. During the third quarter of 2000, well M51A was tested for all constituents of concern (COCs). The Sanitation Districts had previously planned to analyze the first groundwater sample from M51A (collected in the fourth quarter of 1999) for all COCs, but the well became dry during sampling. To compensate for the incomplete analysis of the first sample, the Sanitation Districts collected enough groundwater sample during the third quarter of 2000 to analyze for all COCs.

4.1.2 Corrective Action Program

On June 30, 1999, the RWQCB adopted Order No. 99-059 and revised Monitoring and Reporting Program No. 2294 for the Corrective Action Program (CAP) at the Puente Hills Landfill Main Canyon area. During 2000, the Main Canyon area groundwater monitoring wells followed the monitoring program contained in the revised Monitoring and Reporting Program No. 2294 for the CAP. For discussion purposes, the groundwater monitoring wells included in the CAP are divided into three groups: Barrier 1 monitoring wells, Barrier 3 monitoring wells, and offsite monitoring wells.

Barrier 1 Monitoring Wells

The monitoring system at Barrier 1 includes seven wells, M04A, M04B, M05A, RMW6, M10B, M11A, and EMP4 (refer to Exhibit 14 for locations). No landfill effect has been observed at monitoring wells M04B, M11A, and EMP4 since monitoring began. During 2000, monitoring wells M04B, M11A, and EMP4 were tested for metal surrogates and Appendix I VOCs. In addition, during the fourth quarter of 2000, monitoring wells M04B and M11A were tested for total organic halogen. The purpose of this additional testing was to collect background information about these wells.

A landfill effect has been observed at Barrier 1 monitoring wells M04A, M05A, RMW6, and M10B. During the first, second, and fourth quarters of 2000, these monitoring wells were tested for metal surrogates, water chemistry parameters, organic matter parameters, and Appendix I VOCs. During the third quarter, these monitoring wells were tested for all COCs in accordance to WDR Order No. 99-059. The COC list includes all water quality parameters listed in WDR Order No. 90-046 and in Appendix II to Title 40, Code of Federal Regulations, §258.54 (Appendix II constituents). RWQCB Order No. 99-059 requires the analysis of all COCs once every three years beginning in 2000 for CAP monitoring wells affected by the landfill.

Barrier 3 Monitoring Wells

The monitoring system at Barrier 3 includes four wells, M31A, R32B, M33A, and R34B (refer to Exhibit 14 for locations). Monitoring wells R32B and R34B are completed in the Pico Formation siltstone, and monitoring wells M31A and M33A are completed in alluvium overlying the Pico Formation bedrock. No landfill effect has been observed at monitoring wells R32B and R34B since monitoring began. During 2000, monitoring wells R32B and R34B were tested for metal surrogates and Appendix I VOCs.

A landfill effect has been observed at Barrier 3 monitoring wells M31A and M33A. During the first, second, and fourth quarters of 2000, these monitoring wells were tested for metal surrogates, water chemistry parameters, organic matter parameters, and Appendix I VOCs. During the third quarter, these monitoring wells were tested for all COCs in accordance to WDR Order No. 99-059. RWQCB Order No. 99-059 requires the analysis of all COCs once every three years beginning in 2000 for CAP monitoring wells showing a landfill effect.

Offsite Monitoring Wells

The offsite monitoring wells downgradient of the Puente Hills Landfill Main Canyon area include five wells, EMP1, EMP2, EMP3, EMP5, and EMP6 (refer to Exhibit 14 for locations). No landfill effect has been observed at monitoring wells EMP1, EMP2, EMP3, and EMP6 since monitoring began. During 2000, monitoring wells EMP1, EMP2, EMP3, and EMP6 were tested for metal surrogates and Appendix I VOCs. In addition, during the first, second, and fourth quarters of 2000, monitoring well EMP6 was tested for other general parameters and total and soluble metals. The purpose of this additional testing was to collect background information on these wells.

A landfill effect has been observed at offsite monitoring well EMP5. During the first, second, and fourth quarters of 2000, monitoring well EMP5 was tested for metal surrogates, water chemistry parameters, organic matter parameters, and Appendix I VOCs. During the third quarter, monitoring well EMP5 was tested for all COCs in accordance to WDR Order No. 99-059. RWQCB Order No. 99-059 requires the analysis of all COCs once every three years beginning in 2000 for CAP monitoring wells affected by the landfill.

4.2 SURFACE WATER

As mentioned in Section 3.2, surface water monitoring at Puente Hills Landfill follows the requirements in the NPDES permit. The most recent surface water monitoring program was approved by the RWQCB on May 22, 1997, following its review of *Request for Change in Surface Water Monitoring Requirements at Calabasas, Puente Hills, Scholl Canyon, and Spadra Landfills*, submitted by the Sanitation Districts on February 18, 1997. The surface water monitoring system consists of three monitoring locations where runoff samples are collected. The surface runoff monitoring locations are shown in Exhibit 17. Monitoring location SD1 is located downgradient of Main Canyon, monitoring location SD9 is located downgradient of Canyon 9, and monitoring location SD11 is located downgradient of the Eastern Canyons. Results for the runoff samples are also separately reported to the RWQCB in the NPDES annual report for the Puente Hills Landfill.

During 2000, two sets of runoff samples were collected from each surface water monitoring location. These samples were analyzed for pH, conductivity, suspended solids, total organic carbon, selected metals, and volatile organic compounds.

4.3 LIQUID COLLECTION AND REMOVAL SYSTEM (LCRS)

Liquid collection and removal systems (LCRS) were installed as part of the composite liner systems for Canyon 9 and the Eastern Canyons areas of the Puente Hills Landfill. Water collected from both LCRSs is discharged to the sewer system pursuant to an industrial waste discharge permit. The monthly LCRS collection rates for the Canyon 9 and Eastern Canyons LCRS are presented in Table 2. These systems functioned effectively in 2000. High flow rates to the Eastern Canyons LCRS during the winter months were due to rain storms in which rainwater entered the Eastern Canyons LCRS. To minimize the flow of rainwater into the LCRS, the Sanitation Districts installed a temporary protective membrane over any exposed liner located on the upper slopes of the Eastern Canyons area. The protective membrane diverted the rainfall runoff away from the LCRS and toward the storm runoff system.

TABLE 2
2000 LCRS FLOW RATES AND CANYON WATER EXTRACTION RATES
PUENTE HILLS LANDFILL

Month	Canyon 9 LCRS (gallons)	Eastern Canyons LCRS (gallons)	Barrier 1 (gallons)	Barrier 2 (gallons)	Barrier 3 (gallons)	Barrier 4 (gallons)	Eastern Canyons Drain System (gallons)
January	26,539	145,964 (1)	536,851	574	477,966	58,528	889,660
February	28,006	1,149,997 (1)	419,770	13,605	474,329	54,675	871,842
March	43,415	648,092 (1)	544,168	40,103	458,727	61,301	913,349
April	38,922	336,786 (1)	510,007	28,425	466,255	43,319	860,808
May	38,700	38,198	445,346	50,594	565,596	33,392	882,401
June	37,838	10,983	400,008	33,786	530,839	27,011	821,039
July	37,742	8,700	501,642	51,618	533,175	25,479	843,489
August	39,201	6,792	473,801	45,383	428,855	43,052	710,358
September	32,113	8,411	440,404	41,393	420,363	103,451	596,913
October	36,293	83,924 (1)	425,029	42,149	525,963	123,904	628,718
November	34,382	30,007	487,193	39,705	510,118	50,061	717,507
December	33,959	15,901	501,425	39,671	497,269	28,507	741,977
Total	427,110	2,483,755	5,685,644	427,006	5,889,455	652,680	9,478,061

(1) The increase in water volumes collected from the Eastern Canyons LCRS during the months of January, February, March, April, and October 2000 were a result of rainfall events.

The COC sampling for the Eastern Canyons LCRS follows the program proposed by the Sanitation Districts in the *Puente Hills Landfill - Eastern Canyons Groundwater Quality Detection Monitoring Program* report dated February 1998. As part of this program, the Sanitation Districts made the following two changes to COC sampling required by RWQCB Order No. 93-062.

(1) The LCRS liquid would be sampled at the same frequency as the groundwater monitoring wells, i.e., in March, June, September, and December each year, and the results would be submitted in the quarterly groundwater quality monitoring reports.

(2) Two of the quarterly samples obtained from the Eastern Canyons LCRS (samples obtained in June and December) would be analyzed for all general parameters and all Appendix II constituents. Any newly identified parameters would be added to the COC list. The other two quarterly samples obtained from the Eastern Canyons LCRS (samples obtained in March and September) would be analyzed for the general parameters, all metals and inorganics, and all Appendix I VOCs. These parameters are the most commonly found in the Eastern Canyons LCRS liquid and will be used to determine and update the list of COCs for the Eastern Canyons detections monitoring wells.

In a letter dated October 8, 1998, the RWQCB approved the proposed program and amended Monitoring and Reporting Program No. 7336 for the Eastern Canyons expansion area. In *Constituents of Concern Report for the Puente Hills Landfill, October 1998*, the Sanitation Districts proposed that the same COC monitoring program for the Eastern Canyons LCRS be implemented for the Canyon 9 LCRS sampling. During 2000, the Canyon 9 and Eastern Canyons LCRS were sampled in accordance to the above COC monitoring program. The results of these samples along with the updated constituents of concern scans were reported to the RWQCB in the 2000 water quality quarterly monitoring reports submitted to the RWQCB.

4.4 REUSED WATER

At the Puente Hills Landfill, groundwater is collected upgradient of each barrier through a system of extraction wells. The extraction volumes at each barrier during 2000 are summarized in Table 2. Table 2 also includes the extraction volumes for liquids collected from the Eastern Canyons drain system for 2000. The Eastern Canyons drain system includes the underdrain system beneath the liner on the floor and horizontal drains located along the side slopes. The purpose of the horizontal drains is to reduce hydrostatic pore pressure within the subgrade of the slopes in order to maintain slope stability. All extracted groundwater was discharged to a sanitary sewer pursuant to an industrial waste discharge permit except for portions of the groundwater from the Barrier 4 extraction system and the Eastern Canyons drain system which was reused for dust control. This reuse was approved by the RWQCB in a July 18, 1995 letter.

During 2000, approximately 8.5 out of the 9.5 million gallons of water collected from the Barrier 4 extraction wells and Eastern Canyons drain system was reused for dust control at the Puente Hills Landfill. The reuse water was analyzed quarterly for general parameters, water chemistry parameters (major anions and cations), organic matter parameters, metals, VOCs, and base neutral/acid extractable compound (BNAs). In addition, the reuse water was analyzed annually for gross alpha radioactivity and gross beta radioactivity.

4.5 DEWATERED BIOSOLIDS AND TREATED INCINERATOR ASH

The dewatered biosolids disposed of at the landfill originates at the Sanitation Districts' Joint Water Pollution Control Plant located in Carson, California and the Valencia Water Reclamation Plant located in Valencia, California. Summaries of the monthly biosolids disposal rate and the percent solids content in the biosolids are presented in Table 3. No biosolids from the Valencia Water Reclamation Plant were disposed of at the Puente Hills Landfill in February, March, and from June through December of 2000. Two different types of biosolids analyses are performed on a regular basis: a quarterly modified citrate extract procedure for metals analyses, and a semi-annual analysis for pesticides and VOCs. Monitoring performed during 2000 indicated no exceedances of Title 22 criteria for the identification of hazardous wastes for those analyses required in MRP Nos. 2294 and 7336, Section II (C). Results of biosolids analyses have been separately reported to the RWQCB in quarterly monitoring reports and are not included in this annual report.

Treated incinerator ash from Commerce Refuse to Energy Facility (Commerce) and the Southeast Resources Recovery Facility (SERRF) located in Long Beach was disposed of at the Puente Hills Landfill during 2000. Summaries of the monthly treated ash disposal rate are presented in Table 4. All incinerator ash accepted at the Puente Hills Landfill during 2000 was treated by a solidification/stabilization process. This process forms a concrete or aggregate like material which is used as road base at the Puente Hills Landfill. Ash treated by this process has been classified as a nonhazardous waste by the California Department of Toxic Substances Control.

In accordance with MRP No. 7336, the treated ash from Commerce and SERRF was analyzed by the Waste Extraction Test (WET) with citrate buffer and deionized water extraction on a quarterly basis. These results and disposal summaries have been separately submitted to RWQCB in quarterly monitoring reports and are not included in this annual report.

TABLE 3
2000 BIOSOLIDS DISPOSAL SUMMARY
PUENTE HILLS LANDFILL

Month	Joint Water Pollution Control Plant Biosolids		Valencia Water Reclamation Plant Biosolids	
	Tonnages	Solids Content [1] (%)	Tonnages	Solids Content [1] (%)
January	846	24.6	42	26.2
February	1,164	25.8	0	
March	1,575	26.2	0	
April	1,177	26.1	484	27.1
May	1,876	26.2	386	23.3
June	1,682	25.4	0	
July	1,609	26.0	0	
August	1,543	24.8	0	
September	833	25.7	0	
October	1,613	26.0	0	
November	993	26.3	0	
December	1,321	26.1	0	
Total	16,232		912	

(1) The solids content was based on a monthly average.

TABLE 4
2000 TREATED INCINERATOR ASH DISPOSAL SUMMARY
PUENTE HILLS LANDFILL

Month	Tonnages
January	15,727
February	14,418
March	13,824
April	12,680
May	13,302
June	18,472
July	18,363
August	18,341
September	16,604
October	16,535
November	14,949
December	15,721
Total	188,936

5.0 WATER QUALITY MONITORING RESULTS

This section discusses all water quality monitoring results obtained for 2000. All monitoring data presented in this annual report have previously been submitted to the RWQCB in quarterly monitoring reports.

5.1 MONITORING DATA SUMMARY

Water quality monitoring results for 2000 are presented in the Appendix (Tables A.1 through A.9) of this report. The Appendix includes, in tabular form, the data collected from each monitoring facility. In addition, graphs presenting five years of data for each constituent at each groundwater monitoring well are included pursuant to the requirement in Order No. 93-062. Graphs were prepared for constituents which were analyzed for during 2000 for all onsite and offsite monitoring wells. If there were no detections of a particular constituent during 2000, the graph was not plotted unless the constituent was detected at or above the detection limit in at least two monitoring periods since 1996. The tabulated and graphed data are grouped as follows:

- Barrier 1 downgradient monitoring wells (M04A, M04B, M05A, RMW6, M10B, M11A, and EMP4);
- Barrier 2 downgradient monitoring wells (M24A, M27B, and M29B; M28A and M30B were dry in 2000);
- Barrier 3 downgradient monitoring wells (M31A, R32B, M33A, and R34B);
- Barrier 4 and Barrier 5 downgradient monitoring wells (M41A, M42A, M43A, M47B, M51A, and M52B);
- Offsite monitoring wells (EMP1, EMP2, EMP3, EMP5, and EMP6);
- Liquid collection and removal systems (LCRS for Canyon 9 and the Eastern Canyons);
- Surface runoff monitoring locations (SD1, SD9, and SD11);
- Reused water (REUS); and
- Equipment and trip blanks (BLNK or EQIP).

A computer diskette containing all monitoring results collected in 2000 is included with the transmittal of this report to the RWQCB. The data are in the Microsoft® Excel Office 97 format. Incomplete analyses were the result of insufficient sample volume. Laboratory analyses, including laboratory methods and method detection limits (MDL), followed the program outlined in the Subtitle D Report and two Sanitation Districts' transmittals to the RWQCB on September 22, 1994 and November 21, 1994 regarding this issue. Changes in the method detection limits are a result of matrix interference. All laboratory analyses were conducted at laboratories certified by the California Department of Health Services Environmental Laboratory Accreditation Program for such analyses. Laboratory analyses follow the methods approved by the United States Environmental Protection Agency. The quality assurance/quality control data are not included in this annual monitoring report but were previously provided in quarterly monitoring reports.

5.2 GROUNDWATER MONITORING RESULTS

The groundwater monitoring results for 2000 are discussed in this section. Monitoring results for wells under the detection monitoring program (DMP) are discussed in the Section 5.2.1 and monitoring results for wells under the corrective action program (CAP) are discussed in the Section 5.2.2. Data are analyzed to identify statistical outliers which may be due to sampling anomalies or laboratory errors. Outliers are included in this report and are presented in tabular and graphical data summary, but are excluded from further evaluation or statistical analyses.

5.2.1 Detection Monitoring Program

The groundwater monitoring wells at Canyon 9 and the Eastern Canyons areas of the Puente Hills Landfill have not detected any landfill effect. Therefore, they are monitored in accordance to a detection monitoring program.

Canyon 9

Monitoring Wells

The groundwater monitoring system at Canyon 9 includes monitoring wells M24A, M27B, M28A, M29B, and M30A, all downgradient of Barrier 2. Only wells M24A, M27B, and M29B had sufficient groundwater for sampling purposes during 2000. The other wells were practically dry, consistent with past observations. As mentioned earlier, a groundwater sample could not be obtained from monitoring well M27B in the fourth quarter of 2000 because it was dry.

During 2000, monitoring results for the general parameters, anions, cations, organics and metals at monitoring wells M24A, M27B, and M29B were consistent with past data. For 2000, all detected soluble metals results from M24A, M27B, and M29B were below the maximum contaminant levels (MCLs) for drinking water. There were no detections of any VOCs at these monitoring wells. Based on these results, there continues to be no landfill effect at Canyon 9 monitoring wells M24A, M27B, and M29B.

Eastern Canyons

The groundwater monitoring program for the Eastern Canyons area includes detection monitoring wells located downgradient of Barrier 4 and downgradient of Barrier 5.

Barrier 4 Monitoring Wells

The Eastern Canyons groundwater monitoring system downgradient of Barrier 4 includes monitoring wells M41A, M42A, M43A, and M47B. The Sanitation Districts began to monitor wells M41A, M42A, and M43A in July 1995. The Sanitation Districts' proposal for characterizing background water quality for the Eastern Canyons was included in *Puente Hills Landfill Eastern Canyons Groundwater Quality Detection Monitoring Program*, approved by the RWQCB on October 8, 1998. The intra-well comparison procedure, which uses historical monitoring data collected from unaffected monitoring wells to represent background water quality, was proposed to evaluate monitoring data. Concentration limits were calculated using the prediction limit method for monitoring wells M41A, M42A, and M43A.

Groundwater quality obtained during 2000 for monitoring wells M41A, M42A, and M43A was compared to the calculated concentration limit for each parameter. There were no exceedances of the concentration limits at these monitoring wells during 2000, except for nitrate nitrogen concentrations at well M42A during the second quarter of 2000. These concentrations, 0.63 mg/l and 0.95 mg/l (duplicate samples), were higher than the concentration limit of 0.49 mg/l. Although the nitrate nitrogen concentrations at M42A exceeded the limit, the exceedances appear to be random, and the concentrations of nitrate nitrogen were lower than those observed from samples collected from M42A in July 1995 prior to waste placement in the Eastern Canyons area. Also, no VOCs or elevated levels of leachate indicators such as soluble biochemical oxygen demand (BOD), soluble chemical oxygen demand (COD), or total organic carbon were present in this sample. Therefore, the detected concentrations of nitrate nitrogen at M42A are due to normal fluctuations of water quality, and not a landfill effect. The nitrate nitrogen concentration observed at M42A during the third and fourth quarters of 2000 were below the concentration limit. For 2000, all detected soluble metals results from M41A, M42A, and M43A were below their respective MCLs for drinking water. No VOCs were detected at monitoring wells M41A, M42A, and M43A in 2000. These monitoring results show that the alluvial groundwater downgradient of Barrier 4 is not affected by the landfill.

The Sanitation Districts began sampling M47B in the third quarter of 1998. During 2000, all detected soluble metals from M47B were below their respective MCL for drinking water except for thallium which was detected in the first quarter at concentrations equal to and slightly above its MCL (duplicate samples). Soluble thallium has been detected once in water samples collected from the Eastern Canyon LCRS, but the level was below that observed at M47B. This indicates that the landfill is not the source of this thallium detection. Also, no VOCs or elevated levels of leachate indicators such as soluble BOD, soluble COD, or total organic carbon were present in this sample. Therefore, the Sanitation Districts believe that this thallium detection is not caused by the landfill. These monitoring results show that the bedrock groundwater downgradient of Barrier 4 is not affected by the landfill.

<u>Barrier 5 Monitoring Wells</u>

The Eastern Canyons groundwater monitoring system downgradient of Barrier 5 includes monitoring wells M51A and M52B. The Sanitation Districts began to monitor these two wells in December 1999. Monitoring well M51A monitors the uppermost aquifer downgradient of Barrier 5. Because it is screened in a tight formation, it may not yield a sufficient water volume for analysis of all monitoring parameters. Based on the available results, however, all soluble metals at M51A were either not detected or detected below their respective MCL for drinking water. No anthropogenic compounds (VOCs, base neutral acid extractable compounds (BNAs), pesticides, herbicides, and organophosphorus compounds) were detected at M51A except for acetone which was detected during the second quarter of 2000. The acetone was detected at a concentration of 12 μg/l; there is no MCL for this compound. Acetone is a common laboratory contaminant. The Sanitation

Districts do not believe the detection of this compound is a result of a landfill effect because no other VOCs or elevated levels of leachate indicators such as soluble BOD, soluble COD, or total organic carbon were present in this sample. These results indicate that the alluvial groundwater downgradient of Barrier 5 is not affected by the landfill.

Monitoring well M52B monitors the deep bedrock groundwater downgradient of Barrier 5. During 2000, all soluble metals at M52B were either not detected or detected below their respective MCL for drinking water. No VOCs were detected at monitoring well M52B in 2000. These results indicate that the bedrock groundwater downgradient of Barrier 5 is not affected by the landfill.

5.2.2 Corrective Action Program

For discussion purposes, the groundwater monitoring wells included in the CAP for the Puente Hills Landfill Main Canyon area are divided into three groups: Barrier 1 monitoring wells M04A, M04B, M11A, M05A, RMW6, M10B, and EMP4; Barrier 3 monitoring wells M31A, R32B, M33A, and R34B; and offsite monitoring wells EMP1, EMP2, EMP3, EMP5, and EMP6. The locations of these monitoring wells are shown in Exhibit 14. Barrier 1 monitoring wells M04A, M05A, RMW6, and M10B; Barrier 3 monitoring wells M31A and M33A; and offsite monitoring well EMP5 have detected landfill related VOCs, while M04B, M11A, R32B, R34B, EMP1, EMP2, EMP3, EMP4, and EMP6 have not.

<u>Barrier 1 Monitoring Wells</u>

For 2000, Barrier 1 wells not affected by the landfill (M04B, M11A, and EMP4) continued to show no landfill effect. Monitoring results for the naturally occurring compounds at these wells were consistent with past monitoring data. There were no detections of any VOCs at these monitoring wells in 2000.

At M04A, M05A, RMW6, and M10B, low levels of VOCs were detected in 2000. The detected VOCs, during 2000, included tetrachloroethylene, trichloroethylene, cis-1,2-dichloroethylene, vinyl chloride, 1,1-dichloroethane, 1,2-dichloroethane, and p-dichlorobenzene. The most frequently detected VOCs include vinyl chloride, cis-1,2-dichloroethylene, and trichloroethylene. The concentrations of typical leachate indicator parameters, such as soluble BOD, soluble COD, and total organic carbon, however, were either not detected or detected at background levels. For example, soluble COD concentrations are typically below 30 mg/L, and total organic carbon concentrations below 10 mg/L. Soluble metals were either not detected at these wells or detected below their respective MCL for drinking water except for nickel at monitoring well M05A. The concentration of soluble nickel observed in the third quarter, 2000 sample, however, was within the background levels as defined by the 1993 mineral leaching study results. The Sanitation Districts believe that this nickel detection is naturally occurring and not the result of a landfill effect. Finally, no BNAs, pesticides, herbicides, or organophosphorus compounds were detected at these monitoring wells in 2000. These results show that low levels of VOCs represent the only landfill effect on water quality.

Of the 63 VOCs that have been tested in 2000, only seven were detected at the four Barrier 1 monitoring wells discussed above. These VOCs as well as the range of values observed in 2000 are shown in Table 5. In general, the concentrations of VOCs detected in the Barrier 1 monitoring wells show either a decreasing trend or a stabilizing trend in the concentrations over time except for trichloroethylene (TCE) at monitoring well RMW6. Although TCE at RMW6 shows an increasing trend, the trichloroethylene levels observed at RMW6 have remained below its MCL of 5 μg/l. In addition, three other VOCs at RMW6, cis-1,2-dichloroethylene, 1,2-dichloroethane, and p-dichlorobenzene, show a decreasing trend indicating that the overall enhanced groundwater control for the Main Canyon area has been effective at well RMW6.

TABLE 5
PUENTE HILLS LANDFILL MAIN CANYON
2000 VOLATILE ORGANIC COMPOUNDS LEVELS
IN BARRIER 1 MONITORING WELLS

Volatile Organic Compound	MCL (µg/L)	M04A (µg/L)	M05A (µg/L)	RMW6 (µg/L)	M10B (µg/L)
Tetrachloroethylene	5	ND	ND	ND	4 - 5
Trichloroethylene	5	2 - 3	ND	3 - 4	3 - 6
cis-1,2-Dichloroethylene	6	7 - 15	ND	8 - 11	6 - 11
Vinyl Chloride	0.5	2 - 3	0.4 - 2	1 - 2	ND - 0.4
1,1-Dichloroethane	5	ND	ND	2 - 3	1 -2
1,2-Dichloroethane	0.5	ND	ND	ND - 0.6	ND - 0.4
p-Dichlorobenzene	5	ND	ND	1 - 2	ND

Notes: ND - not detected
Results for duplicate samples were averaged.

Barrier 3 Monitoring Wells

For 2000, Barrier 3 wells not affected by the landfill (R32B and R34B) continued to show no landfill effect. Monitoring results for the naturally occurring compounds at these wells were consistent with past monitoring data. There were no detections of any VOCs at these monitoring wells in 2000.

At M31A and M33A, low levels of VOCs were detected in 2000 which is consistent with past monitoring results. The detected VOCs include trichloroethylene, cis-1,2-dichloroethylene, vinyl chloride, and 1,2-dichloroethane. Only 1,2-dichloroethane at M33A was detected at levels slightly above its MCL. The trend analysis results for the concentrations of VOCs detected in the Barrier 3 monitoring wells show that the concentrations are decreasing or have stabilized over time.

FIGURES 1 - 49

WATER QUALITY DATA GRAPHS

BARRIER 1 MONITORING WELLS

FIGURE 1

PUENTE HILLS LANDFILL

DEPTH TO WATER

BARRIER ONE MONITORING WELLS

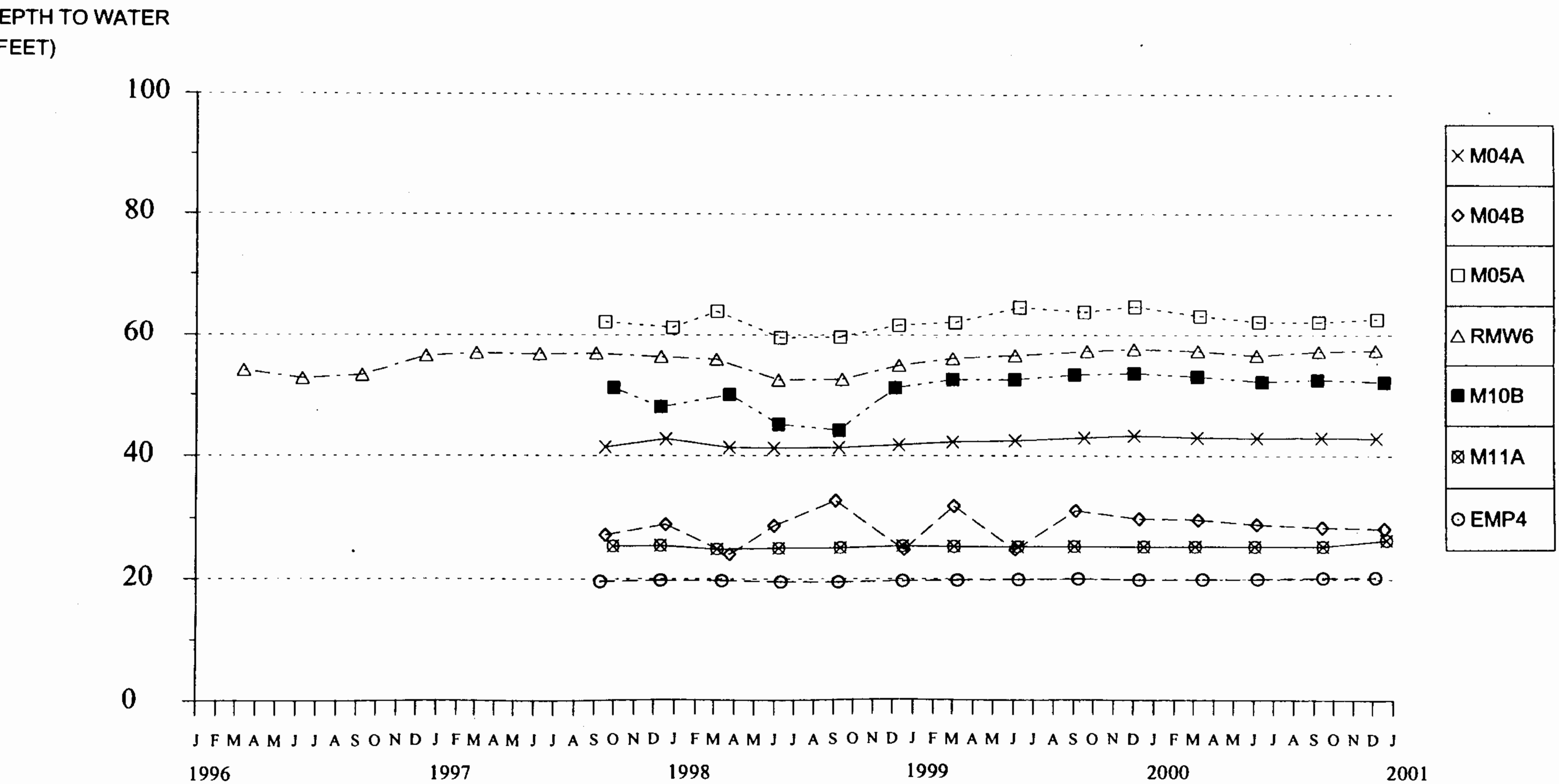


FIGURE 2
PUENTE HILLS LANDFILL
DEPTH TO BOTTOM
BARRIER ONE MONITORING WELLS

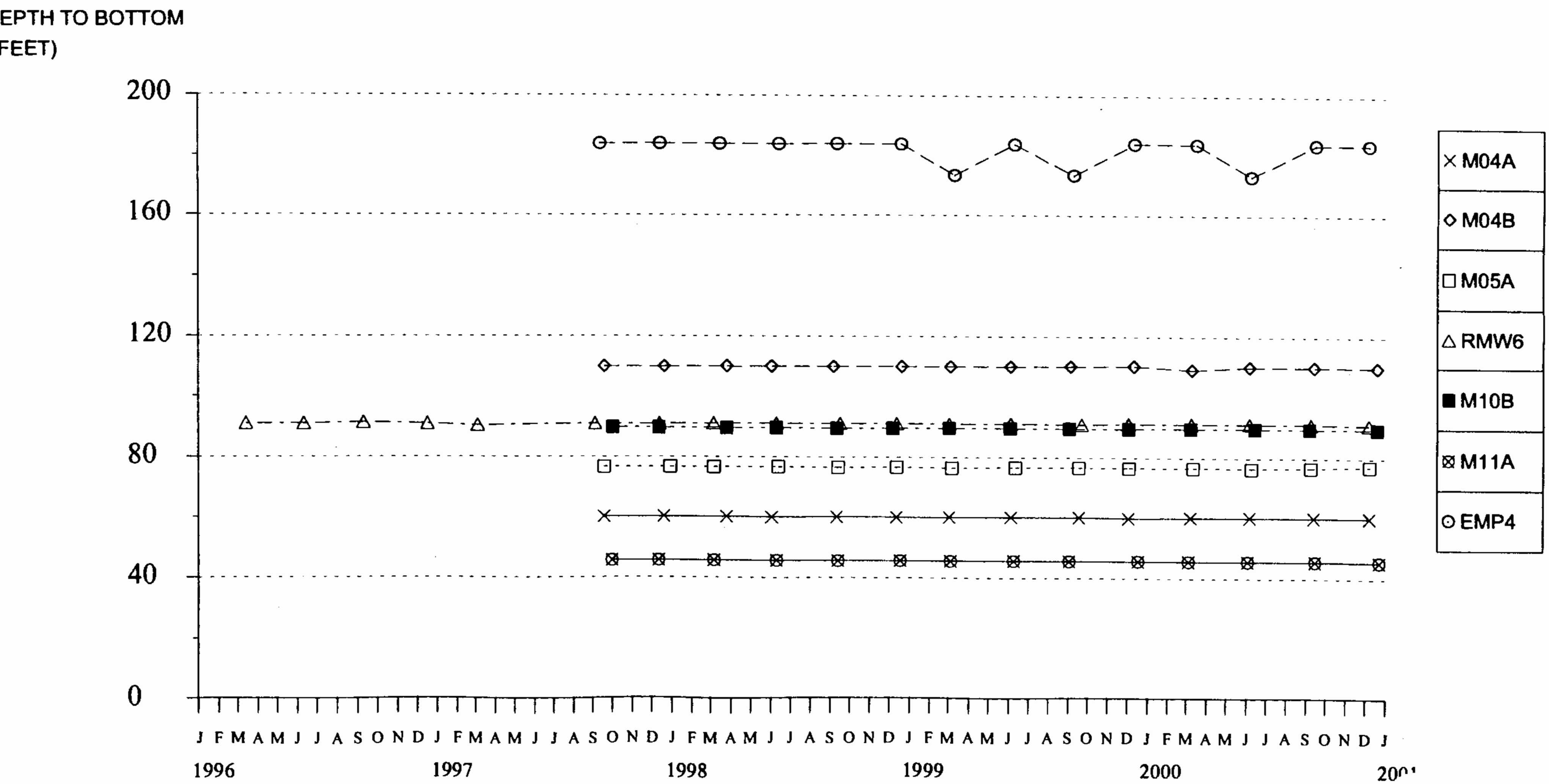


FIGURE 3

PUENTE HILLS LANDFILL

PERCENT OXYGEN IN GAS

BARRIER ONE MONITORING WELLS

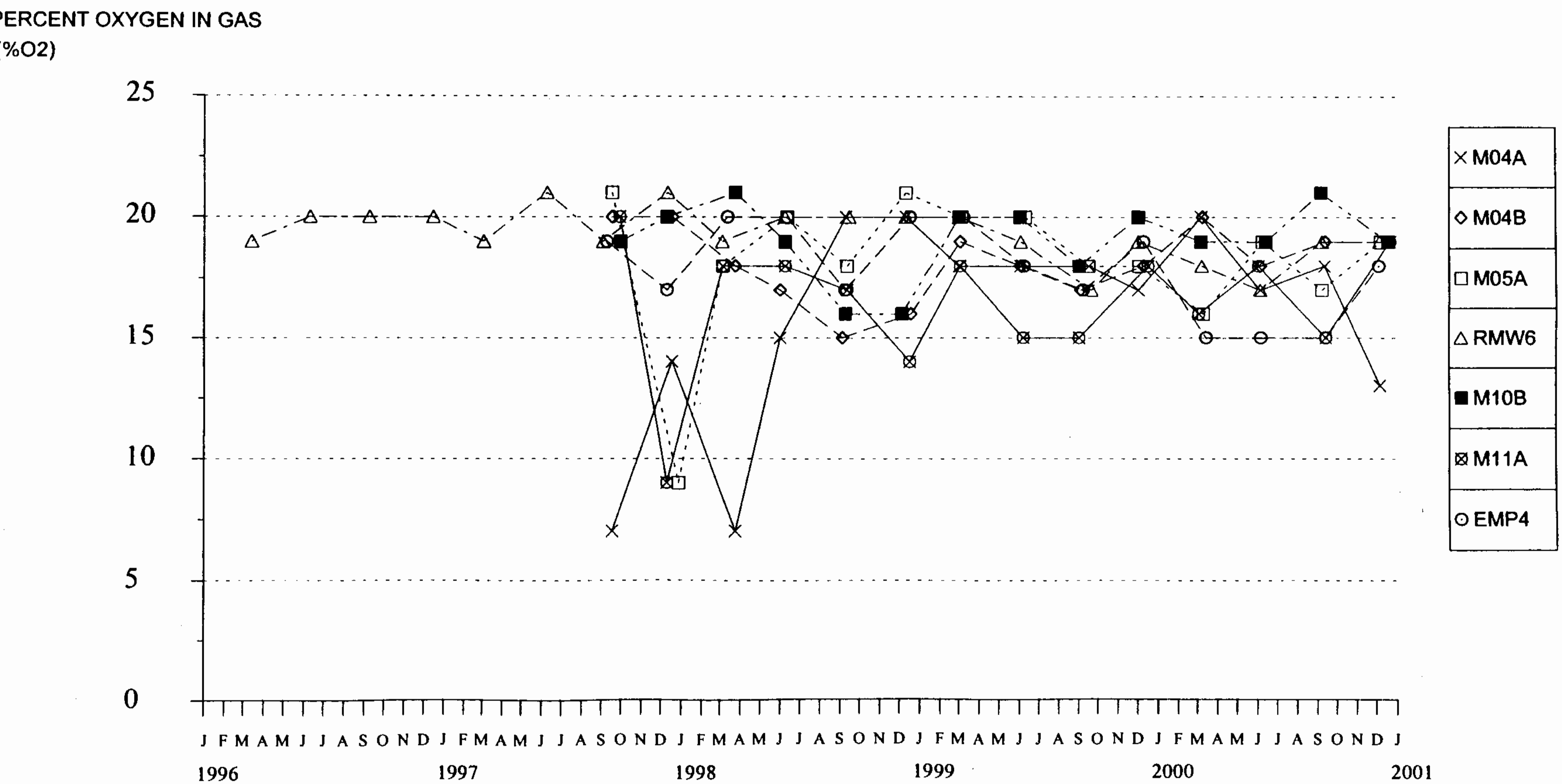


FIGURE 4

PUENTE HILLS LANDFILL

FIELD WATER TEMPERATURE

BARRIER ONE MONITORING WELLS

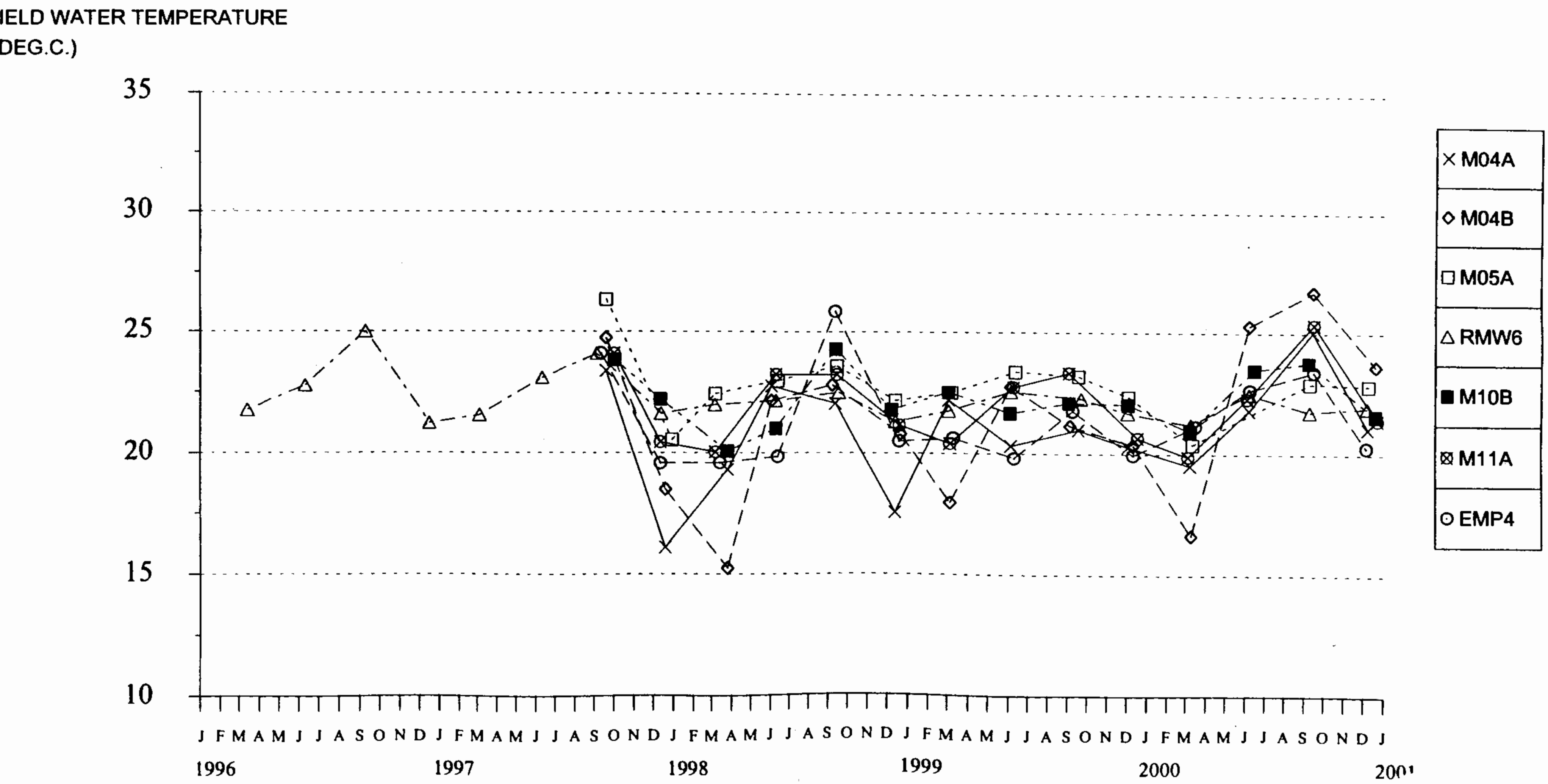


FIGURE 5
PUENTE HILLS LANDFILL
FIELD PH
BARRIER ONE MONITORING WELLS

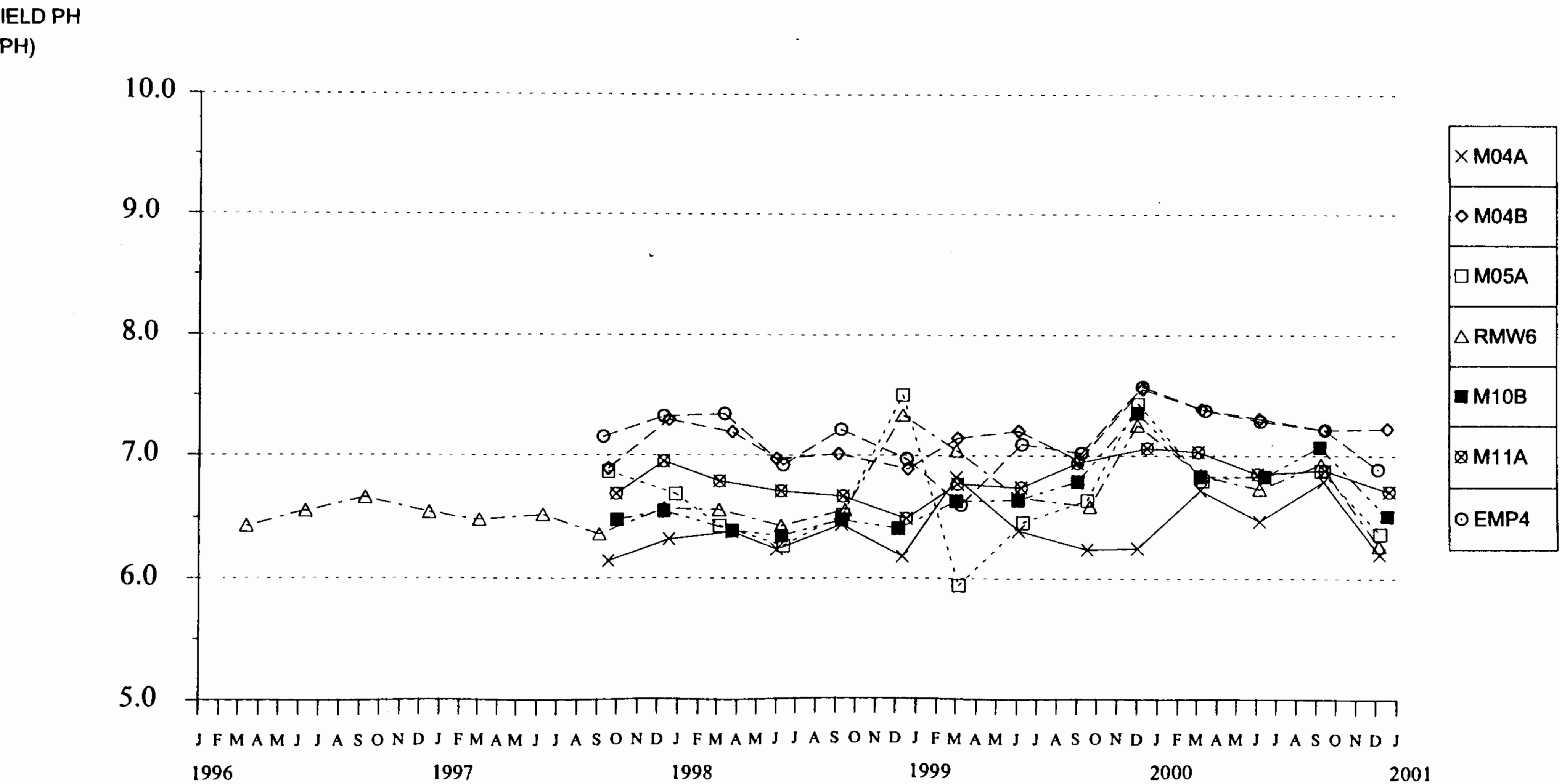


FIGURE 6

PUENTE HILLS LANDFILL

FIELD CONDUCTIVITY

BARRIER ONE MONITORING WELLS

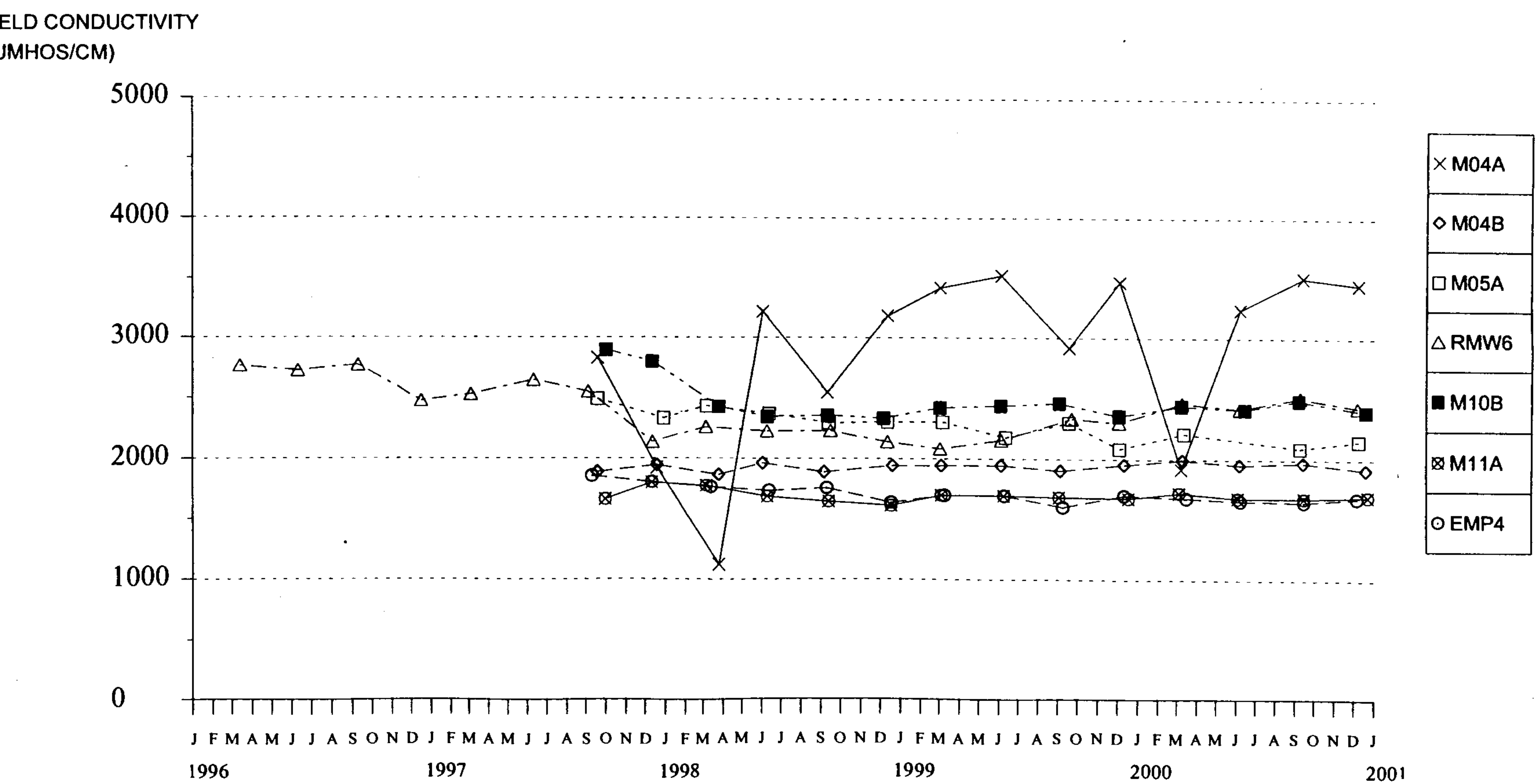


FIGURE 7
PUENTE HILLS LANDFILL
FIELD DISSOLVED O2
BARRIER ONE MONITORING WELLS

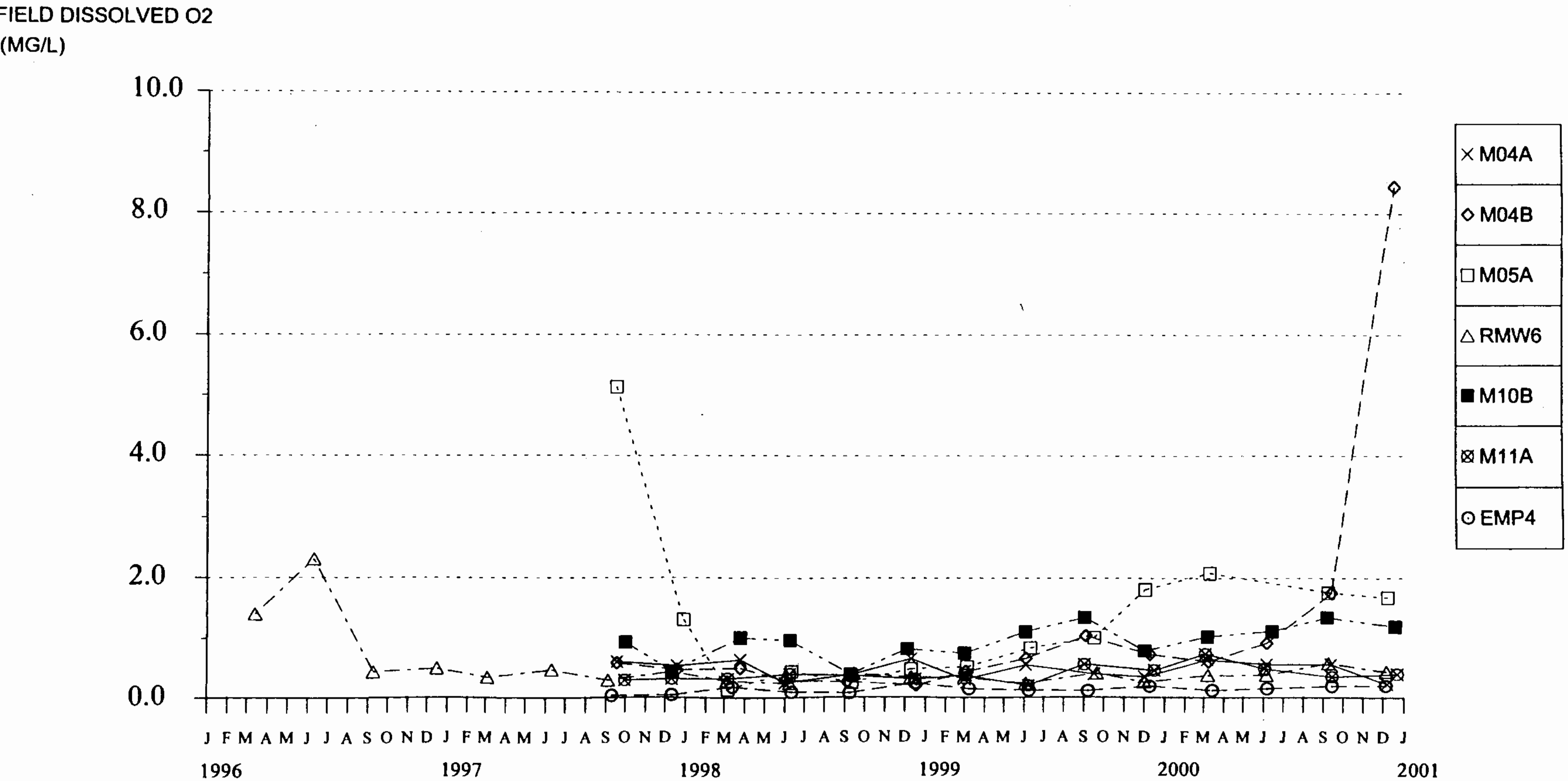


FIGURE 8

PUENTE HILLS LANDFILL

FIELD DISSOLVED CO2

BARRIER ONE MONITORING WELLS

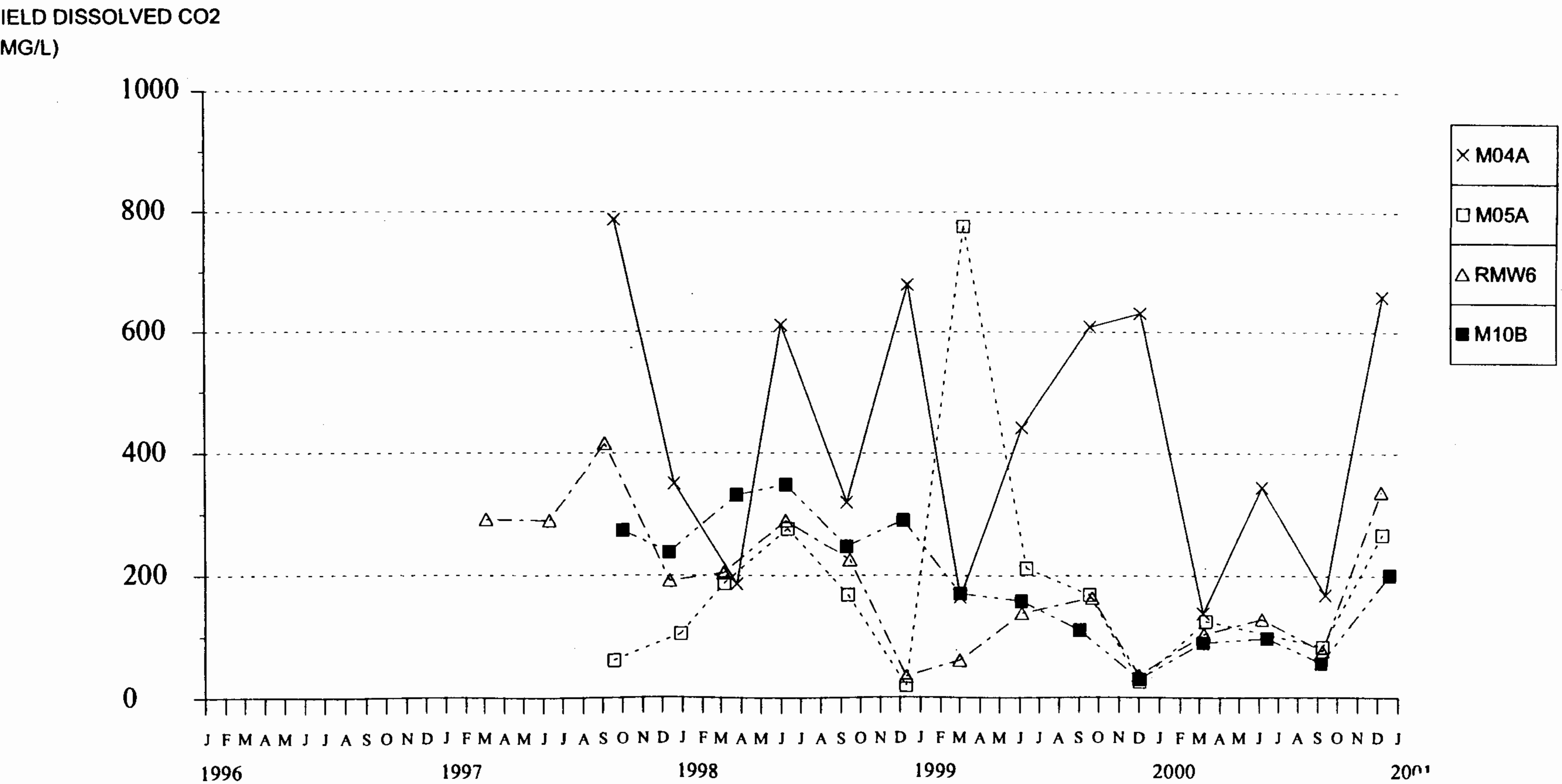


FIGURE 9

PUENTE HILLS LANDFILL

PH

BARRIER ONE MONITORING WELLS

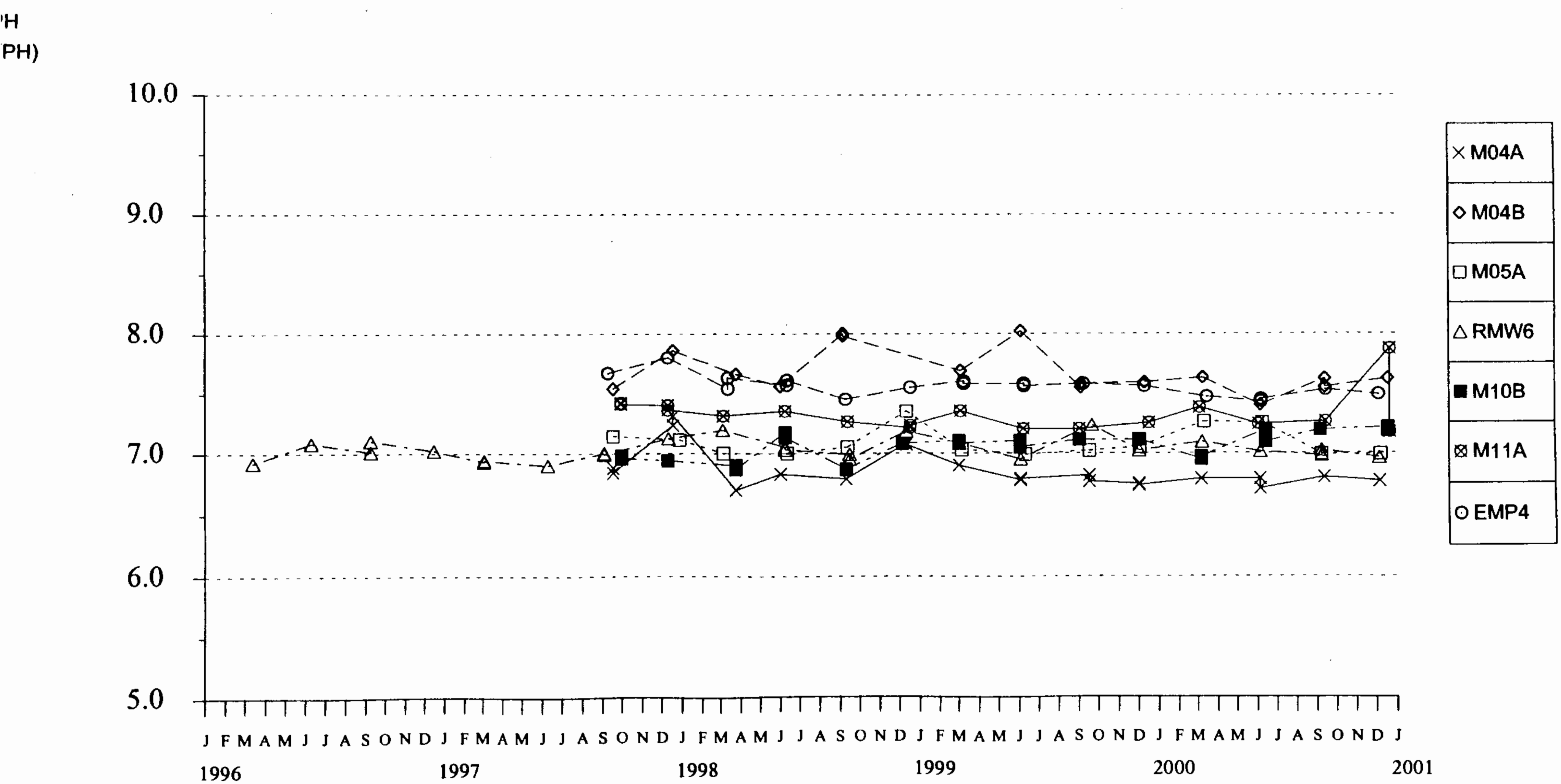


FIGURE 10
PUENTE HILLS LANDFILL
CONDUCTIVITY
BARRIER ONE MONITORING WELLS

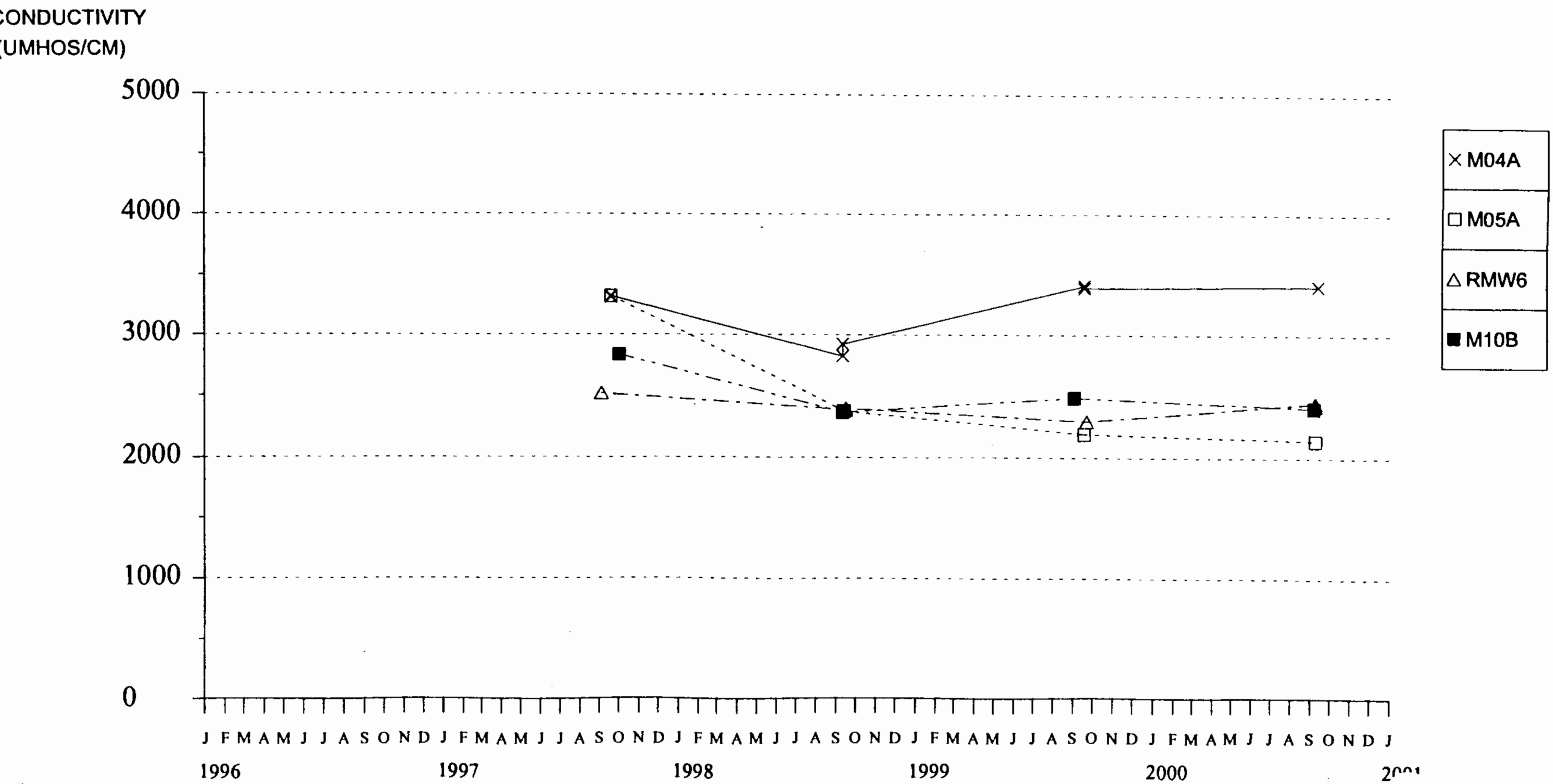


FIGURE 11
PUENTE HILLS LANDFILL
TOTAL DISSOLVED SOLIDS
BARRIER ONE MONITORING WELLS

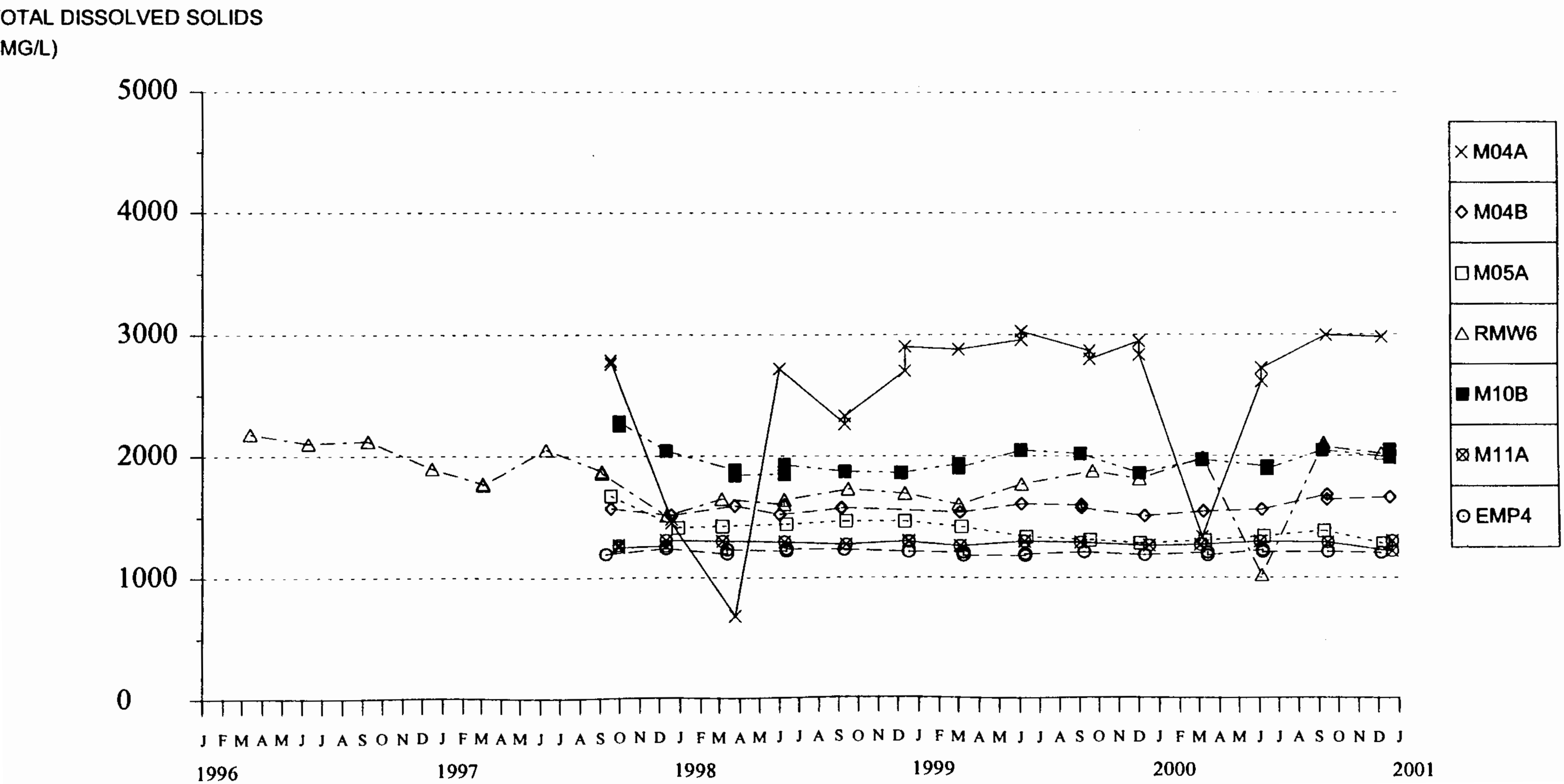


FIGURE 12

PUENTE HILLS LANDFILL

TOTAL HARDNESS

BARRIER ONE MONITORING WELLS

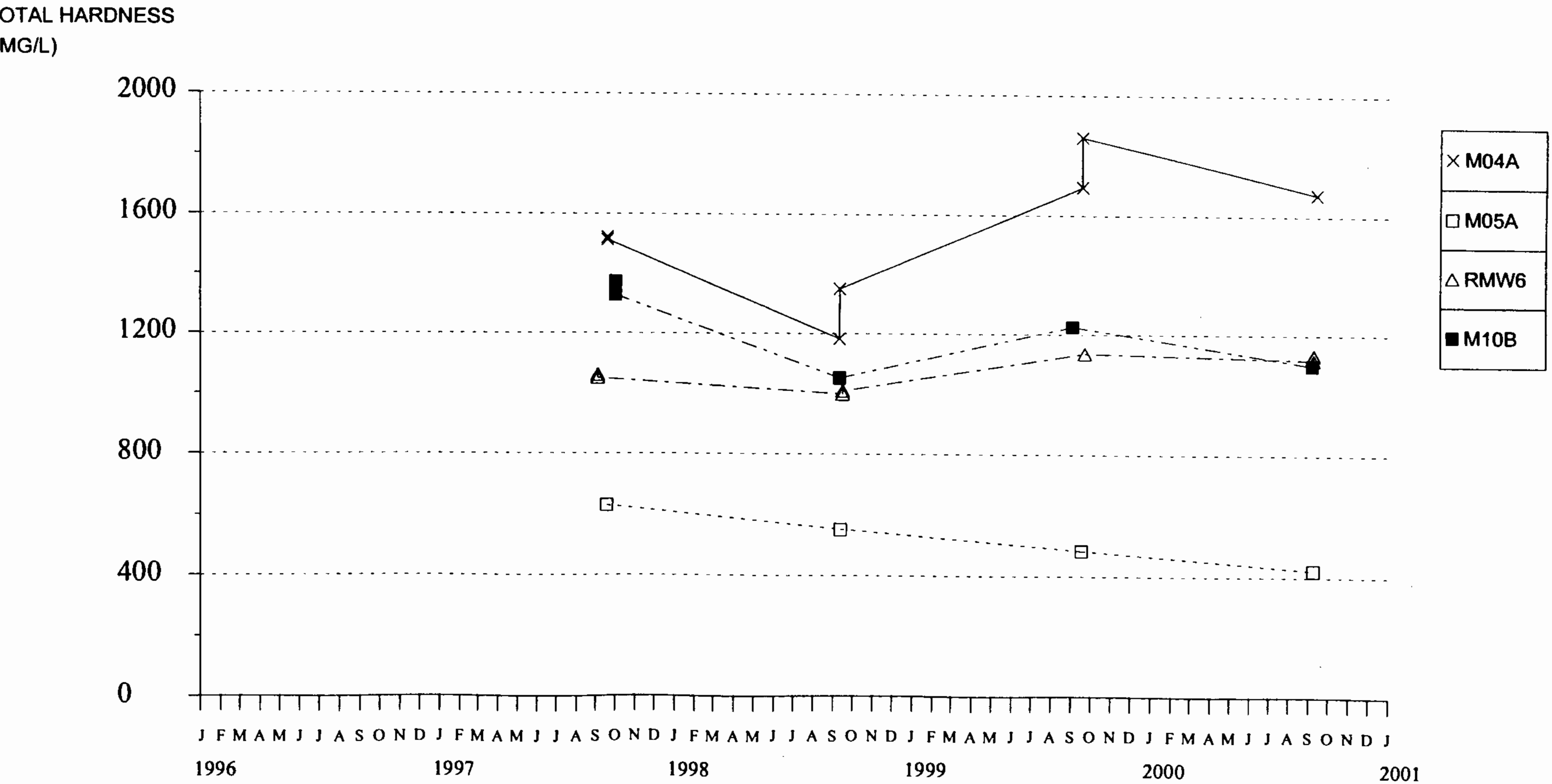


FIGURE 13
PUENTE HILLS LANDFILL
BORON
BARRIER ONE MONITORING WELLS

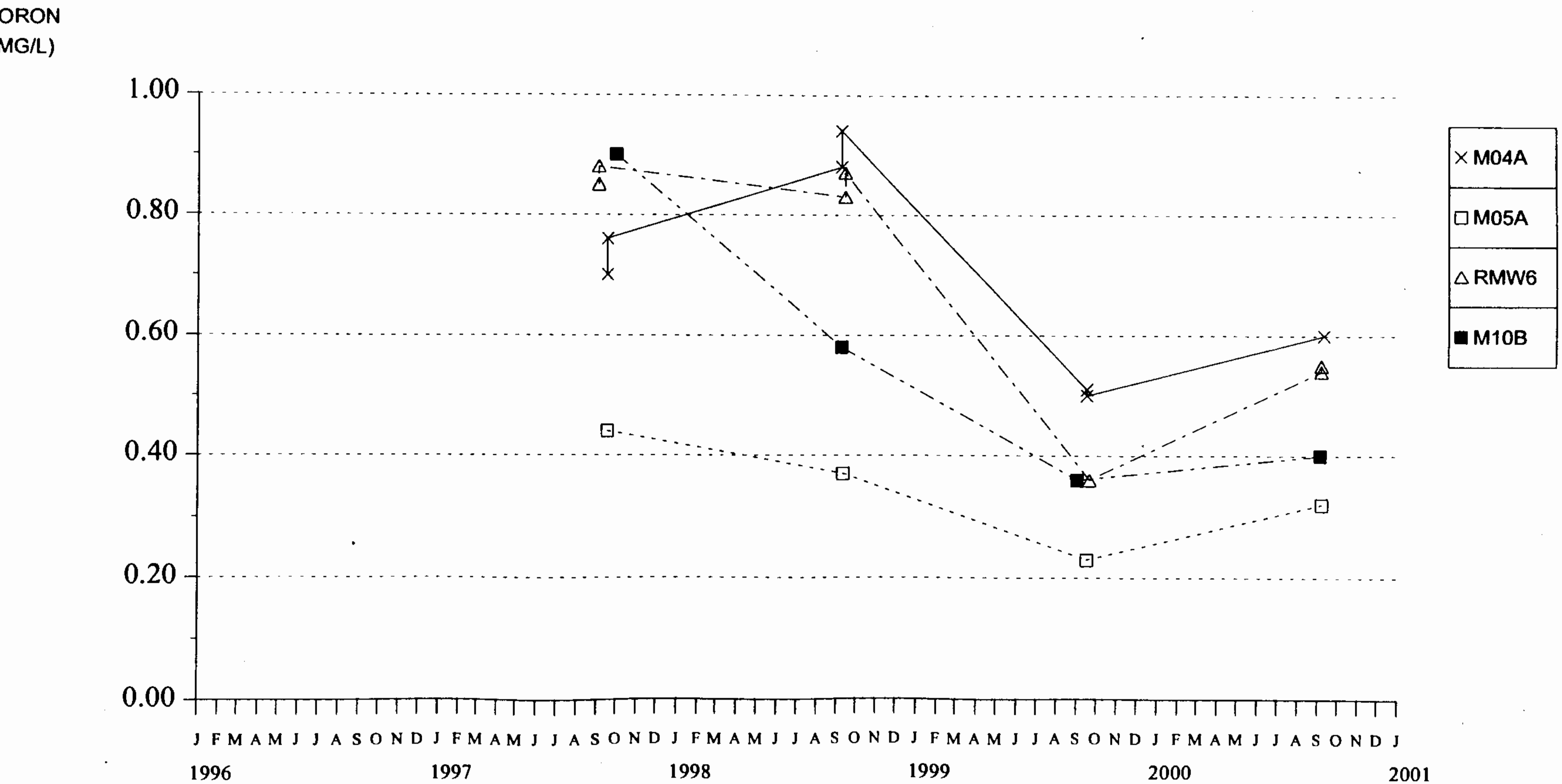


FIGURE 14
PUENTE HILLS LANDFILL
NITRATE NITROGEN
BARRIER ONE MONITORING WELLS

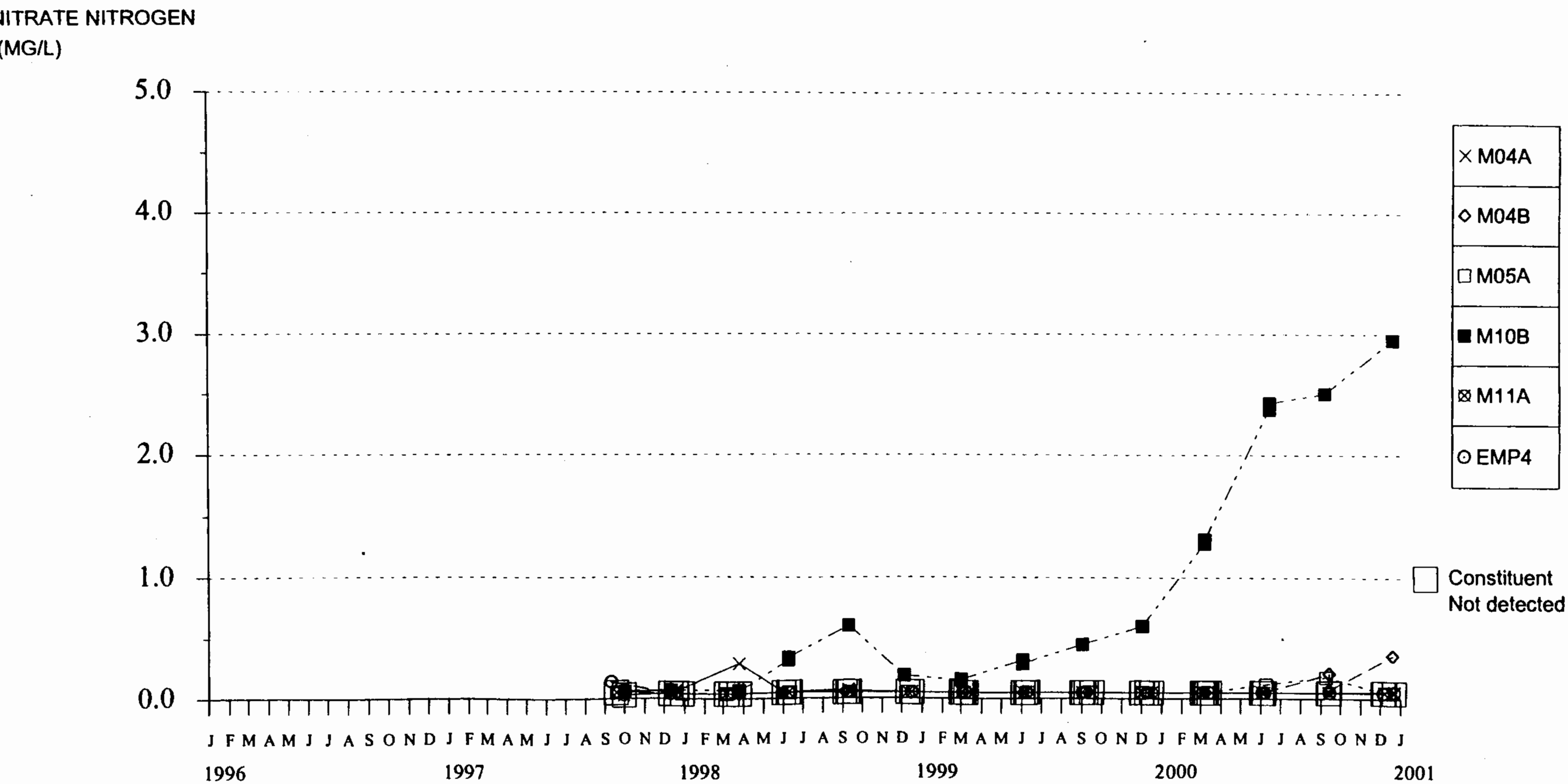


FIGURE 15
PUENTE HILLS LANDFILL
SULFATE
BARRIER ONE MONITORING WELLS

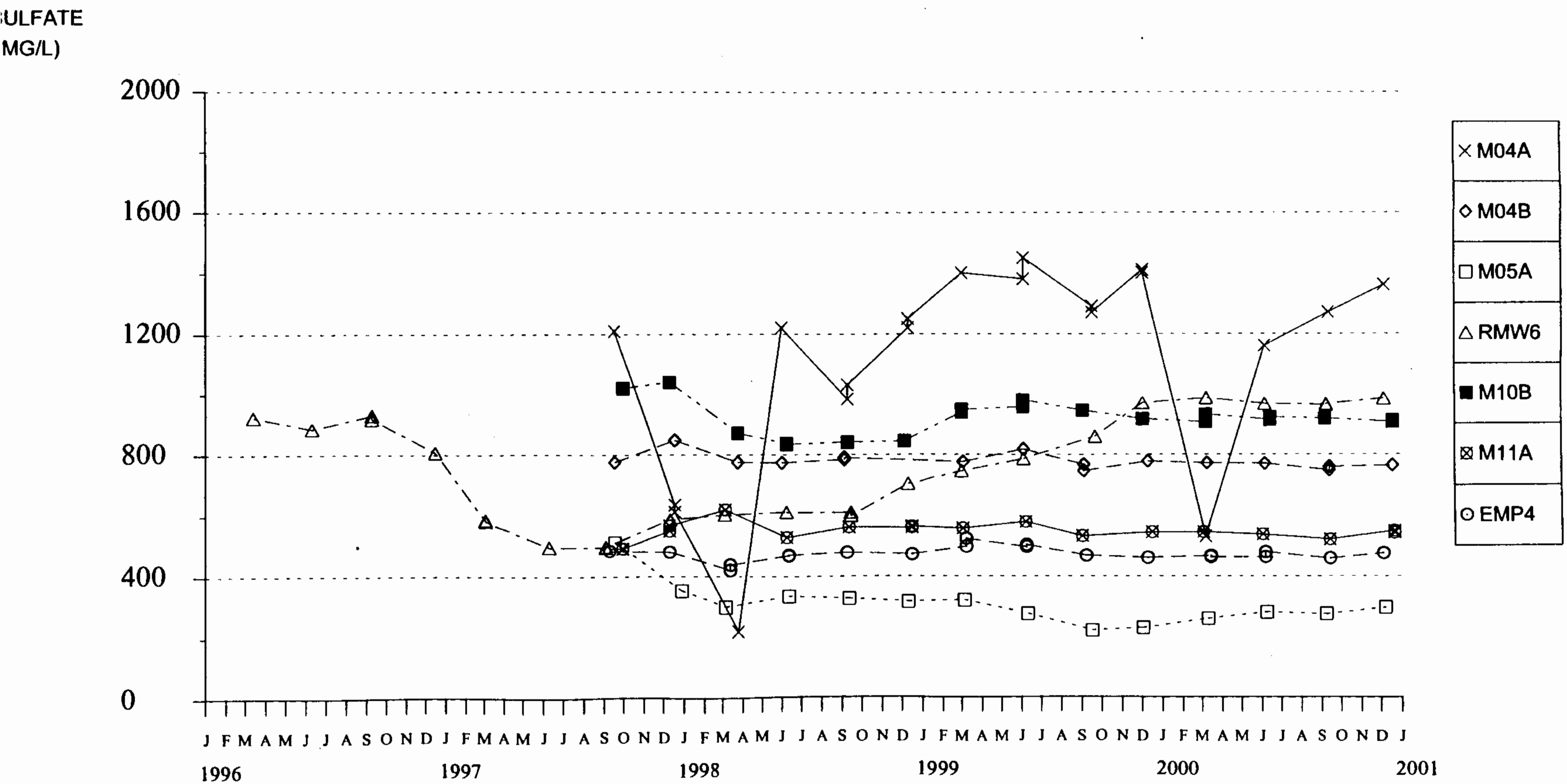


FIGURE 16
PUENTE HILLS LANDFILL
CHLORIDE
BARRIER ONE MONITORING WELLS

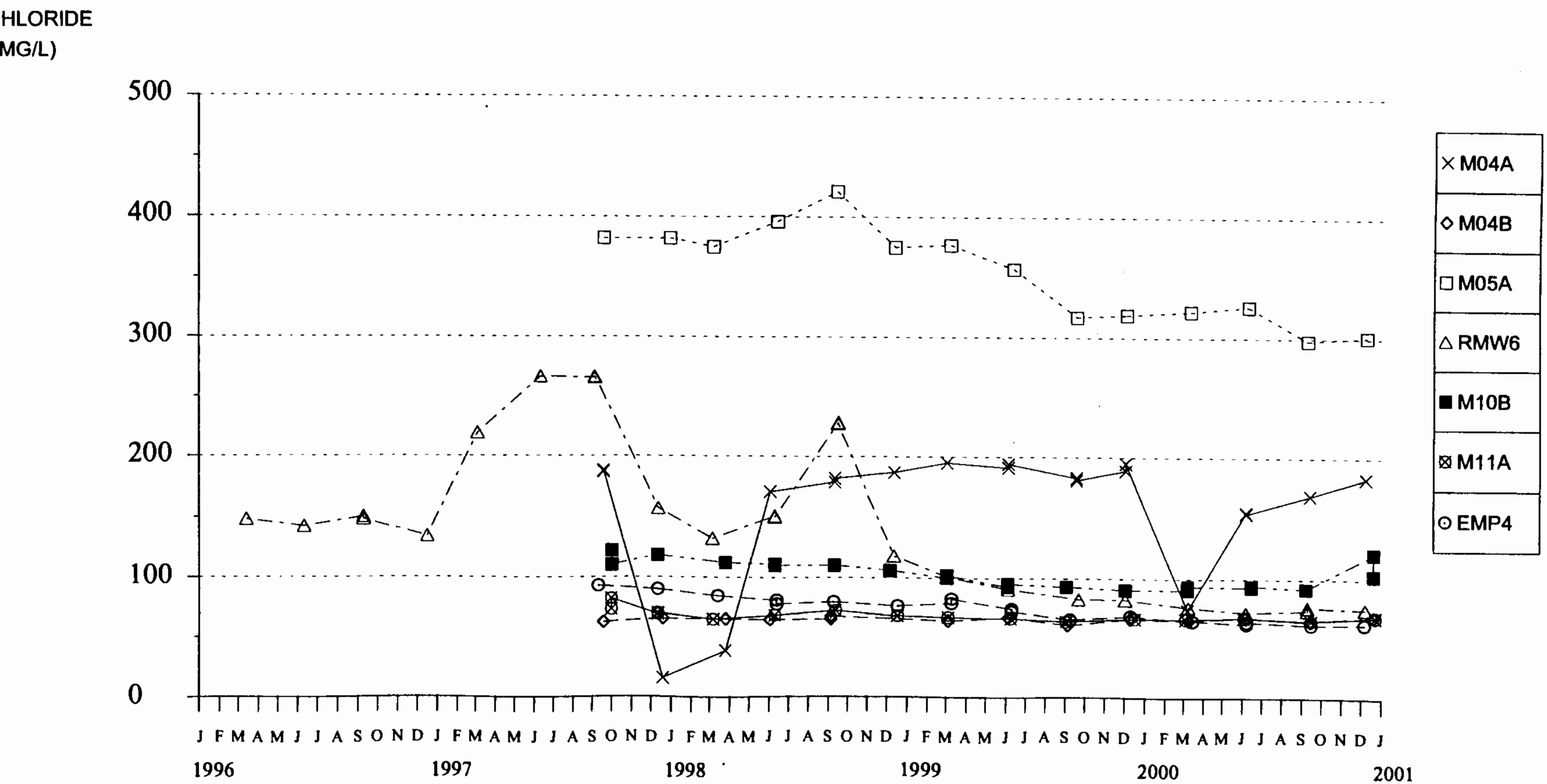


FIGURE 17
PUENTE HILLS LANDFILL
TOTAL ALKALINITY
BARRIER ONE MONITORING WELLS

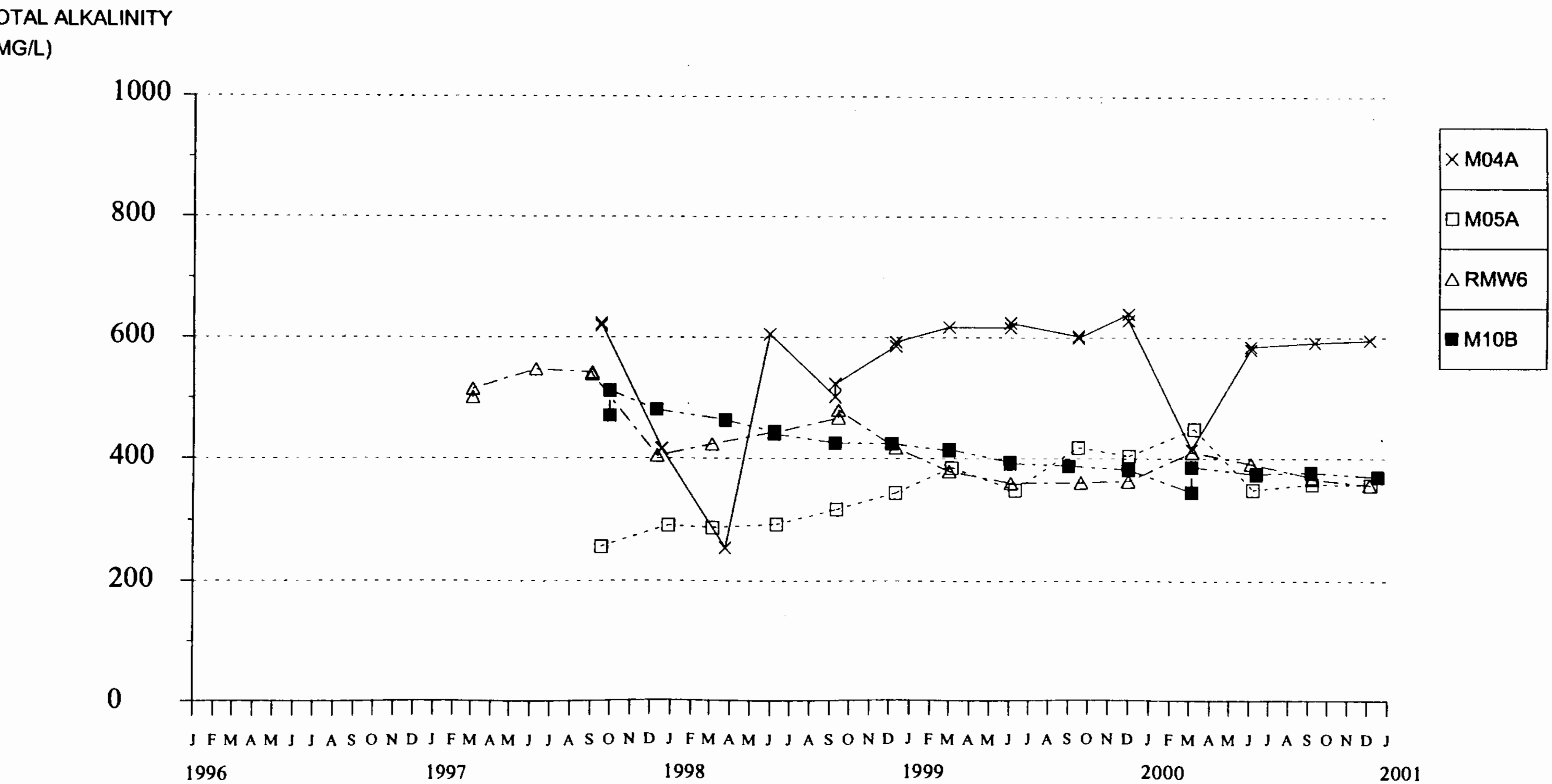


FIGURE 18

PUENTE HILLS LANDFILL

FLUORIDE

BARRIER ONE MONITORING WELLS

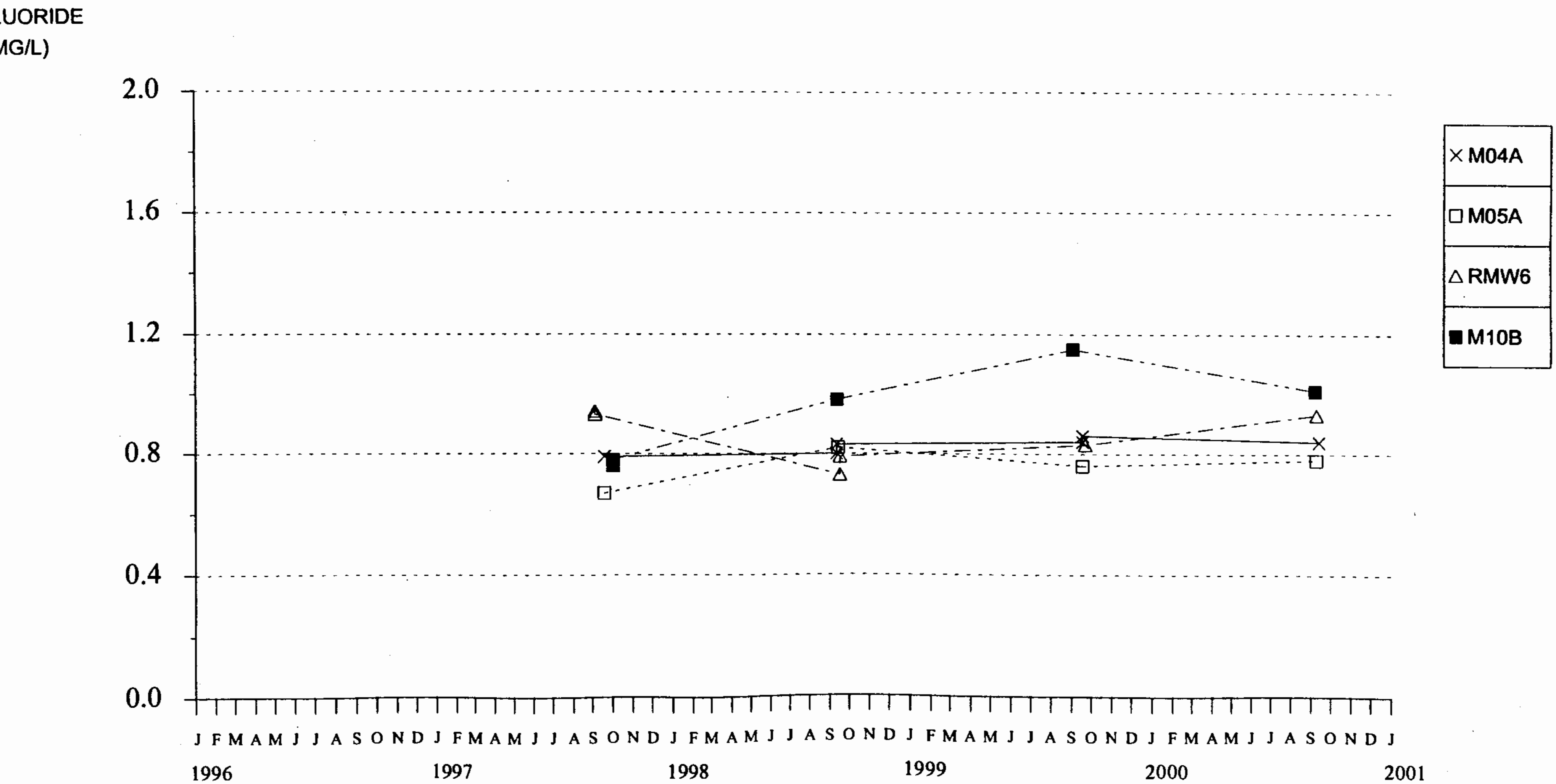


FIGURE 19
PUENTE HILLS LANDFILL
BICARBONATE ALKALINITY
BARRIER ONE MONITORING WELLS

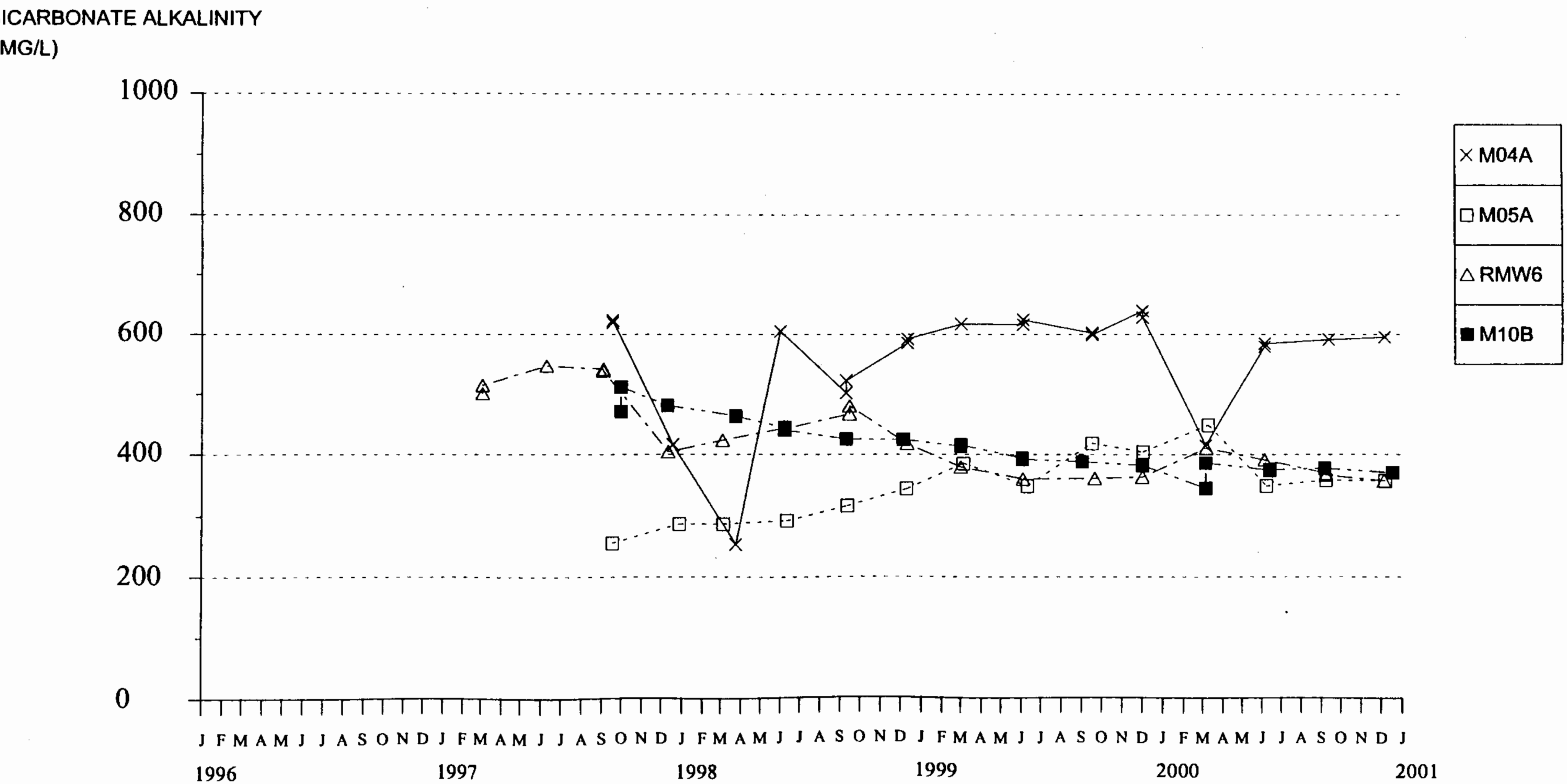


FIGURE 20
PUENTE HILLS LANDFILL
CALCIUM-HARDNESS
BARRIER ONE MONITORING WELLS

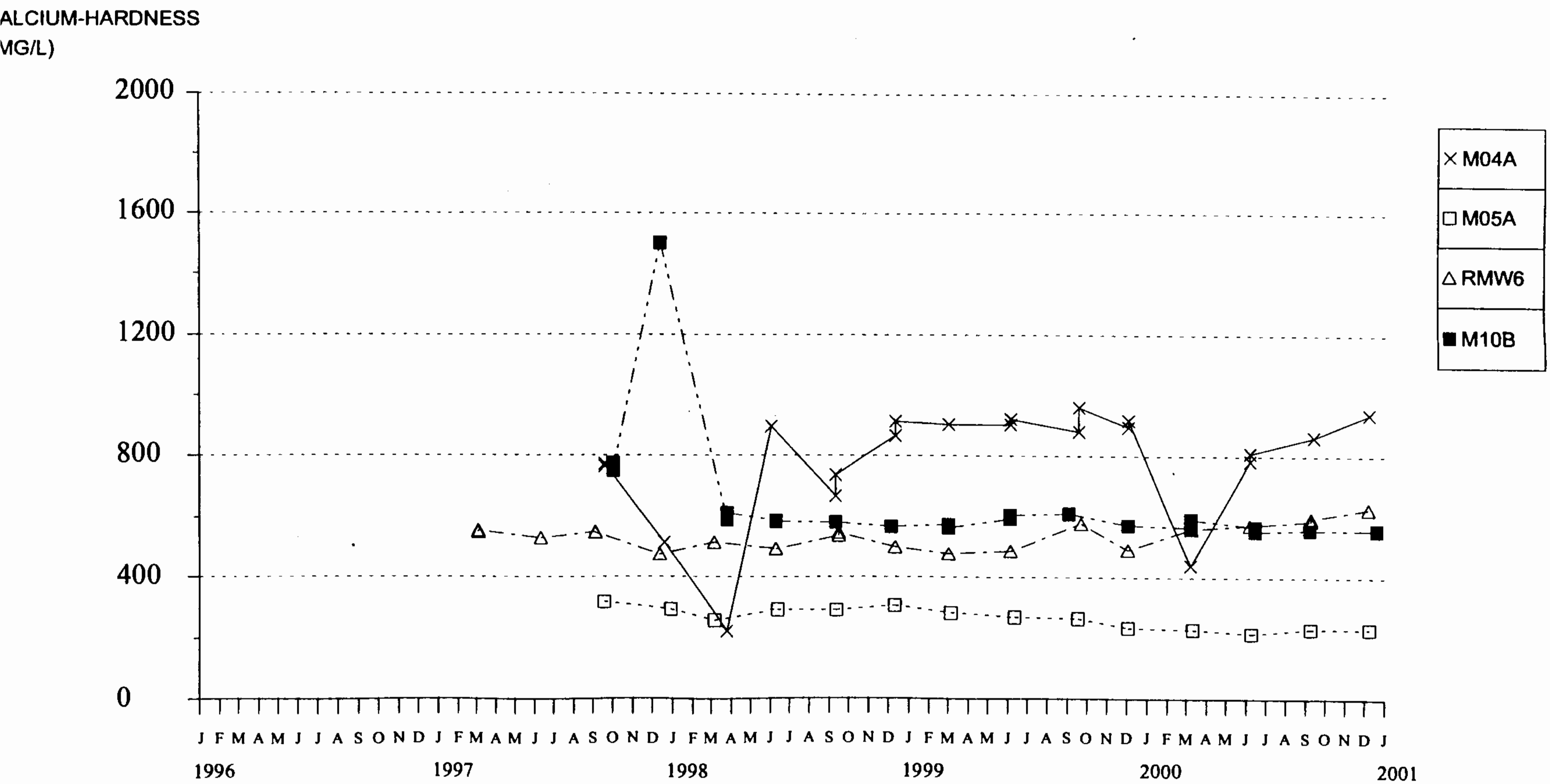


FIGURE 21
PUENTE HILLS LANDFILL
MAGNESIUM-HARDNESS
BARRIER ONE MONITORING WELLS

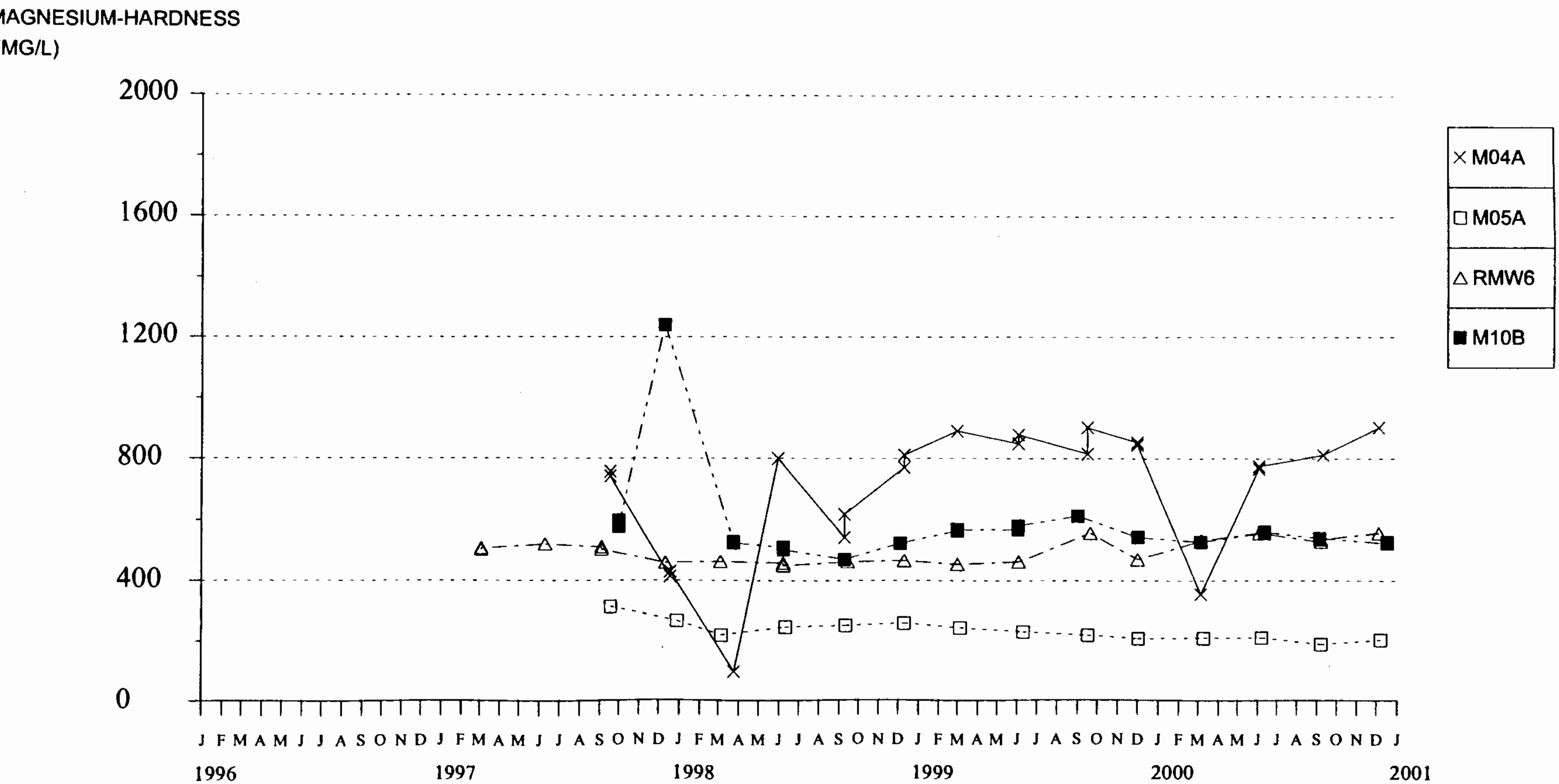


FIGURE 22
PUENTE HILLS LANDFILL
SODIUM
BARRIER ONE MONITORING WELLS

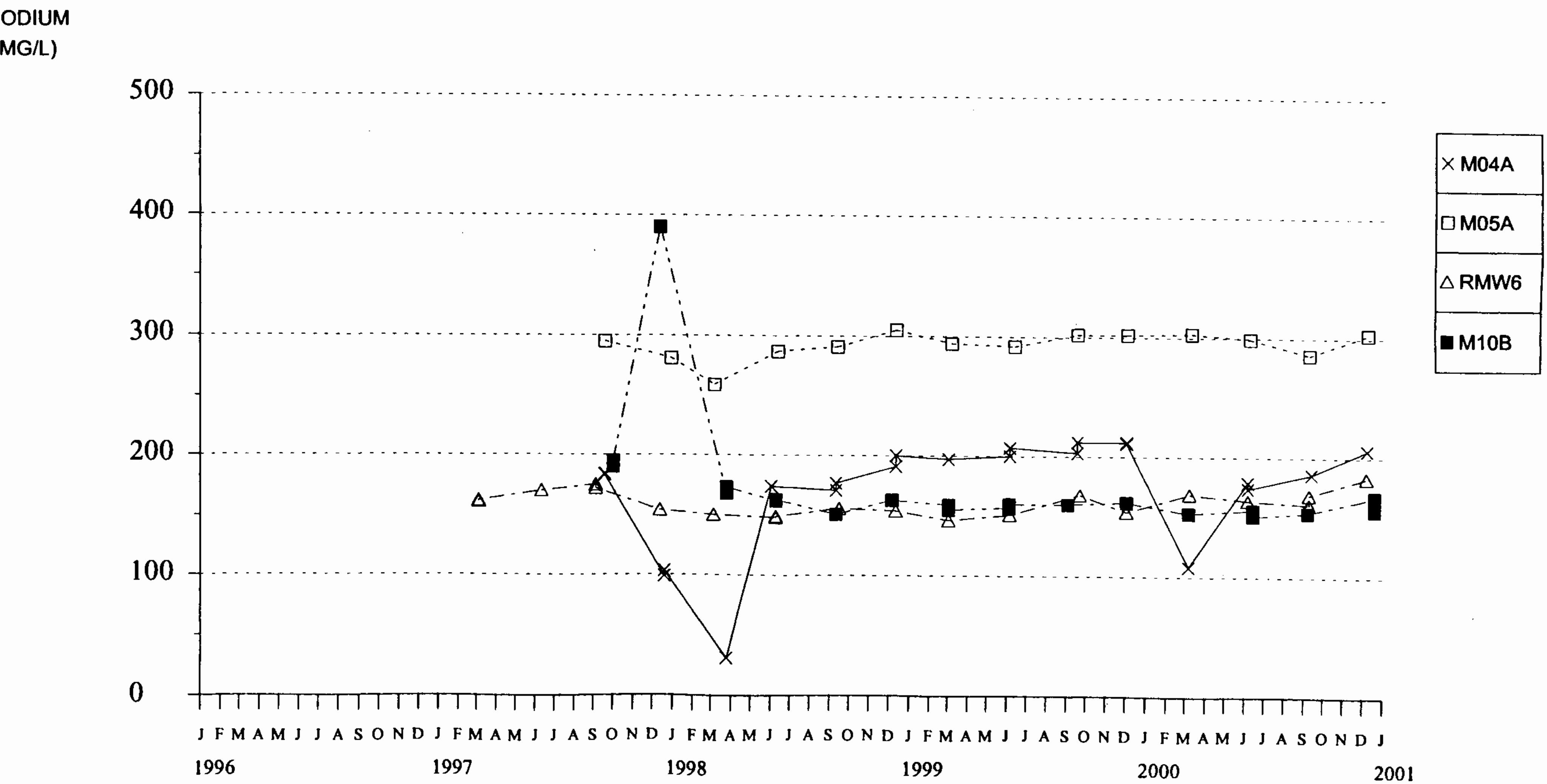


FIGURE 23
PUENTE HILLS LANDFILL
POTASSIUM
BARRIER ONE MONITORING WELLS

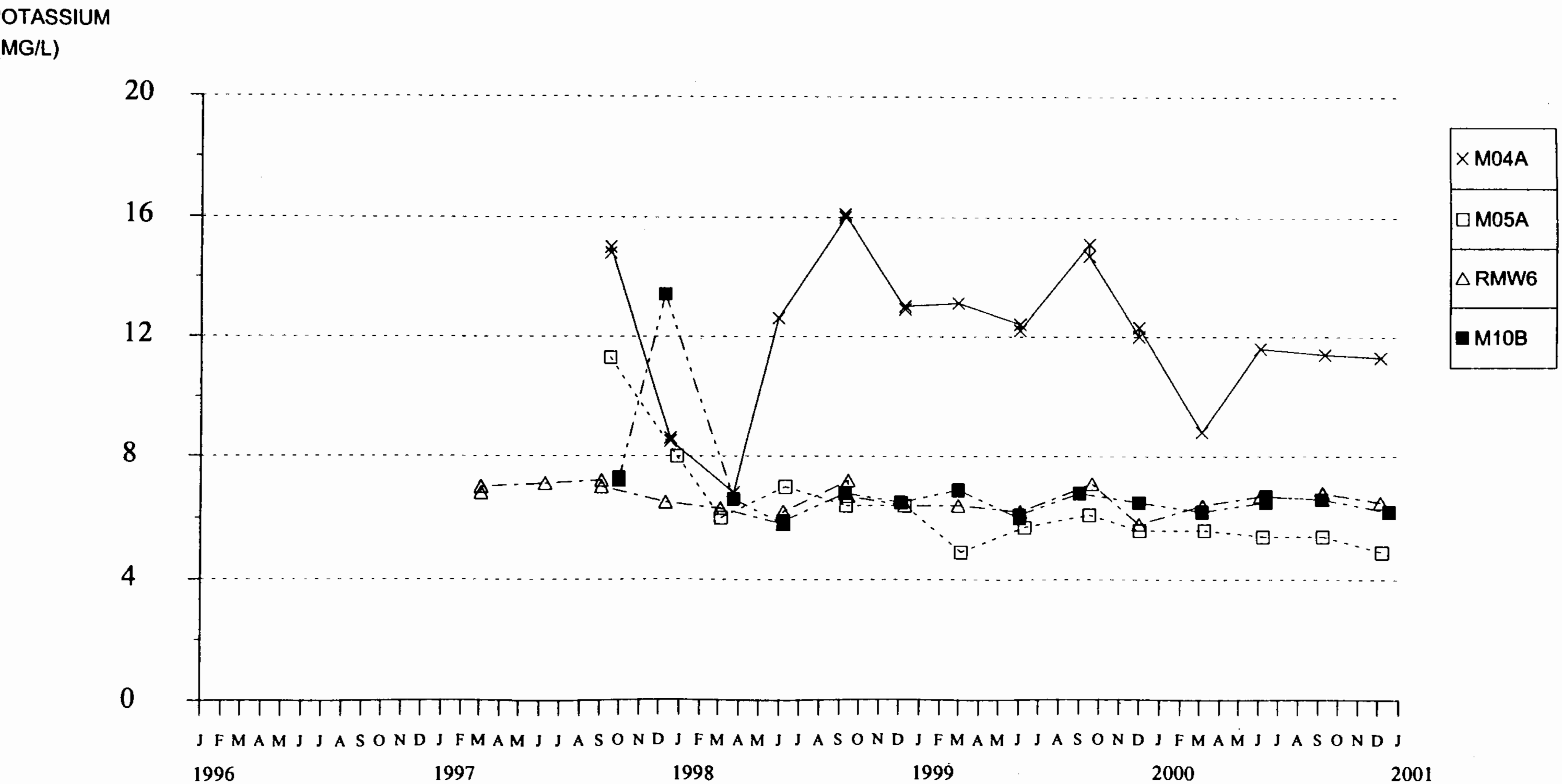


FIGURE 24

PUENTE HILLS LANDFILL

IRON

BARRIER ONE MONITORING WELLS

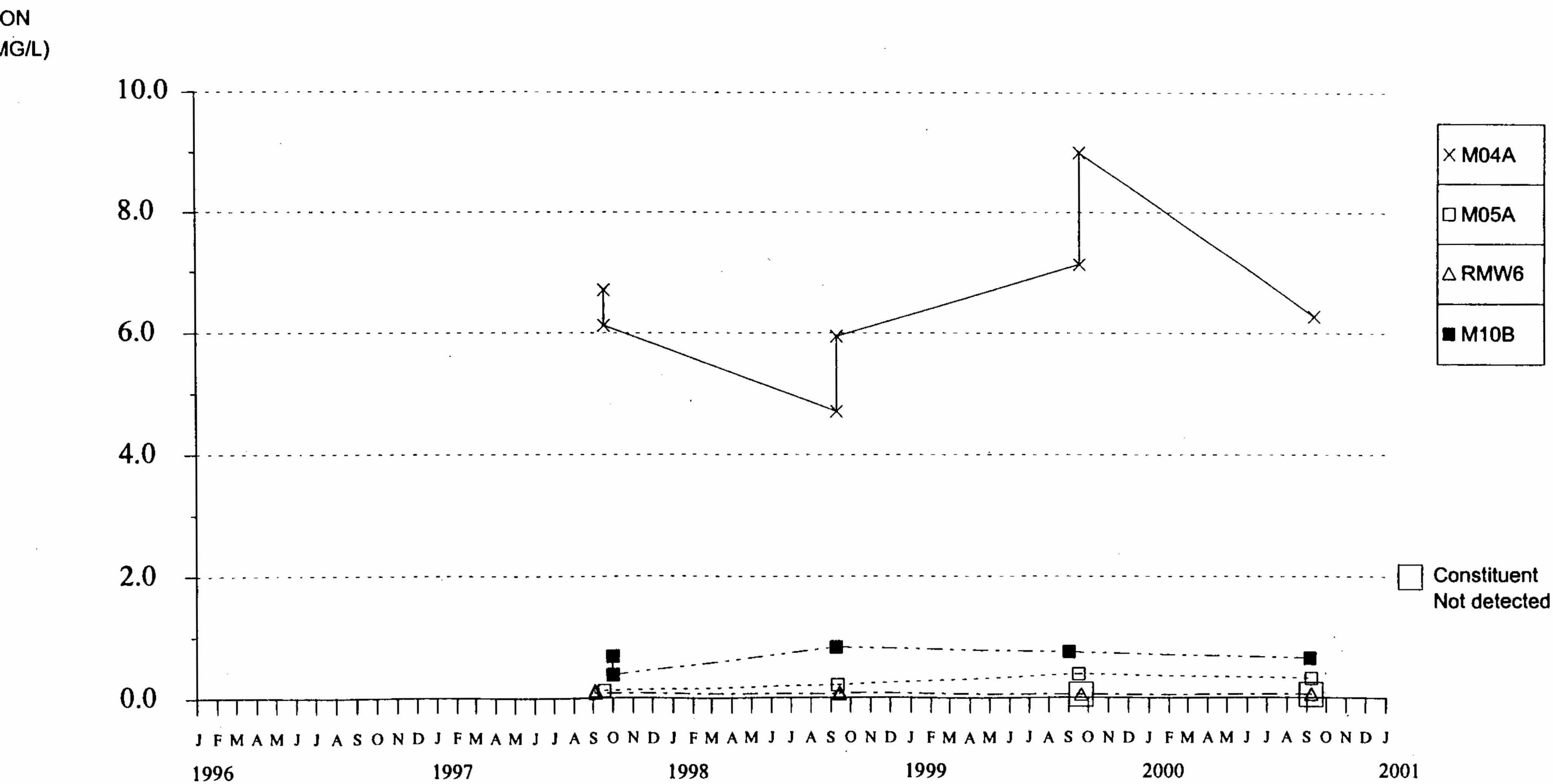


FIGURE 25
PUENTE HILLS LANDFILL
MANGANESE
BARRIER ONE MONITORING WELLS

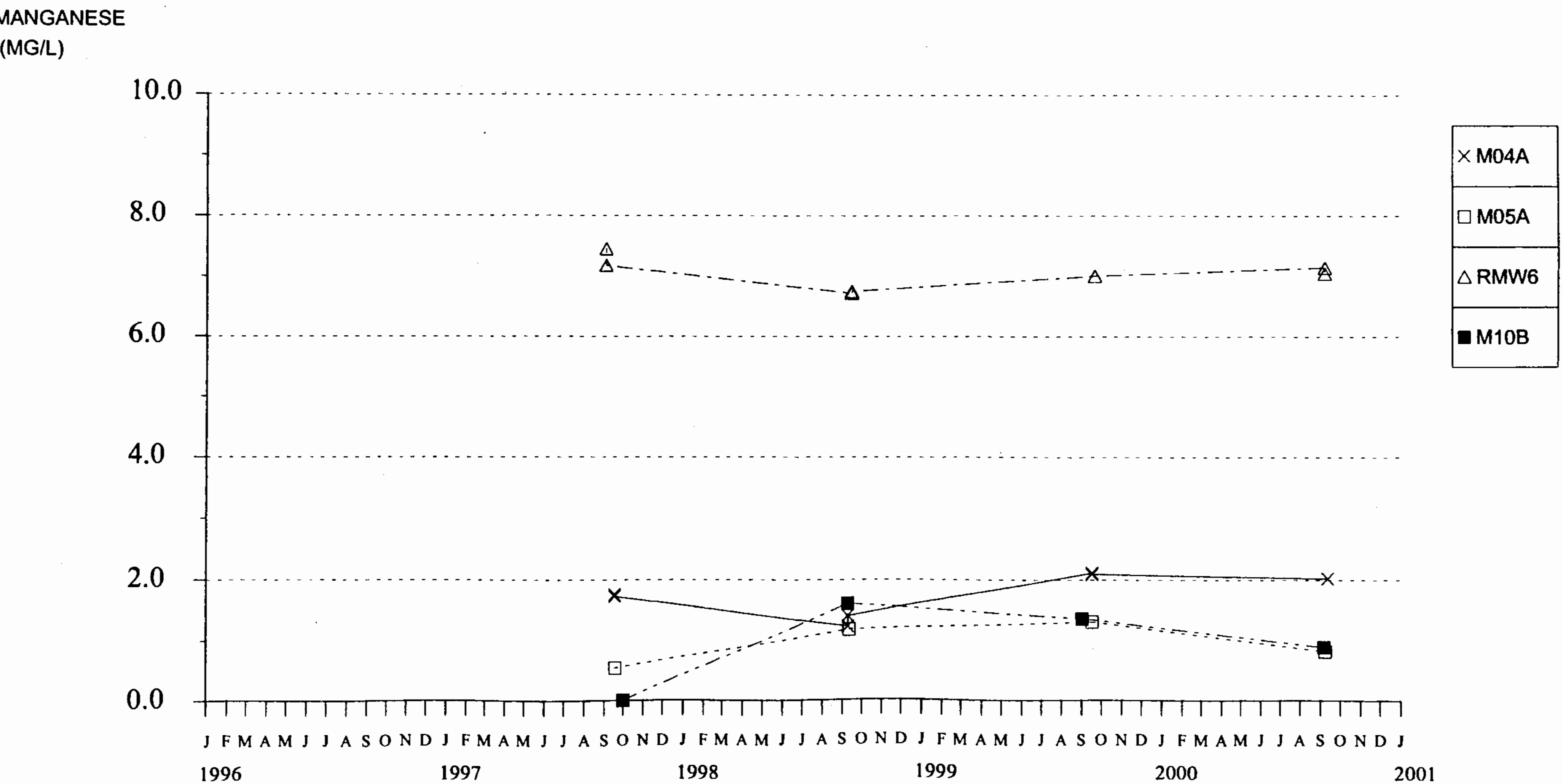


FIGURE 26
PUENTE HILLS LANDFILL
AMMONIA NITROGEN
BARRIER ONE MONITORING WELLS

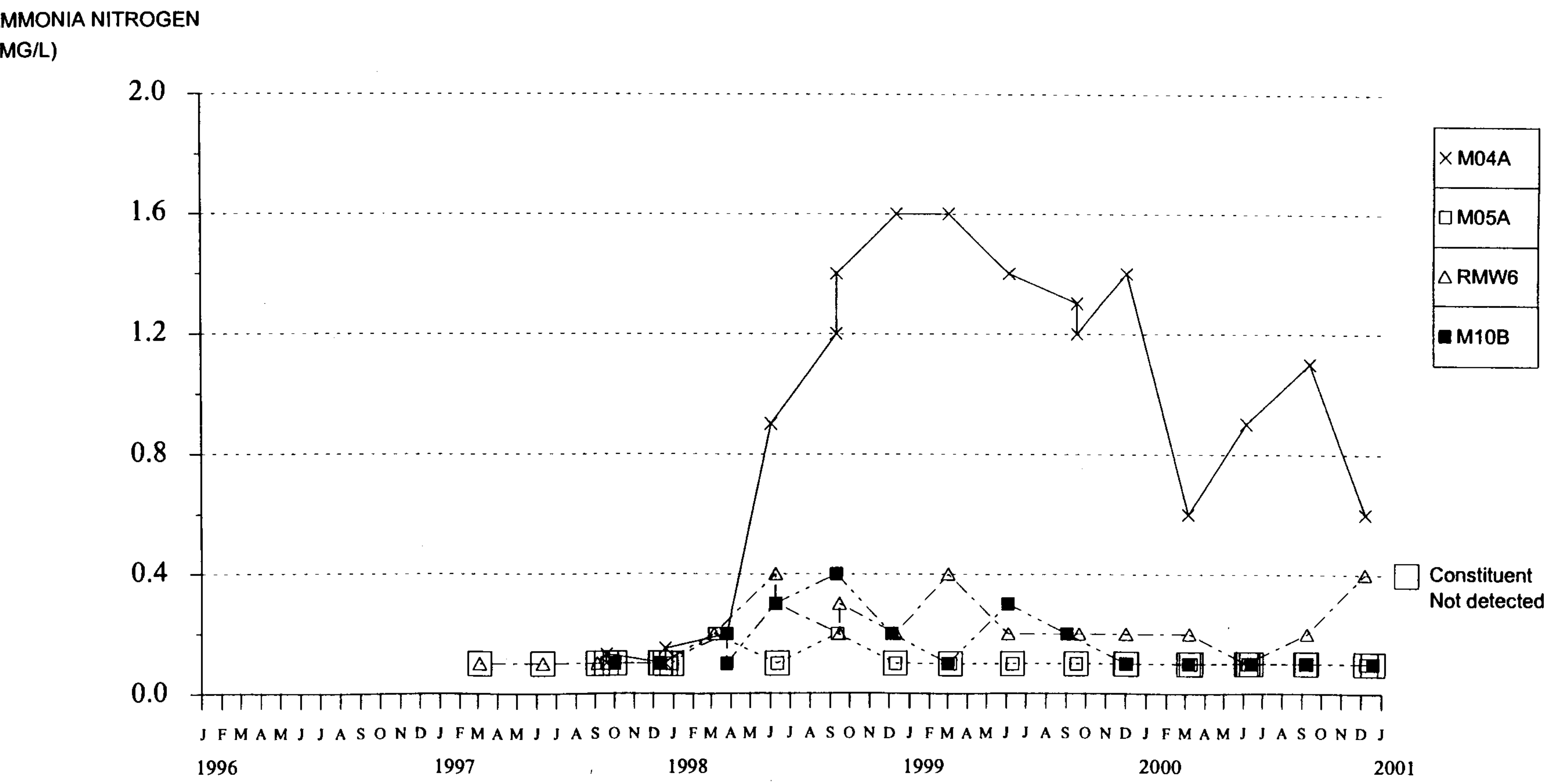


FIGURE 27

PUENTE HILLS LANDFILL

SOLUBLE BOD

BARRIER ONE MONITORING WELLS

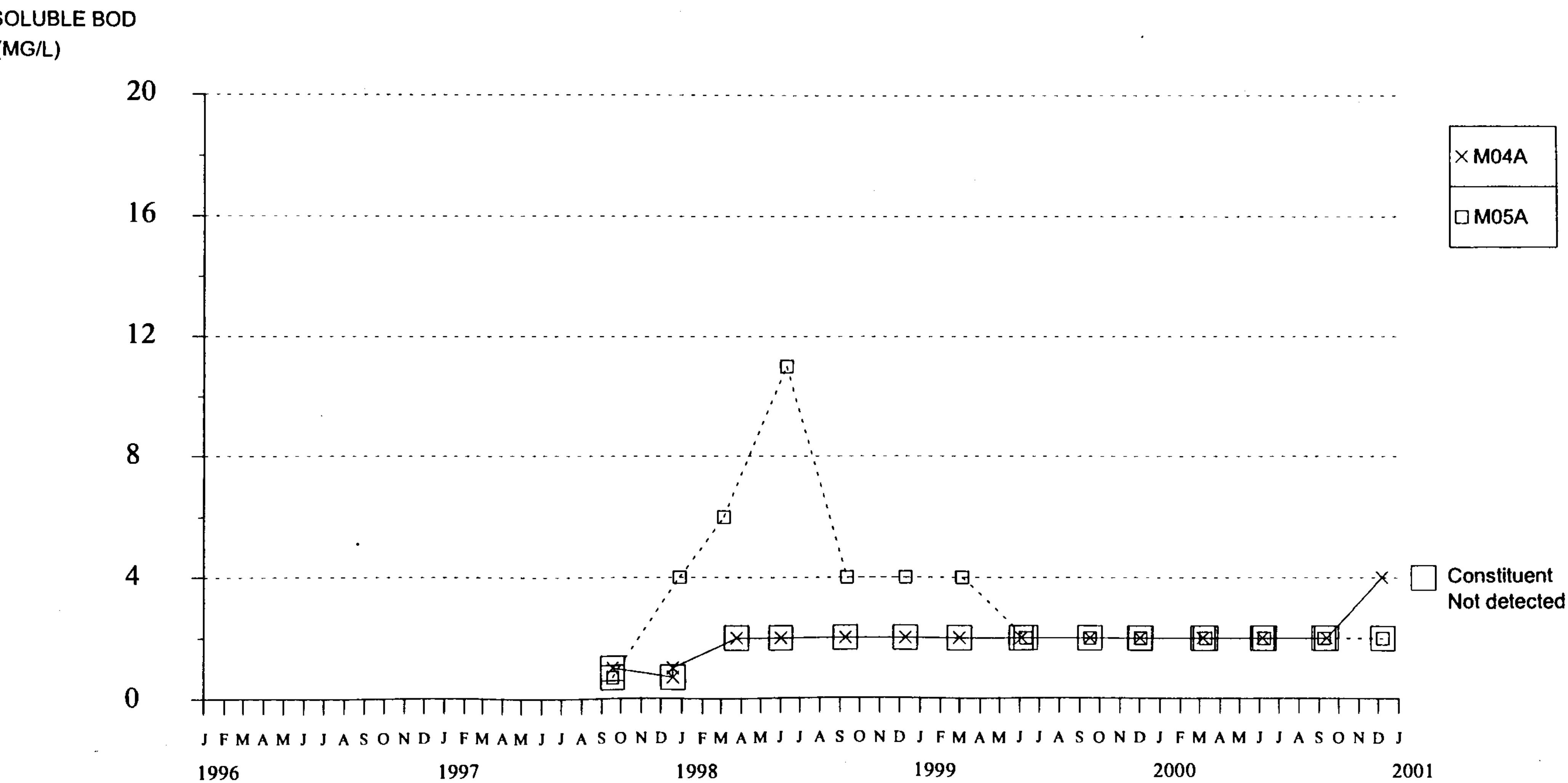


FIGURE 28

PUENTE HILLS LANDFILL

TOTAL COD

BARRIER ONE MONITORING WELLS

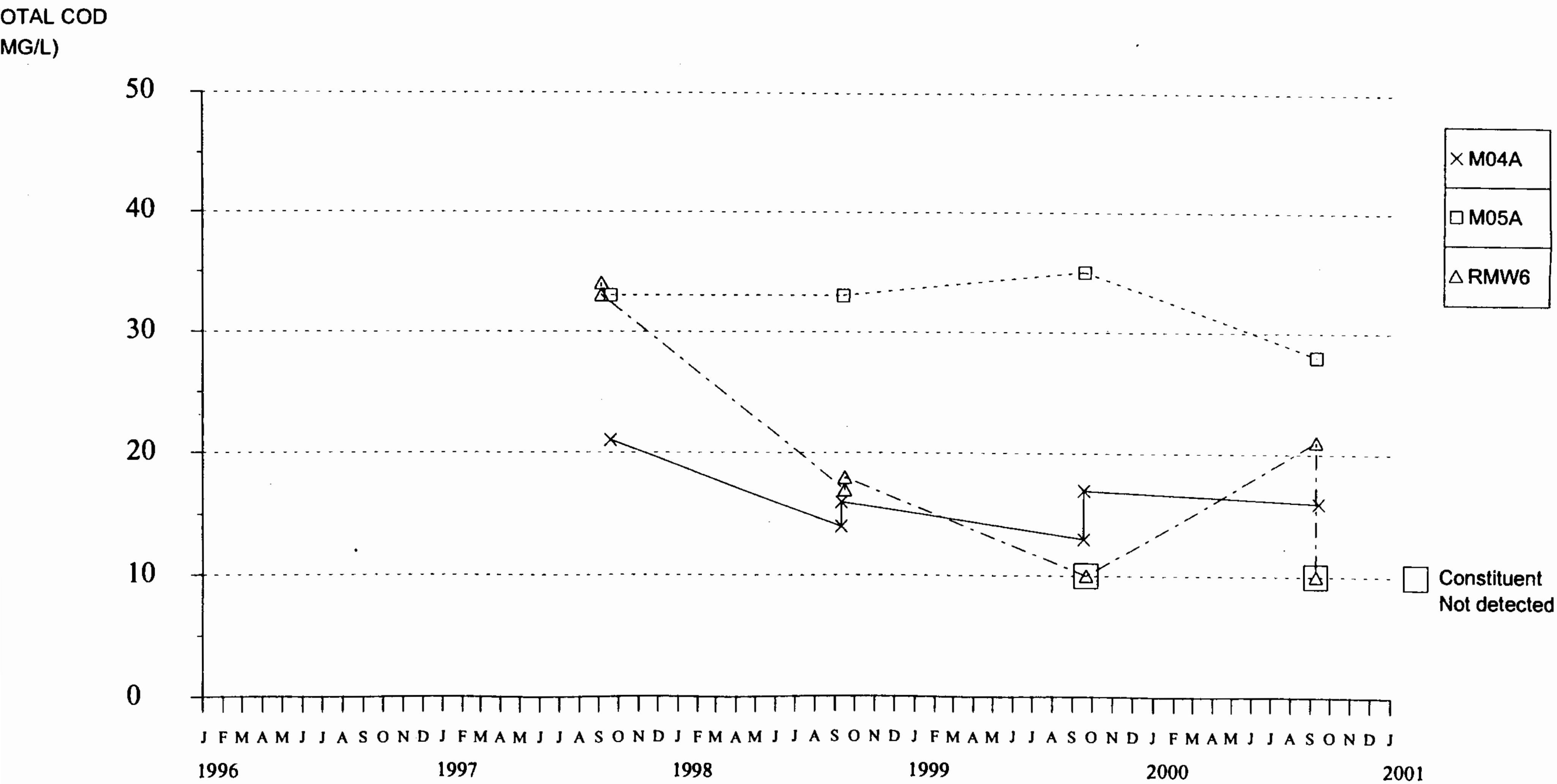


FIGURE 29
PUENTE HILLS LANDFILL
SOLUBLE COD
BARRIER ONE MONITORING WELLS

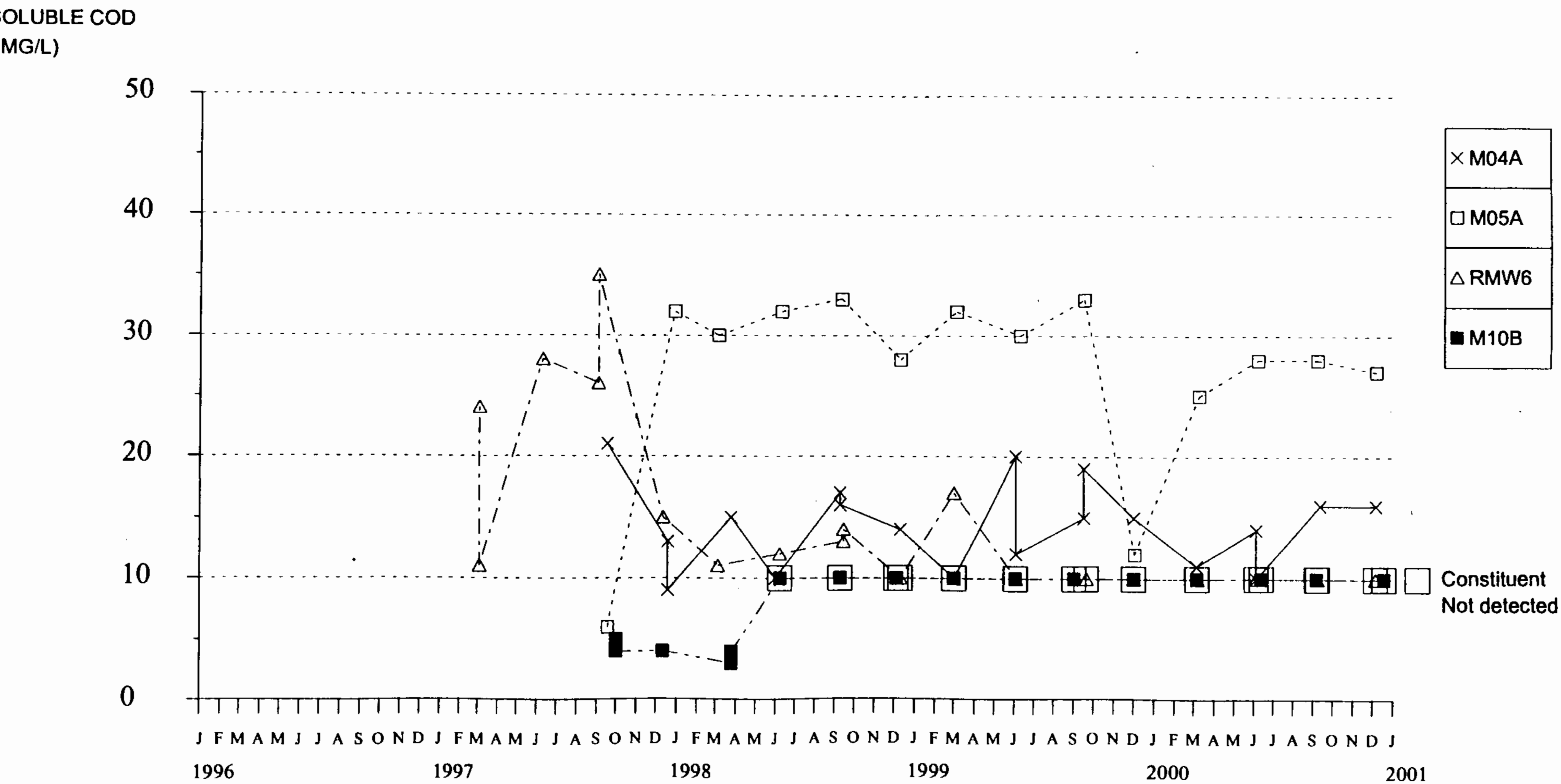


FIGURE 30
PUENTE HILLS LANDFILL
TOTAL ORGANIC CARBON
BARRIER ONE MONITORING WELLS

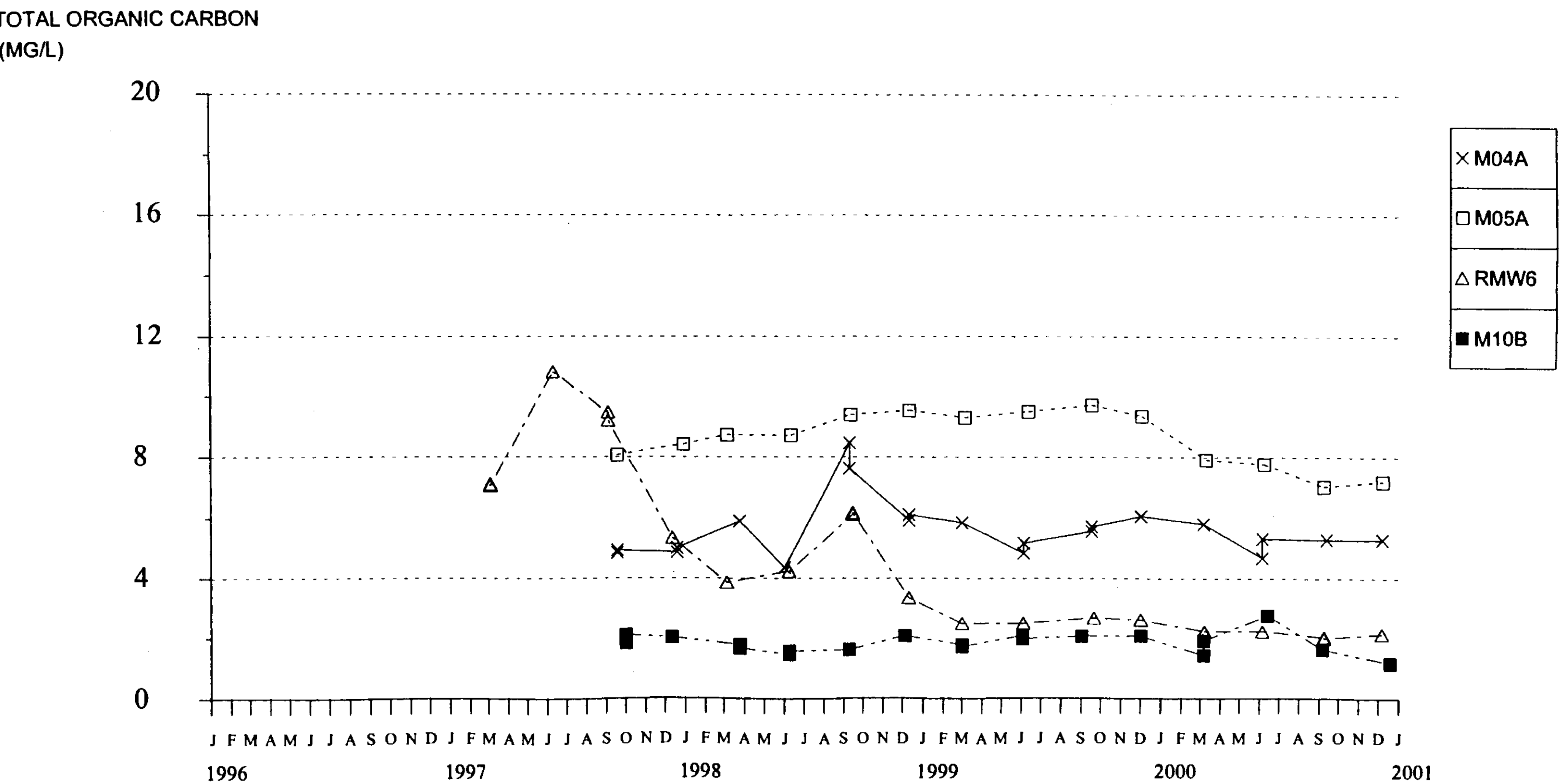


FIGURE 31
PUENTE HILLS LANDFILL
TOTAL ORGANIC HALOGEN
BARRIER ONE MONITORING WELLS

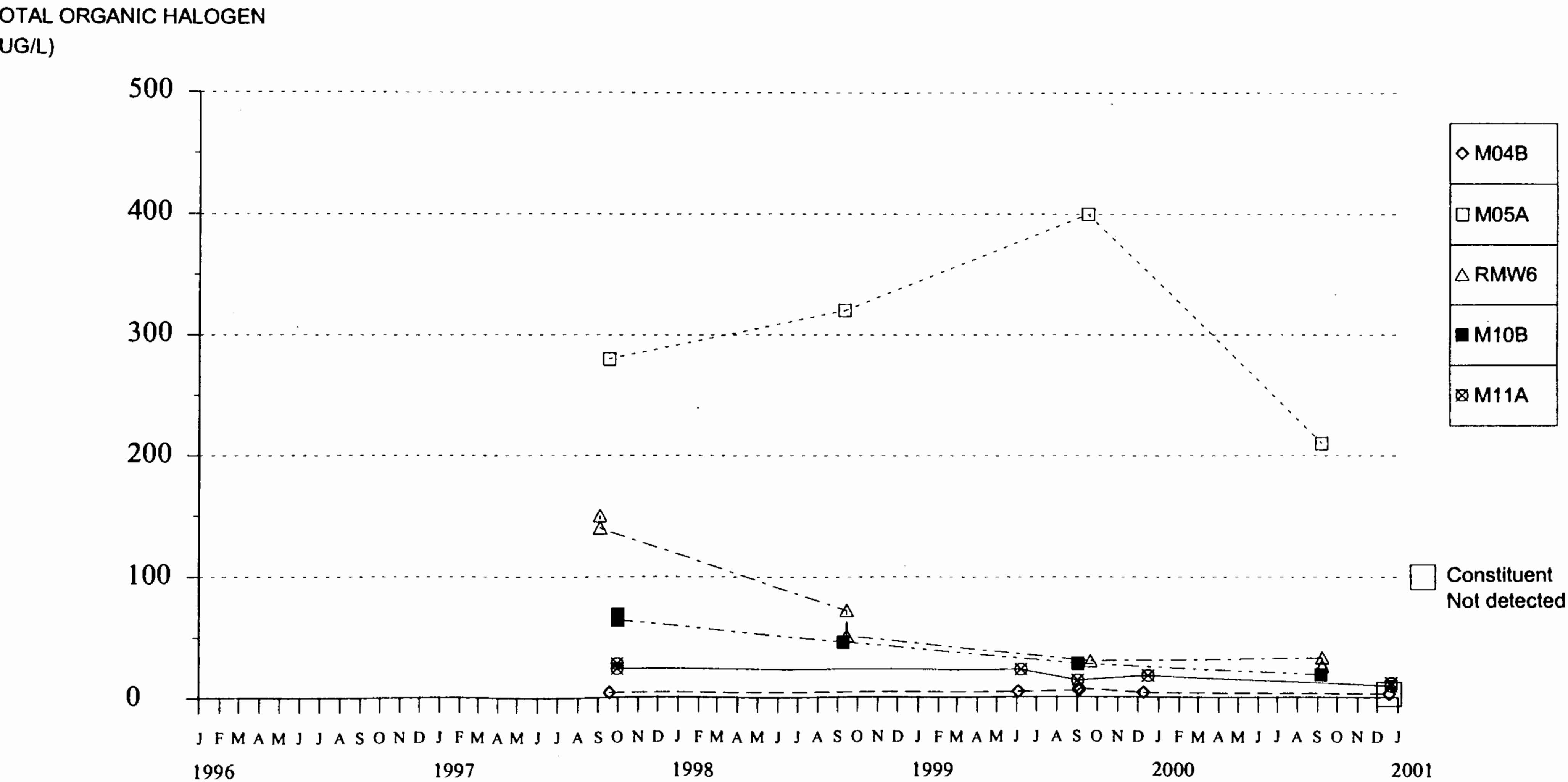


FIGURE 32
PUENTE HILLS LANDFILL
ARSENIC
BARRIER ONE MONITORING WELLS

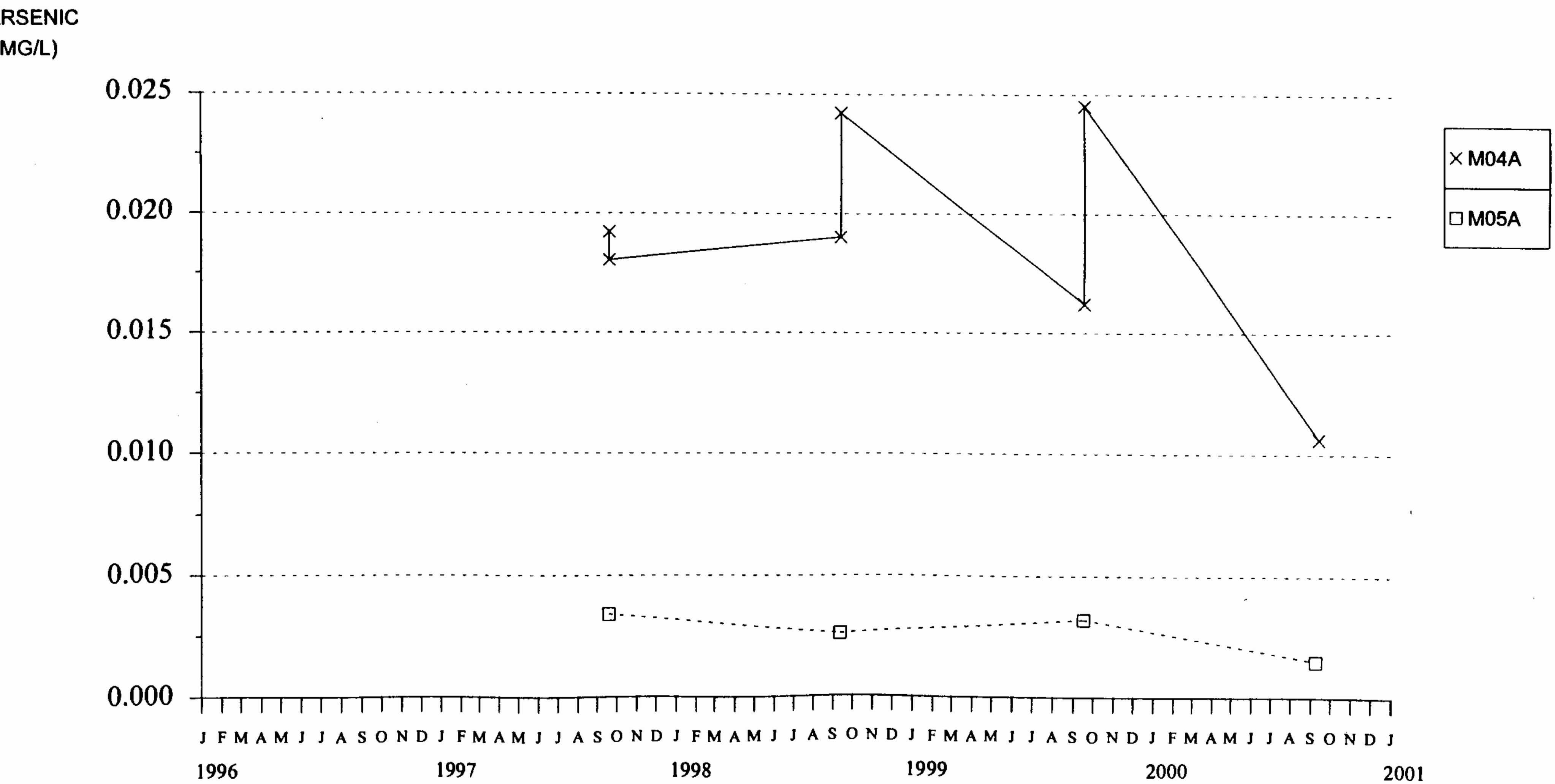


FIGURE 33
PUENTE HILLS LANDFILL
BARIUM
BARRIER ONE MONITORING WELLS

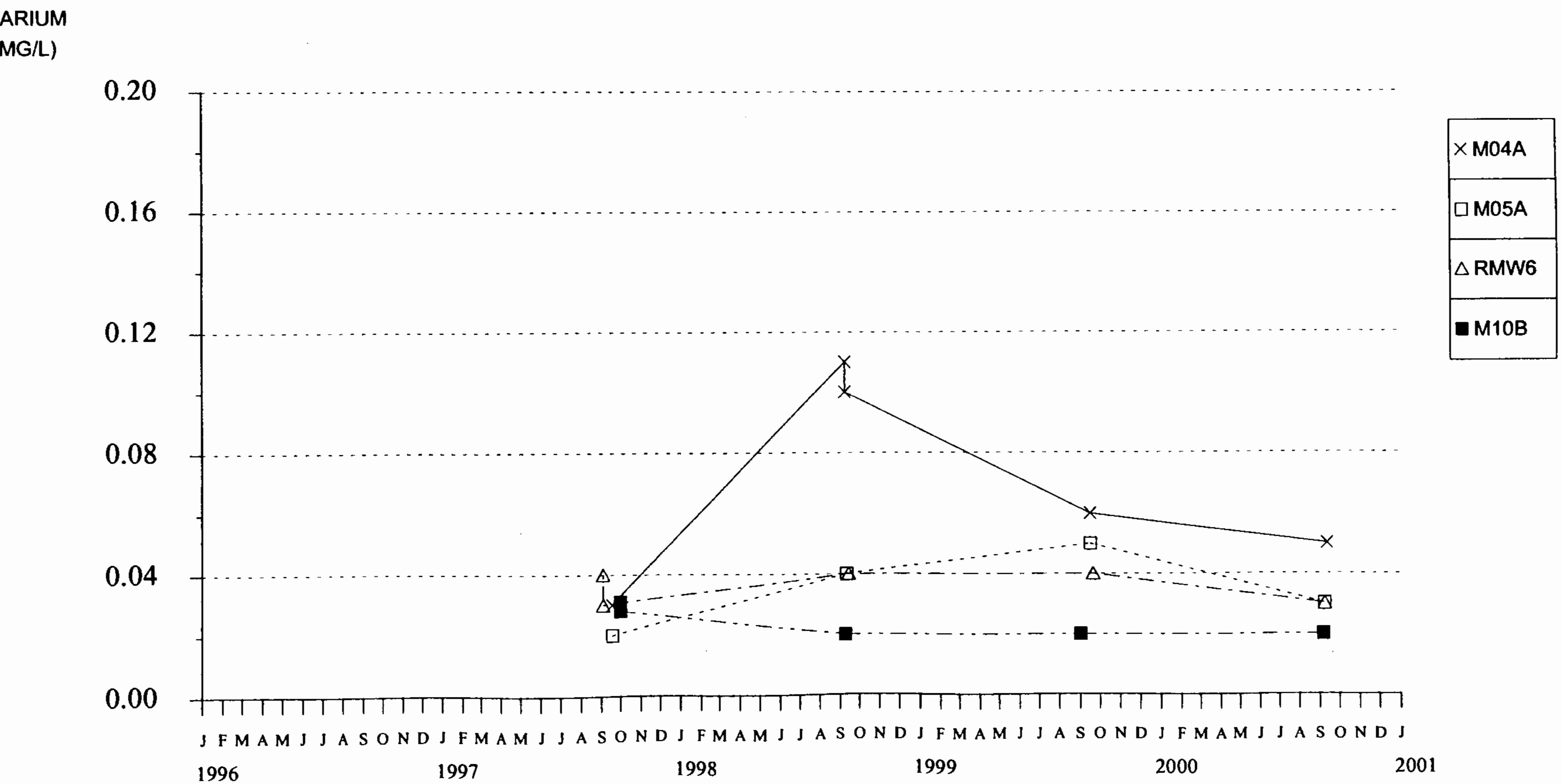


FIGURE 34
PUENTE HILLS LANDFILL
NICKEL
BARRIER ONE MONITORING WELLS

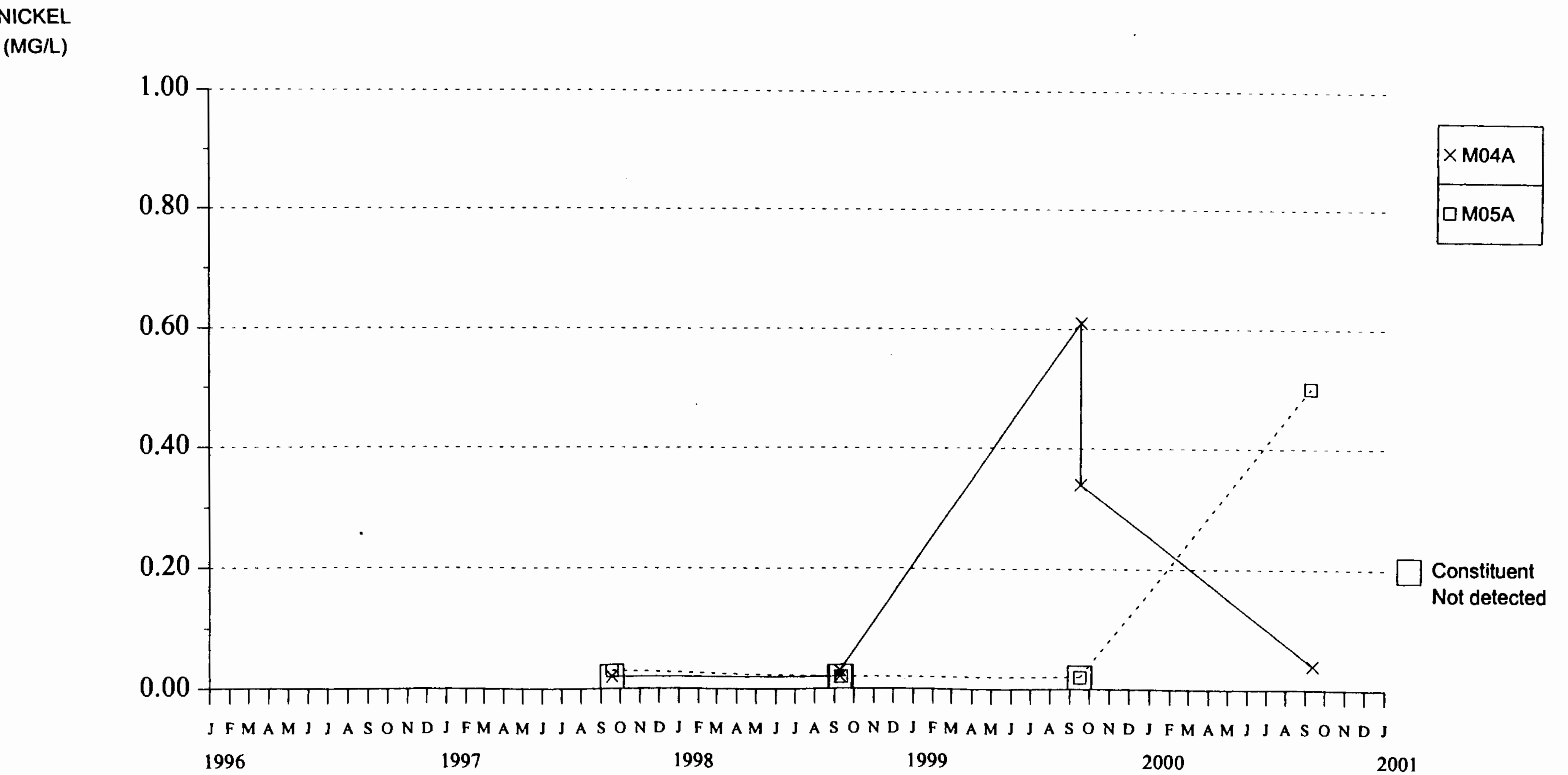


FIGURE 35
PUENTE HILLS LANDFILL
ZINC
BARRIER ONE MONITORING WELLS

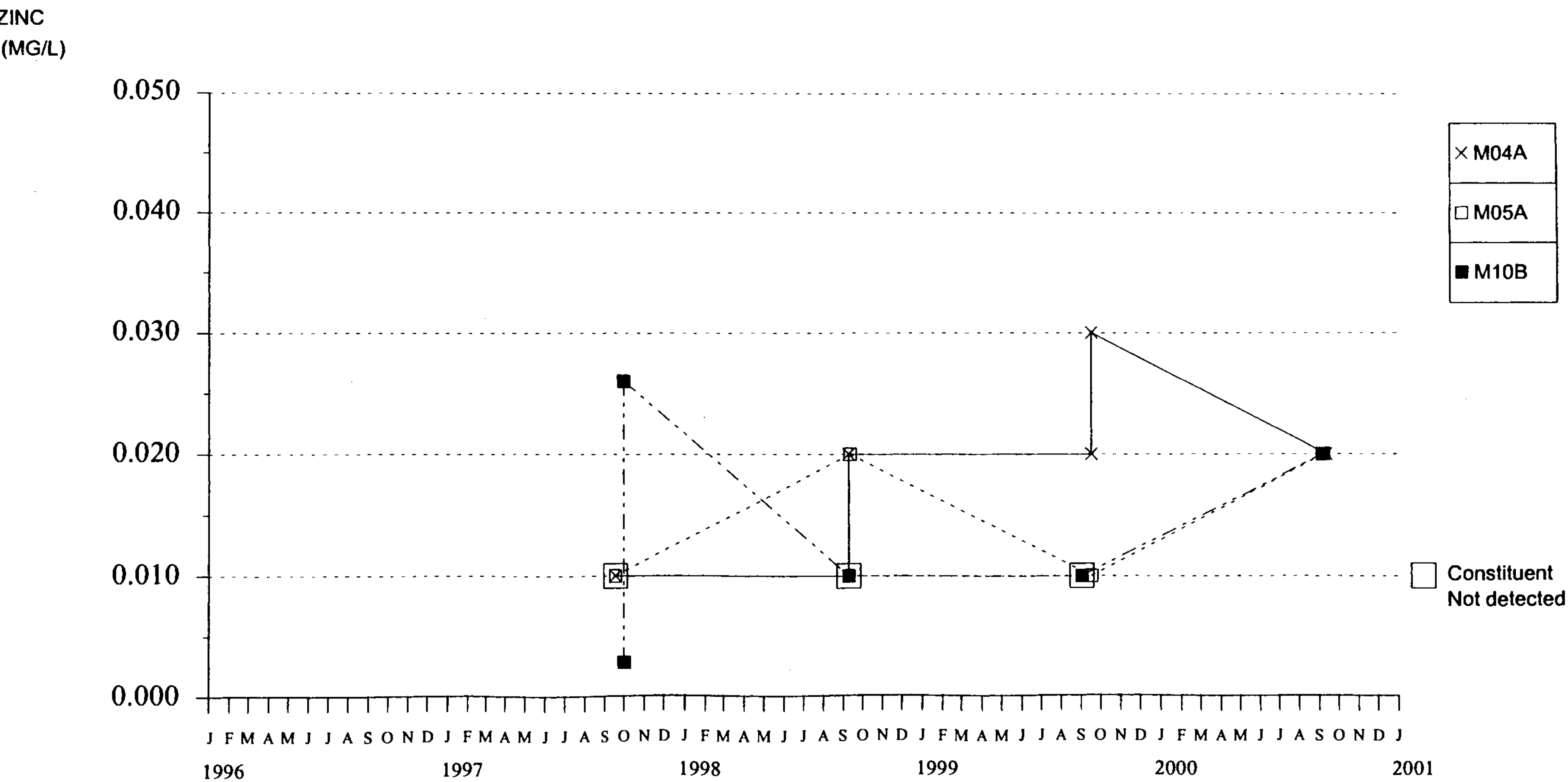


FIGURE 36
PUENTE HILLS LANDFILL
CHLOROFORM
BARRIER ONE MONITORING WELLS

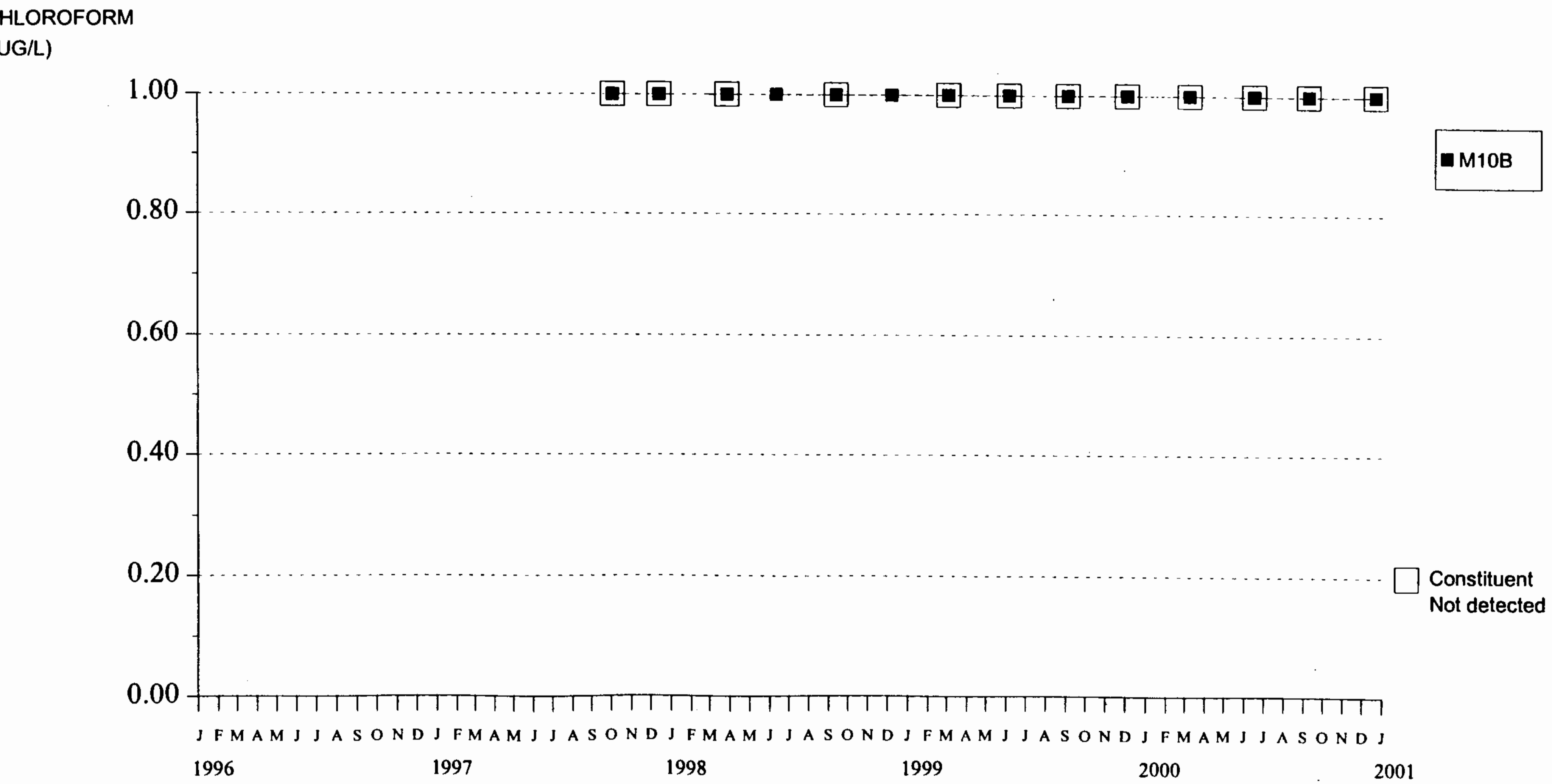


FIGURE 37
PUENTE HILLS LANDFILL
TRICHLOROETHYLENE
BARRIER ONE MONITORING WELLS

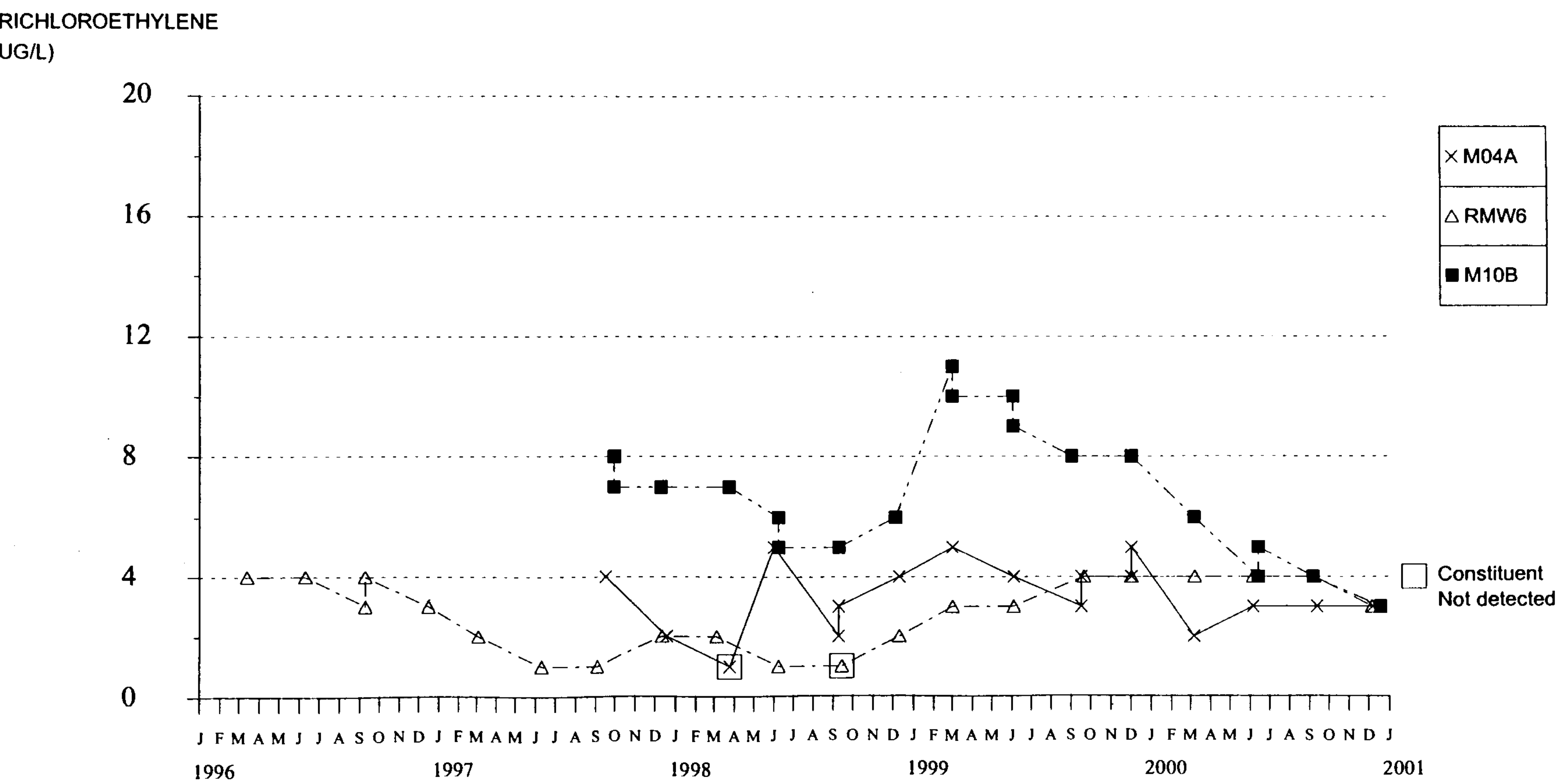


FIGURE 38
PUENTE HILLS LANDFILL
TETRACHLOROETHYLENE
BARRIER ONE MONITORING WELLS

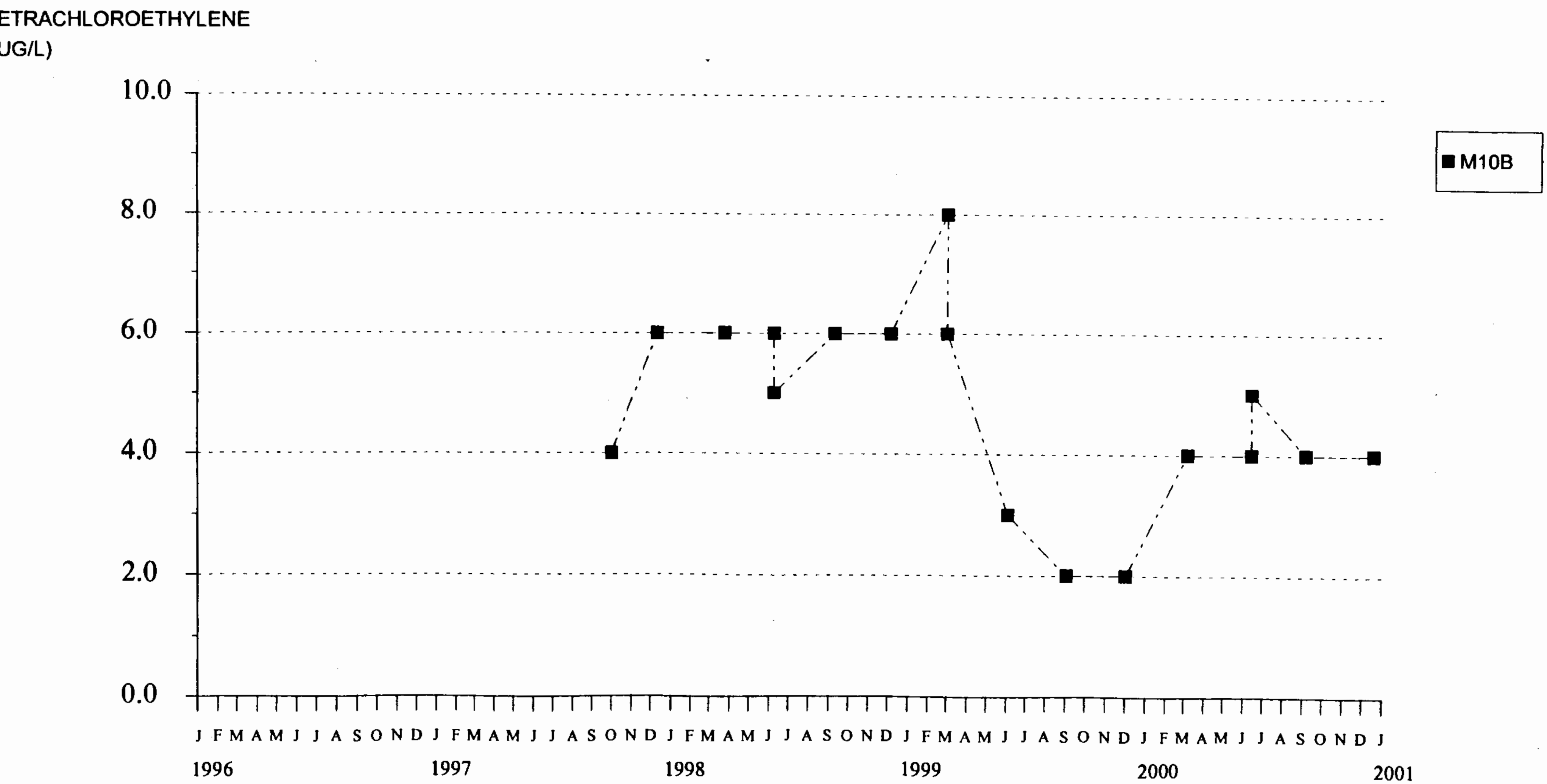


FIGURE 39
PUENTE HILLS LANDFILL
VINYL CHLORIDE
BARRIER ONE MONITORING WELLS

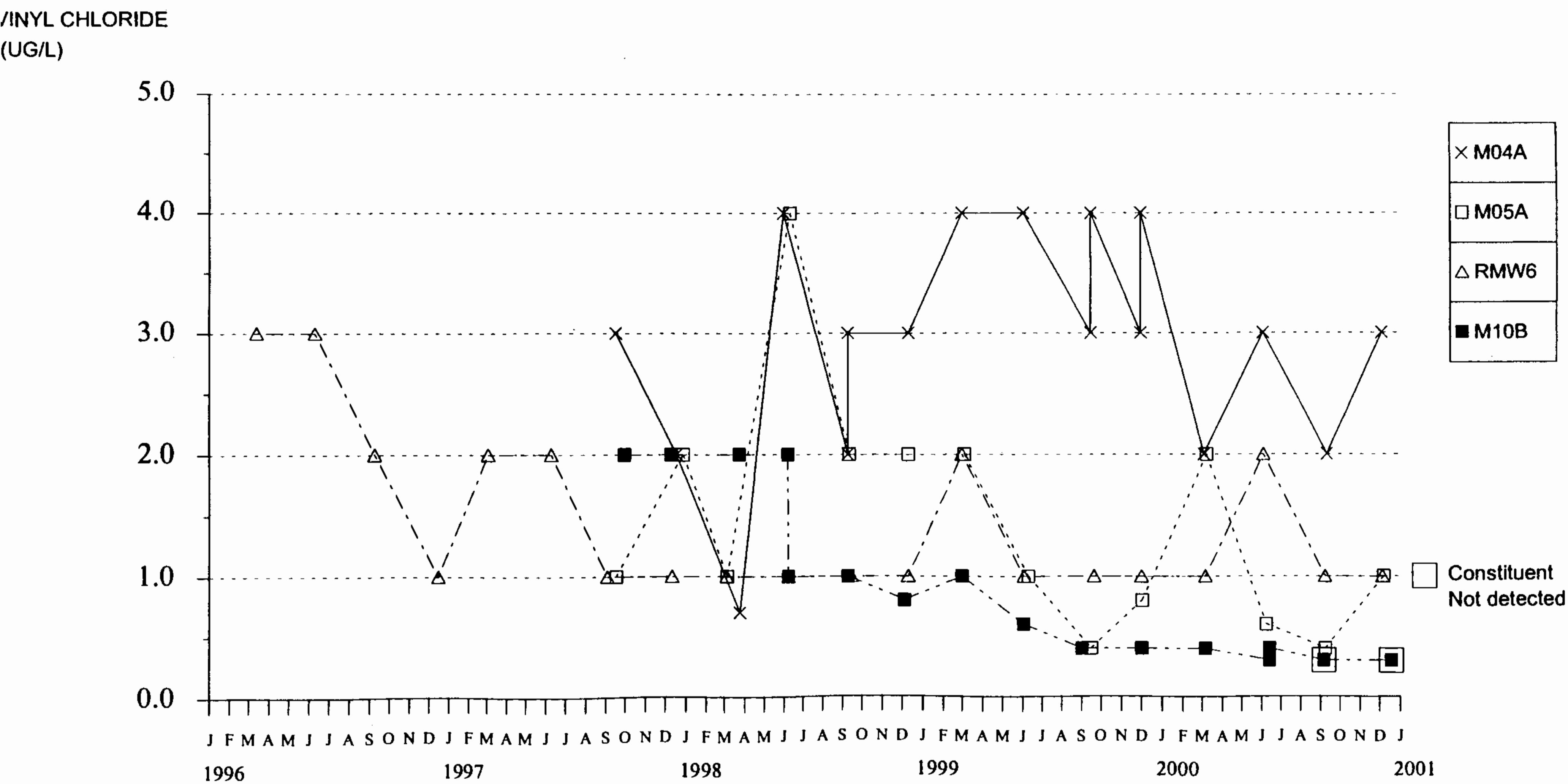


FIGURE 40
PUENTE HILLS LANDFILL
P-DICHLOROBENZENE
BARRIER ONE MONITORING WELLS

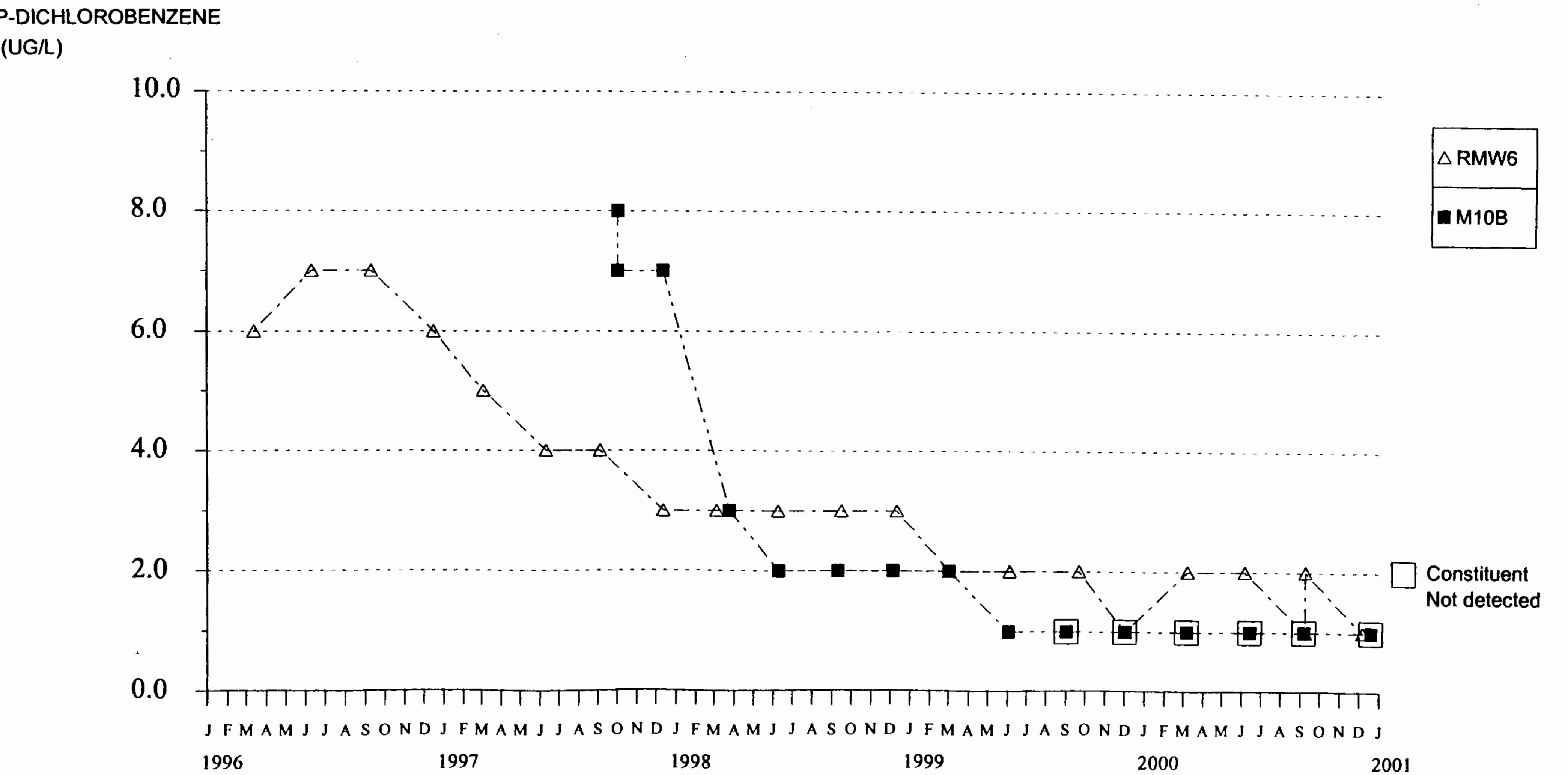


FIGURE 41
PUENTE HILLS LANDFILL
1,1-DICHLOROETHANE
BARRIER ONE MONITORING WELLS

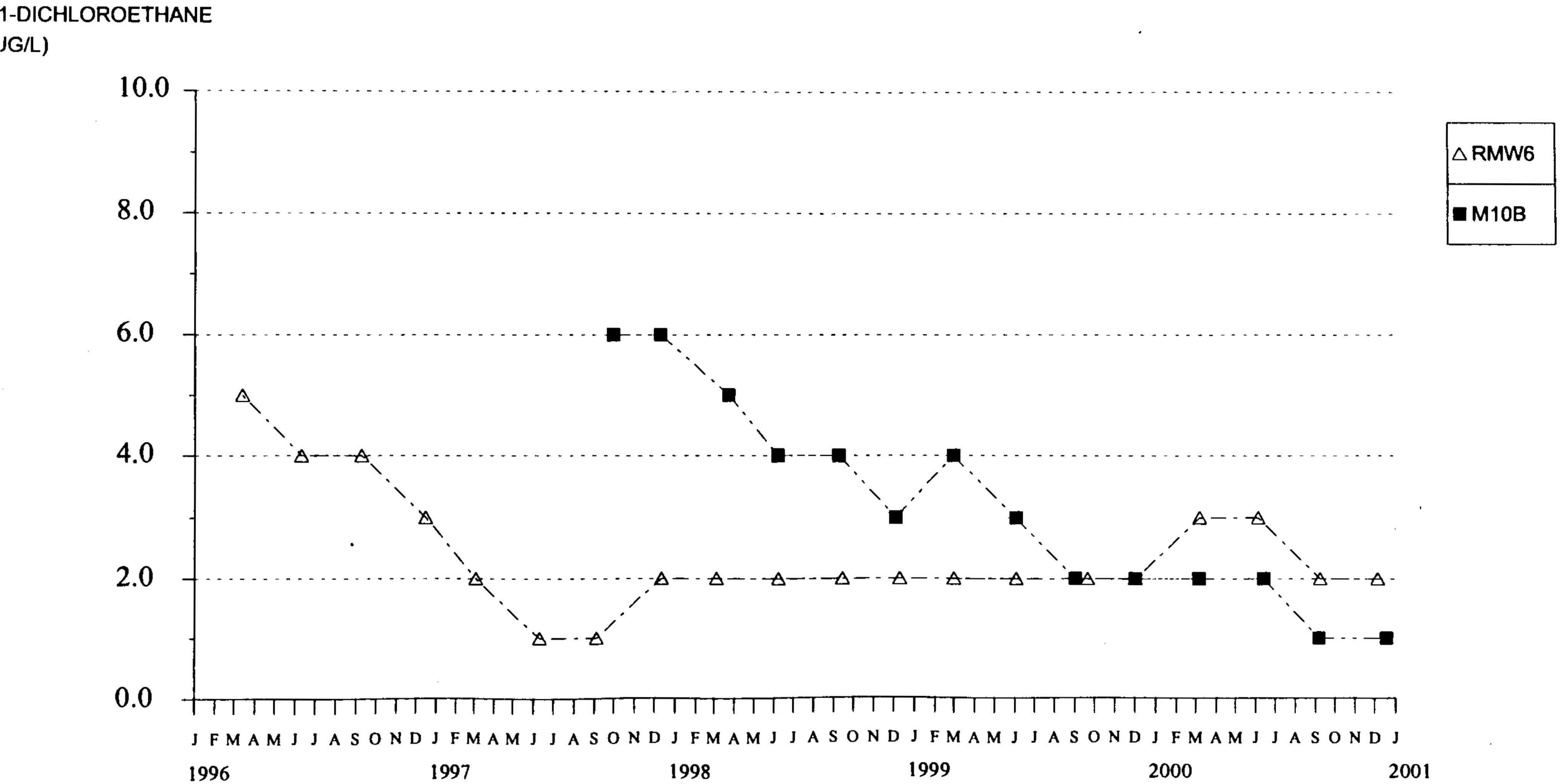


FIGURE 42

PUENTE HILLS LANDFILL

1,2-DICHLOROETHANE

BARRIER ONE MONITORING WELLS

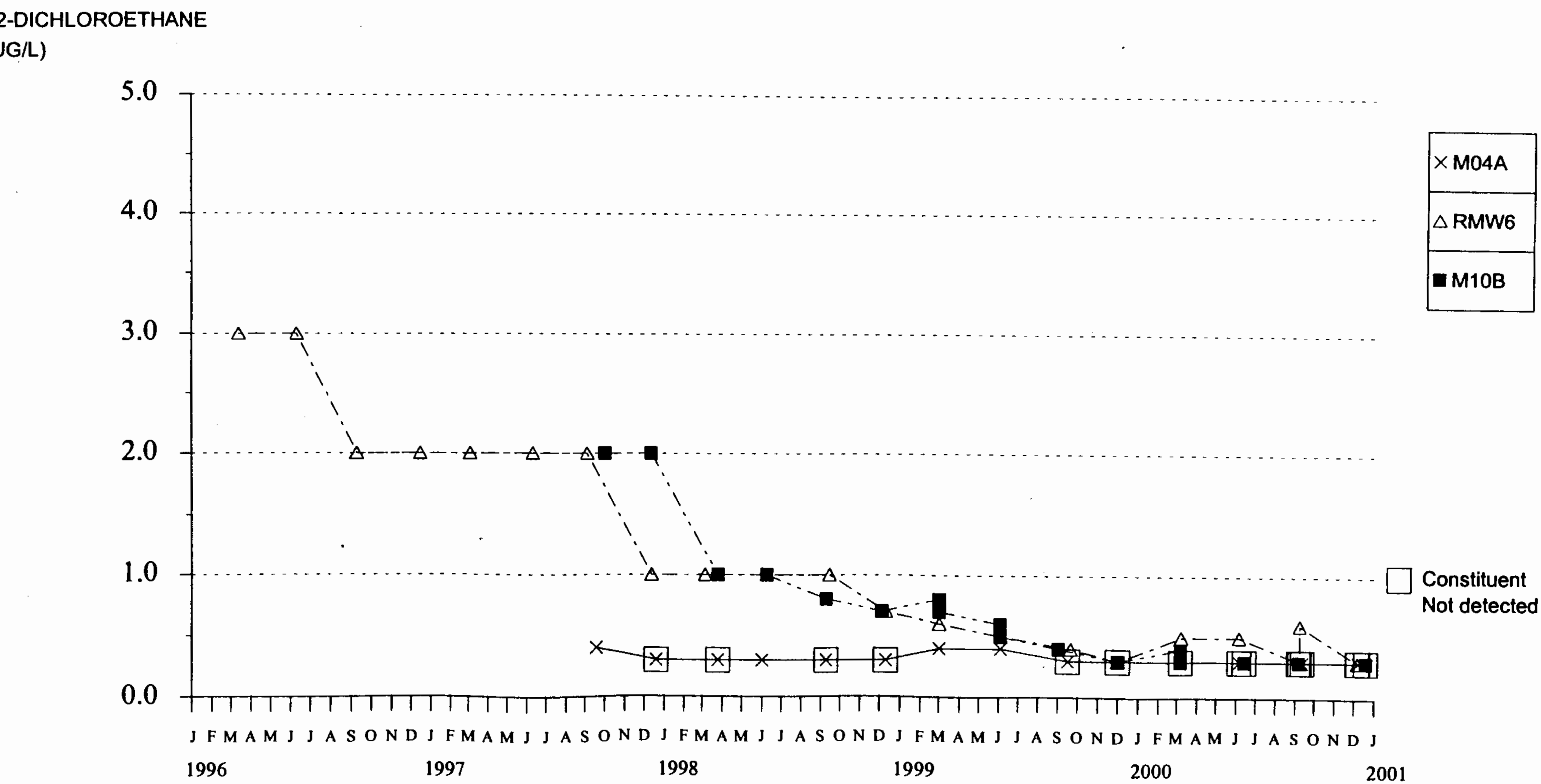


FIGURE 43
PUENTE HILLS LANDFILL
CIS-1,2-DICHLOROETHYLENE
BARRIER ONE MONITORING WELLS

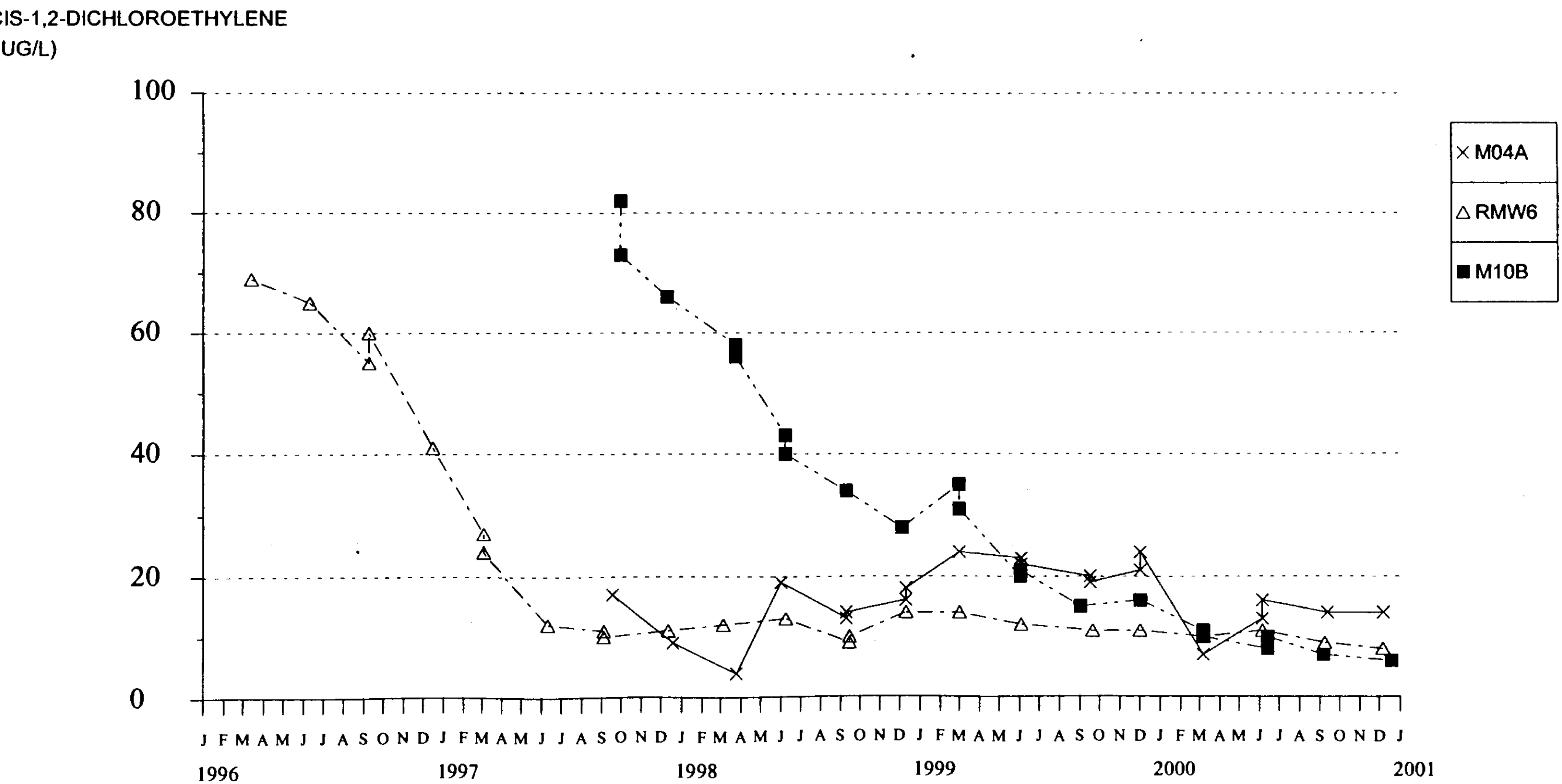


FIGURE 44

PUENTE HILLS LANDFILL

IRON

BARRIER ONE MONITORING WELLS (FILTERED)

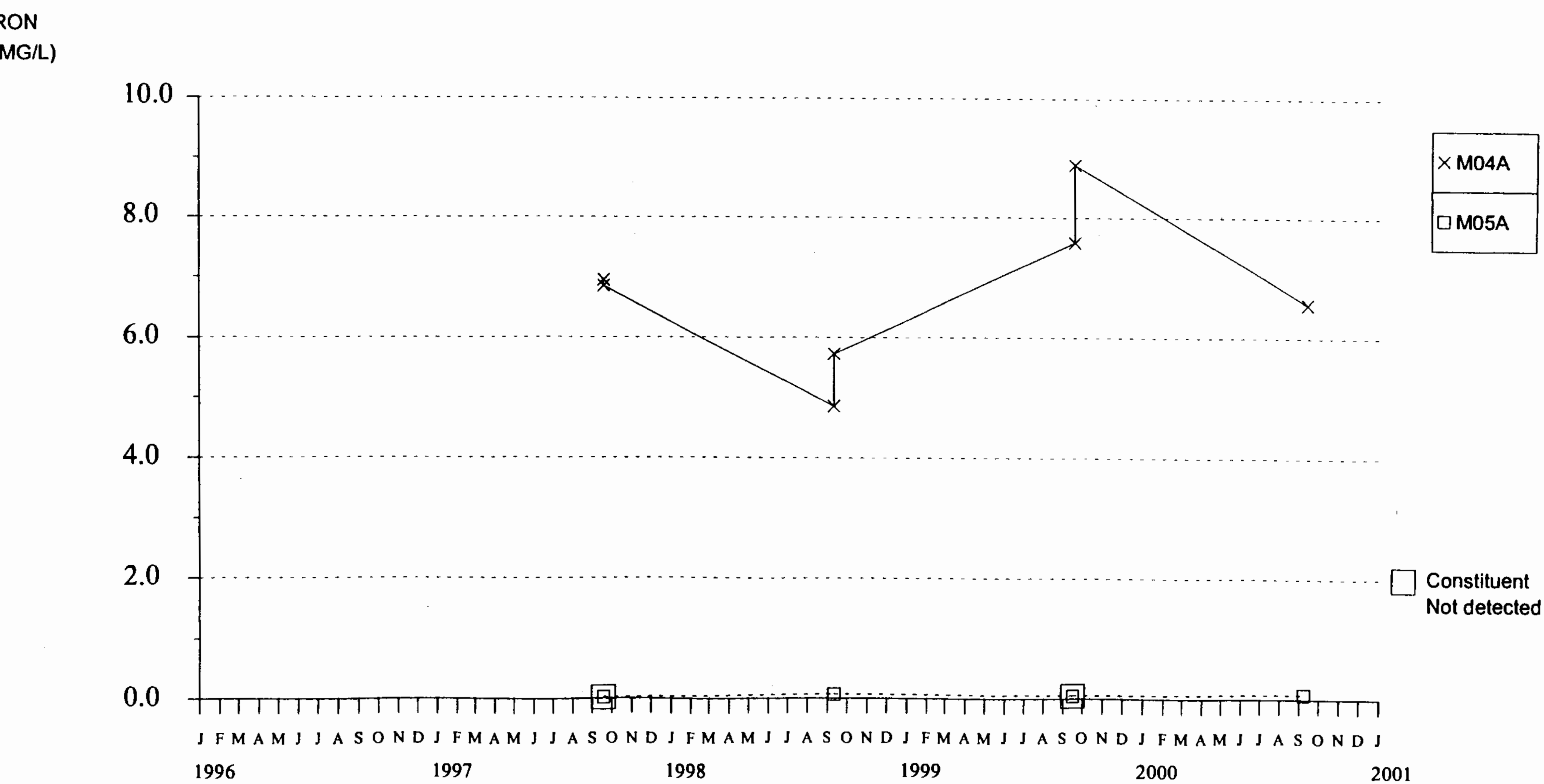


FIGURE 45

PUENTE HILLS LANDFILL

MANGANESE

BARRIER ONE MONITORING WELLS (FILTERED)

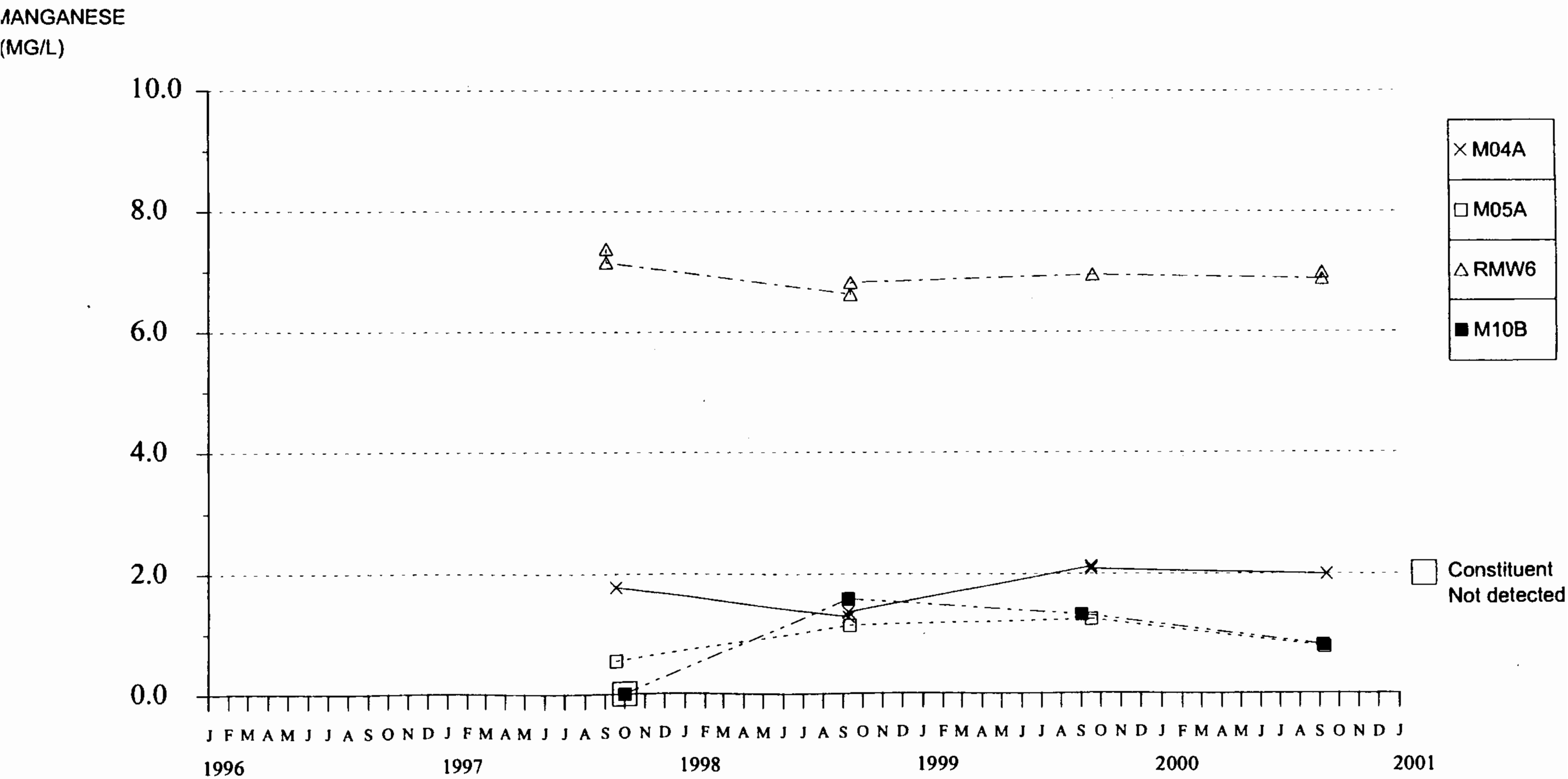


FIGURE 46
PUENTE HILLS LANDFILL
ARSENIC
BARRIER ONE MONITORING WELLS (FILTERED)

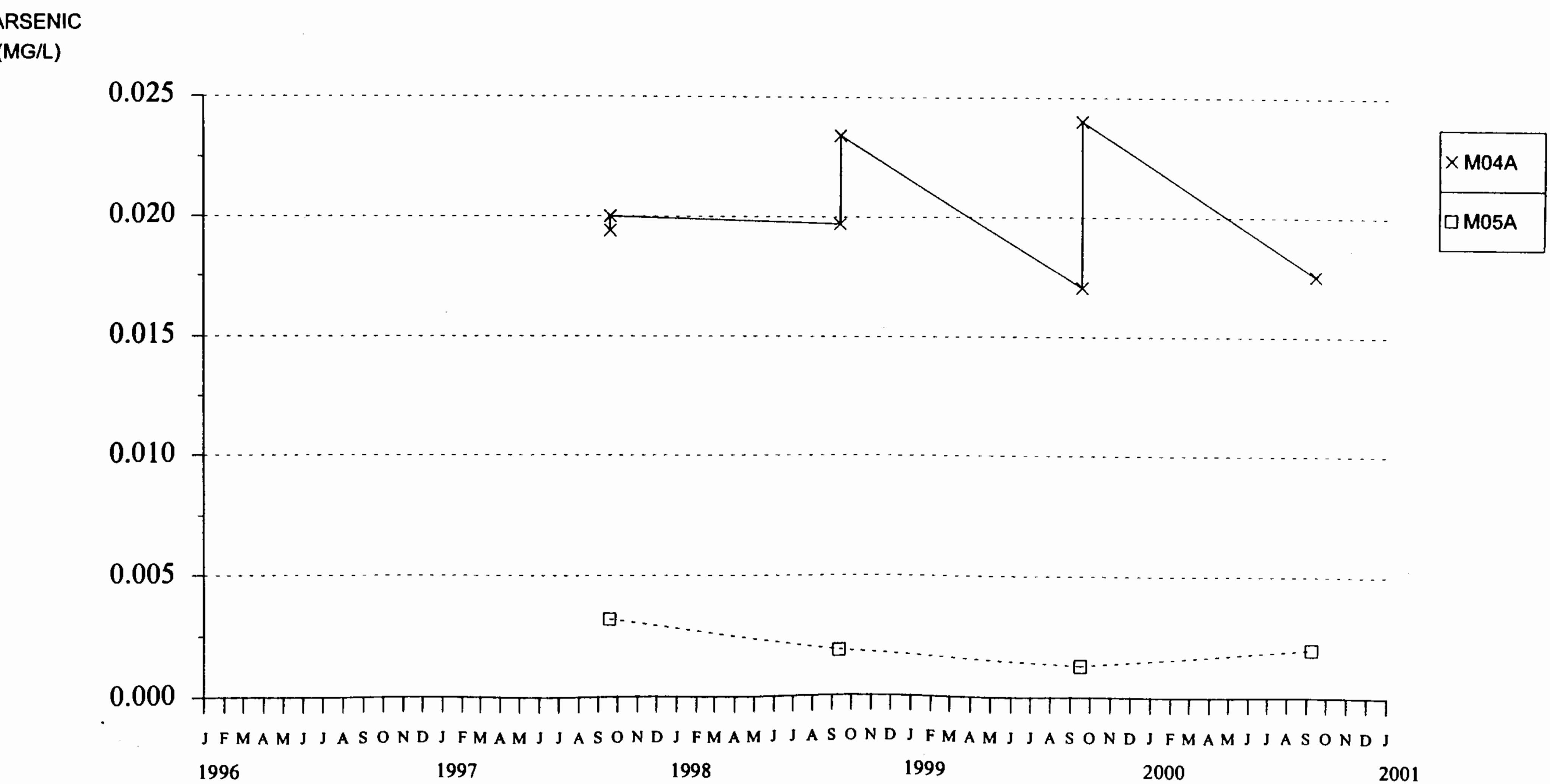


FIGURE 47

PUENTE HILLS LANDFILL

BARIUM

BARRIER ONE MONITORING WELLS (FILTERED)

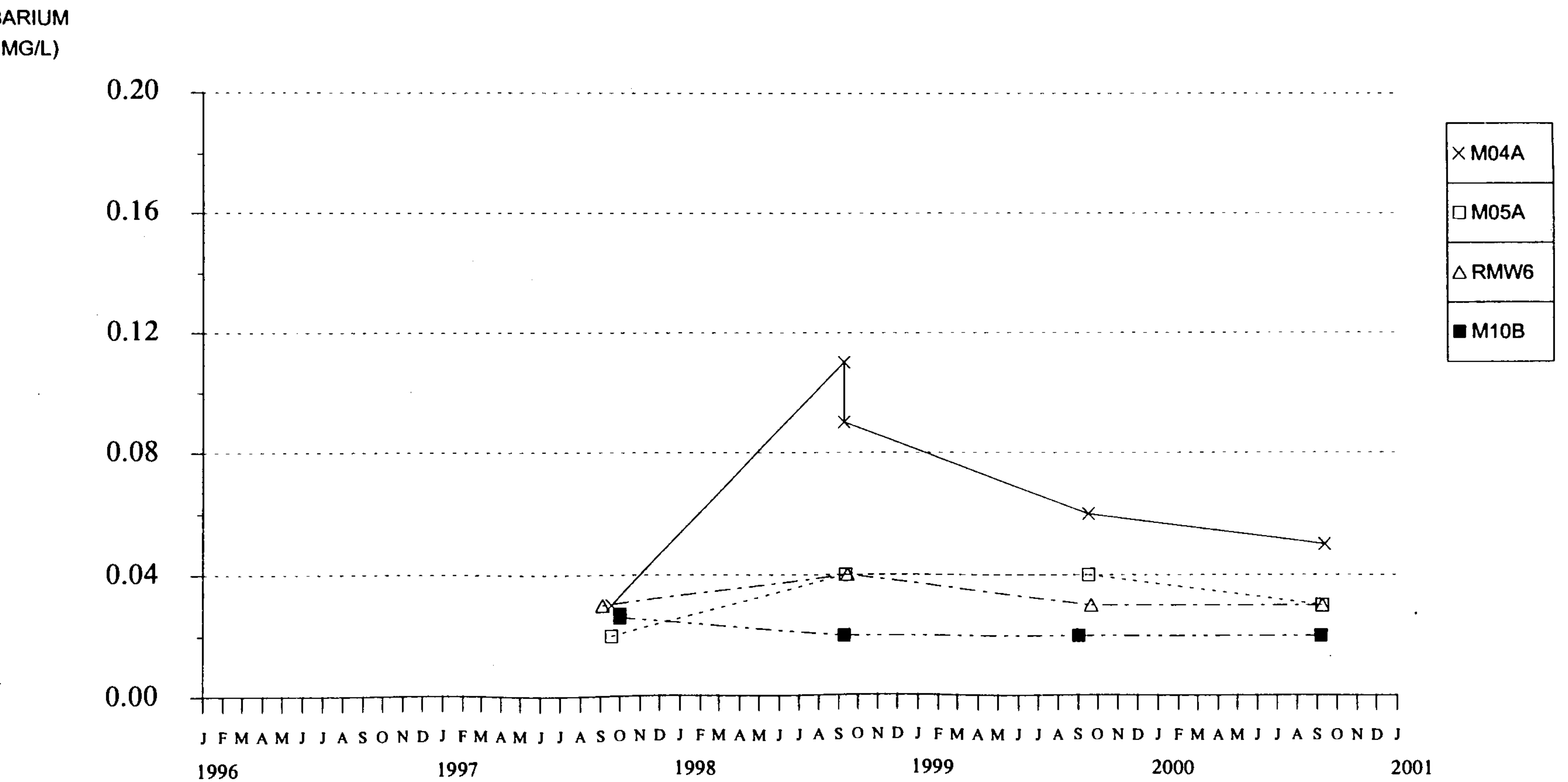


FIGURE 48
PUENTE HILLS LANDFILL
NICKEL
BARRIER ONE MONITORING WELLS (FILTERED)

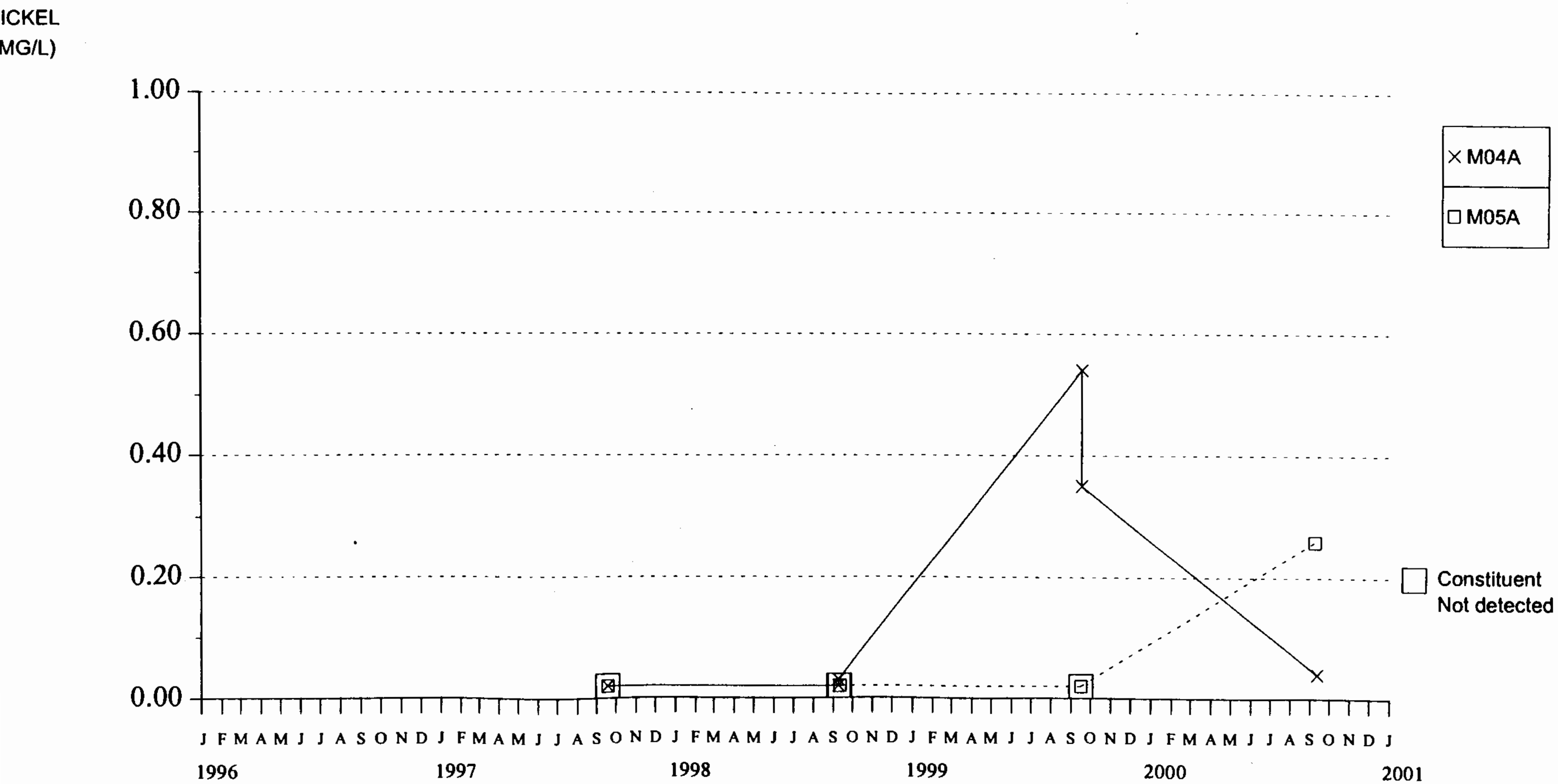
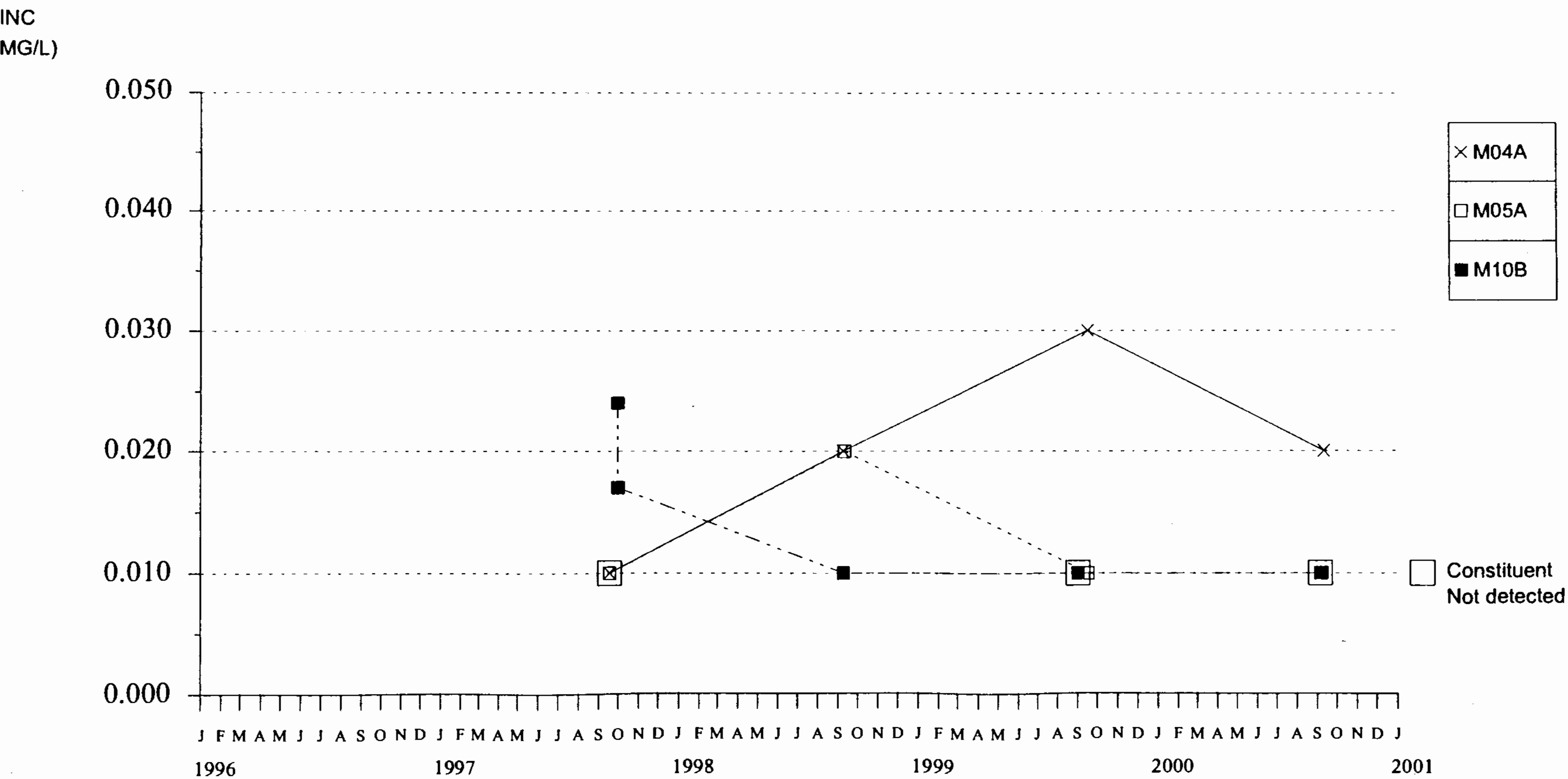


FIGURE 49
PUENTE HILLS LANDFILL
ZINC
BARRIER ONE MONITORING WELLS (FILTERED)



FIGURES 50 - 61

WATER QUALITY DATA GRAPHS

BARRIER 2 MONITORING WELLS

FIGURE 50
PUENTE HILLS LANDFILL
DEPTH TO WATER
BARRIER TWO MONITORING WELLS

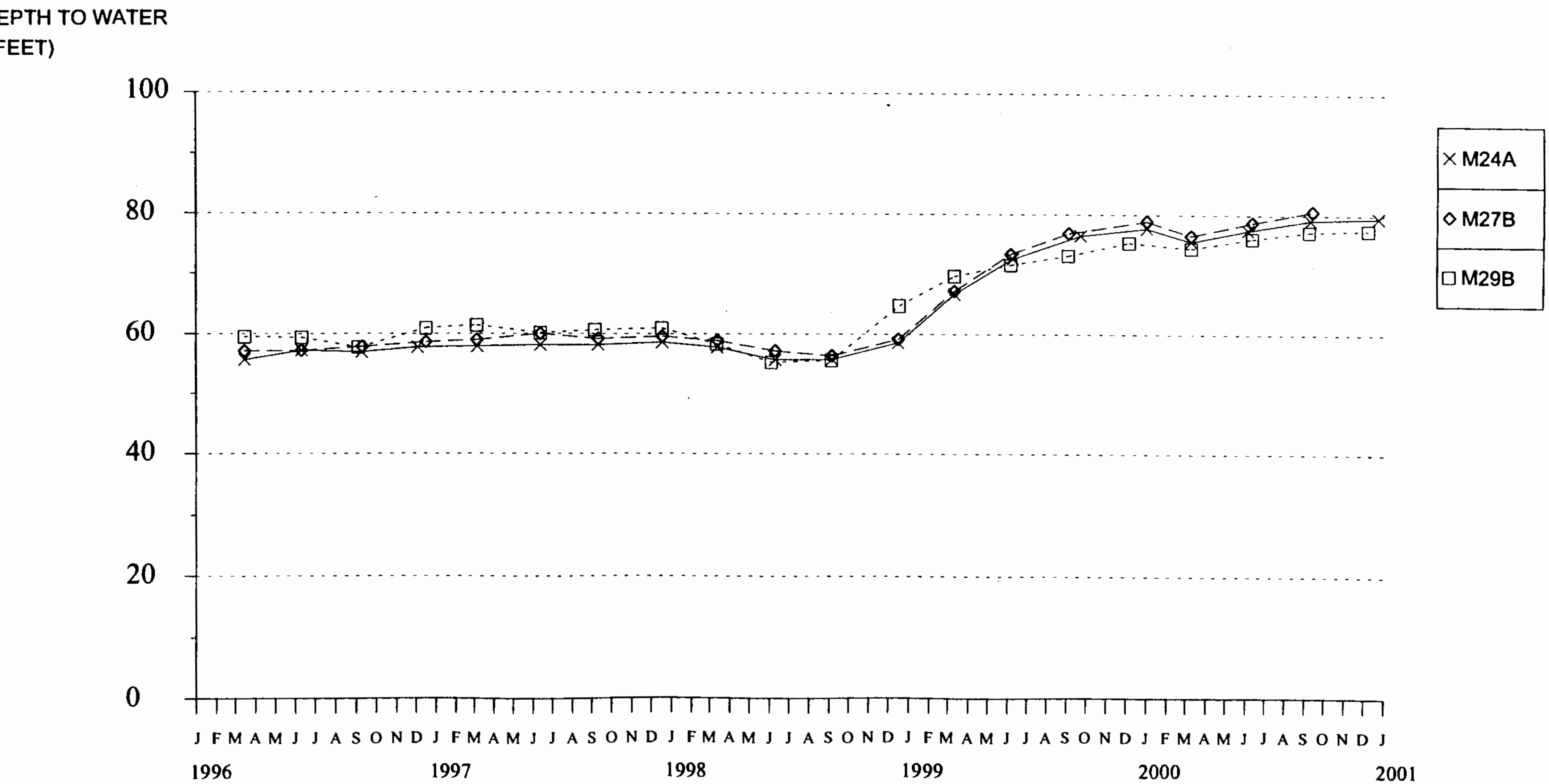


FIGURE 51
PUENTE HILLS LANDFILL
DEPTH TO BOTTOM
BARRIER TWO MONITORING WELLS

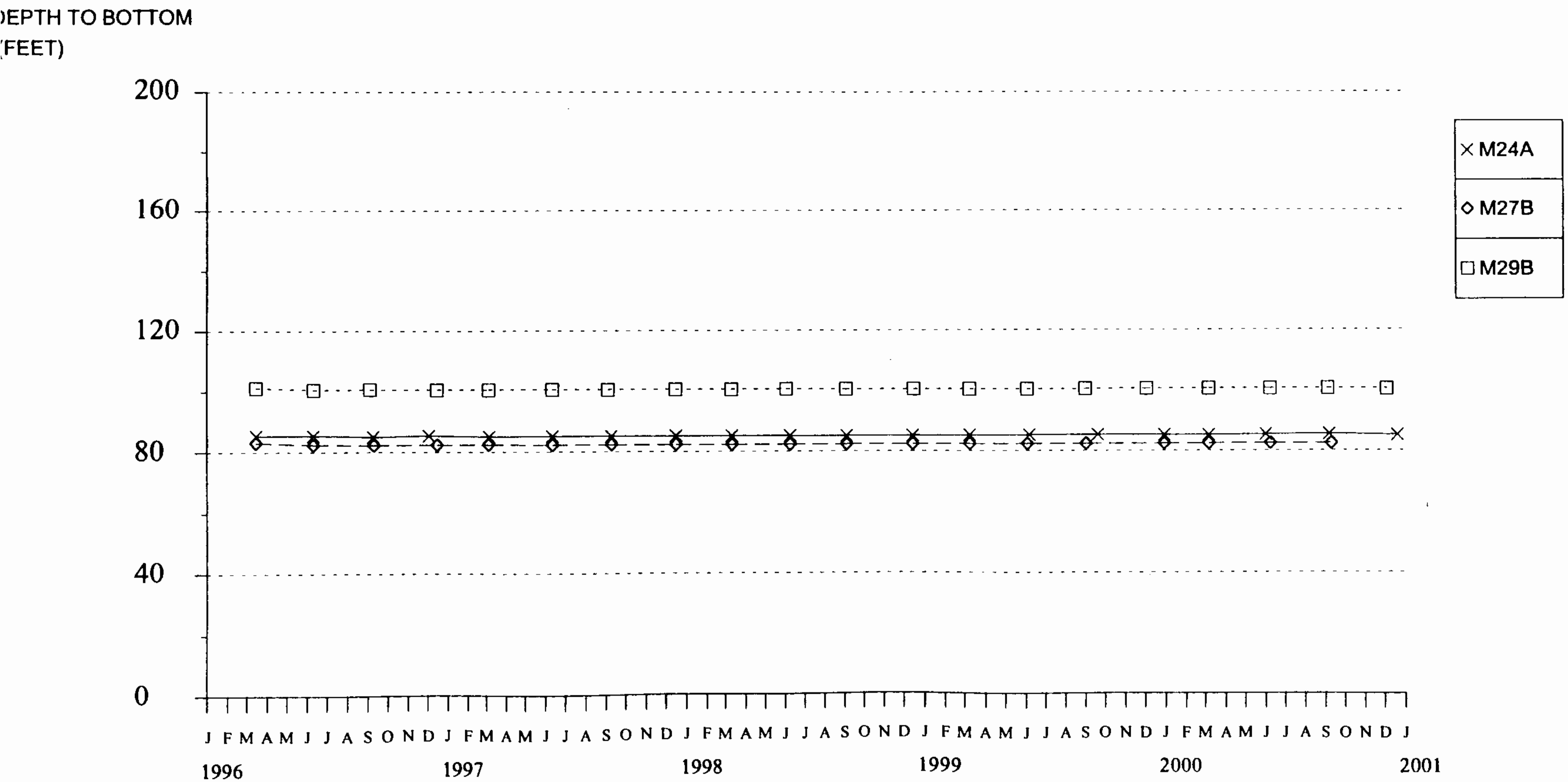


FIGURE 52
PUENTE HILLS LANDFILL
PERCENT OXYGEN IN GAS
BARRIER TWO MONITORING WELLS

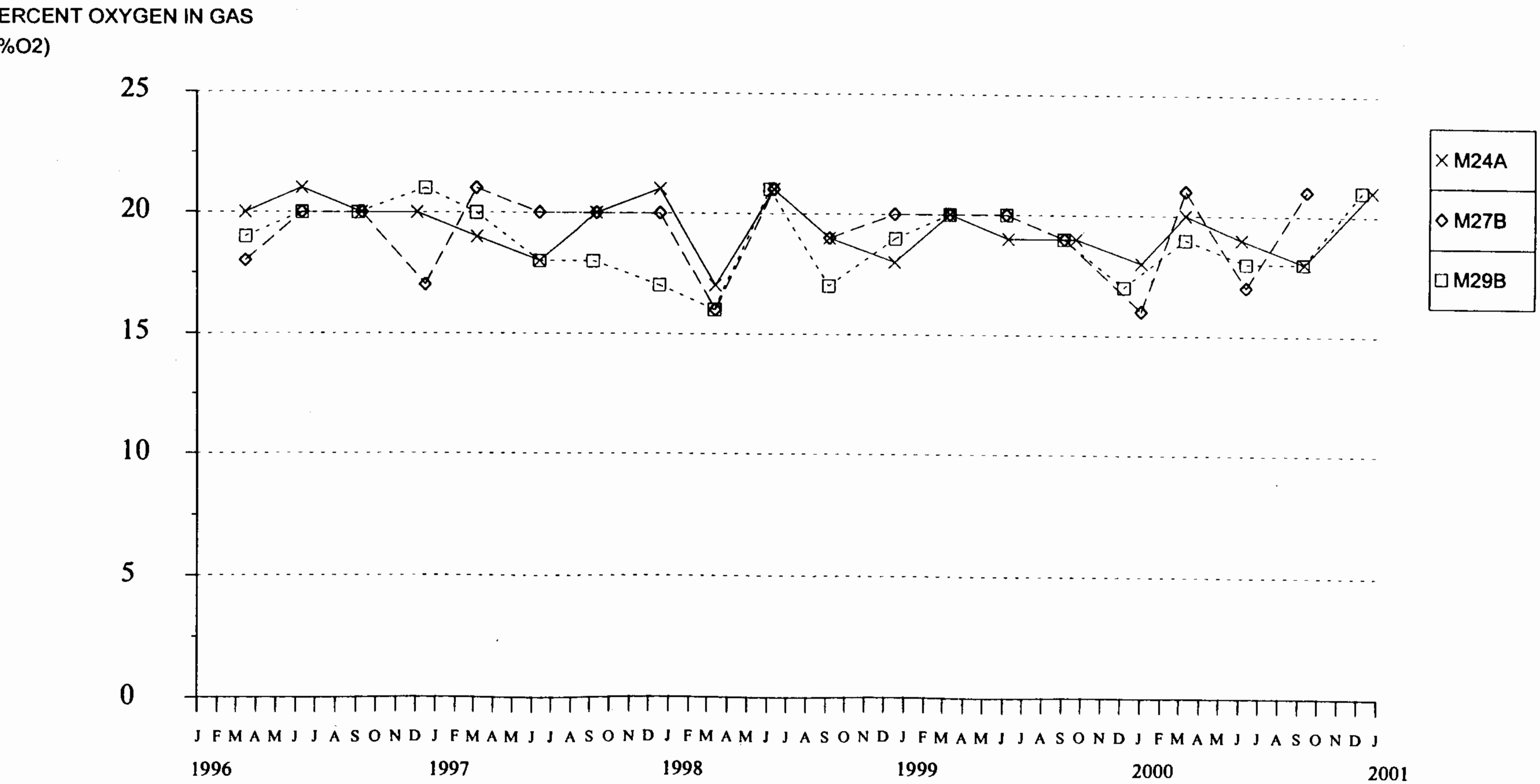


FIGURE 53
PUENTE HILLS LANDFILL
FIELD WATER TEMPERATURE
BARRIER TWO MONITORING WELLS

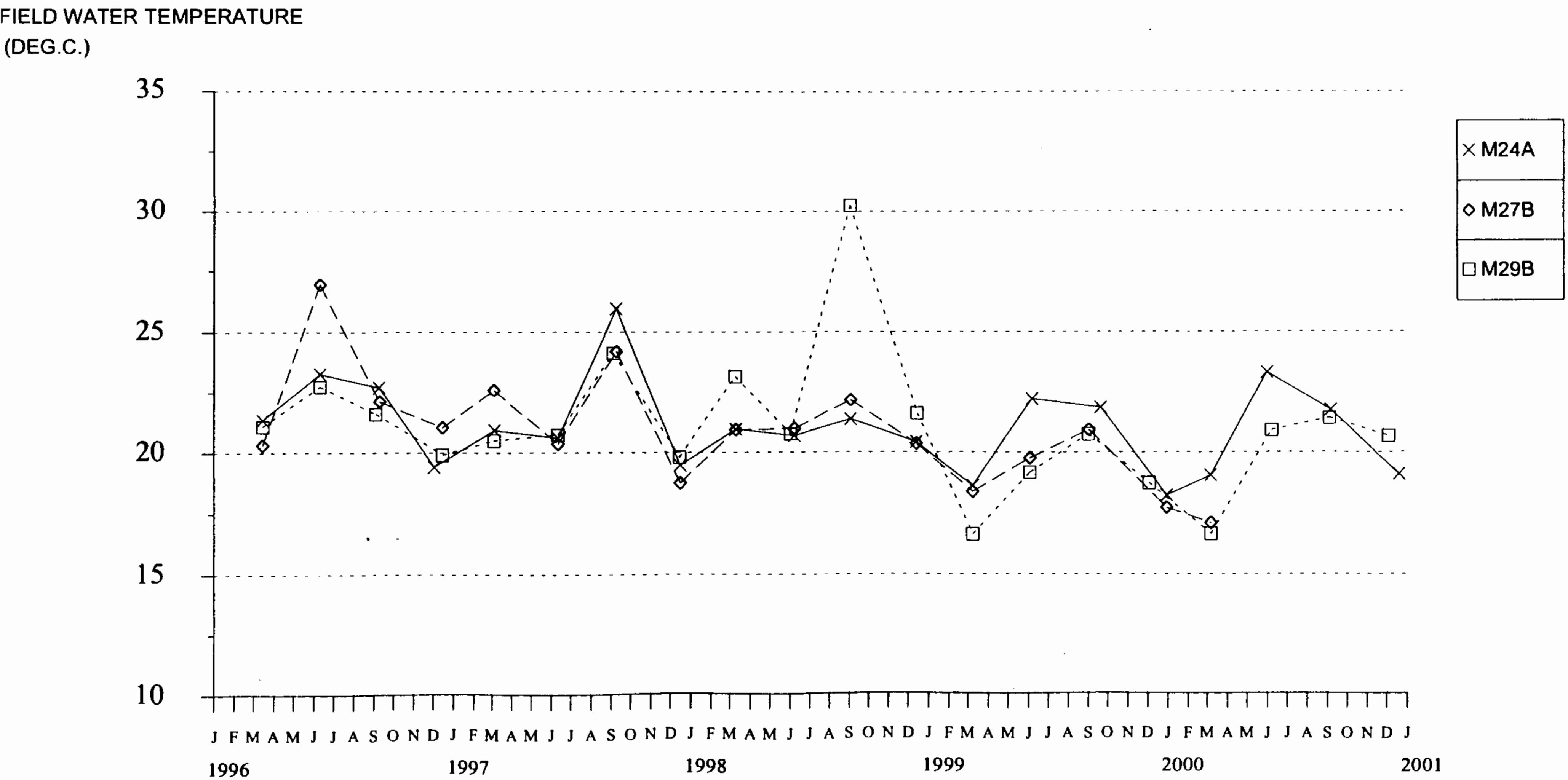


FIGURE 54
PUENTE HILLS LANDFILL
FIELD PH
BARRIER TWO MONITORING WELLS

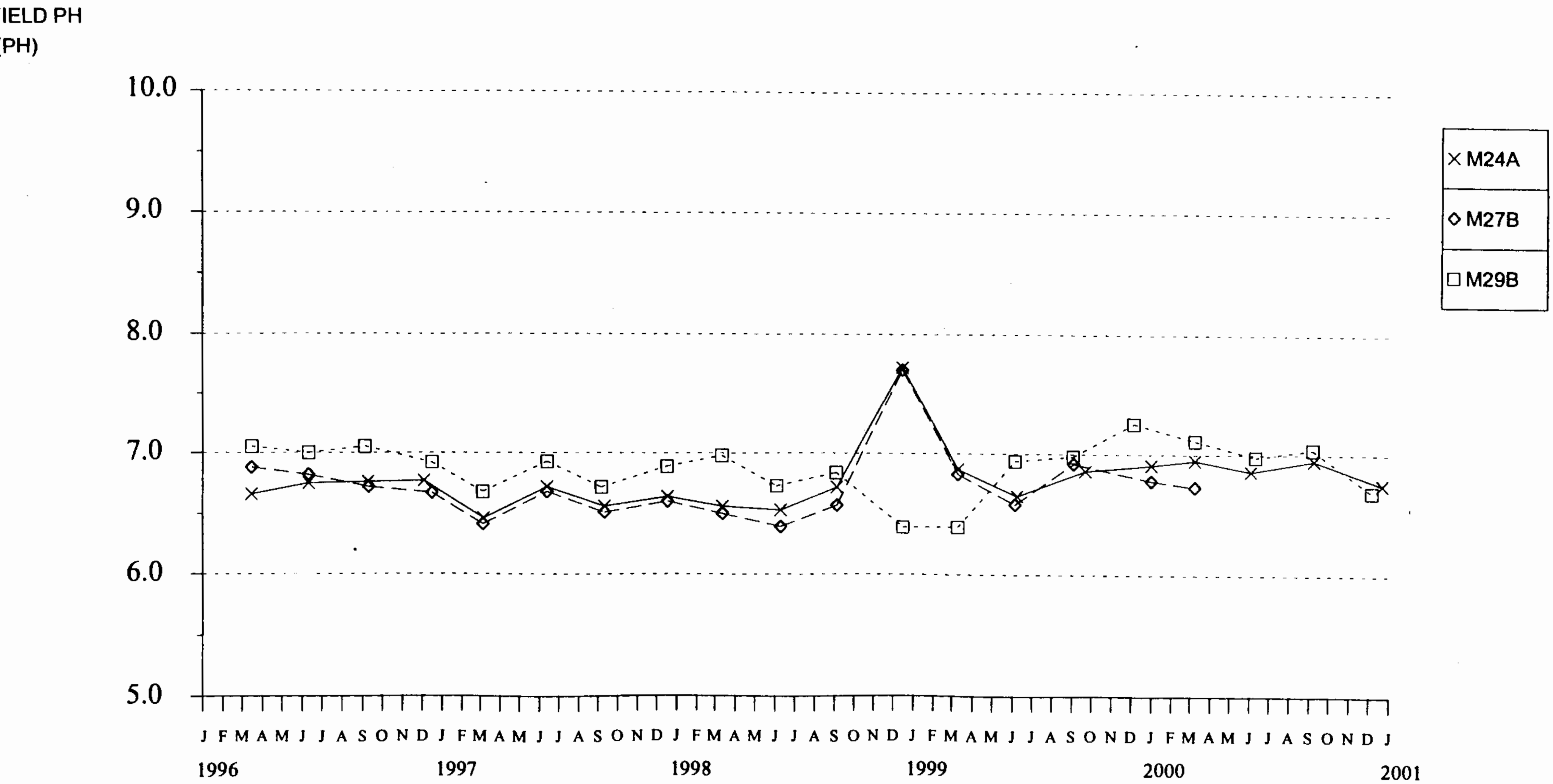


FIGURE 55
PUENTE HILLS LANDFILL
FIELD CONDUCTIVITY
BARRIER TWO MONITORING WELLS

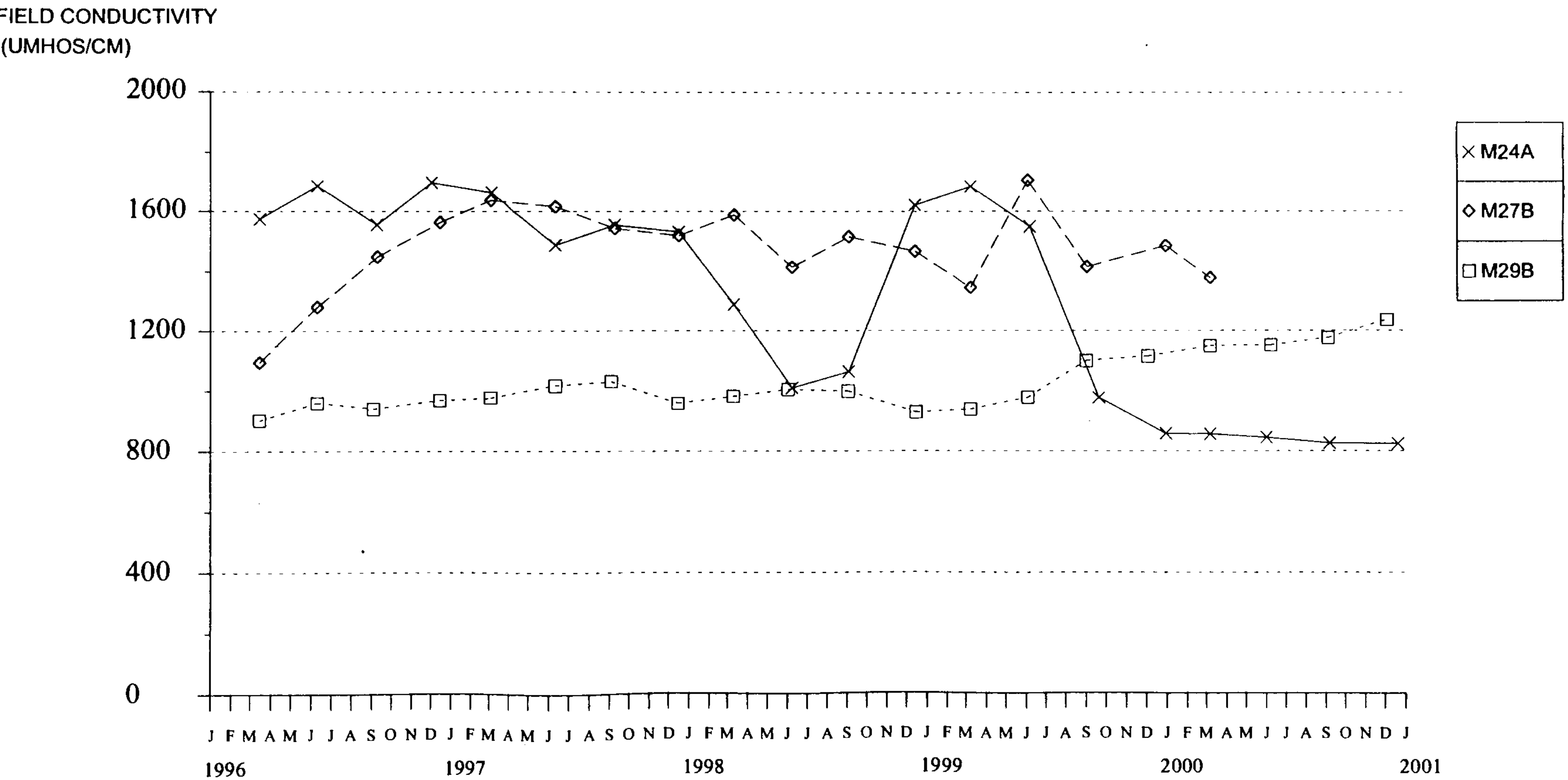


FIGURE 56

PUENTE HILLS LANDFILL

FIELD DISSOLVED O2

BARRIER TWO MONITORING WELLS

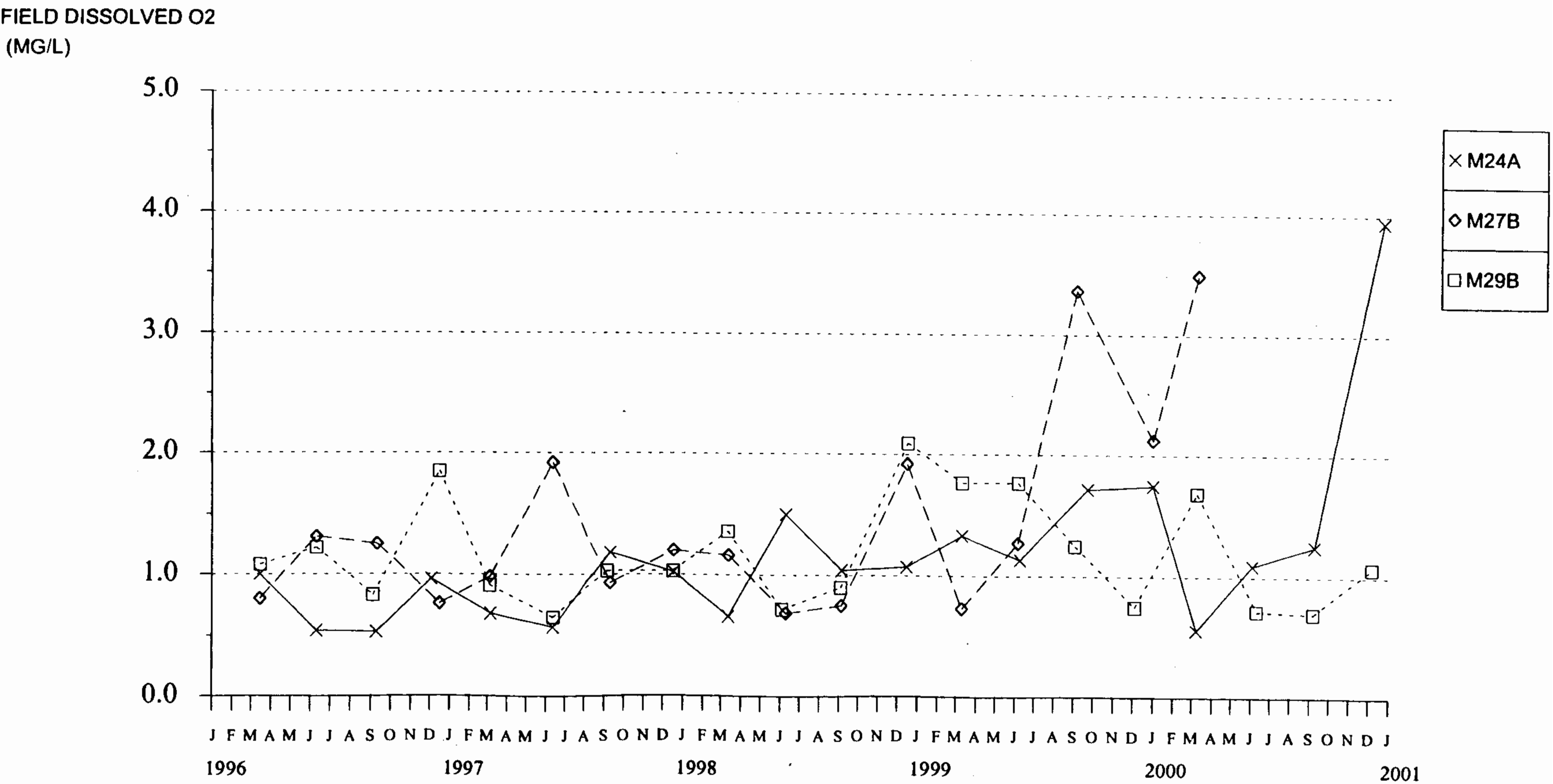


FIGURE 57
PUENTE HILLS LANDFILL
PH
BARRIER TWO MONITORING WELLS

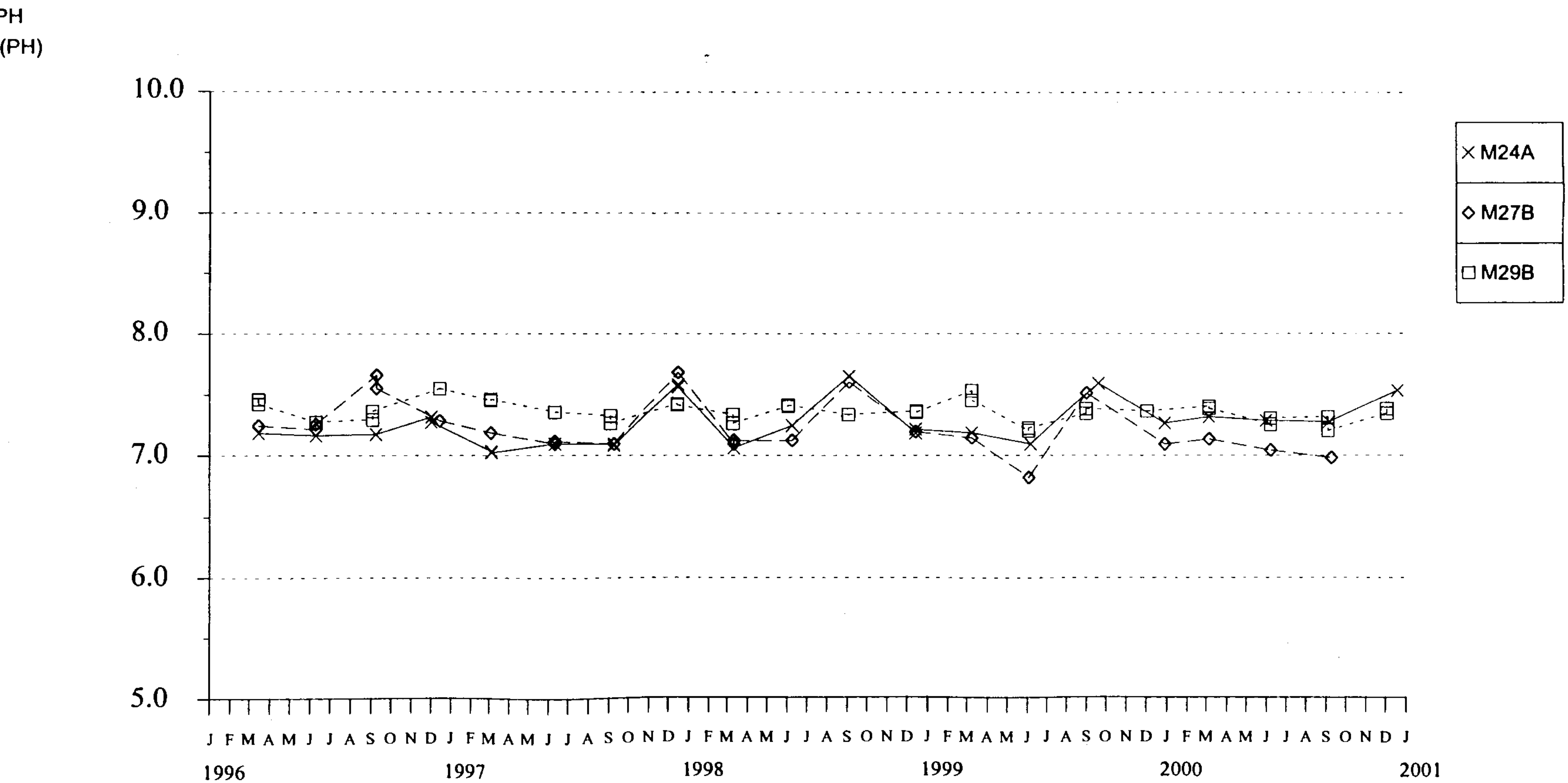


FIGURE 58

PUENTE HILLS LANDFILL

TOTAL DISSOLVED SOLIDS

BARRIER TWO MONITORING WELLS

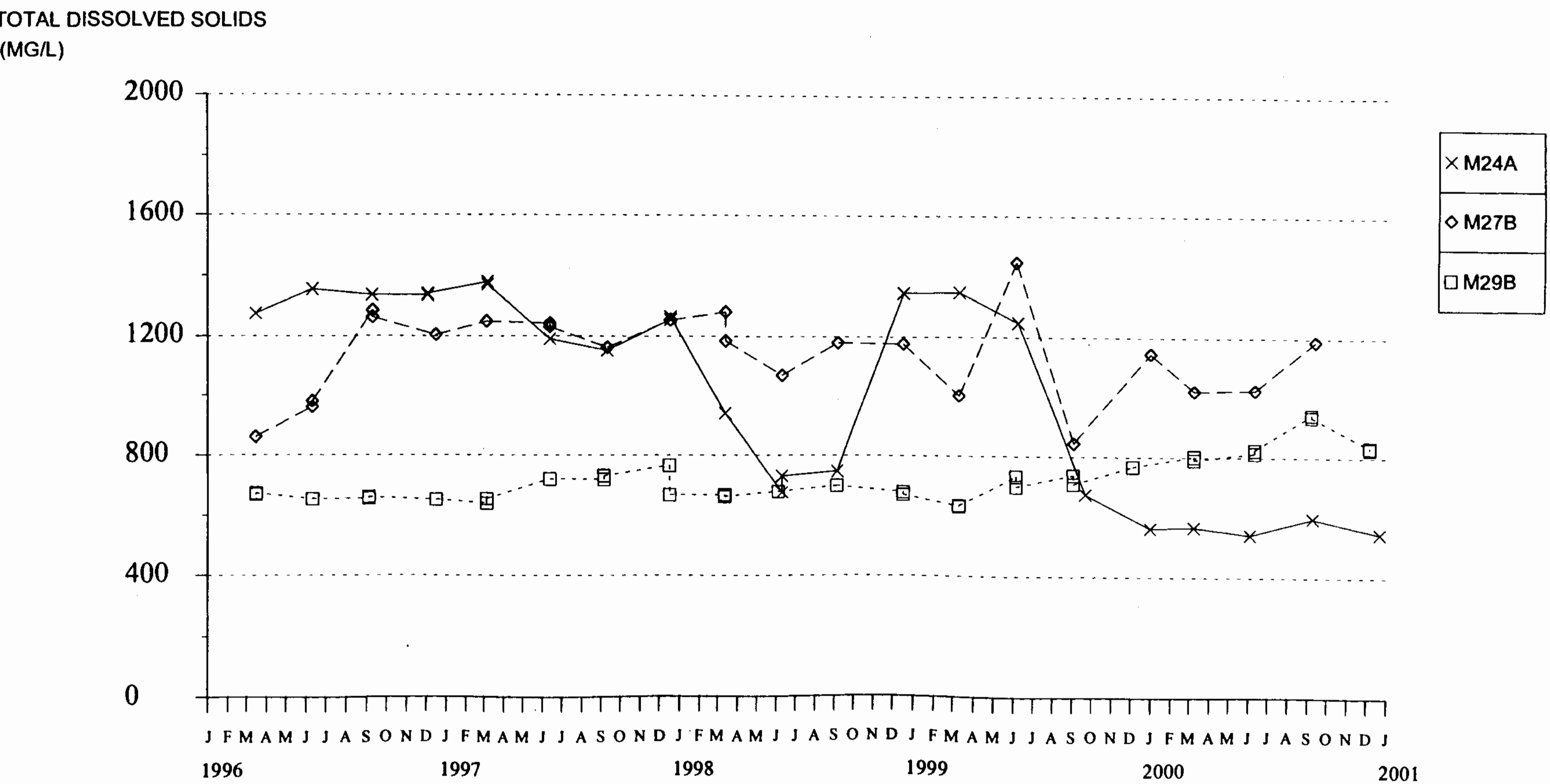


FIGURE 59

PUENTE HILLS LANDFILL

NITRATE NITROGEN

BARRIER TWO MONITORING WELLS

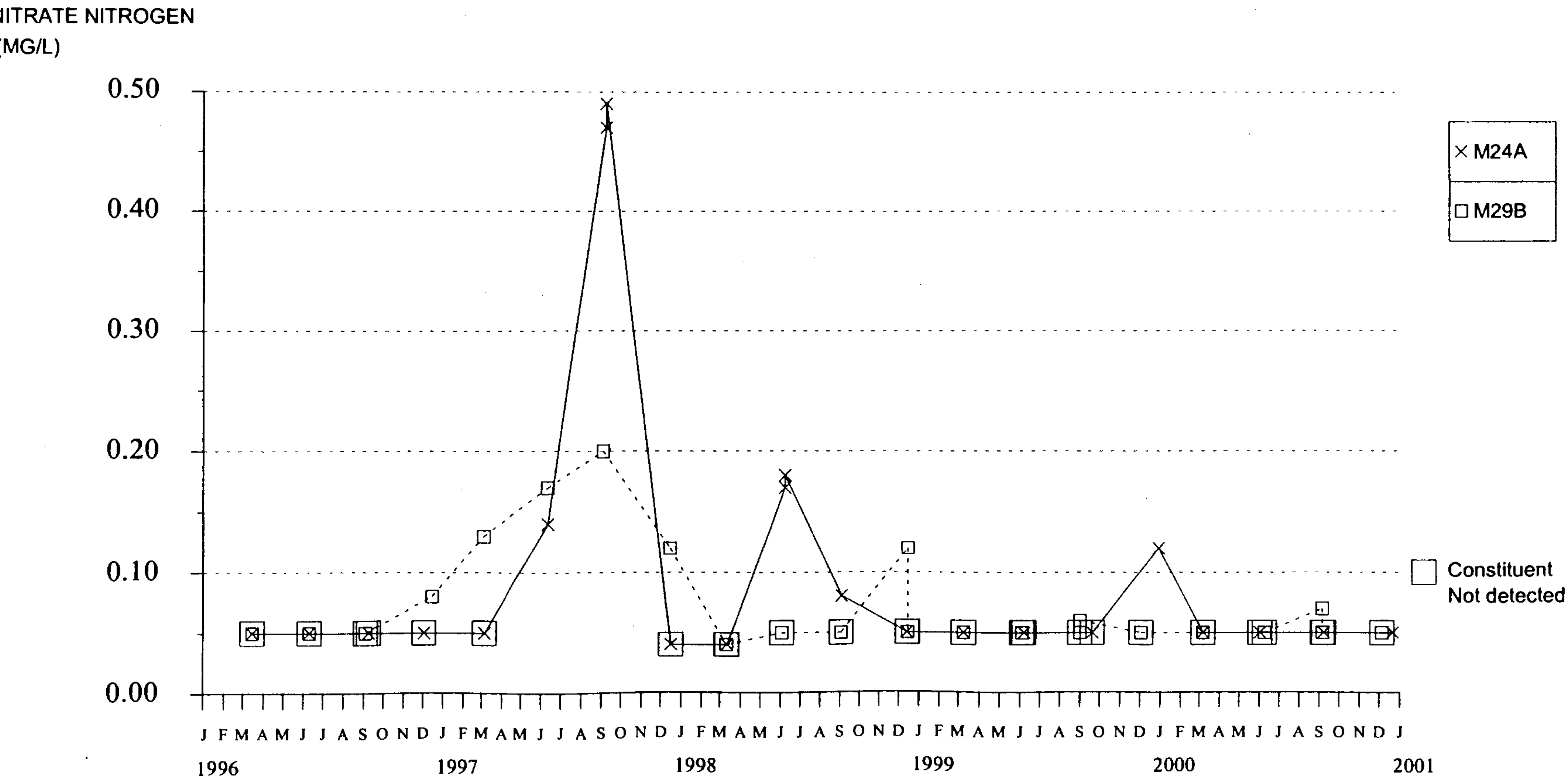


FIGURE 60

PUENTE HILLS LANDFILL

SULFATE

BARRIER TWO MONITORING WELLS

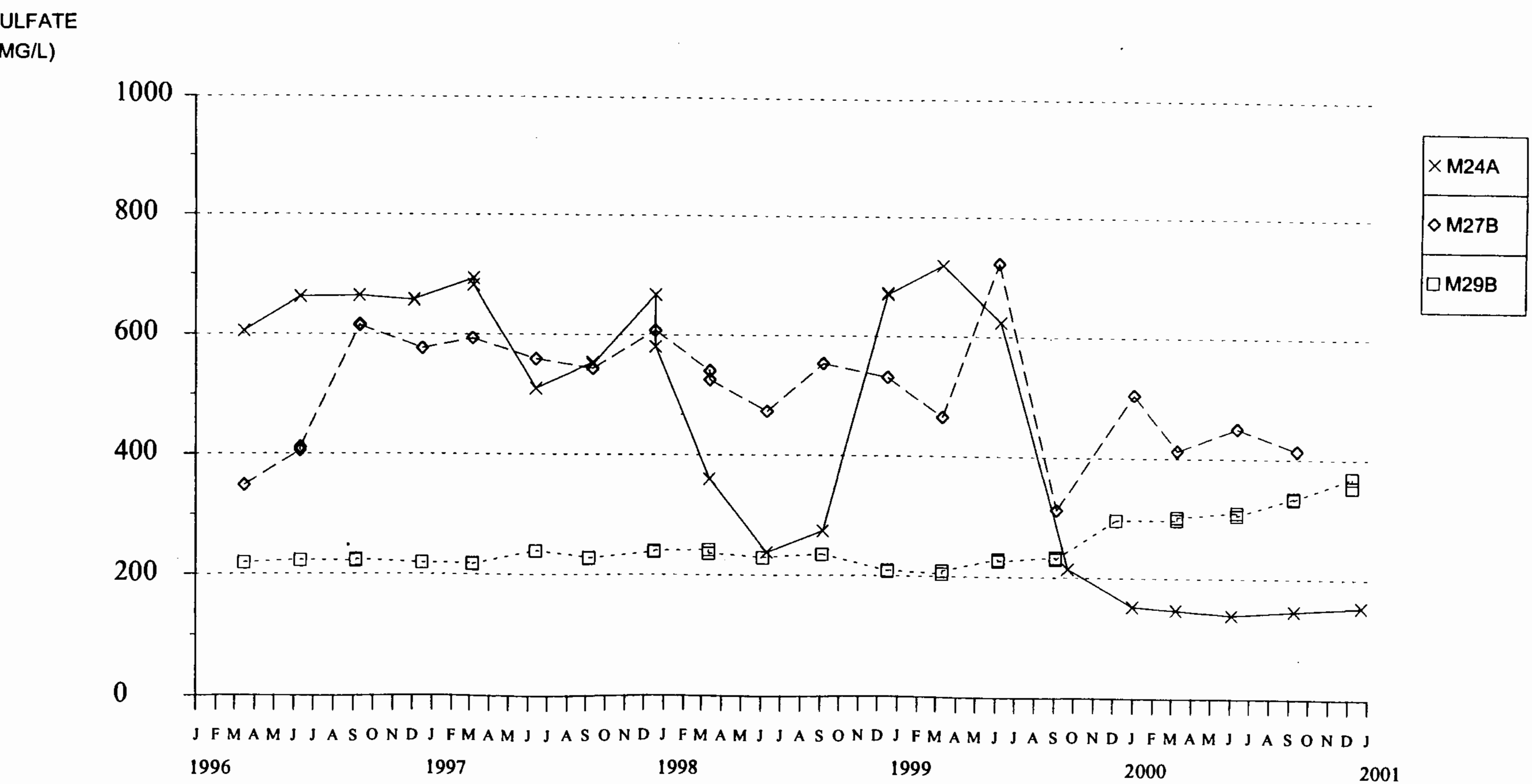
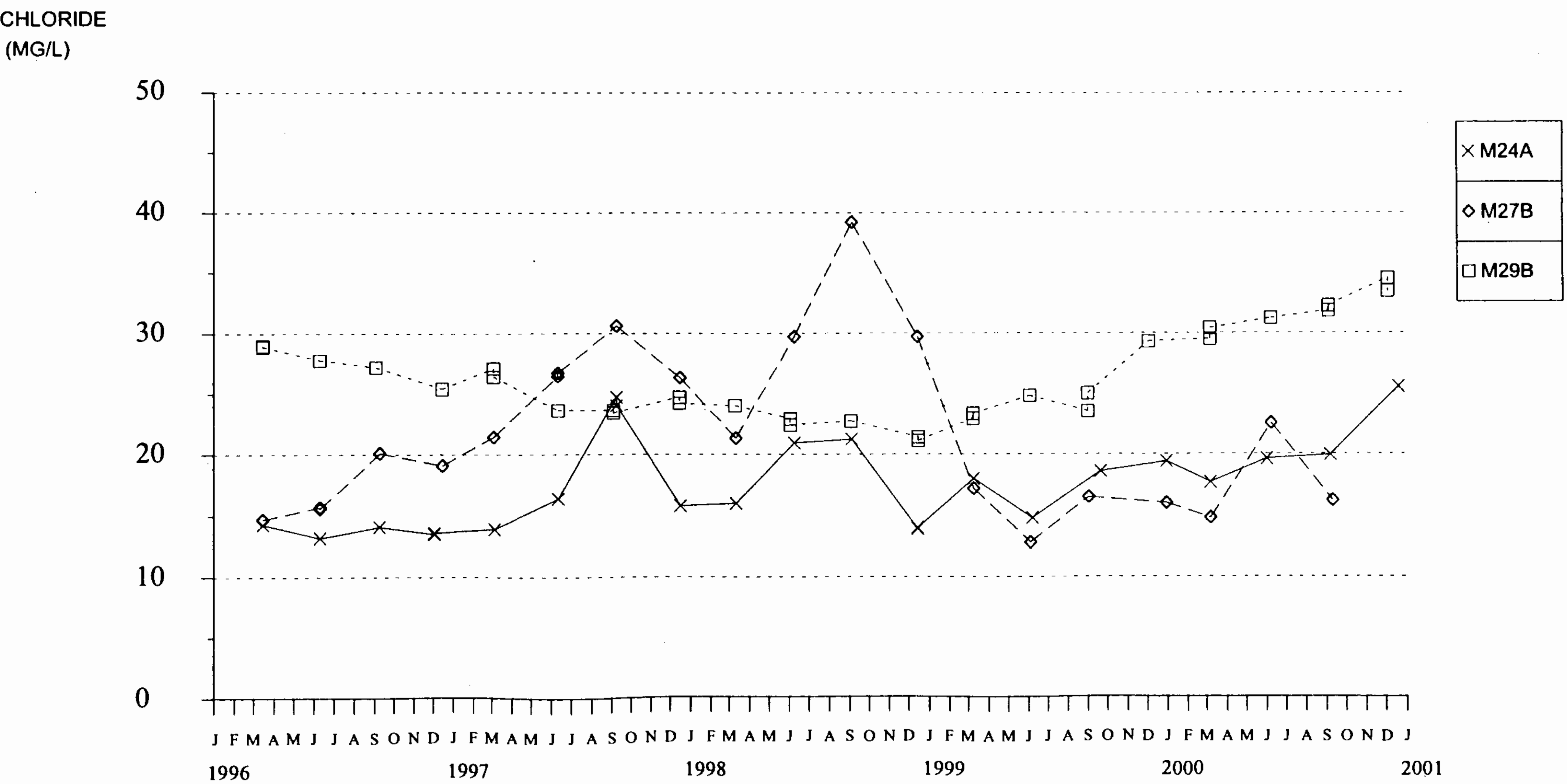


FIGURE 61
PUENTE HILLS LANDFILL
CHLORIDE
BARRIER TWO MONITORING WELLS



FIGURES 62 - 107

WATER QUALITY DATA GRAPHS

BARRIER 3 MONITORING WELLS

FIGURE 62
PUENTE HILLS LANDFILL
DEPTH TO WATER
BARRIER THREE MONITORING WELLS

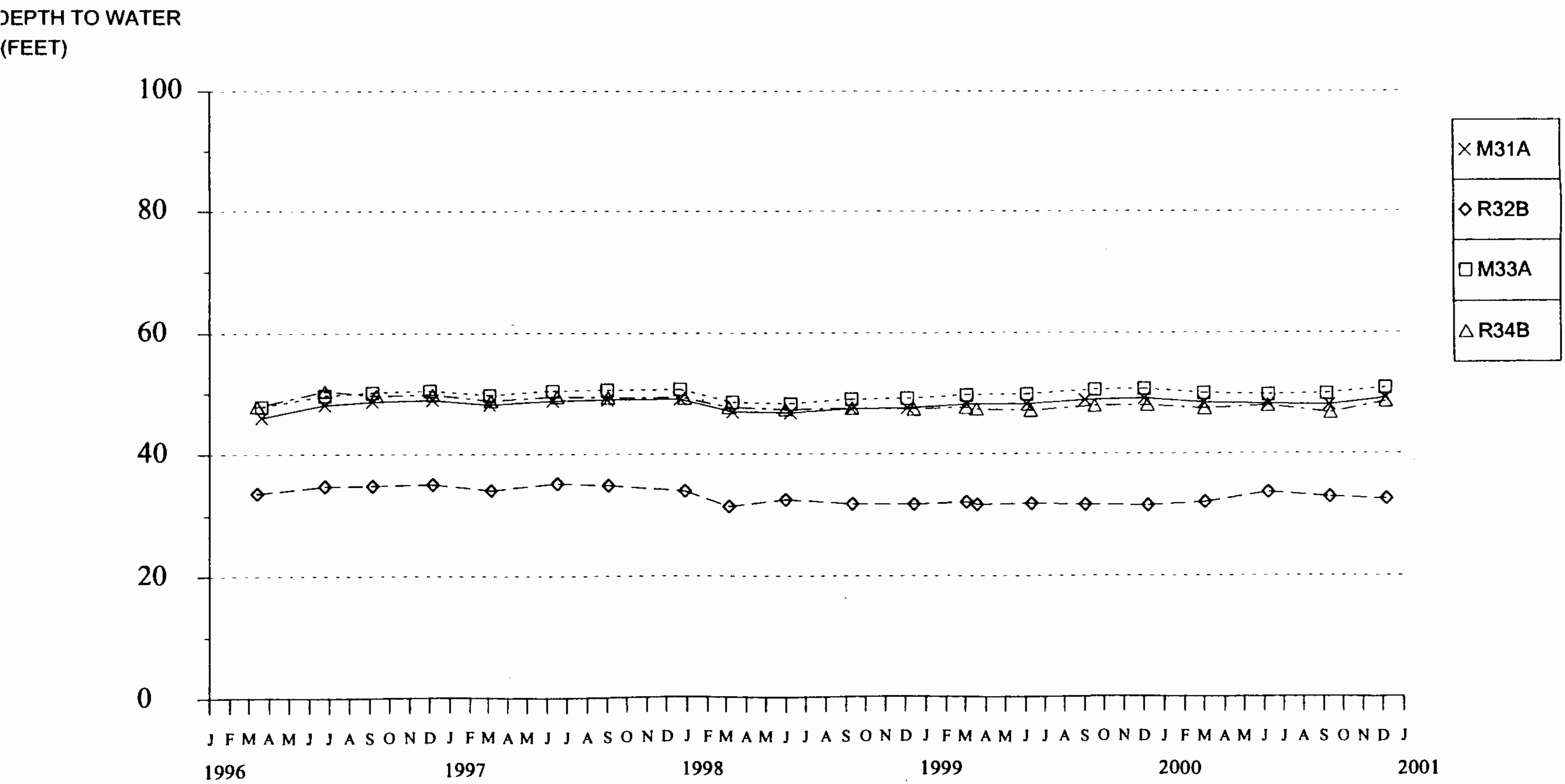


FIGURE 63
PUENTE HILLS LANDFILL
DEPTH TO BOTTOM
BARRIER THREE MONITORING WELLS

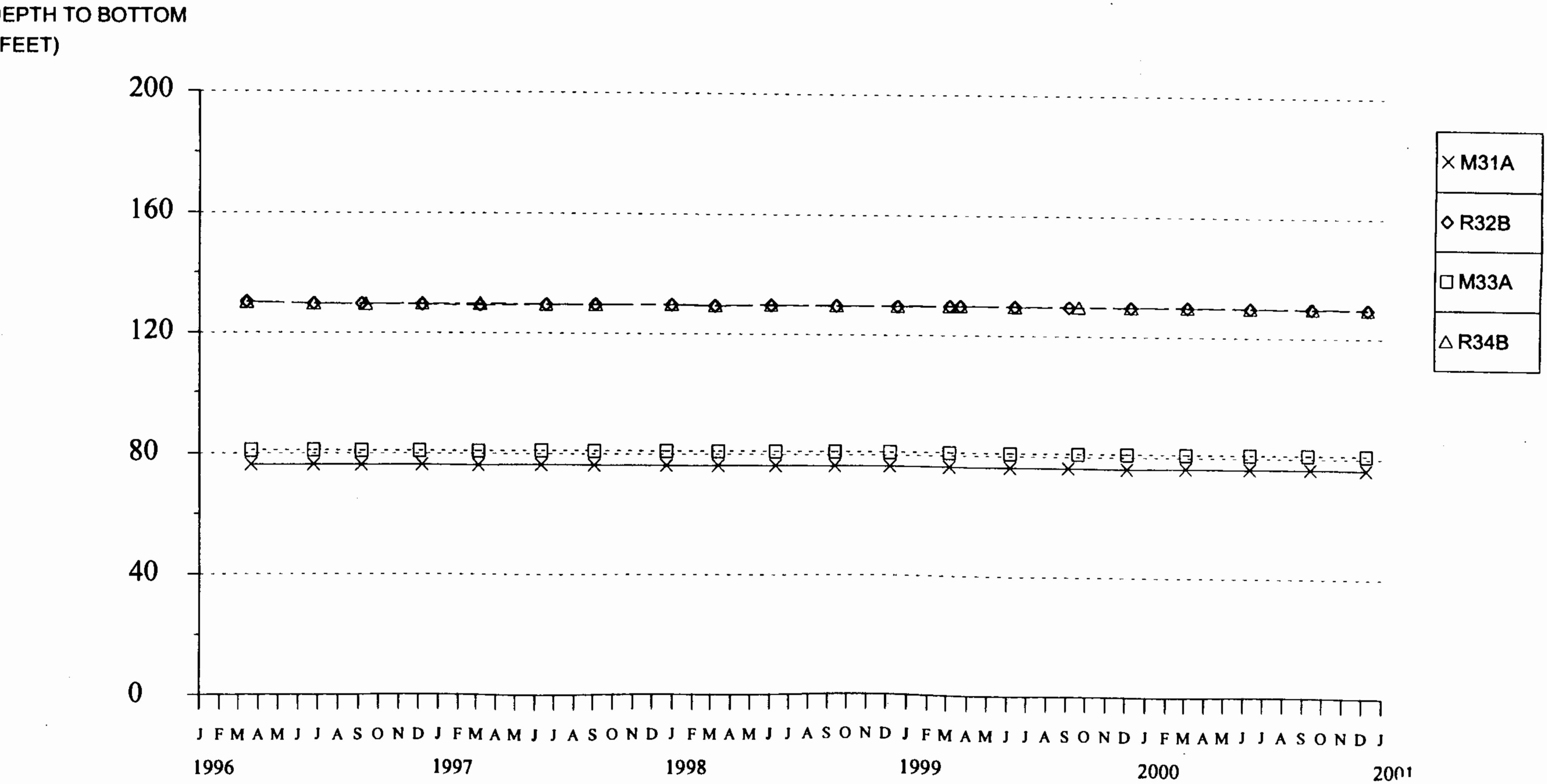


FIGURE 64
PUENTE HILLS LANDFILL
PERCENT METHANE IN GAS
BARRIER THREE MONITORING WELLS

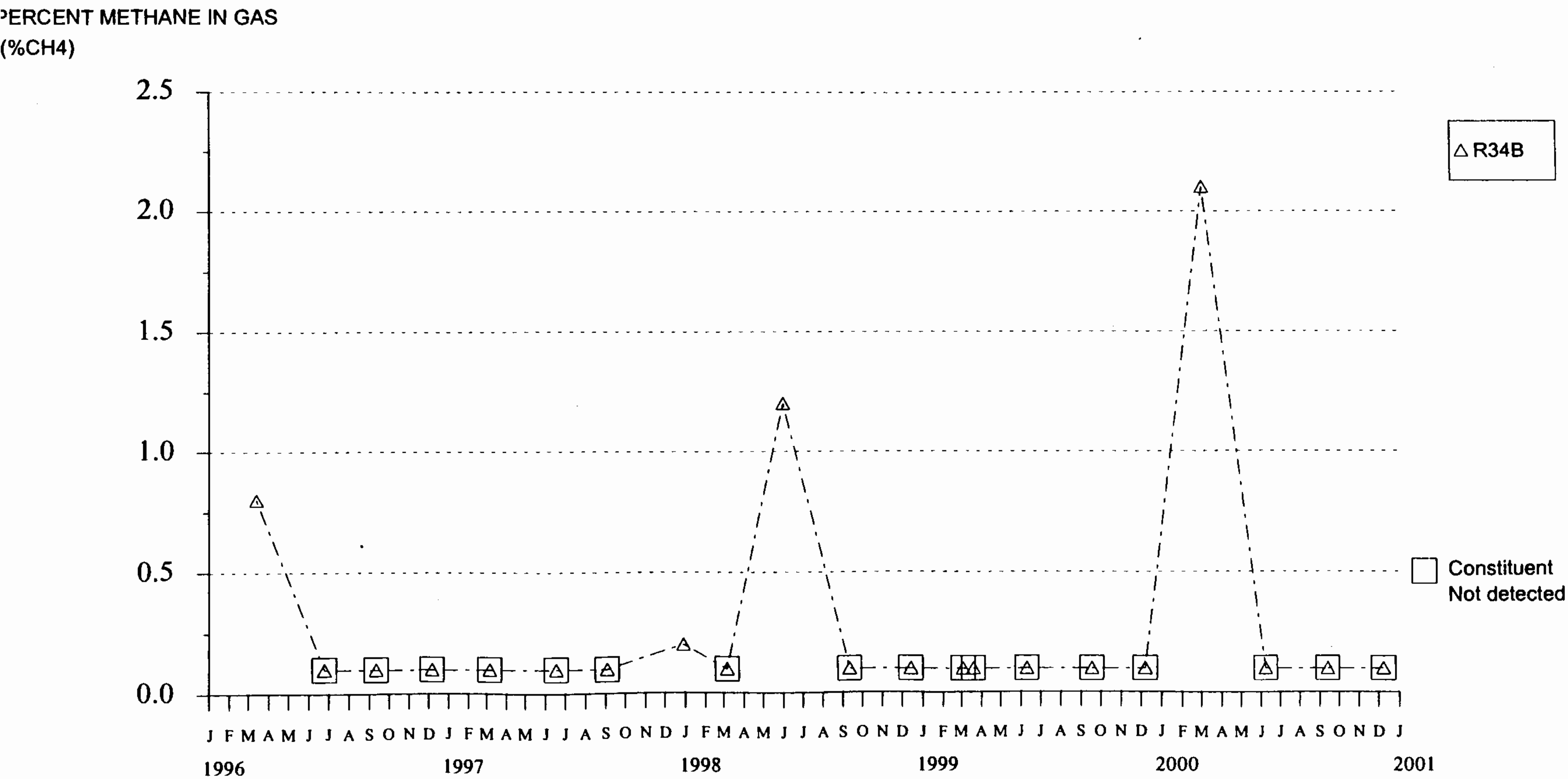


FIGURE 65
PUENTE HILLS LANDFILL
PERCENT OXYGEN IN GAS
BARRIER THREE MONITORING WELLS

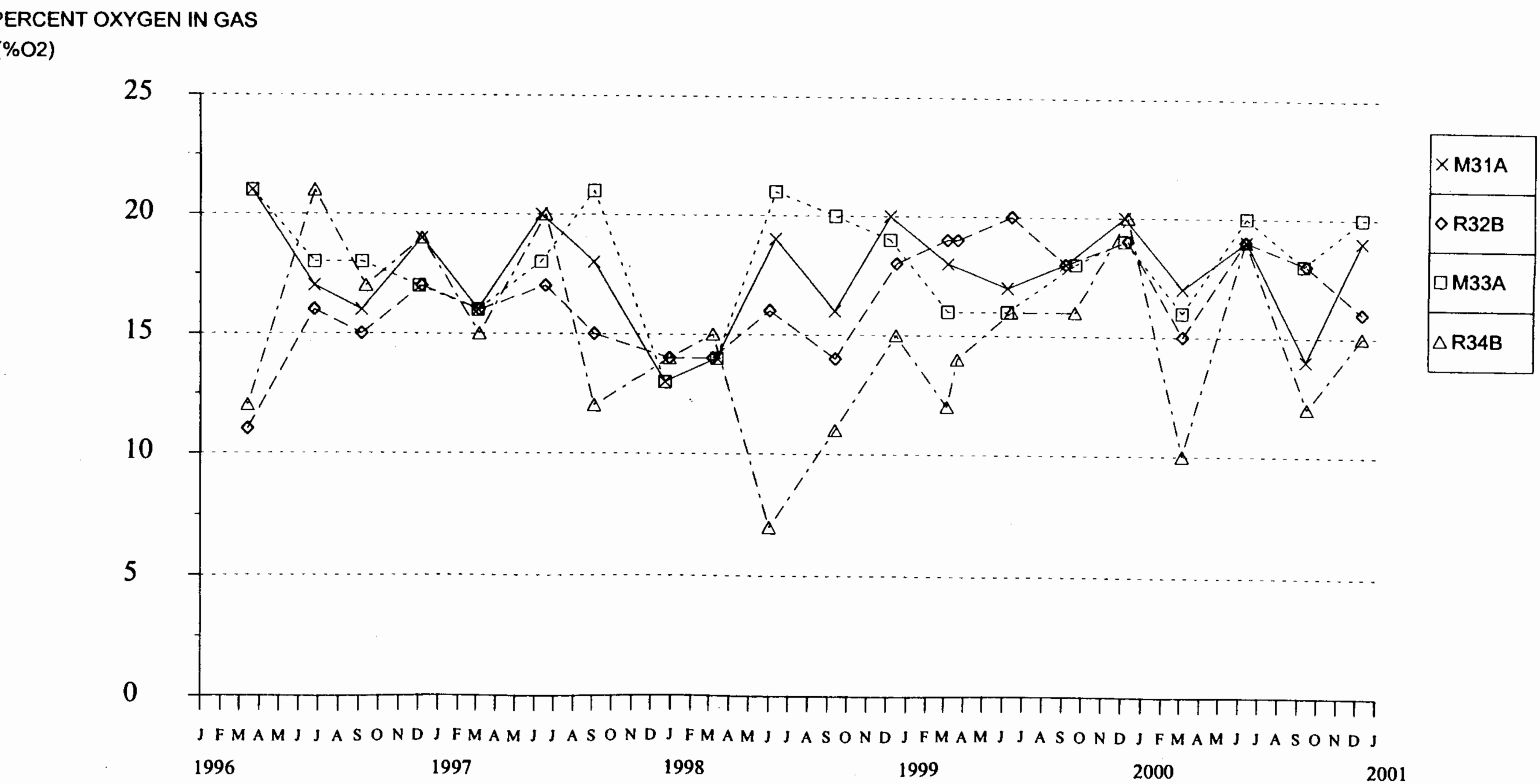


FIGURE 66

PUENTE HILLS LANDFILL

FIELD WATER TEMPERATURE

BARRIER THREE MONITORING WELLS

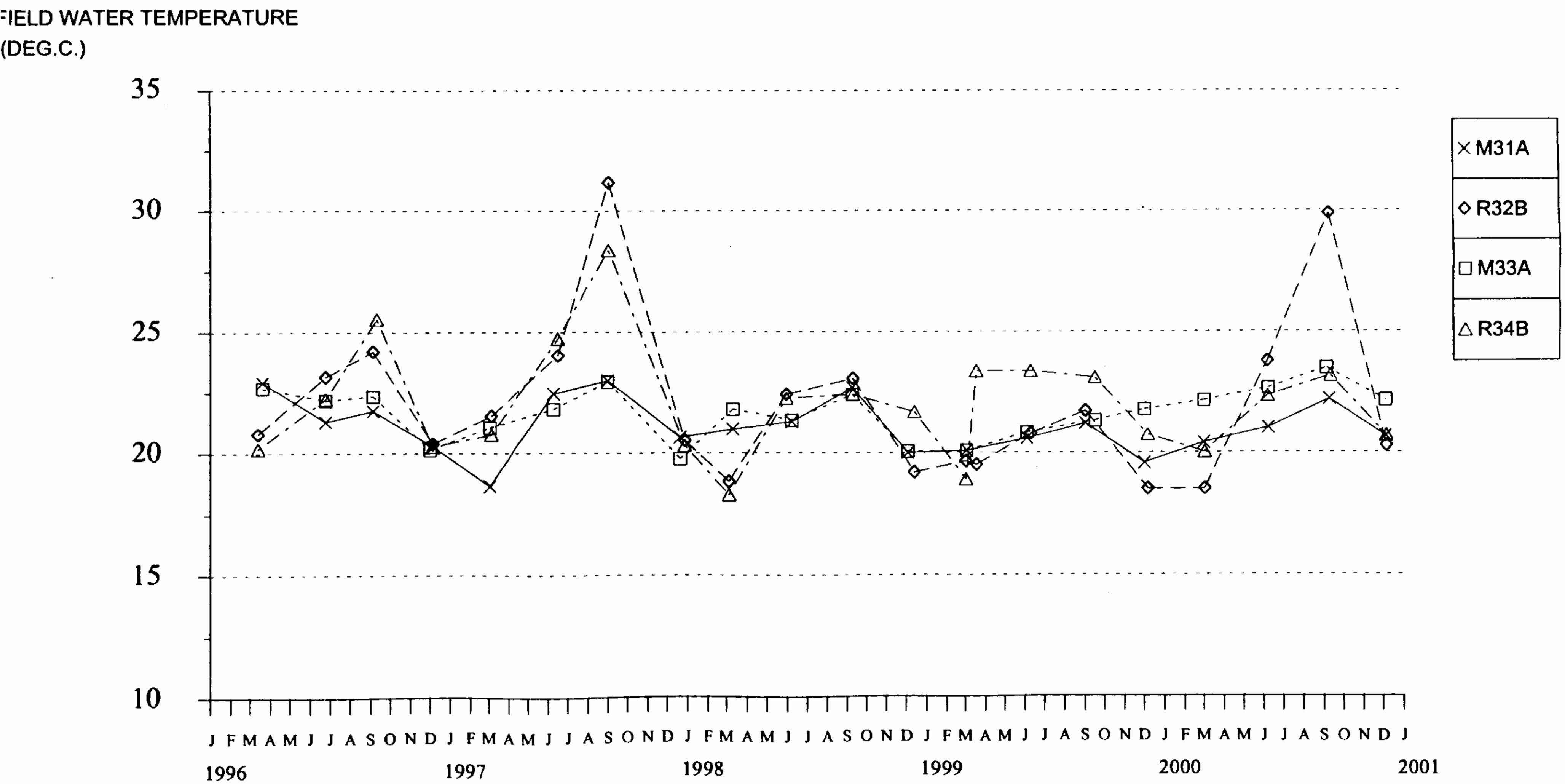


FIGURE 67
PUENTE HILLS LANDFILL
FIELD PH
BARRIER THREE MONITORING WELLS

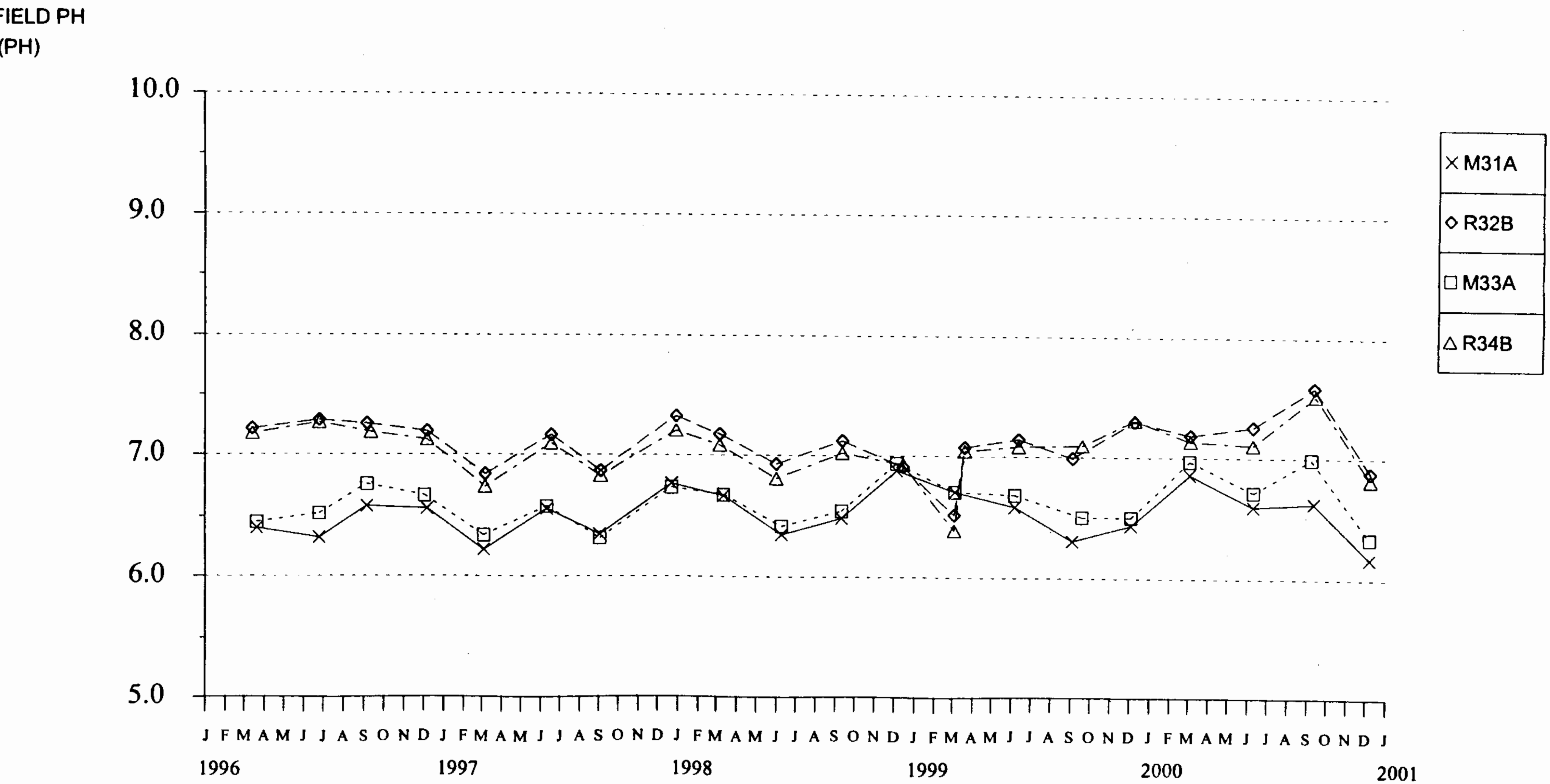


FIGURE 68
PUENTE HILLS LANDFILL
FIELD CONDUCTIVITY
BARRIER THREE MONITORING WELLS

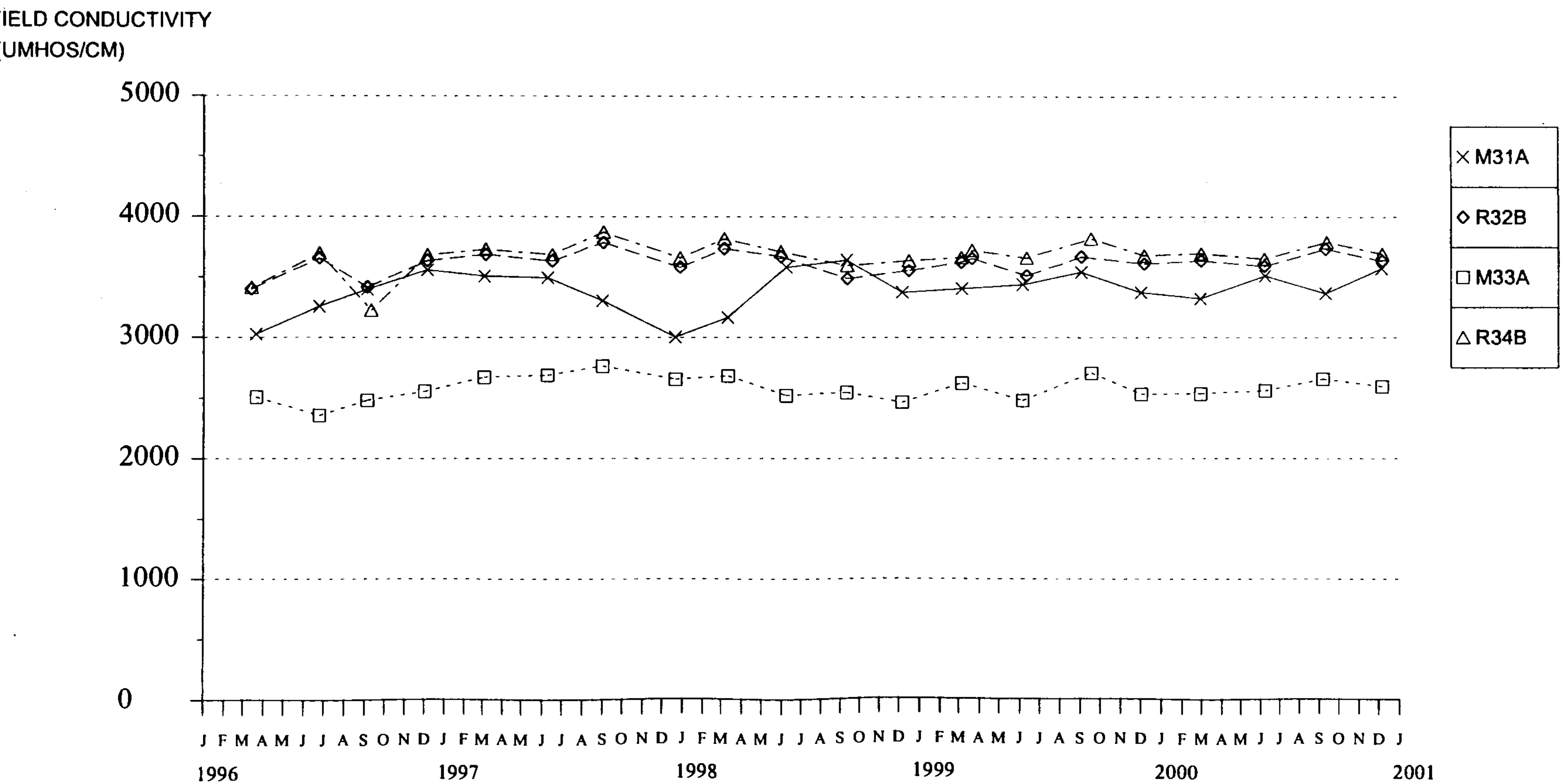


FIGURE 69

PUENTE HILLS LANDFILL

FIELD DISSOLVED O2

BARRIER THREE MONITORING WELLS

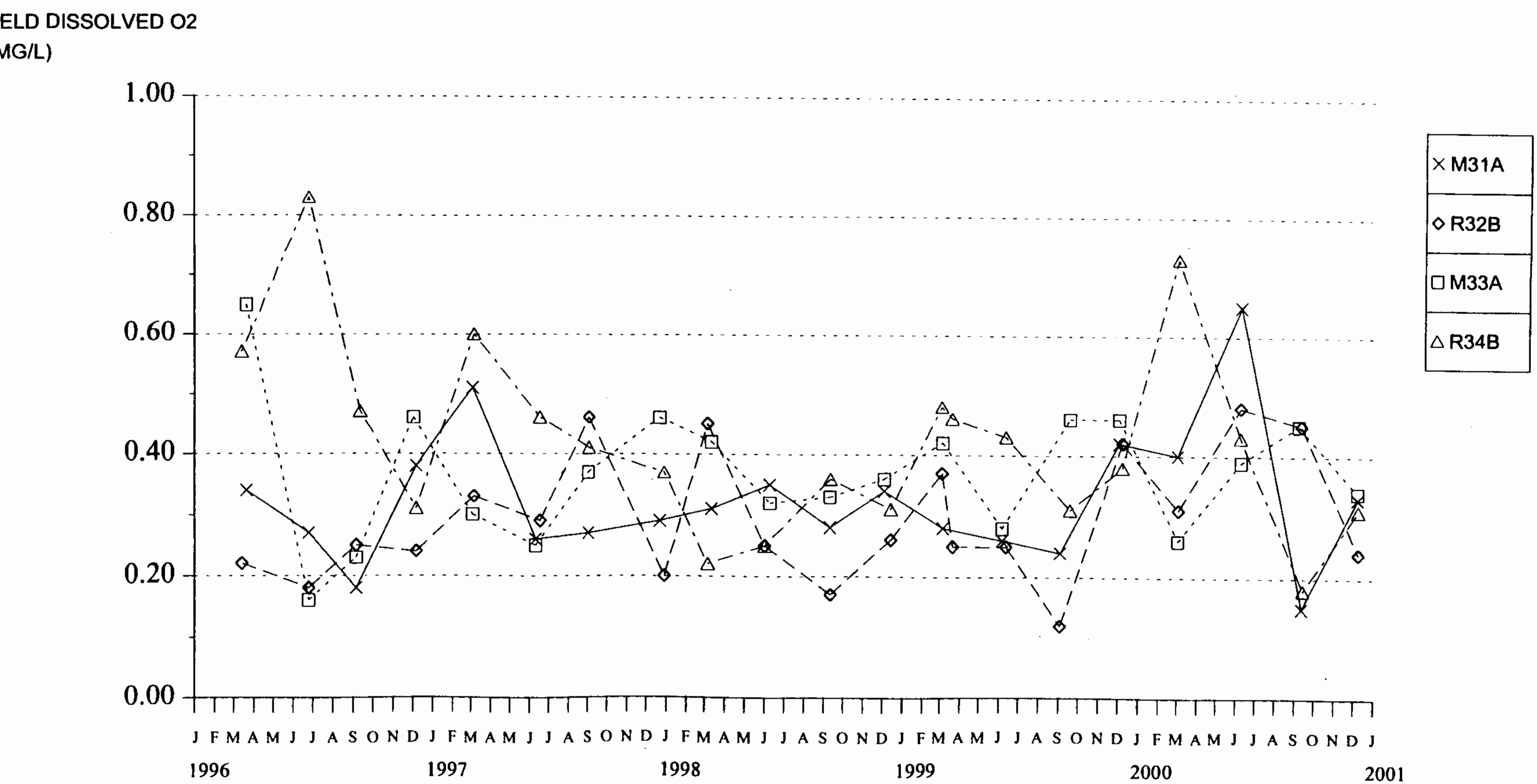


FIGURE 70
PUENTE HILLS LANDFILL
FIELD DISSOLVED CO2
BARRIER THREE MONITORING WELLS

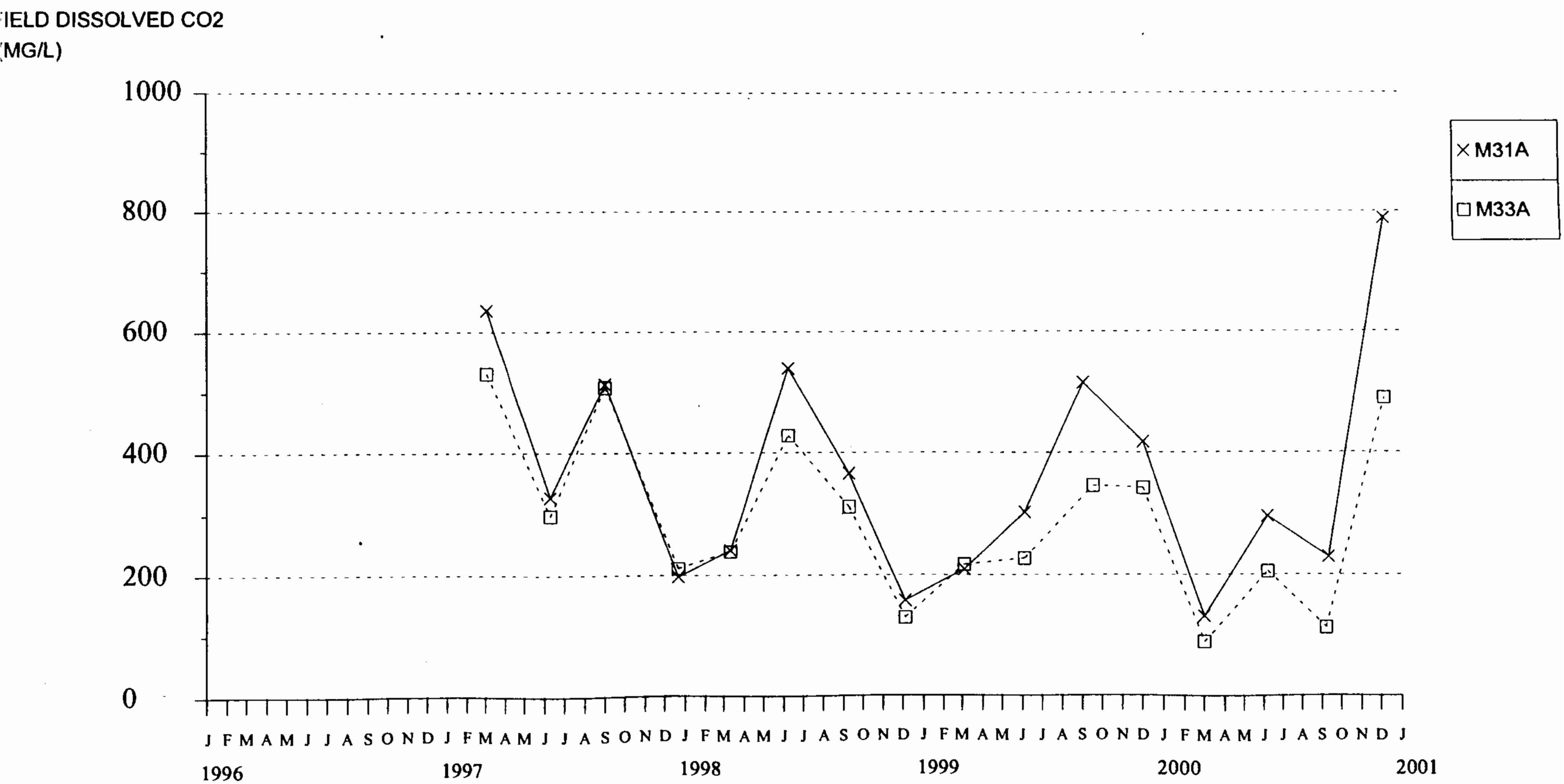


FIGURE 71
PUENTE HILLS LANDFILL
PH
BARRIER THREE MONITORING WELLS

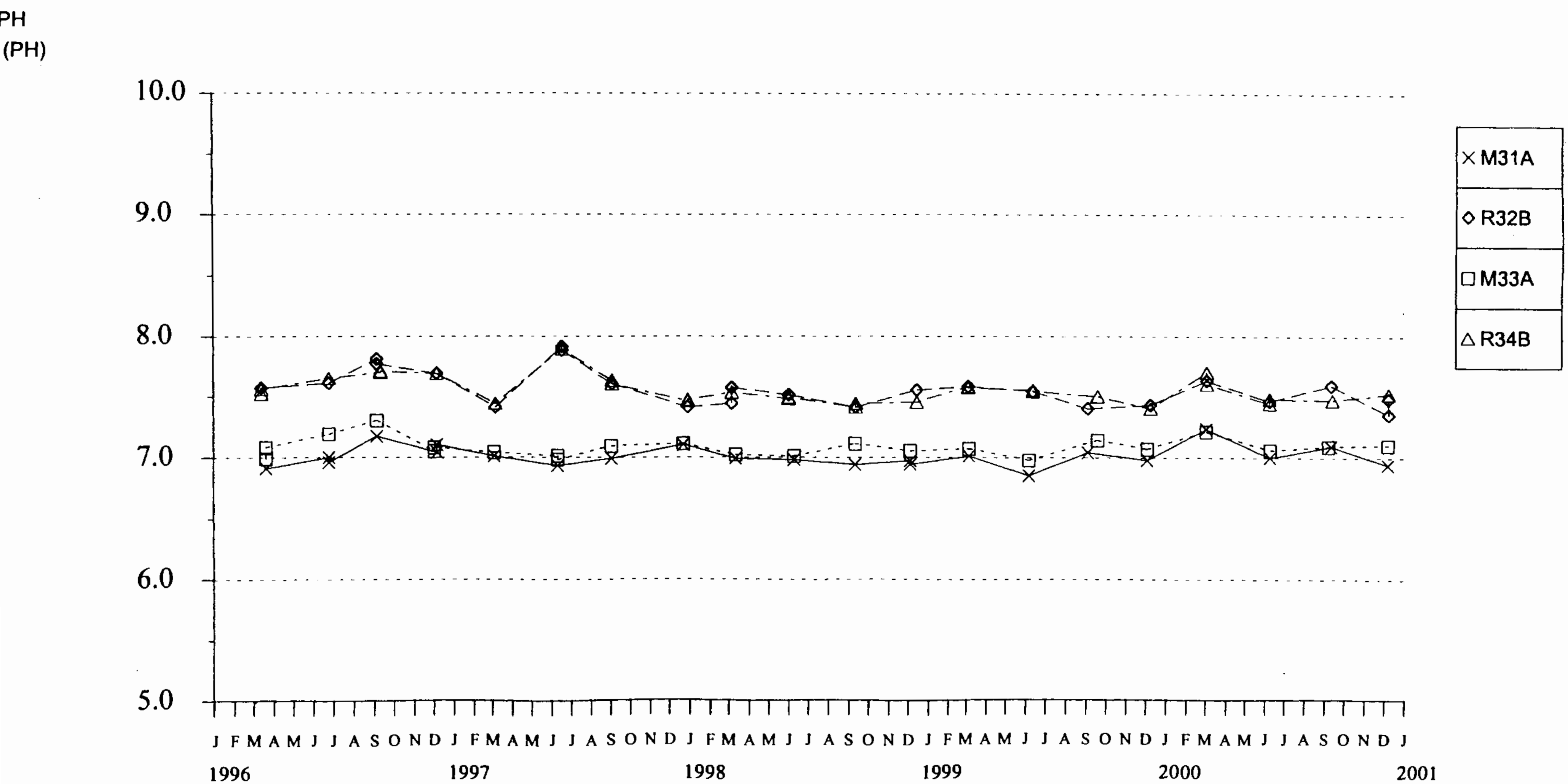


FIGURE 72
PUENTE HILLS LANDFILL
CONDUCTIVITY
BARRIER THREE MONITORING WELLS

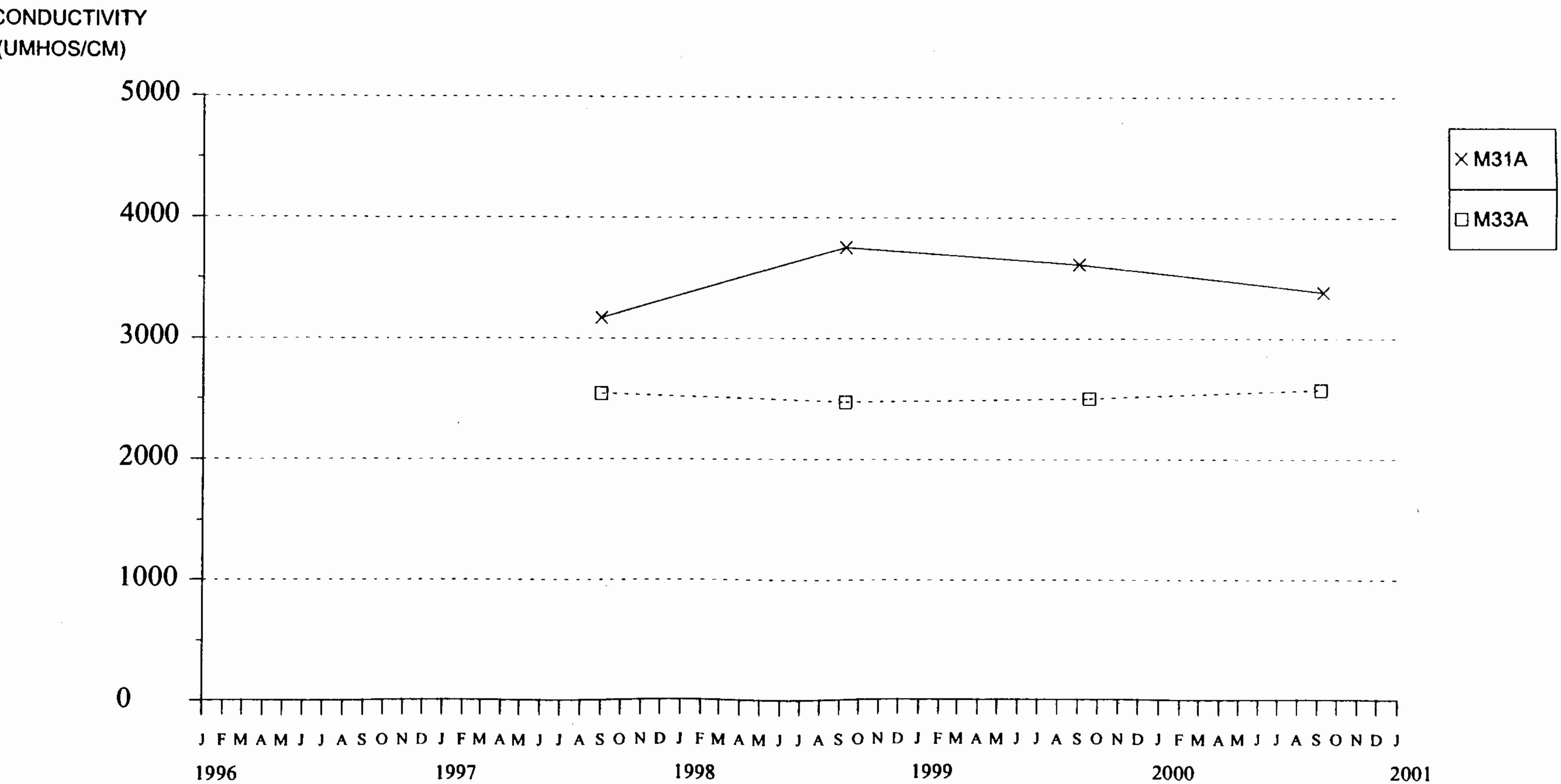


FIGURE 73

PUENTE HILLS LANDFILL

TOTAL DISSOLVED SOLIDS

BARRIER THREE MONITORING WELLS

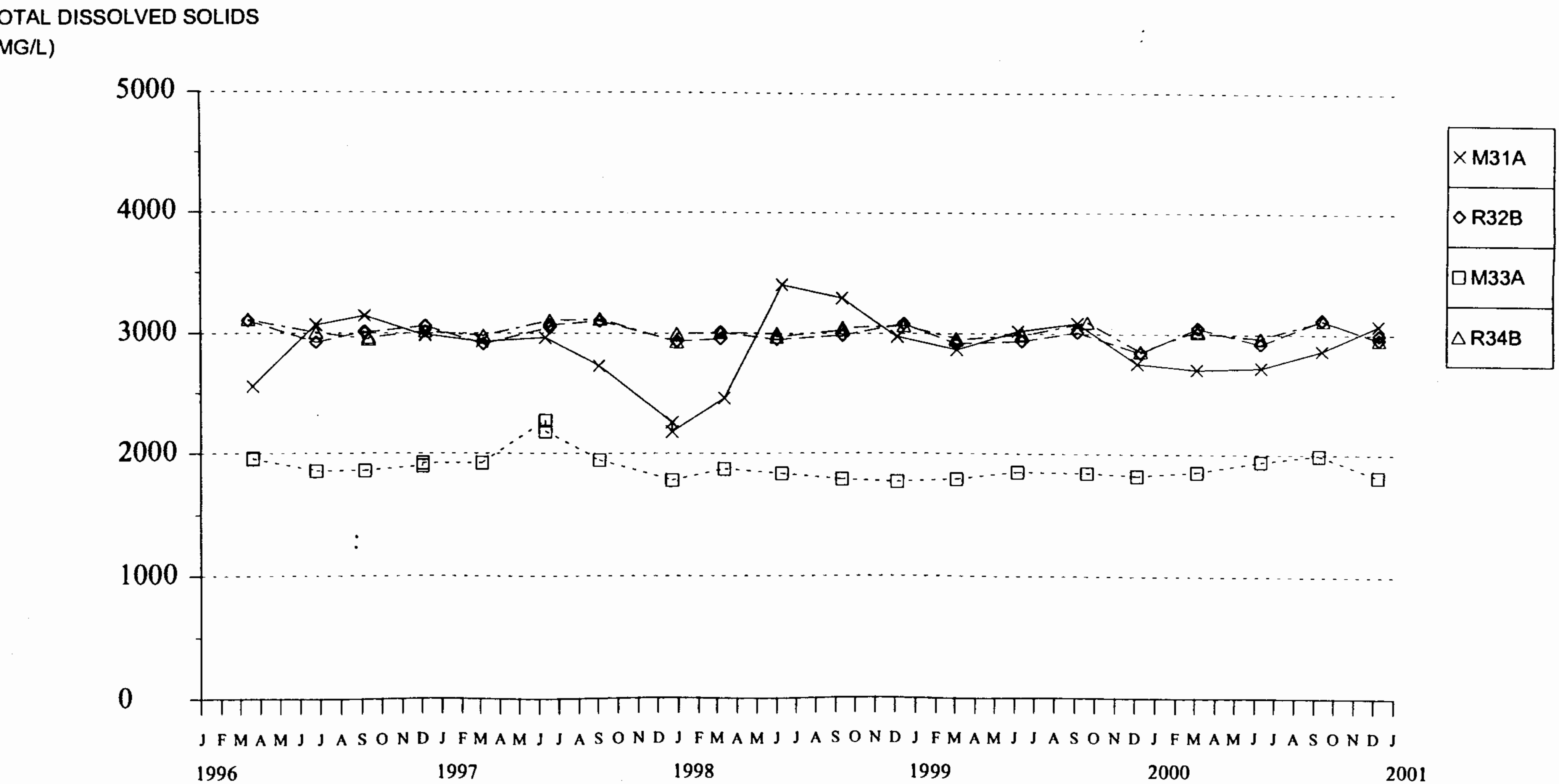


FIGURE 74

PUENTE HILLS LANDFILL

TOTAL HARDNESS

BARRIER THREE MONITORING WELLS

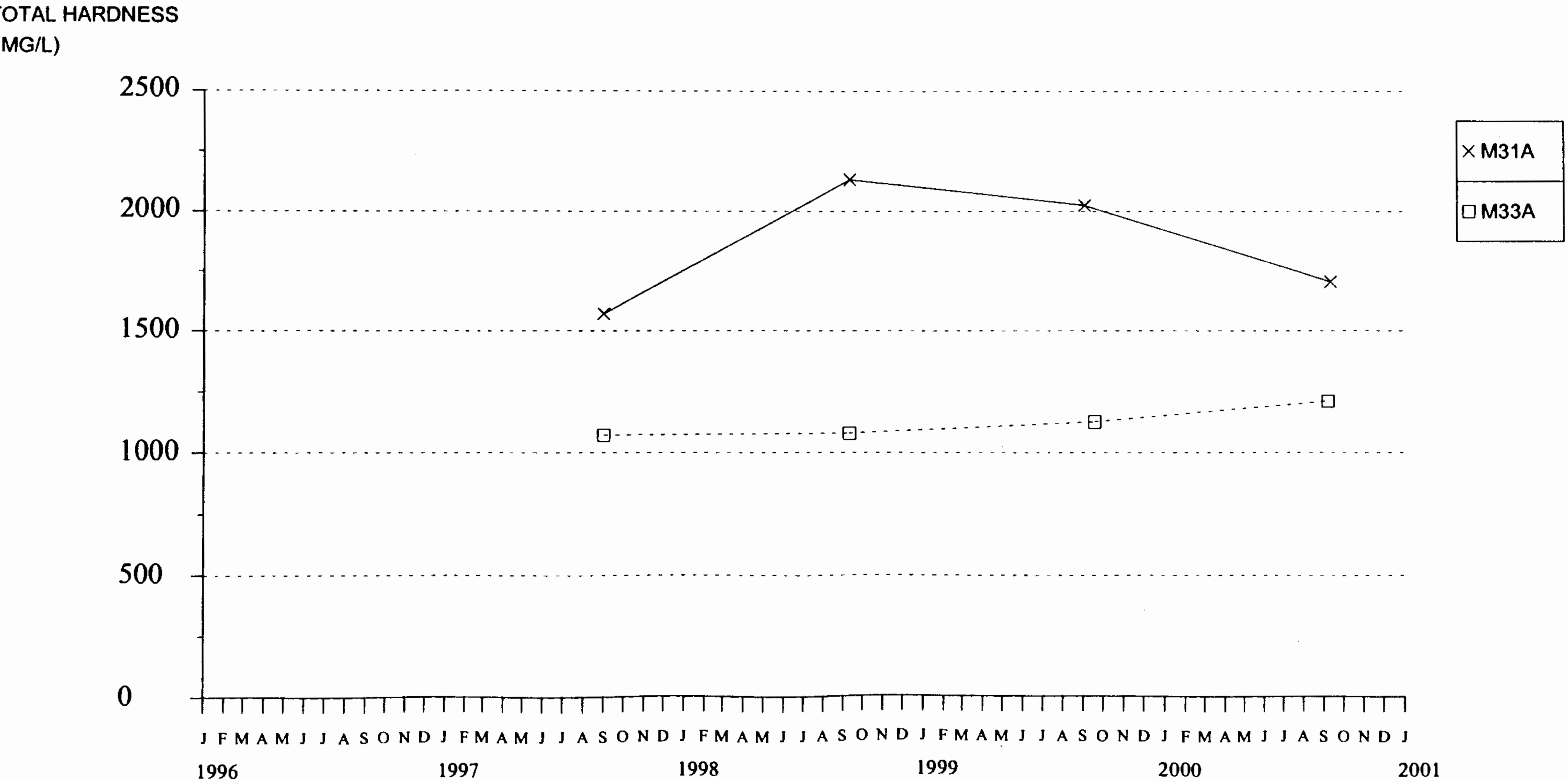


FIGURE 75
PUENTE HILLS LANDFILL
BORON
BARRIER THREE MONITORING WELLS

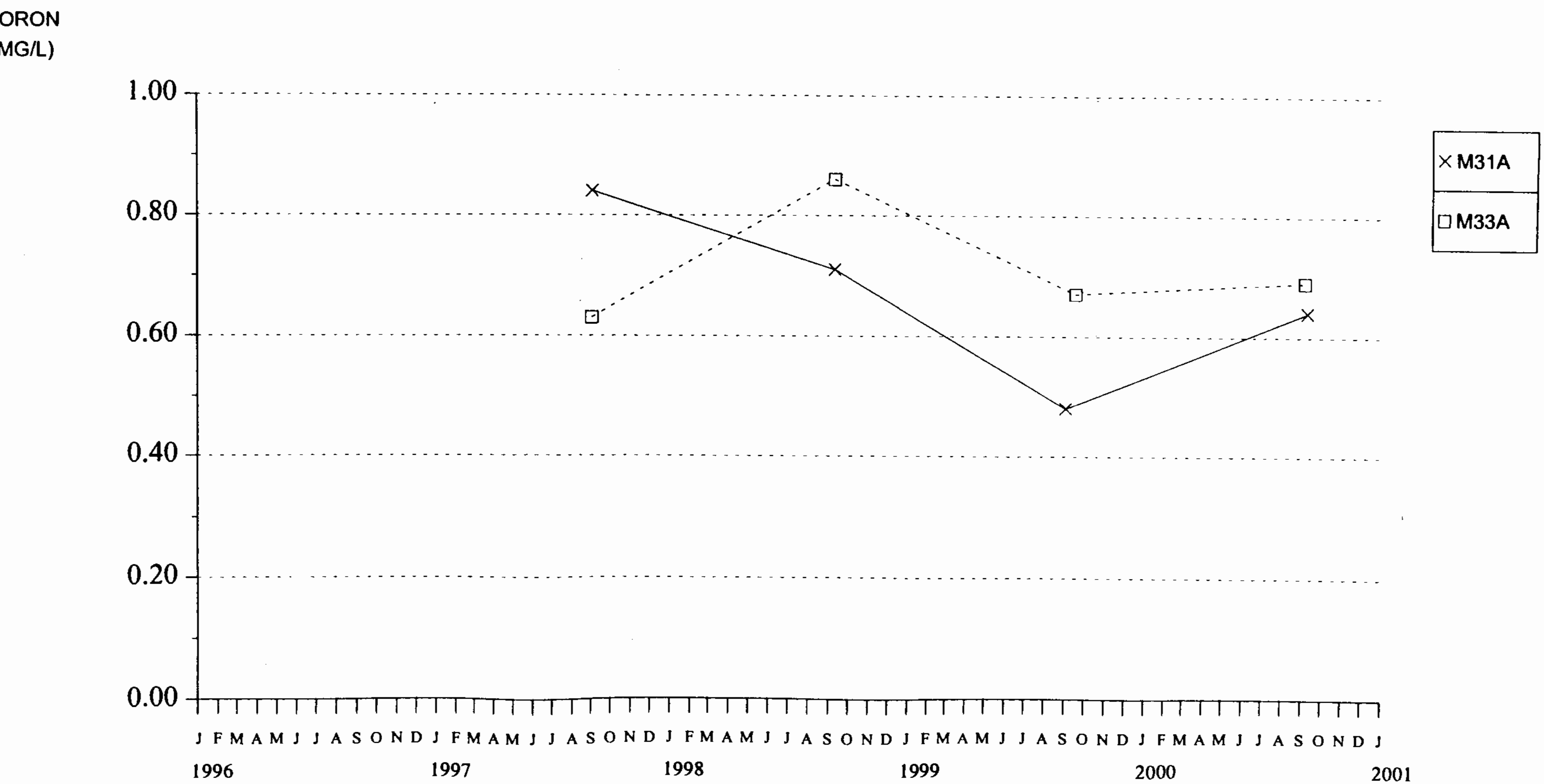


FIGURE 76

PUENTE HILLS LANDFILL

NITRATE NITROGEN

BARRIER THREE MONITORING WELLS

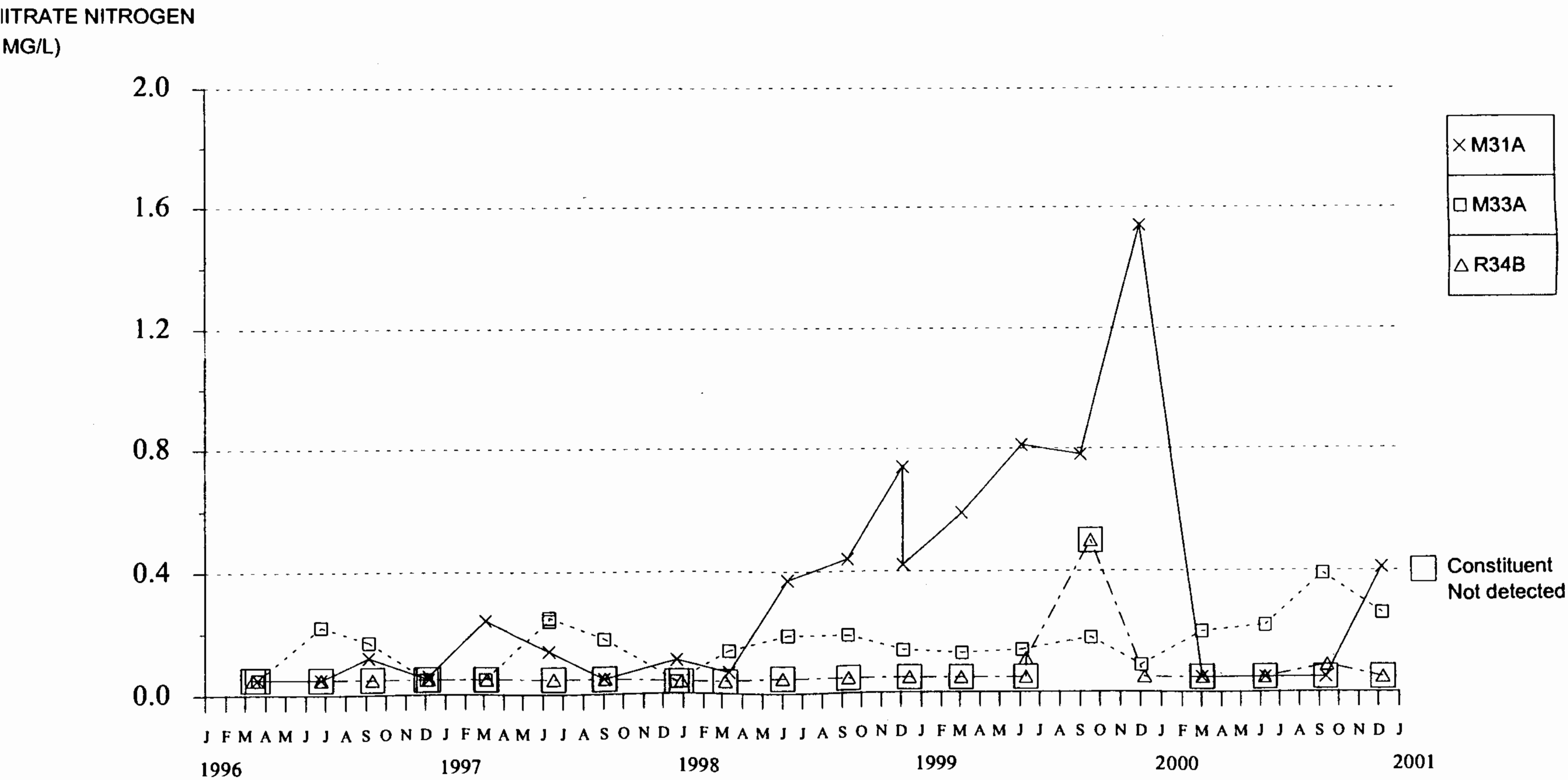


FIGURE 77
PUENTE HILLS LANDFILL
SULFATE
BARRIER THREE MONITORING WELLS

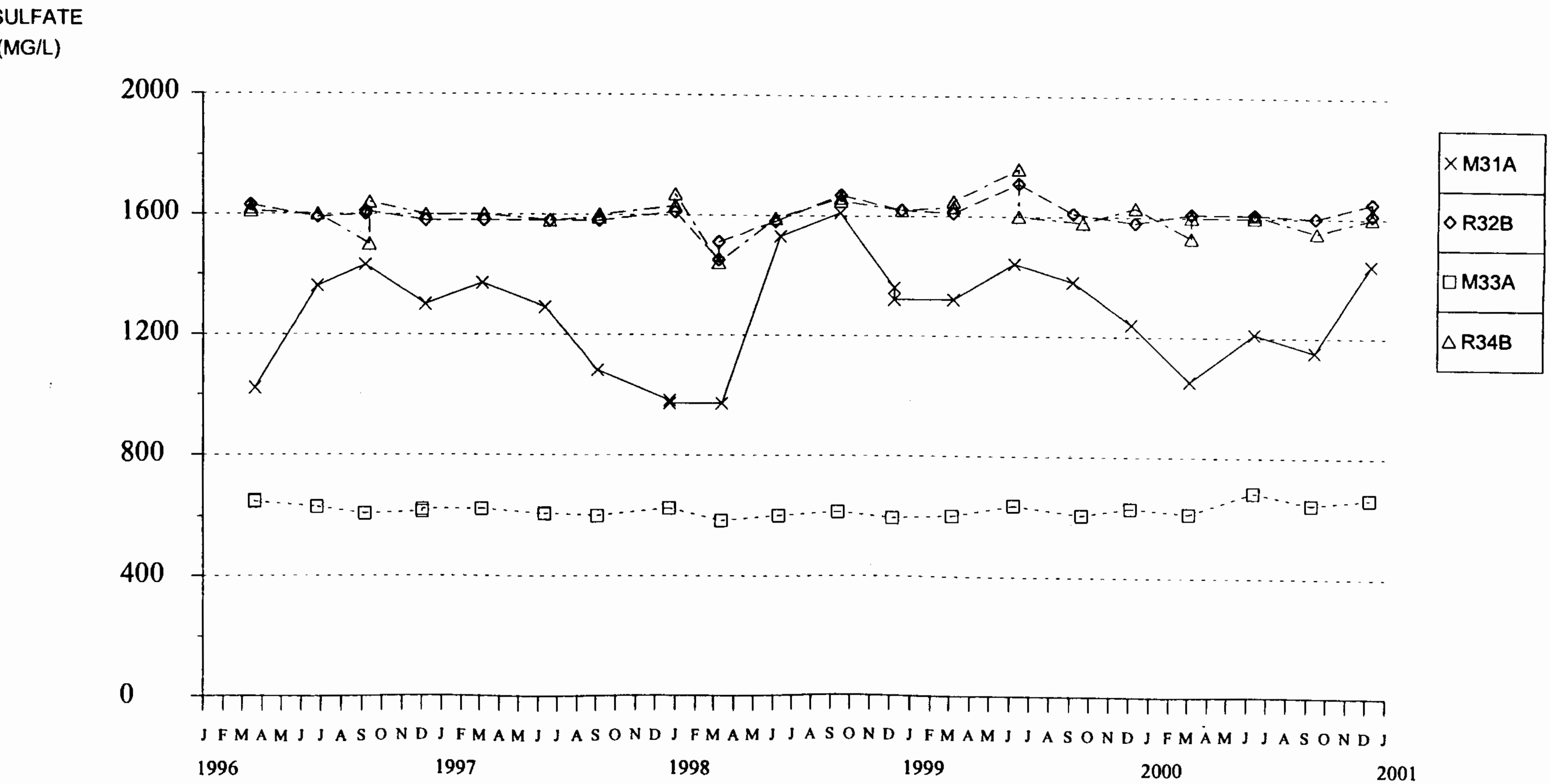


FIGURE 78
PUENTE HILLS LANDFILL
CHLORIDE
BARRIER THREE MONITORING WELLS

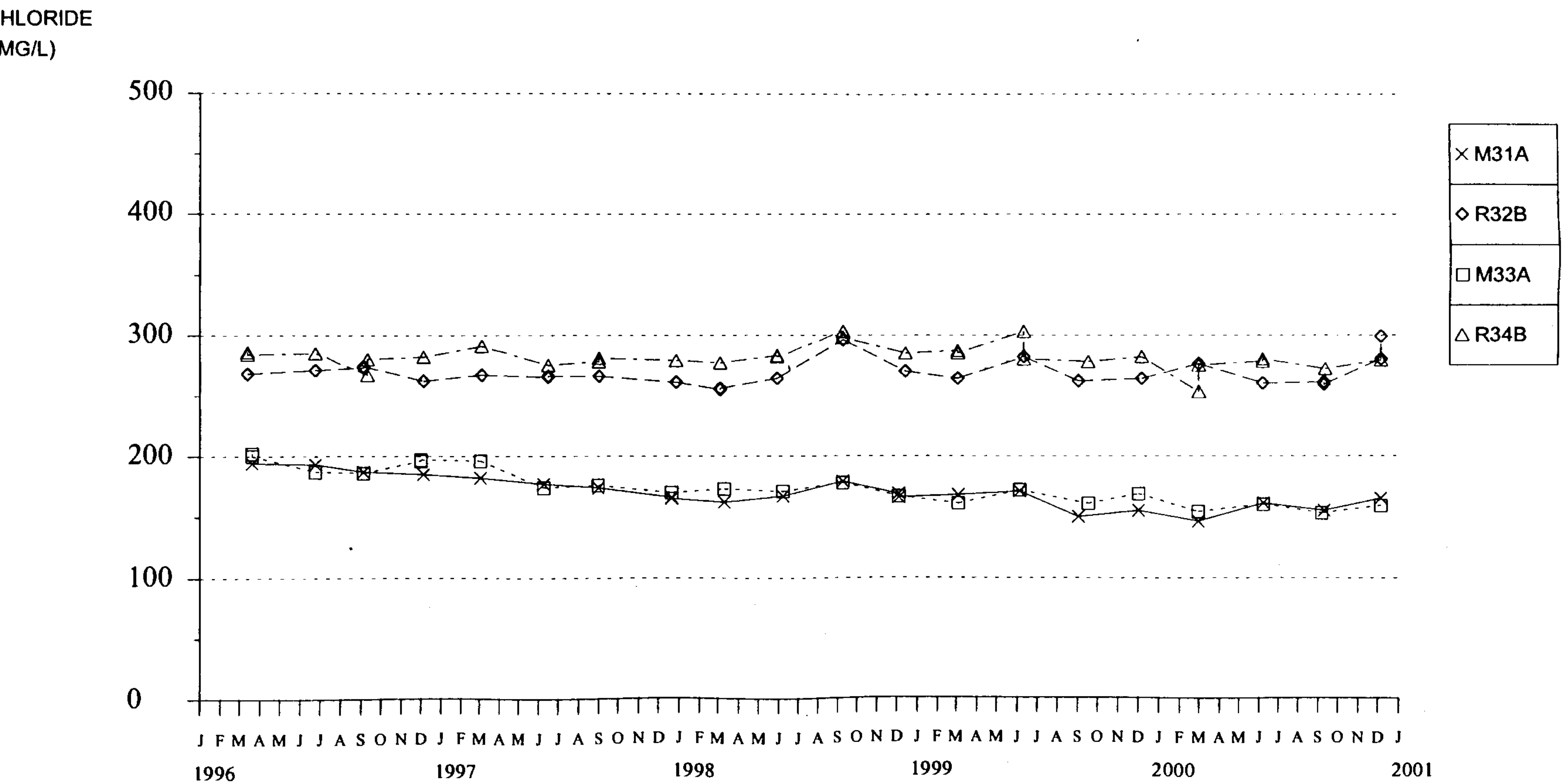


FIGURE 79
PUENTE HILLS LANDFILL
TOTAL ALKALINITY
BARRIER THREE MONITORING WELLS

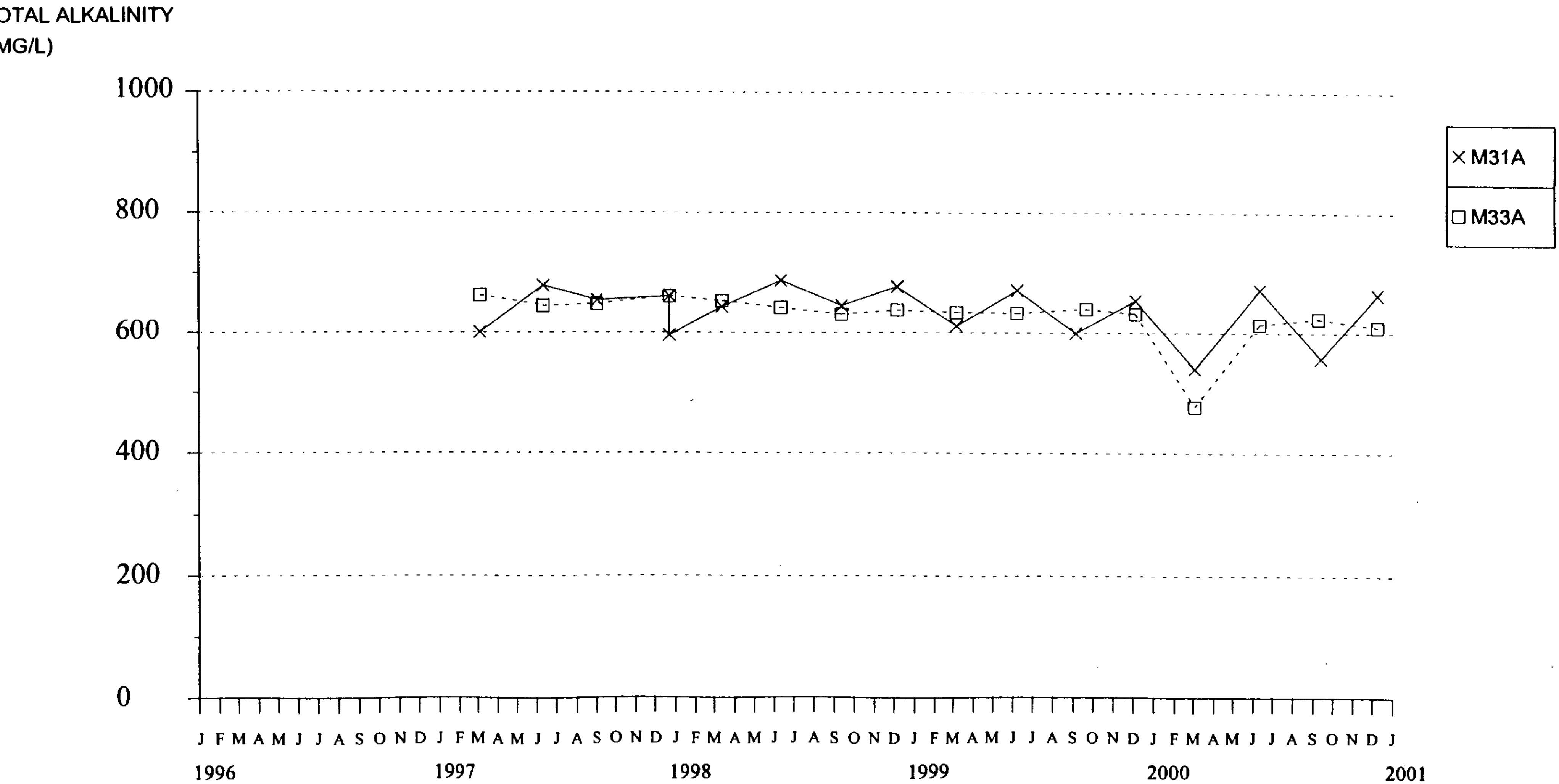


FIGURE 80
PUENTE HILLS LANDFILL
FLUORIDE
BARRIER THREE MONITORING WELLS

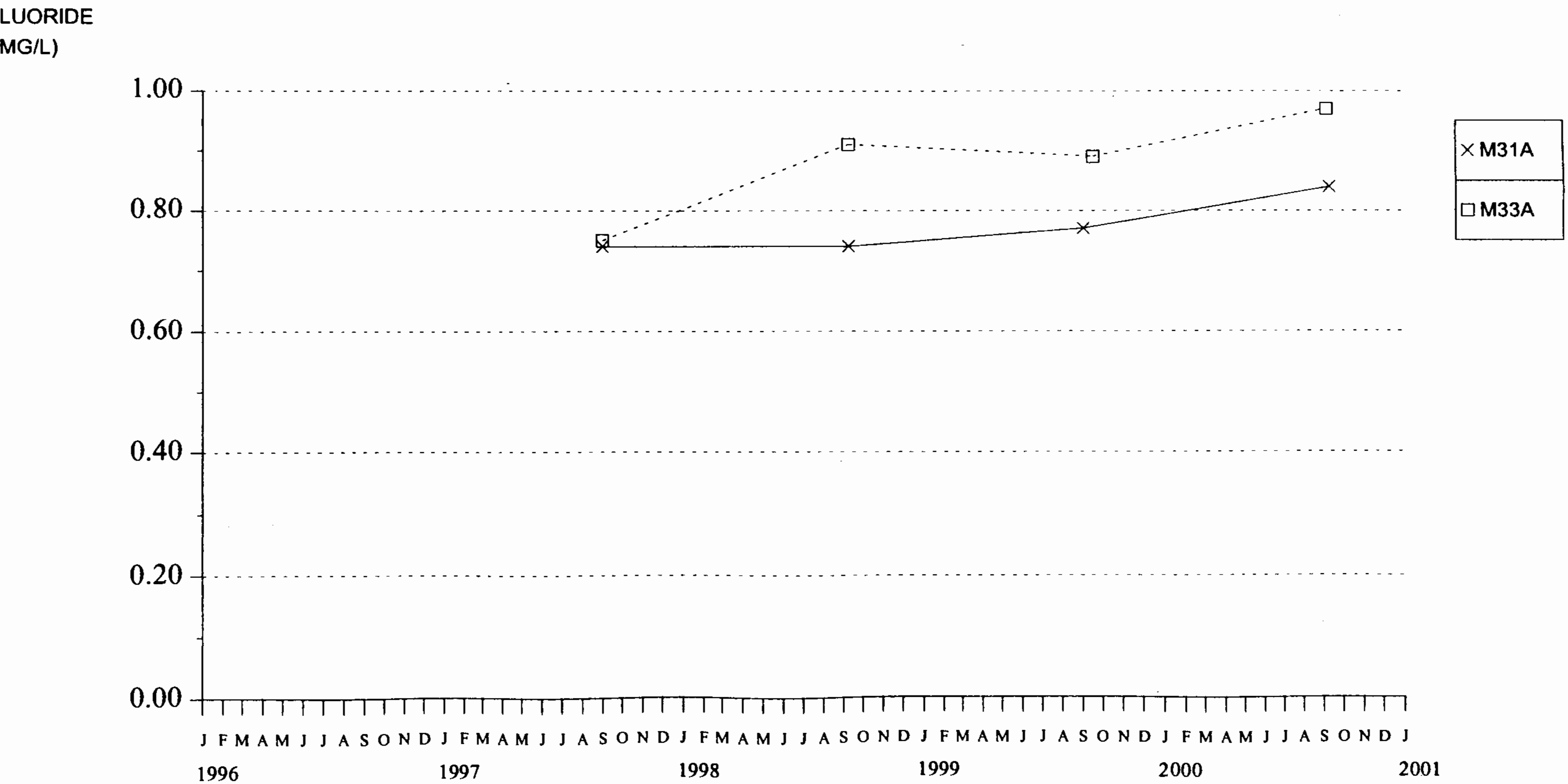


FIGURE 81

PUENTE HILLS LANDFILL
BICARBONATE ALKALINITY
BARRIER THREE MONITORING WELLS

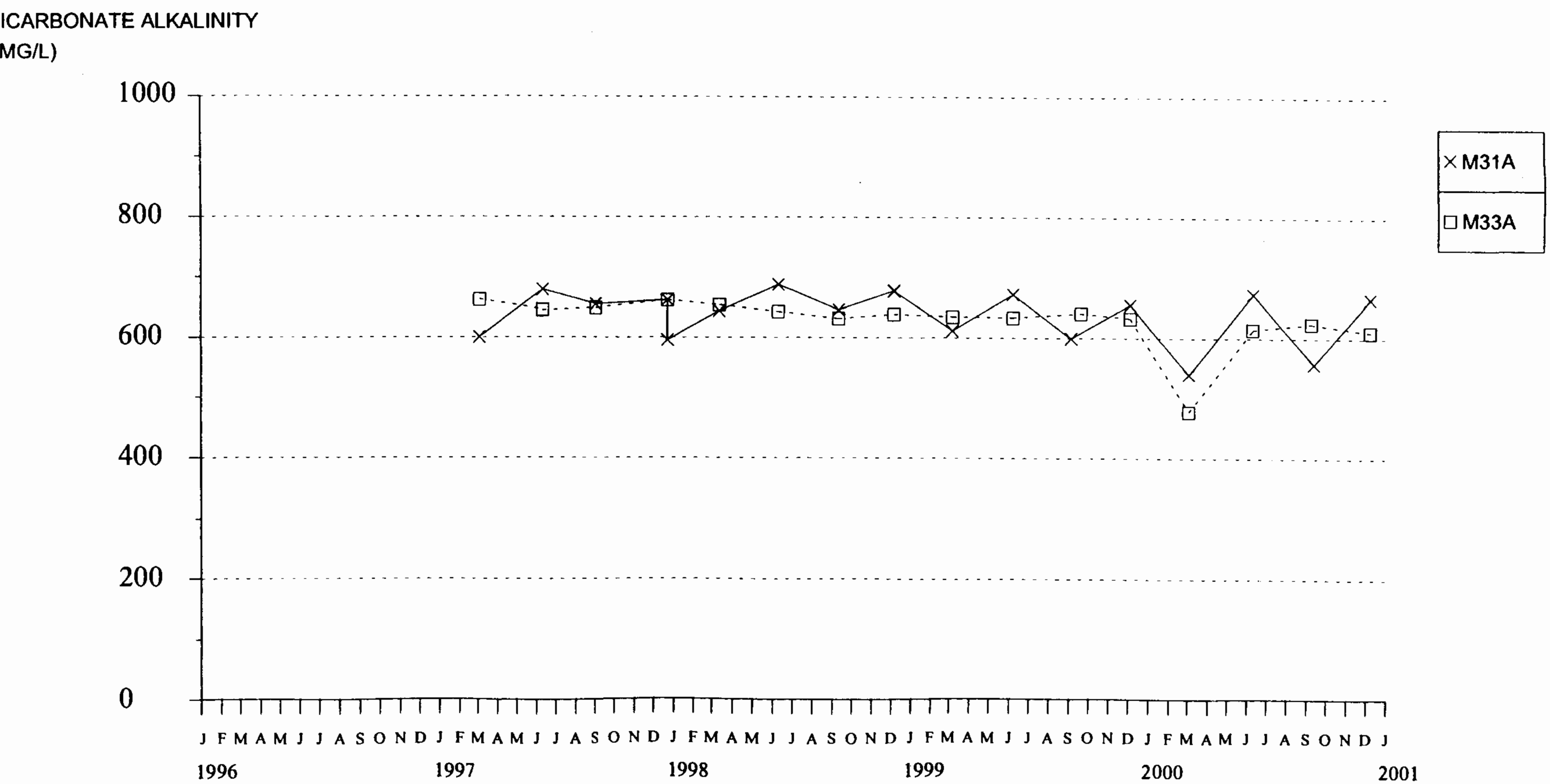


FIGURE 82
PUENTE HILLS LANDFILL
CALCIUM-HARDNESS
BARRIER THREE MONITORING WELLS

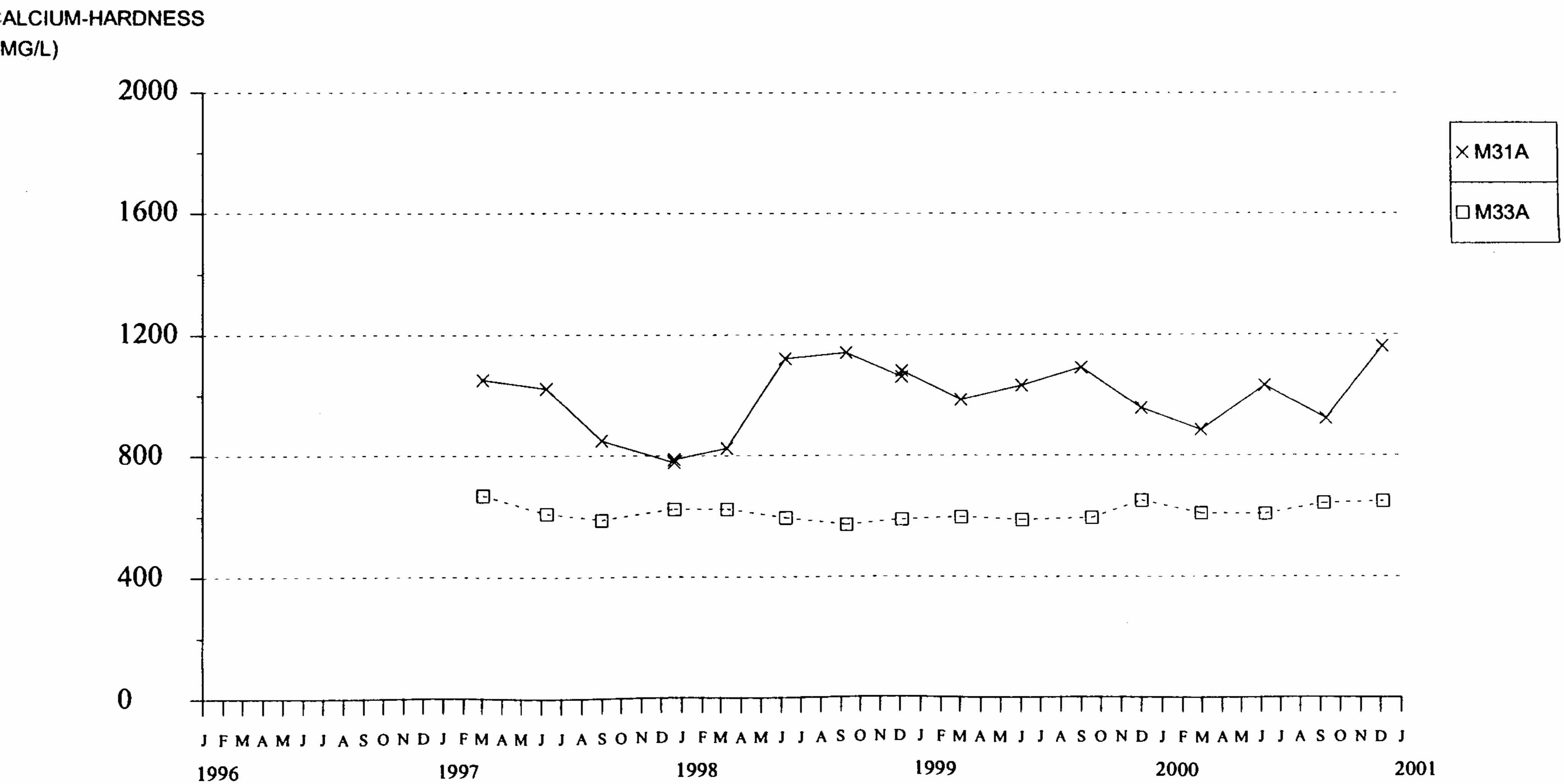


FIGURE 83

PUENTE HILLS LANDFILL

MAGNESIUM-HARDNESS

BARRIER THREE MONITORING WELLS

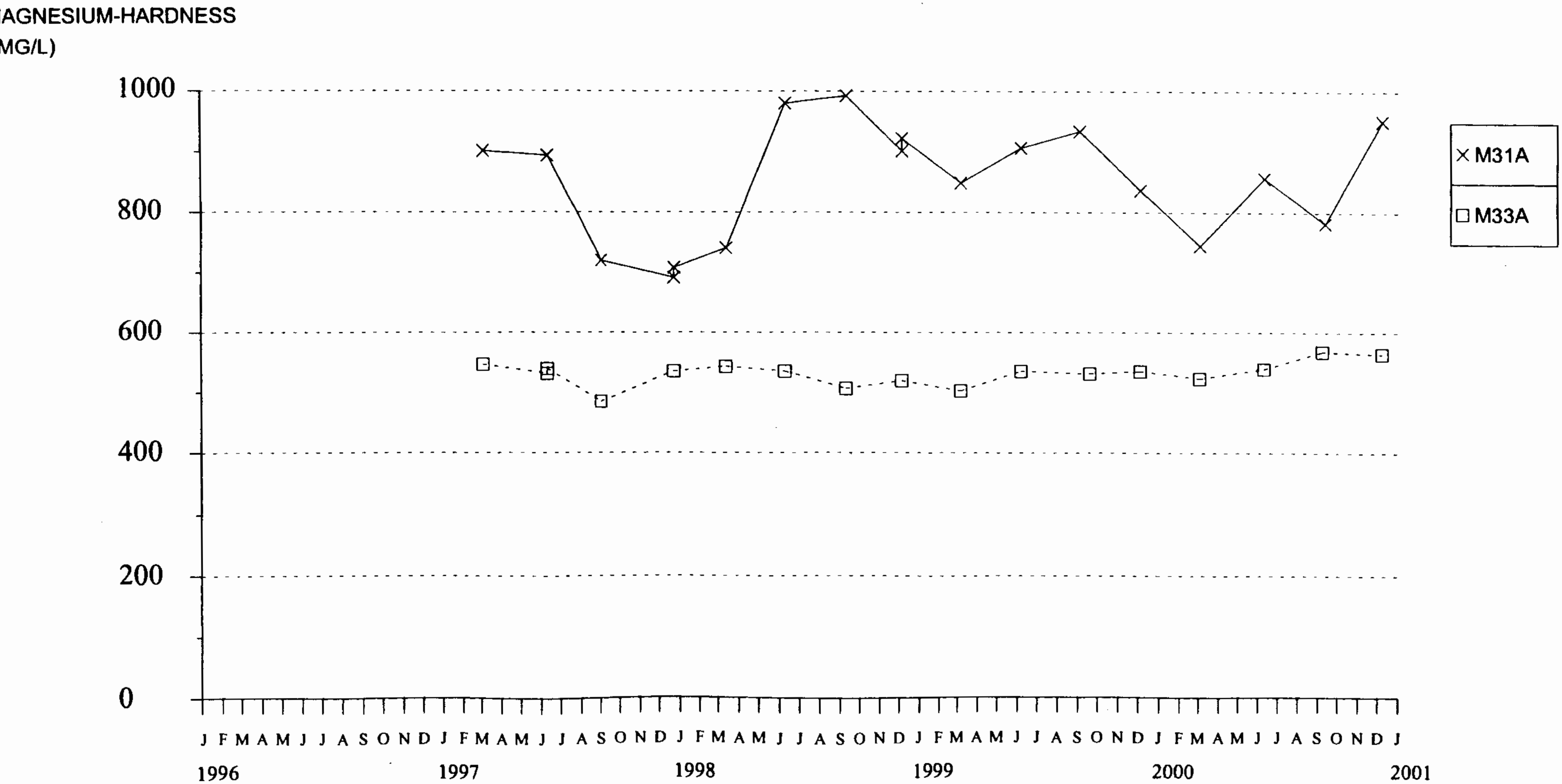


FIGURE 84
PUENTE HILLS LANDFILL
SODIUM
BARRIER THREE MONITORING WELLS

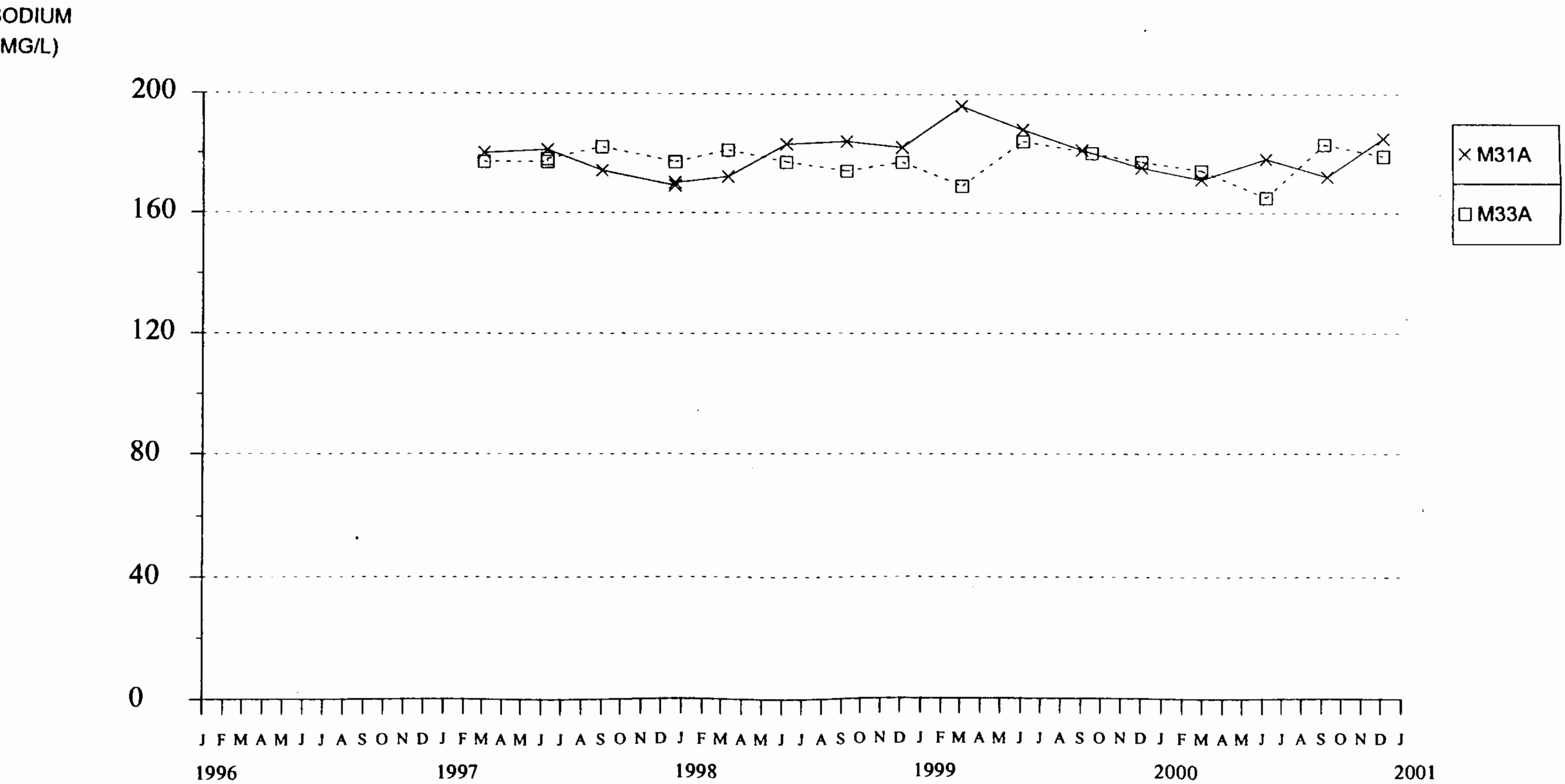


FIGURE 85
PUENTE HILLS LANDFILL
POTASSIUM
BARRIER THREE MONITORING WELLS

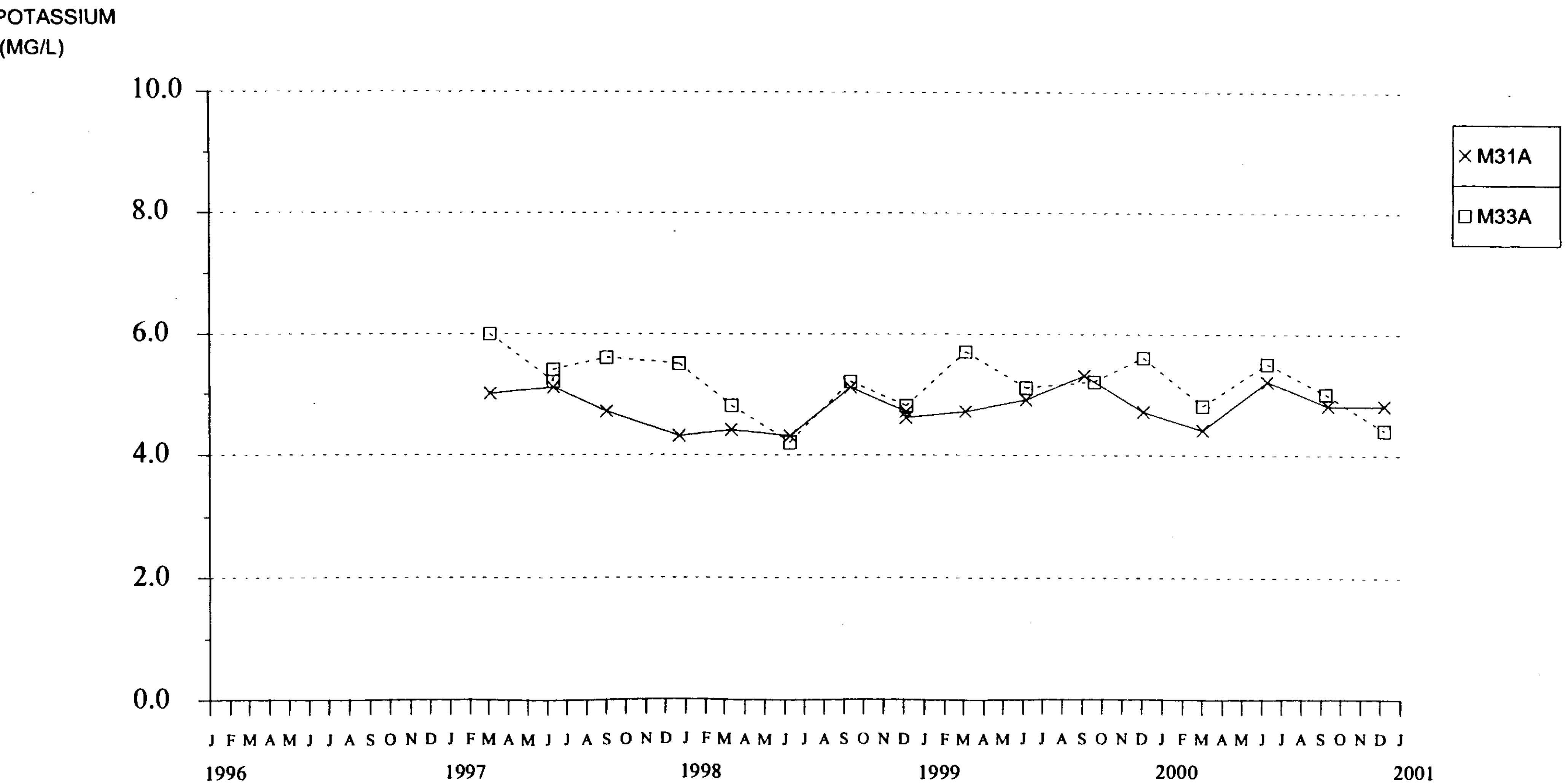


FIGURE 86
PUENTE HILLS LANDFILL
IRON
BARRIER THREE MONITORING WELLS

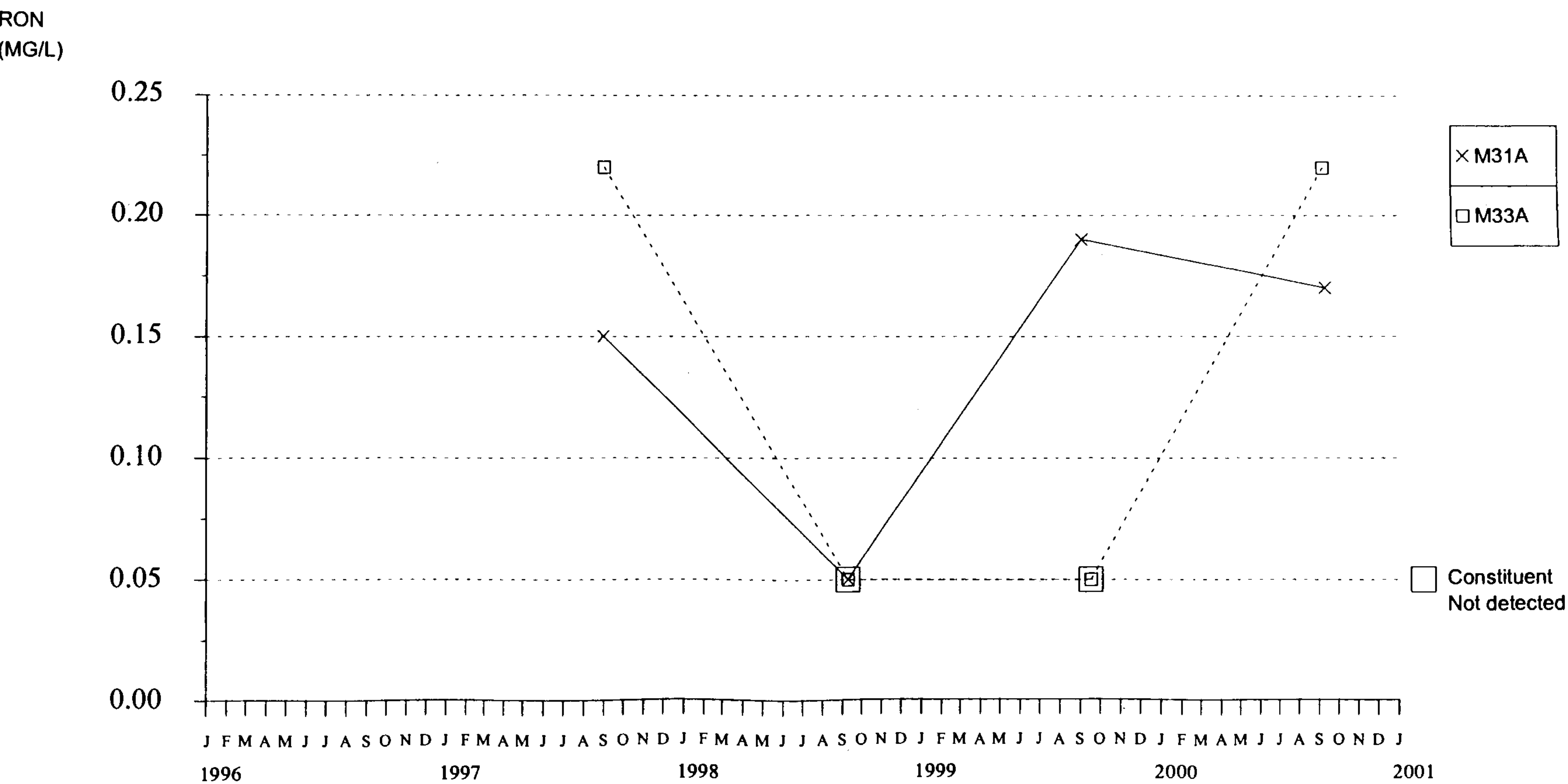


FIGURE 87
PUENTE HILLS LANDFILL
MANGANESE
BARRIER THREE MONITORING WELLS

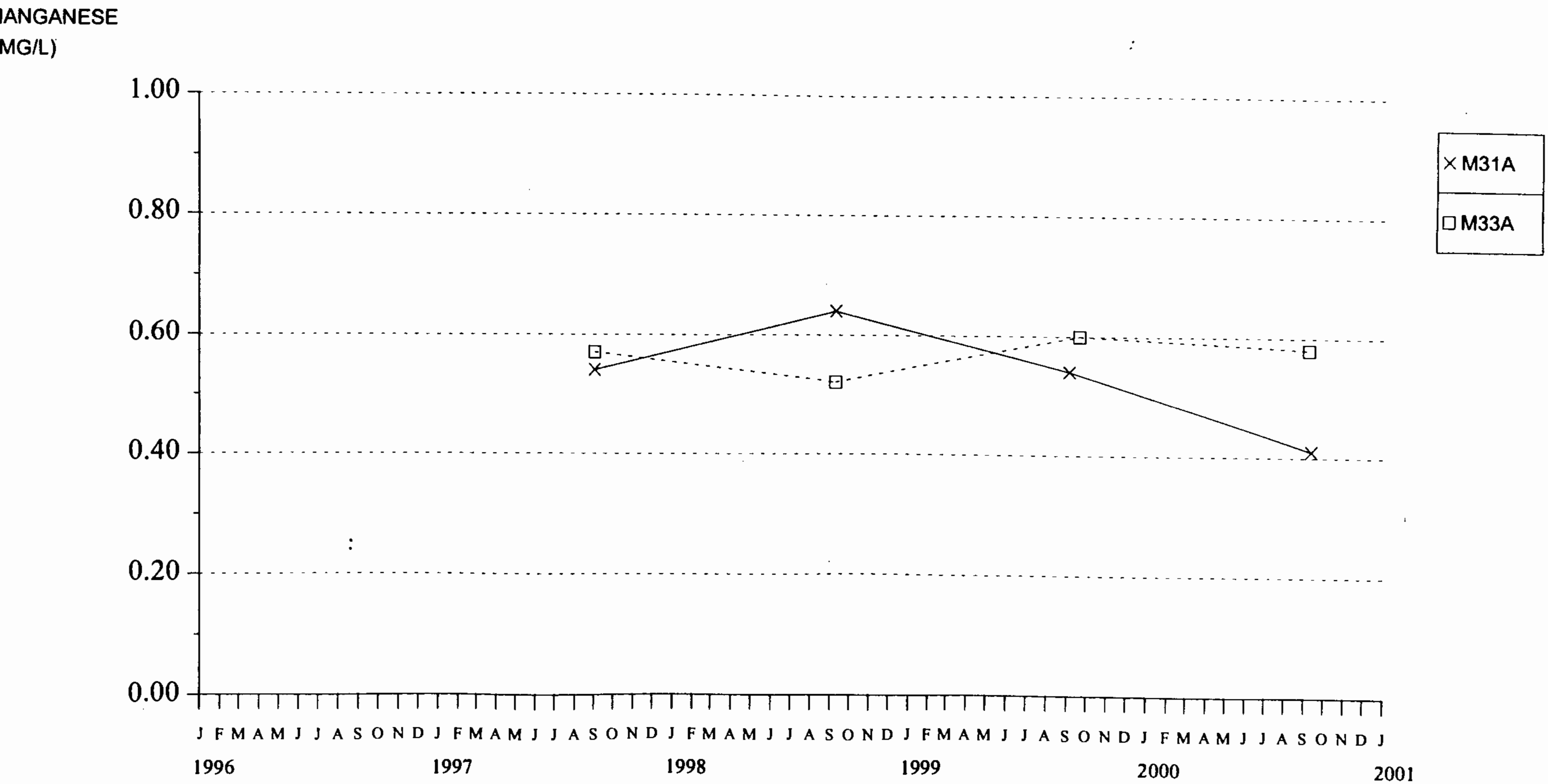


FIGURE 88

PUENTE HILLS LANDFILL

AMMONIA NITROGEN

BARRIER THREE MONITORING WELLS

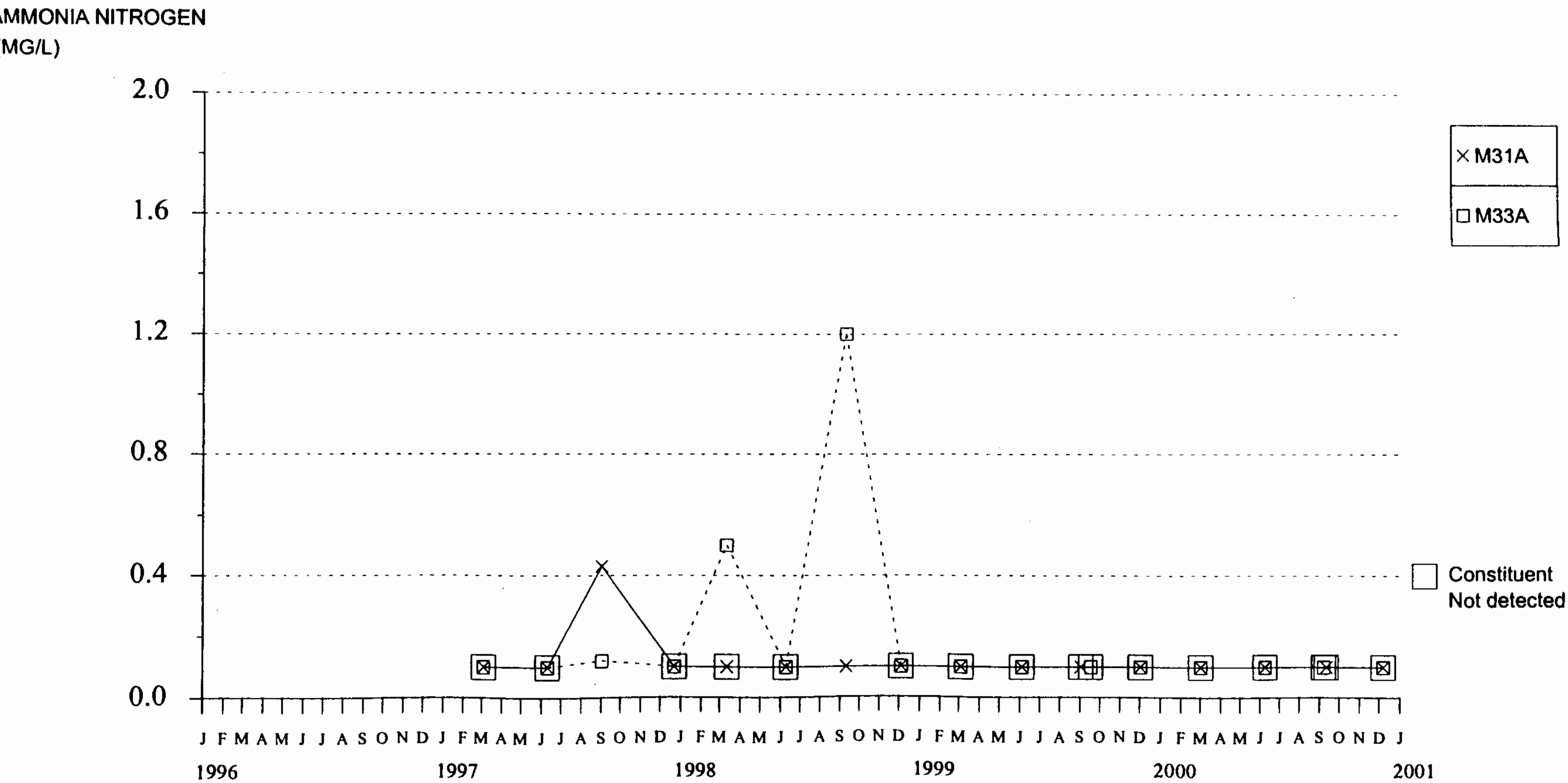


FIGURE 89
PUENTE HILLS LANDFILL
TOTAL COD
BARRIER THREE MONITORING WELLS

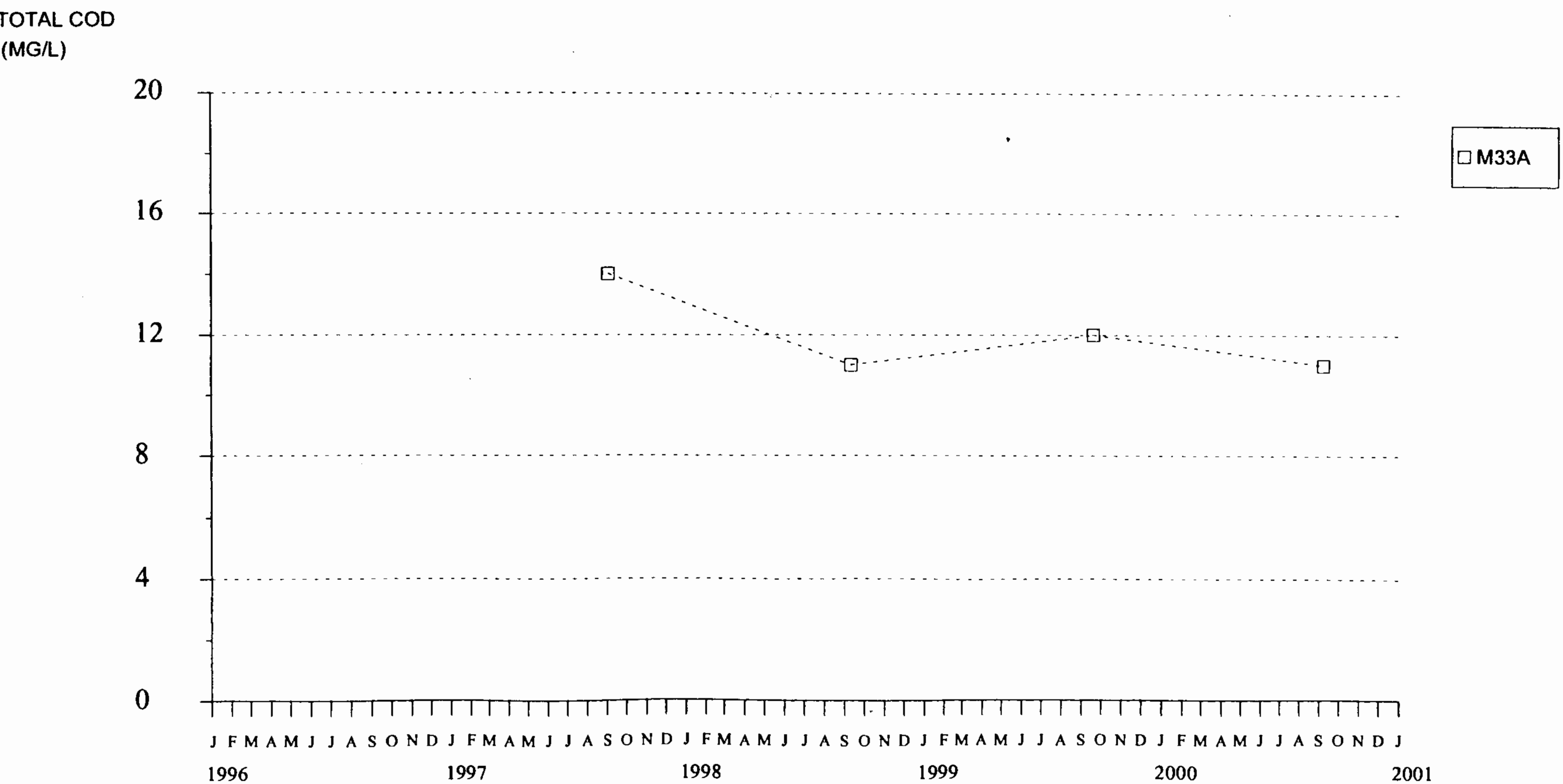


FIGURE 90
PUENTE HILLS LANDFILL
SOLUBLE COD
BARRIER THREE MONITORING WELLS

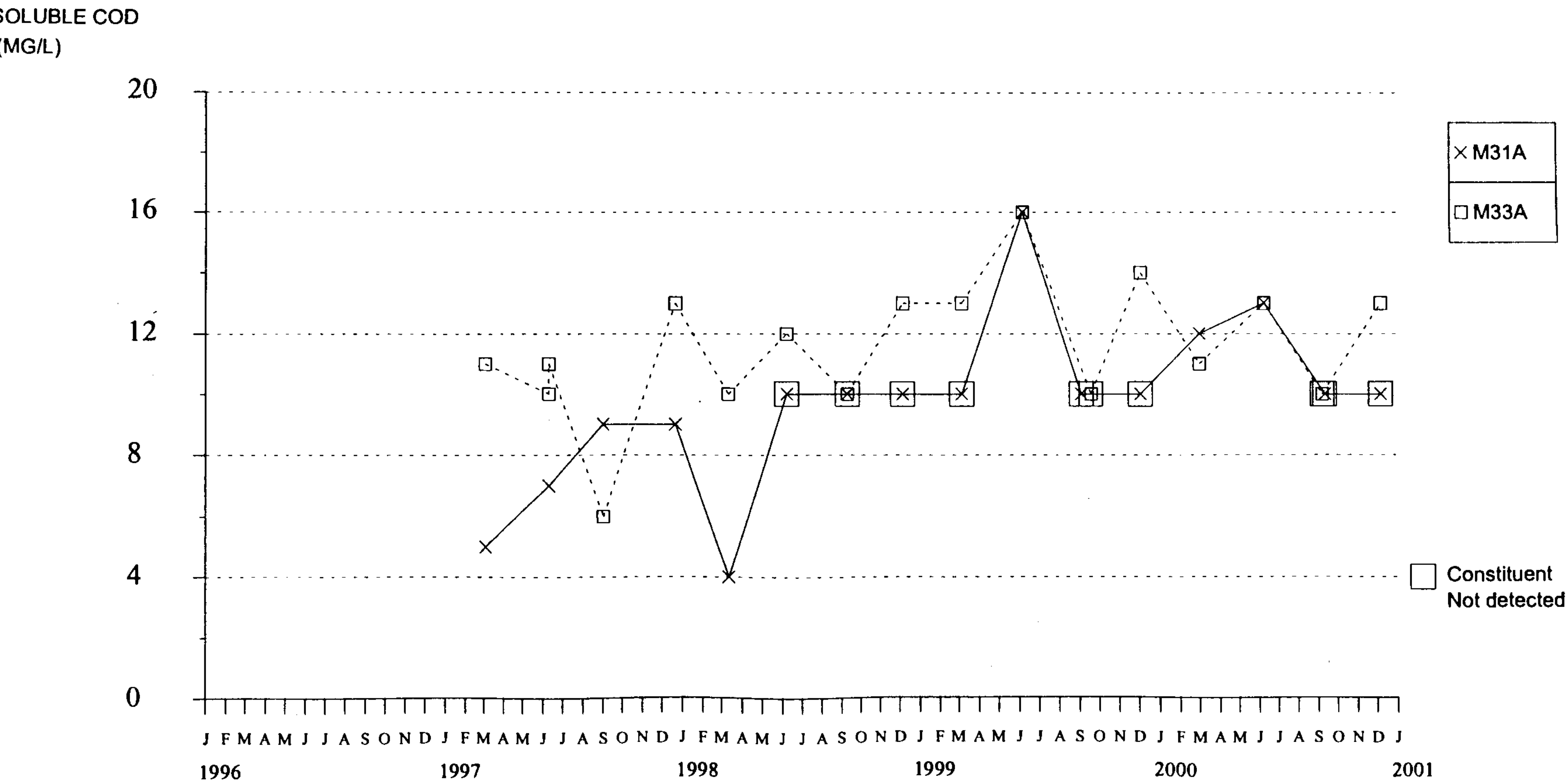


FIGURE 91

PUENTE HILLS LANDFILL

TOTAL ORGANIC CARBON

BARRIER THREE MONITORING WELLS

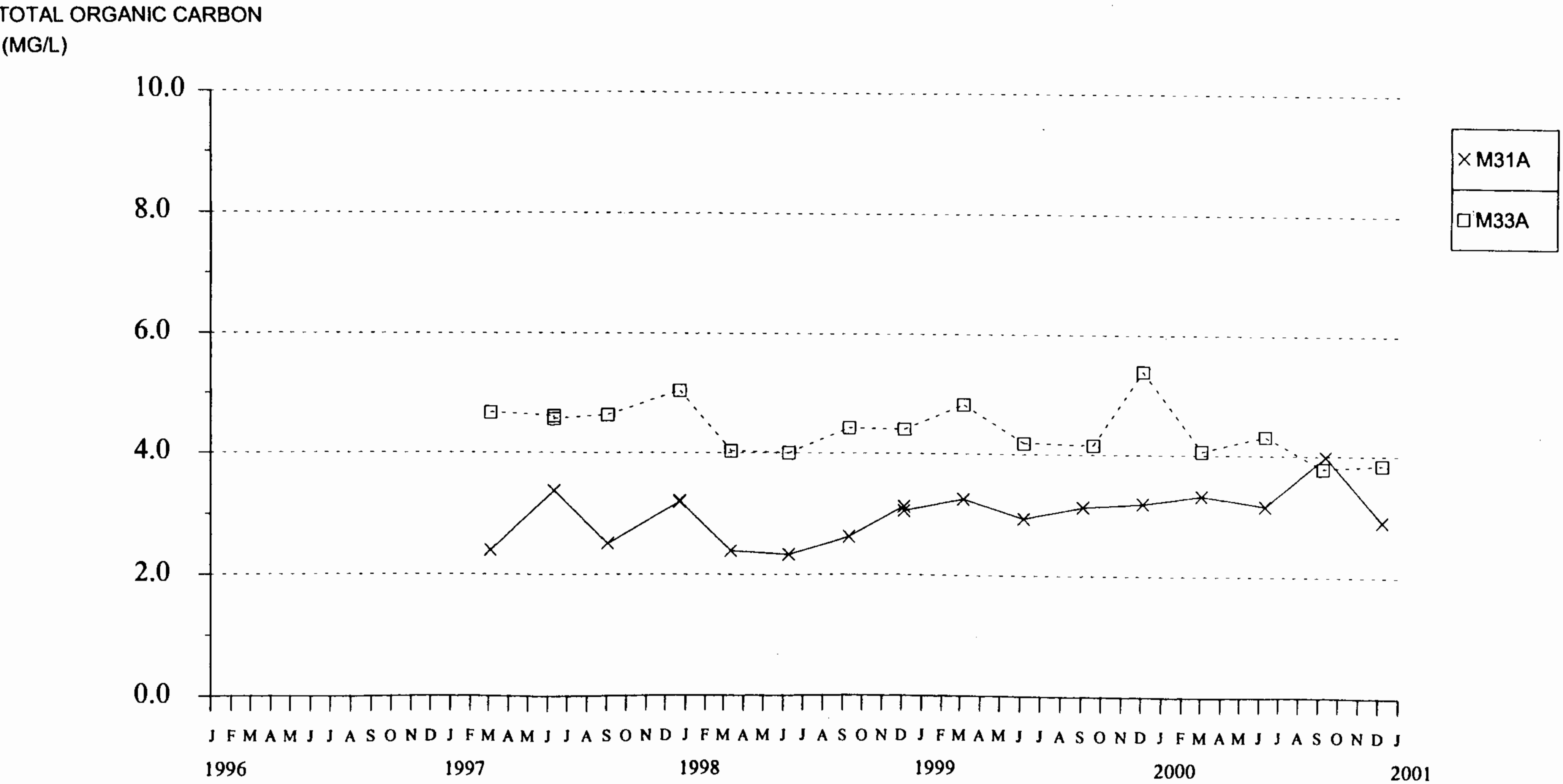


FIGURE 92
PUENTE HILLS LANDFILL
TOTAL ORGANIC HALOGEN
BARRIER THREE MONITORING WELLS

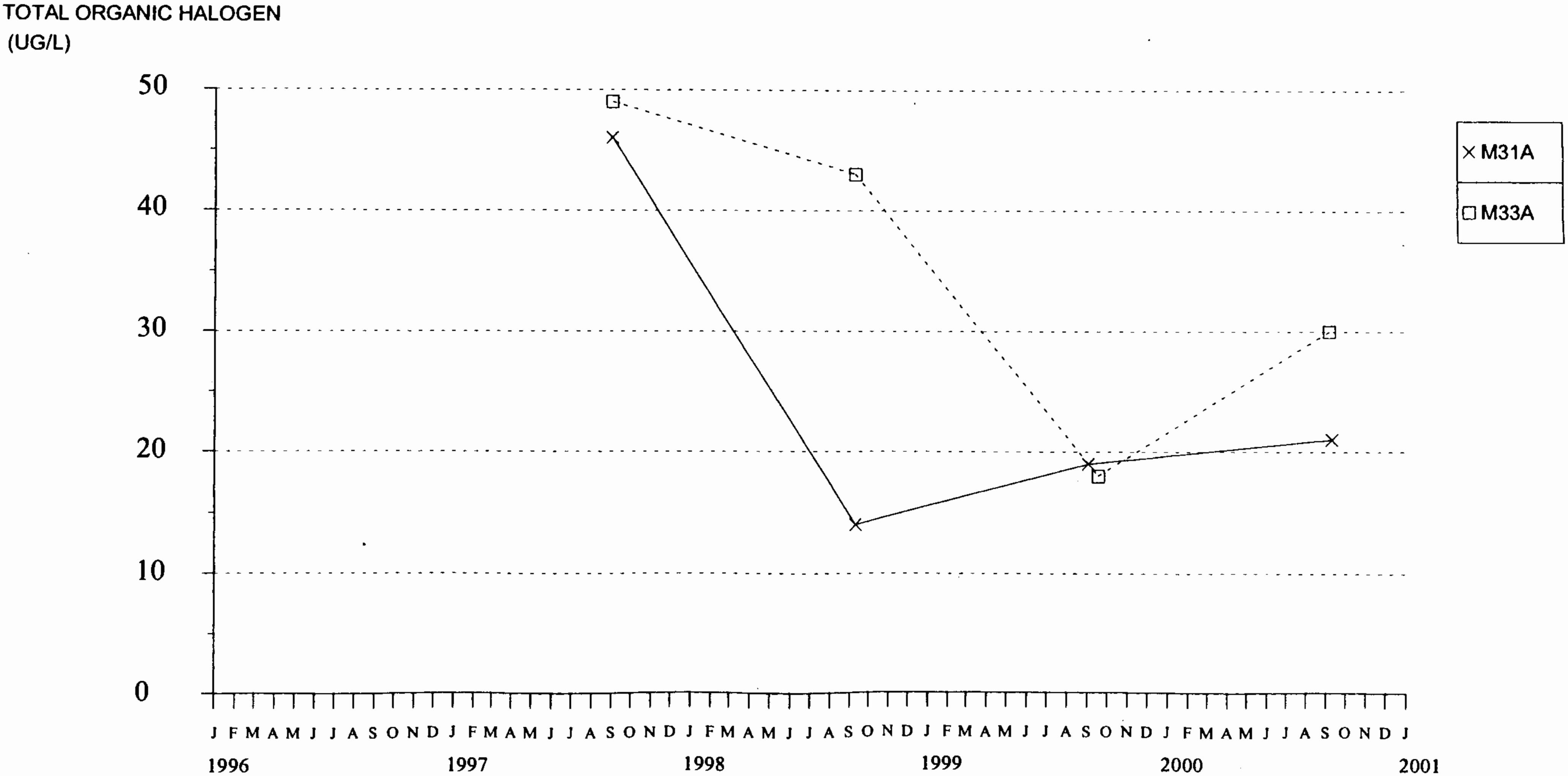


FIGURE 93
PUENTE HILLS LANDFILL
BARIUM
BARRIER THREE MONITORING WELLS

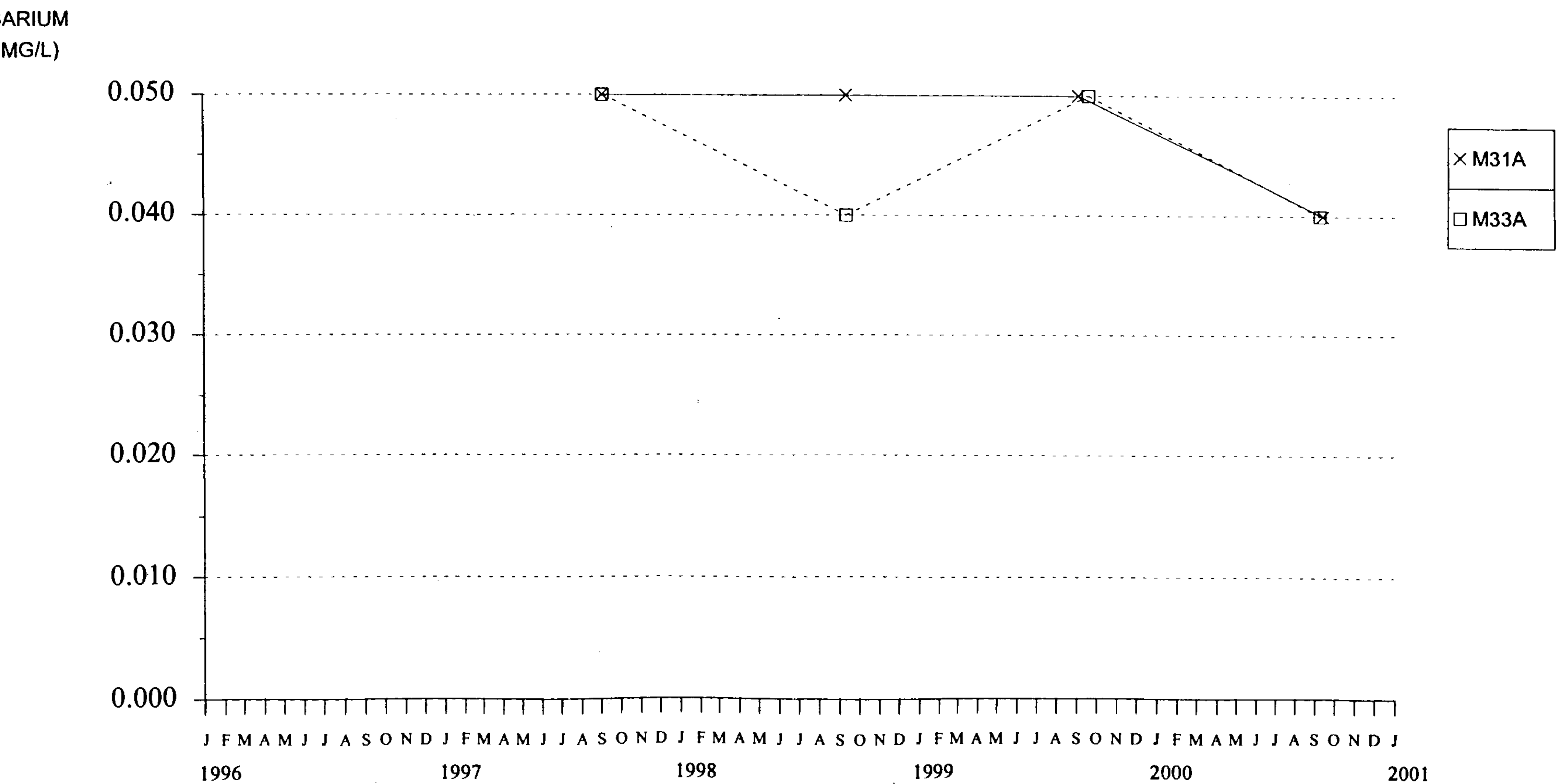


FIGURE 94
PUENTE HILLS LANDFILL
TOTAL CHROMIUM
BARRIER THREE MONITORING WELLS

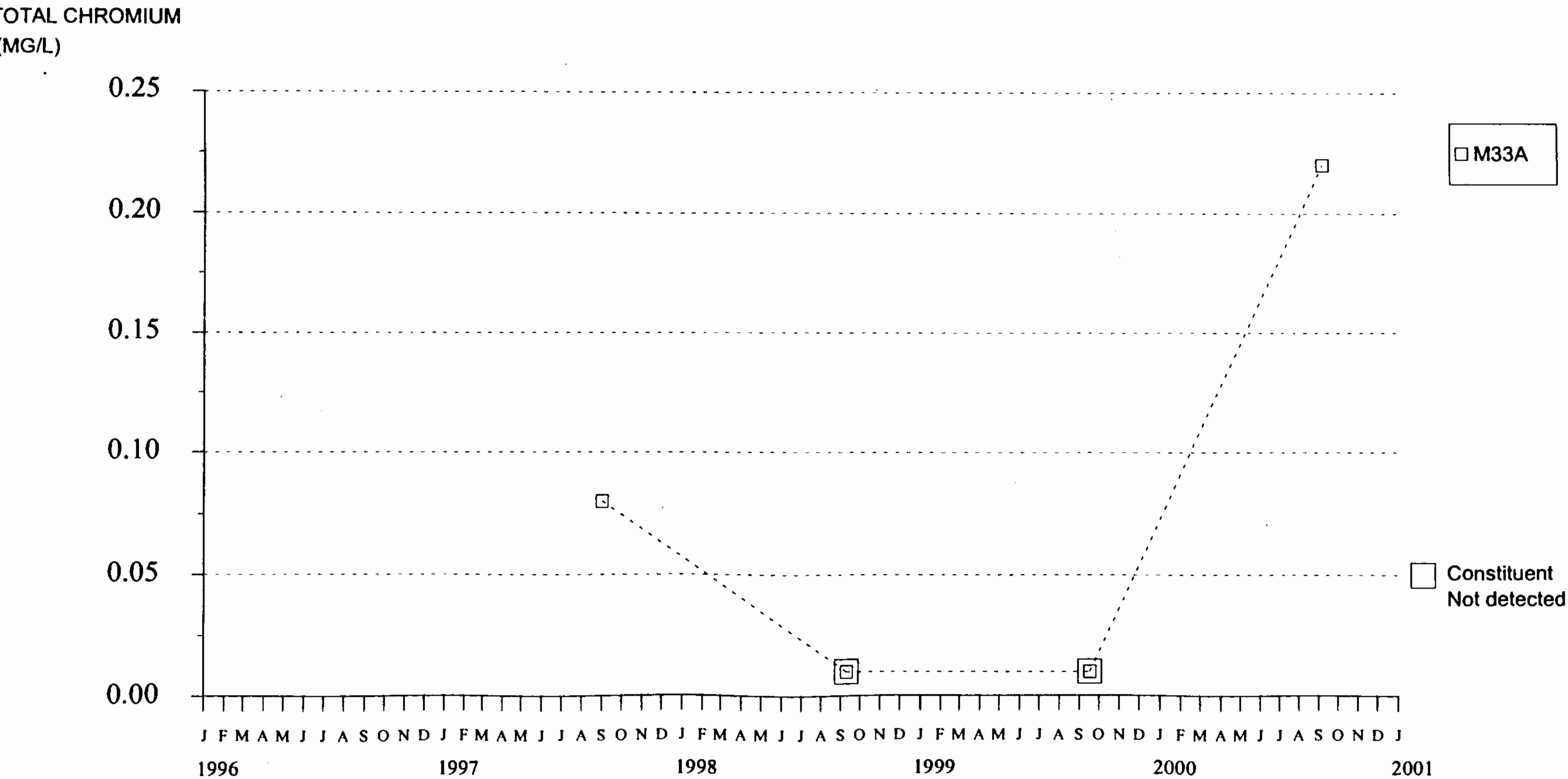


FIGURE 95
PUENTE HILLS LANDFILL
NICKEL
BARRIER THREE MONITORING WELLS

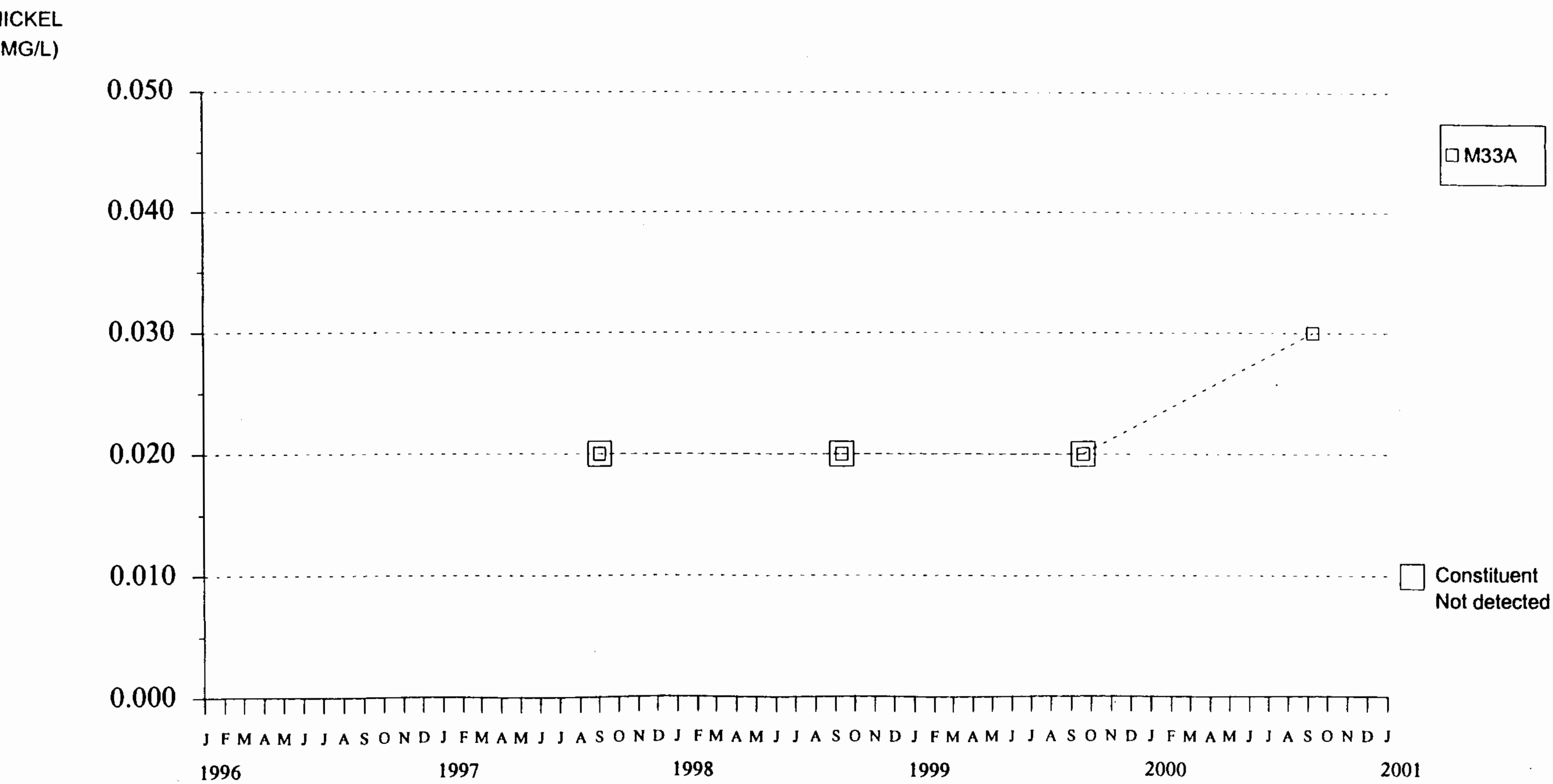


FIGURE 96
PUENTE HILLS LANDFILL
SELENIUM
BARRIER THREE MONITORING WELLS

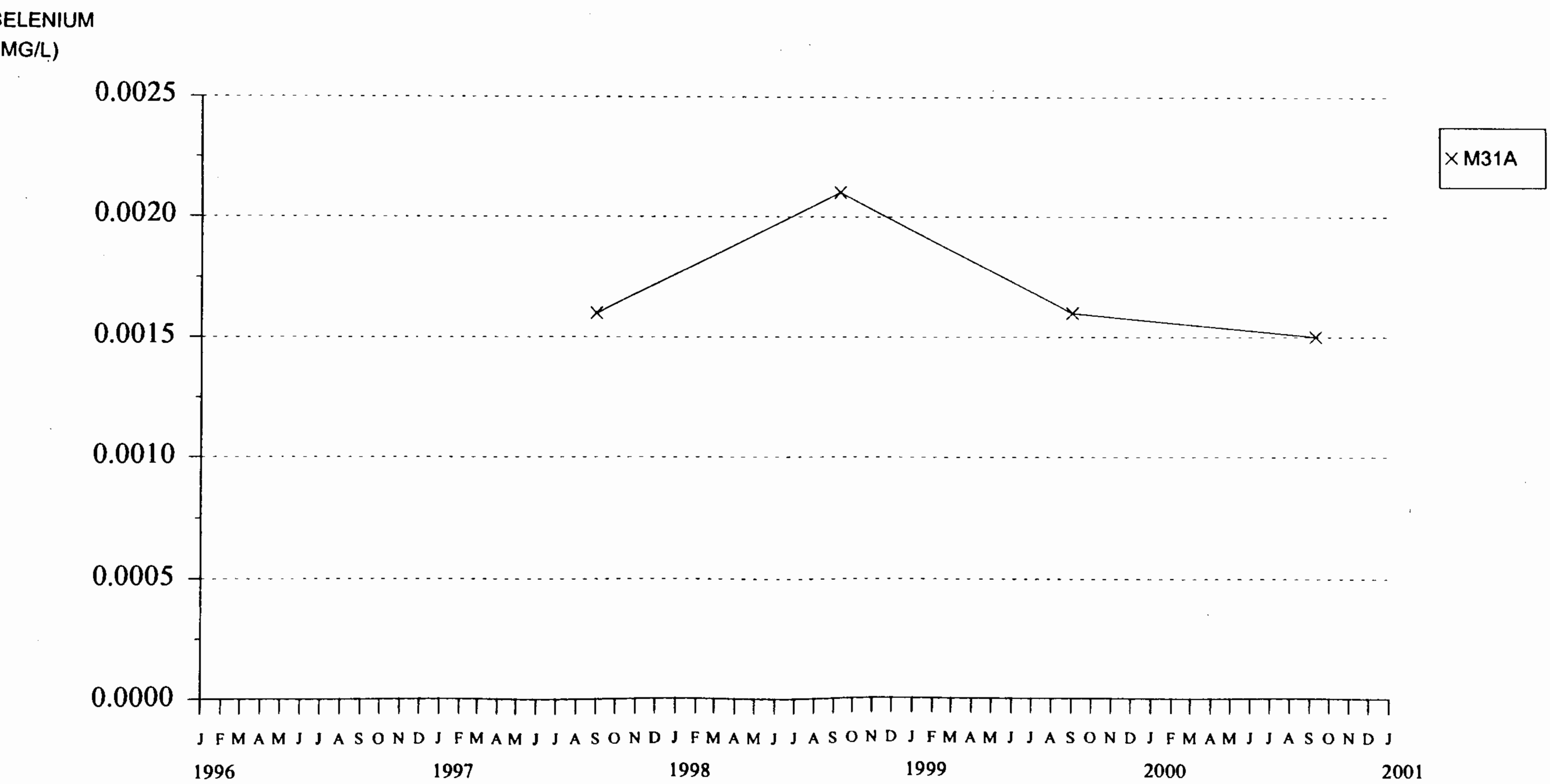


FIGURE 97
PUENTE HILLS LANDFILL
ZINC
BARRIER THREE MONITORING WELLS

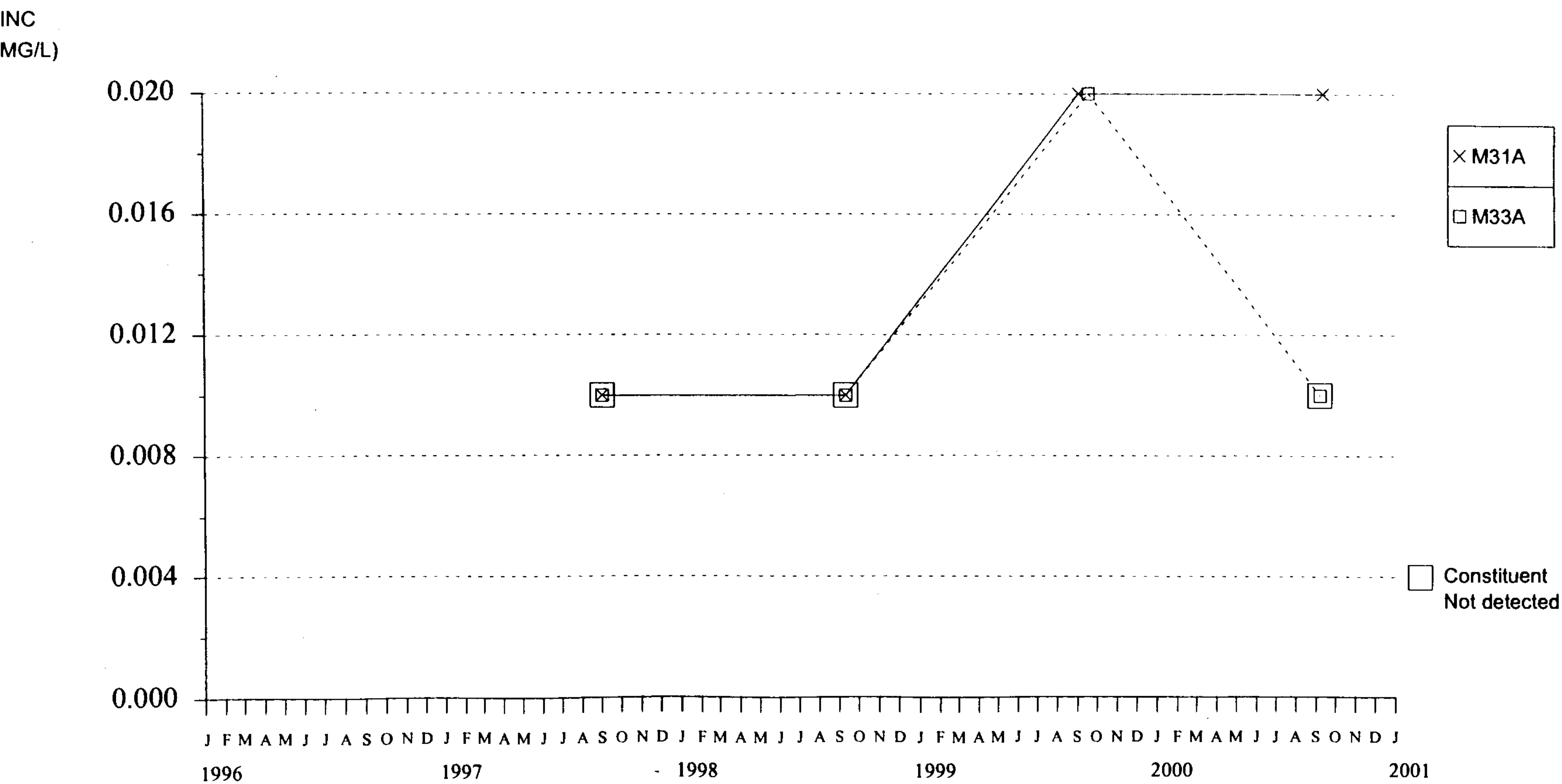


FIGURE 98
PUENTE HILLS LANDFILL
TRICHLOROETHYLENE
BARRIER THREE MONITORING WELLS

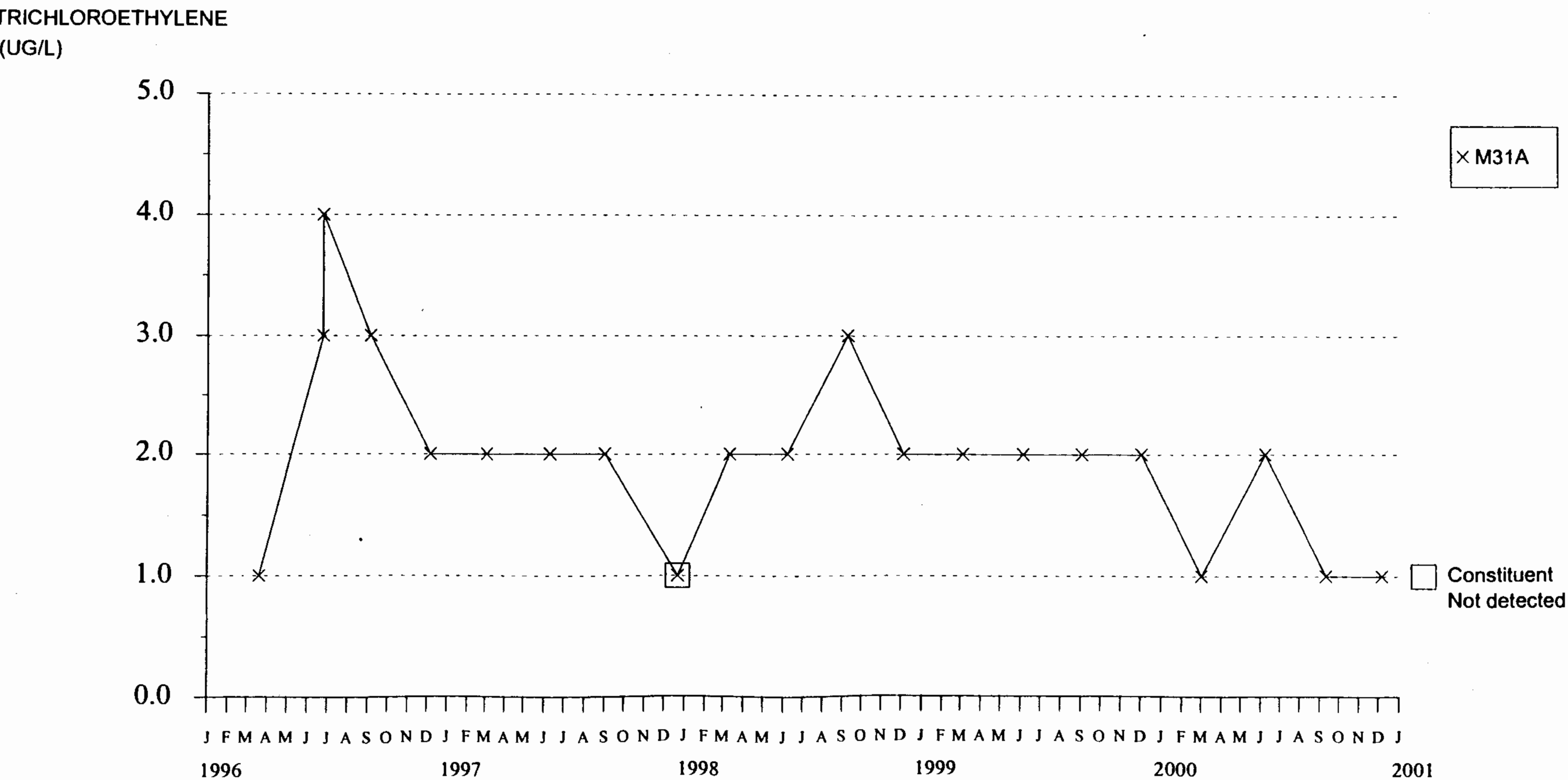


FIGURE 99
PUENTE HILLS LANDFILL
VINYL CHLORIDE
BARRIER THREE MONITORING WELLS

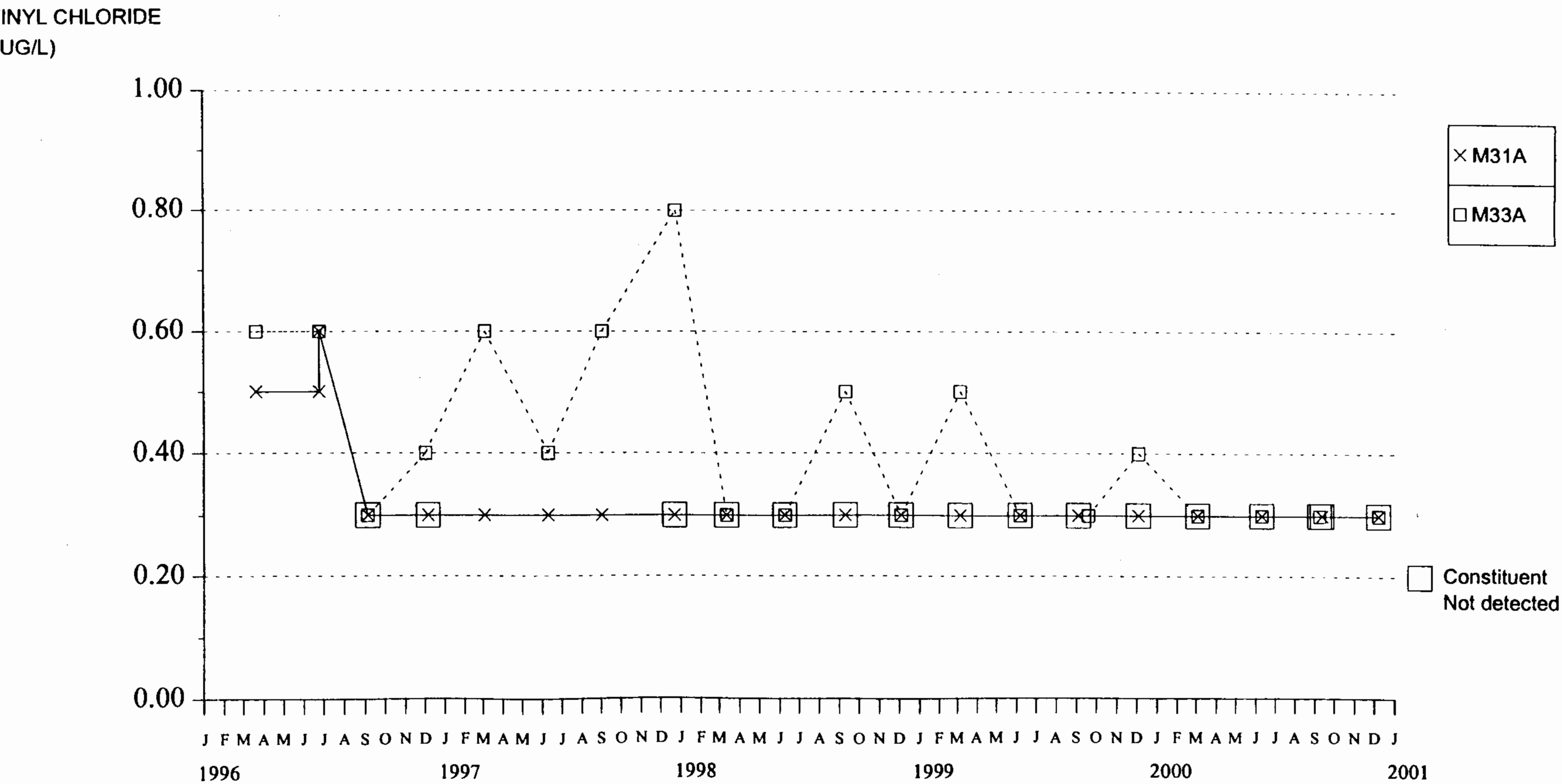


FIGURE 100

PUENTE HILLS LANDFILL

1,2-DICHLOROETHANE

BARRIER THREE MONITORING WELLS

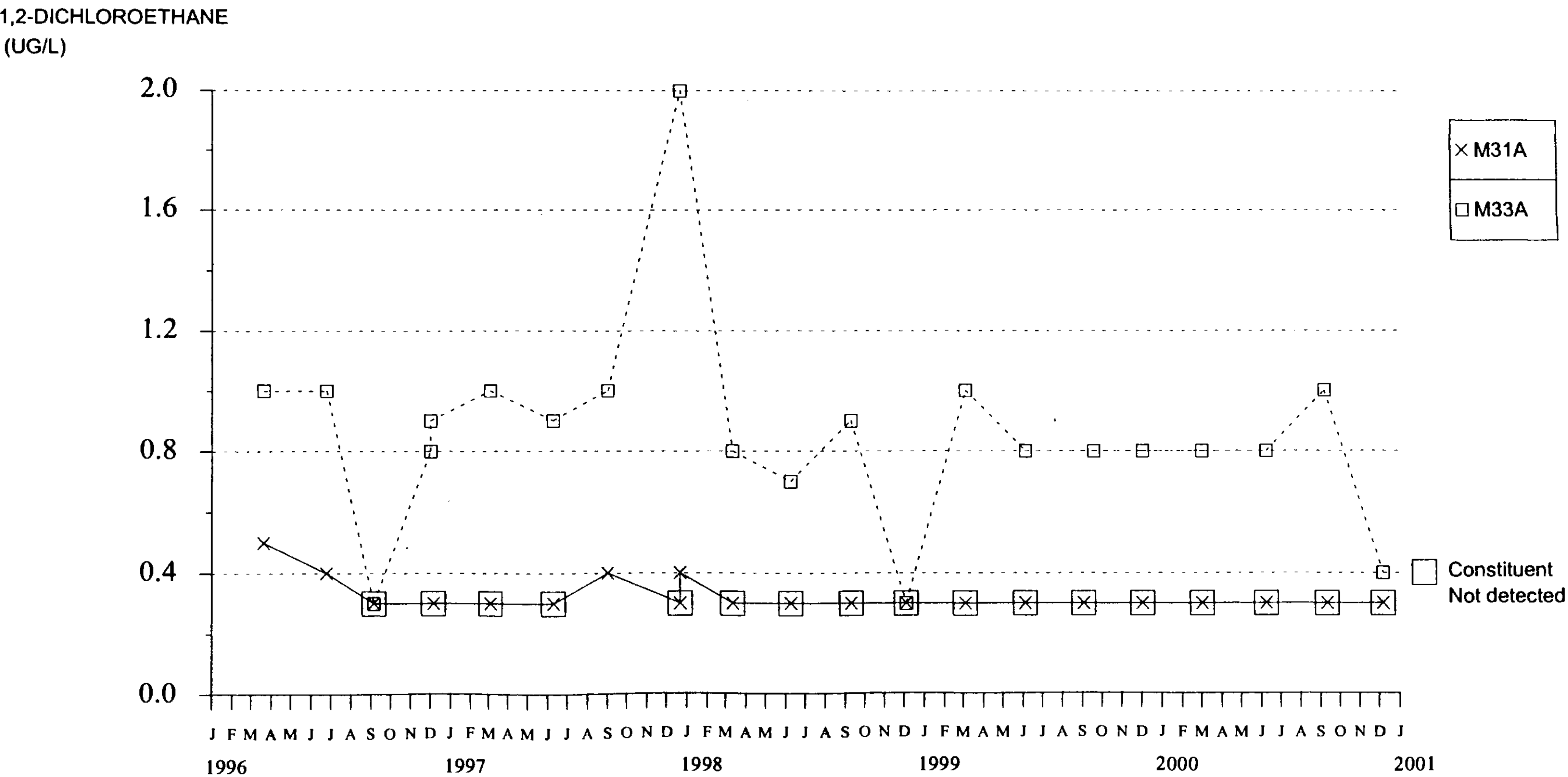


FIGURE 101

PUENTE HILLS LANDFILL

CIS-1,2-DICHLOROETHYLENE

BARRIER THREE MONITORING WELLS

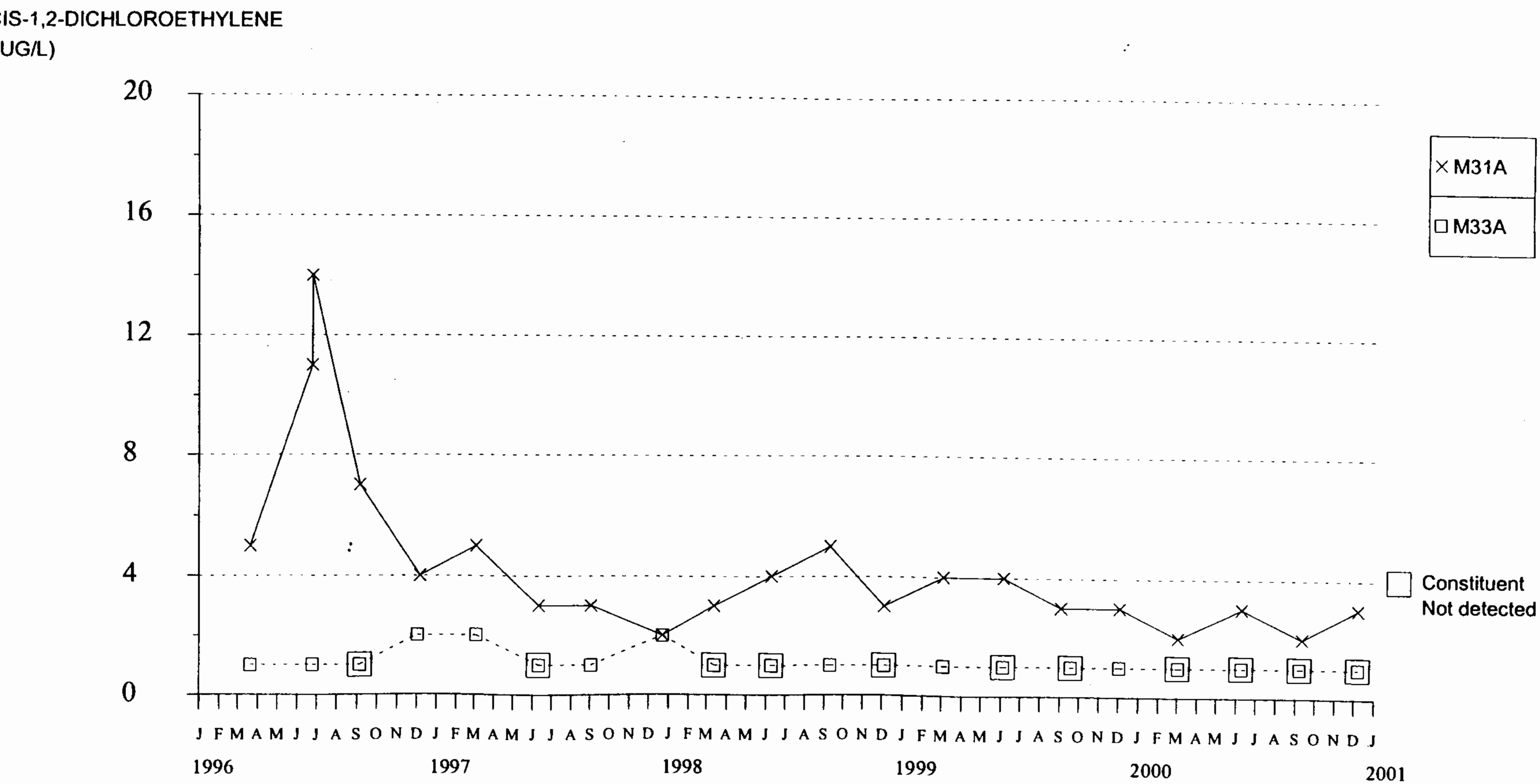


FIGURE 102
PUENTE HILLS LANDFILL
IRON
BARRIER THREE MONITORING WELLS (FILTERED)

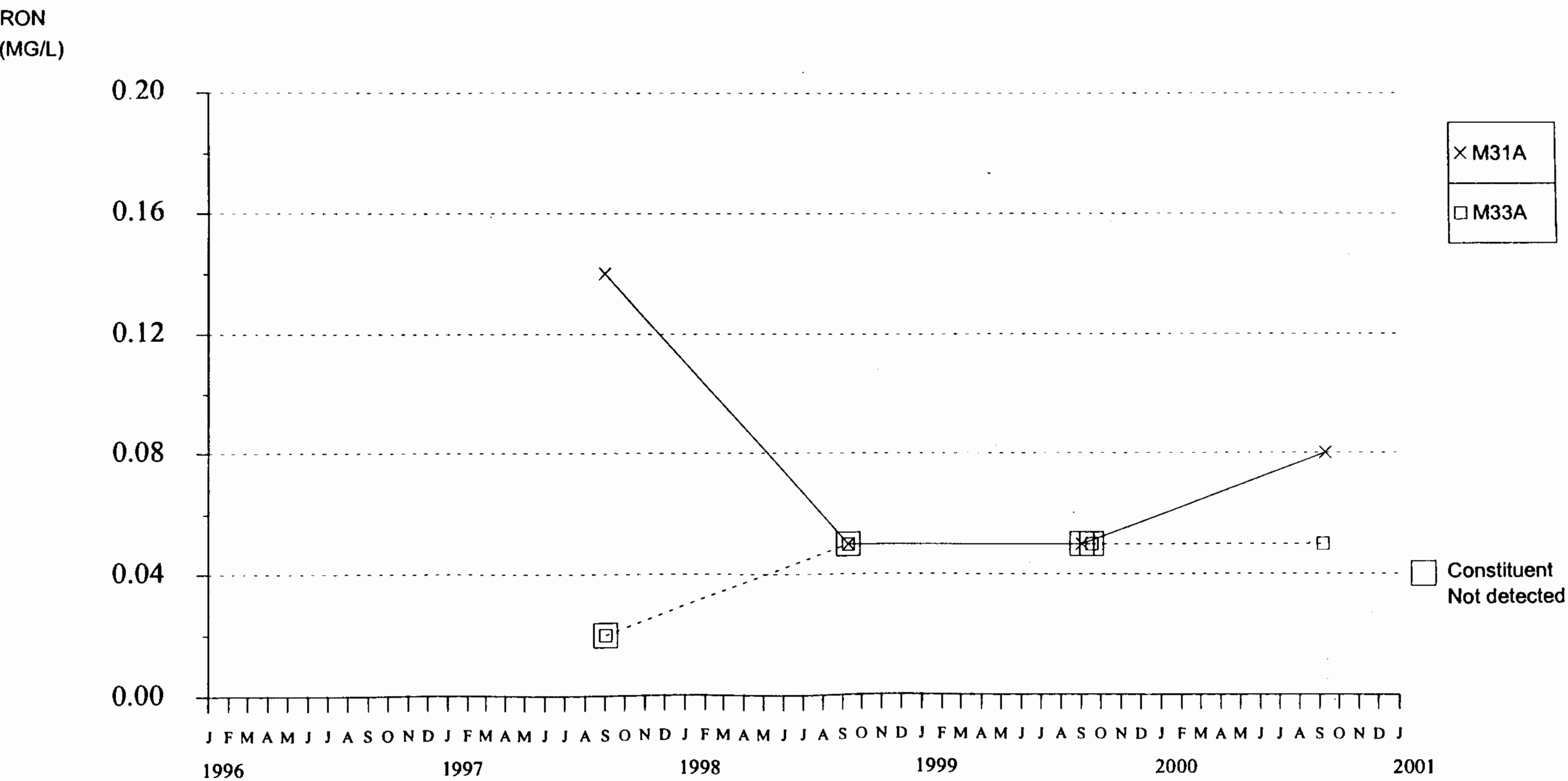


FIGURE 103
PUENTE HILLS LANDFILL
MANGANESE
BARRIER THREE MONITORING WELLS (FILTERED)

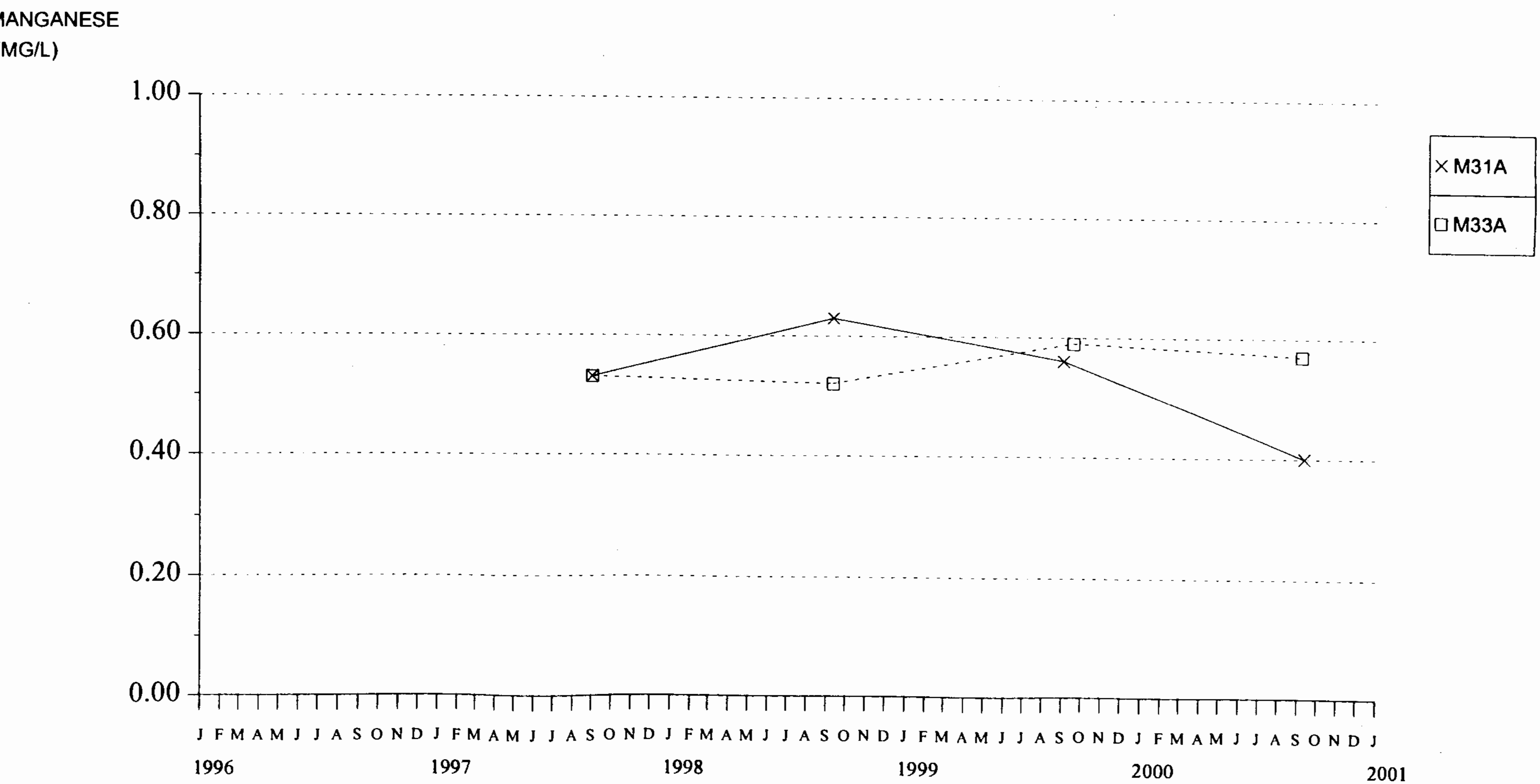


FIGURE 104
PUENTE HILLS LANDFILL
BARIUM
BARRIER THREE MONITORING WELLS (FILTERED)

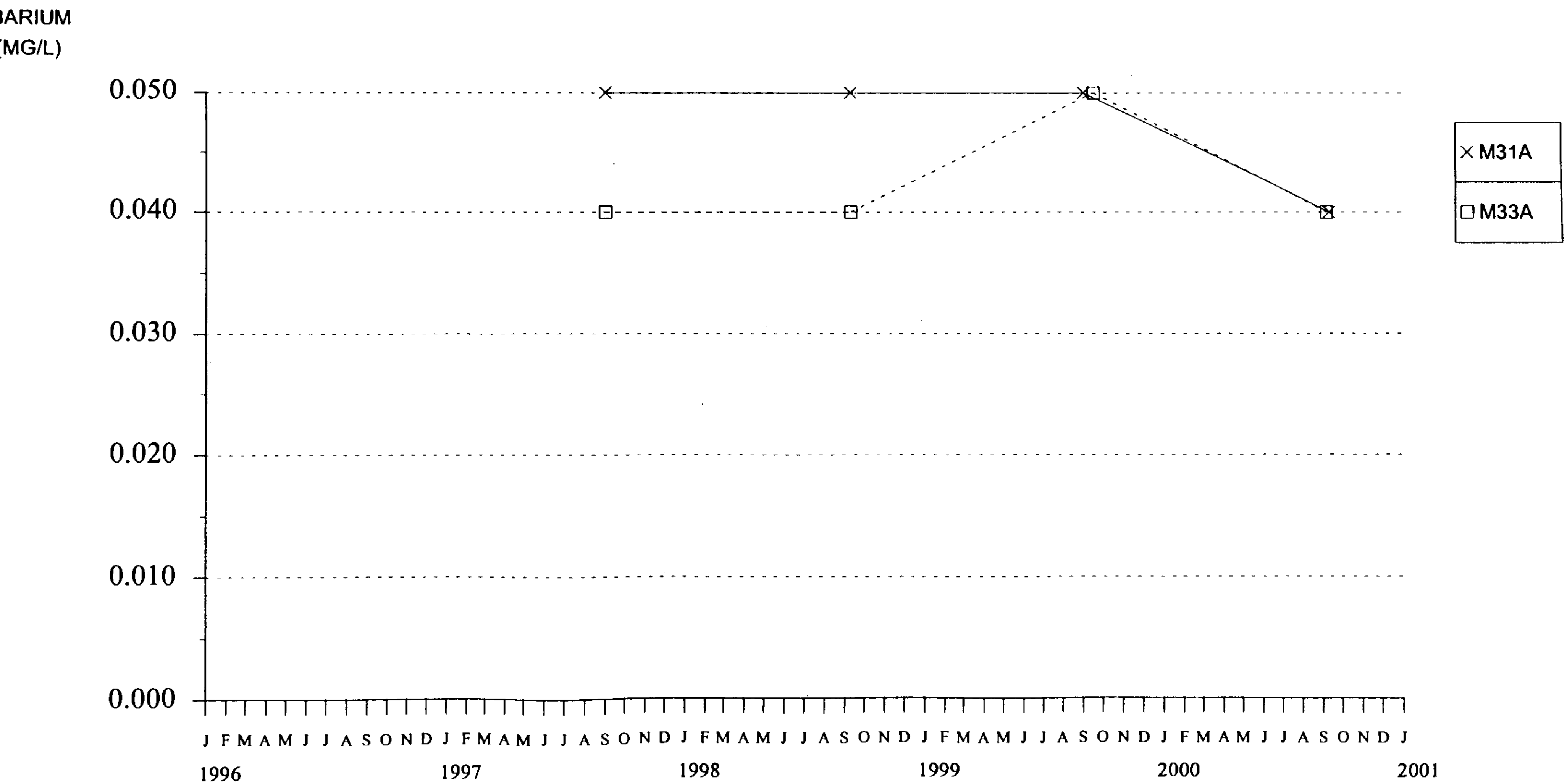


FIGURE 105

PUENTE HILLS LANDFILL

TOTAL CHROMIUM

BARRIER THREE MONITORING WELLS (FILTERED)

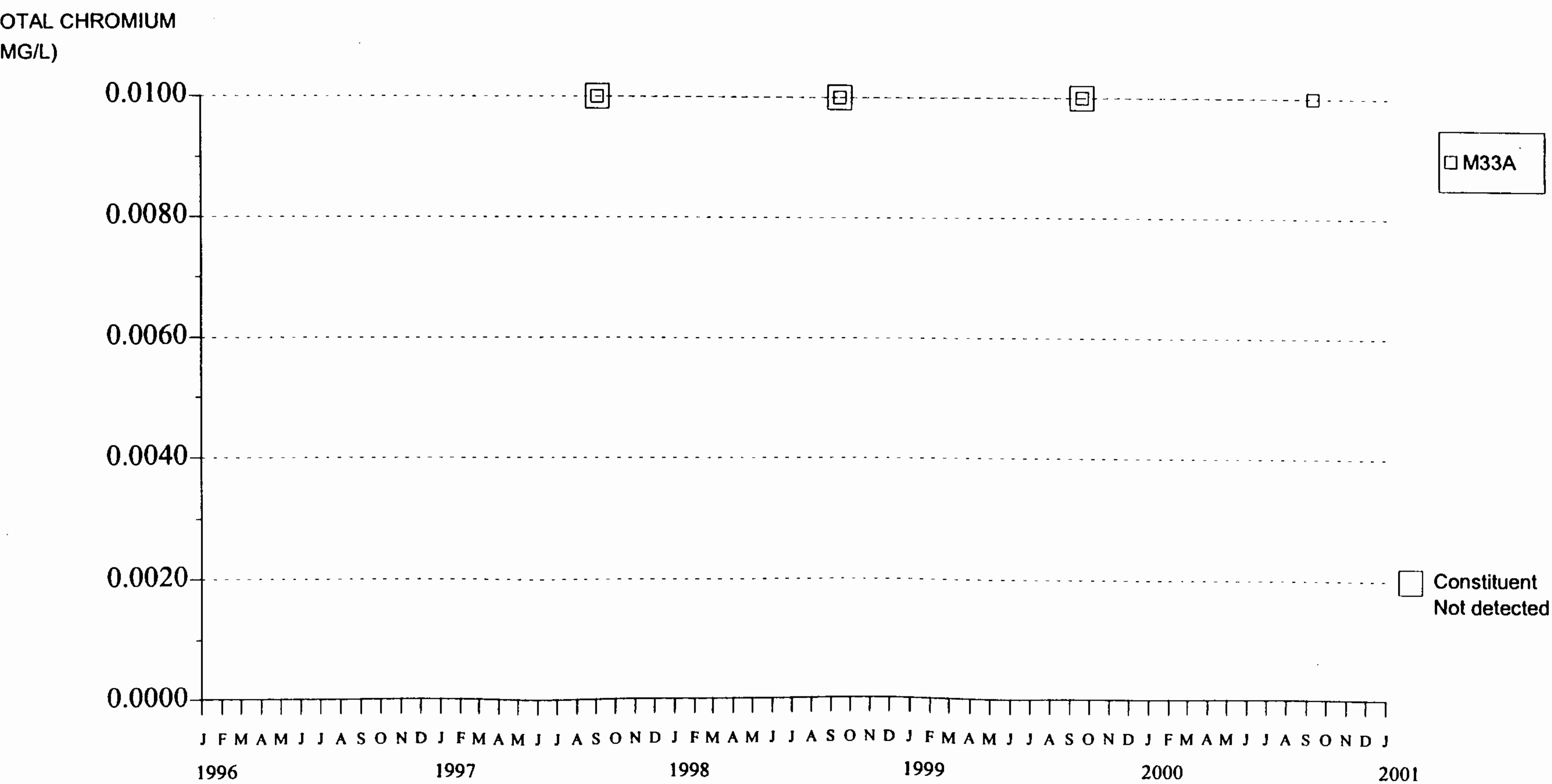


FIGURE 106
PUENTE HILLS LANDFILL
SELENIUM
BARRIER THREE MONITORING WELLS (FILTERED)

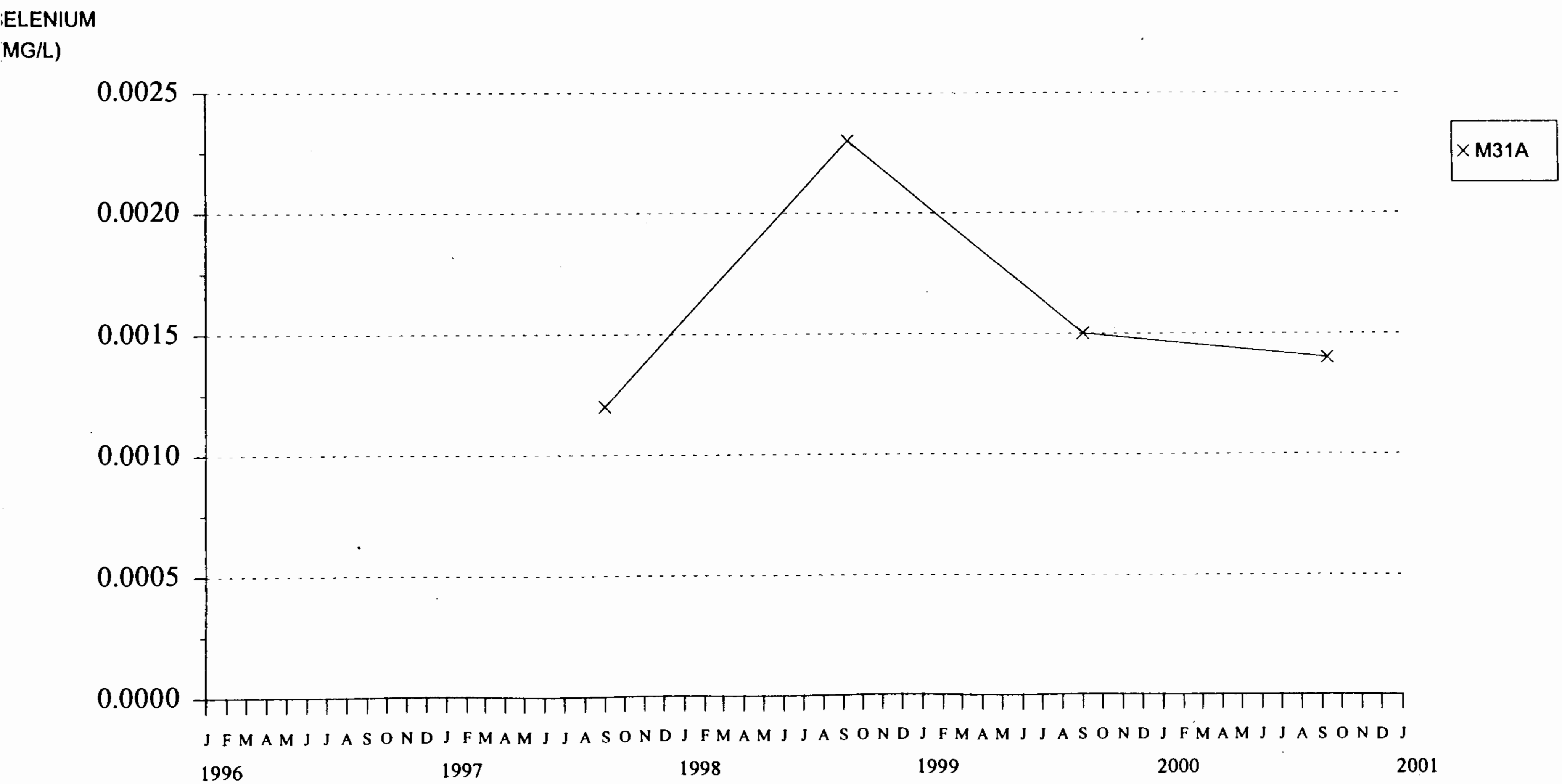
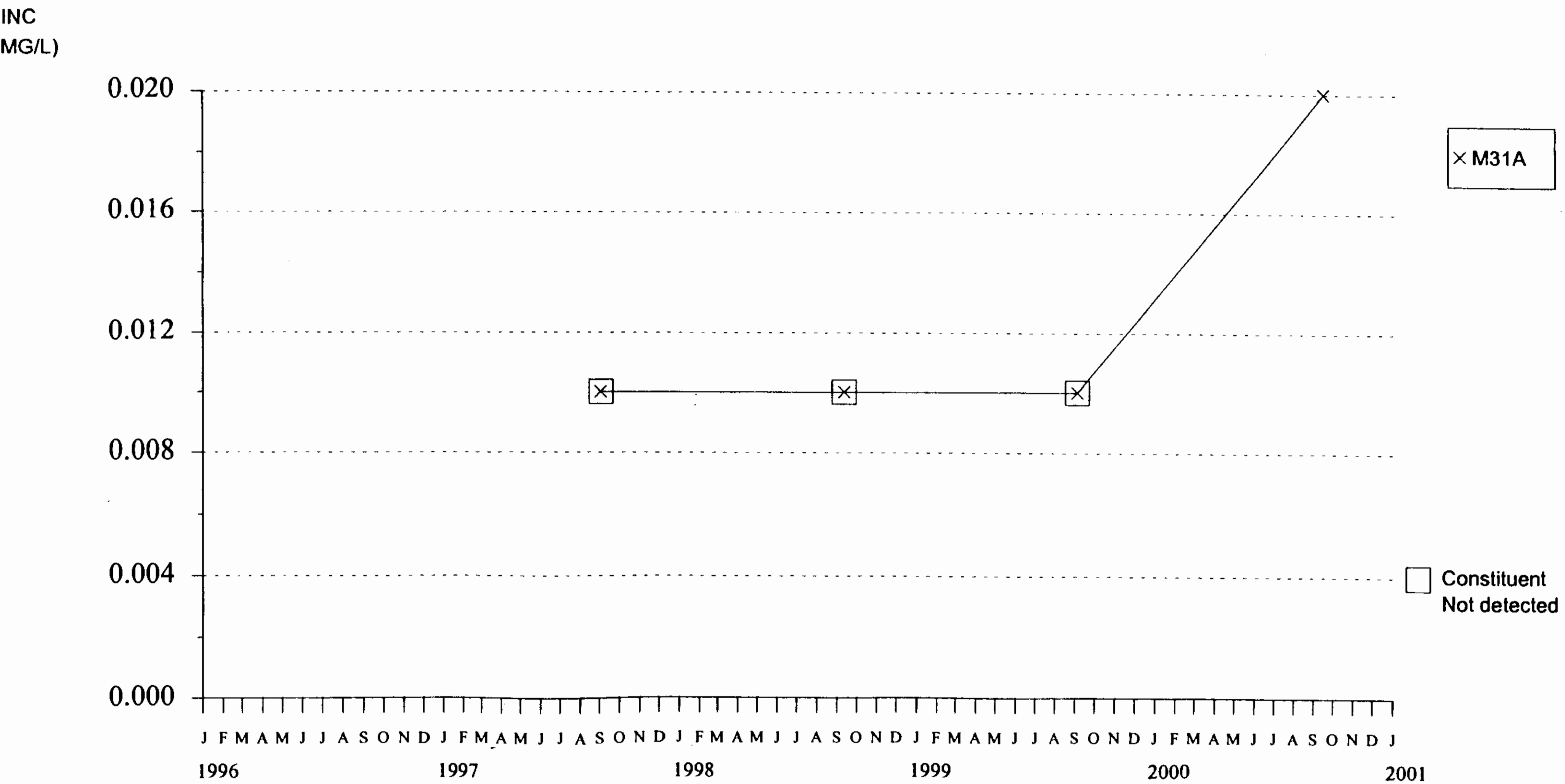


FIGURE 107
PUENTE HILLS LANDFILL
ZINC
BARRIER THREE MONITORING WELLS (FILTERED)



FIGURES 108 - 160

WATER QUALITY DATA GRAPHS

BARRIER 4 AND BARRIER 5 MONITORING WELLS

FIGURE 108
PUENTE HILLS LANDFILL
DEPTH TO WATER
BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

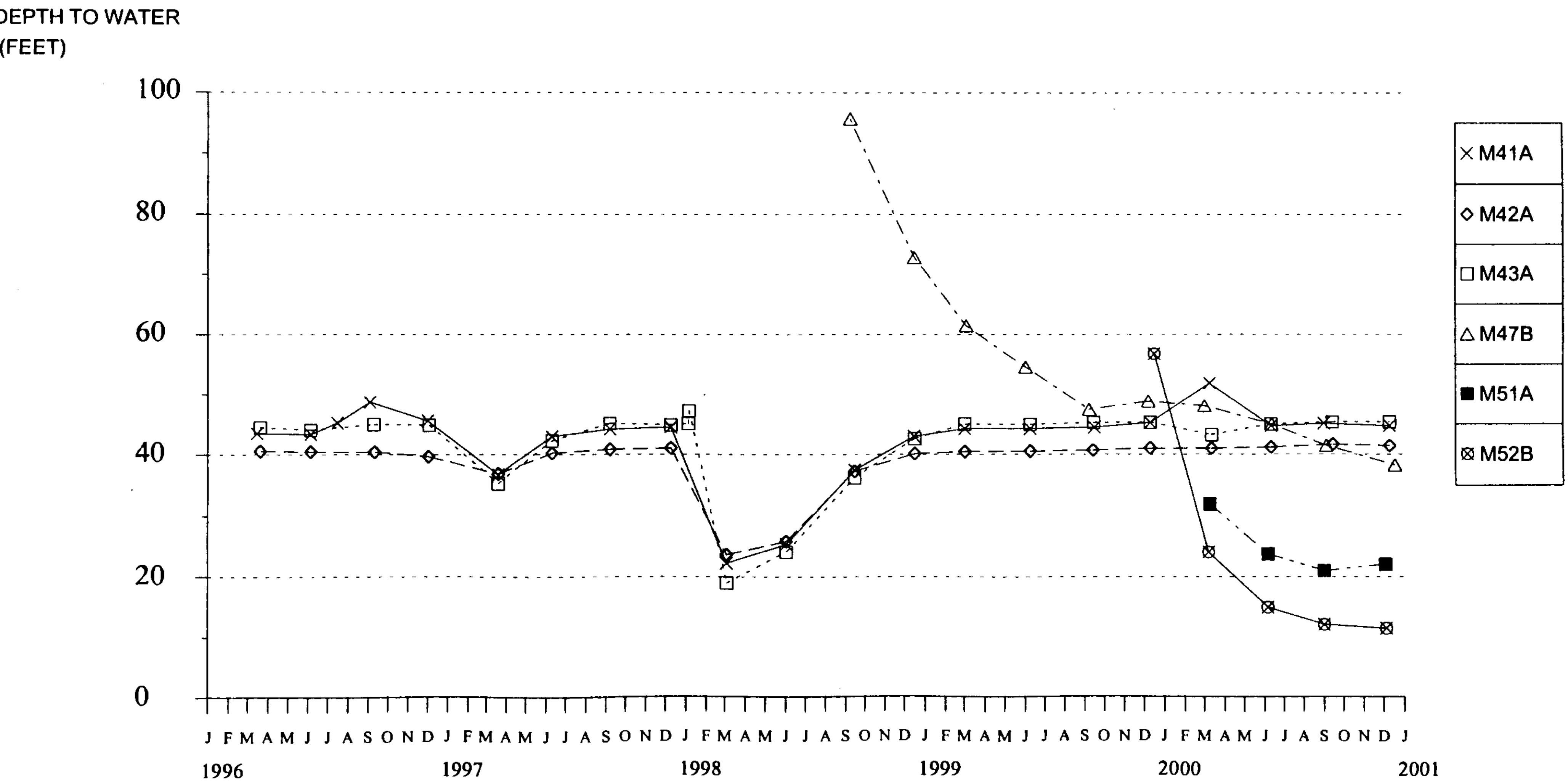


FIGURE 109
PUENTE HILLS LANDFILL
DEPTH TO BOTTOM
BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

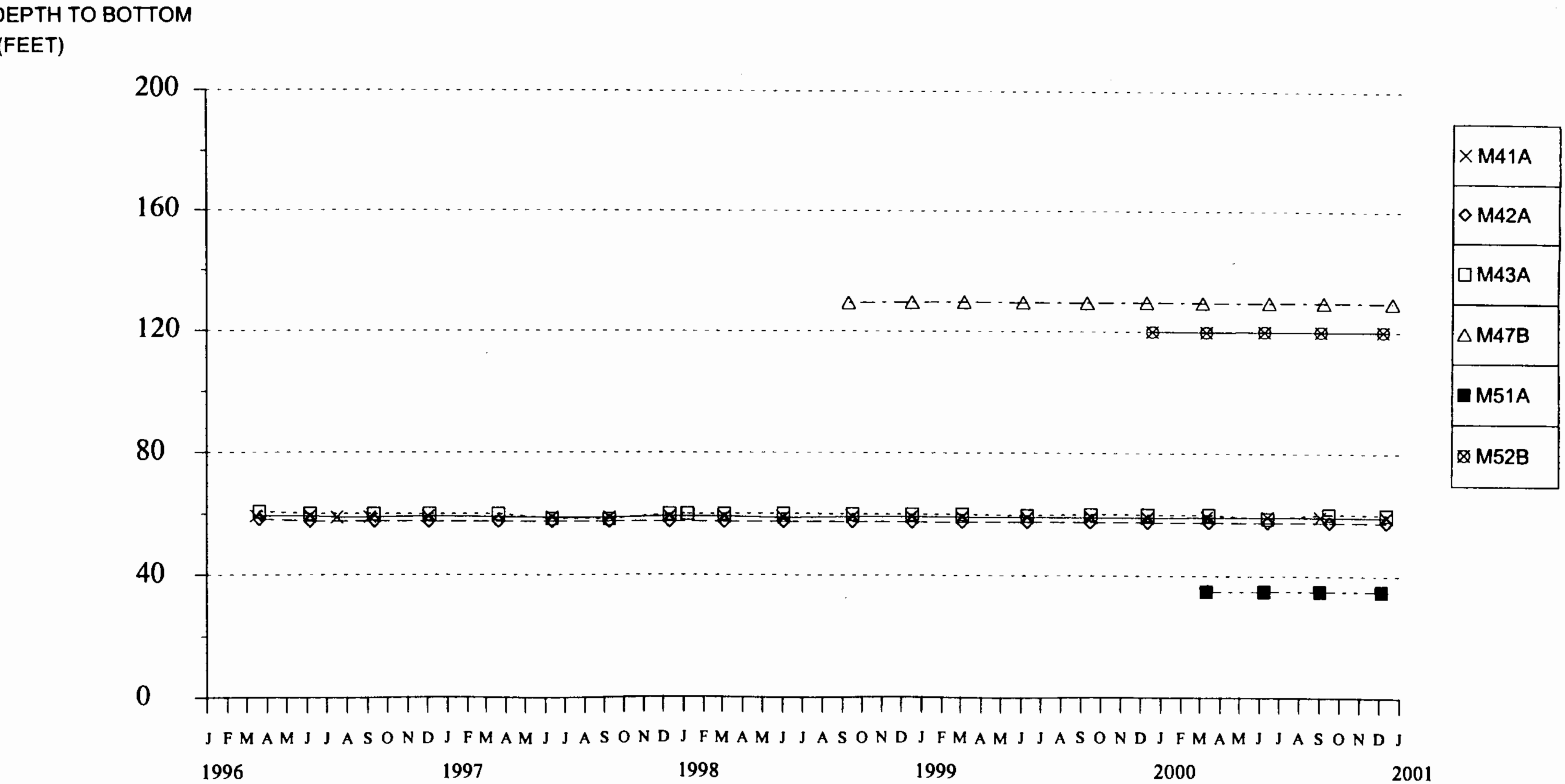


FIGURE 110

PUENTE HILLS LANDFILL

PERCENT OXYGEN IN GAS

BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

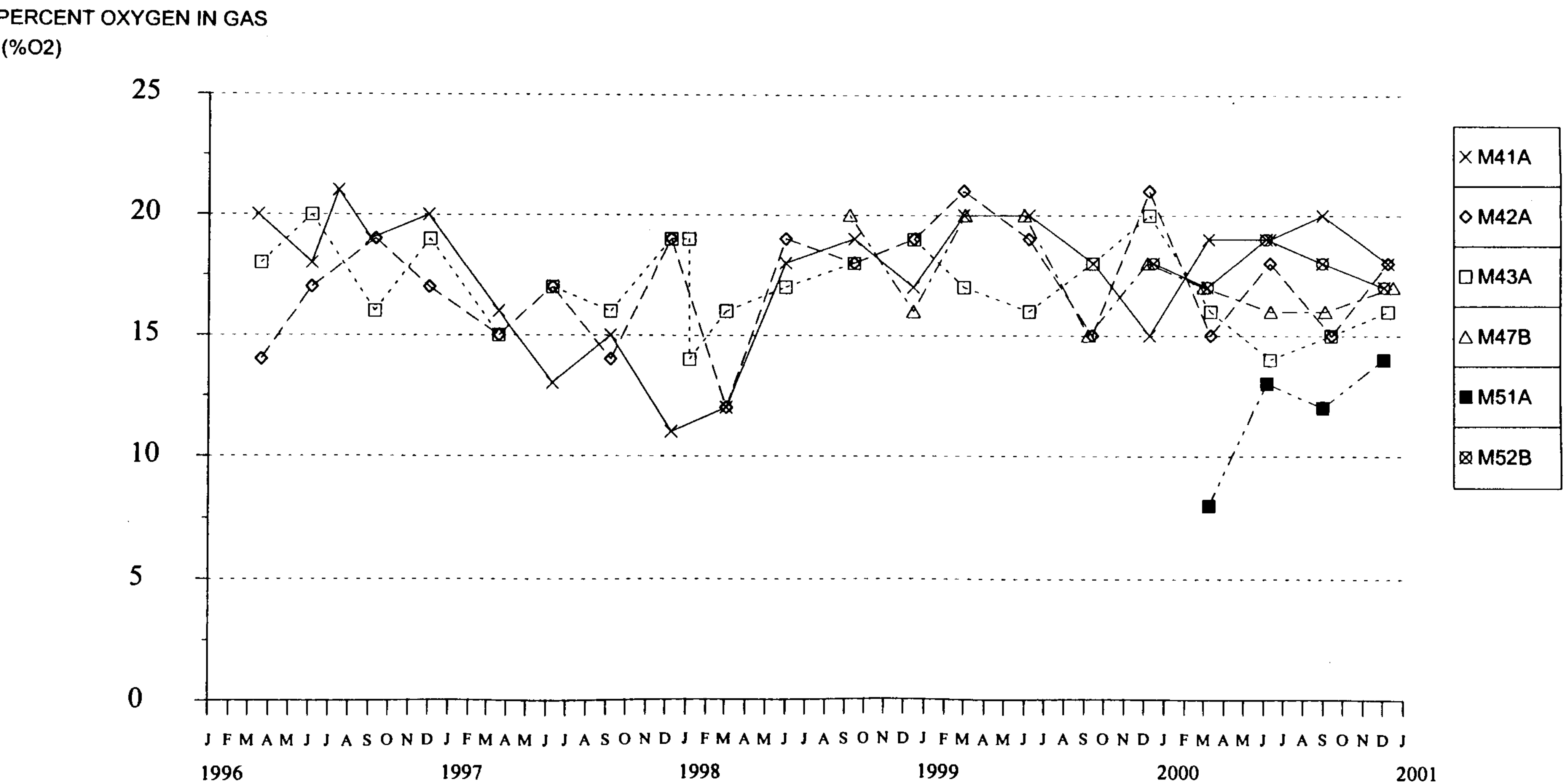


FIGURE 111
PUENTE HILLS LANDFILL
FIELD WATER TEMPERATURE
BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

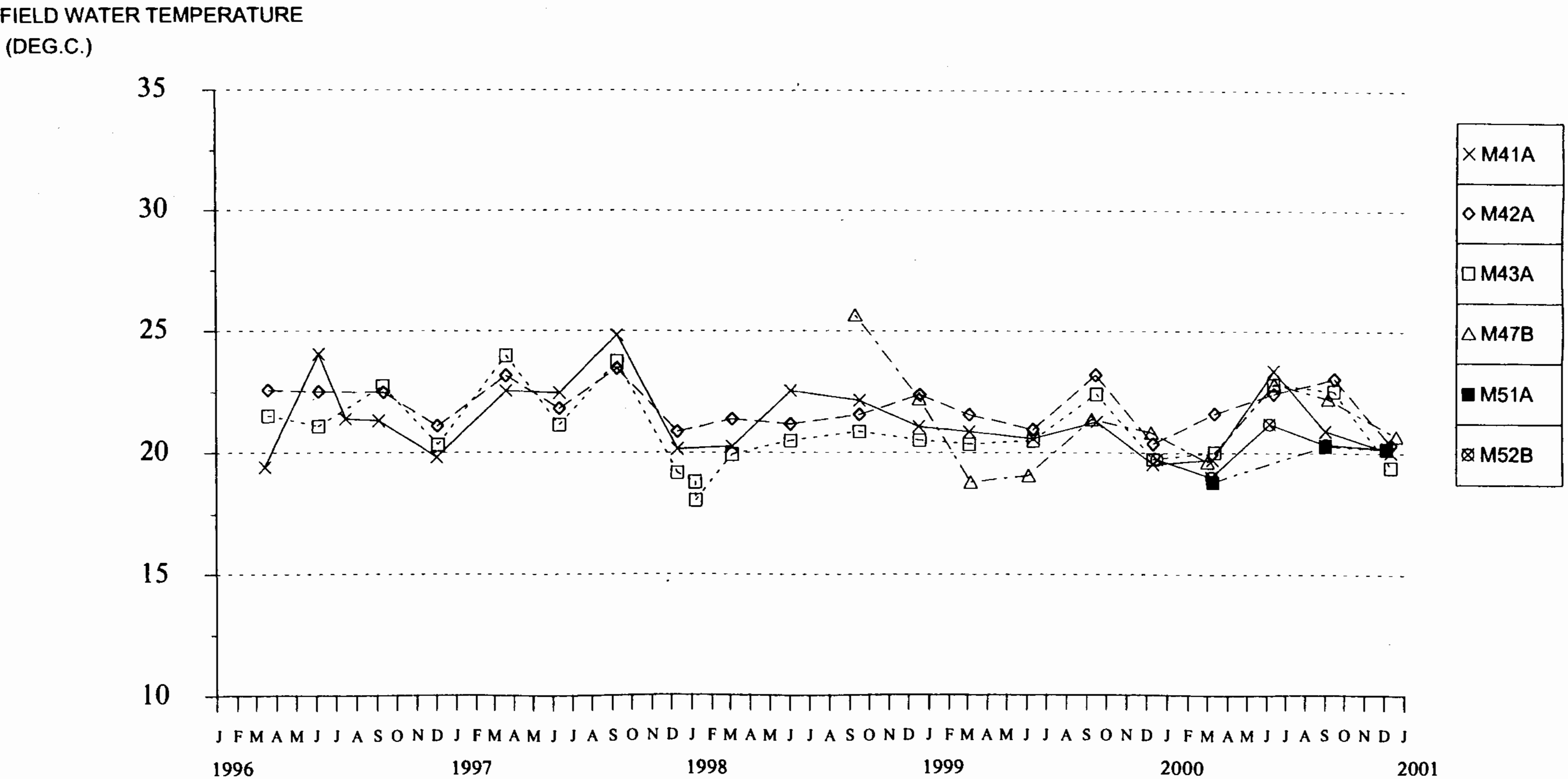


FIGURE 112
PUENTE HILLS LANDFILL
FIELD PH
BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

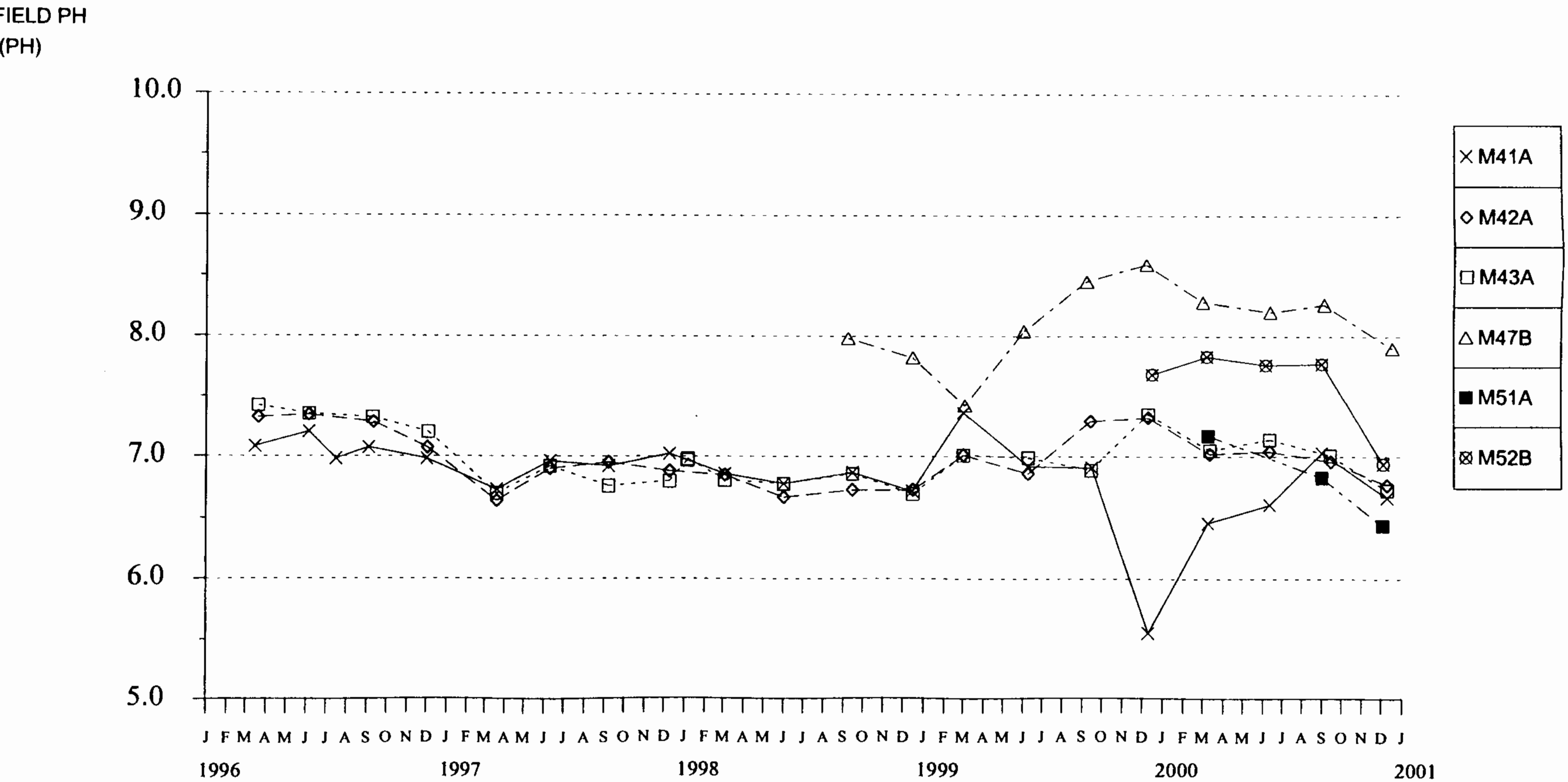


FIGURE 113
PUENTE HILLS LANDFILL
FIELD CONDUCTIVITY
BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

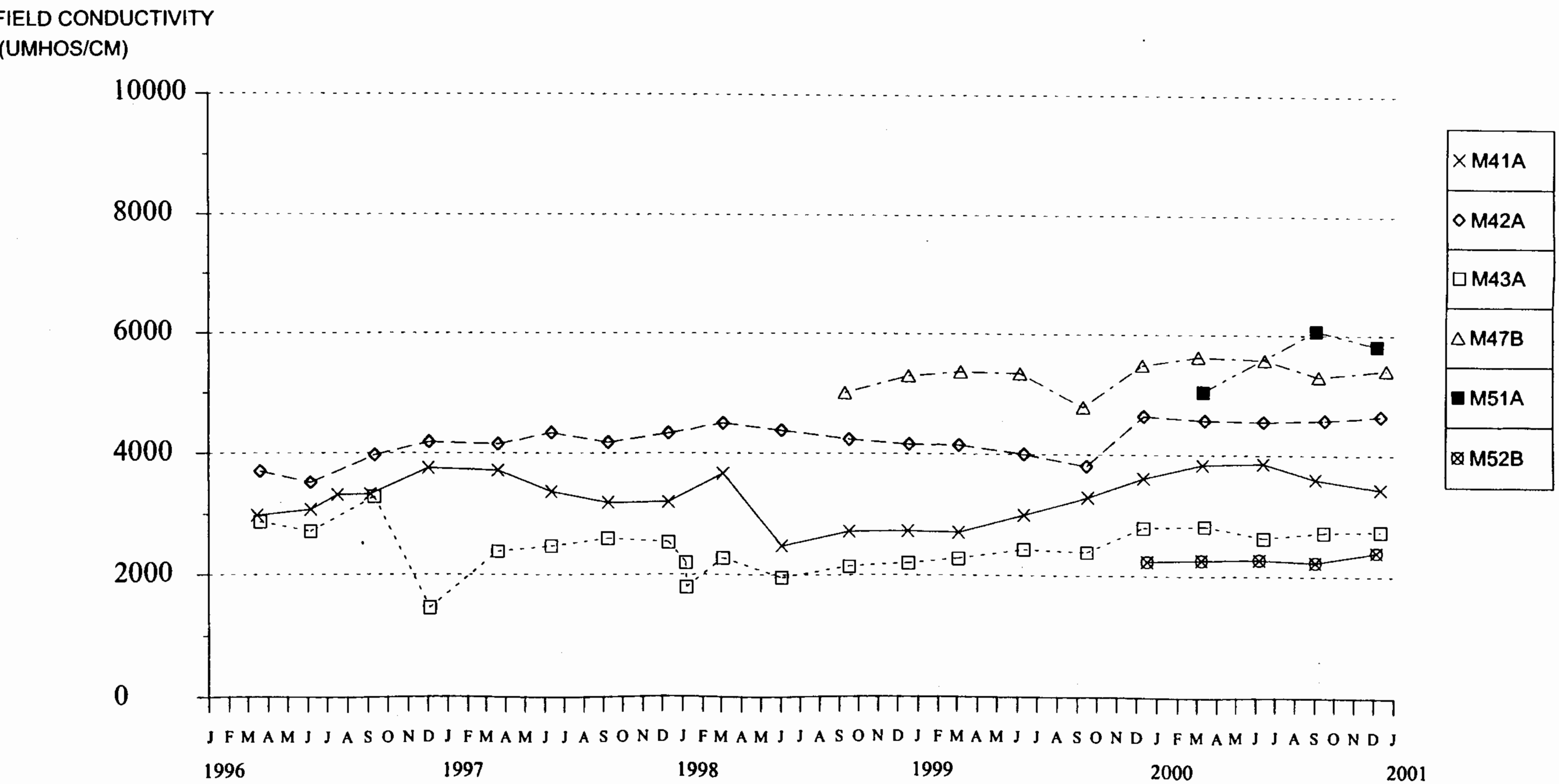


FIGURE 114
PUENTE HILLS LANDFILL
FIELD DISSOLVED O2
BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

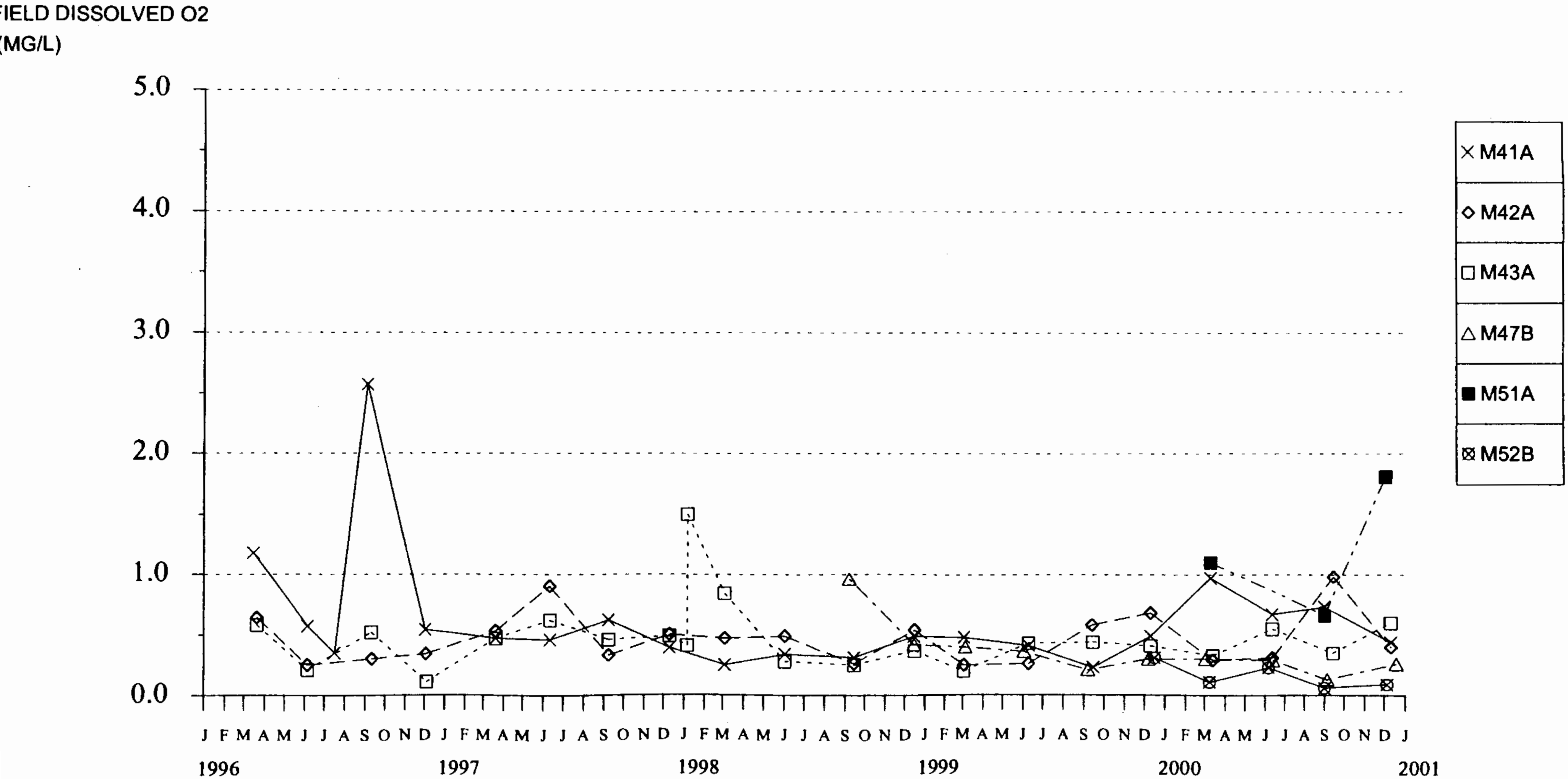


FIGURE 115

PUENTE HILLS LANDFILL

FIELD DISSOLVED CO2

BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

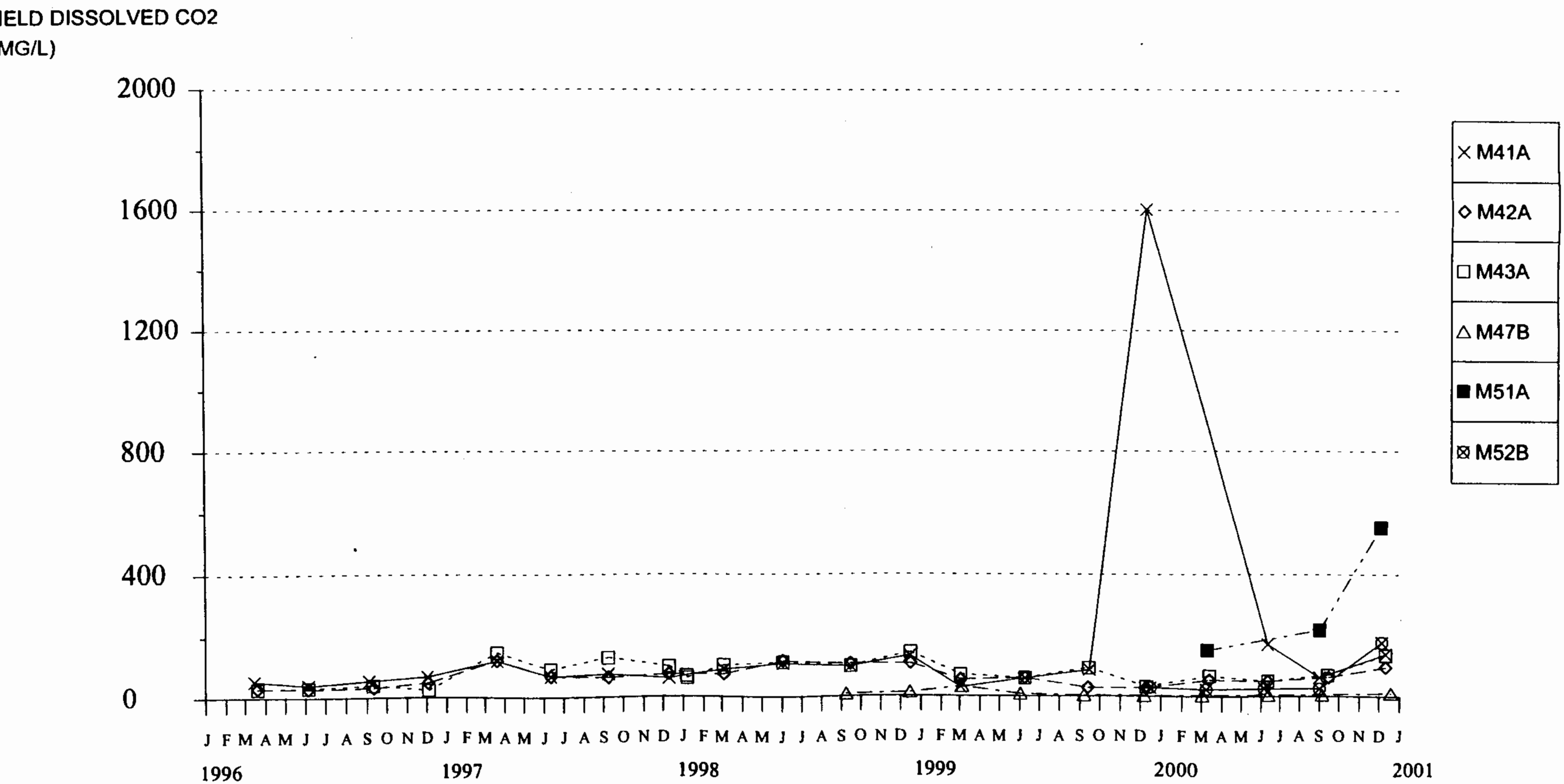


FIGURE 116
PUENTE HILLS LANDFILL
PH
BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

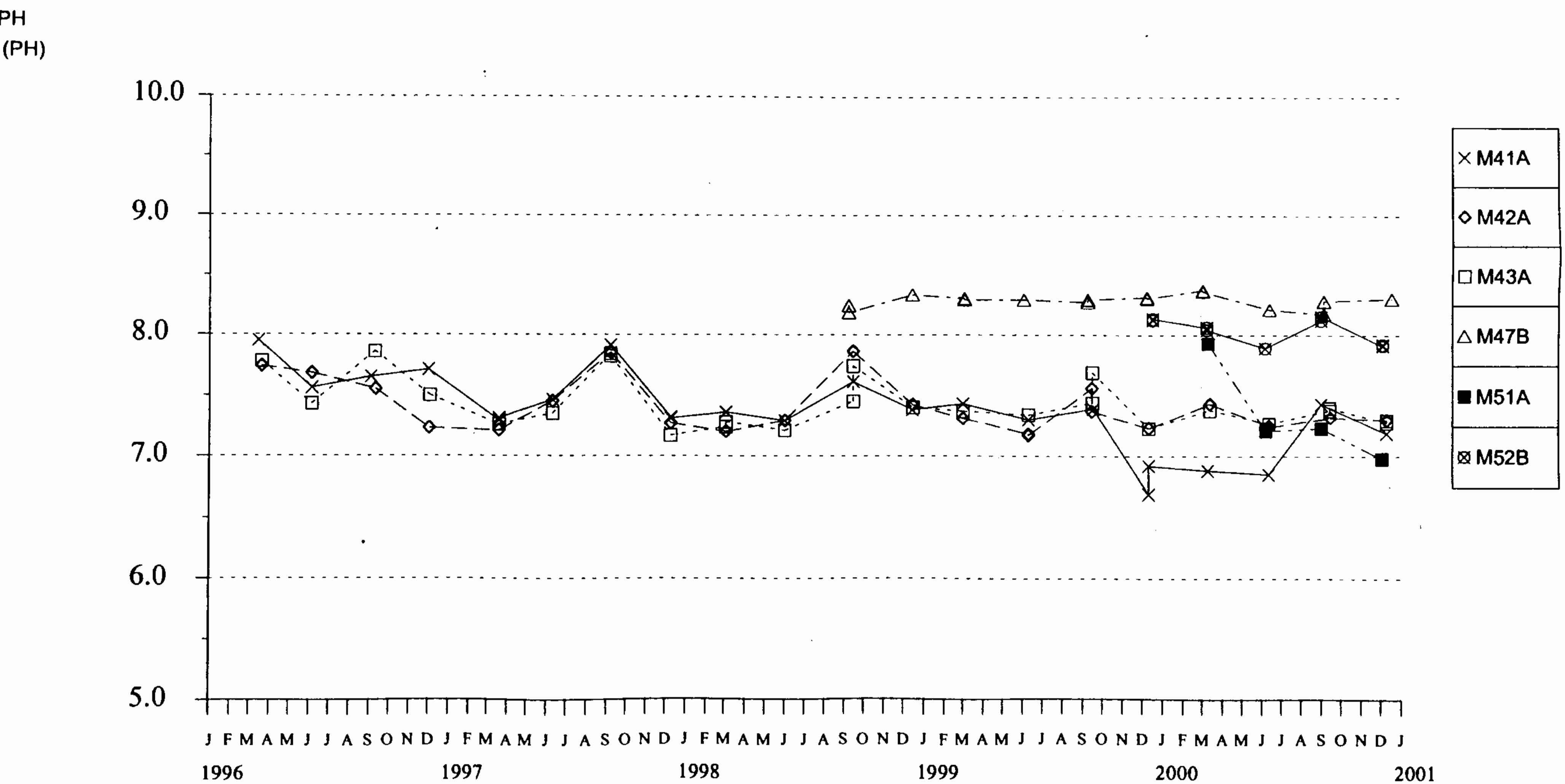


FIGURE 117
PUENTE HILLS LANDFILL
CONDUCTIVITY
BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

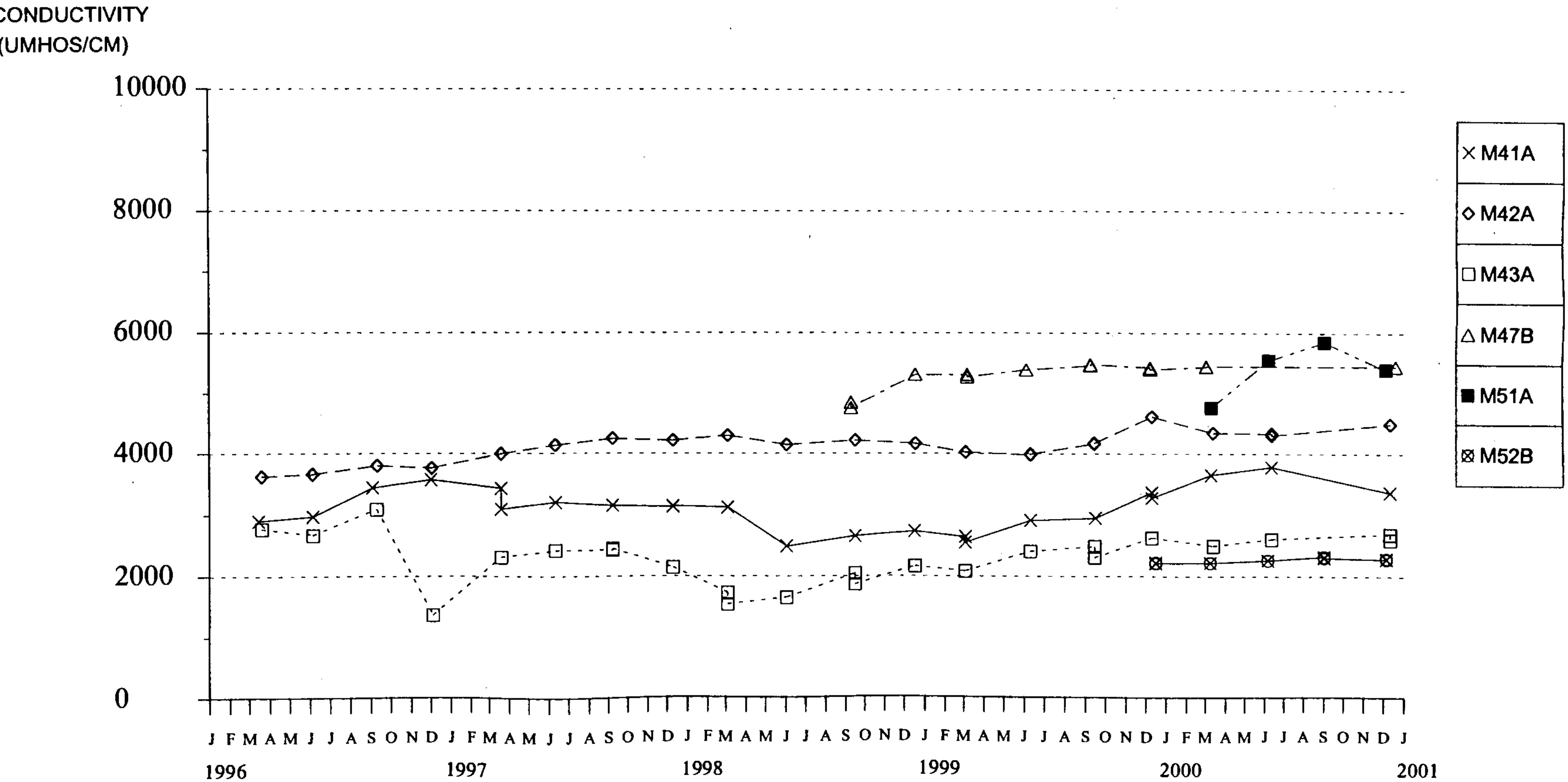


FIGURE 118

PUENTE HILLS LANDFILL

TOTAL DISSOLVED SOLIDS

BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

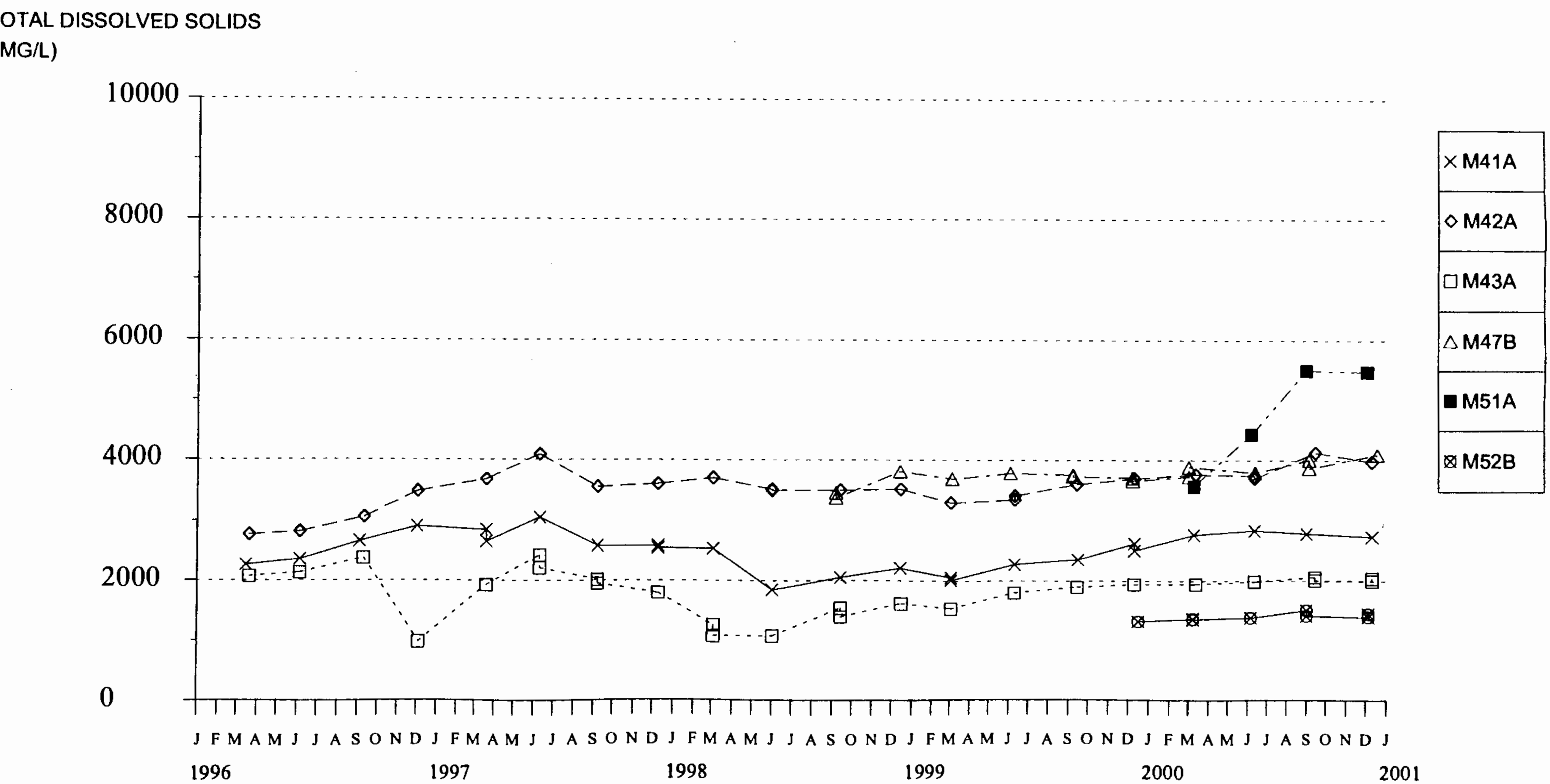


FIGURE 119

PUENTE HILLS LANDFILL

TOTAL CYANIDE

BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

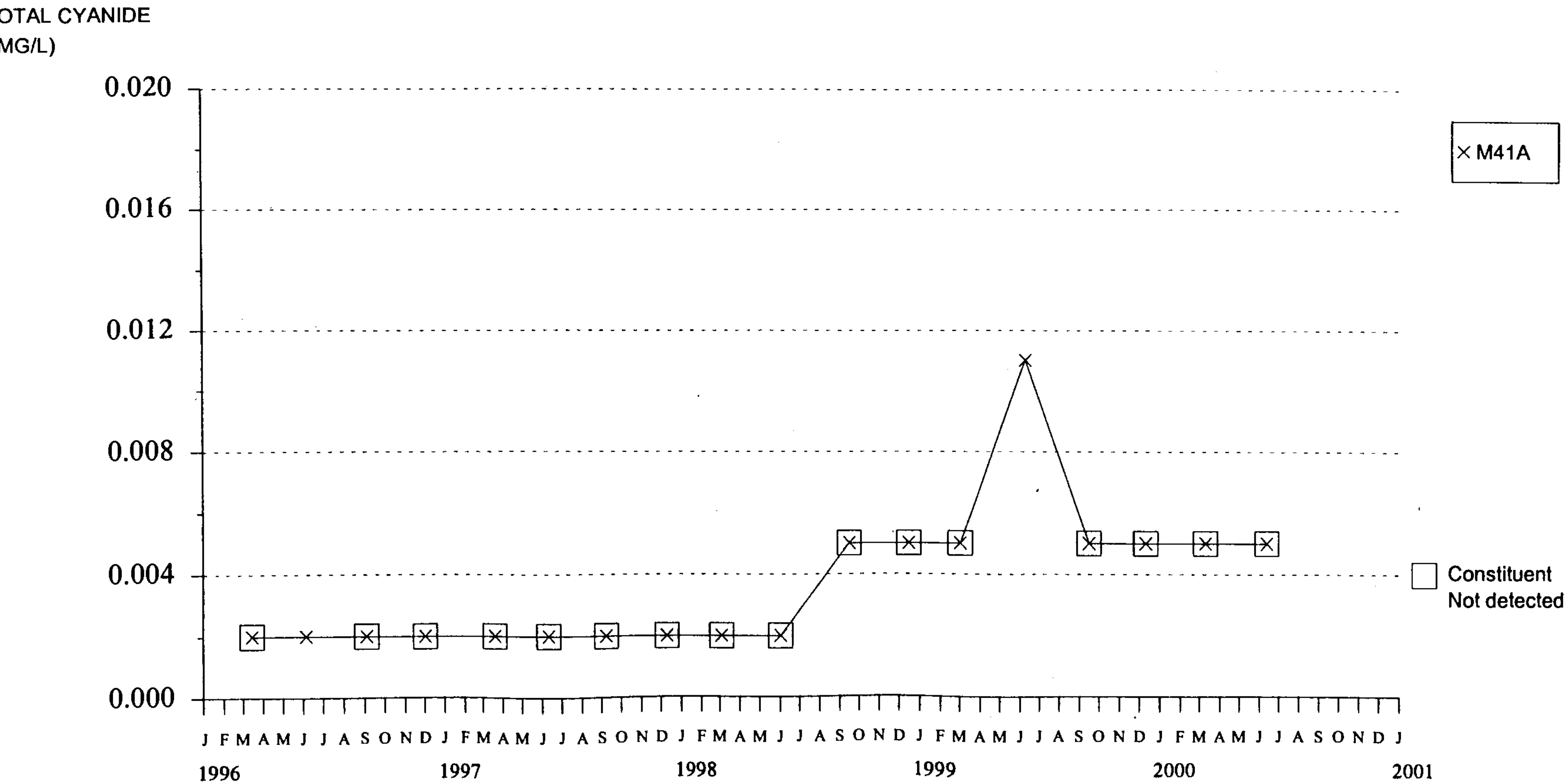


FIGURE 120

PUENTE HILLS LANDFILL

TOTAL SULFIDE

BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

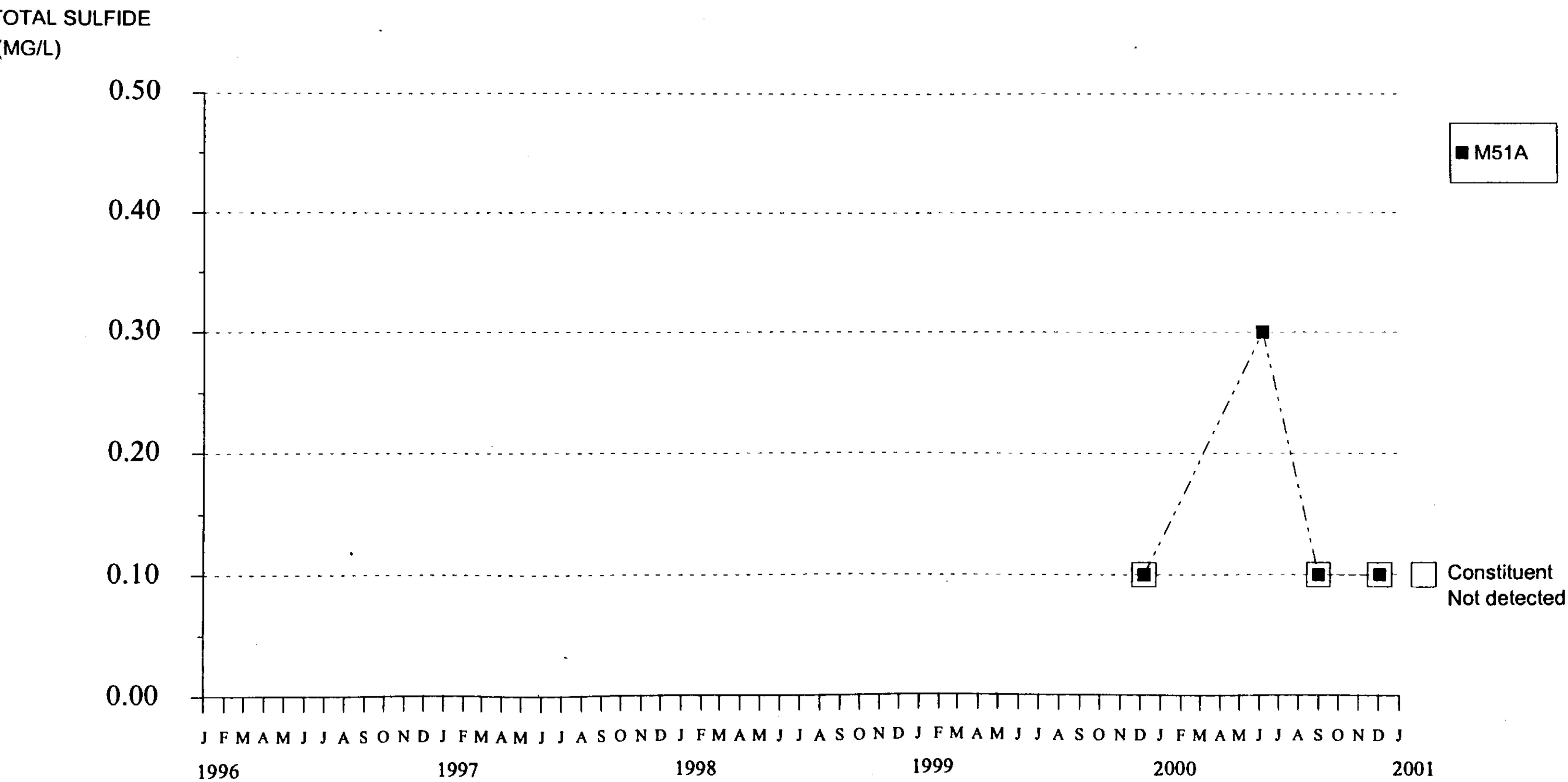


FIGURE 121

PUENTE HILLS LANDFILL

TOTAL HARDNESS

BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

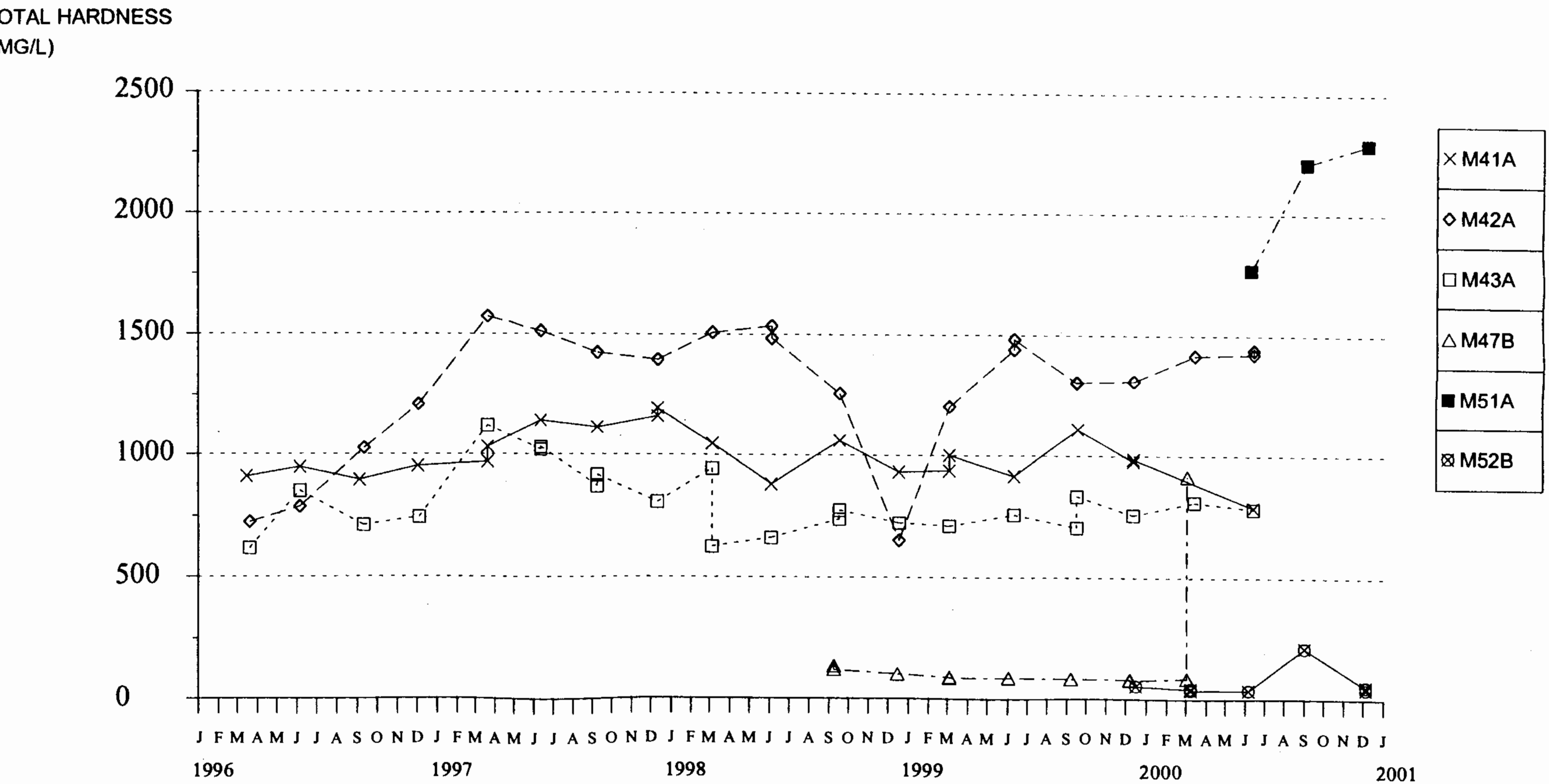


FIGURE 122
PUENTE HILLS LANDFILL
BORON
BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

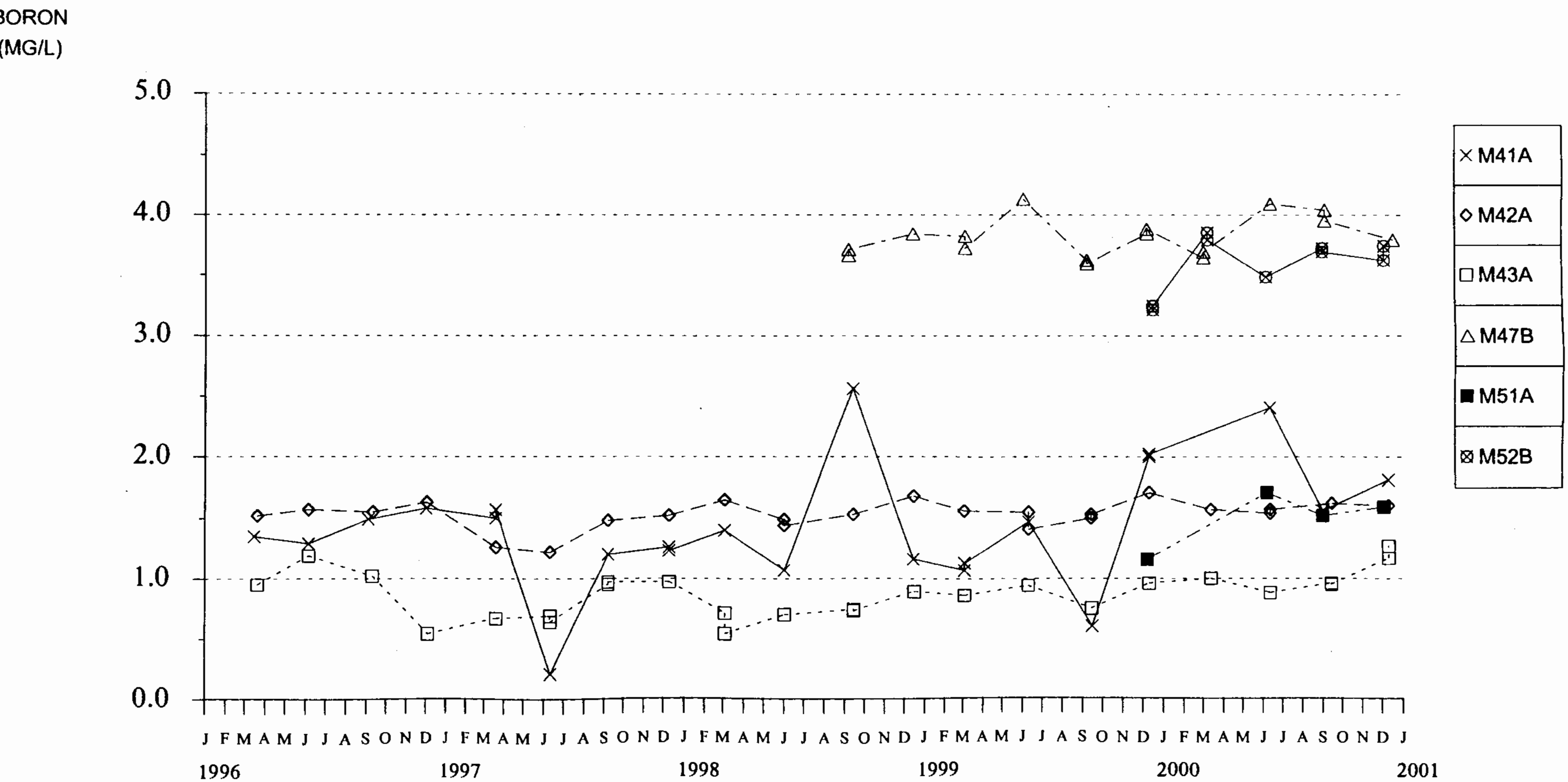


FIGURE 123
PUENTE HILLS LANDFILL
NITRATE NITROGEN
BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

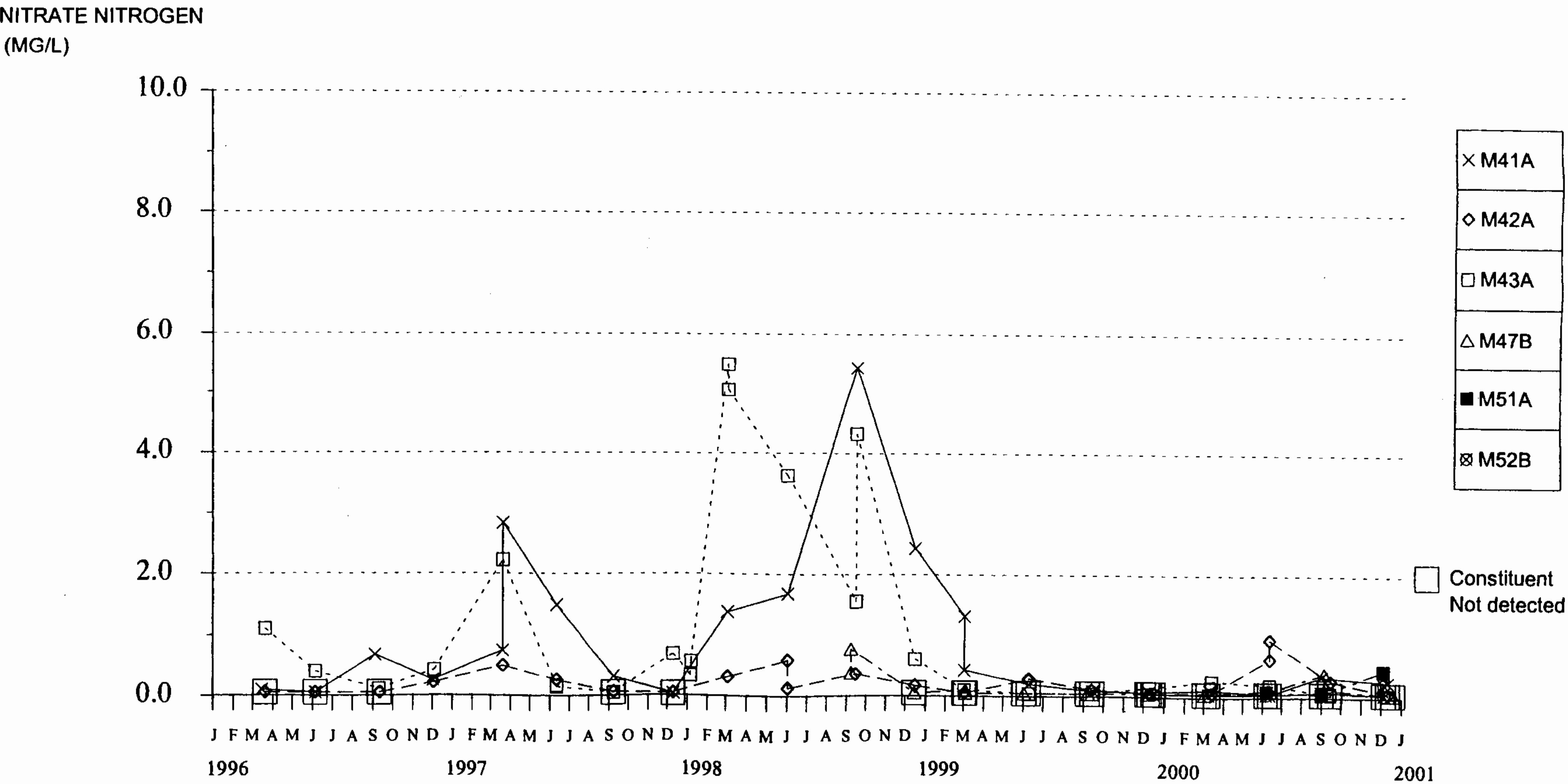


FIGURE 124
PUENTE HILLS LANDFILL
SULFATE
BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

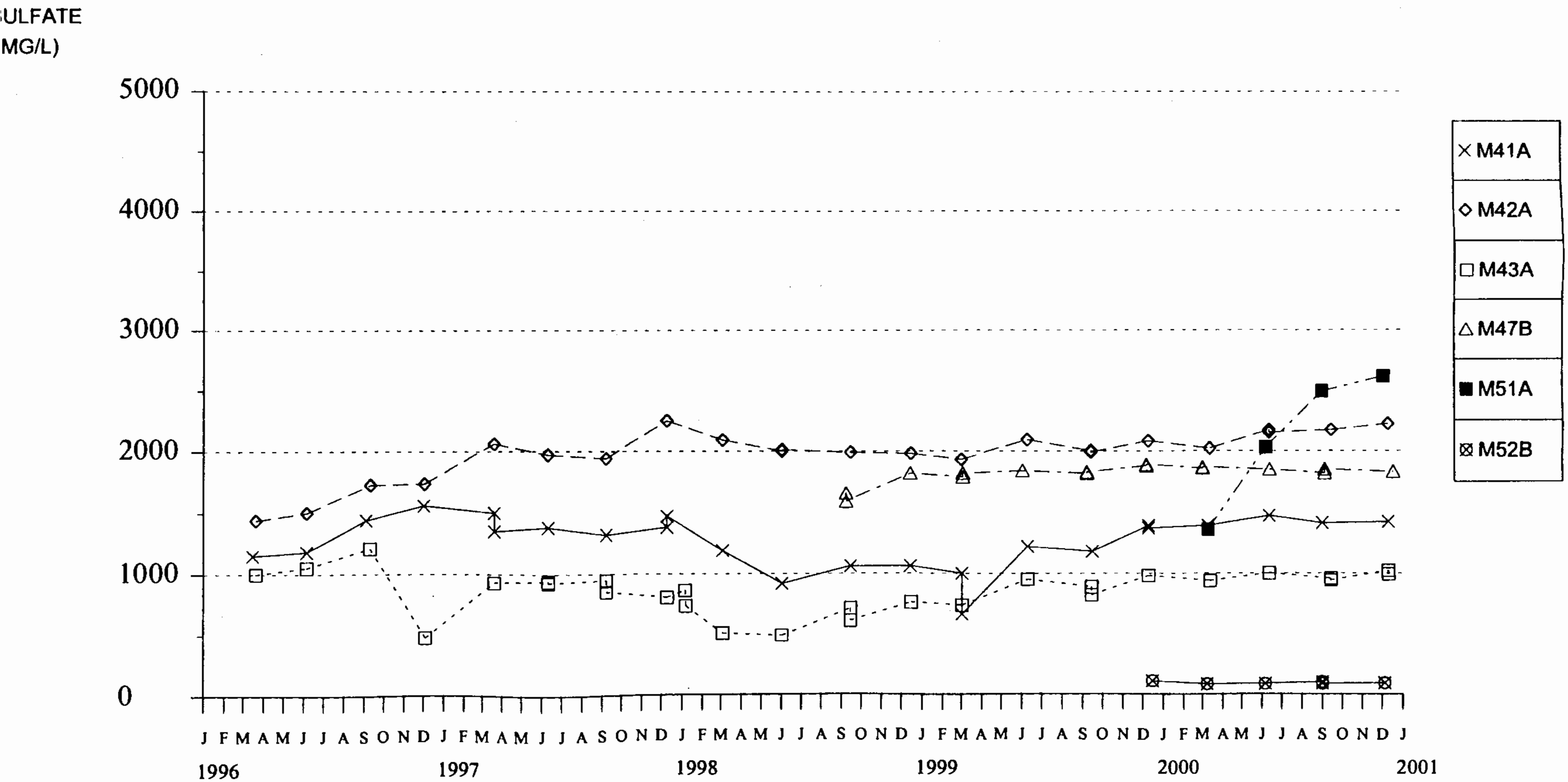


FIGURE 125
PUENTE HILLS LANDFILL
CHLORIDE
BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

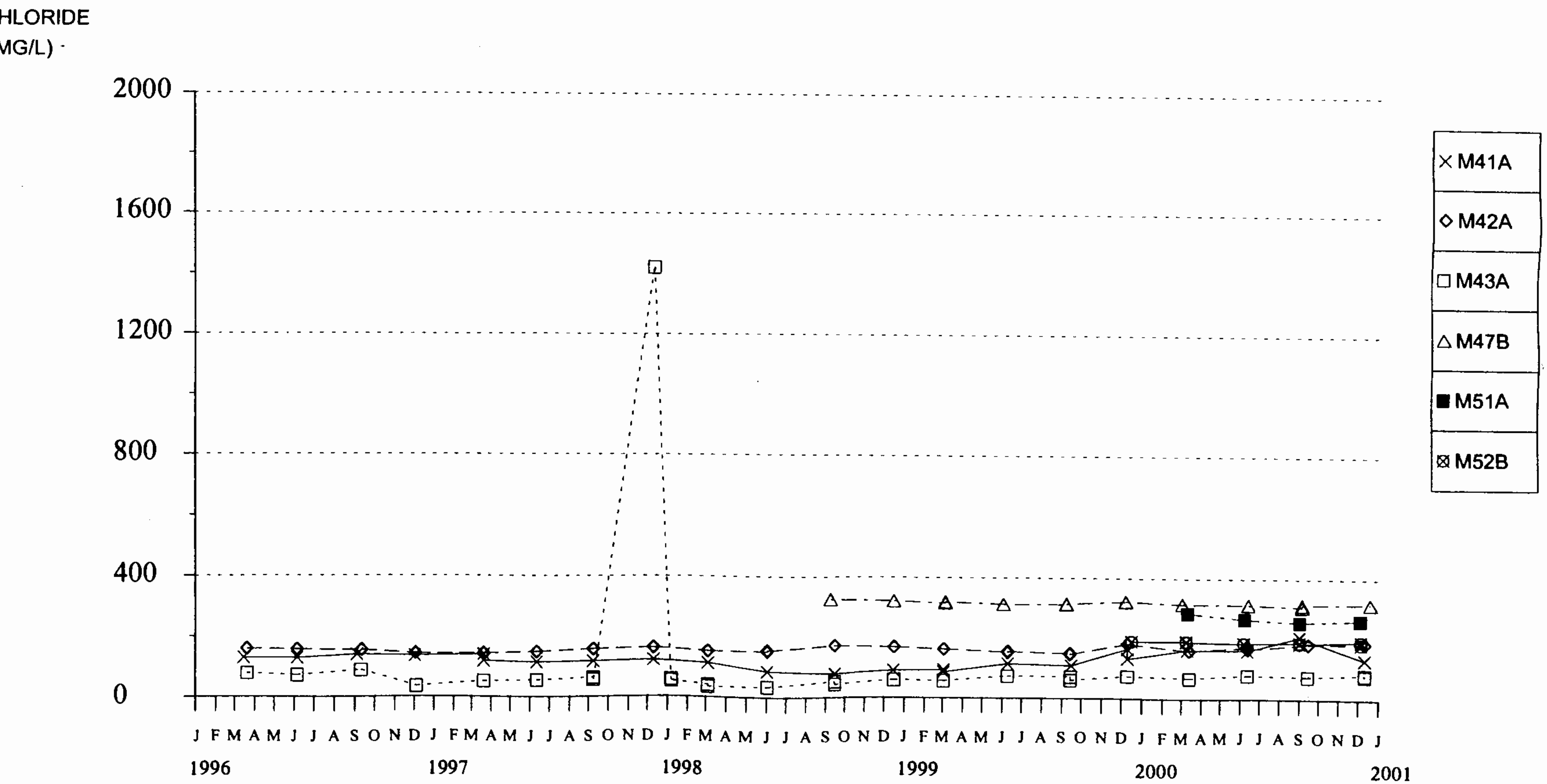


FIGURE 126
PUENTE HILLS LANDFILL
TOTAL ALKALINITY
BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

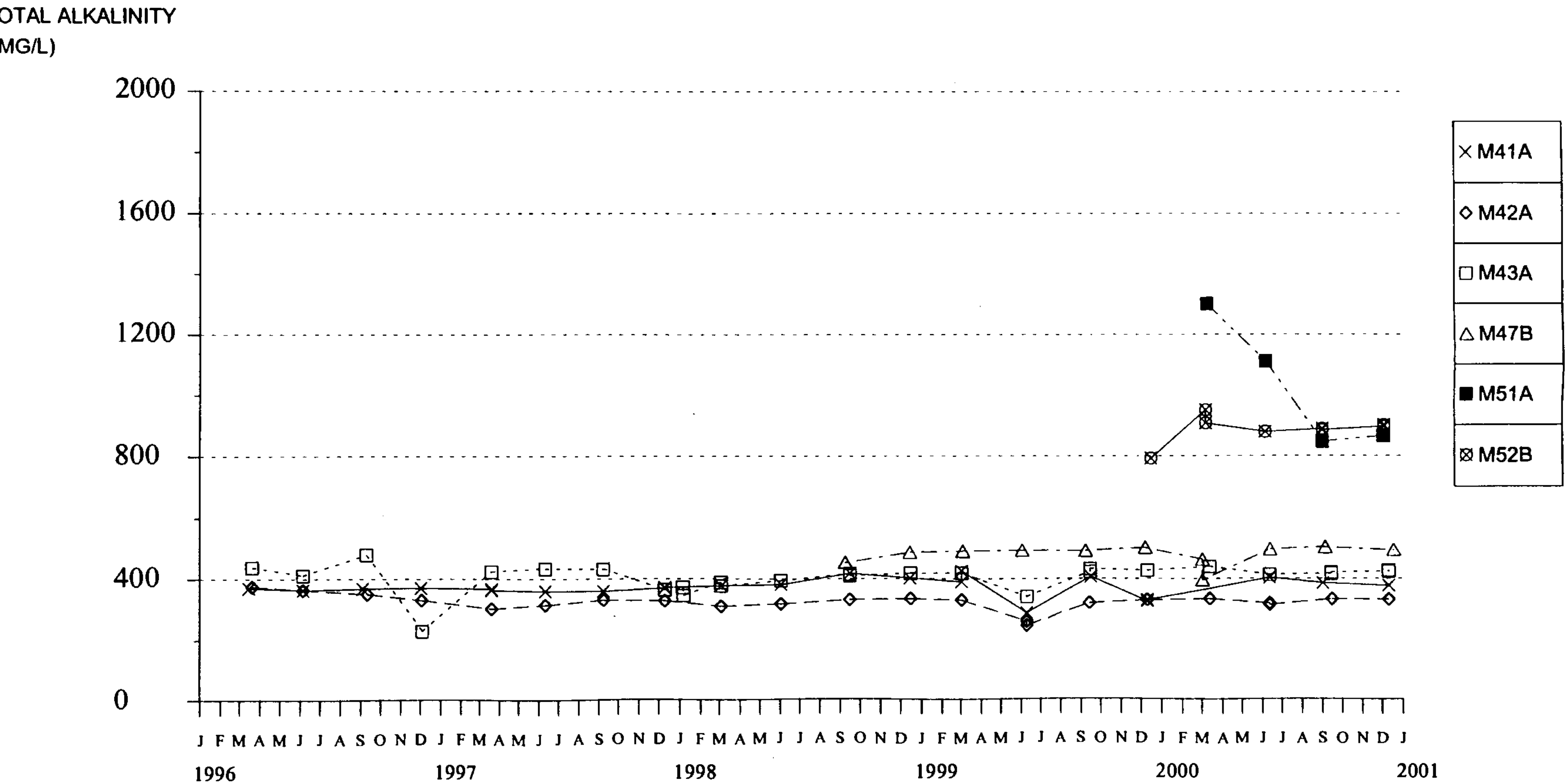


FIGURE 127

PUENTE HILLS LANDFILL

FLUORIDE

BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

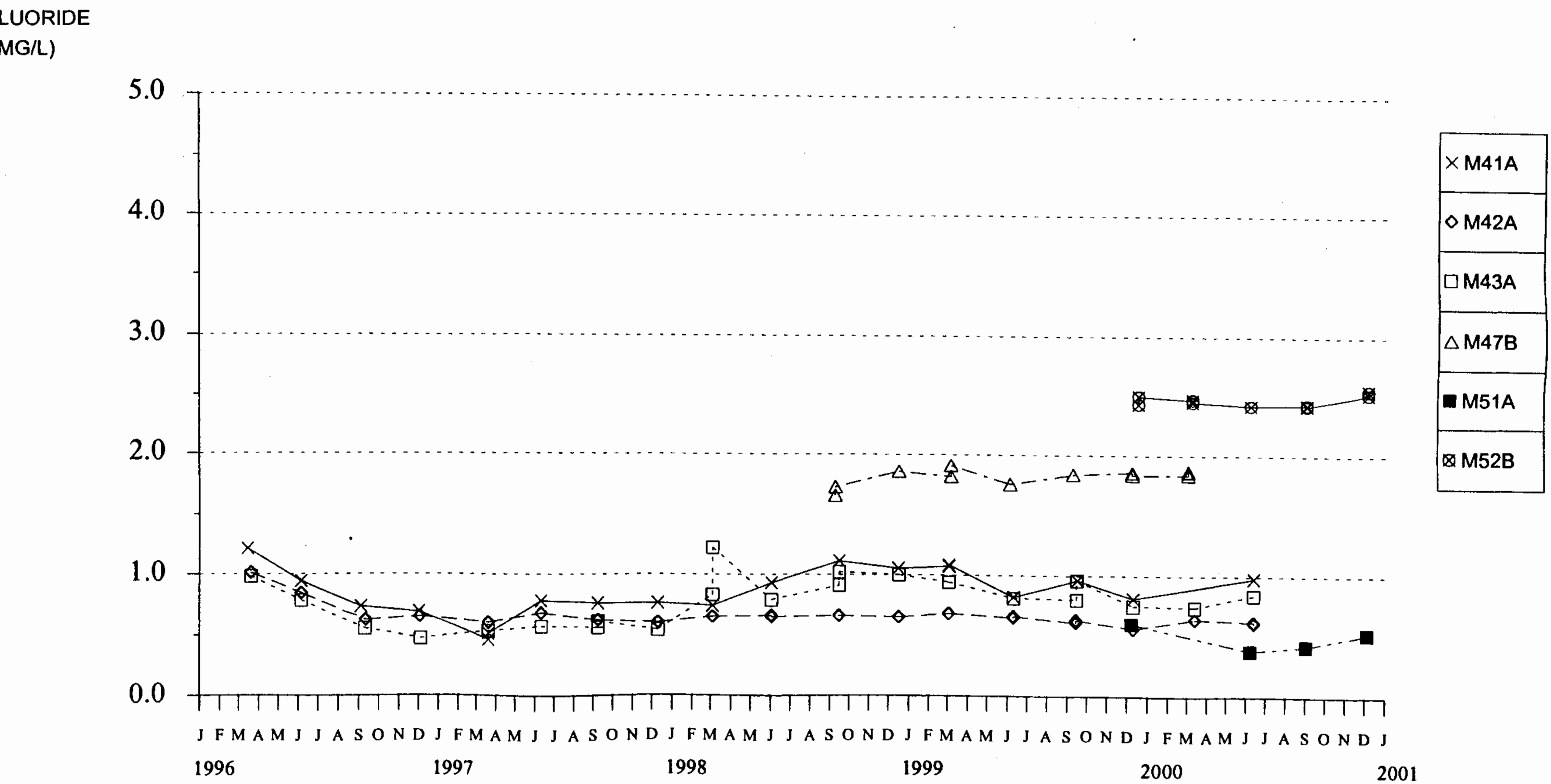


FIGURE 128

PUENTE HILLS LANDFILL

BICARBONATE ALKALINITY

BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

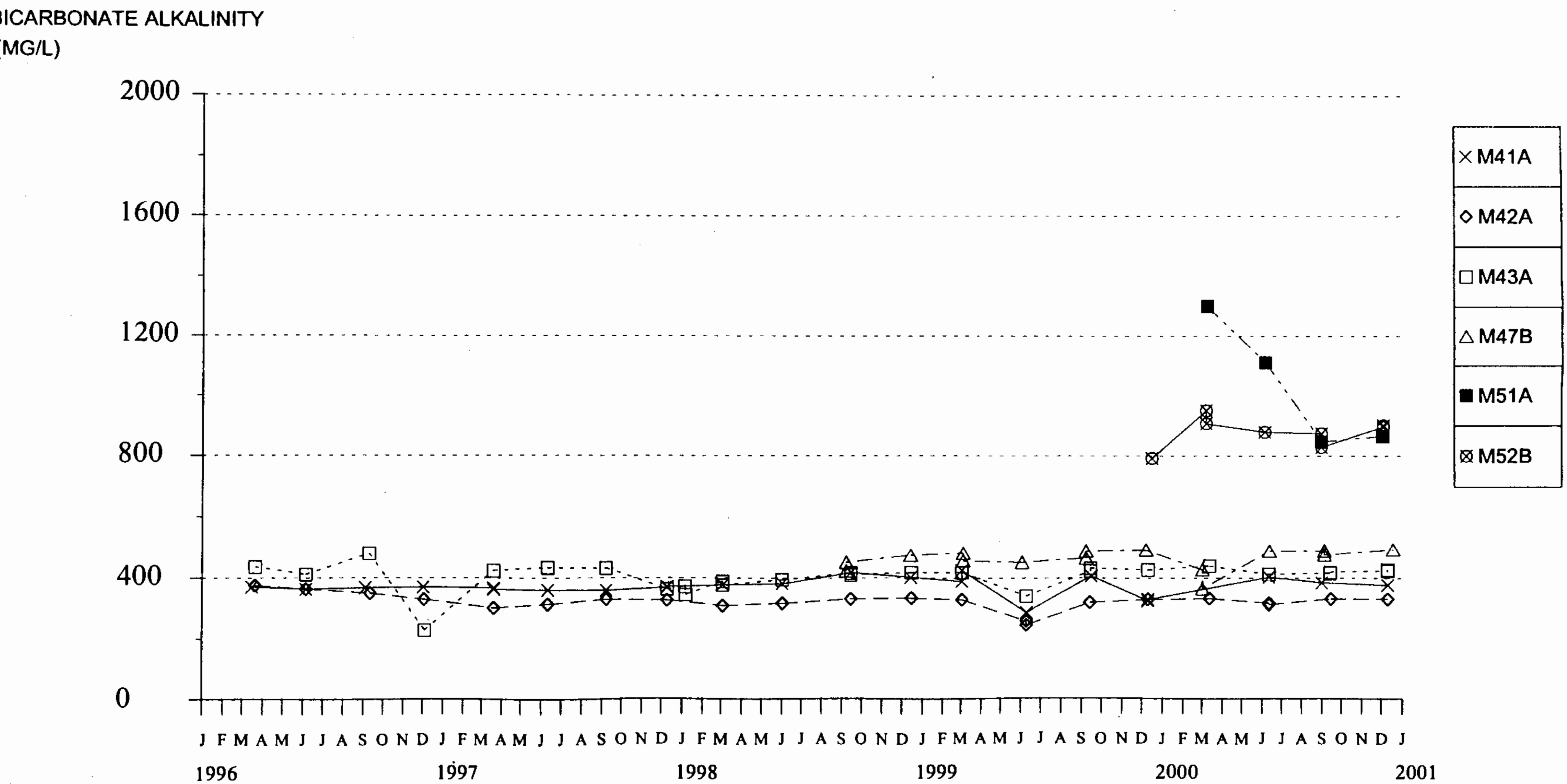


FIGURE 129

PUENTE HILLS LANDFILL

CALCIUM-HARDNESS

BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

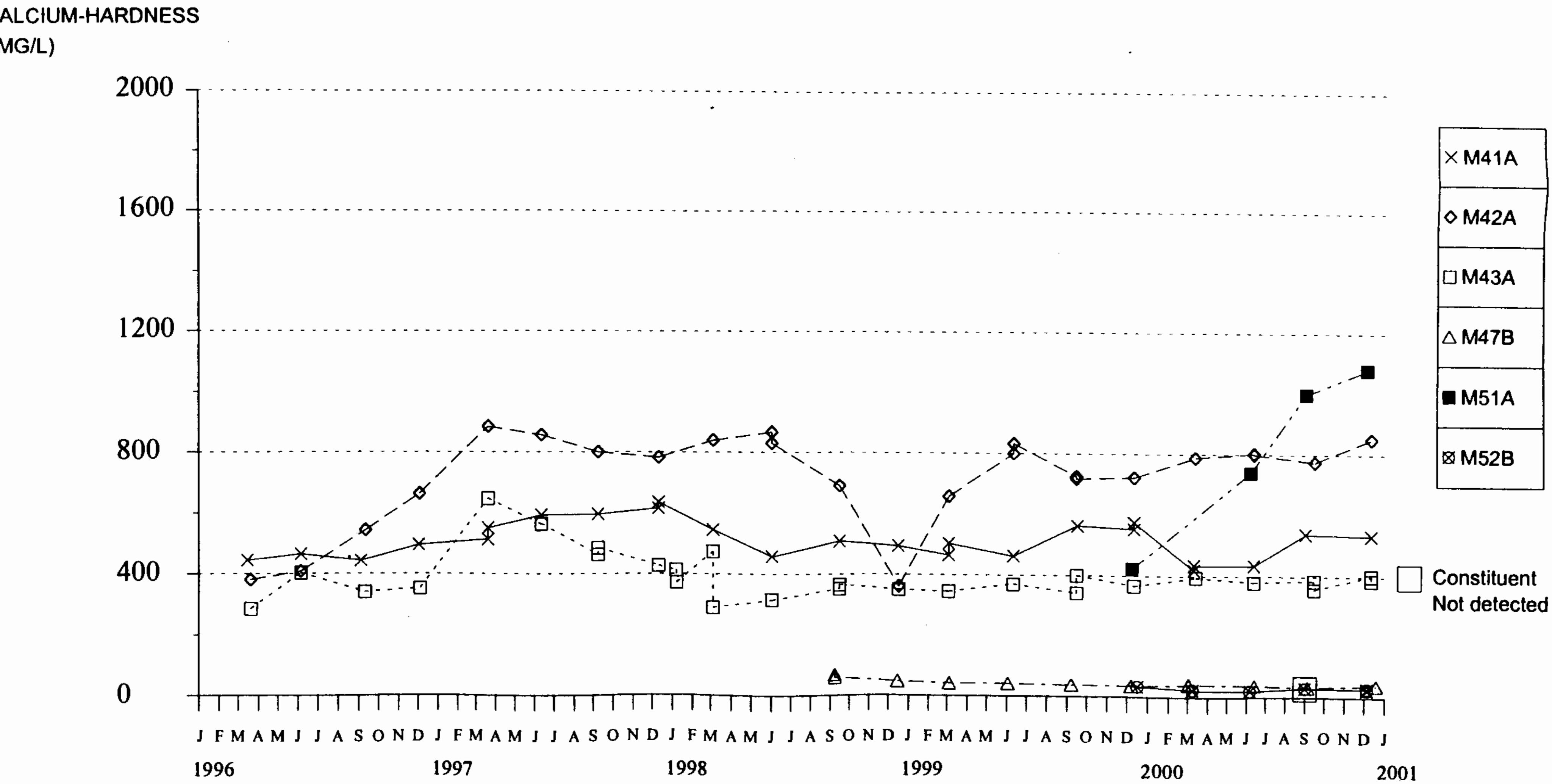


FIGURE 130

PUENTE HILLS LANDFILL

MAGNESIUM-HARDNESS

BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

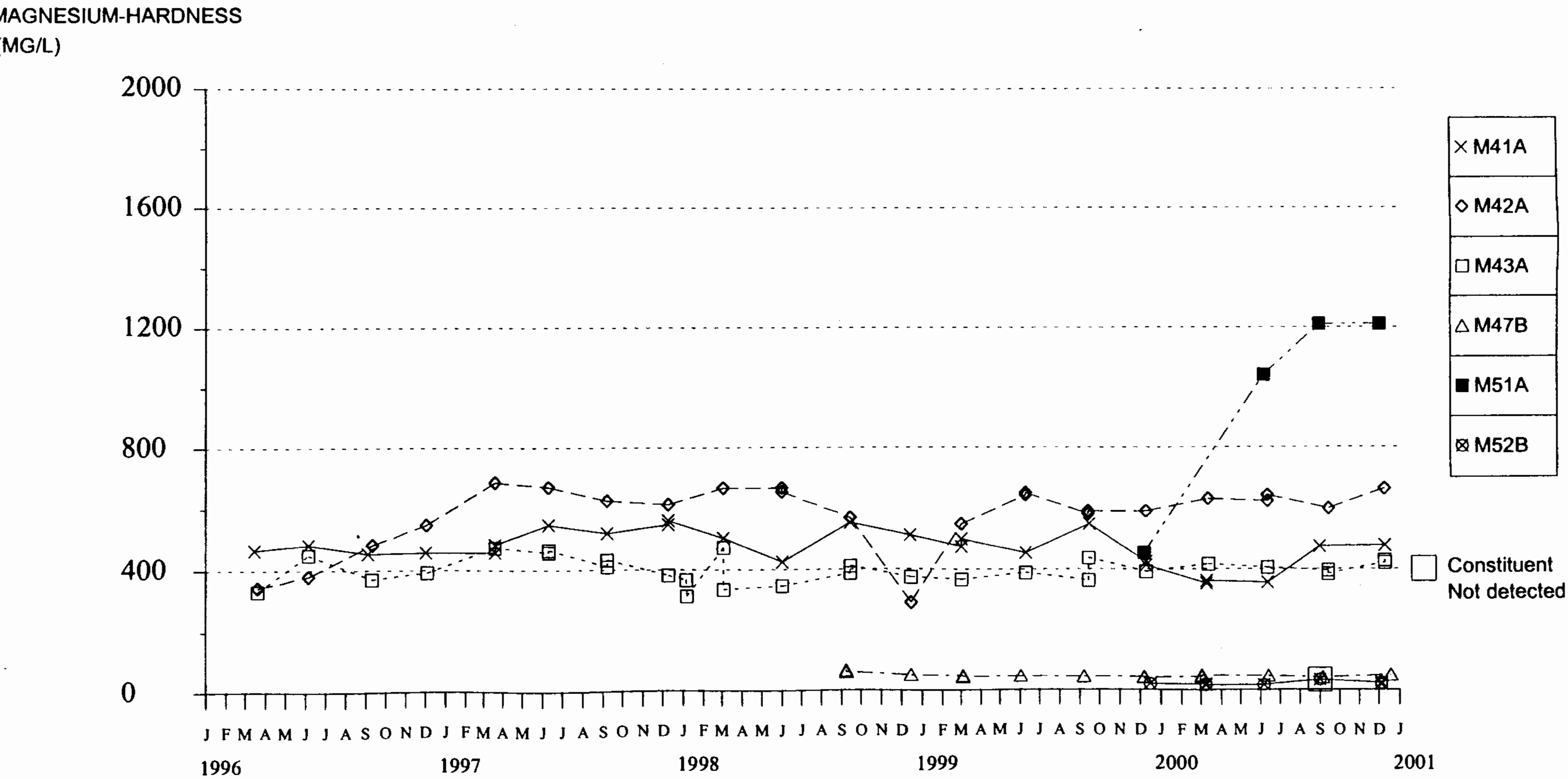


FIGURE 131
PUENTE HILLS LANDFILL
SODIUM
BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

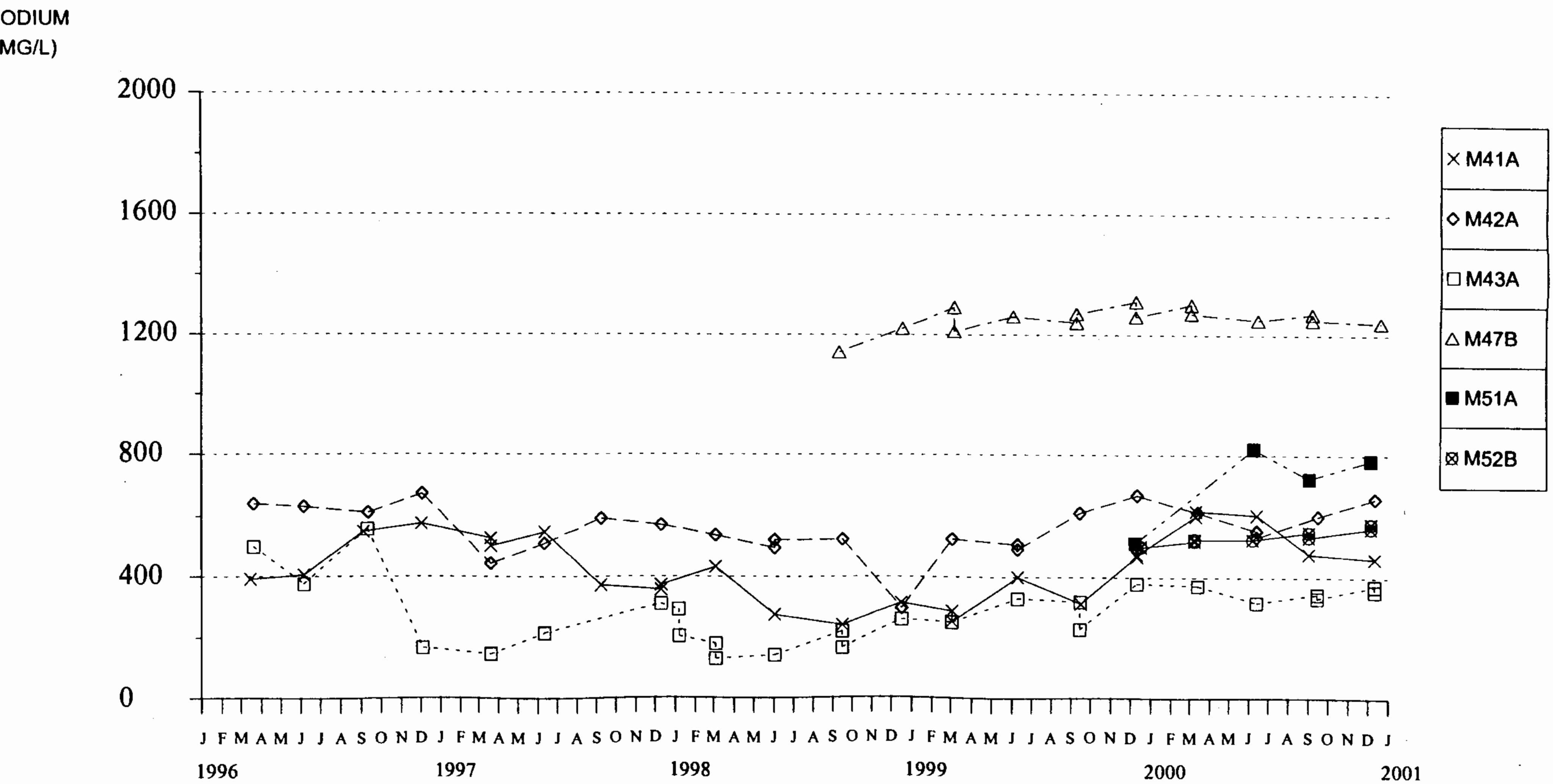


FIGURE 132
PUENTE HILLS LANDFILL
POTASSIUM
BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

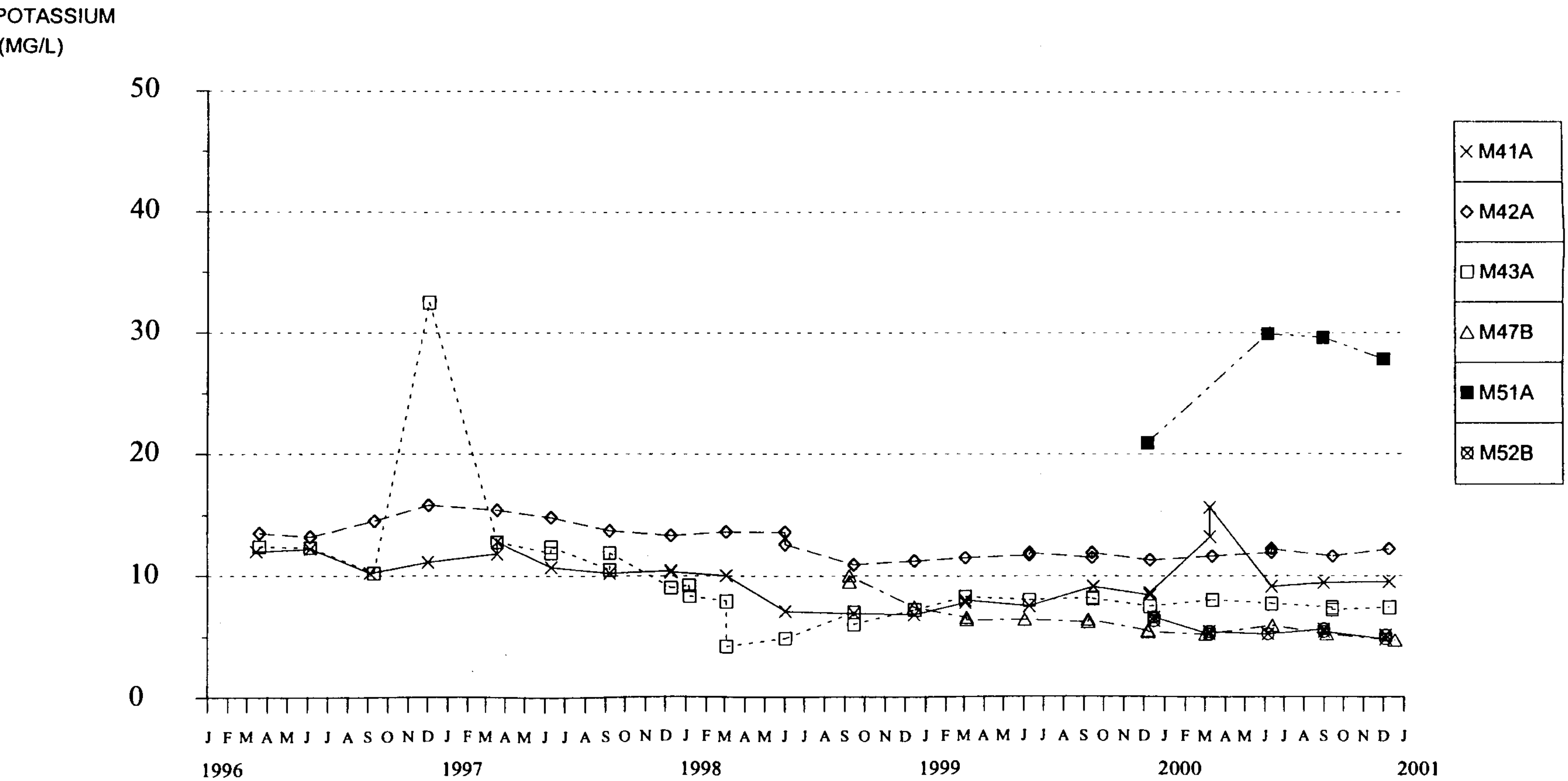


FIGURE 133
PUENTE HILLS LANDFILL
IRON
BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

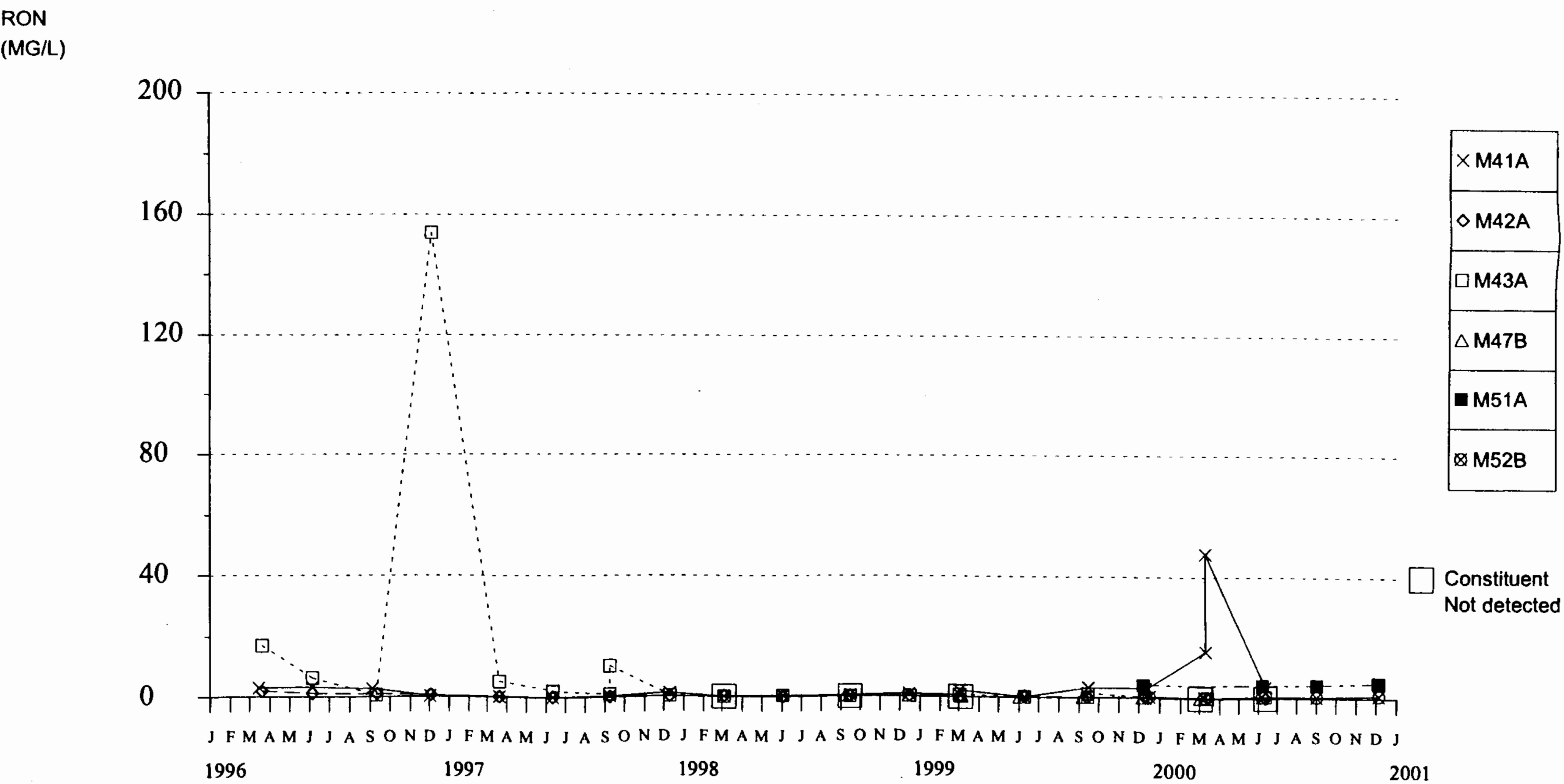


FIGURE 134
PUENTE HILLS LANDFILL
MANGANESE
BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

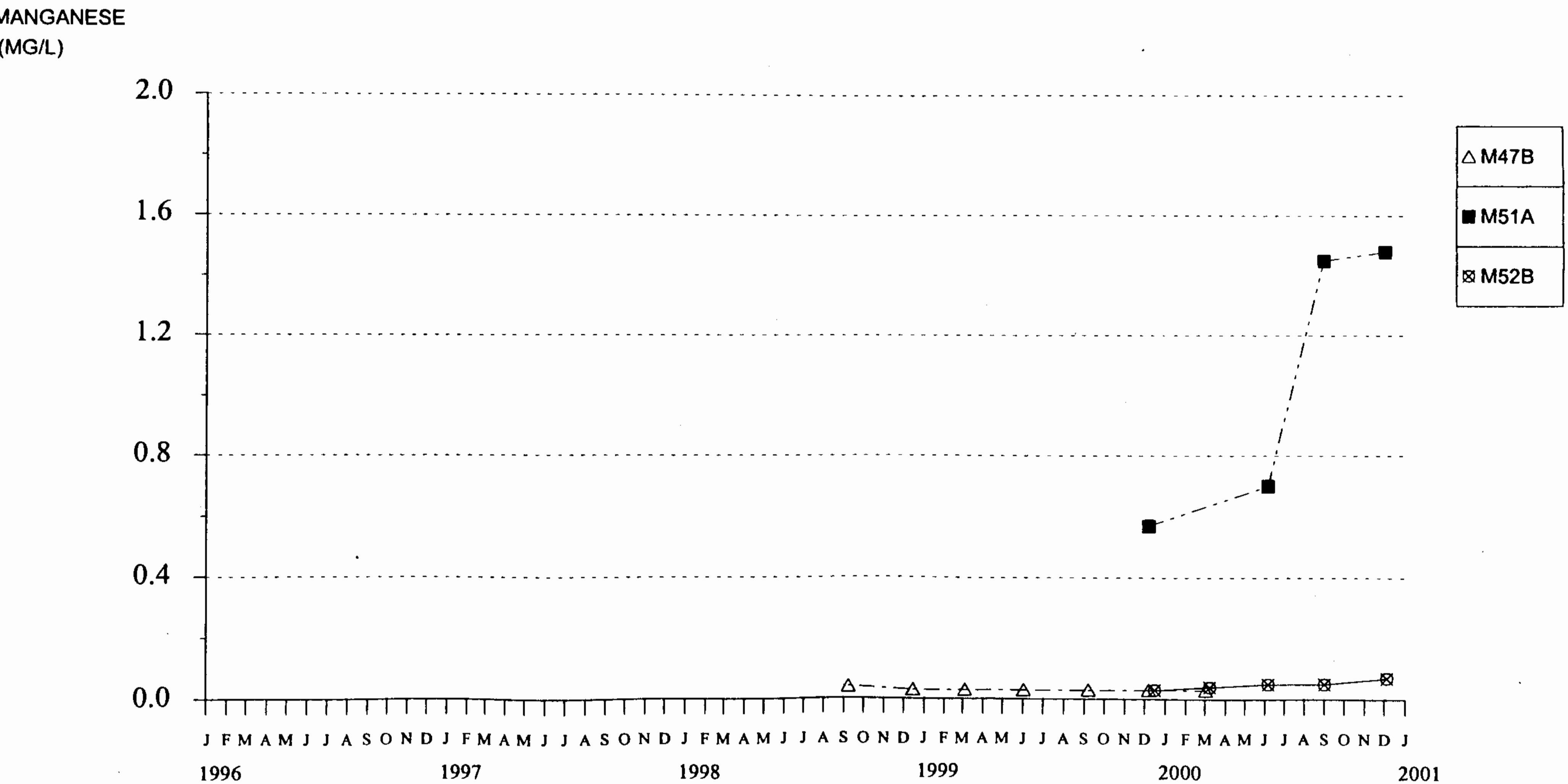


FIGURE 135

PUENTE HILLS LANDFILL

AMMONIA NITROGEN

BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

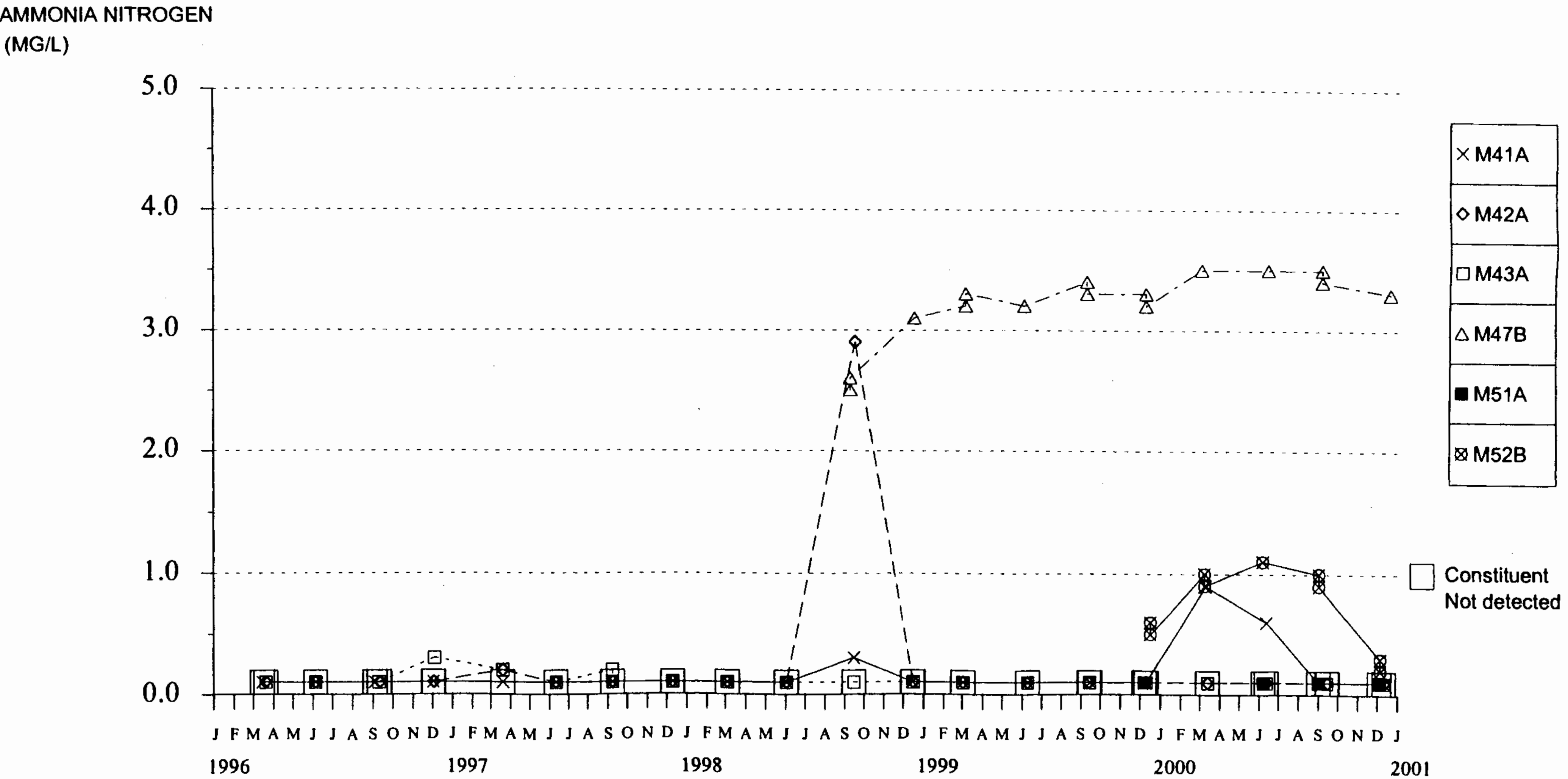


FIGURE 136

PUENTE HILLS LANDFILL

TOTAL BOD

BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

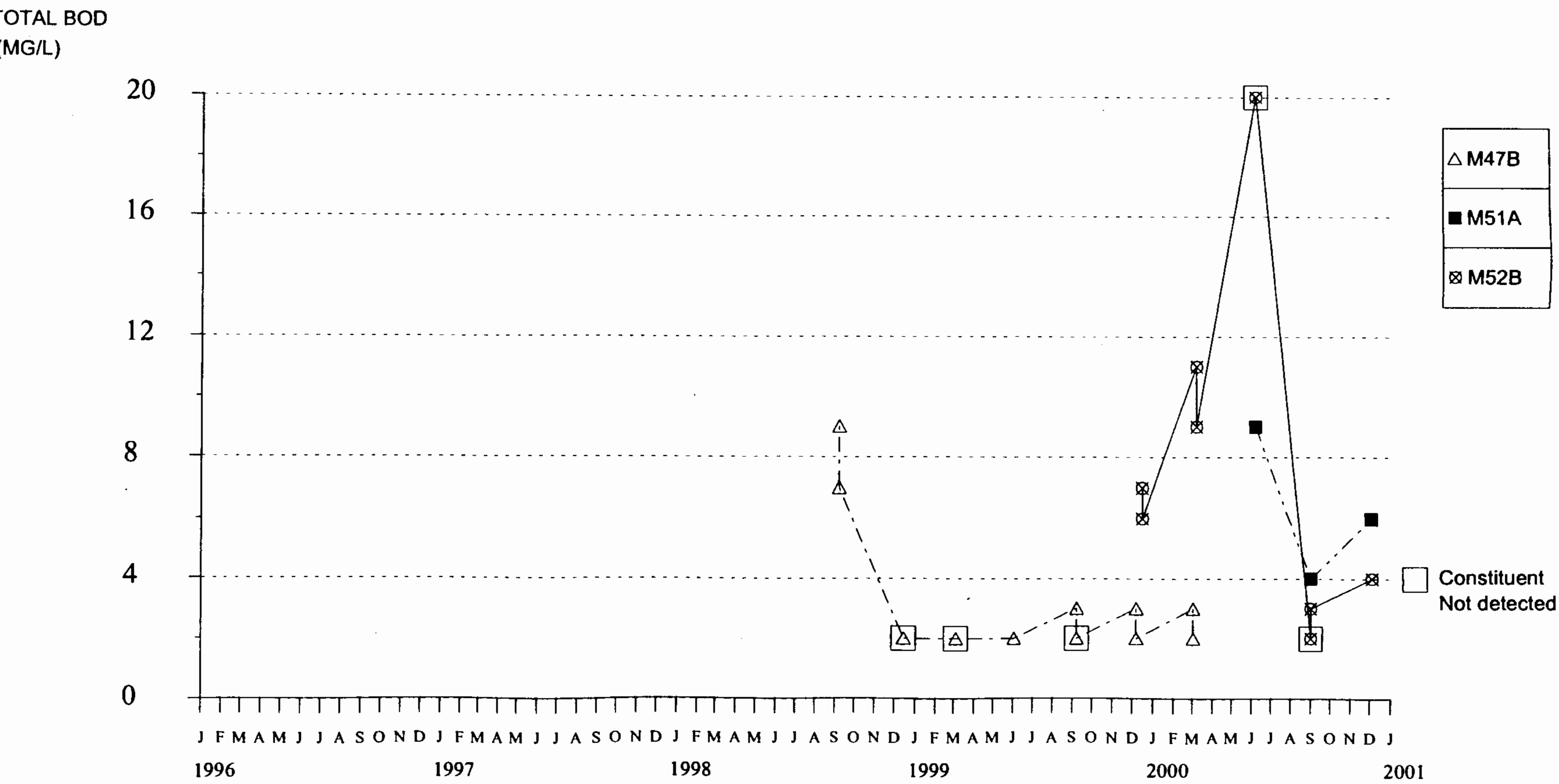


FIGURE 137
PUENTE HILLS LANDFILL
SOLUBLE BOD
BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

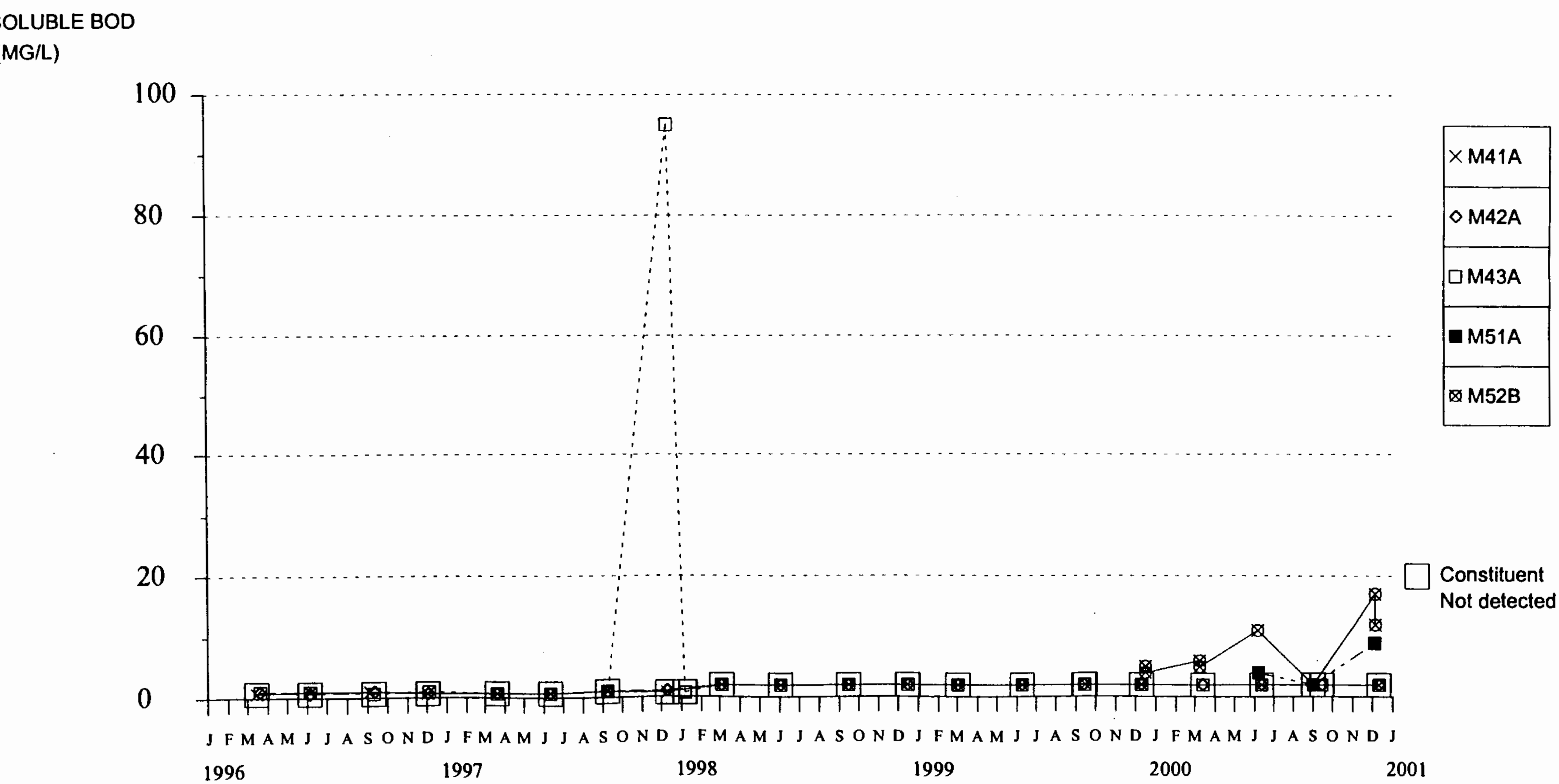


FIGURE 138
PUENTE HILLS LANDFILL
TOTAL COD
BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

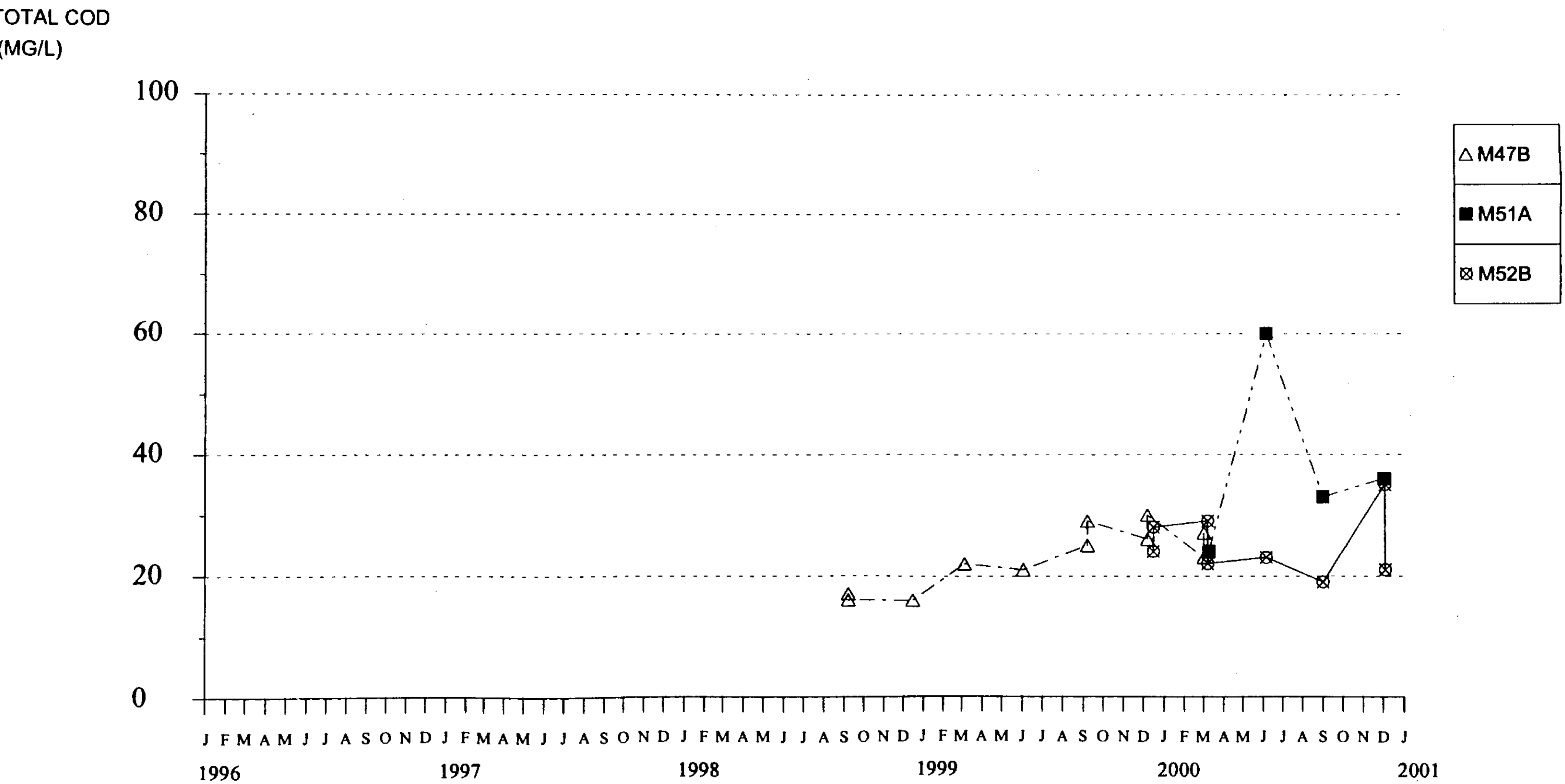


FIGURE 139

PUENTE HILLS LANDFILL

SOLUBLE COD

BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

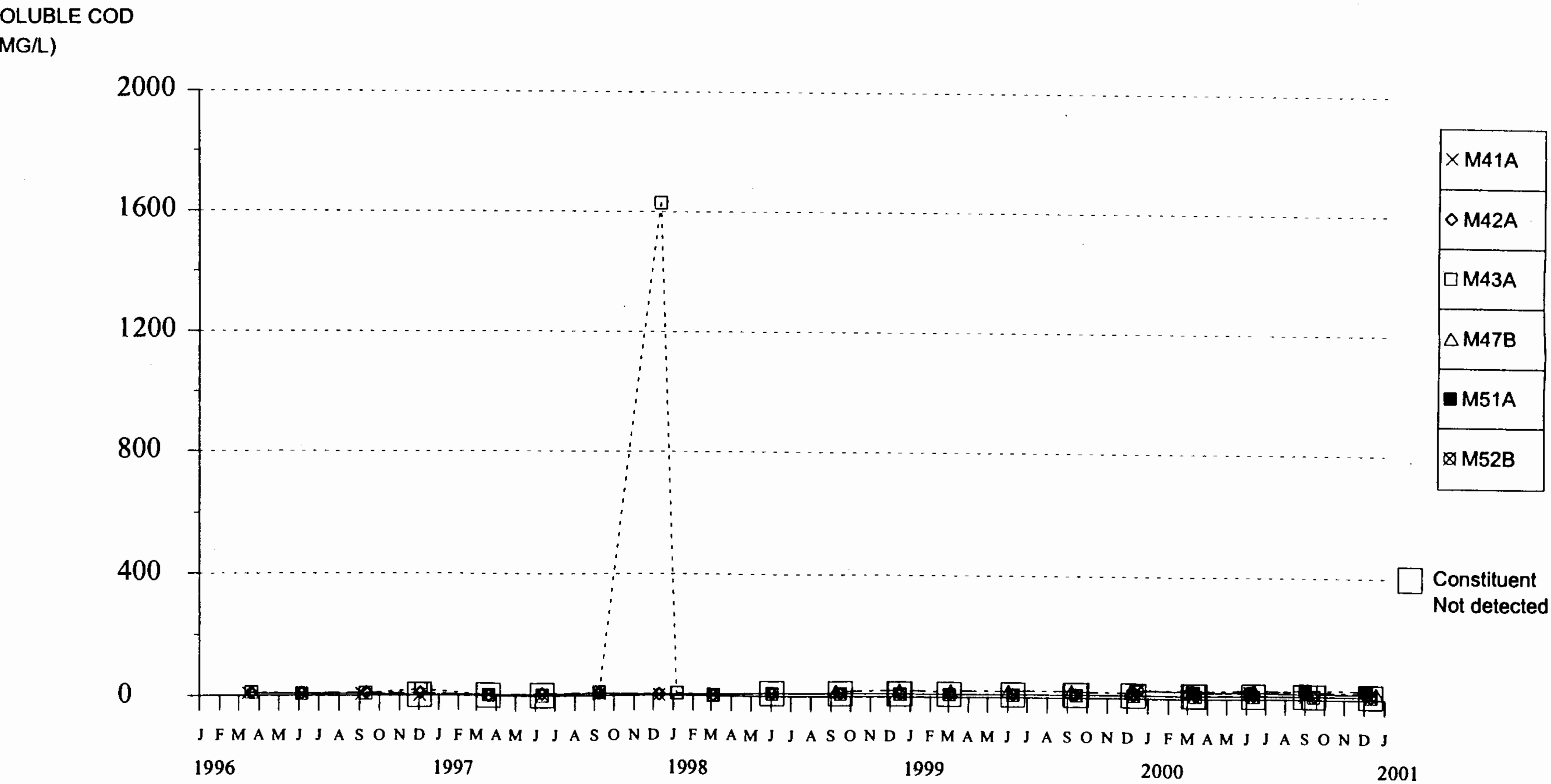


FIGURE 140

PUENTE HILLS LANDFILL

TOTAL ORGANIC CARBON

BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

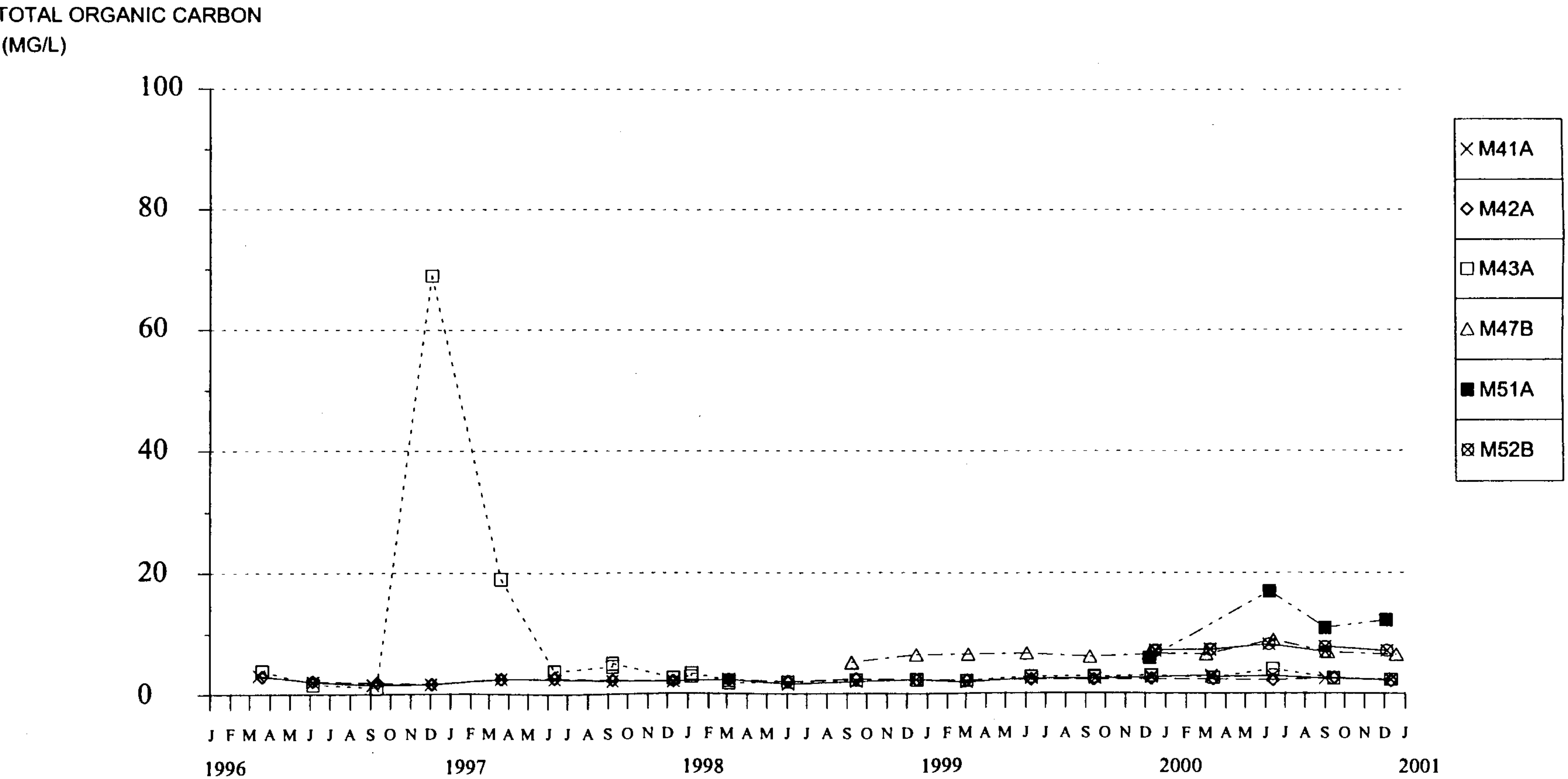


FIGURE 141

PUENTE HILLS LANDFILL

TOTAL ORGANIC HALOGEN

BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

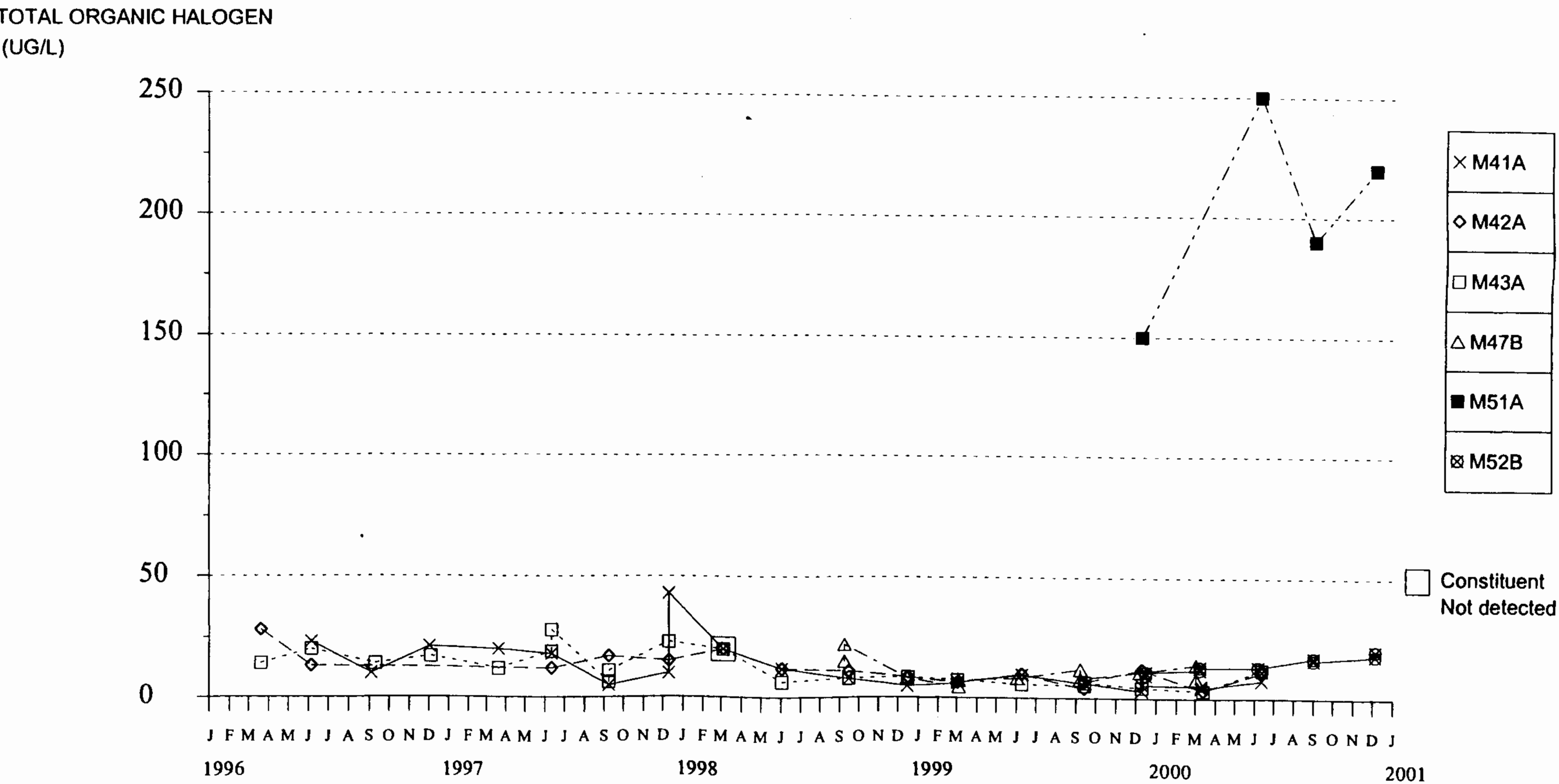


FIGURE 142

PUENTE HILLS LANDFILL

ARSENIC

BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

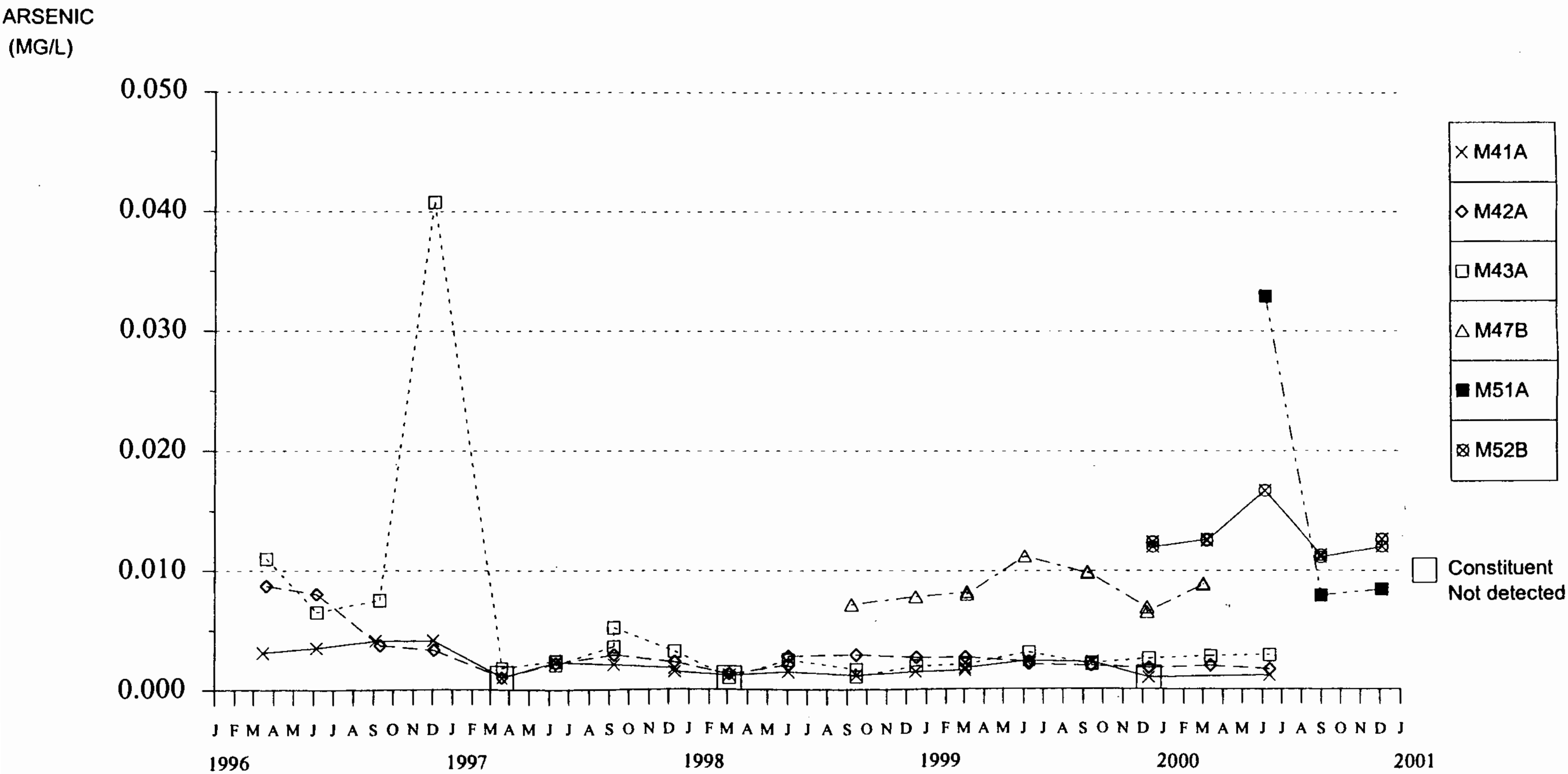


FIGURE 143

PUENTE HILLS LANDFILL

BARIUM

BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

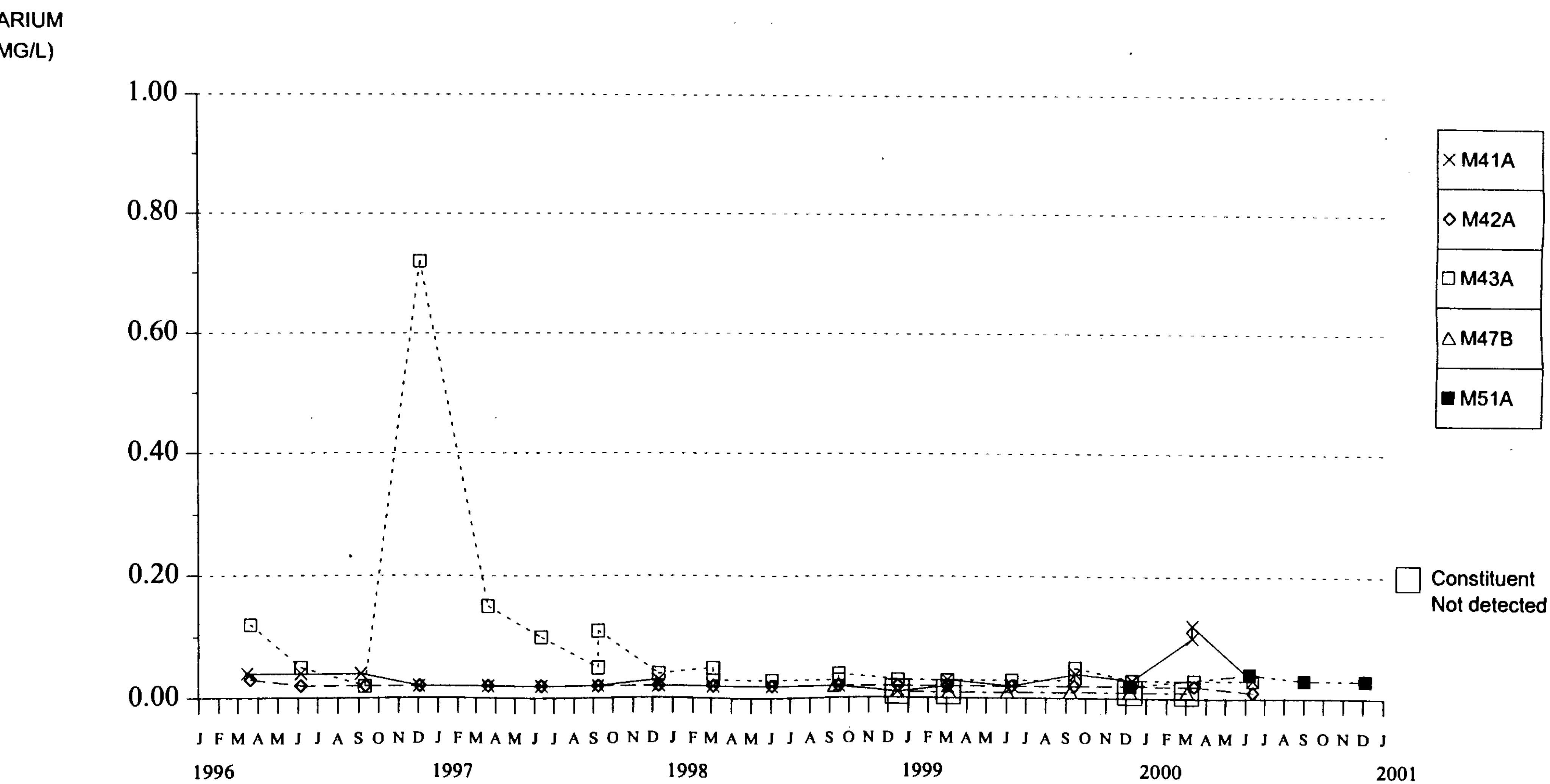


FIGURE 144
PUENTE HILLS LANDFILL
COBALT
BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

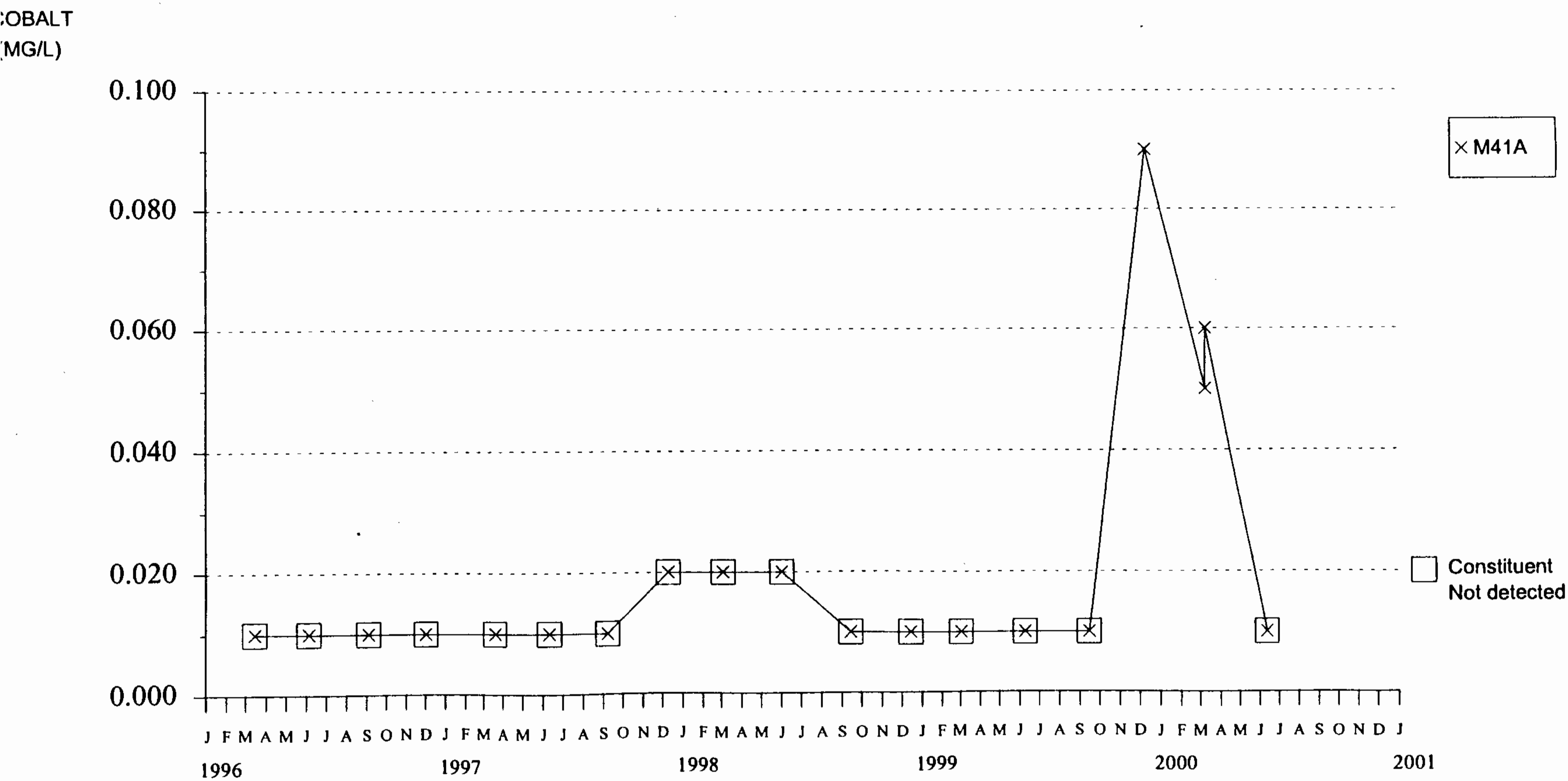


FIGURE 145

PUENTE HILLS LANDFILL

NICKEL

BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

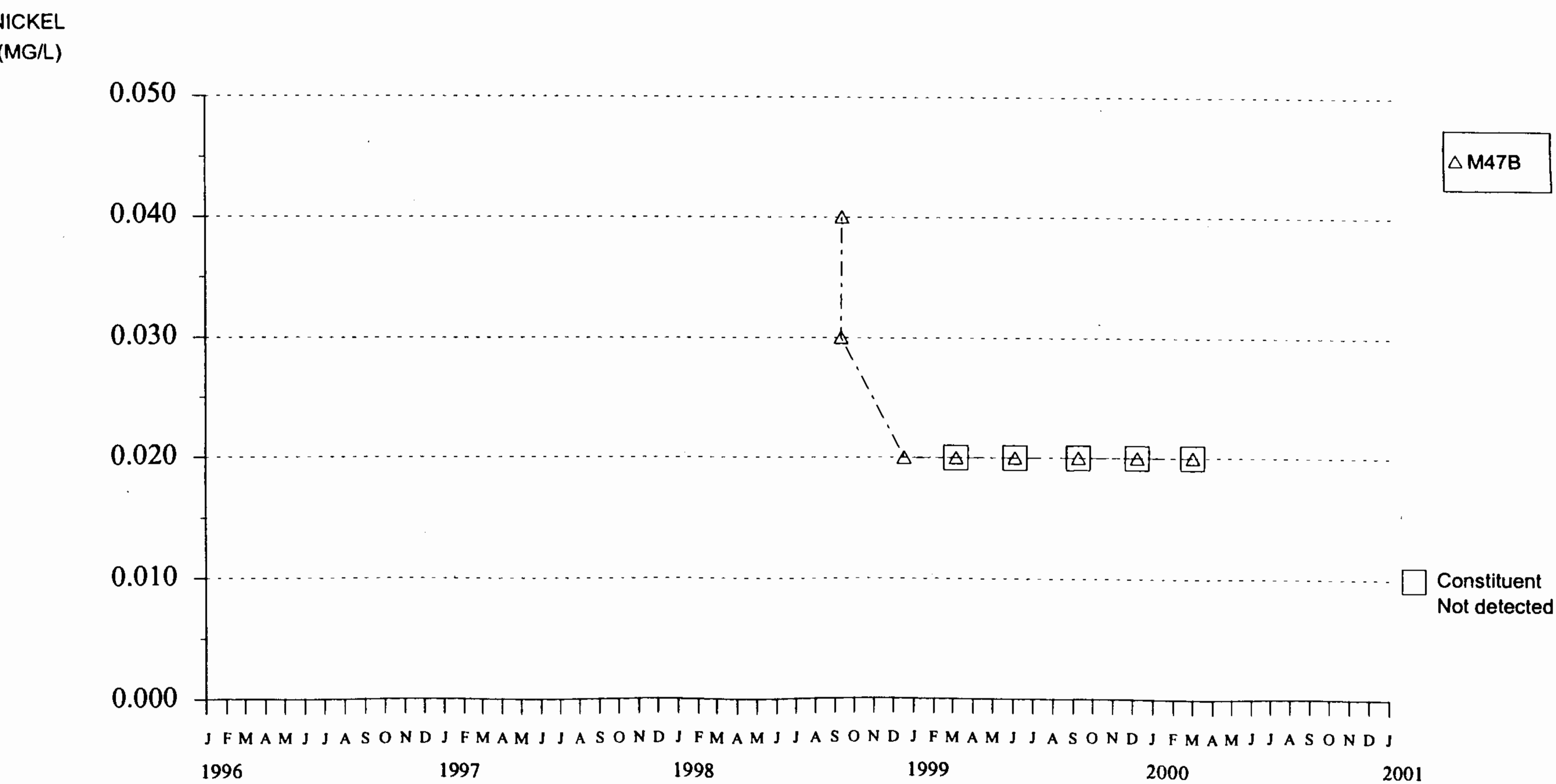


FIGURE 146

PUENTE HILLS LANDFILL

SELENIUM

BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

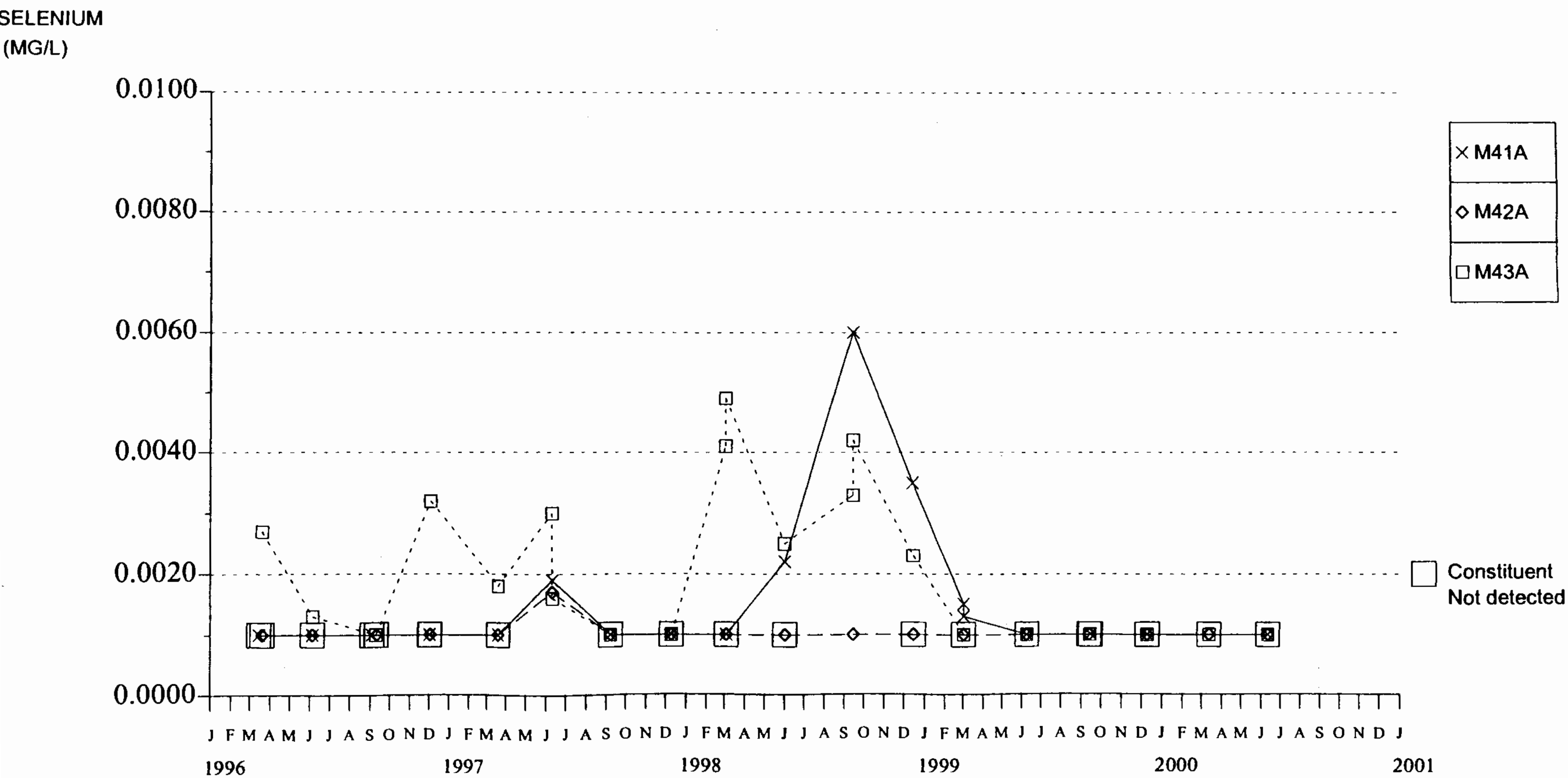


FIGURE 147
PUENTE HILLS LANDFILL
ZINC
BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

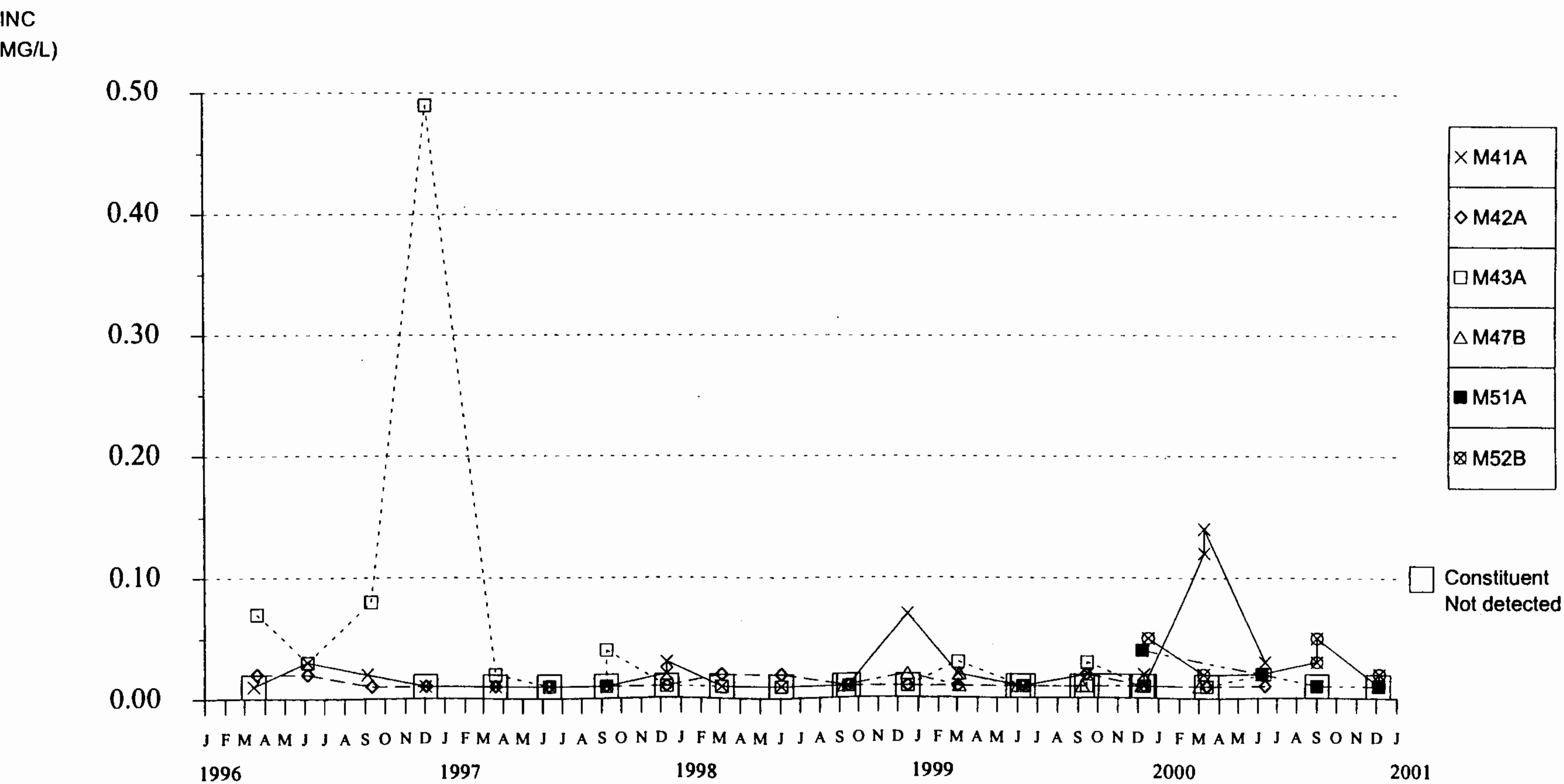


FIGURE 148
PUENTE HILLS LANDFILL
ANTIMONY
BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

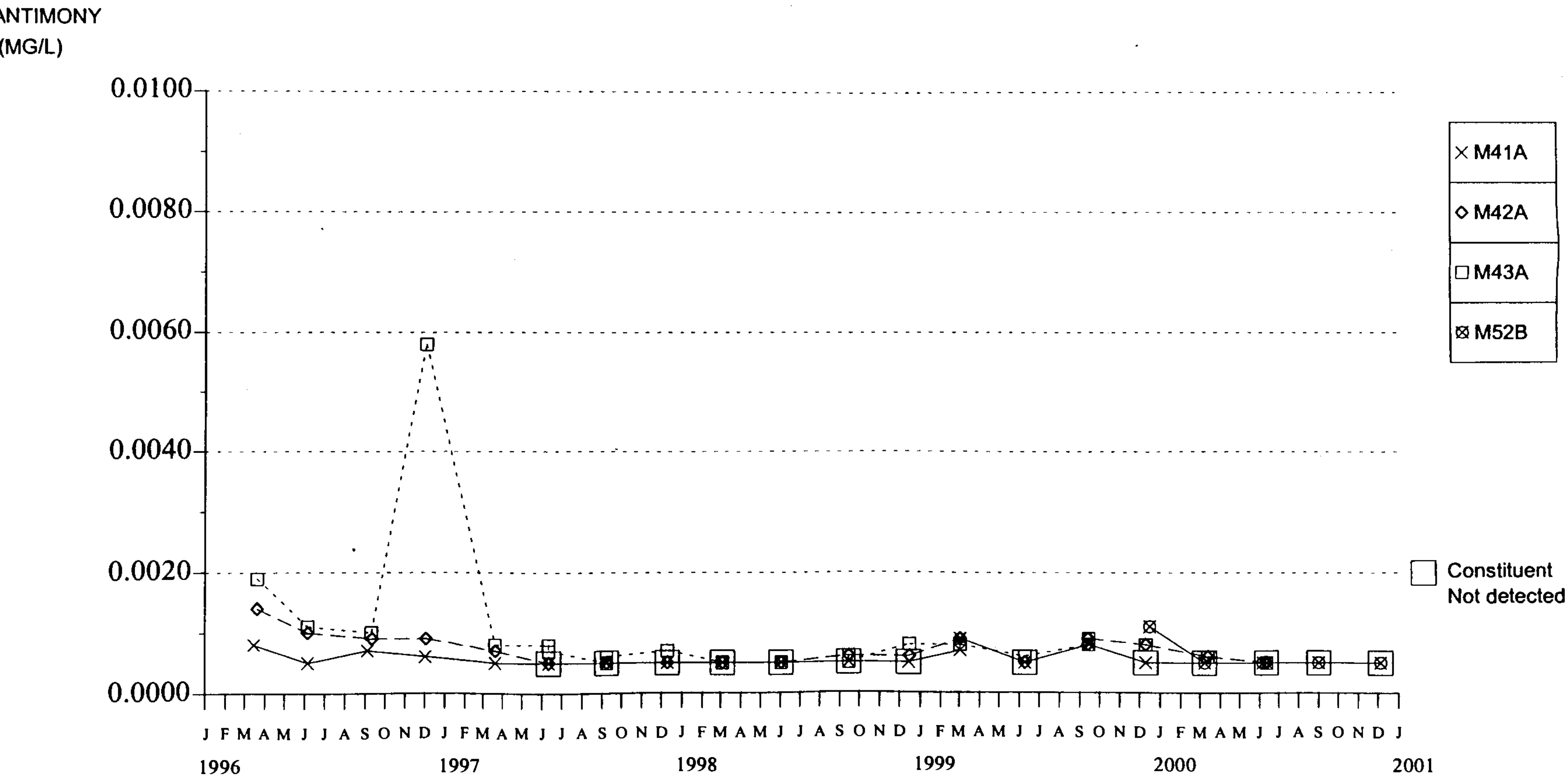


FIGURE 149
PUENTE HILLS LANDFILL
THALLIUM
BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

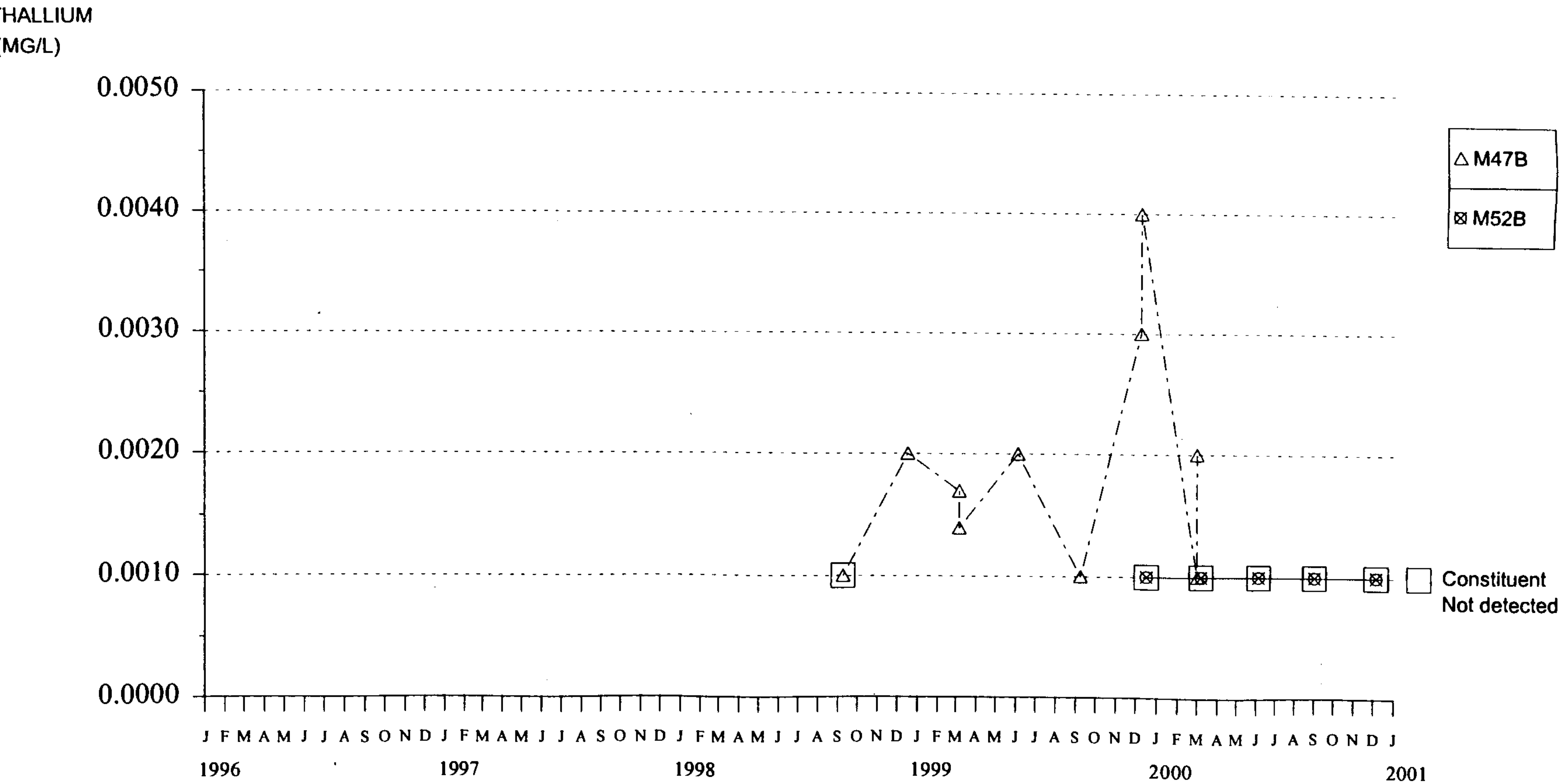


FIGURE 150
PUENTE HILLS LANDFILL
ACETONE
BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

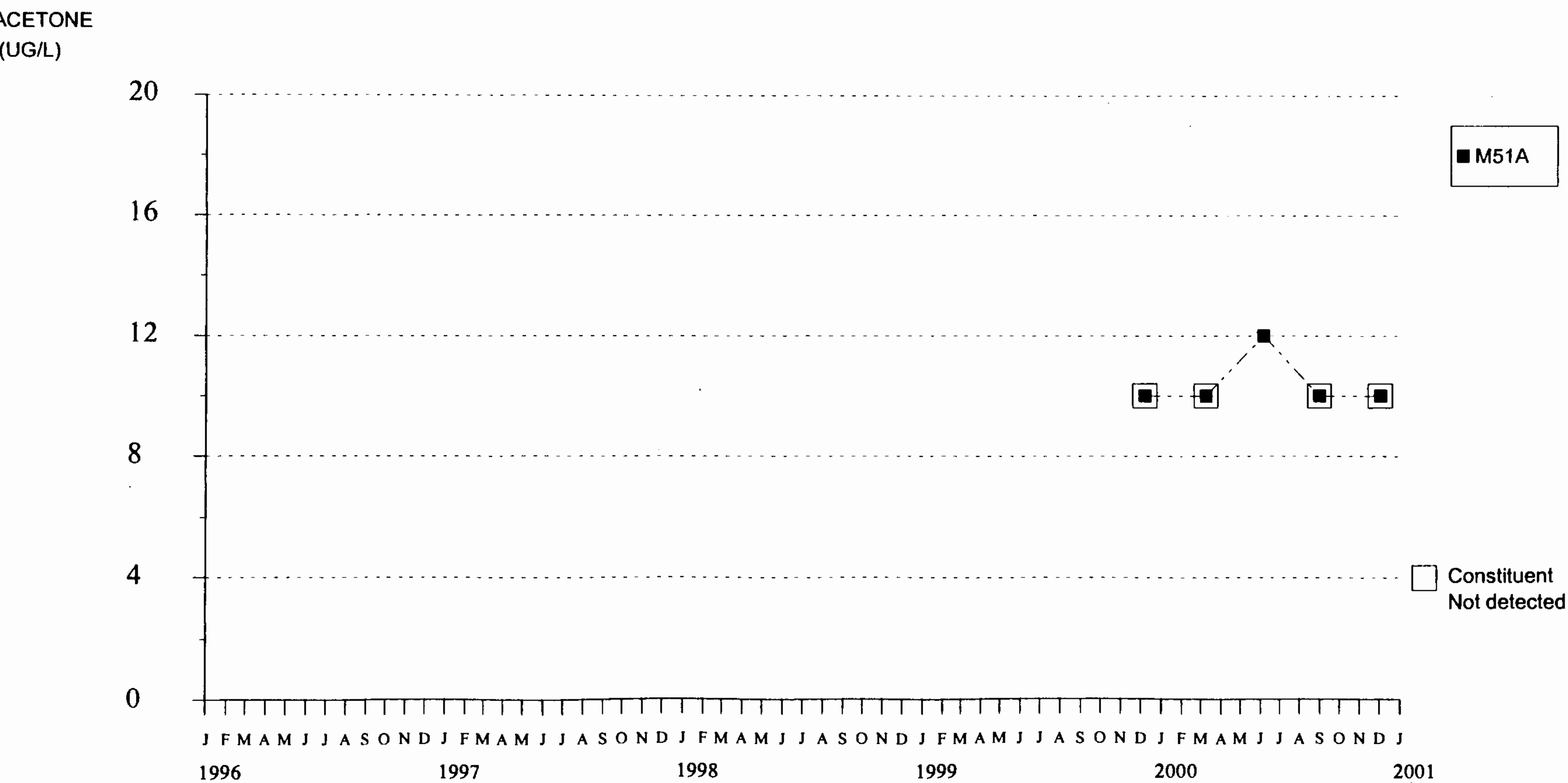


FIGURE 151

PUENTE HILLS LANDFILL

IRON

BARRIER FOUR AND BARRIER FIVE MONITORING WELLS (FILTERED)

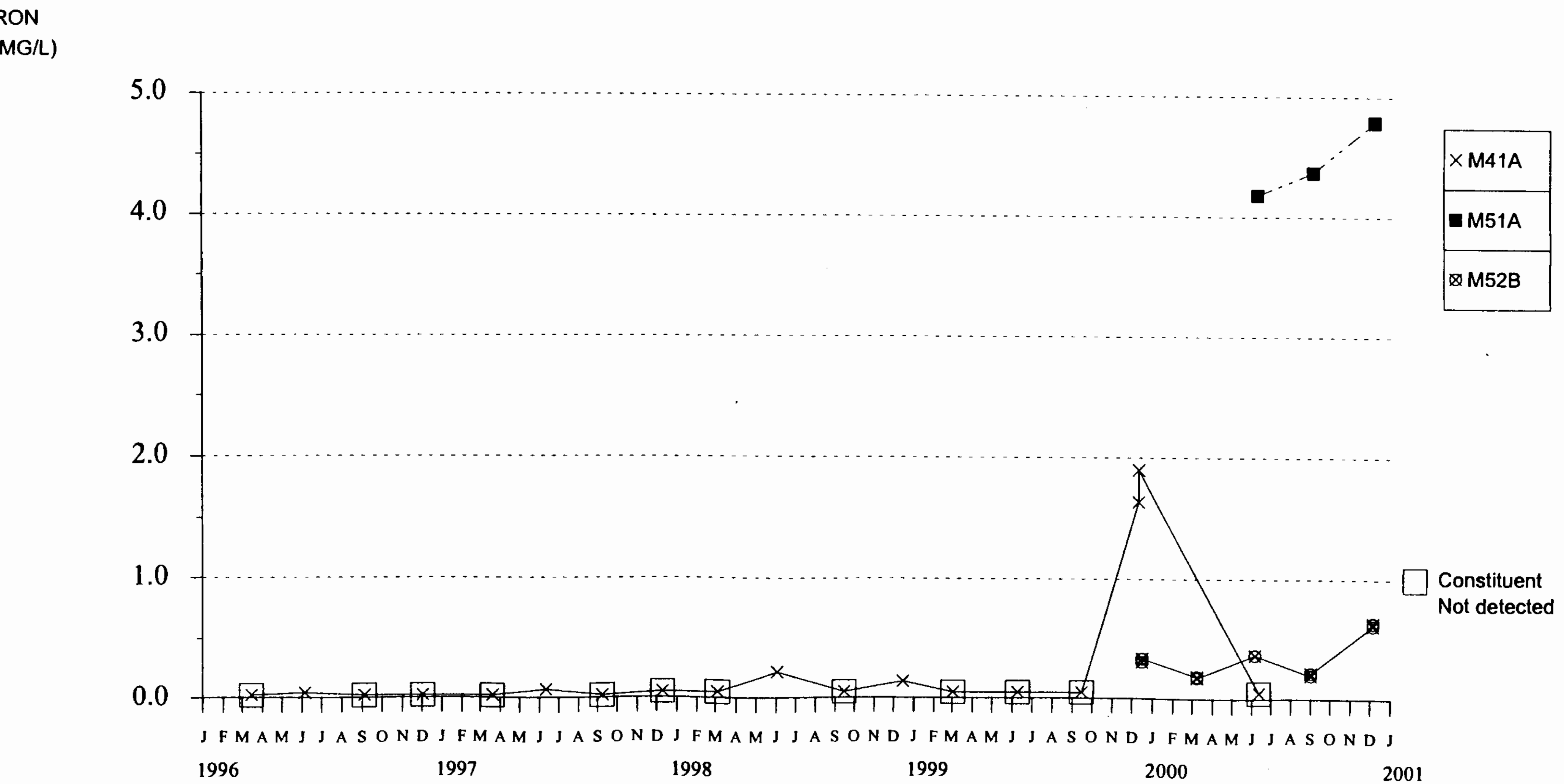


FIGURE 152

PUENTE HILLS LANDFILL

MANGANESE

BARRIER FOUR AND BARRIER FIVE MONITORING WELLS (FILTERED)

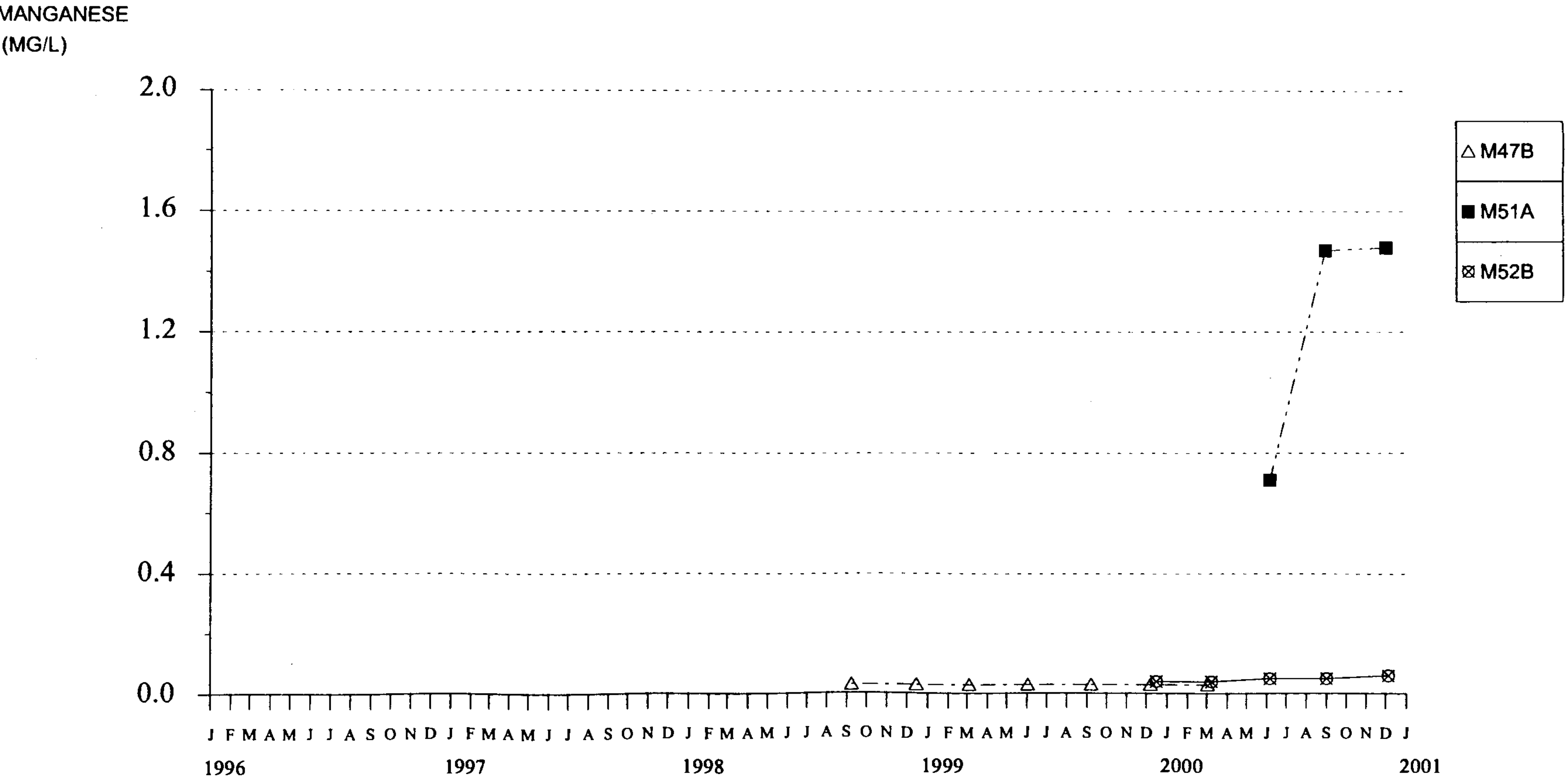


FIGURE 153
PUENTE HILLS LANDFILL
ARSENIC
BARRIER FOUR AND BARRIER FIVE MONITORING WELLS (FILTERED)

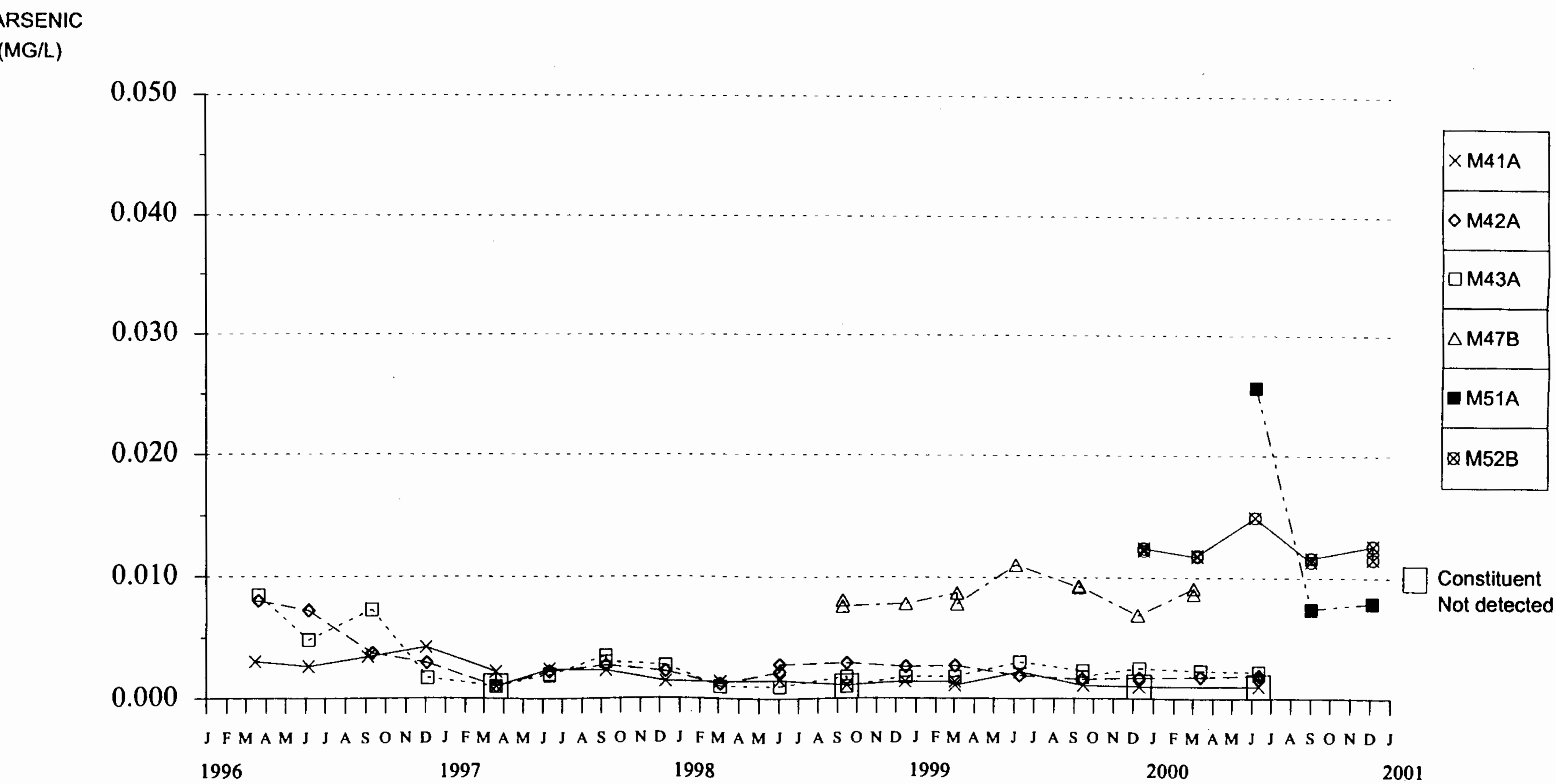


FIGURE 154

PUENTE HILLS LANDFILL

BARIUM

BARRIER FOUR AND BARRIER FIVE MONITORING WELLS (FILTERED)

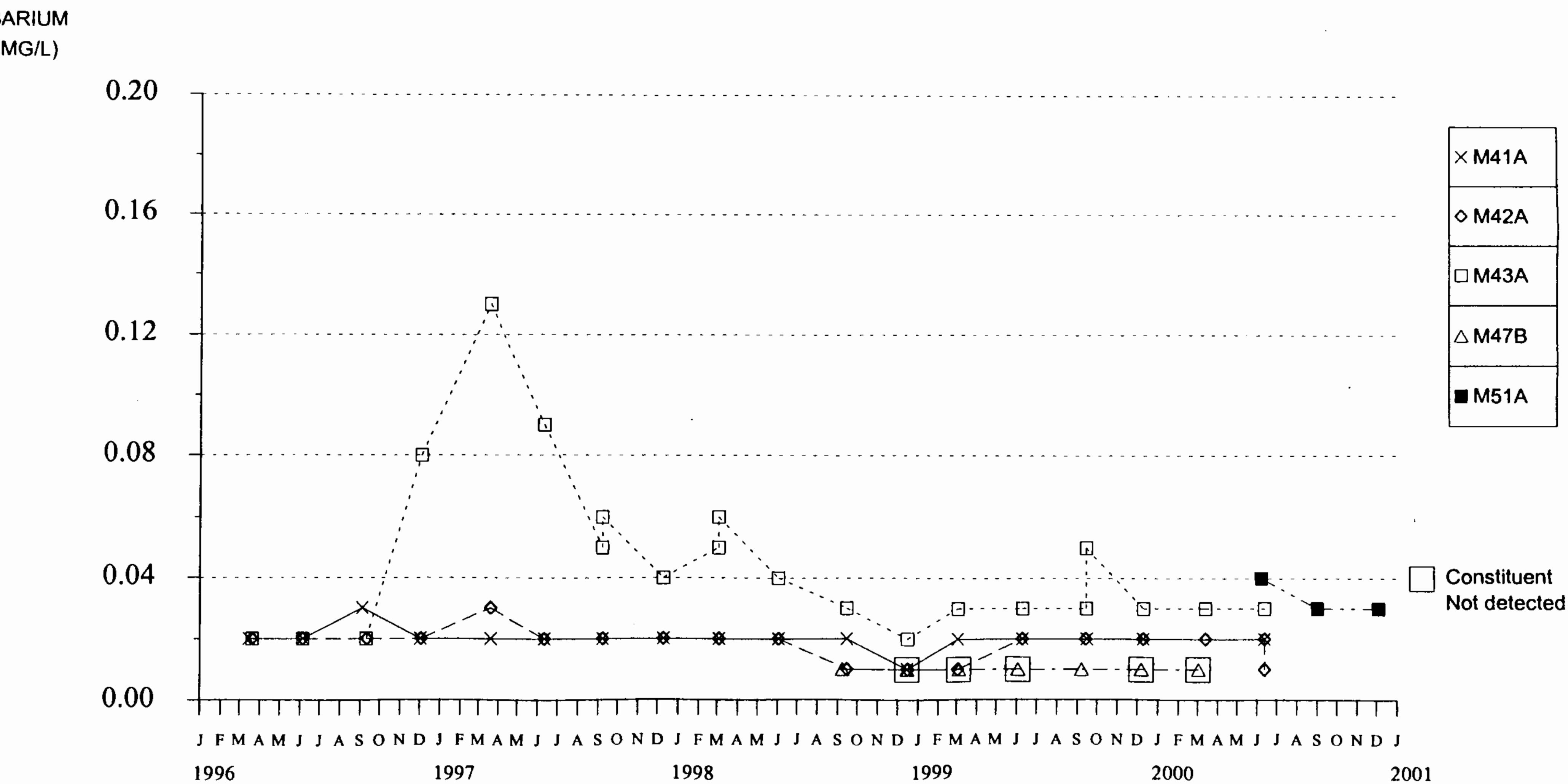


FIGURE 155

PUENTE HILLS LANDFILL

CADMIUM

BARRIER FOUR AND BARRIER FIVE MONITORING WELLS (FILTERED)

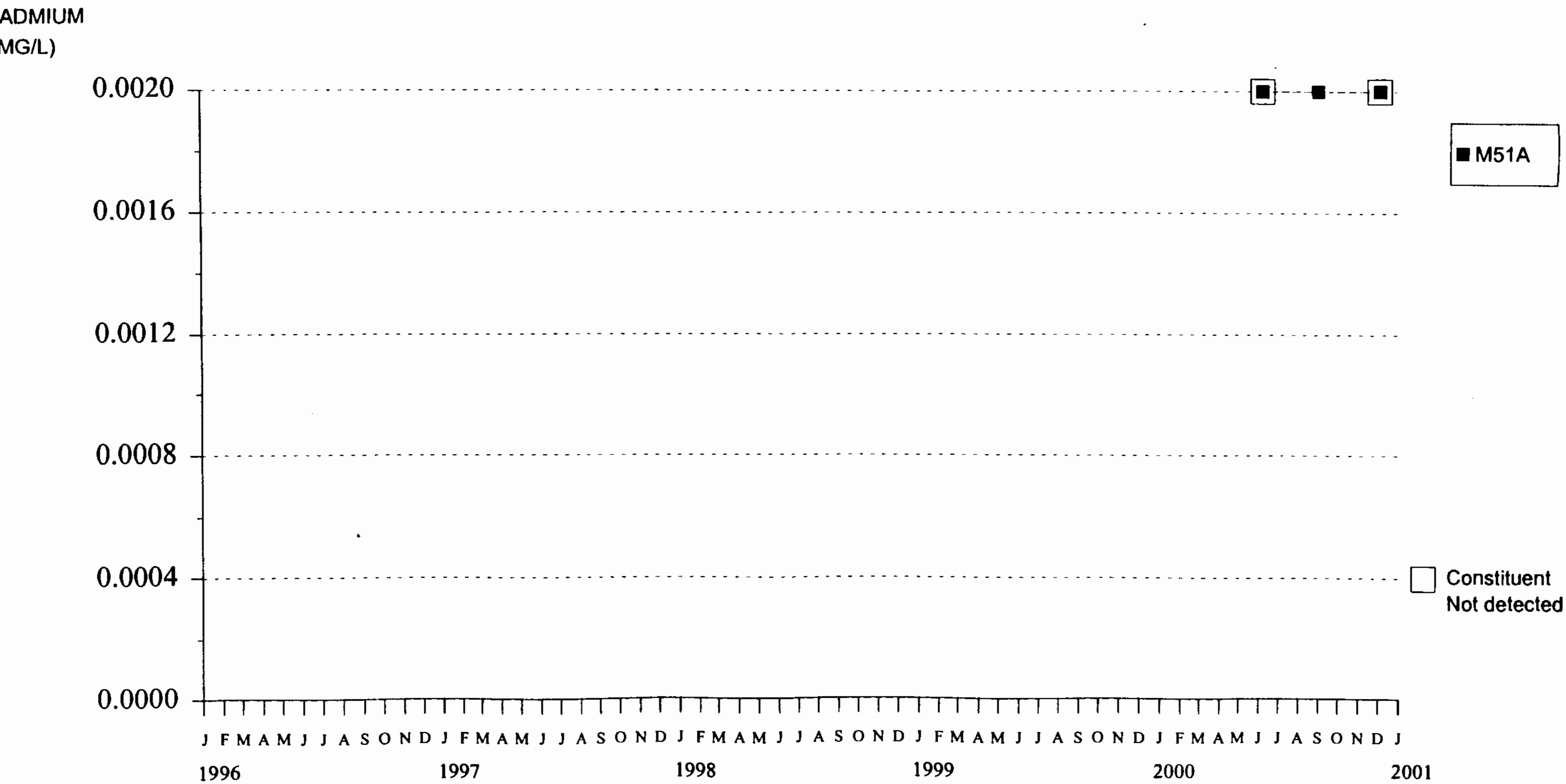


FIGURE 156

PUENTE HILLS LANDFILL

MERCURY

BARRIER FOUR AND BARRIER FIVE MONITORING WELLS (FILTERED)

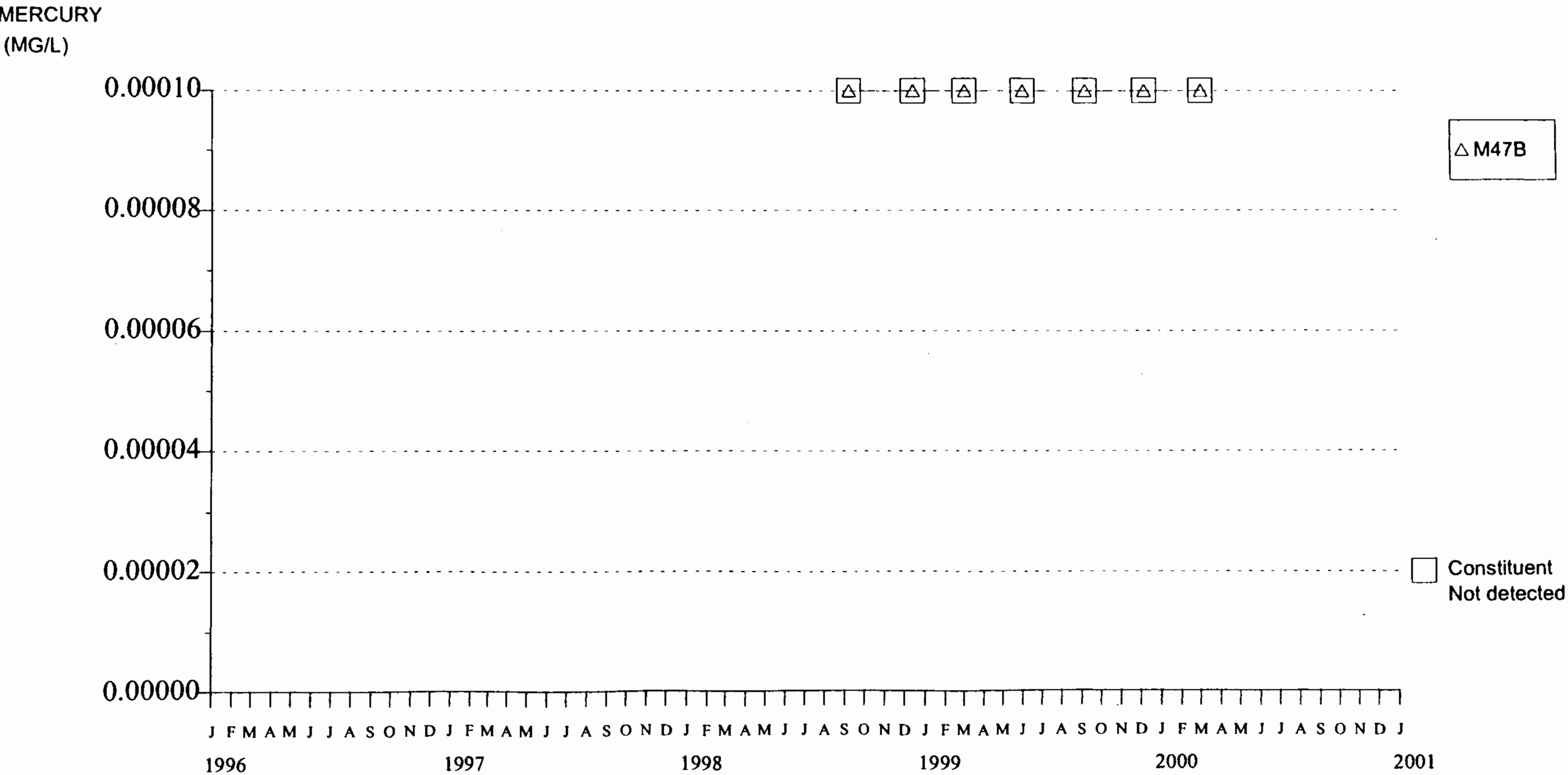


FIGURE 157

PUENTE HILLS LANDFILL

SELENIUM

BARRIER FOUR AND BARRIER FIVE MONITORING WELLS (FILTERED)

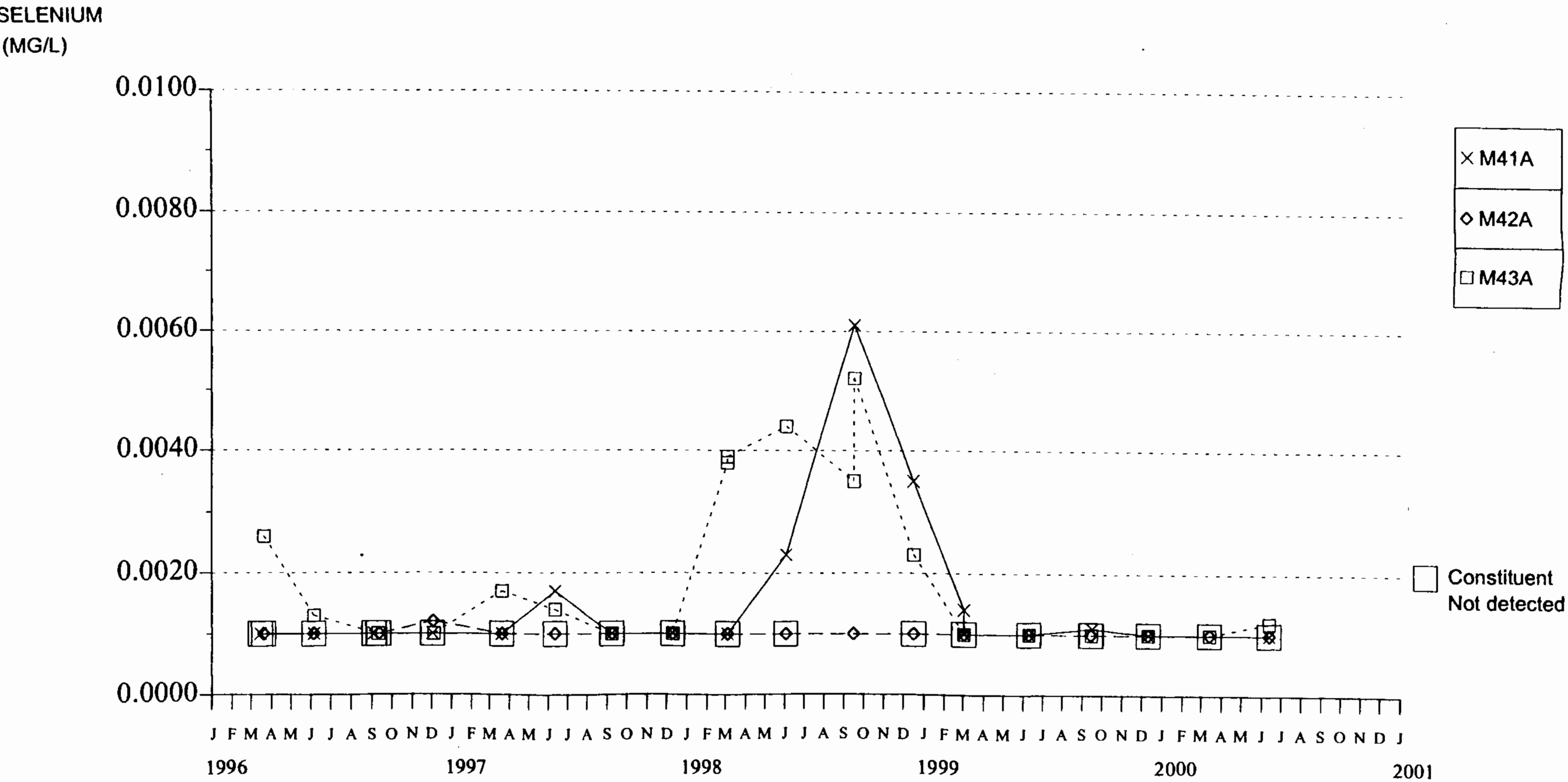


FIGURE 158
PUENTE HILLS LANDFILL
ZINC
BARRIER FOUR AND BARRIER FIVE MONITORING WELLS (FILTERED)

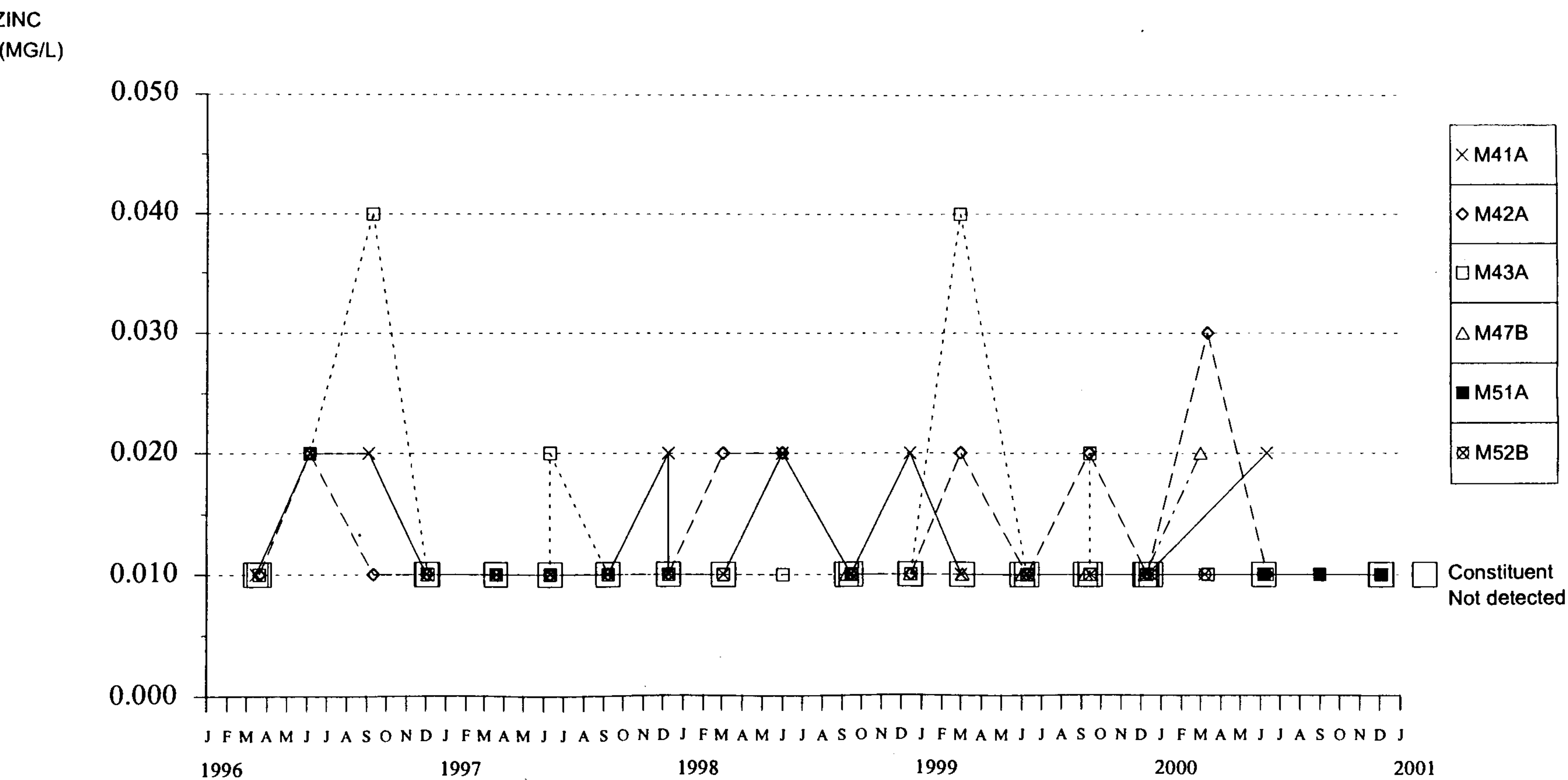


FIGURE 159
PUENTE HILLS LANDFILL
ANTIMONY
BARRIER FOUR AND BARRIER FIVE MONITORING WELLS (FILTERED)

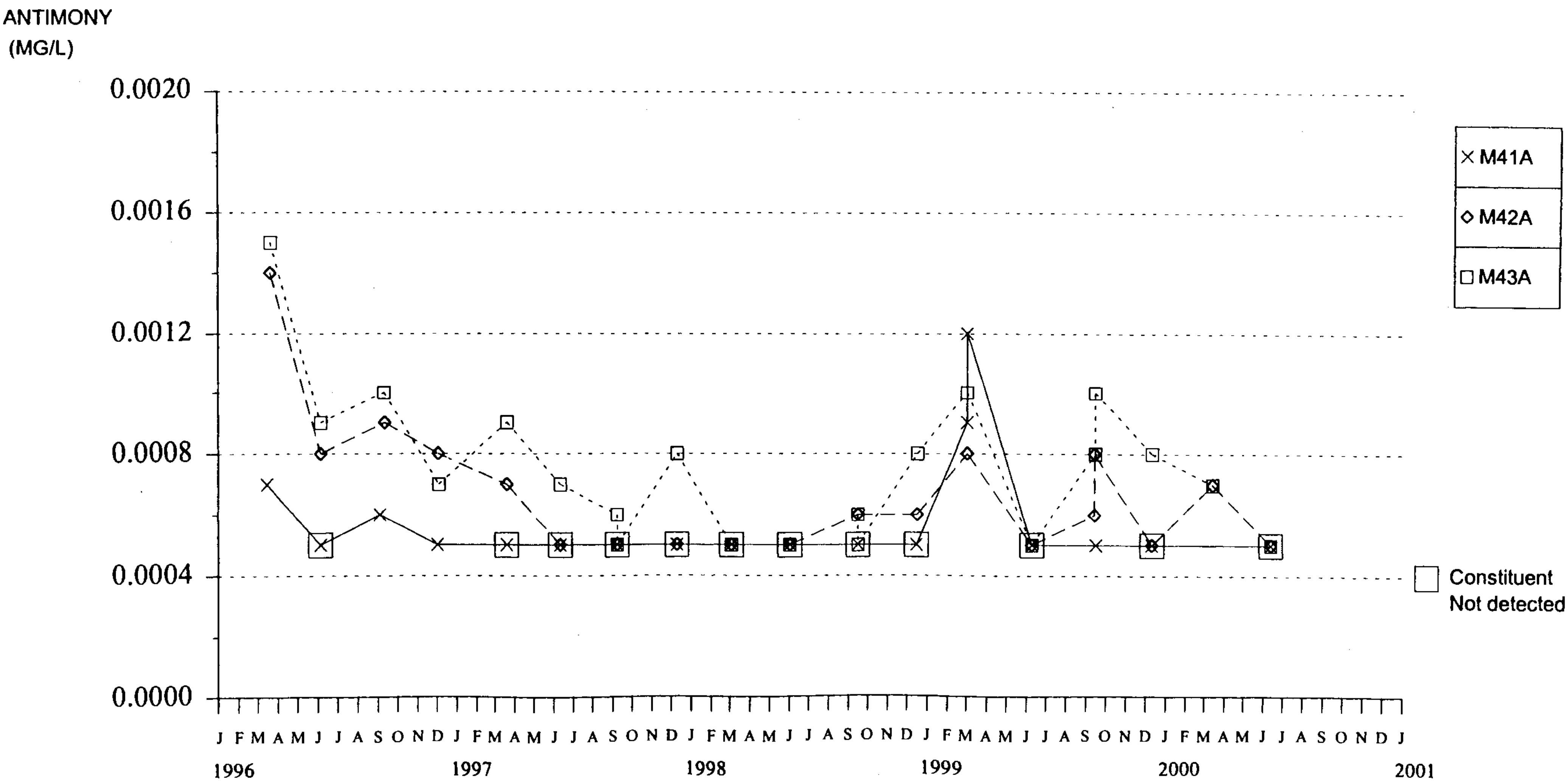
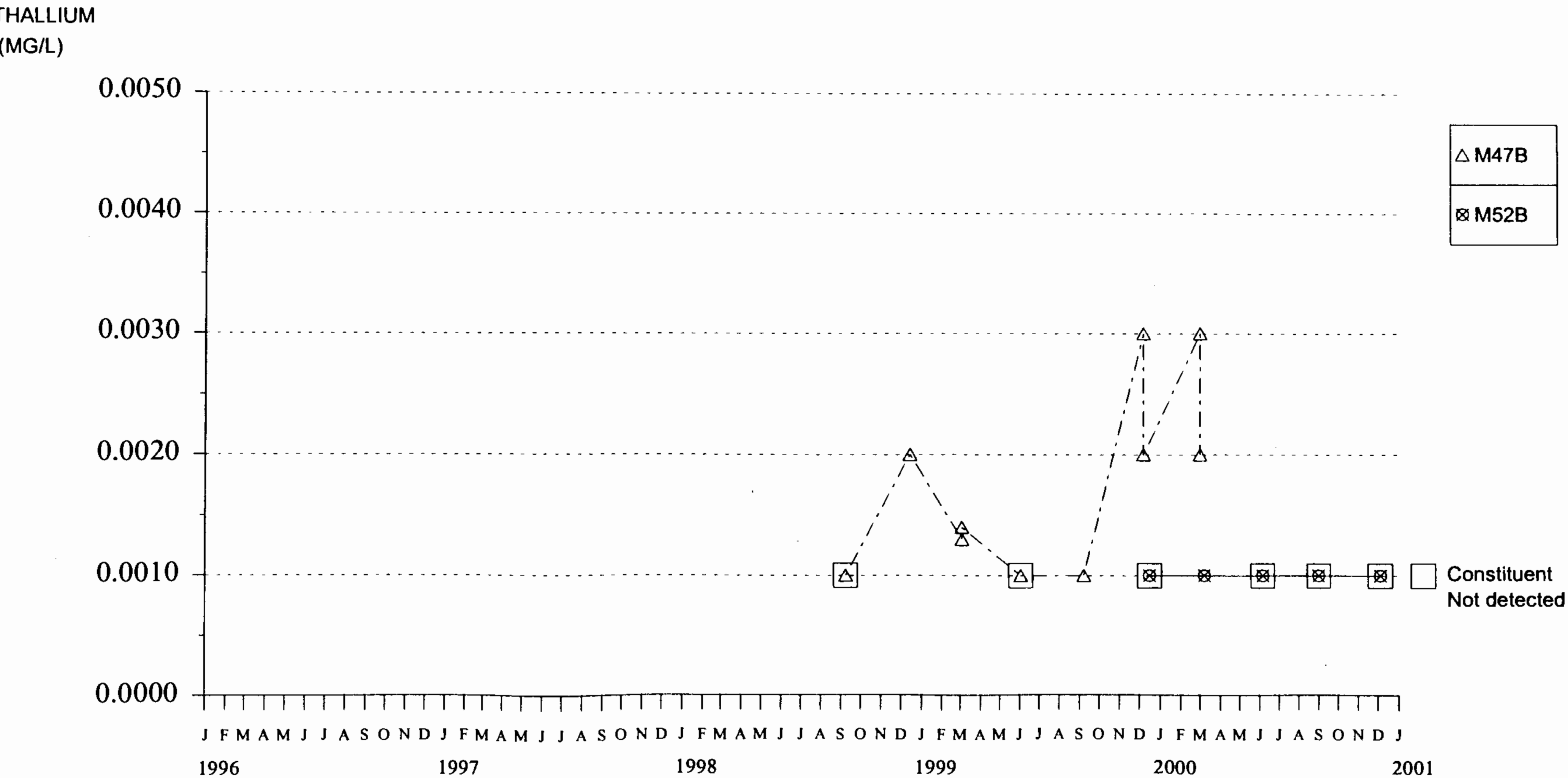


FIGURE 160
PUENTE HILLS LANDFILL
THALLIUM
BARRIER FOUR AND BARRIER FIVE MONITORING WELLS (FILTERED)



FIGURES 161 - 199

WATER QUALITY DATA GRAPHS

OFFSITE MONITORING WELLS

FIGURE 161
PUENTE HILLS LANDFILL
DEPTH TO WATER
OFFSITE MONITORING WELLS

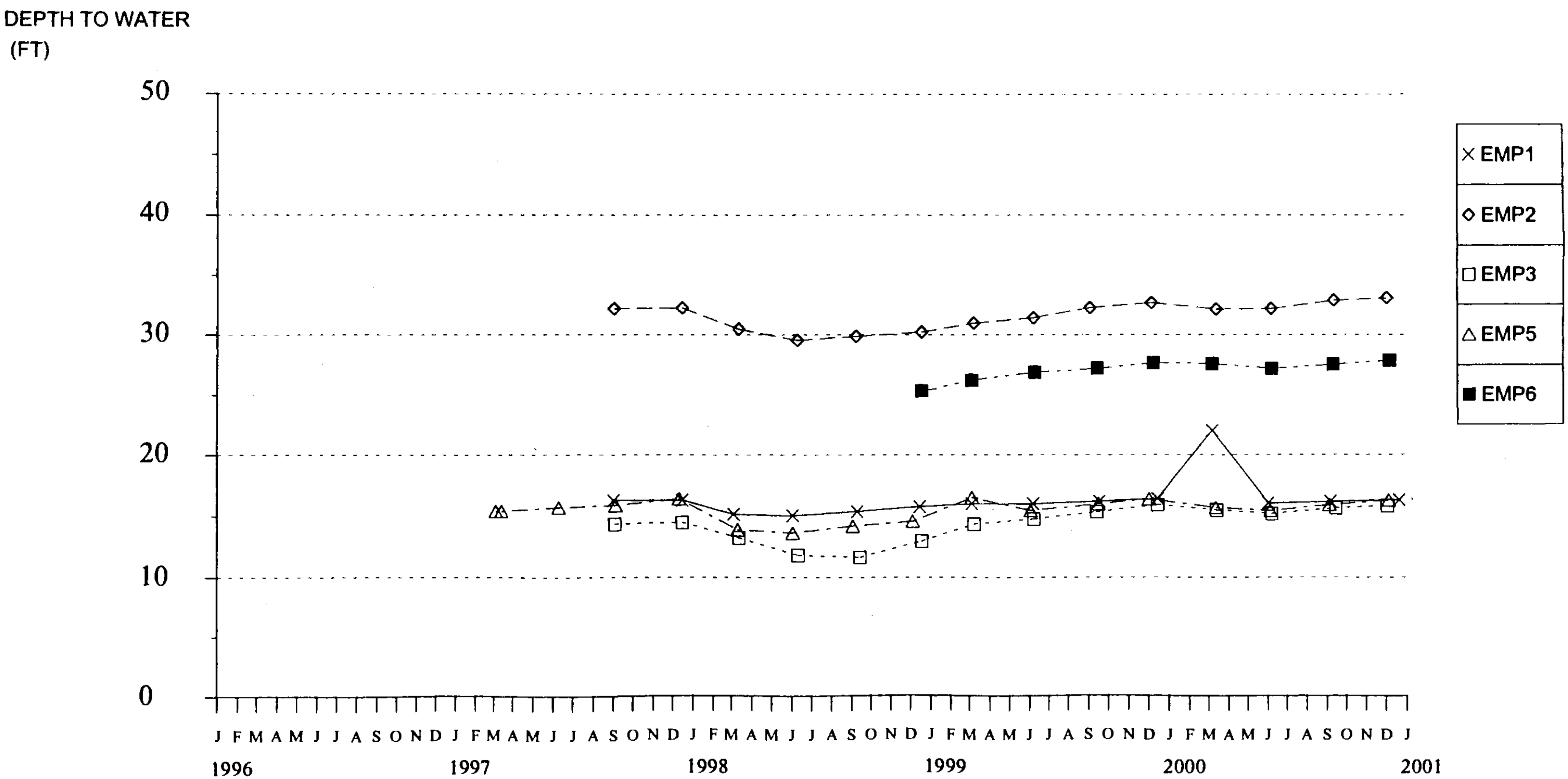


FIGURE 162
PUENTE HILLS LANDFILL
DEPTH TO BOTTOM
OFFSITE MONITORING WELLS

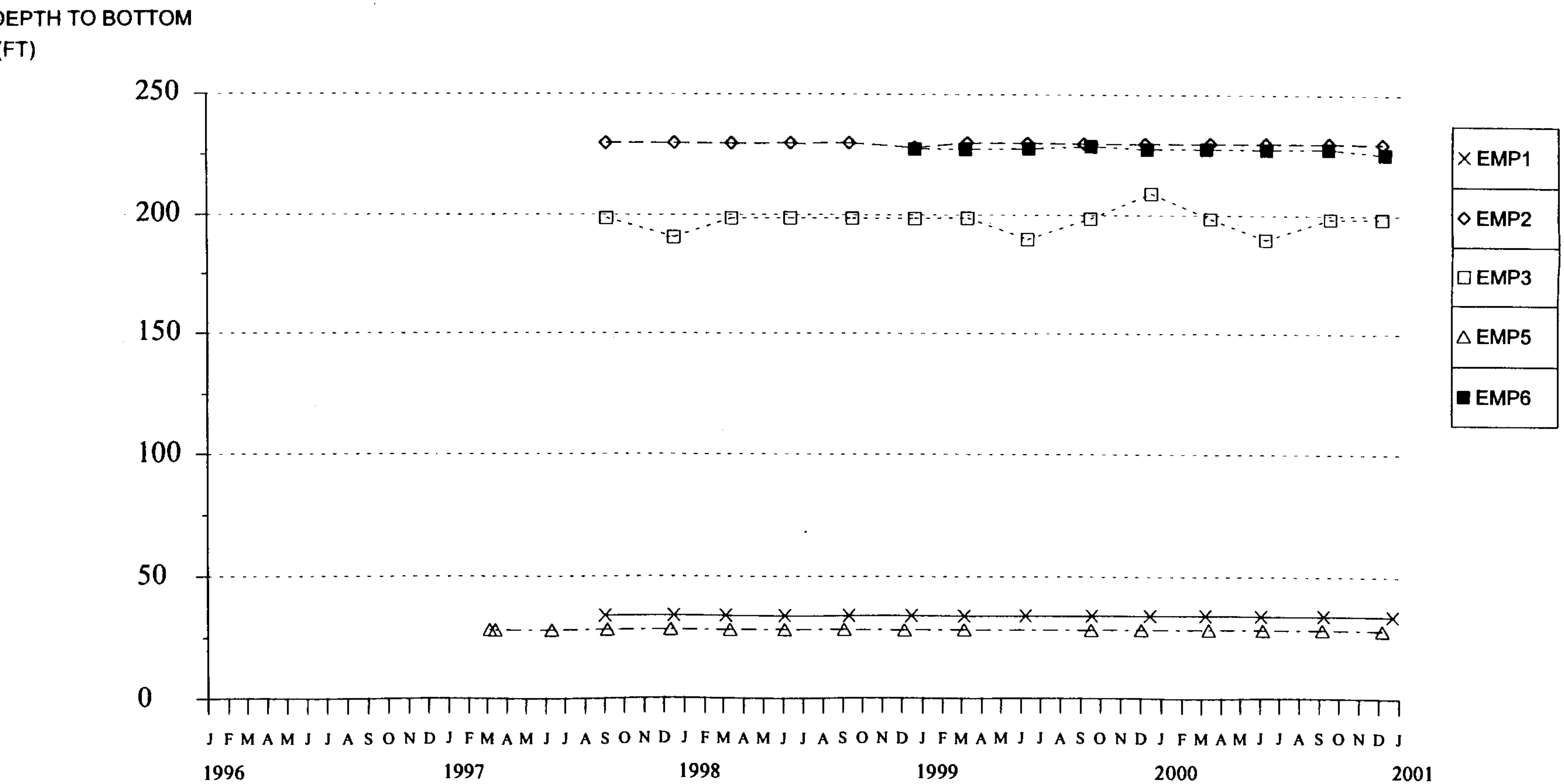


FIGURE 163
PUENTE HILLS LANDFILL
PERCENT OXYGEN IN GAS
OFFSITE MONITORING WELLS

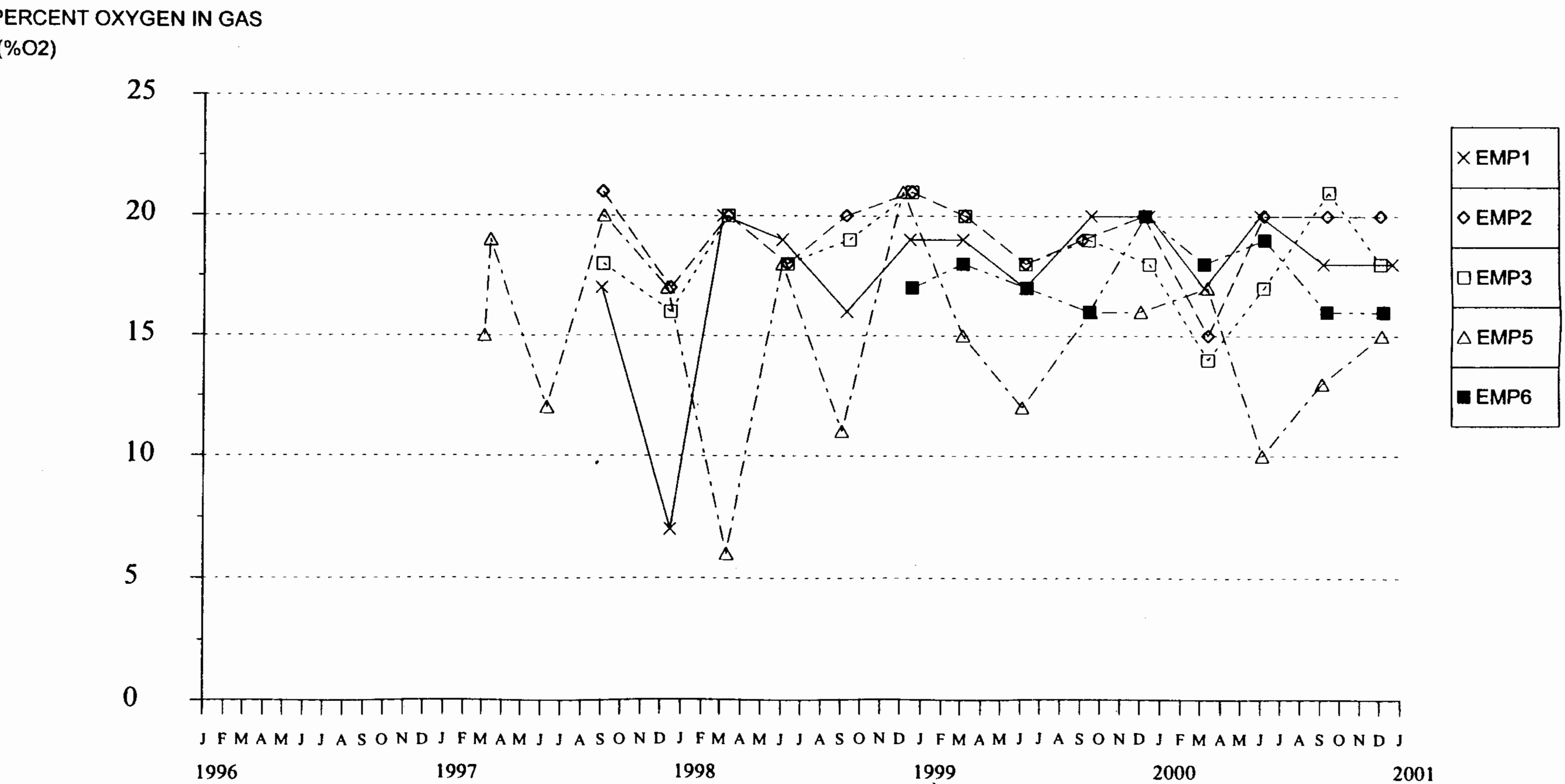


FIGURE 164
PUENTE HILLS LANDFILL
FIELD WATER TEMPERATURE
OFFSITE MONITORING WELLS

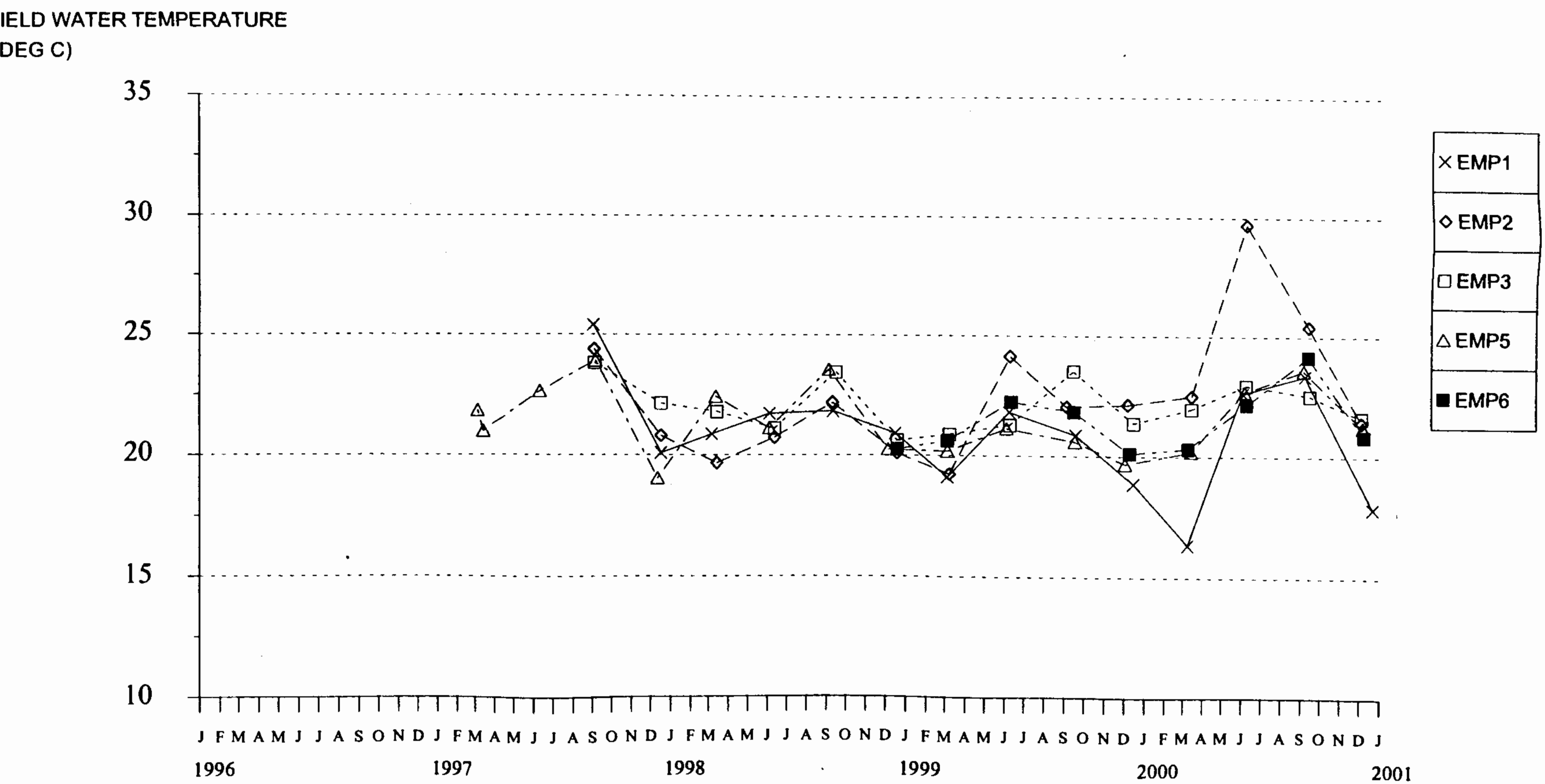


FIGURE 165
PUENTE HILLS LANDFILL
FIELD PH
OFFSITE MONITORING WELLS

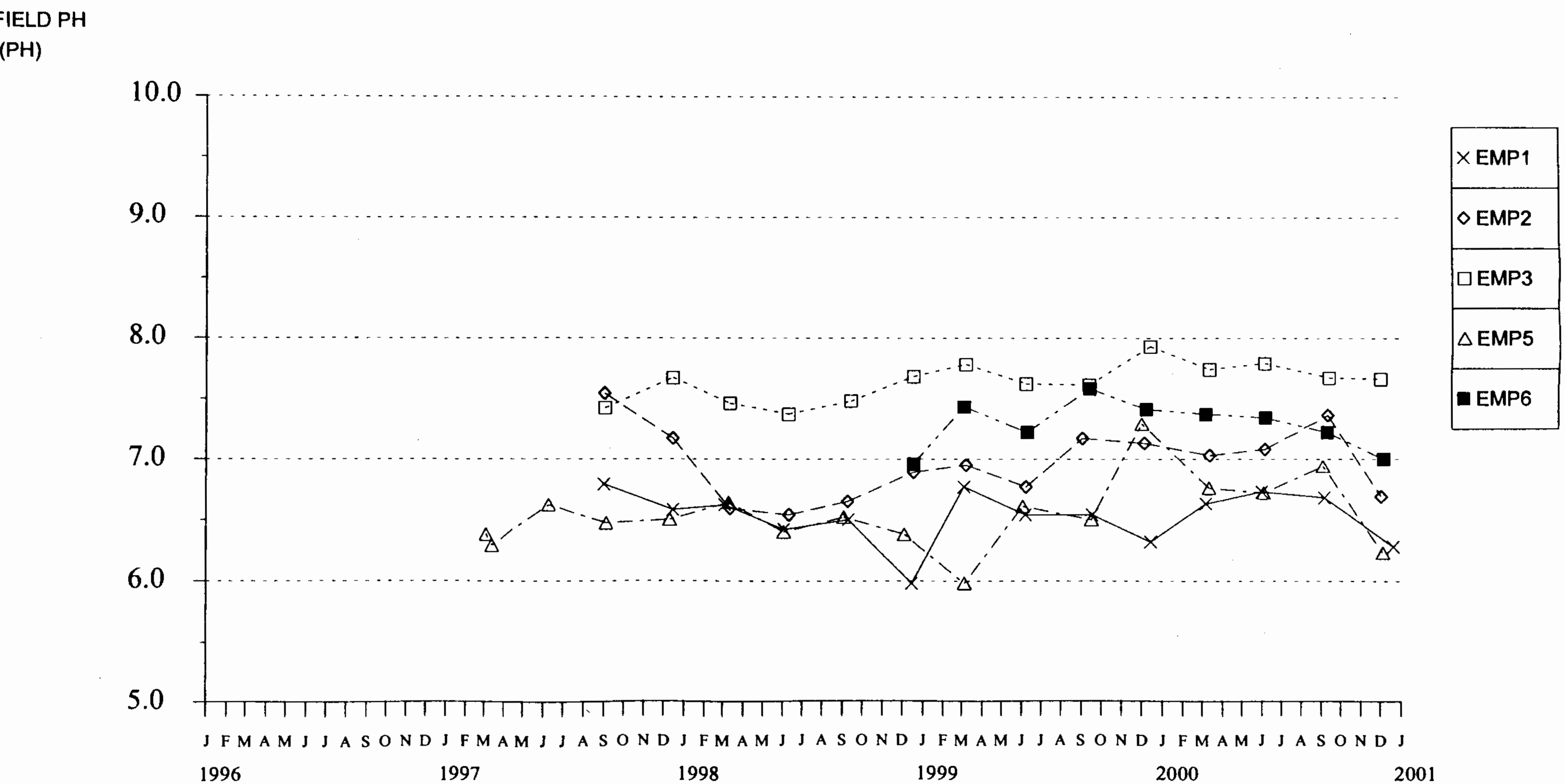


FIGURE 166

PUENTE HILLS LANDFILL

FIELD CONDUCTIVITY

OFFSITE MONITORING WELLS

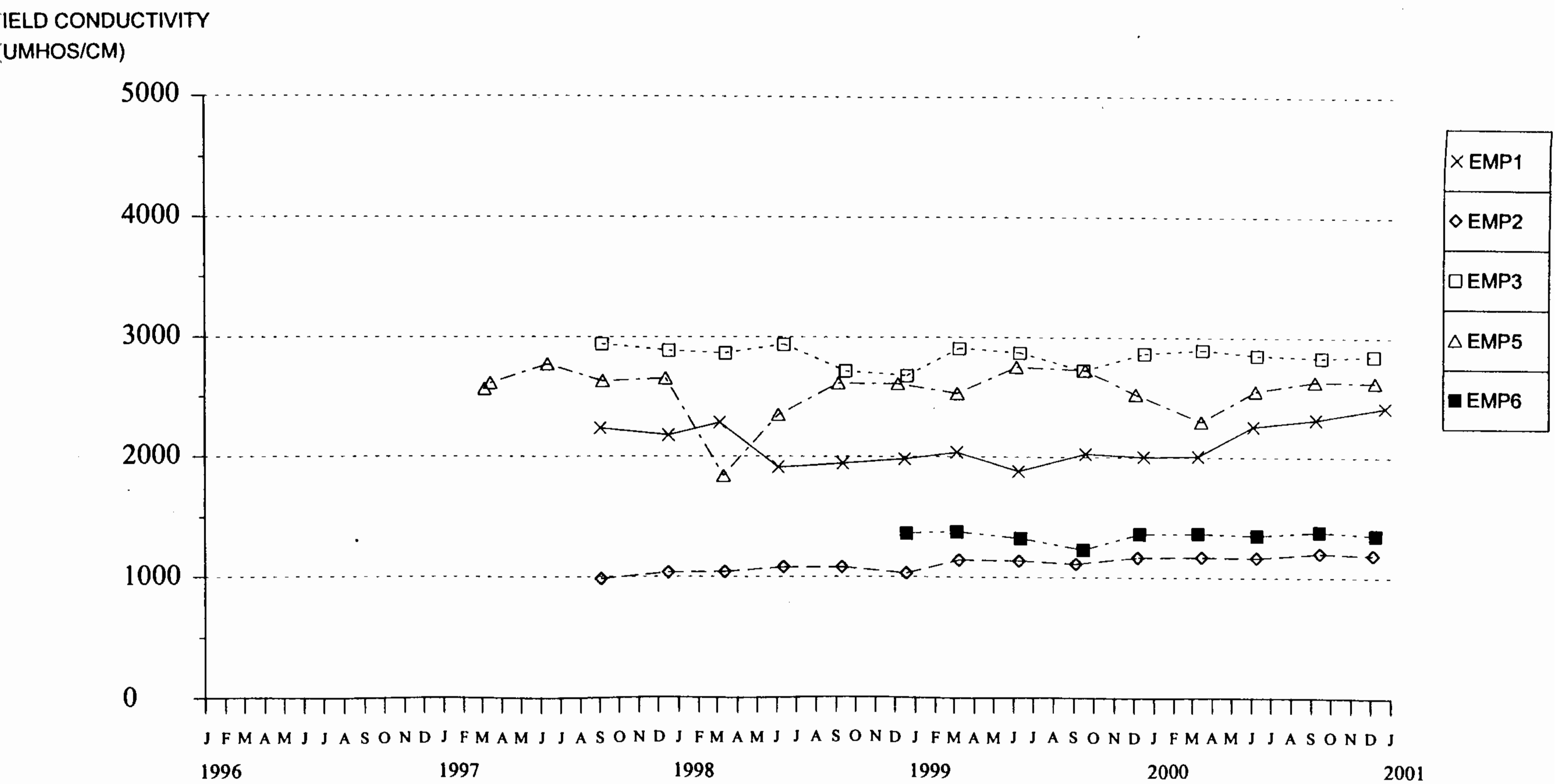


FIGURE 167
PUENTE HILLS LANDFILL
FIELD DISSOLVED O2
OFFSITE MONITORING WELLS

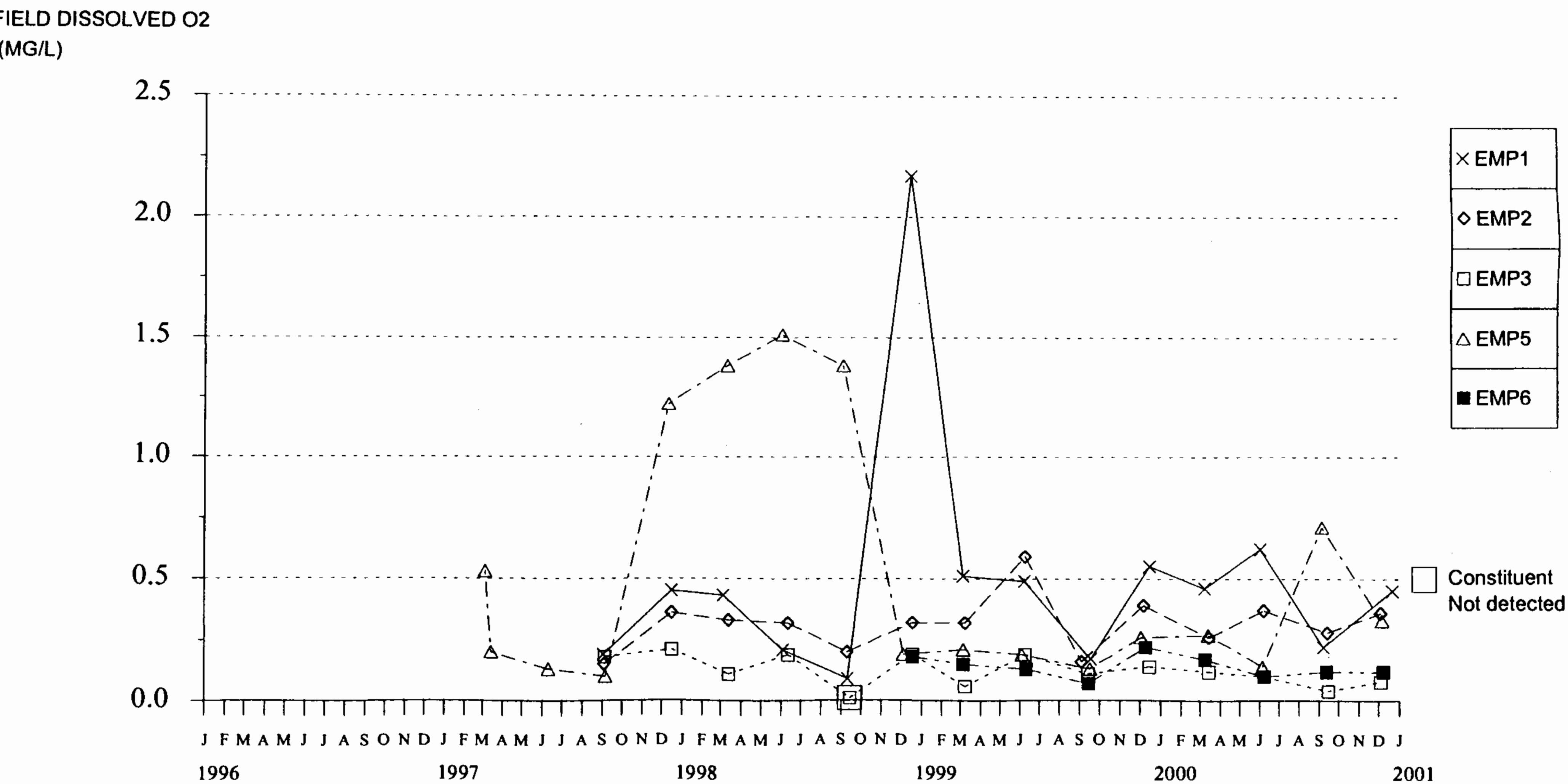


FIGURE 168
PUENTE HILLS LANDFILL
FIELD DISSOLVED CO2
OFFSITE MONITORING WELLS

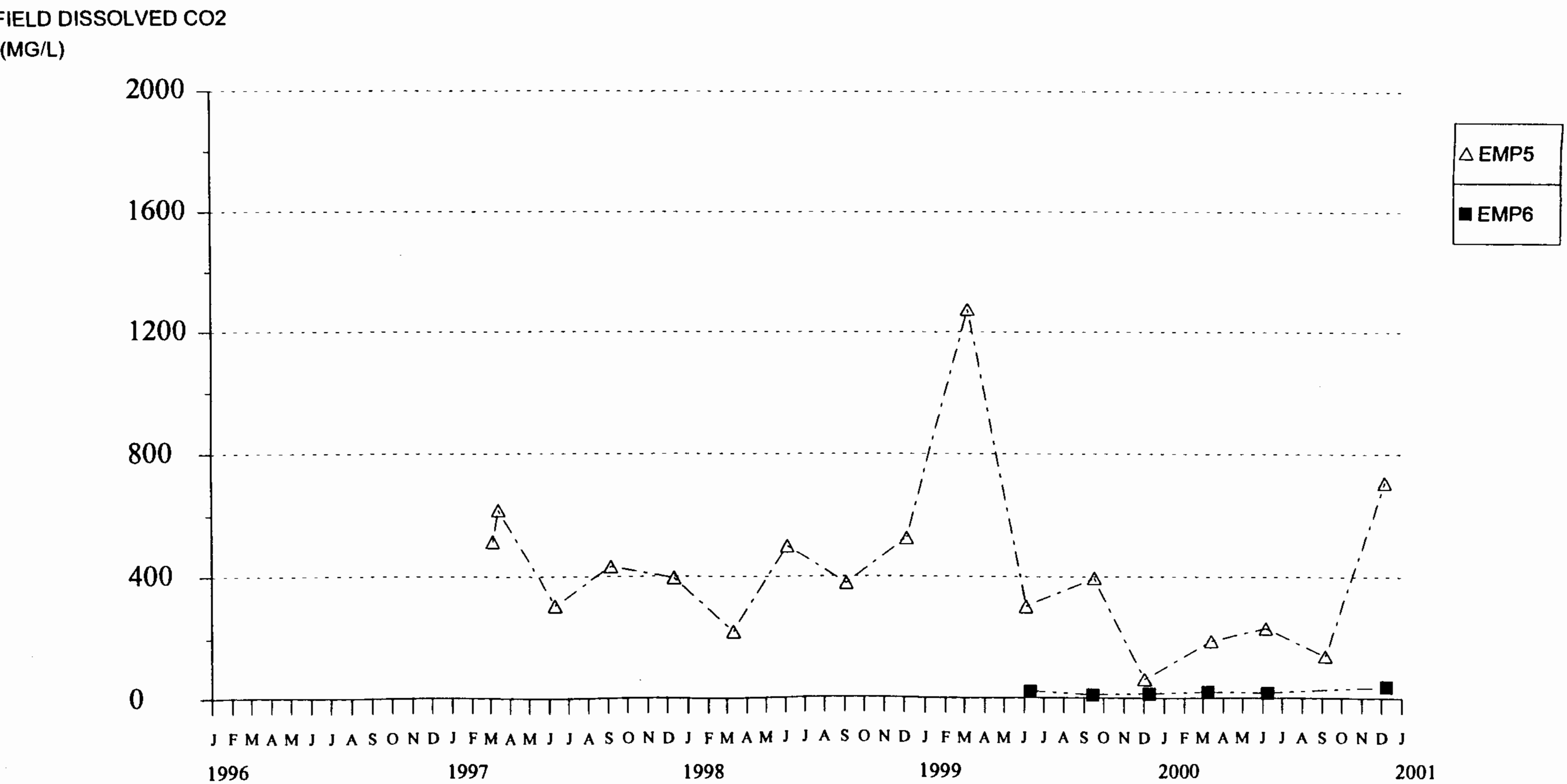


FIGURE 169
PUENTE HILLS LANDFILL
PH
OFFSITE MONITORING WELLS

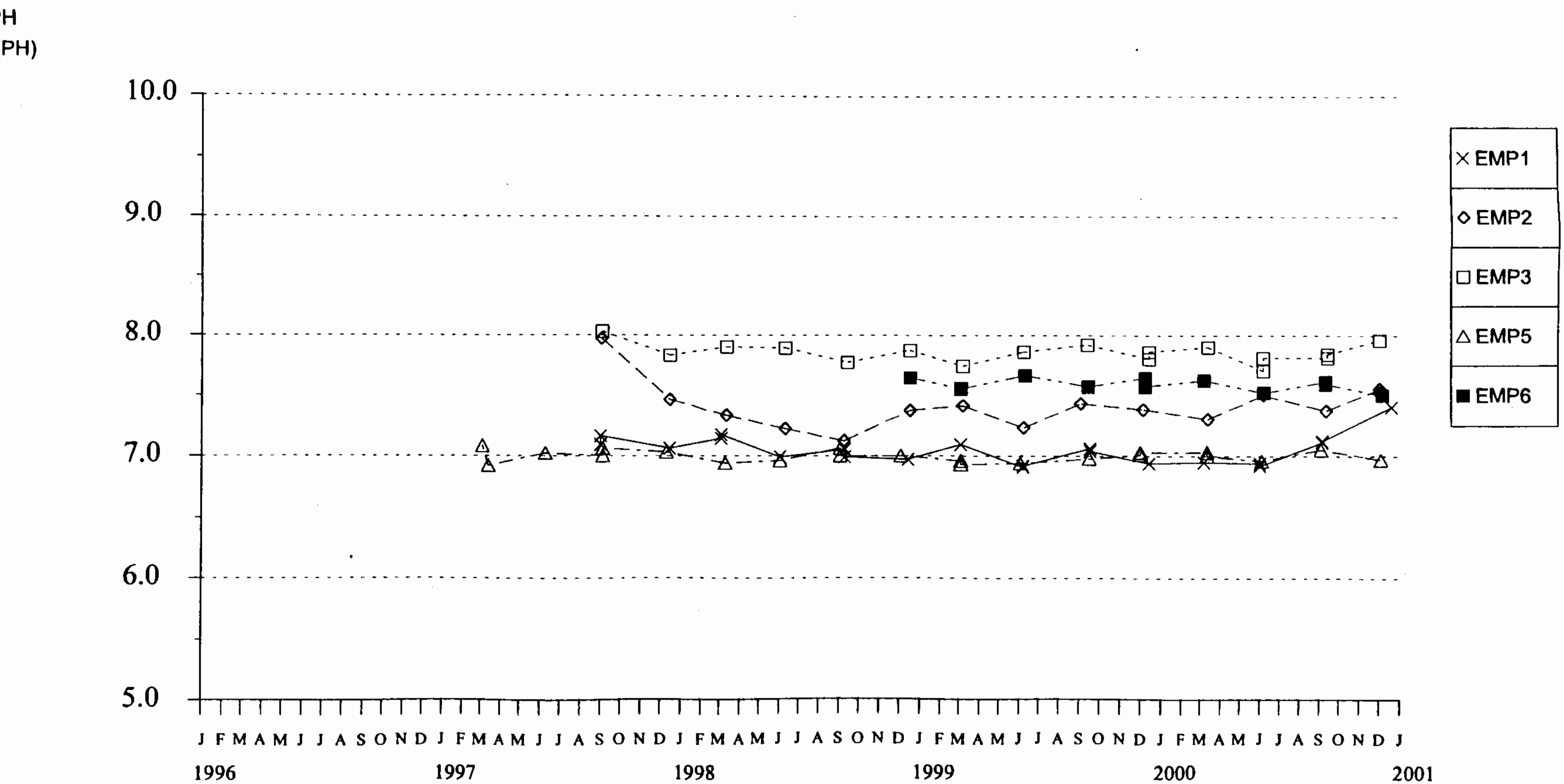


FIGURE 170
PUENTE HILLS LANDFILL
CONDUCTIVITY
OFFSITE MONITORING WELLS

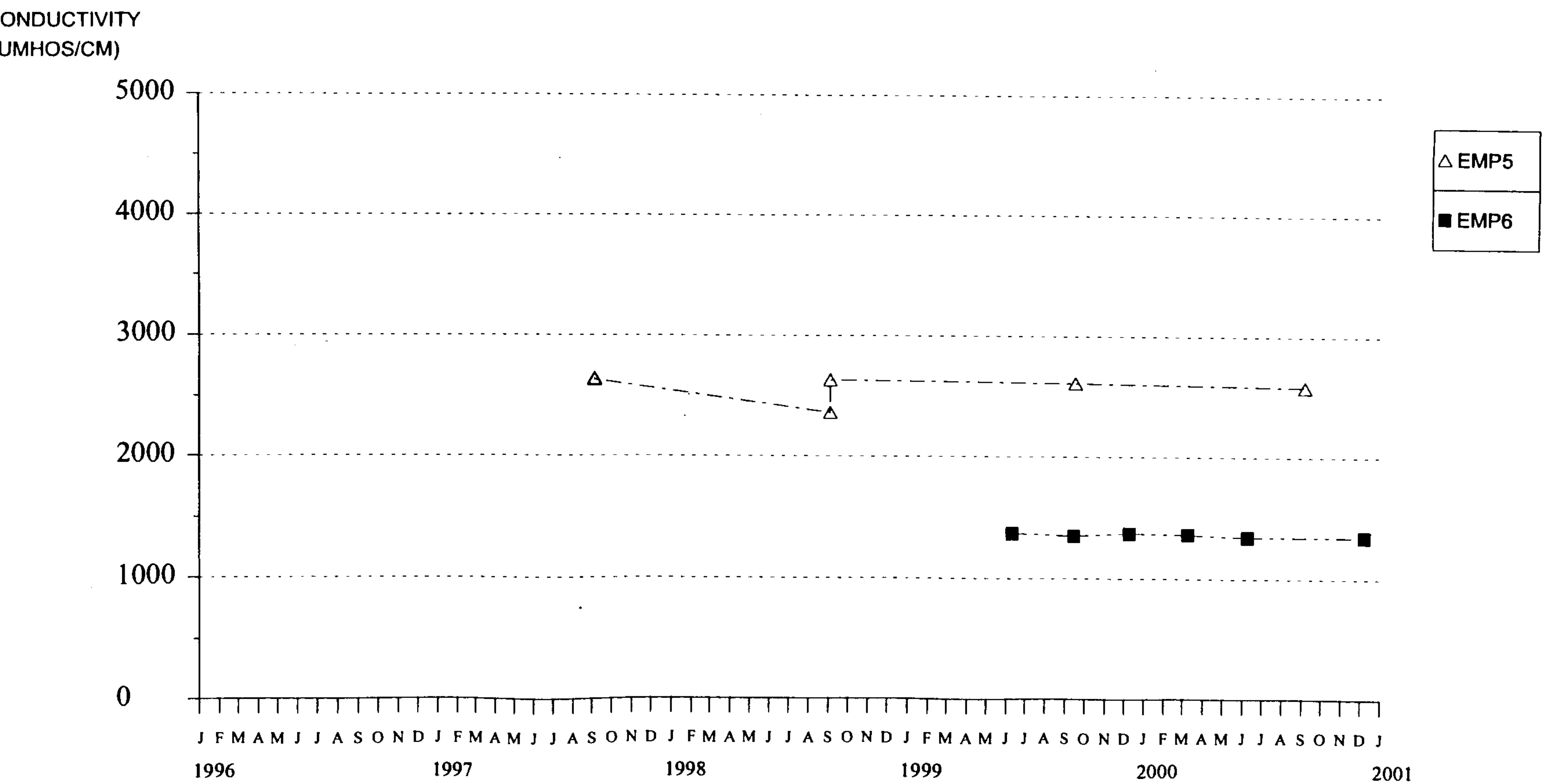


FIGURE 171
PUENTE HILLS LANDFILL
TOTAL DISSOLVED SOLIDS
OFFSITE MONITORING WELLS

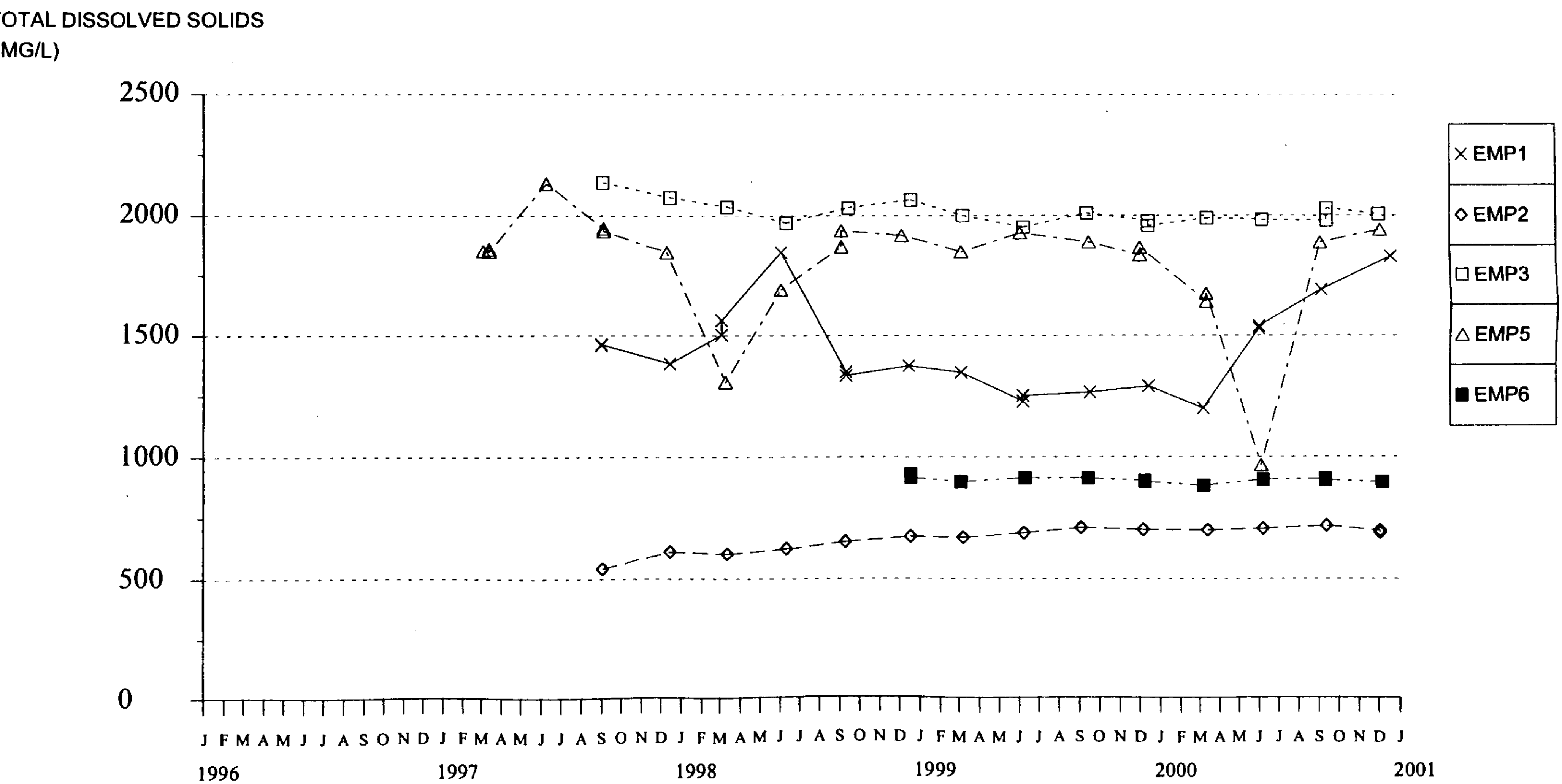


FIGURE 172
PUENTE HILLS LANDFILL
TOTAL HARDNESS
OFFSITE MONITORING WELLS

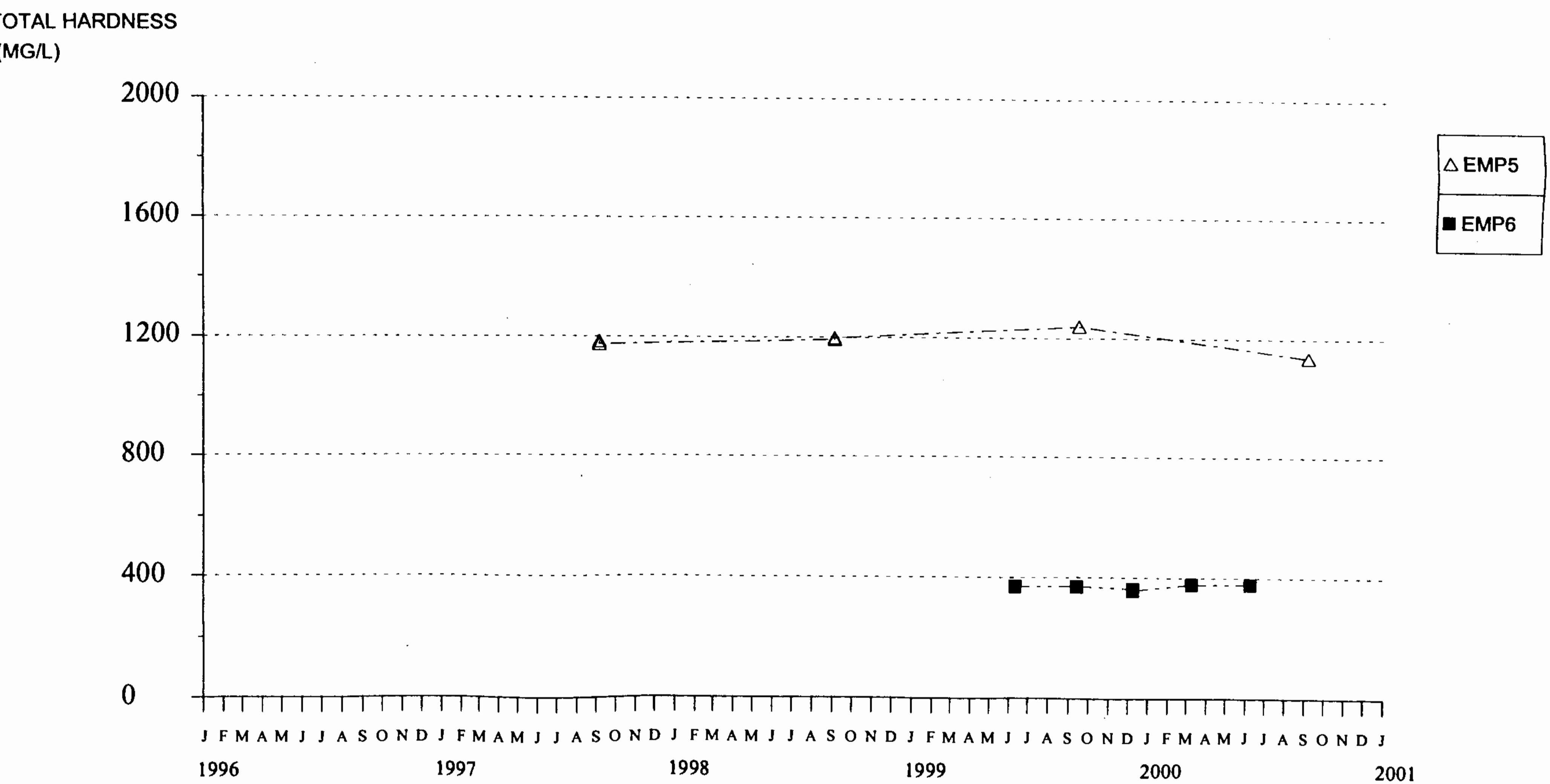


FIGURE 173
PUENTE HILLS LANDFILL
BORON
OFFSITE MONITORING WELLS

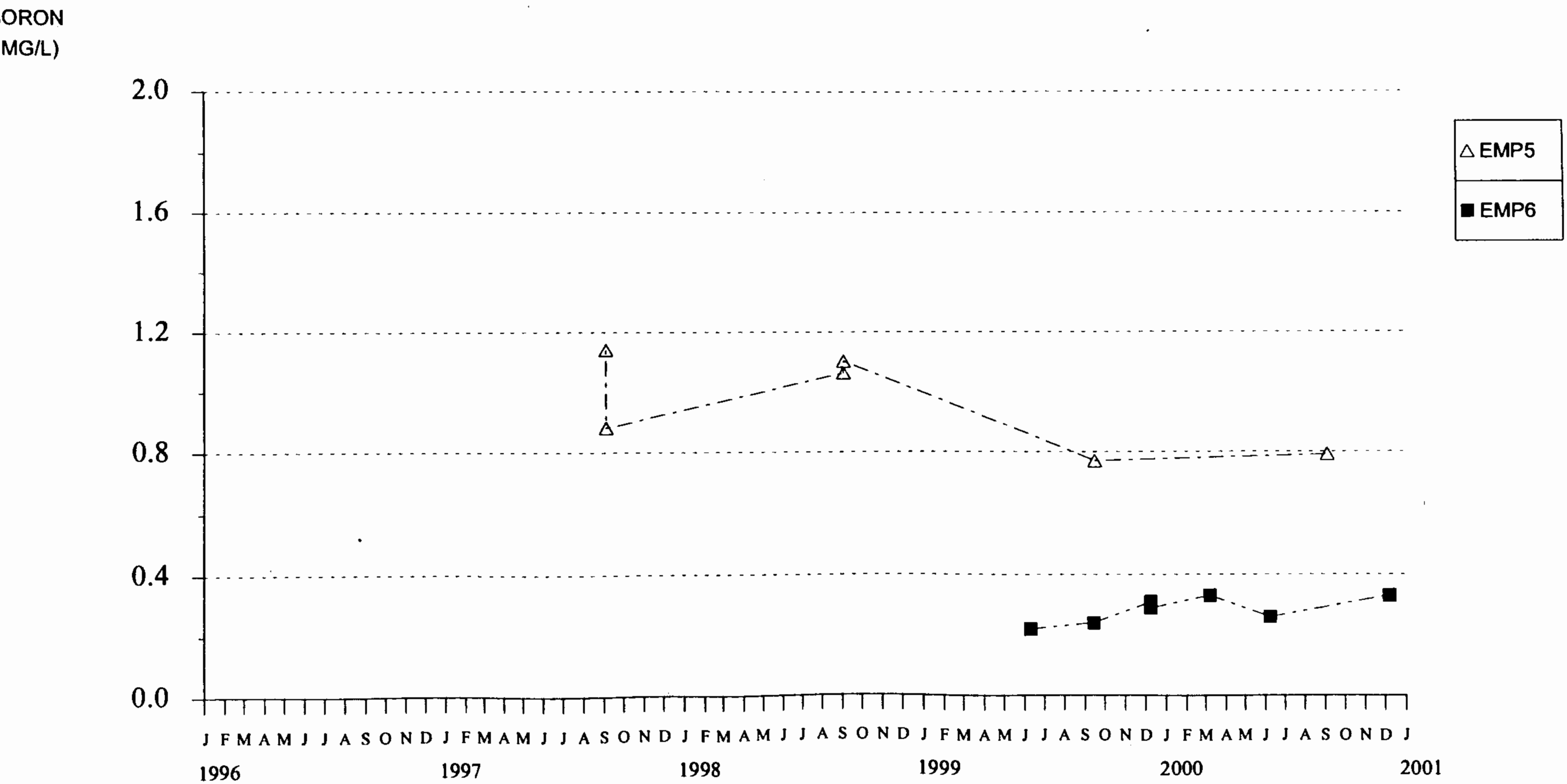


FIGURE 174
PUENTE HILLS LANDFILL
NITRATE NITROGEN
OFFSITE MONITORING WELLS

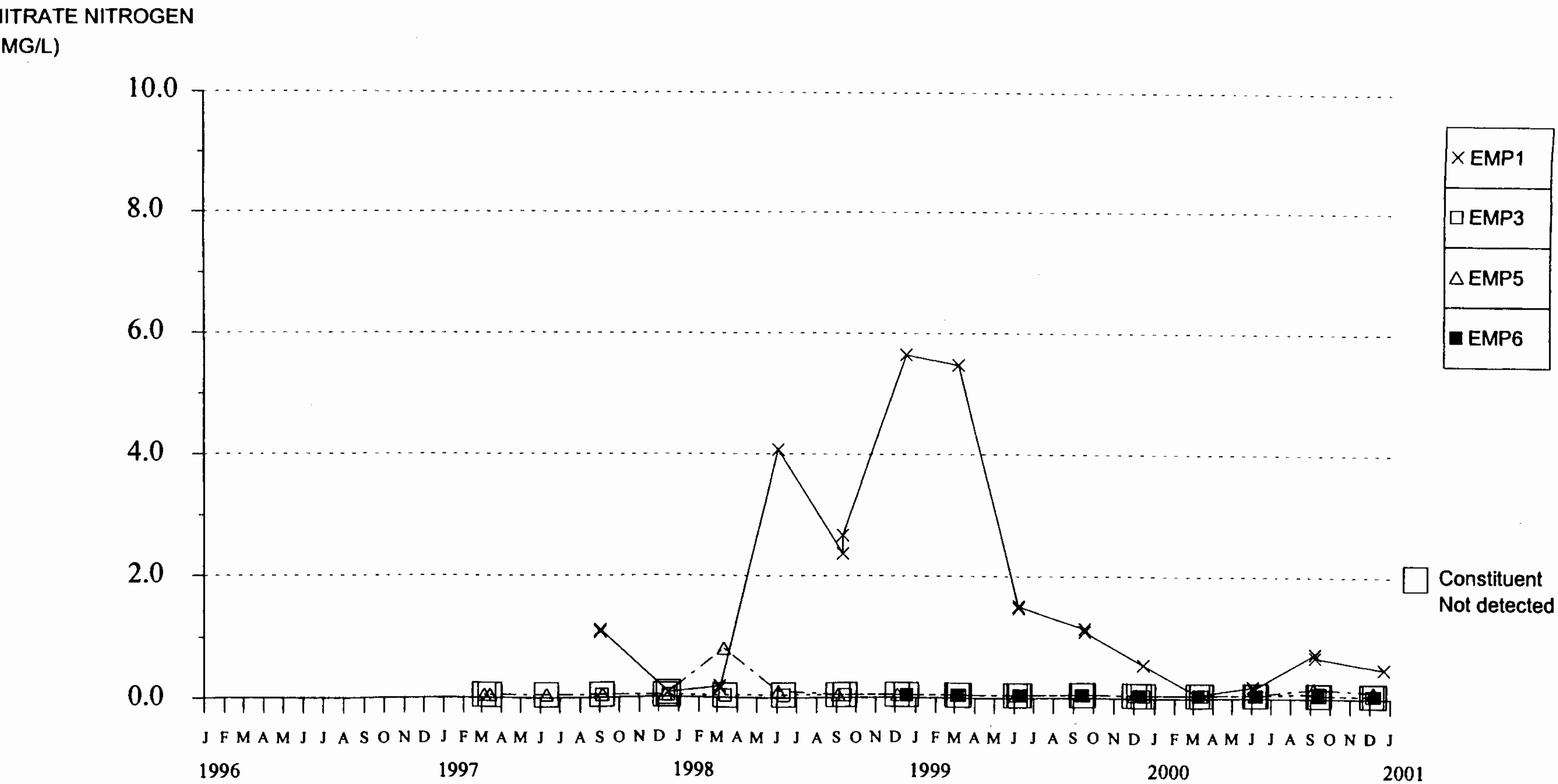


FIGURE 175
PUENTE HILLS LANDFILL
SULFATE
OFFSITE MONITORING WELLS

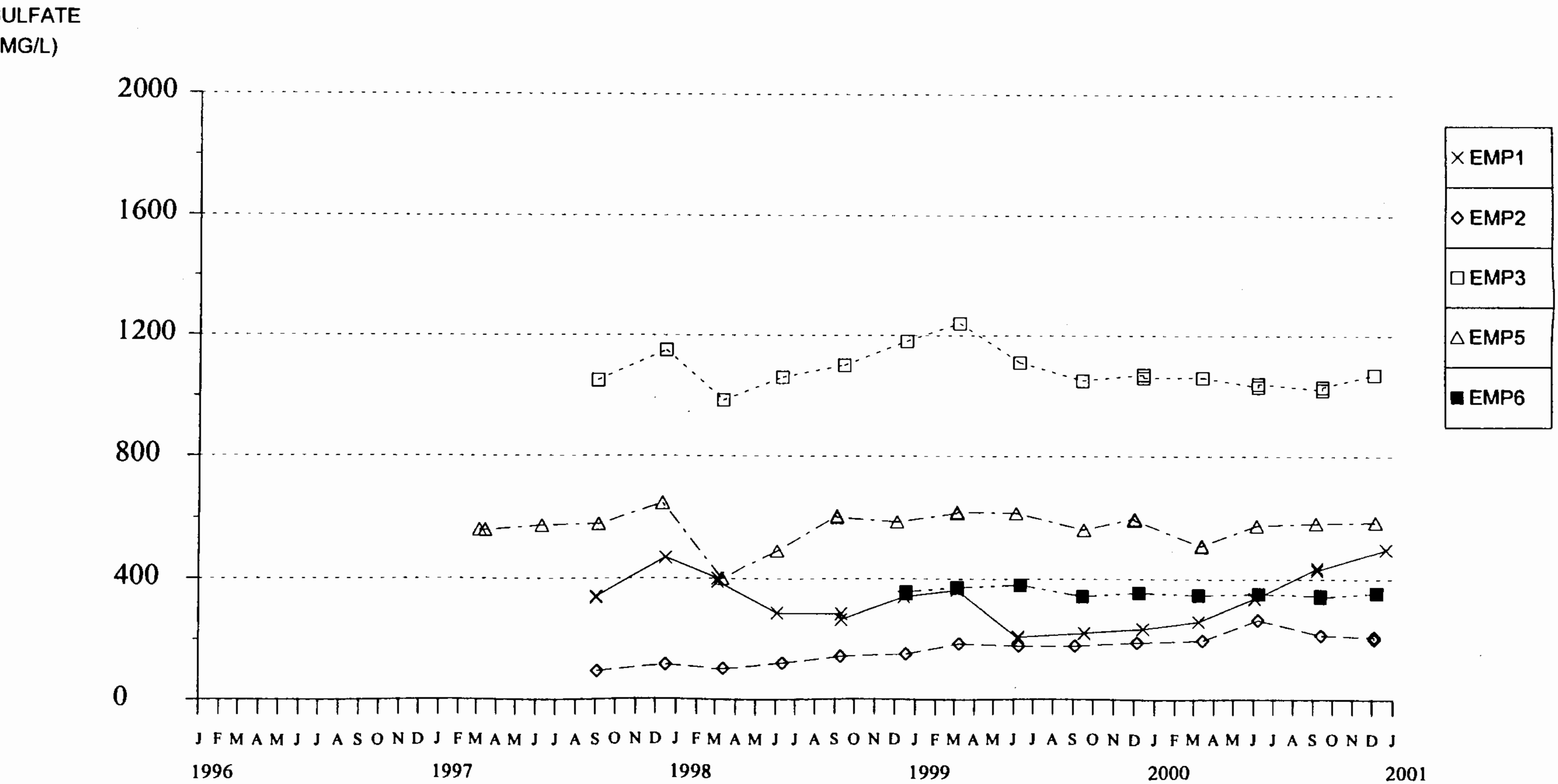


FIGURE 176
PUENTE HILLS LANDFILL
CHLORIDE
OFFSITE MONITORING WELLS

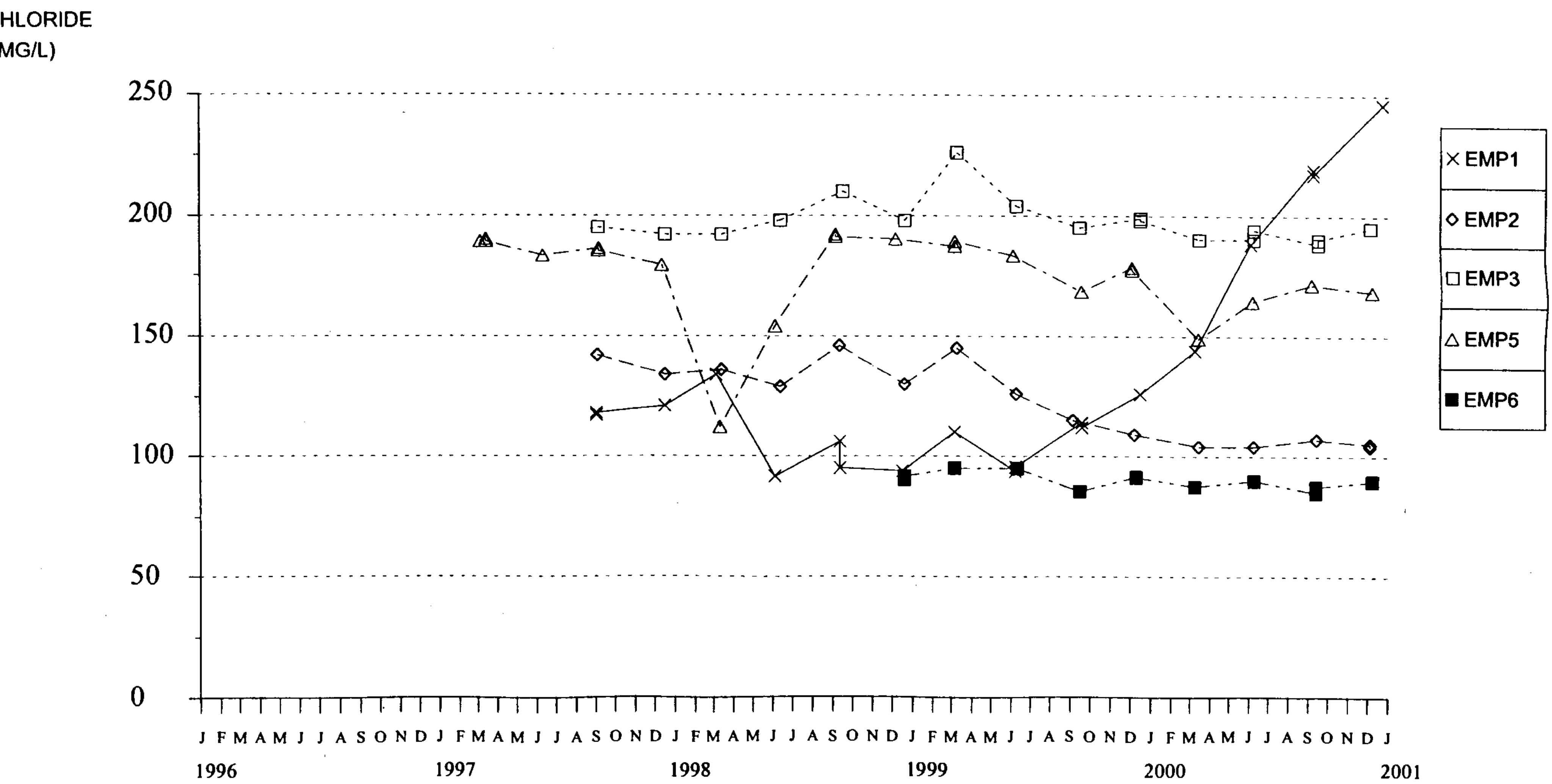


FIGURE 177

PUENTE HILLS LANDFILL

TOTAL ALKALINITY

OFFSITE MONITORING WELLS

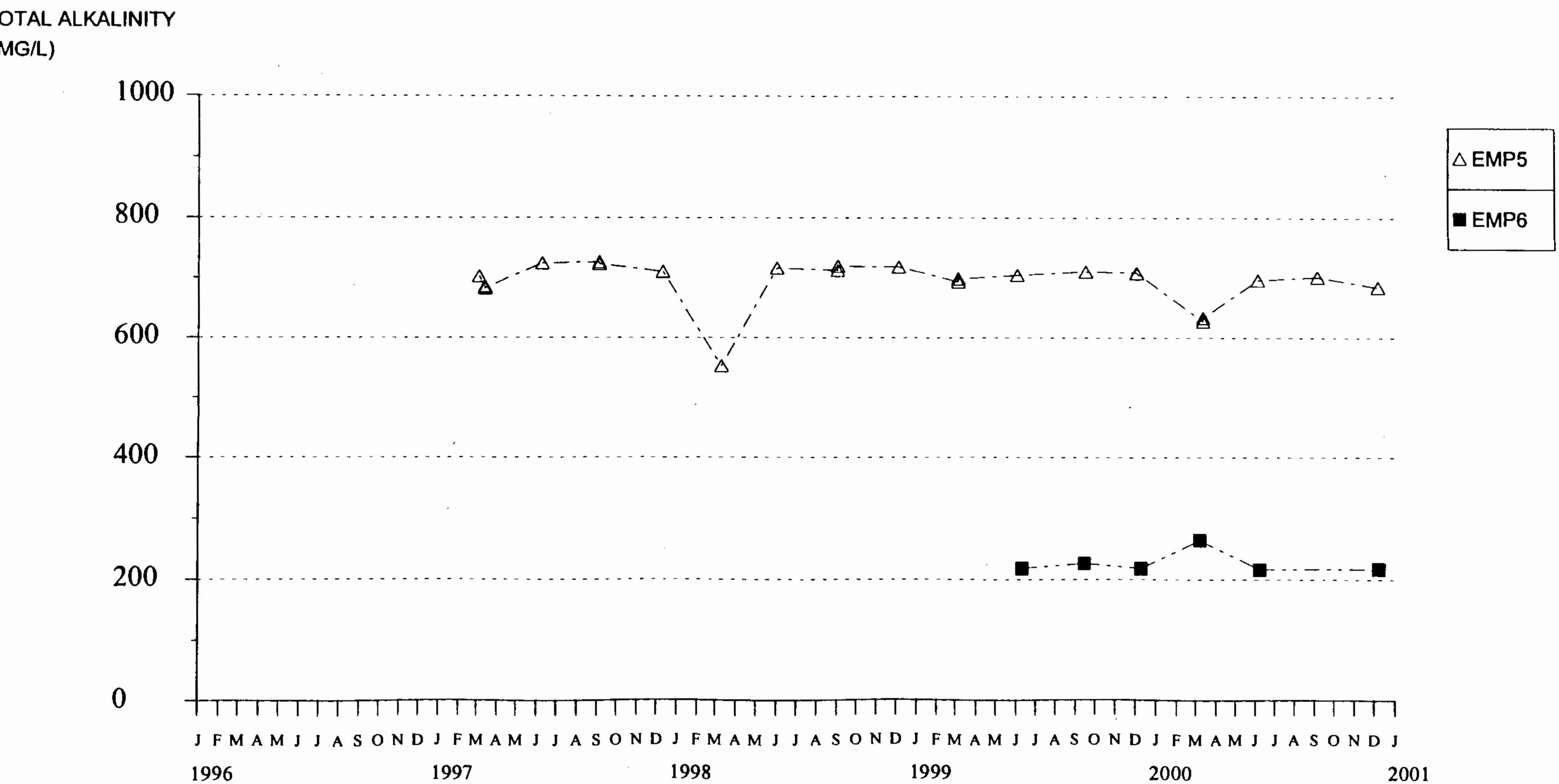


FIGURE 178
PUENTE HILLS LANDFILL
FLUORIDE
OFFSITE MONITORING WELLS

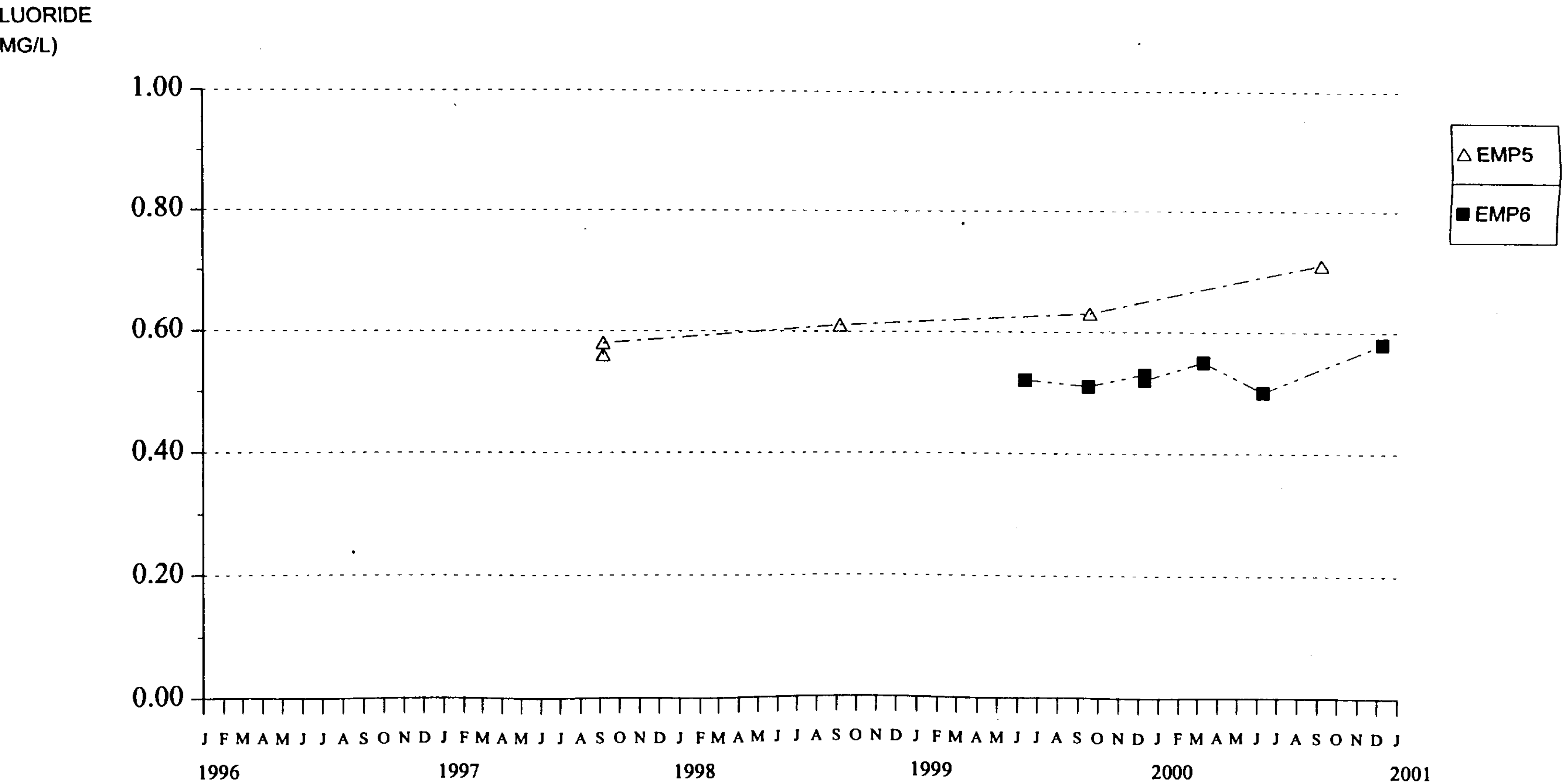


FIGURE 179
PUENTE HILLS LANDFILL
BICARBONATE ALKALINITY
OFFSITE MONITORING WELLS

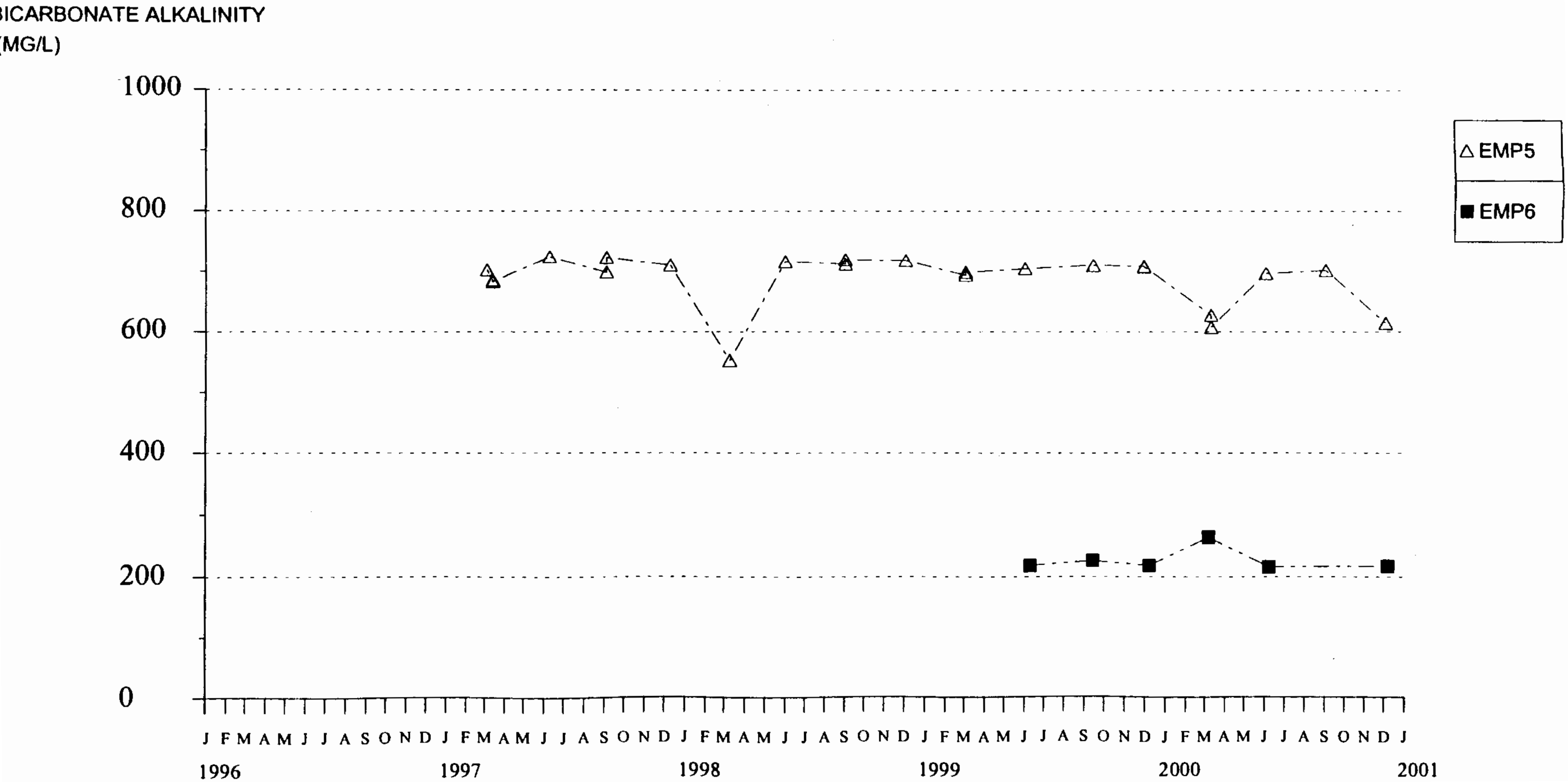


FIGURE 180
PUENTE HILLS LANDFILL
CALCIUM-HARDNESS
OFFSITE MONITORING WELLS

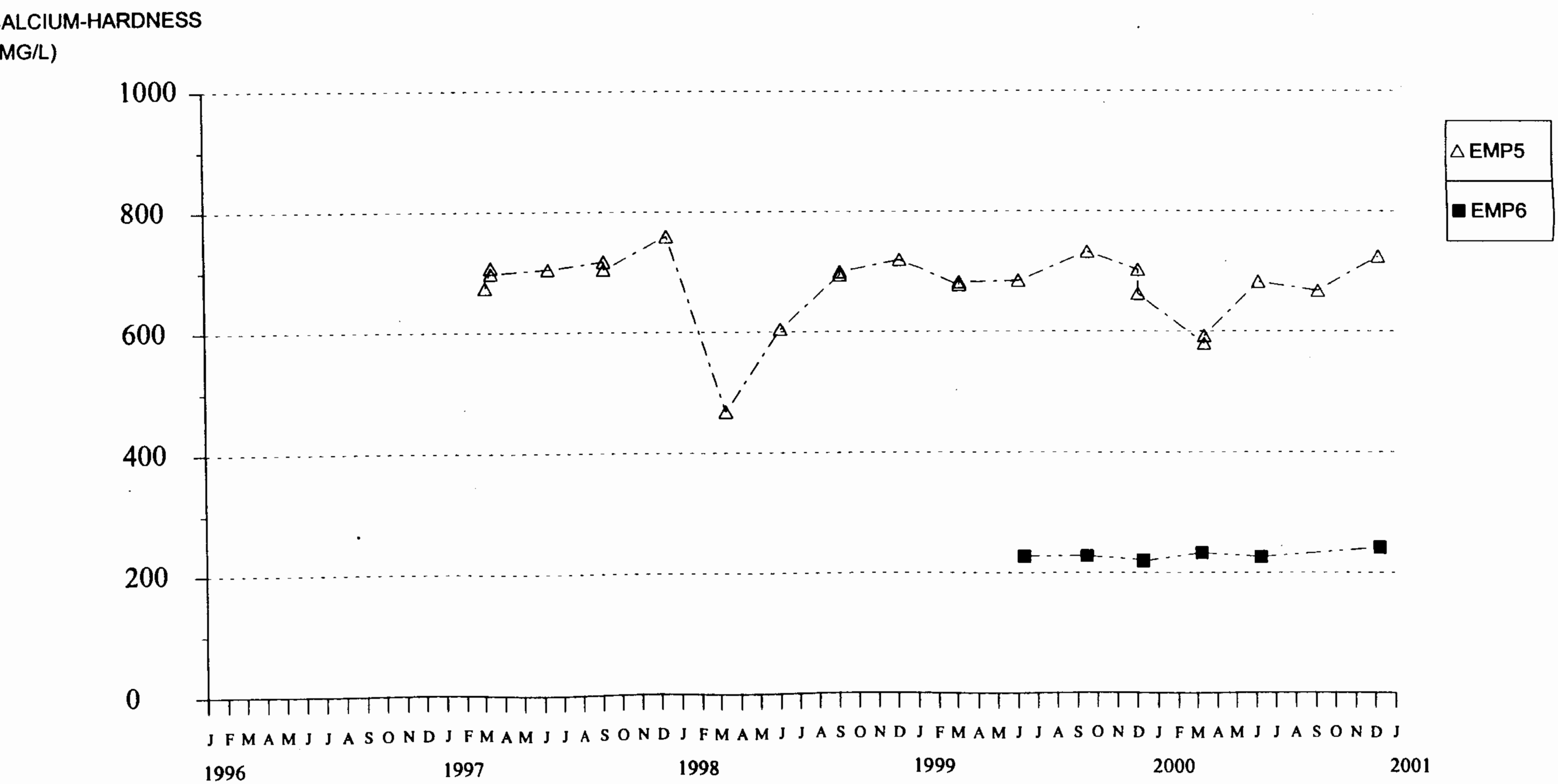


FIGURE 181
PUENTE HILLS LANDFILL
MAGNESIUM-HARDNESS
OFFSITE MONITORING WELLS

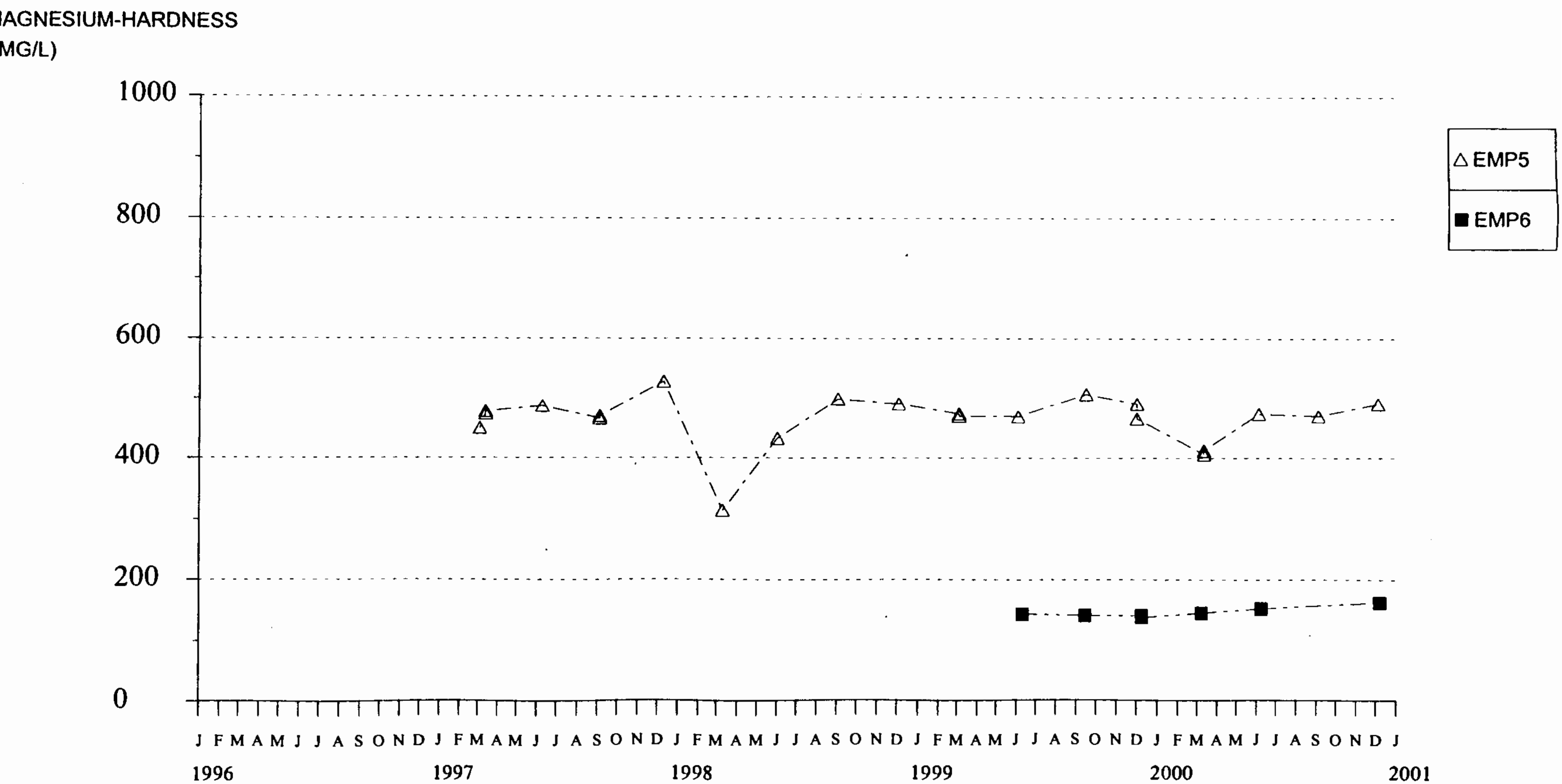


FIGURE 182
PUENTE HILLS LANDFILL
SODIUM
OFFSITE MONITORING WELLS

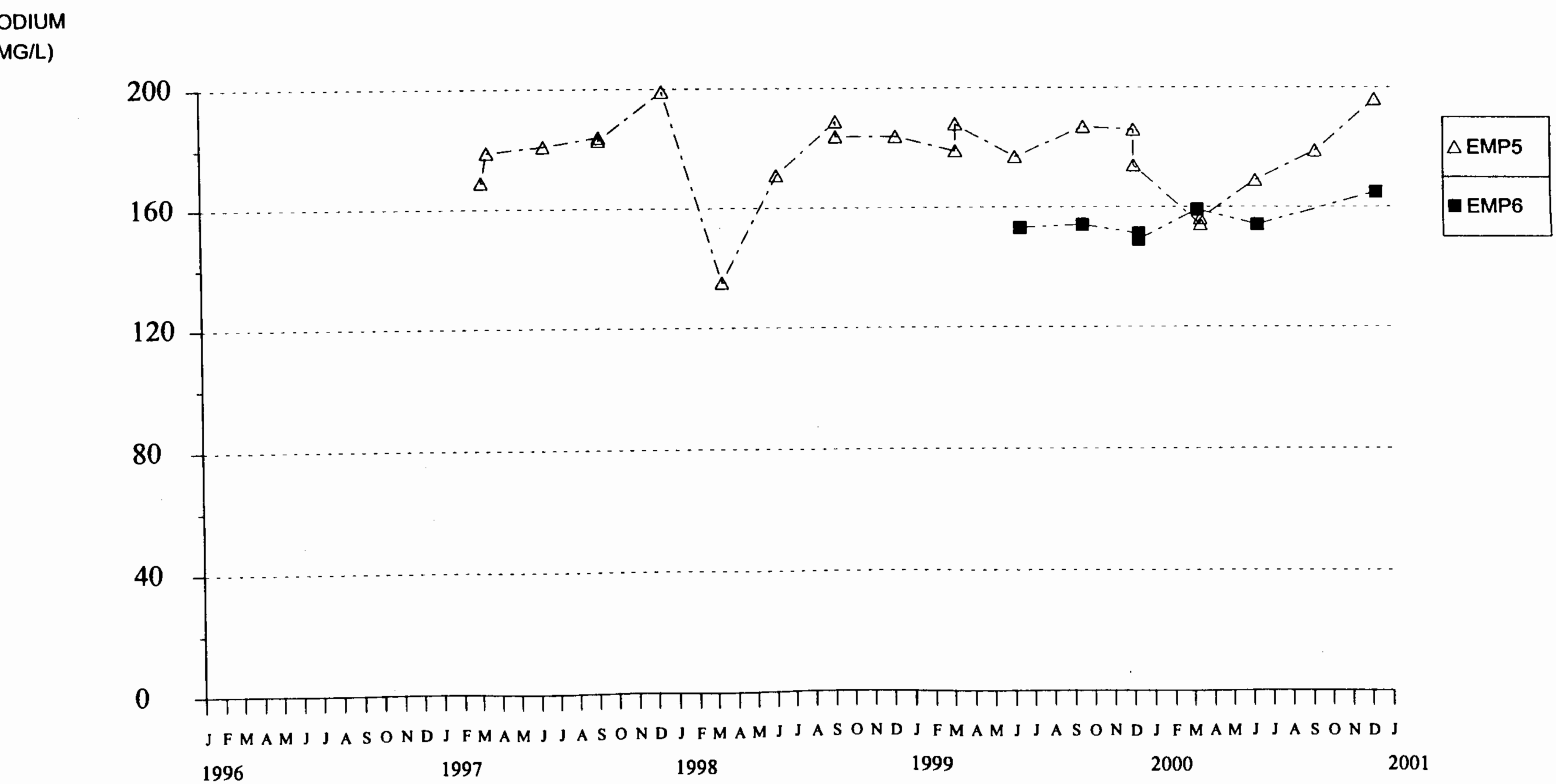


FIGURE 183

PUENTE HILLS LANDFILL

POTASSIUM

OFFSITE MONITORING WELLS

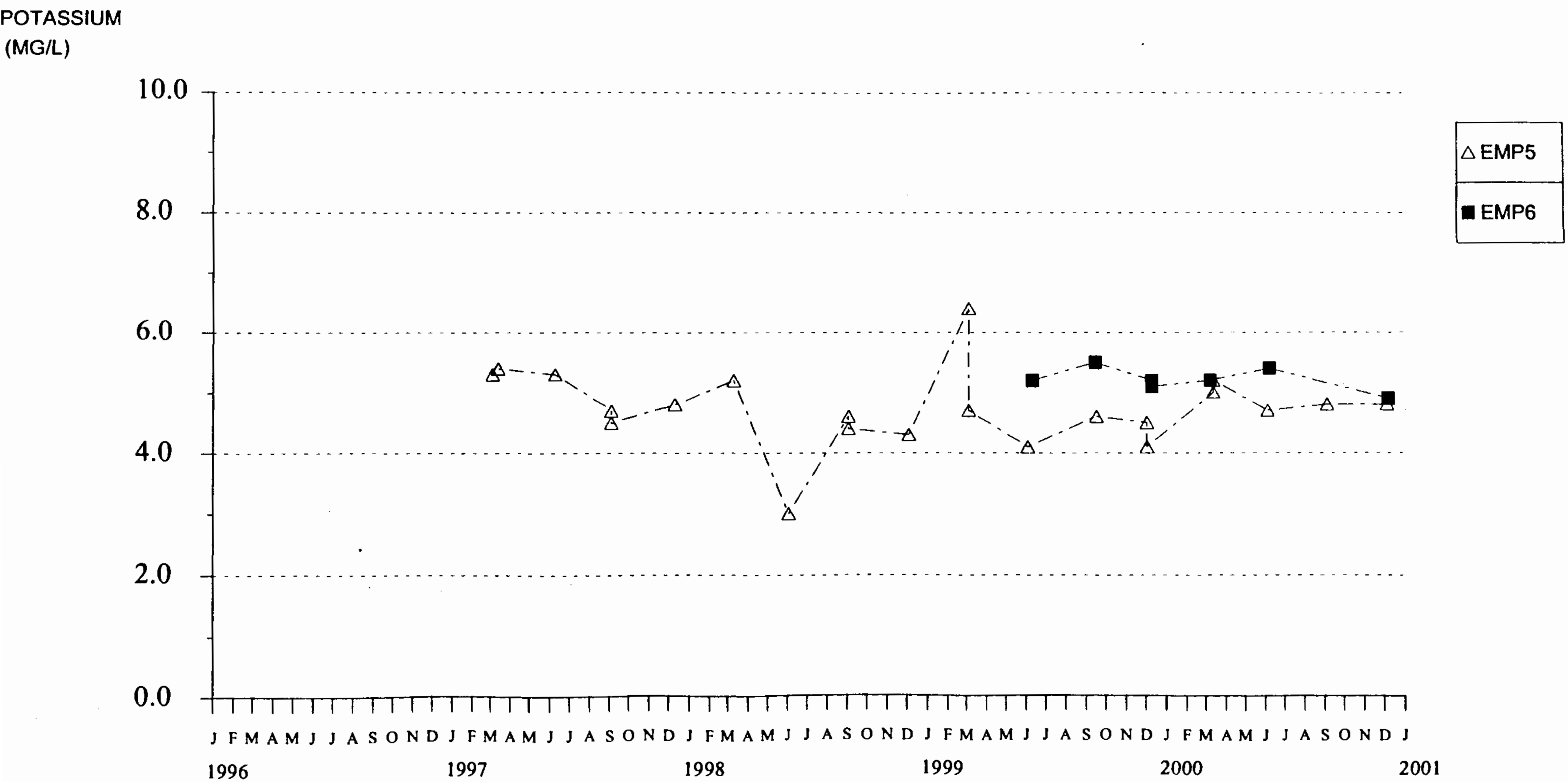


FIGURE 184
PUENTE HILLS LANDFILL
IRON
OFFSITE MONITORING WELLS

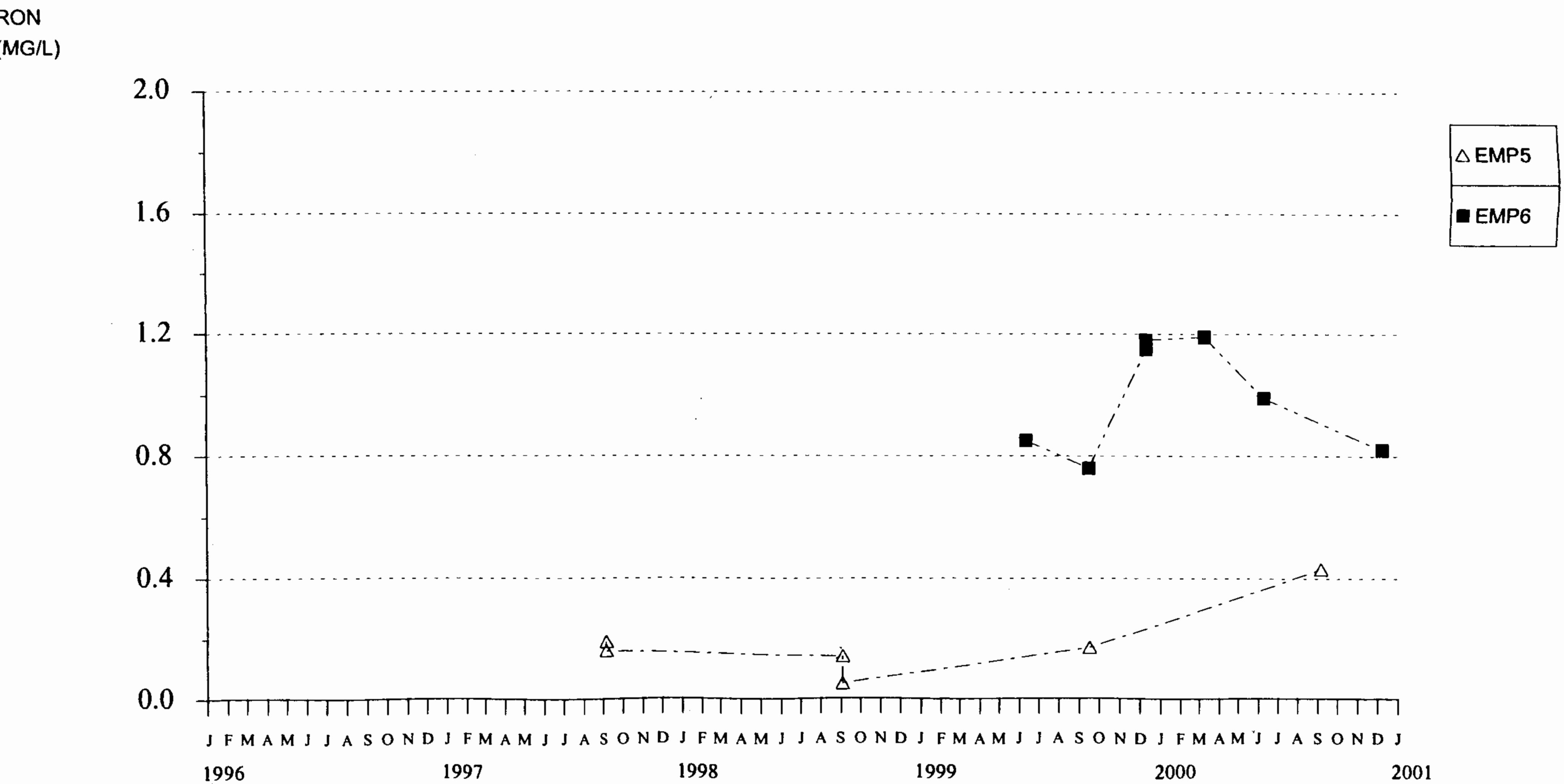


FIGURE 185
PUENTE HILLS LANDFILL
MANGANESE
OFFSITE MONITORING WELLS

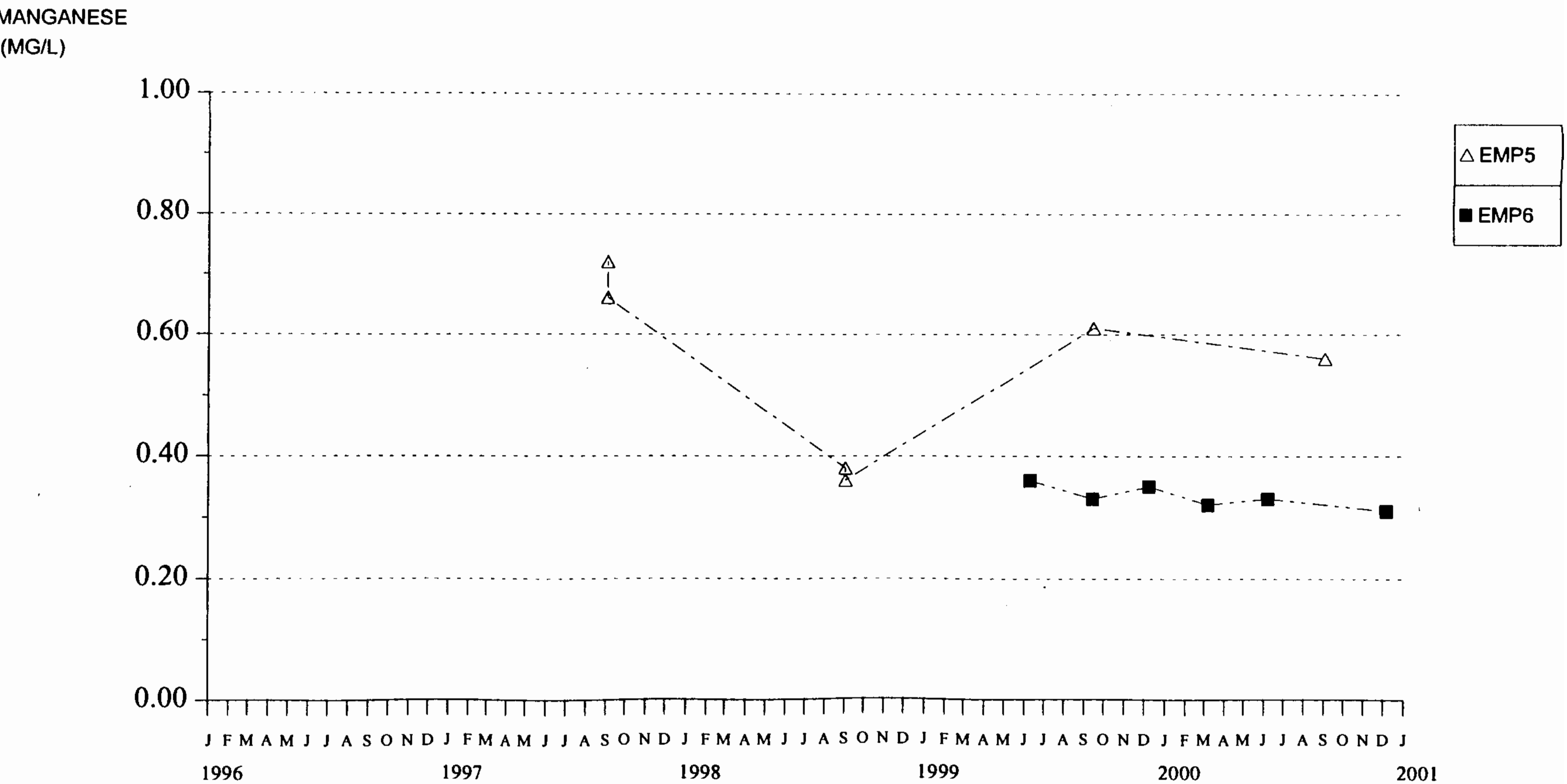


FIGURE 186
PUENTE HILLS LANDFILL
AMMONIA NITROGEN
OFFSITE MONITORING WELLS

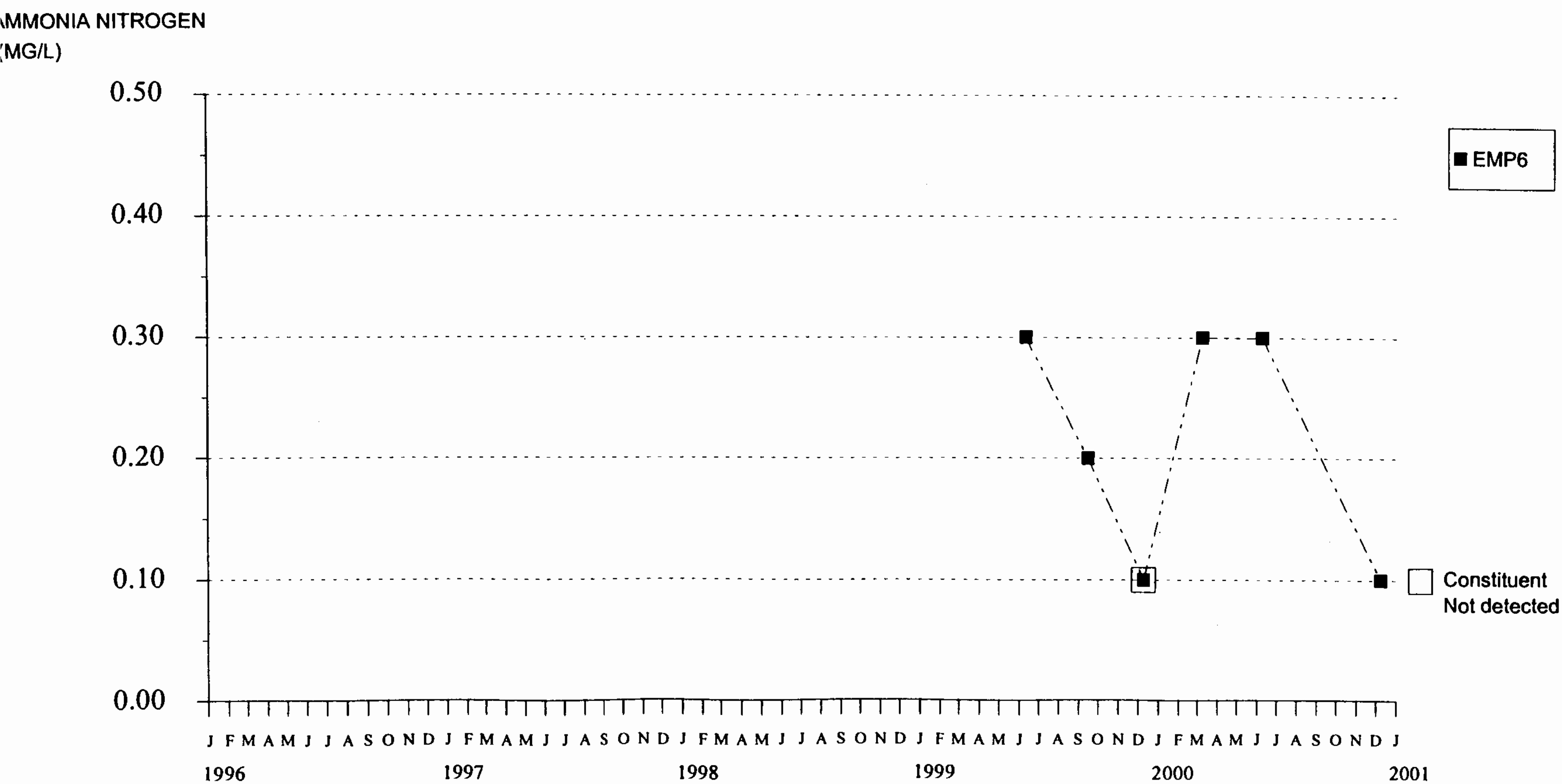


FIGURE 187
PUENTE HILLS LANDFILL
TOTAL COD
OFFSITE MONITORING WELLS

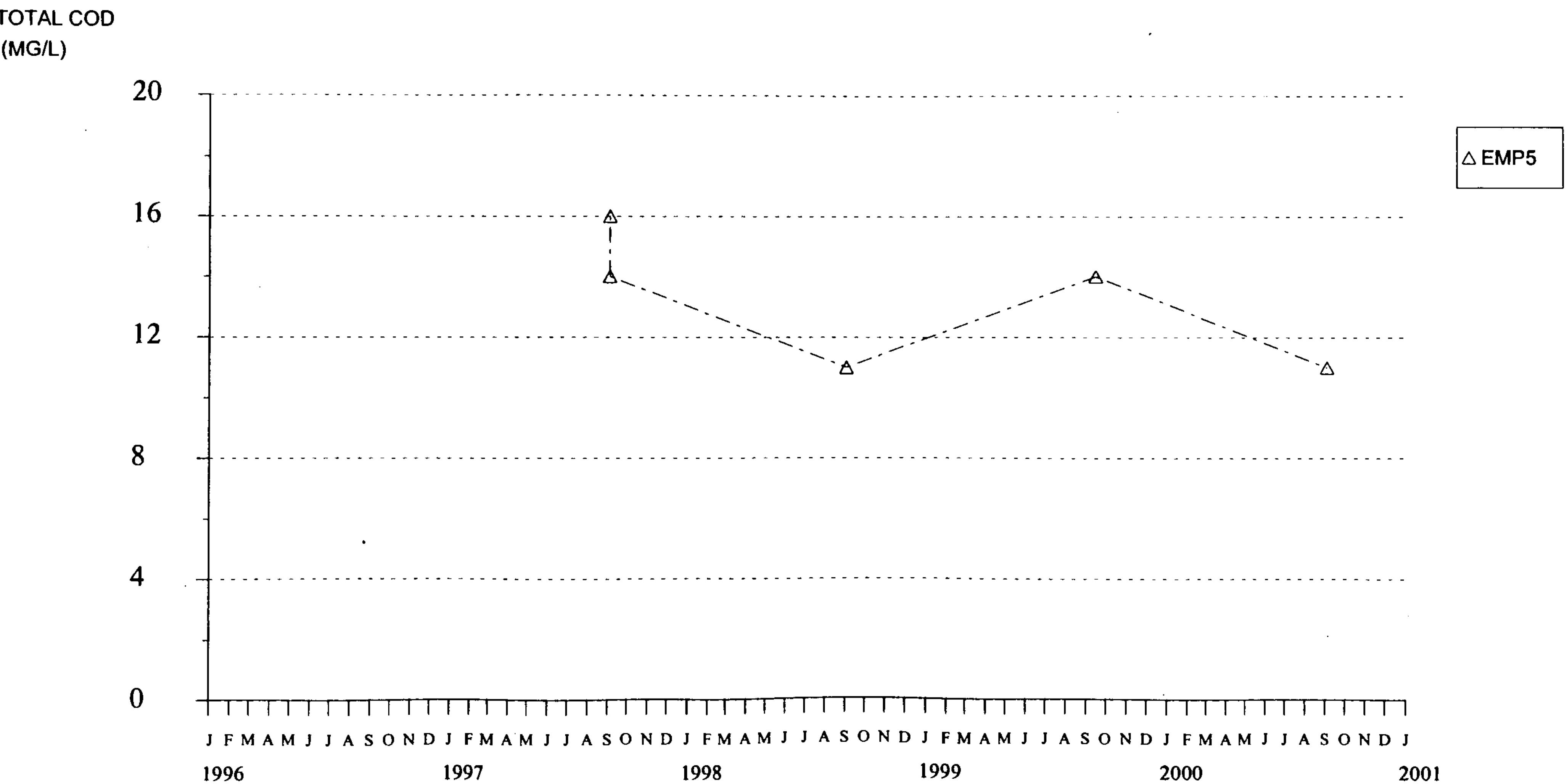


FIGURE 188
PUENTE HILLS LANDFILL
SOLUBLE COD
OFFSITE MONITORING WELLS

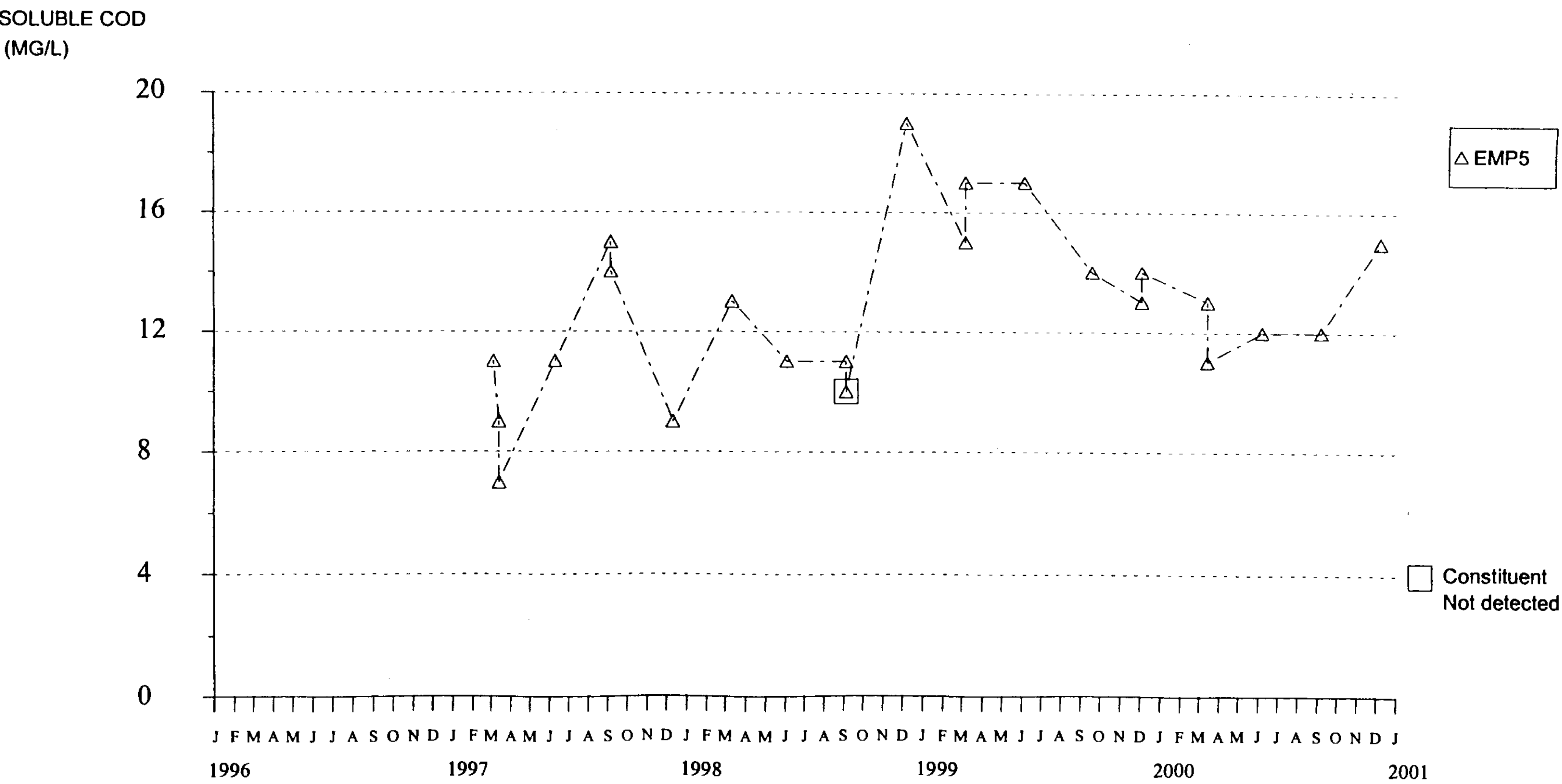


FIGURE 189
PUENTE HILLS LANDFILL
TOTAL ORGANIC CARBON
OFFSITE MONITORING WELLS

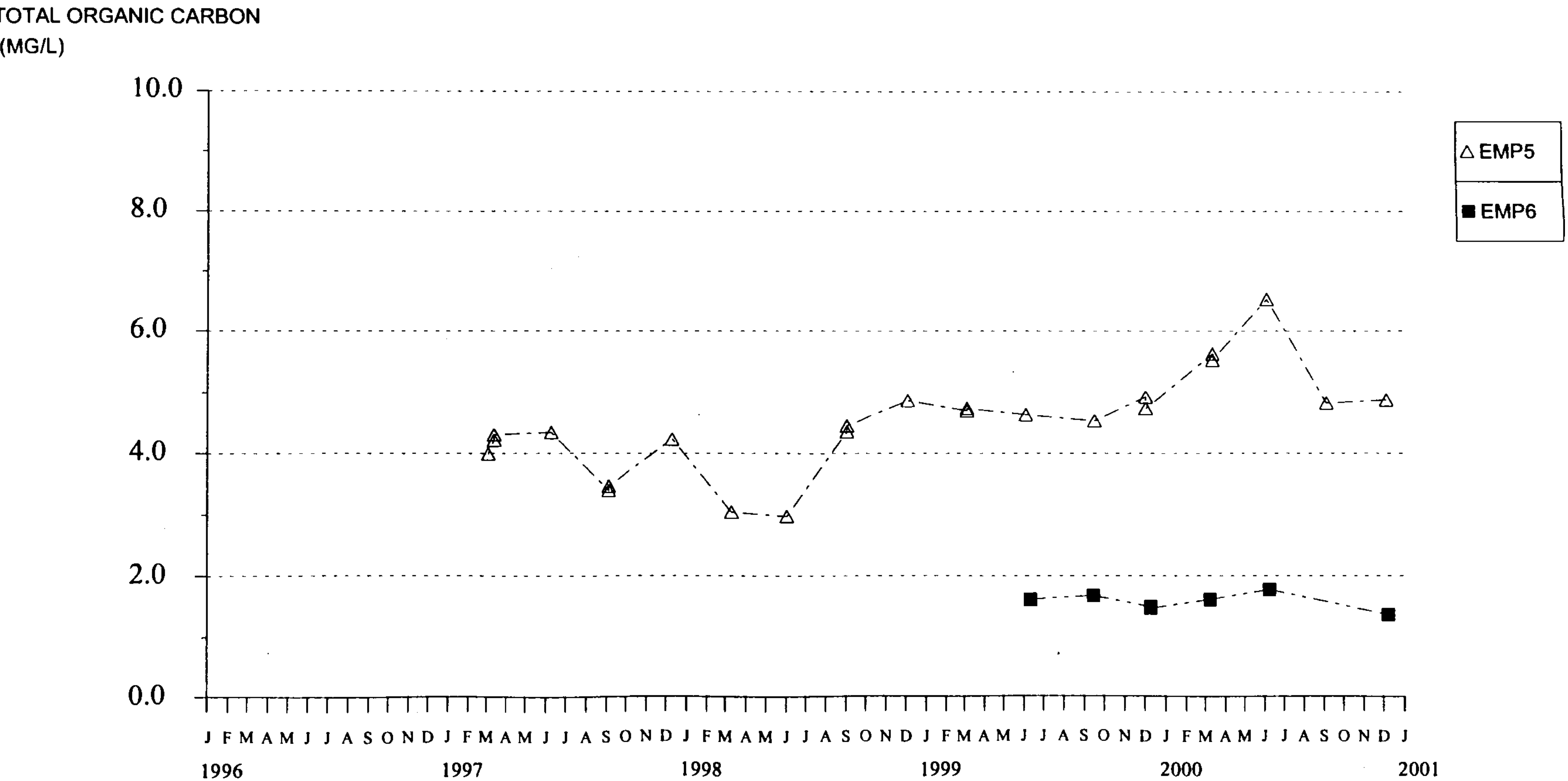


FIGURE 190
PUENTE HILLS LANDFILL
TOTAL ORGANIC HALOGEN
OFFSITE MONITORING WELLS

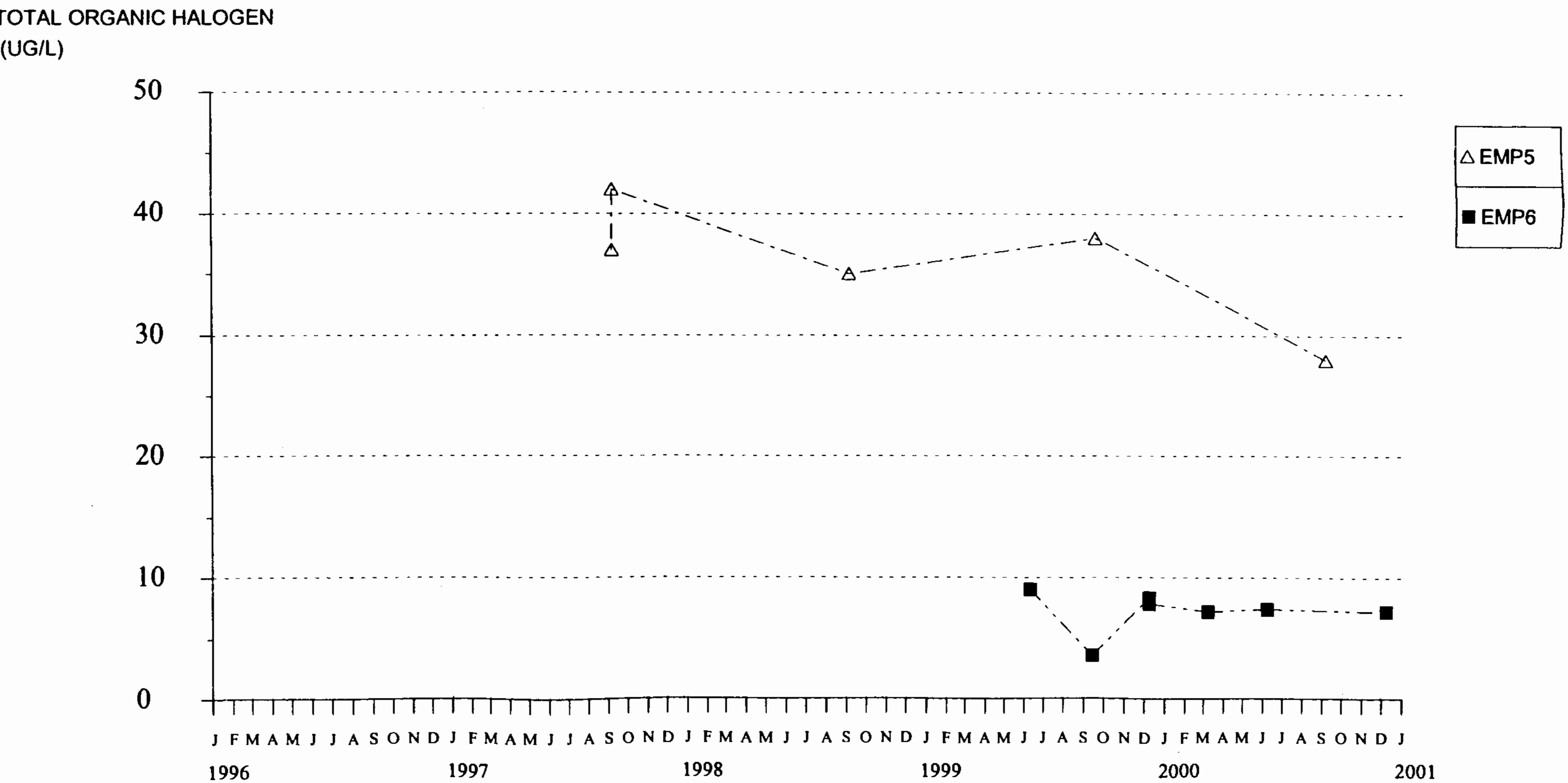


FIGURE 191
PUENTE HILLS LANDFILL
ARSENIC
OFFSITE MONITORING WELLS

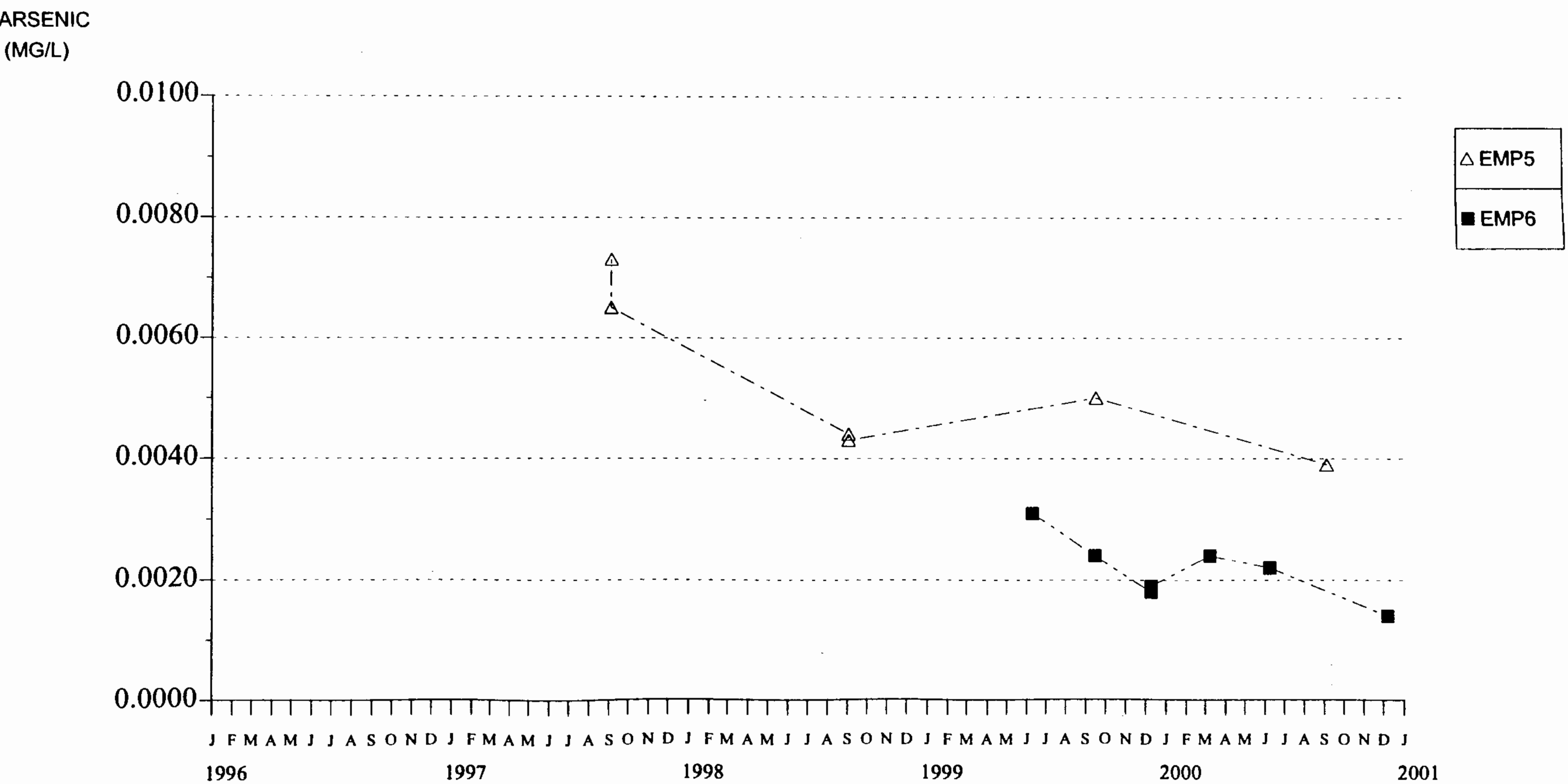


FIGURE 192
PUENTE HILLS LANDFILL
BARIUM
OFFSITE MONITORING WELLS

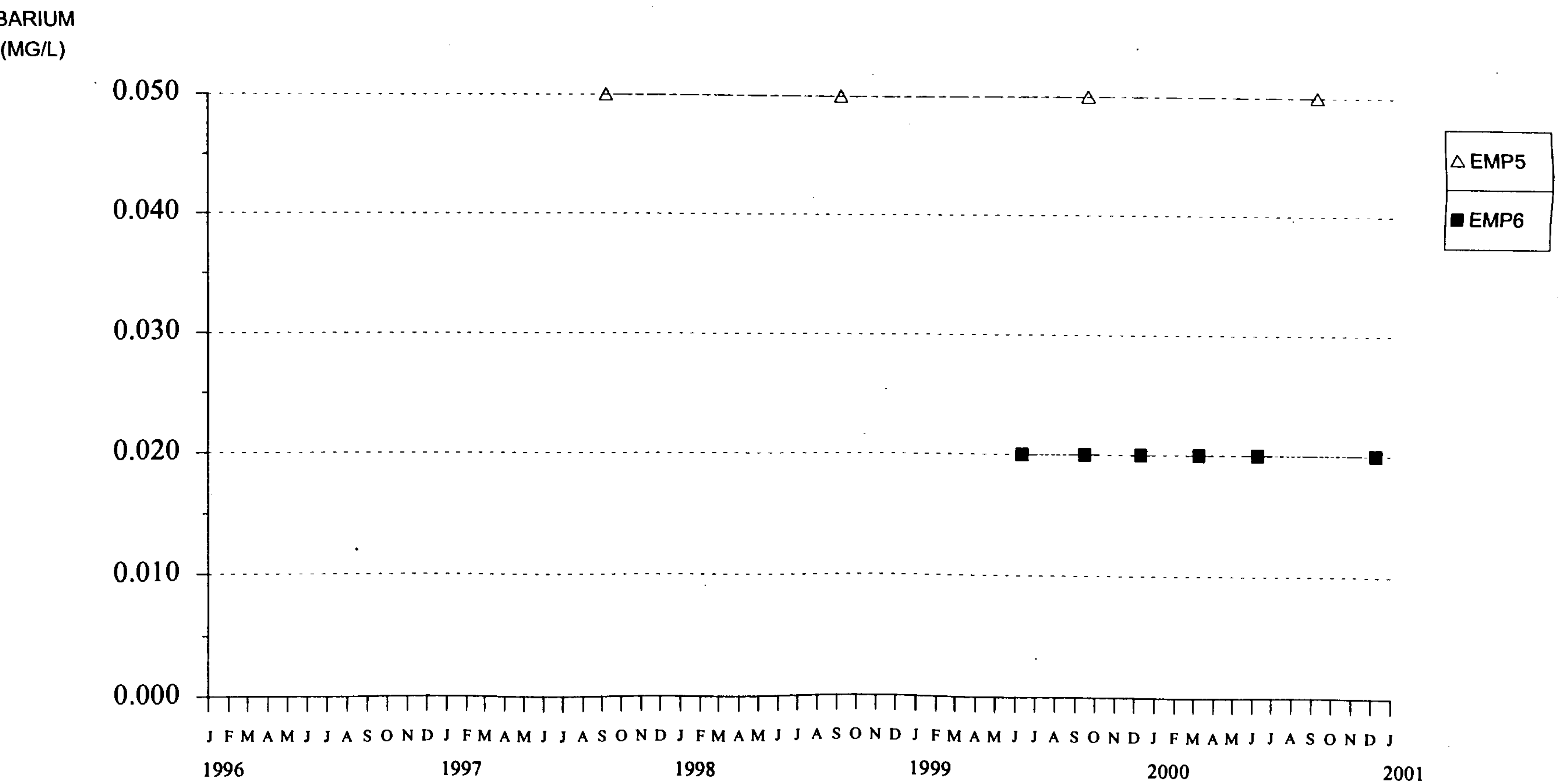


FIGURE 193
PUENTE HILLS LANDFILL
ZINC
OFFSITE MONITORING WELLS

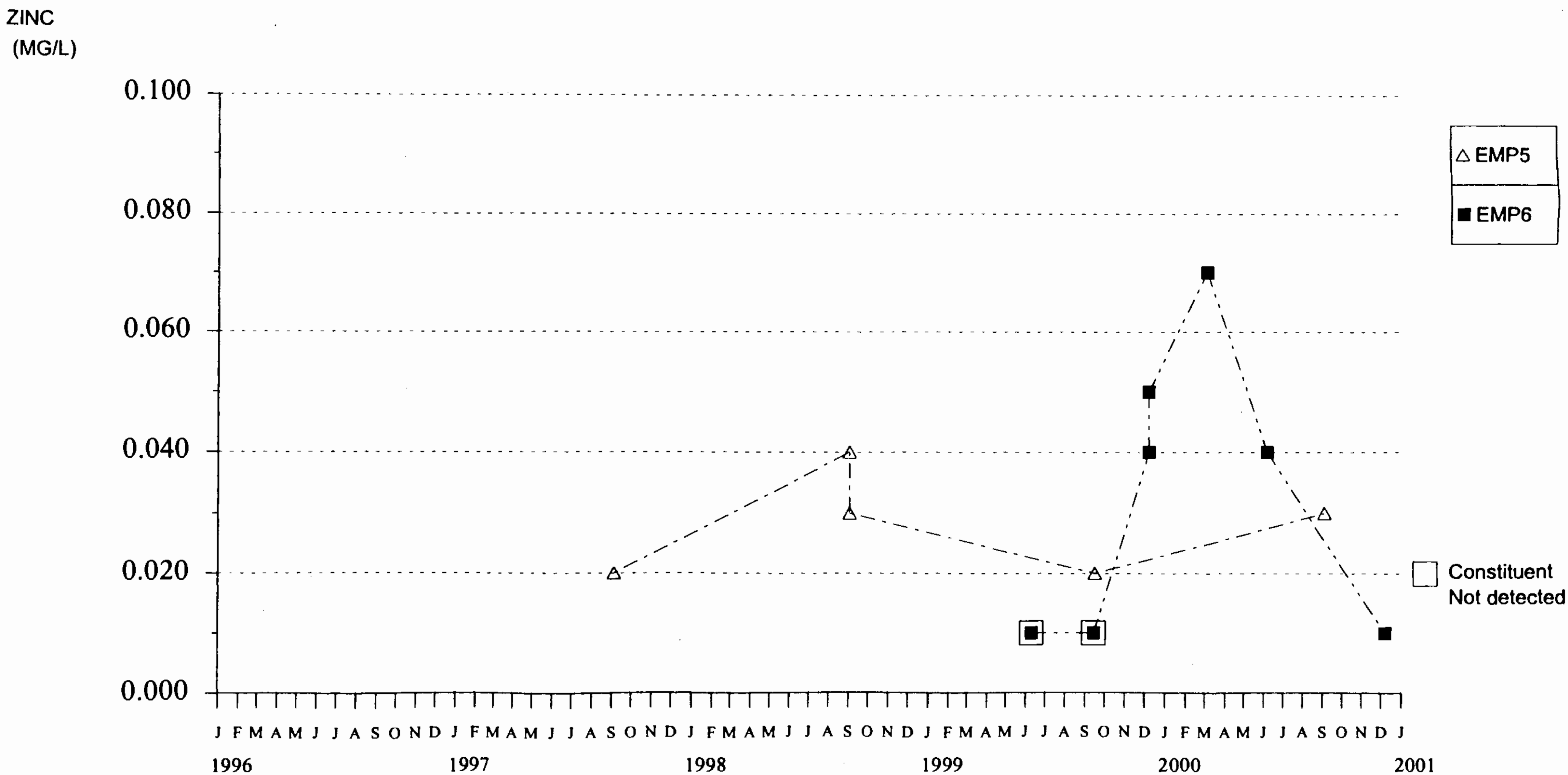


FIGURE 194
PUENTE HILLS LANDFILL
1,2-DICHLOROETHANE
OFFSITE MONITORING WELLS

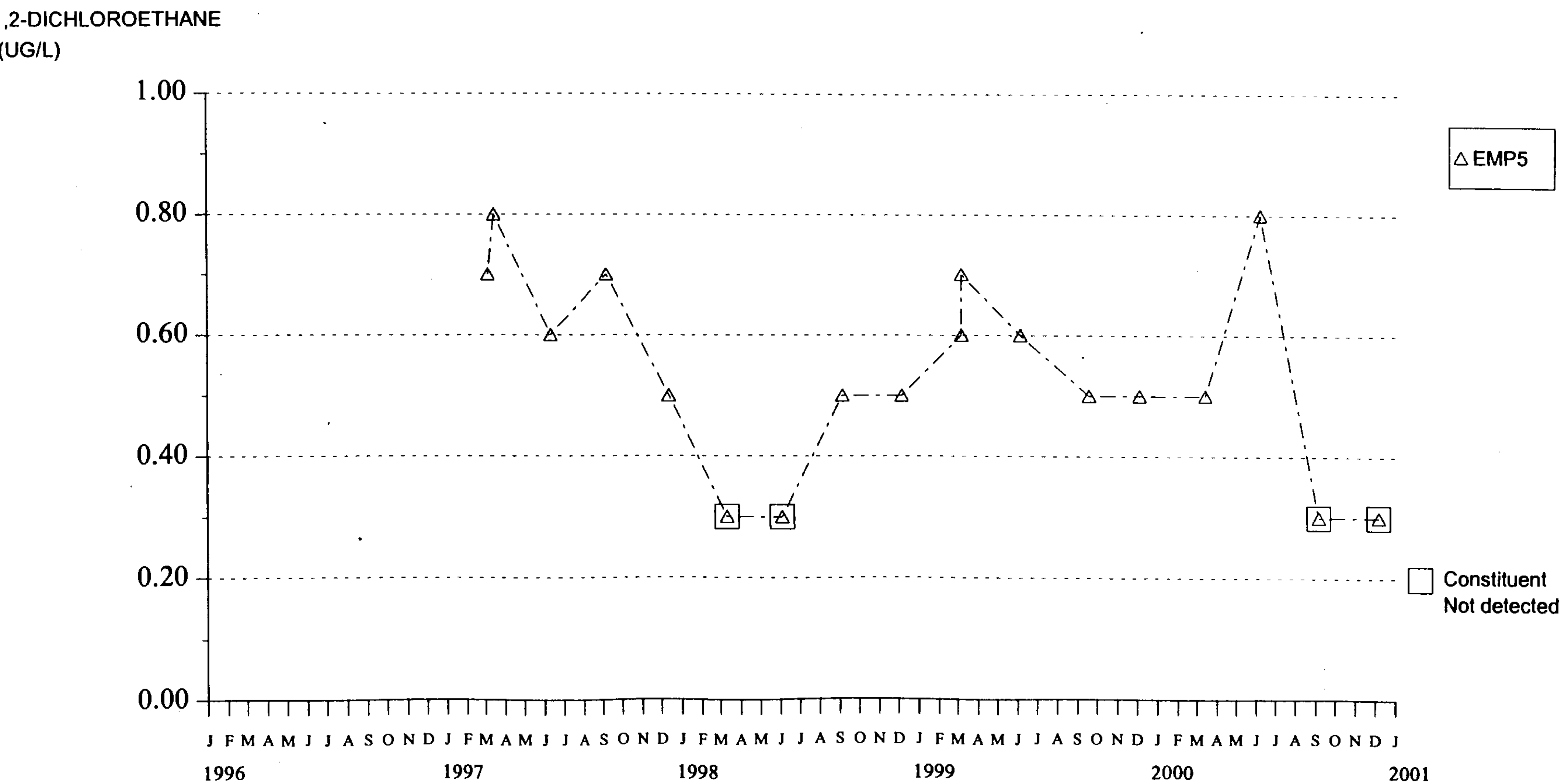


FIGURE 195
PUENTE HILLS LANDFILL
IRON
OFFSITE MONITORING WELLS (FILTERED)

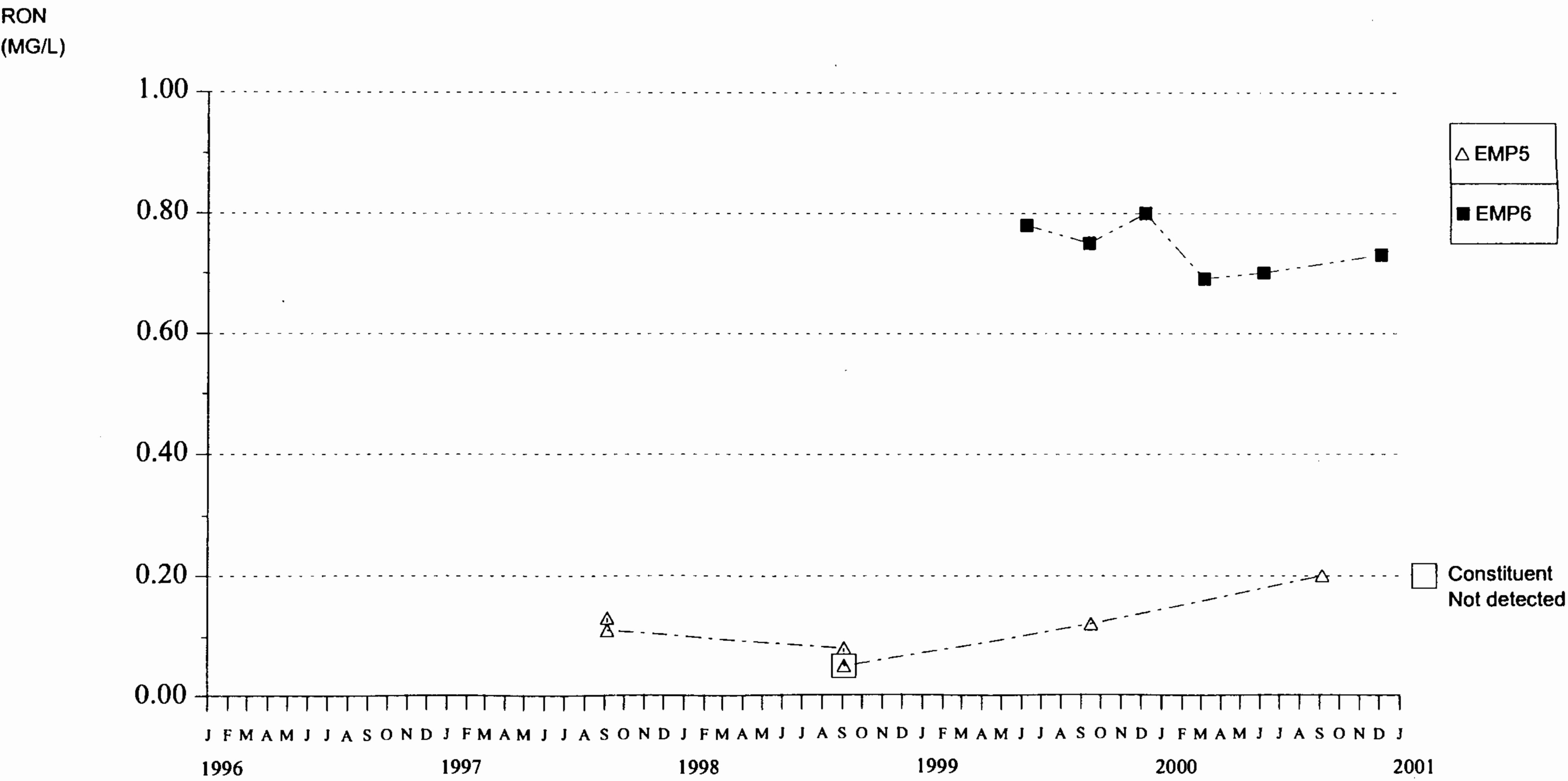


FIGURE 196
PUENTE HILLS LANDFILL
MANGANESE
OFFSITE MONITORING WELLS (FILTERED)

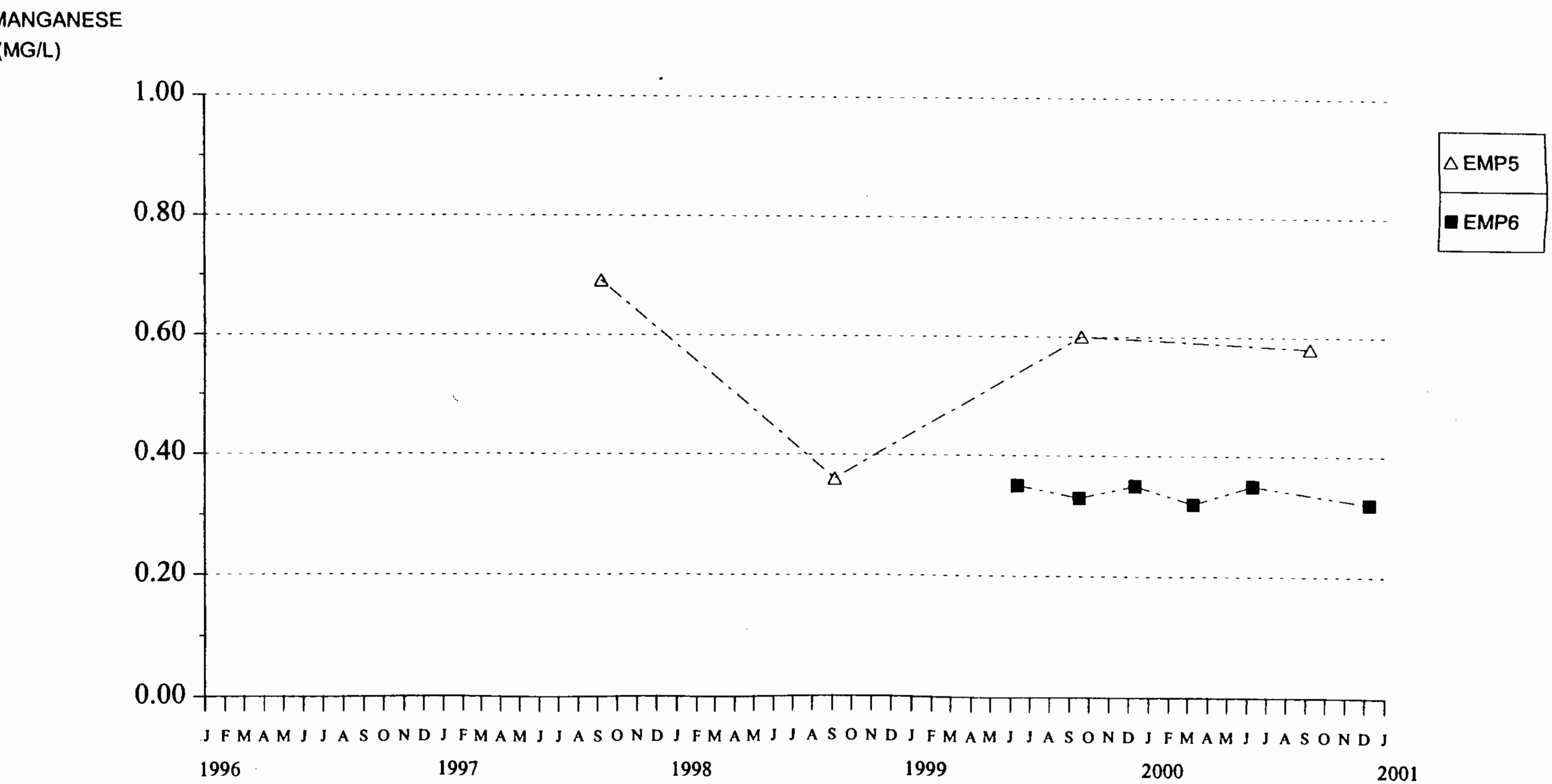


FIGURE 197
PUENTE HILLS LANDFILL
ARSENIC
OFFSITE MONITORING WELLS (FILTERED)

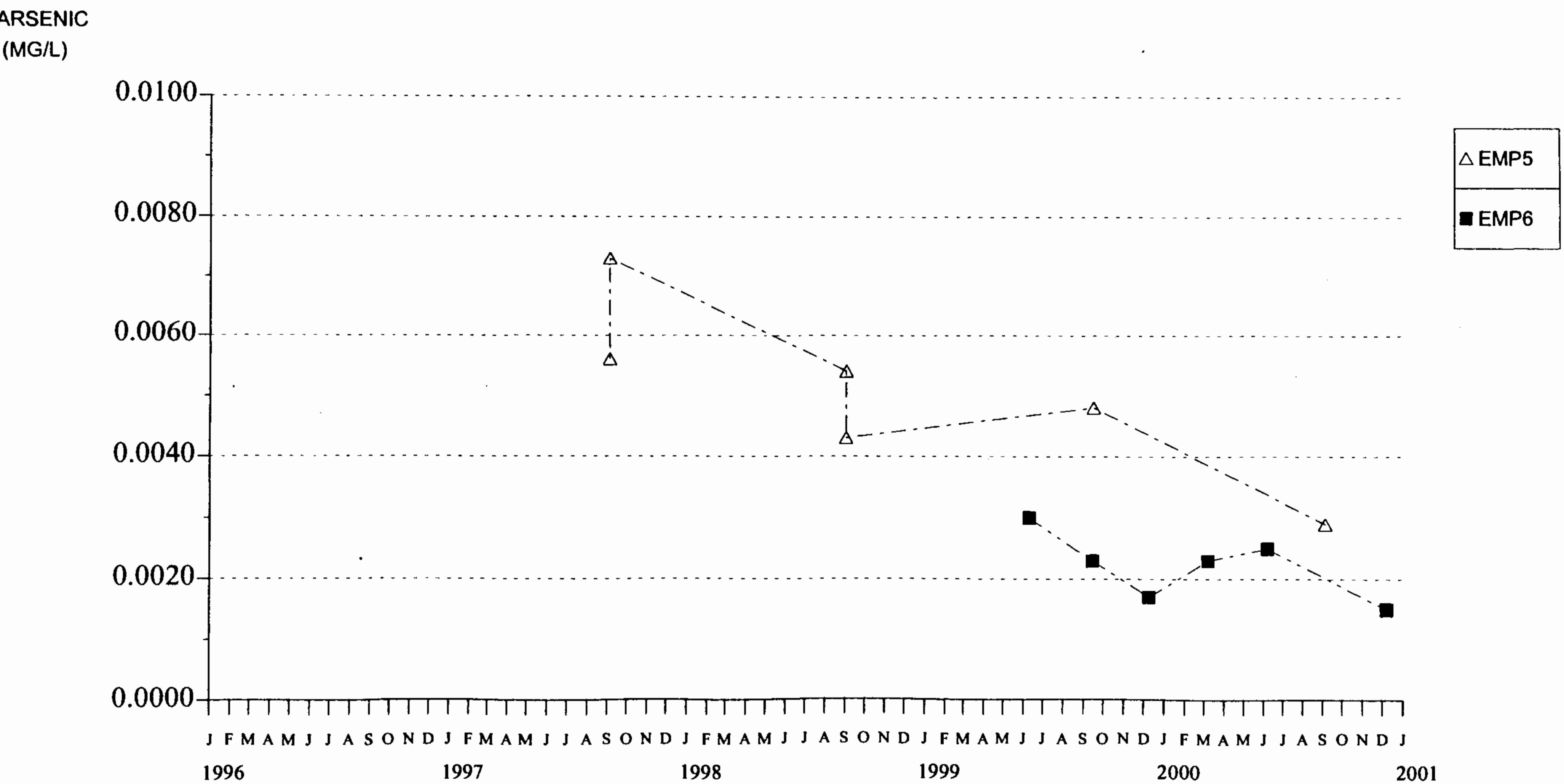


FIGURE 198
PUENTE HILLS LANDFILL
BARIUM
OFFSITE MONITORING WELLS (FILTERED)

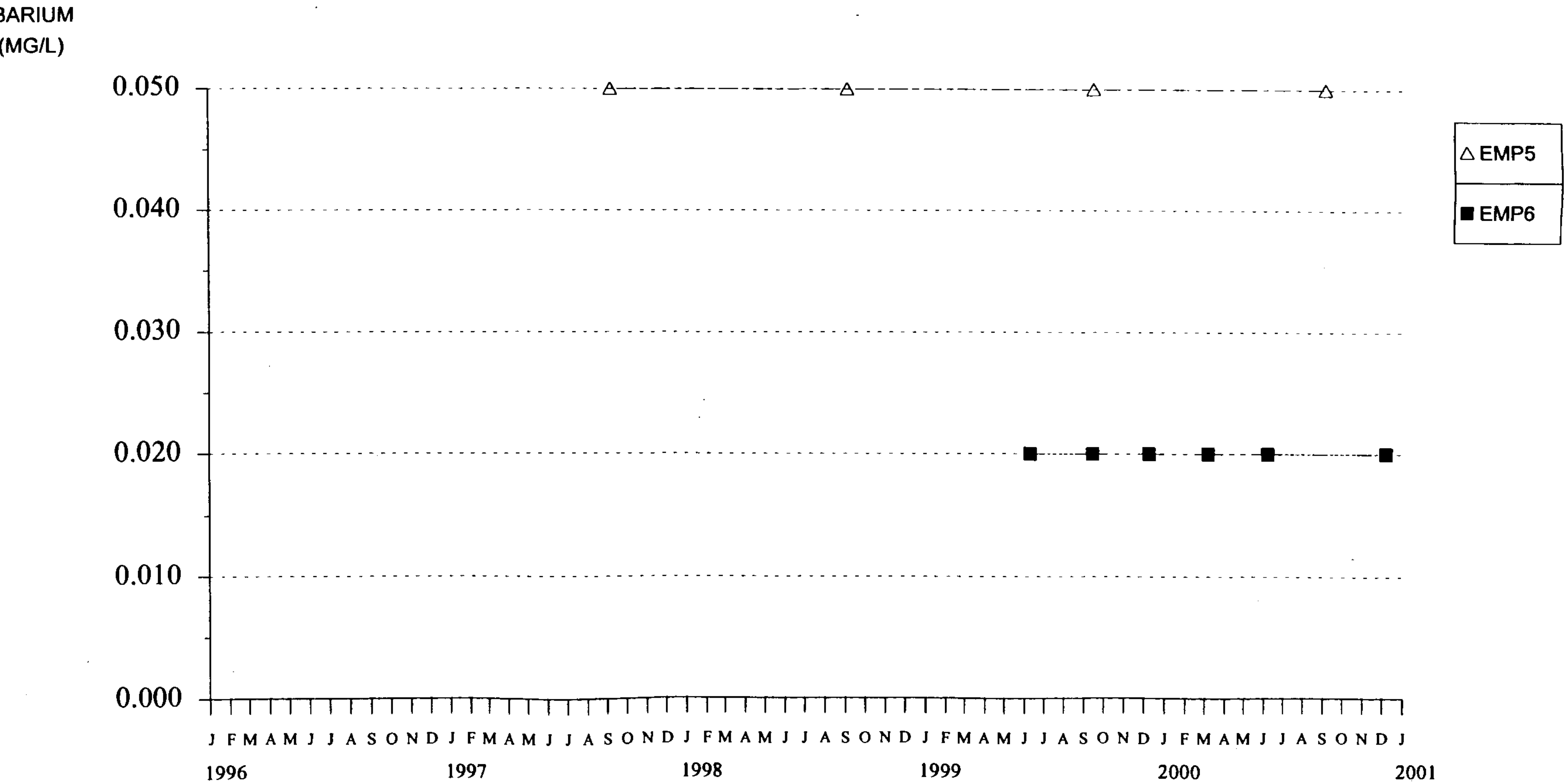
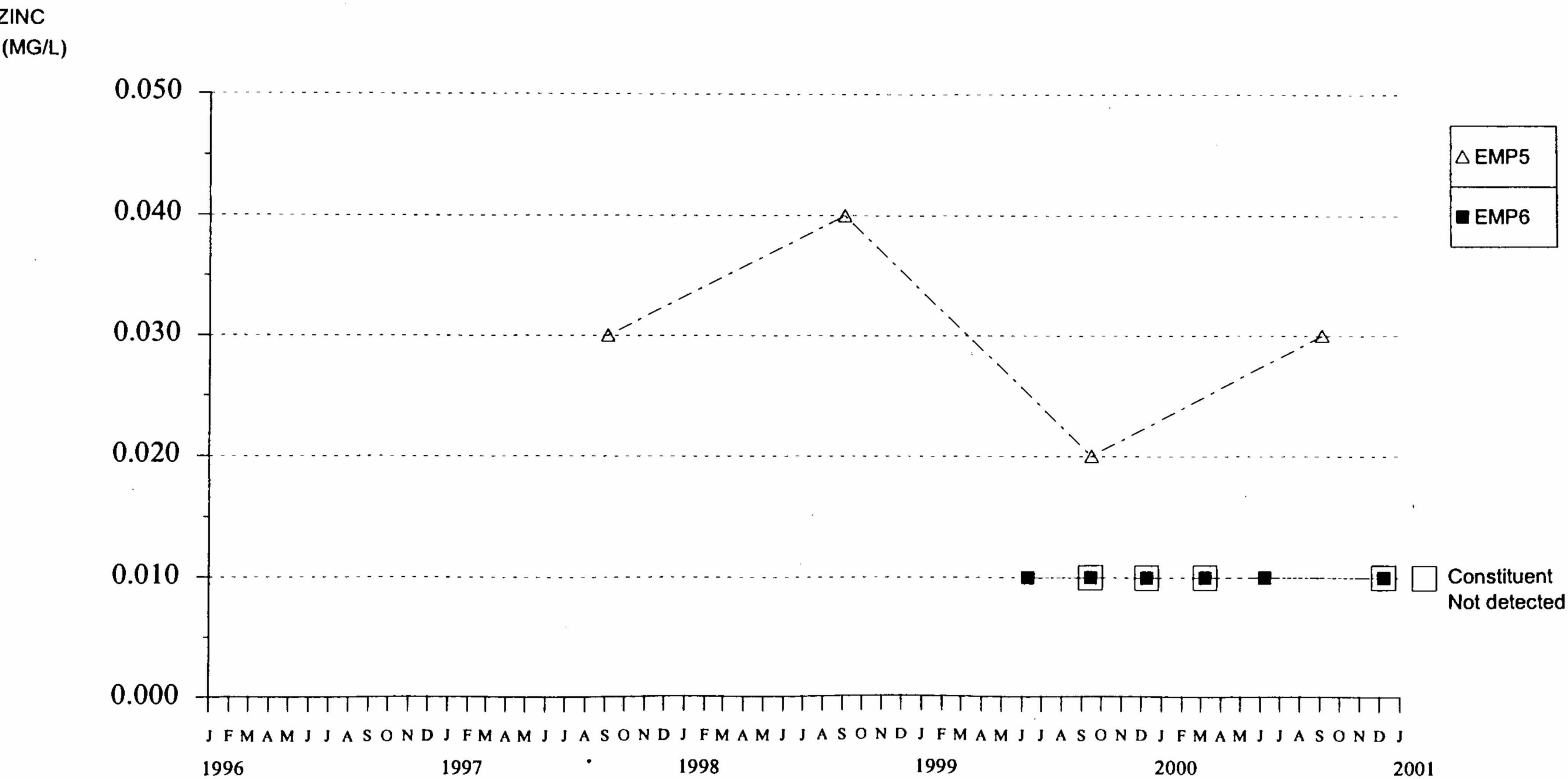


FIGURE 199
PUENTE HILLS LANDFILL
ZINC
OFFSITE MONITORING WELLS (FILTERED)



APPENDIX

WATER QUALITY MONITORING DATA

PUENTE HILLS LANDFILL, 2000

TABLE A.1

WATER QUALITY DATA

BARRIER 1 MONITORING WELLS

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M04A SJ23196 03/06/00	WELL M04A SJ27335 06/05/00	WELL M04A SJ27336 06/05/00	WELL M04A SJ31233 09/12/00	WELL M04A SJ34550 12/07/00
FIELD PARAMETERS						
DEPTH TO WATER	FEET	42.9	42.8		42.87	42.78
DEPTH TO BOTTOM	FEET	59.99	60.06		60.02	59.96
PERCENT METHANE IN GAS	%CH4	< 0.1	< 0.1		< 0.1	< 0.1
PERCENT OXYGEN IN GAS	%O2	20	17		18	13
FIELD WATER TEMPERATURE	DEG.C.	19.51	21.78		25.02	21.04
FIELD PH	PH	6.72	6.47		6.79	6.2
FIELD CONDUCTIVITY	UMHOS/CM	1919	3239		3505	3448
FIELD DISSOLVED O2	MG/L	0.64	0.56		0.56	0.23
FIELD DISSOLVED CO2	MG/L	138	344		168	659
GENERAL						
PH	PH	6.79	6.79 B	6.71	6.80	6.77
CONDUCTIVITY	UMHOS/CM				3410	
TOTAL DISSOLVED SOLIDS	MG/L	1334	2612	2720	2992	2976
TOTAL HARDNESS	MG/L CACO3				1672 E	
TOTAL CYANIDE	MG/L CN				<0.005	
BORON	MG/L B				0.60	
ANIONS						
NITRATE NITROGEN	MG/L N	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
SULFATE	MG/L SO4	531	1160 A	1160	1270	1360
CHLORIDE	MG/L CL	73.4 A	155 A	154 A	169	183 A
TOTAL ALKALINITY	MG/L CACO3	414	579	584	591	595
BICARBONATE ALKALINITY	MG/L CACO3	414	579	584	591	595
TOTAL SULFIDE	MG/L S				< 0.1 B	
FLUORIDE	MG/L F				0.84	
CATIONS						
CALCIUM-HARDNESS	MG/L CACO3	439	784	809	861 D	936 D
MAGNESIUM-HARDNESS	MG/L CACO3	354	766	774	811 D	901 D
SODIUM	MG/L NA	108	179	174	186 D	206 D
POTASSIUM	MG/L K	8.8	11.6	11.6	11.4 D	11.3 D
IRON	MG/L FE				6.27	
MANGANESE	MG/L MN				2.02	
ORGANIC MATTER						
AMMONIA NITROGEN	MG/L N	0.6	0.9	0.9	1.1	0.6

FOOTNOTES : A-AVERAGE B-AVERAGE OF DUPS C-DUP & SPIKE D-DUPLICATE SPIKE E-CALCULATED VALUE
F-INSUFFICIENT SAMPLE

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M04A SJ23196 03/06/00	WELL M04A SJ27335 06/05/00	WELL M04A SJ27336 06/05/00	WELL M04A SJ31233 09/12/00	WELL M04A SJ34550 12/07/00
ORGANIC MATTER						
TOTAL BOD	MG/L O				< 2	
SOLUBLE BOD	MG/L O	< 2	< 2 C	< 2	< 2	4
TOTAL COD	MG/L O				16 C	
SOLUBLE COD	MG/L O	11	14	< 10	16	16
TOTAL ORGANIC CARBON	MG/L C	5.80	4.68 D	5.32	5.29	5.29
OIL & GREASE	MG/L EXTRAC				< 5	
TOTAL ORGANIC HALOGEN(TOX	UG/L				F	
METALS						
ARSENIC	MG/L AS				.0106	
BARIUM	MG/L BA				0.05	
CADMIUM	MG/L CD				<0.002	
TOTAL CHROMIUM	MG/L CR				< 0.01	
COBALT	MG/L CO				< 0.01	
COPPER	MG/L CU				< 0.01	
LEAD	MG/L PB				< 0.02	
MERCURY	MG/L HG				<.0001	
NICKEL	MG/L NI				0.04	
SELENIUM	MG/L SE				<.0010	
SILVER	MG/L AG				< 0.01	
ZINC	MG/L ZN				0.02	
ANTIMONY	MG/L SB				<.0005	
BERYLLIUM	MG/L BE				<.0025	
THALLIUM	MG/L TL				<0.001	
TIN	MG/L SN				< 0.06	
VANADIUM	MG/L V				< 0.05	
PESTICIDES, HERBICIDES, & ORGANOPHOSPHORUS						
2,4,5-T	UG/L				< 0.05	
DINOSEB	UG/L				< 0.1	
THIONAZIN	UG/L				< 1	
DIMETHOATE	UG/L				< 1	
DISULFOTON	UG/L				< 1	
METHYL PARATHION	UG/L				< 1	
ETHYL PARATHION	UG/L				< 1	
PHORATE	UG/L				< 1	
PP'-DDE	UG/L				< 0.01	
PP'-DDD	UG/L				< 0.01	
PP'-DDT	UG/L				< 0.01	

FOOTNOTES : A-AVERAGE B-AVERAGE OF DUPS C-DUP & SPIKE D-DUPLICATE SPIKE E-CALCULATED VALUE
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TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M04A SJ23196 03/06/00	WELL M04A SJ27335 06/05/00	WELL M04A SJ27336 06/05/00	WELL M04A SJ31233 09/12/00	WELL M04A SJ34550 12/07/00
PESTICIDES, HERBICIDES, & ORGANOPHOSPHORUS						
ALPHA-BHC	UG/L				< 0.01	
LINDANE (GAMMA-BHC)	UG/L				< 0.01	
HEPTACHLOR	UG/L				< 0.01	
HEPTACHLOR EPOXIDE	UG/L				< 0.01	
ALDRIN	UG/L				< 0.01	
DIELDRIN	UG/L				< 0.01	
ENDRIN	UG/L				< 0.01	
TOXAPHENE	UG/L				< 0.5	
METHOXYCLOR	UG/L				< 0.01	
2,4-D(ACID)	UG/L				< 0.5	
2,4,5-TP(SILVEX)	UG/L				< 0.05	
AROCLOR 1242	UG/L				< 0.1	
AROCLOR 1254	UG/L				< 0.05	
BETA-BHC	UG/L				< 0.01	
DELTA-BHC	UG/L				< 0.01	
ENDOSULFAN I	UG/L				< 0.01	
ENDOSULFAN II	UG/L				< 0.01	
ENDOSULFAN SULFATE	UG/L				< 0.1	
ENDRIN ALDEHYDE	UG/L				< 0.01	
AROCLOR 1016	UG/L				< 0.1	
AROCLOR 1221	UG/L				< 0.1	
AROCLOR 1232	UG/L				< 0.1	
AROCLOR 1248	UG/L				< 0.1	
AROCLOR 1260	UG/L				< 0.1	
TECHNICAL CHLORDANE	UG/L				< 0.05	
VOLATILE ORGANIC COMPOUNDS						
ALLYL CHLORIDE	UG/L				< 1	
BROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
CHLOROPRENE	UG/L				< 1	
1,2-DIBROMO-3-CHLOROPROPA	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
T-1,4-DICHLORO-2-BUTENE	UG/L	< 1	< 1	< 1	< 1	< 1
1,3-DICHLOROPROPANE	UG/L				< 0.3	
2,2-DICHLOROPROPANE	UG/L				< 1	
1,1-DICHLOROPROPENE	UG/L				< 1	
ISOBUTYL ALCOHOL	UG/L				< 10	
METHACRYLONITRILE	UG/L				< 10	
METHYL IODIDE	UG/L	< 1	< 1	< 1	< 1	< 1
METHYLENE BROMIDE	UG/L	< 1	< 1	< 1	< 1	< 1
PROPIONITRILE	UG/L				< 10	

FOOTNOTES : A-AVERAGE B-AVERAGE OF DUPS C-DUP & SPIKE D-DUPLICATE SPIKE E-CALCULATED VALUE
F-INSUFFICIENT SAMPLE

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M04A SJ23196 03/06/00	WELL M04A SJ27335 06/05/00	WELL M04A SJ27336 06/05/00	WELL M04A SJ31233 09/12/00	WELL M04A SJ34550 12/07/00
VOLATILE ORGANIC COMPOUNDS						
1,1,1,2-TETRACHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,2,3-TRICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1
METHYL METHACRYLATE	UG/L				< 10	
ETHYL METHACRYLATE	UG/L				< 5	
METHYLENE CHLORIDE	UG/L	< 1	< 1	< 1	< 1	< 1
CHLOROFORM	UG/L	< 1	< 1	< 1	< 1	< 1
1,1,1-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
CARBON TETRACHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-DICHLOROETHENE	UG/L	< 1	< 1	< 1	< 1	< 1
TRICHLOROETHYLENE	UG/L	2	3	3	3	3
TETRACHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
BROMODICHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
BROMOFORM	UG/L	< 1	< 1	< 1	< 1	< 1
CHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1
VINYL CHLORIDE	UG/L	2	3	3	2	3
O-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1
M-DICHLOROBENZENE	UG/L				< 1	
P-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1
1,1-DICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,1,2-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROETHANE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
BENZENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	UG/L	< 1	< 1	< 1	< 1	< 1
ETHYL BENZENE	UG/L	< 1	< 1	< 1	< 1	< 1
VINYL ACETATE	UG/L	< 10	< 10	< 10	< 10	< 10
O-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHYLEN	UG/L	< 1	< 1	< 1	< 1	< 1
BROMOMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
CHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
2-CHLOROETHYLVINYLETHER	UG/L				< 1	
CHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
ACROLEIN	UG/L				< 10	
ACRYLONITRILE	UG/L	< 10	< 10	< 10	< 10	< 10
ACETONITRILE	UG/L				< 20	
FREON 12 (CCL2F2)	UG/L				< 1	
FREON 11 (CCL3F)	UG/L	< 1	< 1	< 1	< 1	< 1

FOOTNOTES : A-AVERAGE B-AVERAGE OF DUPS C-DUP & SPIKE D-DUPLICATE SPIKE E-CALCULATED VALUE
F-INSUFFICIENT SAMPLE

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M04A SJ23196 03/06/00	WELL M04A SJ27335 06/05/00	WELL M04A SJ27336 06/05/00	WELL M04A SJ31233 09/12/00	WELL M04A SJ34550 12/07/00
VOLATILE ORGANIC COMPOUNDS						
1,2-DIBROMOETHANE	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ACETONE	UG/L	< 10	< 10	< 10	< 10	< 10
CIS-1,2-DICHLOROETHYLENE	UG/L	7	13	16	14	14
2-BUTANONE	UG/L	< 10	< 10	< 10	< 10	< 10
4-METHYL-2-PENTANONE	UG/L	< 10	< 10	< 10	< 10	< 10
STYRENE	UG/L	< 1	< 1	< 1	< 1	< 1
2,4,5-TRICHLOROPHENOL	UG/L				< 1	
M+P-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
CARBON DISULFIDE	UG/L CS2	< 1	< 1	< 1	< 1	< 1
2-HEXANONE	UG/L C6H12O	< 5	< 5	< 5	< 5	< 5
ACID-BASE NEUTRAL EXTRACTABLE						
ACETOPHENONE	UG/L				< 1	
2-ACETYLAMINOFLUORENE	UG/L				< 1	
4-AMINOBIPHENYL	UG/L				< 1	
BENZYL ALCOHOL	UG/L				< 1	
P-CHLOROANILINE	UG/L				< 1	
CHLOROBENZILATE	UG/L				< 1	
DIALLATE	UG/L				< 1	
DIBENZOFURAN	UG/L				< 1	
2,6-DICHLOROPHENOL	UG/L				< 1	
P(DIMETHYLAMINO)AZOBENZEN	UG/L				< 1	
7,12-DIMETHYLBENZ(A)ANTHR	UG/L				< 10	
3,3'-DIMETHYLBENZIDINE	UG/L				< 1	
M-DINITROBENZENE	UG/L				< 1	
DIPHENYLAMINE	UG/L				< 1	
ETHYL METHANESULFONATE	UG/L				< 1	
FAMPHUR	UG/L				< 1	
HEXACHLOROPROPENE	UG/L				< 5	
ISODRIN	UG/L				< 1	
ISOSAFROLE	UG/L				< 1	
KEPONE	UG/L				< 10	
METHAPYRILENE	UG/L				< 20	
3-METHYLCHOLANTHRENE	UG/L				< 1	
METHYL METHANESULFONATE	UG/L				< 1	
2-METHYLNAPHTHALENE	UG/L				< 1	
1,4-NAPHTHOQUINONE	UG/L				< 1	
1-NAPHTHYLAMINE	UG/L				< 1	
2-NAPHTHYLAMINE	UG/L				< 1	
O-NITROANILINE	UG/L				< 1	

FOOTNOTES : A-AVERAGE B-AVERAGE OF DUPS C-DUP & SPIKE D-DUPLICATE SPIKE E-CALCULATED VALUE
F-INSUFFICIENT SAMPLE

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M04A SJ23196 03/06/00	WELL M04A SJ27335 06/05/00	WELL M04A SJ27336 06/05/00	WELL M04A SJ31233 09/12/00	WELL M04A SJ34550 12/07/00
ACID-BASE NEUTRAL EXTRACTABLE						
M-NITROANILINE	UG/L				< 1	
P-NITROANILINE	UG/L				< 1	
N-NITROSODI-N-BUTYLAMINE	UG/L				< 1	
N-NITROSODIETHYLAMINE	UG/L				< 1	
N-NITROSOMETHYLETHYLAMINE	UG/L				< 1	
N-NITROSOPIPERIDINE	UG/L				< 1	
N-NITROSOPYRROLIDINE	UG/L				< 1	
5-NITRO-O-TOLUIDINE	UG/L				< 1	
PENTACHLOROBENZENE	UG/L				< 1	
PENTACHLORONITROBENZENE	UG/L				< 5	
PHENACETIN	UG/L				< 1	
P-PHENYLENEDIAMINE	UG/L				< 20	
PRONAMIDE	UG/L				< 1	
SAFROLE	UG/L				< 1	
1,2,4,5-TETRACHLOROBENZEN	UG/L				< 1	
2,3,4,6-TETRACHLOROPHENOL	UG/L				< 1	
O-TOLUIDINE	UG/L				< 1	
O,O,O-TRIETHYLPHOSPHOROTH	UG/L				< 1	
SYM-TRINITROBENZENE	UG/L				< 5	
ACENAPHTHENE	UG/L				< 1	
ACENAPHTHYLENE	UG/L				< 1	
ANTHRACENE	UG/L				< 1	
BENZIDINE	UG/L				< 20	
BENZO(A)ANTHRACENE	UG/L				< 1	
BENZO(A)PYRENE	UG/L				< 0.2	
BENZO(B)FLUORANTHENE	UG/L				< 1	
BENZO(G.H.I.)PERYLENE	UG/L				< 1	
BENZO(K)FLUORANTHENE	UG/L				< 1	
BIS(2-CL-ETHOXY)METHANE	UG/L				< 1	
BIS(2-CHLOROETHYL)ETHER	UG/L				< 1	
BIS(2-CL-ISOPROPYL)ETHER	UG/L				< 1	
DIETHYLHEXYL PHTHALATE	UG/L				< 1	
4-BROMOPHENYL PHENYLETHER	UG/L				< 1	
BUTYLBENZYL PHTHALATE	UG/L				< 1	
2-CHLORONAPHTHALENE	UG/L				< 1	
4-CHLOROPHENYLPHENYLETHER	UG/L				< 1	
CHRYSENE	UG/L				< 1	
DIBENZO(A,H)ANTHRACENE	UG/L				< 1	
3,3'-DICHLOROBENZIDINE	UG/L				< 1	
DIETHYL PHTHALATE	UG/L				< 1	
DIMETHYL PHTHALATE	UG/L				< 1	

FOOTNOTES : A-AVERAGE B-AVERAGE OF DUPS C-DUP & SPIKE D-DUPLICATE SPIKE E-CALCULATED VALUE
F-INSUFFICIENT SAMPLE

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M04A SJ23196 03/06/00	WELL M04A SJ27335 06/05/00	WELL M04A SJ27336 06/05/00	WELL M04A SJ31233 09/12/00	WELL M04A SJ34550 12/07/00
ACID-BASE NEUTRAL EXTRACTABLE						
DI-N-BUTYL PHTHALATE	UG/L				< 1	
2,4-DINITROTOLUENE	UG/L				< 1	
2,6-DINITROTOLUENE	UG/L				< 1	
DI-N-OCTYL PHTHALATE	UG/L				< 1	
FLUORANTHENE	UG/L				< 1	
FLUORENE	UG/L				< 1	
HEXACHLOROBENZENE	UG/L				< 1	
HEXACHLOROBUTADIENE	UG/L				< 1	
HEXACHLOROCYCLOPENTADIENE	UG/L				< 5	
HEXACHLOROETHANE	UG/L				< 1	
INDENO(1,2,3-C,D)PYRENE	UG/L				< 1	
ISOPHORONE	UG/L				< 1	
NAPHTHALENE	UG/L				< 1	
NITROBENZENE	UG/L				< 1	
N-NITROSODIMETHYLAMINE	UG/L				< 1	
N-NITROSODI-N-PROPYLAMINE	UG/L				< 1	
PHENANTHRENE	UG/L				< 1	
PYRENE	UG/L				< 1	
2-CHLOROPHENOL	UG/L				< 1	
1,2,4-TRICHLOROBENZENE	UG/L				< 1	
2,4-DICHLOROPHENOL	UG/L				< 1	
2,4-DIMETHYLPHENOL	UG/L				< 1	
2,4-DINITROPHENOL	UG/L				< 6	
2-METHYL-4,6DINITROPHENOL	UG/L				< 1	
2-NITROPHENOL	UG/L				< 1	
4-NITROPHENOL	UG/L				< 1	
4-CHLORO-3-METHYLPHENOL	UG/L				< 1	
PENTACHLOROPHENOL	UG/L				< 1	
PHENOL	UG/L				< 1	
2,4,6-TRICHLOROPHENOL	UG/L				< 1	
N-NITROSODIPHENYLAMINE	UG/L				< 1	
O-CRESOL	UG/L				< 1	
M+P CRESOL	UG/L				< 1	

FOOTNOTES : A-AVERAGE B-AVERAGE OF DUPS C-DUP & SPIKE D-DUPLICATE SPIKE E-CALCULATED VALUE
F-INSUFFICIENT SAMPLE

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WEFI M04A SJ31232 09/12/00
CATIONS		
IRON	MG/L FE	6.55 A
MANGANESE	MG/L MN	1.99 A
METALS		
ARSENIC	MG/L AS	.0175
BARIUM	MG/L BA	0.05 A
CADMIUM	MG/L CD	<0.002 A
TOTAL CHROMIUM	MG/L CR	< 0.01 A
COBALT	MG/L CO	< 0.01 A
COPPER	MG/L CU	< 0.01 A
LEAD	MG/L PB	< 0.02 A
MERCURY	MG/L HG	<.0001 A
NICKEL	MG/L NI	0.04 A
SELENIUM	MG/L SE	<.0010
SILVER	MG/L AG	< 0.01 A
ZINC	MG/L ZN	0.02 A
ANTIMONY	MG/L SB	<.0005
BERYLLIUM	MG/L BE	<.0025 A
THALLIUM	MG/L TL	<0.001 A
TIN	MG/L SN	< 0.06 A
VANADIUM	MG/L V	< 0.05 A

FOOTNOTES : A-DUPLICATE SPIKE

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M04B SJ23285 03/08/00	WELL M04B SJ27337 06/05/00	WELL M04B SJ31269 09/13/00	WELL M04B SJ31270 09/13/00	WELL M04B SJ34973 12/19/00
FIELD PARAMETERS						
DEPTH TO WATER	FEET	29.72	28.93	28.47		28.27
DEPTH TO BOTTOM	FEET	108.8	109.8	109.8		109.6
PERCENT METHANE IN GAS	%CH4	< 0.1	< 0.1	< 0.1		< 0.1
PERCENT OXYGEN IN GAS	%O2	20	18	19		19
FIELD WATER TEMPERATURE	DEG.C.	16.61	25.29	26.71		23.61
FIELD PH	PH	7.38	7.3	7.21		7.22
FIELD CONDUCTIVITY	UMHOS/CM	1994	1955	1972		1915
FIELD DISSOLVED O2	MG/L	0.61	0.92	1.75		8.44
GENERAL						
PH	PH	7.63	7.40	7.62 C	7.55	7.62
TOTAL DISSOLVED SOLIDS	MG/L	1544 A	1560	1680	1640	1660
ANIONS						
NITRATE NITROGEN	MG/L N	< 0.05	< 0.05	0.21	0.07	0.36
SULFATE	MG/L SO4	772	770	748	759	764
CHLORIDE	MG/L CL	64.7 B	67.4 B	64.0 B	65.2 B	68.2 B
ORGANIC MATTER						
TOTAL ORGANIC HALOGEN(TOX	UG/L					< 3.0 B
VOLATILE ORGANIC COMPOUNDS						
BROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMO-3-CHLOROPROPA	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
T-1,4-DICHLORO-2-BUTENE	UG/L	< 1	< 1	< 1	< 1	< 1
METHYL IODIDE	UG/L	< 1	< 1	< 1	< 1	< 1
METHYLENE BROMIDE	UG/L	< 1	< 1	< 1	< 1	< 1
1,1,1,2-TETRACHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,2,3-TRICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1
METHYLENE CHLORIDE	UG/L	< 1	< 1	< 1	< 1	< 1
CHLOROFORM	UG/L	< 1	< 1	< 1	< 1	< 1
1,1,1-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
CARBON TETRACHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-DICHLOROETHENE	UG/L	< 1	< 1	< 1	< 1	< 1
TRICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
TETRACHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
BROMODICHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1

FOOTNOTES : A-DUP & SPIKE B-AVERAGE C-AVERAGE OF DUPS

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M04B SJ23285 03/08/00	WELL M04B SJ27337 06/05/00	WELL M04B SJ31269 09/13/00	WELL M04B SJ31270 09/13/00	WELL M04B SJ34973 12/19/00
VOLATILE ORGANIC COMPOUNDS						
DIBROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
BROMOFORM	UG/L	< 1	< 1	< 1	< 1	< 1
CHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1
VINYL CHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
O-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1
P-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1
1,1-DICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,1,2-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROETHANE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
BENZENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	UG/L	< 1	< 1	< 1	< 1	< 1
ETHYL BENZENE	UG/L	< 1	< 1	< 1	< 1	< 1
VINYL ACETATE	UG/L	< 10	< 10	< 10	< 10	< 10
O-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHYLEN	UG/L	< 1	< 1	< 1	< 1	< 1
BROMOMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
CHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
CHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
ACRYLONITRILE	UG/L	< 10	< 10	< 10	< 10	< 10
FREON 11 (CCL3F)	UG/L	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMOETHANE	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ACETONE	UG/L	< 10	< 10	< 10	< 10	< 10
CIS-1,2-DICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
2-BUTANONE	UG/L	< 10	< 10	< 10	< 10	< 10
4-METHYL-2-PENTANONE	UG/L	< 10	< 10	< 10	< 10	< 10
STYRENE	UG/L	< 1	< 1	< 1	< 1	< 1
M+P-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
CARBON DISULFIDE	UG/L CS2	< 1	< 1	< 1	< 1	< 1
2-HEXANONE	UG/L C6H12O	< 5	< 5	< 5	< 5	< 5

FOOTNOTES : A-DUP & SPIKE B-AVERAGE C-AVERAGE OF DUPS

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M05A SJ23423 03/10/00	WELL M05A SJ27539 06/08/00	WELL M05A SJ31111 09/08/00	WELL M05A SJ34603 12/08/00
FIELD PARAMETERS					
DEPTH TO WATER	FEET	63.15	62.15	62.16	62.62
DEPTH TO BOTTOM	FEET	76.67	76.5	76.78	77.25
PERCENT METHANE IN GAS	%CH4	< 0.1	< 0.1	< 0.1	< 0.1
PERCENT OXYGEN IN GAS	%O2	16	19	17	19
FIELD WATER TEMPERATURE	DEG.C.	20.39		22.89	22.81
FIELD PH	PH	6.8		6.88	6.37
FIELD CONDUCTIVITY	UMHOS/CM	2210		2093	2153
FIELD DISSOLVED O2	MG/L	2.08		1.76	1.68
FIELD DISSOLVED CO2	MG/L	125		83	267
GENERAL					
PH	PH	7.26 A	7.25	6.99	6.99
CONDUCTIVITY	UMHOS/CM			2140	
TOTAL DISSOLVED SOLIDS	MG/L	1306	1342	1384	1280
TOTAL HARDNESS	MG/L CACO3			421 E	
TOTAL CYANIDE	MG/L CN			<0.005	
BORON	MG/L B			0.32	
ANIONS					
NITRATE NITROGEN	MG/L N	< 0.05	0.12	0.18	0.05 D
SULFATE	MG/L SO4	261 B	282	276	297 D
CHLORIDE	MG/L CL	322 B	326	298	301 D
TOTAL ALKALINITY	MG/L CACO3	448	349	358	357
BICARBONATE ALKALINITY	MG/L CACO3	448	349	358	357
TOTAL SULFIDE	MG/L S			< 0.1	
FLUORIDE	MG/L F			0.78	
CATIONS					
CALCIUM-HARDNESS	MG/L CACO3	230 D	217 D	232	232 D
MAGNESIUM-HARDNESS	MG/L CACO3	210 D	211 D	189	204
SODIUM	MG/L NA	303 D	299 D	286	303 D
POTASSIUM	MG/L K	5.6 D	5.4 D	5.4	4.9 D
IRON	MG/L FE			0.32	
MANGANESE	MG/L MN			0.82	
ORGANIC MATTER					
AMMONIA NITROGEN	MG/L N	< 0.1	< 0.1	< 0.1	< 0.1

FOOTNOTES : A-AVERAGE OF DUPS B-AVERAGE C-DUP & SPIKE D-DUPLICATE SPIKE E-CALCULATED VALUE

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M05A SJ23423 03/10/00	WELL M05A SJ27539 06/08/00	WELL M05A SJ31111 09/08/00	WELL M05A SJ34603 12/08/00
ORGANIC MATTER					
TOTAL BOD	MG/L O			< 2	
SOLUBLE BOD	MG/L O	< 2 C	< 2 C	< 2	< 2
TOTAL COD	MG/L O			28 C	
SOLUBLE COD	MG/L O	25	28	28	27
TOTAL ORGANIC CARBON	MG/L C	7.91	7.77	7.04	7.20 D
OIL & GREASE	MG/L EXTRAC			< 5	
TOTAL ORGANIC HALOGEN(TOX	UG/L			210 D	
METALS					
ARSENIC	MG/L AS			.0015	
BARIUM	MG/L BA			0.03	
CADMIUM	MG/L CD			<0.002	
TOTAL CHROMIUM	MG/L CR			< 0.01	
COBALT	MG/L CO			< 0.01	
COPPER	MG/L CU			< 0.01	
LEAD	MG/L PB			< 0.01	
MERCURY	MG/L HG			<.0001	
NICKEL	MG/L NI			0.50	
SELENIUM	MG/L SE			<.0010	
SILVER	MG/L AG			< 0.01	
ZINC	MG/L ZN			0.02	
ANTIMONY	MG/L SB			<.0005	
BERYLLIUM	MG/L BE			<.0025	
THALLIUM	MG/L TL			<0.001	
TIN	MG/L SN			< 0.06	
VANADIUM	MG/L V			< 0.05	
PESTICIDES, HERBICIDES, & ORGANOPHOSPHORUS					
2,4,5-T	UG/L			< 0.05	
DINOSEB	UG/L			< 0.1	
THIONAZIN	UG/L			< 1	
DIMETHOATE	UG/L			< 1	
DISULFOTON	UG/L			< 1	
METHYL PARATHION	UG/L			< 1	
ETHYL PARATHION	UG/L			< 1	
PHORATE	UG/L			< 1	
PP'-DDE	UG/L			< 0.01	
PP'-DDD	UG/L			< 0.01	
PP'-DDT	UG/L			< 0.01	

FOOTNOTES : A-AVERAGE OF DUPS B-AVERAGE C-DUP & SPIKE D-DUPLICATE SPIKE E-CALCULATED VALUE

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M05A SJ23423 03/10/00	WELL M05A SJ27539 06/08/00	WELL M05A SJ31111 09/08/00	WELL M05A SJ34603 12/08/00
PESTICIDES, HERBICIDES, & ORGANOPHOSPHORUS					
ALPHA-BHC	UG/L			< 0.01	
LINDANE (GAMMA-BHC)	UG/L			< 0.01	
HEPTACHLOR	UG/L			< 0.01	
HEPTACHLOR EPOXIDE	UG/L			< 0.01	
ALDRIN	UG/L			< 0.01	
DIELDRIN	UG/L			< 0.01	
ENDRIN	UG/L			< 0.01	
TOXAPHENE	UG/L			< 0.5	
METHOXYCLOR	UG/L			< 0.01	
2,4-D(ACID)	UG/L			< 0.5	
2,4,5-TP(SILVEX)	UG/L			< 0.05	
AROCLOR 1242	UG/L			< 0.1	
AROCLOR 1254	UG/L			< 0.05	
BETA-BHC	UG/L			< 0.01	
DELTA-BHC	UG/L			< 0.01	
ENDOSULFAN I	UG/L			< 0.01	
ENDOSULFAN II	UG/L			< 0.01	
ENDOSULFAN SULFATE	UG/L			< 0.1	
ENDRIN ALDEHYDE	UG/L			< 0.01	
AROCLOR 1016	UG/L			< 0.1	
AROCLOR 1221	UG/L			< 0.1	
AROCLOR 1232	UG/L			< 0.1	
AROCLOR 1248	UG/L			< 0.1	
AROCLOR 1260	UG/L			< 0.1	
TECHNICAL CHLORDANE	UG/L			< 0.05	
VOLATILE ORGANIC COMPOUNDS					
ALLYL CHLORIDE	UG/L			< 1	
BROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1
CHLOROPRENE	UG/L			< 1	
1,2-DIBROMO-3-CHLOROPROPA	UG/L	< 0.01	< 0.01	< 0.01	< 0.01
T-1,4-DICHLORO-2-BUTENE	UG/L	< 1	< 1	< 1	< 1
1,3-DICHLOROPROPANE	UG/L			< 0.3	
2,2-DICHLOROPROPANE	UG/L			< 1	
1,1-DICHLOROPROPENE	UG/L			< 1	
ISOBUTYL ALCOHOL	UG/L			< 10	
METHACRYLONITRILE	UG/L			< 10	
METHYL IODIDE	UG/L	< 1	< 1	< 1	< 1
METHYLENE BROMIDE	UG/L	< 1	< 1	< 1	< 1
PROPIONITRILE	UG/L			< 10	

FOOTNOTES : A-AVERAGE OF DUPS B-AVERAGE C-DUP & SPIKE D-DUPLICATE SPIKE E-CALCULATED VALUE

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M05A SJ23423 03/10/00	WELL M05A SJ27539 06/08/00	WELL M05A SJ31111 09/08/00	WELL M05A SJ34603 12/08/00
VOLATILE ORGANIC COMPOUNDS					
1,1,1,2-TETRACHLOROETHANE	UG/L	< 1	< 1	< 1	< 1
1,2,3-TRICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1
METHYL METHACRYLATE	UG/L			< 10	
ETHYL METHACRYLATE	UG/L			< 5	
METHYLENE CHLORIDE	UG/L	< 1	< 1	< 1	< 1
CHLOROFORM	UG/L	< 1	< 1	< 1	< 1
1,1,1-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1
CARBON TETRACHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3
1,1-DICHLOROETHENE	UG/L	< 1	< 1	< 1	< 1
TRICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1
TETRACHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1
BROMODICHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1
BROMOFORM	UG/L	< 1	< 1	< 1	< 1
CHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1
VINYL CHLORIDE	UG/L	2	0.6	0.4	1
O-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1
M-DICHLOROBENZENE	UG/L			< 1	
P-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1
1,1-DICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1
1,1,2-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1
1,2-DICHLOROETHANE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3
BENZENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	UG/L	< 1	< 1	< 1	< 1
ETHYL BENZENE	UG/L	< 1	< 1	< 1	< 1
VINYL ACETATE	UG/L	< 10	< 10	< 10	< 10
O-XYLENE	UG/L	< 1	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHYLEN	UG/L	< 1	< 1	< 1	< 1
BROMOMETHANE	UG/L	< 1	< 1	< 1	< 1
CHLOROETHANE	UG/L	< 1	< 1	< 1	< 1
2-CHLOROETHYLVINYLETHER	UG/L			< 1	
CHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1
1,2-DICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5
ACROLEIN	UG/L			< 10	
ACRYLONITRILE	UG/L	< 10	< 10	< 10	< 10
ACETONITRILE	UG/L			< 20	
FREON 12 (CCL2F2)	UG/L			< 1	
FREON 11 (CCL3F)	UG/L	< 1	< 1	< 1	< 1

FOOTNOTES : A-AVERAGE OF DUPS B-AVERAGE C-DUP & SPIKE D-DUPLICATE SPIKE E-CALCULATED VALUE

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS		WELL M05A SJ23423 03/10/00	WELL M05A SJ27539 06/08/00	WELL M05A SJ31111 09/08/00	WELL M05A SJ34603 12/08/00
VOLATILE ORGANIC COMPOUNDS						
1,2-DIBROMOETHANE	UG/L		< 0.05	< 0.01	< 0.01	< 0.01
ACETONE	UG/L		< 10	< 10	< 10	< 10
CIS-1,2-DICHLOROETHYLENE	UG/L		< 1	< 1	< 1	< 1
2-BUTANONE	UG/L		< 10	< 10	< 10	< 10
4-METHYL-2-PENTANONE	UG/L		< 10	< 10	< 10	< 10
STYRENE	UG/L		< 1	< 1	< 1	< 1
2,4,5-TRICHLOROPHENOL	UG/L				< 1	
M+P-XYLENE	UG/L		< 1	< 1	< 1	< 1
CARBON DISULFIDE	UG/L	CS2	< 1	< 1	< 1	< 1
2-HEXANONE	UG/L	C6H12O	< 5	< 5	< 5	< 5
ACID-BASE NEUTRAL EXTRACTABLE						
ACETOPHENONE	UG/L				< 1	
2-ACETYLAMINOFLUORENE	UG/L				< 1	
4-AMINOBIPHENYL	UG/L				< 1	
BENZYL ALCOHOL	UG/L				< 1	
P-CHLOROANILINE	UG/L				< 1	
CHLOROBENZILATE	UG/L				< 1	
DIALLATE	UG/L				< 1	
DIBENZOFURAN	UG/L				< 1	
2,6-DICHLOROPHENOL	UG/L				< 1	
P(DIMETHYLAMINO)AZOBENZEN	UG/L				< 1	
7,12-DIMETHYLBENZ(A)ANTHR	UG/L				< 10	
3,3'-DIMETHYLBENZIDINE	UG/L				< 1	
M-DINITROBENZENE	UG/L				< 1	
DIPHENYLAMINE	UG/L				< 1	
ETHYL METHANESULFONATE	UG/L				< 1	
FAMPHUR	UG/L				< 1	
HEXACHLOROPROPENE	UG/L				< 5	
ISODRIN	UG/L				< 1	
ISOSAFROLE	UG/L				< 1	
KEPONE	UG/L				< 10	
METHAPYRILENE	UG/L				< 20	
3-METHYLCHOLANTHRENE	UG/L				< 1	
METHYL METHANESULFONATE	UG/L				< 1	
2-METHYLNAPHTHALENE	UG/L				< 1	
1,4-NAPHTHOQUINONE	UG/L				< 1	
1-NAPHTHYLAMINE	UG/L				< 1	
2-NAPHTHYLAMINE	UG/L				< 1	
O-NITROANILINE	UG/L				< 1	

FOOTNOTES : A-AVERAGE OF DUPS B-AVERAGE C-DUP & SPIKE D-DUPLICATE SPIKE E-CALCULATED VALUE

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M05A SJ23423 03/10/00	WELL M05A SJ27539 06/08/00	WELL M05A SJ31111 09/08/00	WELL M05A SJ34603 12/08/00
ACID-BASE NEUTRAL EXTRACTABLE					
M-NITROANILINE	UG/L			< 1	
P-NITROANILINE	UG/L			< 1	
N-NITROSODI-N-BUTYLAMINE	UG/L			< 1	
N-NITROSODIETHYLAMINE	UG/L			< 1	
N-NITROSOMETHYLETHYLAMINE	UG/L			< 1	
N-NITROSOPIPERIDINE	UG/L			< 1	
N-NITROSOPYRROLIDINE	UG/L			< 1	
5-NITRO-O-TOLUIDINE	UG/L			< 1	
PENTACHLOROBENZENE	UG/L			< 1	
PENTACHLORONITROBENZENE	UG/L			< 5	
PHENACETIN	UG/L			< 1	
P-PHENYLENEDIAMINE	UG/L			< 20	
PRONAMIDE	UG/L			< 1	
SAFROLE	UG/L			< 1	
1,2,4,5-TETRACHLOROBENZEN	UG/L			< 1	
2,3,4,6-TETRACHLOROPHENOL	UG/L			< 1	
O-TOLUIDINE	UG/L			< 1	
O,O,O-TRIETHYLPHOSPHOROTH	UG/L			< 1	
SYM-TRINITROBENZENE	UG/L			< 5	
ACENAPHTHENE	UG/L			< 1	
ACENAPHTHYLENE	UG/L			< 1	
ANTHRACENE	UG/L			< 1	
BENZIDINE	UG/L			< 20	
BENZO(A)ANTHRACENE	UG/L			< 1	
BENZO(A)PYRENE	UG/L			< 0.2	
BENZO(B)FLUORANTHENE	UG/L			< 1	
BENZO(G.H.I.)PERYLENE	UG/L			< 1	
BENZO(K)FLUORANTHENE	UG/L			< 1	
BIS(2-CL-ETHOXY)METHANE	UG/L			< 1	
BIS(2-CHLOROETHYL)ETHER	UG/L			< 1	
BIS(2-CL-ISOPROPYL)ETHER	UG/L			< 1	
DIETHYLHEXYL PHTHALATE	UG/L			< 1	
4-BROMOPHENYL PHENYLETHER	UG/L			< 1	
BUTYLBENZYL PHTHALATE	UG/L			< 1	
2-CHLORONAPHTHALENE	UG/L			< 1	
4-CHLOROPHENYLPHENYLETHER	UG/L			< 1	
CHRYSENE	UG/L			< 1	
DIBENZO(A,H)ANTHRACENE	UG/L			< 1	
3,3'-DICHLOROBENZIDINE	UG/L			< 1	
DIETHYL PHTHALATE	UG/L			< 1	
DIMETHYL PHTHALATE	UG/L			< 1	

FOOTNOTES : A-AVERAGE OF DUPS B-AVERAGE C-DUP & SPIKE D-DUPLICATE SPIKE E-CALCULATED VALUE

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M05A SJ23423 03/10/00	WELL M05A SJ27539 06/08/00	WELL M05A SJ31111 09/08/00	WELL M05A SJ34603 12/08/00
ACID-BASE NEUTRAL EXTRACTABLE					
DI-N-BUTYL PHTHALATE	UG/L			< 1	
2,4-DINITROTOLUENE	UG/L			< 1	
2,6-DINITROTOLUENE	UG/L			< 1	
DI-N-OCTYL PHTHALATE	UG/L			< 1	
FLUORANTHENE	UG/L			< 1	
FLUORENE	UG/L			< 1	
HEXACHLOROBENZENE	UG/L			< 1	
HEXACHLOROBUTADIENE	UG/L			< 1	
HEXACHLOROCYCLOPENTADIENE	UG/L			< 5	
HEXACHLOROETHANE	UG/L			< 1	
INDENO(1,2,3-C,D)PYRENE	UG/L			< 1	
ISOPHORONE	UG/L			< 1	
NAPHTHALENE	UG/L			< 1	
NITROBENZENE	UG/L			< 1	
N-NITROSODIMETHYLAMINE	UG/L			< 1	
N-NITROSODI-N-PROPYLAMINE	UG/L			< 1	
PHENANTHRENE	UG/L			< 1	
PYRENE	UG/L			< 1	
2-CHLOROPHENOL	UG/L			< 1	
1,2,4-TRICHLOROBENZENE	UG/L			< 1	
2,4-DICHLOROPHENOL	UG/L			< 1	
2,4-DIMETHYLPHENOL	UG/L			< 1	
2,4-DINITROPHENOL	UG/L			< 6	
2-METHYL-4,6DINITROPHENOL	UG/L			< 1	
2-NITROPHENOL	UG/L			< 1	
4-NITROPHENOL	UG/L			< 1	
4-CHLORO-3-METHYLPHENOL	UG/L			< 1	
PENTACHLOROPHENOL	UG/L			< 1	
PHENOL	UG/L			< 1	
2,4,6-TRICHLOROPHENOL	UG/L			< 1	
N-NITROSODIPHENYLAMINE	UG/L			< 1	
O-CRESOL	UG/L			< 1	
M+P CRESOL	UG/L			< 1	

FOOTNOTES : A-AVERAGE OF DUPS B-AVERAGE C-DUP & SPIKE D-DUPLICATE SPIKE E-CALCULATED VALUE

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WEFI M05A SJ31110 09/08/00
CATIONS		
IRON	MG/L FE	0.08
MANGANESE	MG/L MN	0.78
METALS		
ARSENIC	MG/L AS	.0020
BARIUM	MG/L BA	0.03
CADMIUM	MG/L CD	<0.002
TOTAL CHROMIUM	MG/L CR	< 0.01
COBALT	MG/L CO	< 0.01
COPPER	MG/L CU	< 0.01
LEAD	MG/L PB	< 0.01
MERCURY	MG/L HG	<.0001 A
NICKEL	MG/L NI	0.26
SELENIUM	MG/L SE	<.0010
SILVER	MG/L AG	< 0.01
ZINC	MG/L ZN	0.01
ANTIMONY	MG/L SB	<.0005
BERYLLIUM	MG/L BE	<.0025
THALLIUM	MG/L TL	<0.001
TIN	MG/L SN	< 0.06
VANADIUM	MG/L V	< 0.05

FOOTNOTES : A-DUPLICATE SPIKE

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL RMW6 SJ23241 03/07/00	WELL RMW6 SJ27340 06/05/00	WELL RMW6 SJ31137 09/08/00	WELL RMW6 SJ31138 09/08/00	WELL RMW6 SJ34468 12/06/00
FIELD PARAMETERS						
DEPTH TO WATER	FEET	57.27	56.48	57.17		57.37
DEPTH TO BOTTOM	FEET	91.09	91.1	91.02		90.86
PERCENT METHANE IN GAS	%CH4	< 0.1	< 0.1	< 0.1		< 0.1
PERCENT OXYGEN IN GAS	%O2	18	17	19		19
FIELD WATER TEMPERATURE	DEG.C.	21.19	22.45	21.73		21.9
FIELD PH	PH	6.84	6.73	6.93		6.27
FIELD CONDUCTIVITY	UMHOS/CM	2459	2413	2506		2427
FIELD DISSOLVED O2	MG/L	0.38	0.38	0.58		0.44
FIELD DISSOLVED CO2	MG/L	104	128	76		337
GENERAL						
PH	PH	7.09	7.01	6.98	7.02	6.96
CONDUCTIVITY	UMHOS/CM			2440	2420	
TOTAL DISSOLVED SOLIDS	MG/L	1984 A	1018	2104	2072	2016
TOTAL HARDNESS	MG/L CACO3			1116 D	1132 D	
TOTAL CYANIDE	MG/L CN			<0.005	<0.005	
BORON	MG/L B			0.54	0.55	
ANIONS						
NITRATE NITROGEN	MG/L N	< 0.05	< 0.05 C	< 0.05 C	0.10	< 0.05
SULFATE	MG/L SO4	985	966 C	962 C	965	983
CHLORIDE	MG/L CL	75.8 B	71.5 C	73.5 C	76.0 B	74.7 B
TOTAL ALKALINITY	MG/L CACO3	410	391	369	366	357
BICARBONATE ALKALINITY	MG/L CACO3	410	391	369	366	357
TOTAL SULFIDE	MG/L S			< 0.1	< 0.1	
FLUORIDE	MG/L F			0.93	0.93	
CATIONS						
CALCIUM-HARDNESS	MG/L CACO3	562	574	589 C	597	629 C
MAGNESIUM-HARDNESS	MG/L CACO3	531	556	527 C	535	556 C
SODIUM	MG/L NA	169	164	161 C	169	183 C
POTASSIUM	MG/L K	6.4	6.7	6.6 C	6.8	6.5 C
IRON	MG/L FE			0.06	< 0.05 C	
MANGANESE	MG/L MN			7.14	7.04 C	
ORGANIC MATTER						
AMMONIA NITROGEN	MG/L N	0.2	< 0.1	0.2	0.2	0.4

FOOTNOTES : A-DUP & SPIKE B-AVERAGE C-DUPLICATE SPIKE D-CALCULATED VALUE

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL RMW6 SJ23241 03/07/00	WELL RMW6 SJ27340 06/05/00	WELL RMW6 SJ31137 09/08/00	WELL RMW6 SJ31138 09/08/00	WELL RMW6 SJ34468 12/06/00
ORGANIC MATTER						
TOTAL BOD	MG/L O			< 2	< 2	
SOLUBLE BOD	MG/L O	< 2 A	< 2	< 2	< 2	< 2
TOTAL COD	MG/L O			21	< 10	
SOLUBLE COD	MG/L O	< 10 A	< 10 A	< 10	< 10	< 10
TOTAL ORGANIC CARBON	MG/L C	2.23	2.23	2.03	1.99	2.14
OIL & GREASE	MG/L EXTRAC			< 5	< 5	
TOTAL ORGANIC HALOGEN(TOX	UG/L			33 B	26 B	
METALS						
ARSENIC	MG/L AS			<.0010	<.0010	
BARIUM	MG/L BA			0.03	0.03 C	
CADMIUM	MG/L CD			<0.002	<0.002 C	
TOTAL CHROMIUM	MG/L CR			< 0.01	< 0.01 C	
COBALT	MG/L CO			< 0.01	< 0.01 C	
COPPER	MG/L CU			< 0.01	< 0.01 C	
LEAD	MG/L PB			< 0.01	< 0.01 C	
MERCURY	MG/L HG			<.0001	<.0001	
NICKEL	MG/L NI			< 0.02	< 0.02 C	
SELENIUM	MG/L SE			<.0010	<.0010	
SILVER	MG/L AG			< 0.01	< 0.01 C	
ZINC	MG/L ZN			< 0.01	< 0.01 C	
ANTIMONY	MG/L SB			<.0005	<.0005	
BERYLLIUM	MG/L BE			<.0025	<.0025 C	
THALLIUM	MG/L TL			<0.001	<0.001 C	
TIN	MG/L SN			< 0.06	< 0.06 C	
VANADIUM	MG/L V			< 0.05	< 0.05 C	
PESTICIDES, HERBICIDES, & ORGANOPHOSPHORUS						
2,4,5-T	UG/L			< 0.05	< 0.05	
DINOSEB	UG/L			< 0.1	< 0.1	
THIONAZIN	UG/L			< 1	< 1	
DIMETHOATE	UG/L			< 1	< 1	
DISULFOTON	UG/L			< 1	< 1	
METHYL PARATHION	UG/L			< 1	< 1	
ETHYL PARATHION	UG/L			< 1	< 1	
PHORATE	UG/L			< 1	< 1	
PP'-DDE	UG/L			< 0.01	< 0.01	
PP'-DDD	UG/L			< 0.01	< 0.01	
PP'-DDT	UG/L			< 0.01	< 0.01	

FOOTNOTES : A-DUP & SPIKE B-AVERAGE C-DUPLICATE SPIKE D-CALCULATED VALUE

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL RMW6 SJ23241 03/07/00	WELL RMW6 SJ27340 06/05/00	WELL RMW6 SJ31137 09/08/00	WELL RMW6 SJ31138 09/08/00	WELL RMW6 SJ34468 12/06/00
PESTICIDES, HERBICIDES, & ORGANOPHOSPHORUS						
ALPHA-BHC	UG/L			< 0.01	< 0.01	
LINDANE (GAMMA-BHC)	UG/L			< 0.01	< 0.01	
HEPTACHLOR	UG/L			< 0.01	< 0.01	
HEPTACHLOR EPOXIDE	UG/L			< 0.01	< 0.01	
ALDRIN	UG/L			< 0.01	< 0.01	
DIELDRIN	UG/L			< 0.01	< 0.01	
ENDRIN	UG/L			< 0.01	< 0.01	
TOXAPHENE	UG/L			< 0.5	< 0.5	
METHOXYCLOR	UG/L			< 0.01	< 0.01	
2,4-D(ACID)	UG/L			< 0.5	< 0.5	
2,4,5-TP(SILVEX)	UG/L			< 0.05	< 0.05	
AROCLOR 1242	UG/L			< 0.1	< 0.1	
AROCLOR 1254	UG/L			< 0.05	< 0.05	
BETA-BHC	UG/L			< 0.01	< 0.01	
DELTA-BHC	UG/L			< 0.01	< 0.01	
ENDOSULFAN I	UG/L			< 0.01	< 0.01	
ENDOSULFAN II	UG/L			< 0.01	< 0.01	
ENDOSULFAN SULFATE	UG/L			< 0.1	< 0.1	
ENDRIN ALDEHYDE	UG/L			< 0.01	< 0.01	
AROCLOR 1016	UG/L			< 0.1	< 0.1	
AROCLOR 1221	UG/L			< 0.1	< 0.1	
AROCLOR 1232	UG/L			< 0.1	< 0.1	
AROCLOR 1248	UG/L			< 0.1	< 0.1	
AROCLOR 1260	UG/L			< 0.1	< 0.1	
TECHNICAL CHLORDANE	UG/L			< 0.05	< 0.05	
VOLATILE ORGANIC COMPOUNDS						
ALLYL CHLORIDE	UG/L			< 1	< 1	
BROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
CHLOROPRENE	UG/L			< 1	< 1	
1,2-DIBROMO-3-CHLOROPROPA	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
T-1,4-DICHLORO-2-BUTENE	UG/L	< 1	< 1	< 1	< 1	< 1
1,3-DICHLOROPROPANE	UG/L			< 0.3	< 0.3	
2,2-DICHLOROPROPANE	UG/L			< 1	< 1	
1,1-DICHLOROPROPENE	UG/L			< 1	< 1	
ISOBUTYL ALCOHOL	UG/L			< 10	< 10	
METHACRYLONITRILE	UG/L			< 10	< 10	
METHYL IODIDE	UG/L	< 1	< 1	< 1	< 1	< 1
METHYLENE BROMIDE	UG/L	< 1	< 1	< 1	< 1	< 1
PROPIONITRILE	UG/L			< 10	< 10	

FOOTNOTES : A-DUP & SPIKE B-AVERAGE C-DUPLICATE SPIKE D-CALCULATED VALUE

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL RMW6 SJ23241 03/07/00	WELL RMW6 SJ27340 06/05/00	WELL RMW6 SJ31137 09/08/00	WELL RMW6 SJ31138 09/08/00	WELL RMW6 SJ34468 12/06/00
VOLATILE ORGANIC COMPOUNDS						
1,1,1,2-TETRACHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,2,3-TRICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1
METHYL METHACRYLATE	UG/L			< 10	< 10	
ETHYL METHACRYLATE	UG/L			< 5	< 5	
METHYLENE CHLORIDE	UG/L	< 1	< 1	< 1	< 1	< 1
CHLOROFORM	UG/L	< 1	< 1	< 1	< 1	< 1
1,1,1-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
CARBON TETRACHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-DICHLOROETHENE	UG/L	< 1	< 1	< 1	< 1	< 1
TRICHLOROETHYLENE	UG/L	4	4	4	4	3
TETRACHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
BROMODICHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
BROMOFORM	UG/L	< 1	< 1	< 1	< 1	< 1
CHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1
VINYL CHLORIDE	UG/L	1	2	1	1	1
O-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1
M-DICHLOROBENZENE	UG/L			< 1	< 1	
P-DICHLOROBENZENE	UG/L	2	2	1	2	1
1,1-DICHLOROETHANE	UG/L	3	3	2	2	2
1,1,2-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROETHANE	UG/L	0.5	0.5	< 0.3	0.6	< 0.3
BENZENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	UG/L	< 1	< 1	< 1	< 1	< 1
ETHYL BENZENE	UG/L	< 1	< 1	< 1	< 1	< 1
VINYL ACETATE	UG/L	< 10	< 10	< 10	< 10	< 10
O-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHYLEN	UG/L	< 1	< 1	< 1	< 1	< 1
BROMOMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
CHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
2-CHLOROETHYLVINYLETHER	UG/L			< 1	< 1	
CHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
ACROLEIN	UG/L			< 10	< 10	
ACRYLONITRILE	UG/L	< 10	< 10	< 10	< 10	< 10
ACETONITRILE	UG/L			< 20	< 20	
FREON 12 (CCL2F2)	UG/L			< 1	< 1	
FREON 11 (CCL3F)	UG/L	< 1	< 1	< 1	< 1	< 1

FOOTNOTES : A-DUP & SPIKE B-AVERAGE C-DUPLICATE SPIKE D-CALCULATED VALUE

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL RMW6 SJ23241 03/07/00	WELL RMW6 SJ27340 06/05/00	WELL RMW6 SJ31137 09/08/00	WELL RMW6 SJ31138 09/08/00	WELL RMW6 SJ34468 12/06/00
VOLATILE ORGANIC COMPOUNDS						
1,2-DIBROMOETHANE	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ACETONE	UG/L	< 10	< 10	< 10	< 10	< 10
CIS-1,2-DICHLOROETHYLENE	UG/L	10	11	9	9	8
2-BUTANONE	UG/L	< 10	< 10	< 10	< 10	< 10
4-METHYL-2-PENTANONE	UG/L	< 10	< 10	< 10	< 10	< 10
STYRENE	UG/L	< 1	< 1	< 1	< 1	< 1
2,4,5-TRICHLOROPHENOL	UG/L			< 1	< 1	
M+P-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
CARBON DISULFIDE	UG/L CS2	< 1	< 1	< 1	< 1	< 1
2-HEXANONE	UG/L C6H12O	< 5	< 5	< 5	< 5	< 5
ACID-BASE NEUTRAL EXTRACTABLE						
ACETOPHENONE	UG/L			< 1	< 1	
2-ACETYLAMINOFLUORENE	UG/L			< 1	< 1	
4-AMINOBIPHENYL	UG/L			< 1	< 1	
BENZYL ALCOHOL	UG/L			< 1	< 1	
P-CHLOROANILINE	UG/L			< 1	< 1	
CHLOROBENZILATE	UG/L			< 1	< 1	
DIALLATE	UG/L			< 1	< 1	
DIBENZOFURAN	UG/L			< 1	< 1	
2,6-DICHLOROPHENOL	UG/L			< 1	< 1	
P(DIMETHYLAMINO)AZOBENZEN	UG/L			< 1	< 1	
7,12-DIMETHYLBENZ(A)ANTHR	UG/L			< 10	< 10	
3,3'-DIMETHYLBENZIDINE	UG/L			< 1	< 1	
M-DINITROBENZENE	UG/L			< 1	< 1	
DIPHENYLAMINE	UG/L			< 1	< 1	
ETHYL METHANESULFONATE	UG/L			< 1	< 1	
FAMPHUR	UG/L			< 1	< 1	
HEXACHLOROPROPENE	UG/L			< 5	< 5	
ISODRIN	UG/L			< 1	< 1	
ISOSAFROLE	UG/L			< 1	< 1	
KEPONE	UG/L			< 10	< 10	
METHAPYRILENE	UG/L			< 20	< 20	
3-METHYLCHOLANTHRENE	UG/L			< 1	< 1	
METHYL METHANESULFONATE	UG/L			< 1	< 1	
2-METHYLNAPHTHALENE	UG/L			< 1	< 1	
1,4-NAPHTHOQUINONE	UG/L			< 1	< 1	
1-NAPHTHYLAMINE	UG/L			< 1	< 1	
2-NAPHTHYLAMINE	UG/L			< 1	< 1	
O-NITROANILINE	UG/L			< 1	< 1	

FOOTNOTES : A-DUP & SPIKE B-AVERAGE C-DUPLICATE SPIKE D-CALCULATED VALUE

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL RMW6 SJ23241 03/07/00	WELL RMW6 SJ27340 06/05/00	WELL RMW6 SJ31137 09/08/00	WELL RMW6 SJ31138 09/08/00	WELL RMW6 SJ34468 12/06/00
ACID-BASE NEUTRAL EXTRACTABLE						
M-NITROANILINE	UG/L			< 1	< 1	
P-NITROANILINE	UG/L			< 1	< 1	
N-NITROSODI-N-BUTYLAMINE	UG/L			< 1	< 1	
N-NITROSODIETHYLAMINE	UG/L			< 1	< 1	
N-NITROSOMETHYLETHYLAMINE	UG/L			< 1	< 1	
N-NITROSOPIPERIDINE	UG/L			< 1	< 1	
N-NITROSOPYRROLIDINE	UG/L			< 1	< 1	
5-NITRO-O-TOLUIDINE	UG/L			< 1	< 1	
PENTACHLOROBENZENE	UG/L			< 1	< 1	
PENTACHLORONITROBENZENE	UG/L			< 5	< 5	
PHENACETIN	UG/L			< 1	< 1	
P-PHENYLENEDIAMINE	UG/L			< 20	< 20	
PRONAMIDE	UG/L			< 1	< 1	
SAFROLE	UG/L			< 1	< 1	
1,2,4,5-TETRACHLOROBENZEN	UG/L			< 1	< 1	
2,3,4,6-TETRACHLOROPHENOL	UG/L			< 1	< 1	
O-TOLUIDINE	UG/L			< 1	< 1	
O,O,O-TRIETHYLPHOSPHOROTH	UG/L			< 1	< 1	
SYM-TRINITROBENZENE	UG/L			< 5	< 5	
ACENAPHTHENE	UG/L			< 1	< 1	
ACENAPHTHYLENE	UG/L			< 1	< 1	
ANTHRACENE	UG/L			< 1	< 1	
BENZIDINE	UG/L			< 20	< 20	
BENZO(A)ANTHRACENE	UG/L			< 1	< 1	
BENZO(A)PYRENE	UG/L			< 0.2	< 0.2	
BENZO(B)FLUORANTHENE	UG/L			< 1	< 1	
BENZO(G.H.I.)PERYLENE	UG/L			< 1	< 1	
BENZO(K)FLUORANTHENE	UG/L			< 1	< 1	
BIS(2-CL-ETHOXY)METHANE	UG/L			< 1	< 1	
BIS(2-CHLOROETHYL)ETHER	UG/L			< 1	< 1	
BIS(2-CL-ISOPROPYL)ETHER	UG/L			< 1	< 1	
DIETHYLHEXYL PHTHALATE	UG/L			< 1	< 1	
4-BROMOPHENYL PHENYLETHER	UG/L			< 1	< 1	
BUTYLBENZYL PHTHALATE	UG/L			< 1	< 1	
2-CHLORONAPHTHALENE	UG/L			< 1	< 1	
4-CHLOROPHENYLPHENYLETHER	UG/L			< 1	< 1	
CHRYSENE	UG/L			< 1	< 1	
DIBENZO(A,H)ANTHRACENE	UG/L			< 1	< 1	
3,3'-DICHLOROBENZIDINE	UG/L			< 1	< 1	
DIETHYL PHTHALATE	UG/L			< 1	< 1	
DIMETHYL PHTHALATE	UG/L			< 1	< 1	

FOOTNOTES : A-DUP & SPIKE B-AVERAGE C-DUPLICATE SPIKE D-CALCULATED VALUE

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL RMW6 SJ23241 03/07/00	WELL RMW6 SJ27340 06/05/00	WELL RMW6 SJ31137 09/08/00	WELL RMW6 SJ31138 09/08/00	WELL RMW6 SJ34468 12/06/00
ACID-BASE NEUTRAL EXTRACTABLE						
DI-N-BUTYL PHTHALATE	UG/L			< 1	< 1	
2,4-DINITROTOLUENE	UG/L			< 1	< 1	
2,6-DINITROTOLUENE	UG/L			< 1	< 1	
DI-N-OCTYL PHTHALATE	UG/L			< 1	< 1	
FLUORANTHENE	UG/L			< 1	< 1	
FLUORENE	UG/L			< 1	< 1	
HEXACHLOROBENZENE	UG/L			< 1	< 1	
HEXACHLOROBUTADIENE	UG/L			< 1	< 1	
HEXACHLOROCYCLOPENTADIENE	UG/L			< 5	< 5	
HEXACHLOROETHANE	UG/L			< 1	< 1	
INDENO(1,2,3-C,D)PYRENE	UG/L			< 1	< 1	
ISOPHORONE	UG/L			< 1	< 1	
NAPHTHALENE	UG/L			< 1	< 1	
NITROBENZENE	UG/L			< 1	< 1	
N-NITROSODIMETHYLAMINE	UG/L			< 1	< 1	
N-NITROSODI-N-PROPYLAMINE	UG/L			< 1	< 1	
PHENANTHRENE	UG/L			< 1	< 1	
PYRENE	UG/L			< 1	< 1	
2-CHLOROPHENOL	UG/L			< 1	< 1	
1,2,4-TRICHLOROBENZENE	UG/L			< 1	< 1	
2,4-DICHLOROPHENOL	UG/L			< 1	< 1	
2,4-DIMETHYLPHENOL	UG/L			< 1	< 1	
2,4-DINITROPHENOL	UG/L			< 6	< 6	
2-METHYL-4,6DINITROPHENOL	UG/L			< 1	< 1	
2-NITROPHENOL	UG/L			< 1	< 1	
4-NITROPHENOL	UG/L			< 1	< 1	
4-CHLORO-3-METHYLPHENOL	UG/L			< 1	< 1	
PENTACHLOROPHENOL	UG/L			< 1	< 1	
PHENOL	UG/L			< 1	< 1	
2,4,6-TRICHLOROPHENOL	UG/L			< 1	< 1	
N-NITROSODIPHENYLAMINE	UG/L			< 1	< 1	
O-CRESOL	UG/L			< 1	< 1	
M+P CRESOL	UG/L			< 1	< 1	

FOOTNOTES : A-DUP & SPIKE B-AVERAGE C-DUPLICATE SPIKE D-CALCULATED VALUE

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WEFI RMW6 SJ31135 09/08/00	WEFI RMW6 SJ31136 09/08/00
CATIONS			
IRON	MG/L FE	< 0.05	< 0.05
MANGANESE	MG/L MN	6.87	6.98
METALS			
ARSENIC	MG/L AS	<.0010	<.0010
BARIUM	MG/L BA	0.03	0.03
CADMIUM	MG/L CD	<0.002	<0.002
TOTAL CHROMIUM	MG/L CR	< 0.01	< 0.01
COBALT	MG/L CO	< 0.01	< 0.01
COPPER	MG/L CU	< 0.01	< 0.01
LEAD	MG/L PB	< 0.01	< 0.01
MERCURY	MG/L HG	<.0001	<.0001
NICKEL	MG/L NI	< 0.02	< 0.02
SELENIUM	MG/L SE	<.0010	<.0010
SILVER	MG/L AG	< 0.01	< 0.01
ZINC	MG/L ZN	< 0.01	< 0.01
ANTIMONY	MG/L SB	<.0005	<.0005
BERYLLIUM	MG/L BE	<.0025	<.0025
THALLIUM	MG/L TL	<0.001	<0.001
TIN	MG/L SN	< 0.06	< 0.06
VANADIUM	MG/L V	< 0.05	< 0.05

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M10B SJ23193 03/06/00	WELL M10B SJ23194 03/06/00	WELL M10B SJ27667 06/13/00	WELL M10B SJ27668 06/13/00	WELL M10B SJ31022 09/06/00	WELL M10B SJ34984 12/19/00	WELL M10B SJ34985 12/19/00
FIELD PARAMETERS								
DEPTH TO WATER	FEET	52.97		52.09		52.41	52.06	
DEPTH TO BOTTOM	FEET	89.58		89.51		89.45	89.48	
PERCENT METHANE IN GAS	%CH4	< 0.1		< 0.1		< 0.1	< 0.1	
PERCENT OXYGEN IN GAS	%O2	19		19		21	19	
FIELD WATER TEMPERATURE	DEG.C.	20.93		23.46		23.76	21.57	
FIELD PH	PH	6.83		6.83		7.07	6.51	
FIELD CONDUCTIVITY	UMHOS/CM	2436		2409		2484	2392	
FIELD DISSOLVED O2	MG/L	1.03		1.12		1.35	1.2	
FIELD DISSOLVED CO2	MG/L	90		97		56	201	
GENERAL								
PH	PH	6.95 A	6.97	7.19 A	7.09	7.19	7.21	7.18
CONDUCTIVITY	UMHOS/CM					2400		
TOTAL DISSOLVED SOLIDS	MG/L	1967	1969	1912	1892	2044 C	1984	2048
TOTAL HARDNESS	MG/L CACO3					1098 E		
TOTAL CYANIDE	MG/L CN					<0.005		
BORON	MG/L B					0.40		
ANIONS								
NITRATE NITROGEN	MG/L N	1.28 B	1.31	2.37 B	2.42 D	2.50 D	2.95	2.95
SULFATE	MG/L SO4	906 B	931	913 B	922 D	917	906	910
CHLORIDE	MG/L CL	90.6 B	93.5 D	92.9 B	94.1 D	91.7 D	121	103
TOTAL ALKALINITY	MG/L CACO3	345	386	374	375	377	370	370
BICARBONATE ALKALINITY	MG/L CACO3	345	386	374	375	377	370	370
TOTAL SULFIDE	MG/L S					< 0.1 A		
FLUORIDE	MG/L F					1.01		
CATIONS								
CALCIUM-HARDNESS	MG/L CACO3	567	594 B	569	554	559 B	557	559
MAGNESIUM-HARDNESS	MG/L CACO3	527	527 B	556	560	539 B	523	527
SODIUM	MG/L NA	153	153 B	156	151	154 B	167	156
POTASSIUM	MG/L K	6.2	6.2 B	6.5	6.7	6.6 B	6.2	6.2
IRON	MG/L FE					0.65		
MANGANESE	MG/L MN					0.89		
ORGANIC MATTER								
AMMONIA NITROGEN	MG/L N	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1

FOOTNOTES : A-AVERAGE OF DUPS B-DUPLICATE SPIKE C-DUP & SPIKE D-AVERAGE E-CALCULATED VALUE

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M10B SJ23193 03/06/00	WELL M10B SJ23194 03/06/00	WELL M10B SJ27667 06/13/00	WELL M10B SJ27668 06/13/00	WELL M10B SJ31022 09/06/00	WELL M10B SJ34984 12/19/00	WELL M10B SJ34985 12/19/00
ORGANIC MATTER								
TOTAL BOD	MG/L O					< 2 C		
SOLUBLE BOD	MG/L O	< 2 C	< 2	< 2 C	< 2	< 2	< 2	< 2
TOTAL COD	MG/L O					< 10		
SOLUBLE COD	MG/L O	< 10 C	< 10	< 10 C	< 10	< 10 C	< 10 C	< 10 C
TOTAL ORGANIC CARBON	MG/L C	1.43	1.92 B	2.76	2.77	1.62	1.17	1.16
OIL & GREASE	MG/L EXTRAC					< 5		
TOTAL ORGANIC HALOGEN(TOX	UG/L					19 D		
METALS								
ARSENIC	MG/L AS					<.0010		
BARIUM	MG/L BA					0.02		
CADMIUM	MG/L CD					<0.002		
TOTAL CHROMIUM	MG/L CR					< 0.01		
COBALT	MG/L CO					< 0.01		
COPPER	MG/L CU					< 0.01		
LEAD	MG/L PB					< 0.01		
MERCURY	MG/L HG					<.0001		
NICKEL	MG/L NI					< 0.02		
SELENIUM	MG/L SE					<.0010		
SILVER	MG/L AG					< 0.01		
ZINC	MG/L ZN					0.02		
ANTIMONY	MG/L SB					<.0005		
BERYLLIUM	MG/L BE					<.0025		
THALLIUM	MG/L TL					<0.001		
TIN	MG/L SN					< 0.06		
VANADIUM	MG/L V					< 0.05		
PESTICIDES, HERBICIDES, & ORGANOPHOSPHORUS								
2,4,5-T	UG/L					< 0.05		
DINOSEB	UG/L					< 0.1		
THIONAZIN	UG/L					< 1		
DIMETHOATE	UG/L					< 1		
DISULFOTON	UG/L					< 1		
METHYL PARATHION	UG/L					< 1		
ETHYL PARATHION	UG/L					< 1		
PHORATE	UG/L					< 1		
PP'-DDE	UG/L					< 0.01		
PP'-DDD	UG/L					< 0.01		
PP'-DDT	UG/L					< 0.01		

FOOTNOTES : A-AVERAGE OF DUPS B-DUPLICATE SPIKE C-DUP & SPIKE D-AVERAGE E-CALCULATED VALUE

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M10B SJ23193 03/06/00	WELL M10B SJ23194 03/06/00	WELL M10B SJ27667 06/13/00	WELL M10B SJ27668 06/13/00	WELL M10B SJ31022 09/06/00	WELL M10B SJ34984 12/19/00	WELL M10B SJ34985 12/19/00
PESTICIDES, HERBICIDES, & ORGANOPHOSPHORUS								
ALPHA-BHC	UG/L					< 0.01		
LINDANE (GAMMA-BHC)	UG/L					< 0.01		
HEPTACHLOR	UG/L					< 0.01		
HEPTACHLOR EPOXIDE	UG/L					< 0.01		
ALDRIN	UG/L					< 0.01		
DIELDRIN	UG/L					< 0.01		
ENDRIN	UG/L					< 0.01		
TOXAPHENE	UG/L					< 0.5		
METHOXYCLOR	UG/L					< 0.01		
2,4-D(ACID)	UG/L					< 0.5		
2,4,5-TP(SILVEX)	UG/L					< 0.05		
AROCLOR 1242	UG/L					< 0.1		
AROCLOR 1254	UG/L					< 0.05		
BETA-BHC	UG/L					< 0.01		
DELTA-BHC	UG/L					< 0.01		
ENDOSULFAN I	UG/L					< 0.01		
ENDOSULFAN II	UG/L					< 0.01		
ENDOSULFAN SULFATE	UG/L					< 0.1		
ENDRIN ALDEHYDE	UG/L					< 0.01		
AROCLOR 1016	UG/L					< 0.1		
AROCLOR 1221	UG/L					< 0.1		
AROCLOR 1232	UG/L					< 0.1		
AROCLOR 1248	UG/L					< 0.1		
AROCLOR 1260	UG/L					< 0.1		
TECHNICAL CHLORDANE	UG/L					< 0.05		
VOLATILE ORGANIC COMPOUNDS								
ALLYL CHLORIDE	UG/L					< 1		
BROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROPRENE	UG/L					< 1		
1,2-DIBROMO-3-CHLOROPROPA	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
T-1,4-DICHLORO-2-BUTENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-DICHLOROPROPANE	UG/L					< 0.3		
2,2-DICHLOROPROPANE	UG/L					< 1		
1,1-DICHLOROPROPENE	UG/L					< 1		
ISOBUTYL ALCOHOL	UG/L					< 10		
METHACRYLONITRILE	UG/L					< 10		
METHYL IODIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
METHYLENE BROMIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
PROPIONITRILE	UG/L					< 10		

FOOTNOTES : A-AVERAGE OF DUPS B-DUPLICATE SPIKE C-DUP & SPIKE D-AVERAGE E-CALCULATED VALUE

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M10B SJ23193 03/06/00	WELL M10B SJ23194 03/06/00	WELL M10B SJ27667 06/13/00	WELL M10B SJ27668 06/13/00	WELL M10B SJ31022 09/06/00	WELL M10B SJ34984 12/19/00	WELL M10B SJ34985 12/19/00
VOLATILE ORGANIC COMPOUNDS								
1,1,1,2-TETRACHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-TRICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
METHYL METHACRYLATE	UG/L					< 10		
ETHYL METHACRYLATE	UG/L					< 5		
METHYLENE CHLORIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROFORM	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CARBON TETRACHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-DICHLOROETHENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TRICHLOROETHYLENE	UG/L	6	6	4	5	4	3	3
TETRACHLOROETHYLENE	UG/L	4	4	4	5	4	4	4
BROMODICHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
BROMOFORM	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
VINYL CHLORIDE	UG/L	0.4	0.4	0.3	0.4	< 0.3	< 0.3	< 0.3
O-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
M-DICHLOROBENZENE	UG/L					< 1		
P-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-DICHLOROETHANE	UG/L	2	2	2	2	1	1	1
1,1,2-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROETHANE	UG/L	0.4	0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
BENZENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
ETHYL BENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
VINYL ACETATE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10
O-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHYLEN	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
BROMOMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-CHLOROETHYLVINYLETHER	UG/L					< 1		
CHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
ACROLEIN	UG/L					< 10		
ACRYLONITRILE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10
ACETONITRILE	UG/L					< 20		
FREON 12 (CCL2F2)	UG/L					< 1		
FREON 11 (CCL3F)	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1

FOOTNOTES : A-AVERAGE OF DUPS B-DUPLICATE SPIKE C-DUP & SPIKE D-AVERAGE E-CALCULATED VALUE

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M10B SJ23193 03/06/00	WELL M10B SJ23194 03/06/00	WELL M10B SJ27667 06/13/00	WELL M10B SJ27668 06/13/00	WELL M10B SJ31022 09/06/00	WELL M10B SJ34984 12/19/00	WELL M10B SJ34985 12/19/00
VOLATILE ORGANIC COMPOUNDS								
1,2-DIBROMOETHANE	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ACETONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10
CIS-1,2-DICHLOROETHYLENE	UG/L	11	10	8	10	7	6	6
2-BUTANONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-METHYL-2-PENTANONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10
STYRENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2,4,5-TRICHLOROPHENOL	UG/L					< 1		
M+P-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CARBON DISULFIDE	UG/L CS2	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-HEXANONE	UG/L C6H12O	< 5	< 5	< 5	< 5	< 5	< 5	< 5
ACID-BASE NEUTRAL EXTRACTABLE								
ACETOPHENONE	UG/L					< 1		
2-ACETYLAMINOFLUORENE	UG/L					< 1		
4-AMINOBIPHENYL	UG/L					< 1		
BENZYL ALCOHOL	UG/L					< 1		
P-CHLOROANILINE	UG/L					< 1		
CHLOROBENZILATE	UG/L					< 1		
DIALLATE	UG/L					< 1		
DIBENZOFURAN	UG/L					< 1		
2,6-DICHLOROPHENOL	UG/L					< 1		
P(DIMETHYLAMINO)AZOBENZEN	UG/L					< 1		
7,12-DIMETHYLBENZ(A)ANTHR	UG/L					< 10		
3,3'-DIMETHYLBENZIDINE	UG/L					< 1		
M-DINITROBENZENE	UG/L					< 1		
DIPHENYLAMINE	UG/L					< 1		
ETHYL METHANESULFONATE	UG/L					< 1		
FAMPHUR	UG/L					< 1		
HEXACHLOROPROPENE	UG/L					< 5		
ISODRIN	UG/L					< 1		
ISOSAFROLE	UG/L					< 1		
KEPONE	UG/L					< 10		
METHAPYRILENE	UG/L					< 20		
3-METHYLCHOLANTHRENE	UG/L					< 1		
METHYL METHANESULFONATE	UG/L					< 1		
2-METHYLNAPHTHALENE	UG/L					< 1		
1,4-NAPHTHOQUINONE	UG/L					< 1		
1-NAPHTHYLAMINE	UG/L					< 1		
2-NAPHTHYLAMINE	UG/L					< 1		
O-NITROANILINE	UG/L					< 1		

FOOTNOTES : A-AVERAGE OF DUPS B-DUPLICATE SPIKE C-DUP & SPIKE D-AVERAGE E-CALCULATED VALUE

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M10B SJ23193 03/06/00	WELL M10B SJ23194 03/06/00	WELL M10B SJ27667 06/13/00	WELL M10B SJ27668 06/13/00	WELL M10B SJ31022 09/06/00	WELL M10B SJ34984 12/19/00	WELL M10B SJ34985 12/19/00
ACID-BASE NEUTRAL EXTRACTABLE								
M-NITROANILINE	UG/L					< 1		
P-NITROANILINE	UG/L					< 1		
N-NITROSODI-N-BUTYLAMINE	UG/L					< 1		
N-NITROSODIETHYLAMINE	UG/L					< 1		
N-NITROSOMETHYLETHYLAMINE	UG/L					< 1		
N-NITROSOPIPERIDINE	UG/L					< 1		
N-NITROSOPYRROLIDINE	UG/L					< 1		
5-NITRO-O-TOLUIDINE	UG/L					< 1		
PENTACHLOROBENZENE	UG/L					< 1		
PENTACHLORONITROBENZENE	UG/L					< 5		
PHENACETIN	UG/L					< 1		
P-PHENYLENEDIAMINE	UG/L					< 20		
PRONAMIDE	UG/L					< 1		
SAFROLE	UG/L					< 1		
1,2,4,5-TETRACHLOROBENZEN	UG/L					< 1		
2,3,4,6-TETRACHLOROPHENOL	UG/L					< 1		
O-TOLUIDINE	UG/L					< 1		
O,O,O-TRIETHYLPHOSPHOROTH	UG/L					< 1		
SYM-TRINITROBENZENE	UG/L					< 5		
ACENAPHTHENE	UG/L					< 1		
ACENAPHTHYLENE	UG/L					< 1		
ANTHRACENE	UG/L					< 1		
BENZIDINE	UG/L					< 20		
BENZO(A)ANTHRACENE	UG/L					< 1		
BENZO(A)PYRENE	UG/L					< 0.2		
BENZO(B)FLUORANTHENE	UG/L					< 1		
BENZO(G.H.I.)PERYLENE	UG/L					< 1		
BENZO(K)FLUORANTHENE	UG/L					< 1		
BIS(2-CL-ETHOXY)METHANE	UG/L					< 1		
BIS(2-CHLOROETHYL)ETHER	UG/L					< 1		
BIS(2-CL-ISOPROPYL)ETHER	UG/L					< 1		
DIETHYLHEXYL PHTHALATE	UG/L					< 1		
4-BROMOPHENYL PHENYLETHER	UG/L					< 1		
BUTYLBENZYL PHTHALATE	UG/L					< 1		
2-CHLORONAPHTHALENE	UG/L					< 1		
4-CHLOROPHENYLPHENYLETHER	UG/L					< 1		
CHRYSENE	UG/L					< 1		
DIBENZO(A,H)ANTHRACENE	UG/L					< 1		
3,3'-DICHLOROBENZIDINE	UG/L					< 1		
DIETHYL PHTHALATE	UG/L					< 1		
DIMETHYL PHTHALATE	UG/L					< 1		

FOOTNOTES : A-AVERAGE OF DUPS B-DUPLICATE SPIKE C-DUP & SPIKE D-AVERAGE E-CALCULATED VALUE

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M10B SJ23193 03/06/00	WELL M10B SJ23194 03/06/00	WELL M10B SJ27667 06/13/00	WELL M10B SJ27668 06/13/00	WELL M10B SJ31022 09/06/00	WELL M10B SJ34984 12/19/00	WELL M10B SJ34985 12/19/00
ACID-BASE NEUTRAL EXTRACTABLE								
DI-N-BUTYL PHTHALATE	UG/L					< 1		
2,4-DINITROTOLUENE	UG/L					< 1		
2,6-DINITROTOLUENE	UG/L					< 1		
DI-N-OCTYL PHTHALATE	UG/L					< 1		
FLUORANTHENE	UG/L					< 1		
FLUORENE	UG/L					< 1		
HEXACHLOROBENZENE	UG/L					< 1		
HEXACHLOROBUTADIENE	UG/L					< 1		
HEXACHLOROCYCLOPENTADIENE	UG/L					< 5		
HEXACHLOROETHANE	UG/L					< 1		
INDENO(1,2,3-C,D)PYRENE	UG/L					< 1		
ISOPHORONE	UG/L					< 1		
NAPHTHALENE	UG/L					< 1		
NITROBENZENE	UG/L					< 1		
N-NITROSODIMETHYLAMINE	UG/L					< 1		
N-NITROSODI-N-PROPYLAMINE	UG/L					< 1		
PHENANTHRENE	UG/L					< 1		
PYRENE	UG/L					< 1		
2-CHLOROPHENOL	UG/L					< 1		
1,2,4-TRICHLOROBENZENE	UG/L					< 1		
2,4-DICHLOROPHENOL	UG/L					< 1		
2,4-DIMETHYLPHENOL	UG/L					< 1		
2,4-DINITROPHENOL	UG/L					< 6		
2-METHYL-4,6DINITROPHENOL	UG/L					< 1		
2-NITROPHENOL	UG/L					< 1		
4-NITROPHENOL	UG/L					< 1		
4-CHLORO-3-METHYLPHENOL	UG/L					< 1		
PENTACHLOROPHENOL	UG/L					< 1		
PHENOL	UG/L					< 1		
2,4,6-TRICHLOROPHENOL	UG/L					< 1		
N-NITROSODIPHENYLAMINE	UG/L					< 1		
O-CRESOL	UG/L					< 1		
M+P CRESOL	UG/L					< 1		

FOOTNOTES : A-AVERAGE OF DUPS B-DUPLICATE SPIKE C-DUP & SPIKE D-AVERAGE E-CALCULATED VALUE

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WEFI M10B SJ31021 09/06/00
CATIONS		
IRON	MG/L FE	< 0.05 A
MANGANESE	MG/L MN	0.81 A
METALS		
ARSENIC	MG/L AS	<.0010
BARIUM	MG/L BA	0.02 A
CADMIUM	MG/L CD	<0.002 A
TOTAL CHROMIUM	MG/L CR	< 0.01 A
COBALT	MG/L CO	< 0.01 A
COPPER	MG/L CU	< 0.01 A
LEAD	MG/L PB	< 0.01 A
MERCURY	MG/L HG	<.0001 A
NICKEL	MG/L NI	< 0.02 A
SELENIUM	MG/L SE	<.0010
SILVER	MG/L AG	< 0.01 A
ZINC	MG/L ZN	< 0.01 A
ANTIMONY	MG/L SB	<.0005
BERYLLIUM	MG/L BE	<.0025 A
THALLIUM	MG/L TL	<0.001 A
TIN	MG/L SN	< 0.06 A
VANADIUM	MG/L V	< 0.05 A

FOOTNOTES : A-DUPLICATE SPIKE

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M11A SJ23156 03/03/00	WELL M11A SJ27290 06/02/00	WELL M11A SJ31358 09/14/00	WELL M11A SJ35149 12/22/00	WELL M11A SJ35150 12/22/00
FIELD PARAMETERS						
DEPTH TO WATER	FEET	25.39	25.39	25.39	26.44	
DEPTH TO BOTTOM	FEET	45.46	45.49	45.46	45.36	
PERCENT METHANE IN GAS	%CH4	< 0.1	< 0.1	< 0.1	< 0.1	
PERCENT OXYGEN IN GAS	%O2	16	18	15	19	
FIELD WATER TEMPERATURE	DEG.C.	19.89	22.26	25.35	21.4	
FIELD PH	PH	7.03	6.85	6.88	6.71	
FIELD CONDUCTIVITY	UMHOS/CM	1719	1677	1675	1691	
FIELD DISSOLVED O2	MG/L	0.74	0.49	0.35	0.4	
GENERAL						
PH	PH	7.38	7.24	7.26	7.87	7.17
TOTAL DISSOLVED SOLIDS	MG/L	1272	1298	1288	1216	1300
ANIONS						
NITRATE NITROGEN	MG/L N	< 0.05	< 0.05	< 0.05	0.06 B	< 0.05
SULFATE	MG/L SO4	545	537	520	548 B	542
CHLORIDE	MG/L CL	65.8 A	67.0 A	64.7 A	68.1 B	67.8 A
ORGANIC MATTER						
TOTAL ORGANIC HALOGEN(TOX	UG/L				9.5 B	12 A
VOLATILE ORGANIC COMPOUNDS						
BROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMO-3-CHLOROPROPA	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
T-1,4-DICHLORO-2-BUTENE	UG/L	< 1	< 1	< 1	< 1	< 1
METHYL IODIDE	UG/L	< 1	< 1	< 1	< 1	< 1
METHYLENE BROMIDE	UG/L	< 1	< 1	< 1	< 1	< 1
1,1,1,2-TETRACHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,2,3-TRICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1
METHYLENE CHLORIDE	UG/L	< 1	< 1	< 1	< 1	< 1
CHLOROFORM	UG/L	< 1	< 1	< 1	< 1	< 1
1,1,1-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
CARBON TETRACHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-DICHLOROETHENE	UG/L	< 1	< 1	< 1	< 1	< 1
TRICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
TETRACHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
BROMODICHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1

FOOTNOTES : A-AVERAGE B-DUPLICATE SPIKE

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M11A SJ23156 03/03/00	WELL M11A SJ27290 06/02/00	WELL M11A SJ31358 09/14/00	WELL M11A SJ35149 12/22/00	WELL M11A SJ35150 12/22/00
VOLATILE ORGANIC COMPOUNDS						
DIBROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
BROMOFORM	UG/L	< 1	< 1	< 1	< 1	< 1
CHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1
VINYL CHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
O-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1
P-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1
1,1-DICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,1,2-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROETHANE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
BENZENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	UG/L	< 1	< 1	< 1	< 1	< 1
ETHYL BENZENE	UG/L	< 1	< 1	< 1	< 1	< 1
VINYL ACETATE	UG/L	< 10	< 10	< 10	< 10	< 10
O-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHYLEN	UG/L	< 1	< 1	< 1	< 1	< 1
BROMOMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
CHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
CHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
ACRYLONITRILE	UG/L	< 10	< 10	< 10	< 10	< 10
FREON 11 (CCL3F)	UG/L	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMOETHANE	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ACETONE	UG/L	< 10	< 10	< 10	< 10	< 10
CIS-1,2-DICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
2-BUTANONE	UG/L	< 10	< 10	< 10	< 10	< 10
4-METHYL-2-PENTANONE	UG/L	< 10	< 10	< 10	< 10	< 10
STYRENE	UG/L	< 1	< 1	< 1	< 1	< 1
M+P-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
CARBON DISULFIDE	UG/L CS2	< 1	< 1	< 1	< 1	< 1
2-HEXANONE	UG/L C6H12O	< 5	< 5	< 5	< 5	< 5

FOOTNOTES : A-AVERAGE B-DUPLICATE SPIKE

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL EMP4 SJ23563 03/14/00	WELL EMP4 SJ23564 03/14/00	WELL EMP4 SJ27374 06/06/00	WELL EMP4 SJ27375 06/06/00	WELL EMP4 SJ31357 09/14/00	WELL EMP4 SJ34402 12/05/00
FIELD PARAMETERS							
DEPTH TO WATER	FEET	19.94		20.0		20.17	20.27
DEPTH TO BOTTOM	FEET	183.8		173.2		183.8	183.8
PERCENT METHANE IN GAS	%CH4	< 0.1		< 0.1		< 0.1	< 0.1
PERCENT OXYGEN IN GAS	%O2	15		15		15	18
FIELD WATER TEMPERATURE	DEG.C.	21.13		22.62		23.38	20.28
FIELD PH	PH	7.37		7.28		7.21	6.89
FIELD CONDUCTIVITY	UMHOS/CM	1677		1654		1645	1677
FIELD DISSOLVED O2	MG/L	0.12		0.15		0.19	0.2
GENERAL							
PH	PH	7.47 A	7.47	7.43	7.45	7.53	7.49
TOTAL DISSOLVED SOLIDS	MG/L	1207	1182	1228	1210	1212	1204
ANIONS							
NITRATE NITROGEN	MG/L N	< 0.05 B	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
SULFATE	MG/L SO4	466 B	462	462	478	457	474
CHLORIDE	MG/L CL	64.3 B	64.5 C	62.0 C	63.8 C	61.3 C	62.0 C
VOLATILE ORGANIC COMPOUNDS							
BROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMO-3-CHLOROPROPA	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
T-1,4-DICHLORO-2-BUTENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
METHYL IODIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
METHYLENE BROMIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-TETRACHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-TRICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
METHYLENE CHLORIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROFORM	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CARBON TETRACHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-DICHLOROETHENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
TRICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
TETRACHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
BROMODICHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
BROMOFORM	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
VINYL CHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3

FOOTNOTES : A-AVERAGE OF DUPS B-DUPLICATE SPIKE C-AVERAGE

TABLE A.1

WATER QUALITY DATA - BARRIER ONE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL EMP4 SJ23563 03/14/00	WELL EMP4 SJ23564 03/14/00	WELL EMP4 SJ27374 06/06/00	WELL EMP4 SJ27375 06/06/00	WELL EMP4 SJ31357 09/14/00	WELL EMP4 SJ34402 12/05/00
VOLATILE ORGANIC COMPOUNDS							
O-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
P-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,1-DICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROETHANE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
BENZENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
ETHYL BENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
VINYL ACETATE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10
O-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHYLEN	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
BROMOMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
ACRYLONITRILE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10
FREON 11 (CCL3F)	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMOETHANE	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ACETONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10
CIS-1,2-DICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
2-BUTANONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10
4-METHYL-2-PENTANONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10
STYRENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
M+P-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CARBON DISULFIDE	UG/L CS2	< 1	< 1	< 1	< 1	< 1	< 1
2-HEXANONE	UG/L C6H12O	< 5	< 5	< 5	< 5	< 5	< 5

FOOTNOTES : A-AVERAGE OF DUPS B-DUPLICATE SPIKE C-AVERAGE

TABLE A.2

WATER QUALITY DATA

BARRIER 2 MONITORING WELLS

TABLE A.2

WATER QUALITY DATA - BARRIER TWO MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M24A SJ23229 03/07/00	WELL M24A SJ27291 06/02/00	WELL M24A SJ31108 09/08/00	WELL M24A SJ35156 12/22/00
FIELD PARAMETERS					
DEPTH TO WATER	FEET	75.51	77.41	79.11	79.48
DEPTH TO BOTTOM	FEET	85.08	85.28	85.41	85
PERCENT METHANE IN GAS	%CH4	< 0.1	< 0.1	< 0.1	< 0.1
PERCENT OXYGEN IN GAS	%O2	20	19	18	21
FIELD WATER TEMPERATURE	DEG.C.	19.04	23.30	21.73	19.08
FIELD PH	PH	6.95	6.86	6.95	6.75
FIELD CONDUCTIVITY	UMHOS/CM	855	844	825	823
FIELD DISSOLVED O2	MG/L	0.56	1.09	1.25	3.94
GENERAL					
PH	PH	7.31 A	7.28	7.27	7.53
TOTAL DISSOLVED SOLIDS	MG/L	565	540	596	544
ANIONS					
NITRATE NITROGEN	MG/L N	< 0.05 B	< 0.05	< 0.05	0.05
SULFATE	MG/L SO4	147 B	139	146	153
CHLORIDE	MG/L CL	17.7 B	19.6	19.9 C	25.5 C
VOLATILE ORGANIC COMPOUNDS					
BROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1
1,2-DIBROMO-3-CHLOROPROPA	UG/L	< 0.01	< 0.01	< 0.01	< 0.01
T-1,4-DICHLORO-2-BUTENE	UG/L	< 1	< 1	< 1	< 1
METHYL IODIDE	UG/L	< 1	< 1	< 1	< 1
METHYLENE BROMIDE	UG/L	< 1	< 1	< 1	< 1
1,1,1,2-TETRACHLOROETHANE	UG/L	< 1	< 1	< 1	< 1
1,2,3-TRICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1
METHYLENE CHLORIDE	UG/L	< 1	< 1	< 1	< 1
CHLOROFORM	UG/L	< 1	< 1	< 1	< 1
1,1,1-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1
CARBON TETRACHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3
1,1-DICHLOROETHENE	UG/L	< 1	< 1	< 1	< 1
TRICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1
TETRACHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1
BROMODICHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1
BROMOFORM	UG/L	< 1	< 1	< 1	< 1
CHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1
VINYL CHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3

FOOTNOTES : A-AVERAGE OF DUPS B-DUPLICATE SPIKE C-AVERAGE

TABLE A.2

WATER QUALITY DATA - BARRIER TWO MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M24A SJ23229 03/07/00	WELL M24A SJ27291 06/02/00	WELL M24A SJ31108 09/08/00	WELL M24A SJ35156 12/22/00
VOLATILE ORGANIC COMPOUNDS					
O-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1
P-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1
1,1-DICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1
1,1,2-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1
1,2-DICHLOROETHANE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3
BENZENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	UG/L	< 1	< 1	< 1	< 1
ETHYL BENZENE	UG/L	< 1	< 1	< 1	< 1
VINYL ACETATE	UG/L	< 10	< 10	< 10	< 10
O-XYLENE	UG/L	< 1	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHYLEN	UG/L	< 1	< 1	< 1	< 1
BROMOMETHANE	UG/L	< 1	< 1	< 1	< 1
CHLOROETHANE	UG/L	< 1	< 1	< 1	< 1
CHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1
1,2-DICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5
ACRYLONITRILE	UG/L	< 10	< 10	< 10	< 10
FREON 11 (CCL3F)	UG/L	< 1	< 1	< 1	< 1
1,2-DIBROMOETHANE	UG/L	< 0.01	< 0.01	< 0.01	< 0.01
ACETONE	UG/L	< 10	< 10	< 10	< 10
CIS-1,2-DICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1
2-BUTANONE	UG/L	< 10	< 10	< 10	< 10
4-METHYL-2-PENTANONE	UG/L	< 10	< 10	< 10	< 10
STYRENE	UG/L	< 1	< 1	< 1	< 1
M+P-XYLENE	UG/L	< 1	< 1	< 1	< 1
CARBON DISULFIDE	UG/L CS2	< 1	< 1	< 1	< 1
2-HEXANONE	UG/L C6H12O	< 5	< 5	< 5	< 5

FOOTNOTES : A-AVERAGE OF DUPS B-DUPLICATE SPIKE C-AVERAGE

TABLE A.2

WATER QUALITY DATA - BARRIER TWO MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M27B SJ23230 03/07/00	WELL M27B SJ27574 06/09/00	WELL M27B SJ31179 09/11/00
FIELD PARAMETERS				
DEPTH TO WATER	FEET	76.49	78.72	80.62
DEPTH TO BOTTOM	FEET	82.36	82.39	82.31
PERCENT METHANE IN GAS	%CH4	< 0.1	< 0.1	< 0.1
PERCENT OXYGEN IN GAS	%O2	21	17	21
FIELD WATER TEMPERATURE	DEG.C.	17.1		
FIELD PH	PH	6.73		
FIELD CONDUCTIVITY	UMHOS/CM	1378		
FIELD DISSOLVED O2	MG/L	3.49		
GENERAL				
PH	PH	7.13	7.04	6.98
TOTAL DISSOLVED SOLIDS	MG/L	1019	1022	1188
ANIONS				
NITRATE NITROGEN	MG/L N	< 0.05	< 0.05	< 0.05
SULFATE	MG/L SO4	412	449	413
CHLORIDE	MG/L CL	14.8 A	22.5 A	16.2 A
VOLATILE ORGANIC COMPOUNDS				
BROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1
1,2-DIBROMO-3-CHLOROPROPA	UG/L	< 0.01	< 0.01	< 0.01
T-1,4-DICHLORO-2-BUTENE	UG/L	< 1	< 1	< 1
METHYL IODIDE	UG/L	< 1	< 1	< 1
METHYLENE BROMIDE	UG/L	< 1	< 1	< 1
1,1,1,2-TETRACHLOROETHANE	UG/L	< 1	< 1	< 1
1,2,3-TRICHLOROPROPANE	UG/L	< 1	< 1	< 1
METHYLENE CHLORIDE	UG/L	< 1	< 1	< 1
CHLOROFORM	UG/L	< 1	< 1	< 1
1,1,1-TRICHLOROETHANE	UG/L	< 1	< 1	< 1
CARBON TETRACHLORIDE	UG/L	< 0.3	< 0.3	< 0.3
1,1-DICHLOROETHENE	UG/L	< 1	< 1	< 1
TRICHLOROETHYLENE	UG/L	< 1	< 1	< 1
TETRACHLOROETHYLENE	UG/L	< 1	< 1	< 1
BROMODICHLOROMETHANE	UG/L	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1
BROMOFORM	UG/L	< 1	< 1	< 1
CHLOROBENZENE	UG/L	< 1	< 1	< 1
VINYL CHLORIDE	UG/L	< 0.3	< 0.3	< 0.3

FOOTNOTES : A-AVERAGE

TABLE A.2

WATER QUALITY DATA - BARRIER TWO MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M27B SJ23230 03/07/00	WELL M27B SJ27574 06/09/00	WELL M27B SJ31179 09/11/00
VOLATILE ORGANIC COMPOUNDS				
O-DICHLOROBENZENE	UG/L	< 1	< 1	< 1
P-DICHLOROBENZENE	UG/L	< 1	< 1	< 1
1,1-DICHLOROETHANE	UG/L	< 1	< 1	< 1
1,1,2-TRICHLOROETHANE	UG/L	< 1	< 1	< 1
1,2-DICHLOROETHANE	UG/L	< 0.3	< 0.3	< 0.3
BENZENE	UG/L	< 0.5	< 0.5	< 0.5
TOLUENE	UG/L	< 1	< 1	< 1
ETHYL BENZENE	UG/L	< 1	< 1	< 1
VINYL ACETATE	UG/L	< 10	< 10	< 10
O-XYLENE	UG/L	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHYLEN	UG/L	< 1	< 1	< 1
BROMOMETHANE	UG/L	< 1	< 1	< 1
CHLOROETHANE	UG/L	< 1	< 1	< 1
CHLOROMETHANE	UG/L	< 1	< 1	< 1
1,2-DICHLOROPROPANE	UG/L	< 1	< 1	< 1
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.5	< 0.5	< 0.5
ACRYLONITRILE	UG/L	< 10	< 10	< 10
FREON 11 (CCL3F)	UG/L	< 1	< 1	< 1
1,2-DIBROMOETHANE	UG/L	< 0.01	< 0.01	< 0.01
ACETONE	UG/L	< 10	< 10	< 10
CIS-1,2-DICHLOROETHYLENE	UG/L	< 1	< 1	< 1
2-BUTANONE	UG/L	< 10	< 10	< 10
4-METHYL-2-PENTANONE	UG/L	< 10	< 10	< 10
STYRENE	UG/L	< 1	< 1	< 1
M+P-XYLENE	UG/L	< 1	< 1	< 1
CARBON DISULFIDE	UG/L CS2	< 1	< 1	< 1
2-HEXANONE	UG/L C6H12O	< 5	< 5	< 5

FOOTNOTES : A-AVERAGE

TABLE A.2

WATER QUALITY DATA - BARRIER TWO MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M29B SJ23242 03/07/00	WELL M29B SJ23243 03/07/00	WELL M29B SJ27575 06/09/00	WELL M29B SJ27576 06/09/00	WELL M29B SJ31024 09/06/00	WELL M29B SJ31025 09/06/00	WELL M29B SJ34470 12/06/00	WELL M29B SJ34471 12/06/00
FIELD PARAMETERS									
DEPTH TO WATER	FEET	74.36		76.03		77.18		77.46	
DEPTH TO BOTTOM	FEET	100.5		100.5		100.5		100.4	
PERCENT METHANE IN GAS	%CH4	< 0.1		< 0.1		< 0.1		< 0.1	
PERCENT OXYGEN IN GAS	%O2	19		18		18		21	
FIELD WATER TEMPERATURE	DEG.C.	16.66		20.89		21.4		20.64	
FIELD PH	PH	7.11		6.98		7.04		6.69	
FIELD CONDUCTIVITY	UMHOS/CM	1148		1151		1175		1236	
FIELD DISSOLVED O2	MG/L	1.69		0.72		0.7		1.07	
GENERAL									
PH	PH	7.40	7.38	7.25	7.30	7.31	7.20	7.34	7.38
TOTAL DISSOLVED SOLIDS	MG/L	802	791	813	824	940	932	832	828
ANIONS									
NITRATE NITROGEN	MG/L N	< 0.05	< 0.05	< 0.05	< 0.05	0.07	< 0.05	< 0.05	< 0.05
SULFATE	MG/L SO4	297	302	310	305	335	333	369	354
CHLORIDE	MG/L CL	29.5 A	30.4 A	31.2 A	31.2 A	31.8 A	32.2 A	34.5 A	33.4 A
VOLATILE ORGANIC COMPOUNDS									
BROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMO-3-CHLOROPROPA	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
T-1,4-DICHLORO-2-BUTENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
METHYL IODIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
METHYLENE BROMIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-TETRACHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-TRICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
METHYLENE CHLORIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROFORM	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CARBON TETRACHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-DICHLOROETHENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TRICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TETRACHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
BROMODICHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
BROMOFORM	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
VINYL CHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3

FOOTNOTES : A-AVERAGE

TABLE A.2

WATER QUALITY DATA - BARRIER TWO MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M29B SJ23242 03/07/00	WELL M29B SJ23243 03/07/00	WELL M29B SJ27575 06/09/00	WELL M29B SJ27576 06/09/00	WELL M29B SJ31024 09/06/00	WELL M29B SJ31025 09/06/00	WELL M29B SJ34470 12/06/00	WELL M29B SJ34471 12/06/00
VOLATILE ORGANIC COMPOUNDS									
O-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
P-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-DICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROETHANE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
BENZENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
ETHYL BENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
VINYL ACETATE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
O-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHYLEN	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
BROMOMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
ACRYLONITRILE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
FREON 11 (CCL3F)	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMOETHANE	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ACETONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
CIS-1,2-DICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-BUTANONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-METHYL-2-PENTANONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
STYRENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
M+P-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CARBON DISULFIDE	UG/L CS2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-HEXANONE	UG/L C6H12O	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5

FOOTNOTES : A-AVERAGE

TABLE A.3

WATER QUALITY DATA

BARRIER 3 MONITORING WELLS

TABLE A.3

WATER QUALITY DATA - BARRIER THREE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M31A SJ23066 03/02/00	WELL M31A SJ27566 06/09/00	WELL M31A SJ31170 09/11/00	WELL M31A SJ34547 12/07/00
FIELD PARAMETERS					
DEPTH TO WATER	FEET	48.35	48.12	47.99	49.1
DEPTH TO BOTTOM	FEET	76.39	76.39	76.42	76.29
PERCENT METHANE IN GAS	%CH4	< 0.1	< 0.1	< 0.1	< 0.1
PERCENT OXYGEN IN GAS	%O2	17	19	14	19
FIELD WATER TEMPERATURE	DEG.C.	20.39	21.01	22.18	20.65
FIELD PH	PH	6.86	6.6	6.63	6.17
FIELD CONDUCTIVITY	UMHOS/CM	3319	3509	3363	3570
FIELD DISSOLVED O2	MG/L	0.4	0.65	0.15	0.33
FIELD DISSOLVED CO2	MG/L	131	296	229	788
GENERAL					
PH	PH	7.23	7.00 C	7.09 C	6.94
CONDUCTIVITY	UMHOS/CM			3380	
TOTAL DISSOLVED SOLIDS	MG/L	2700	2716 B	2860	3072 B
TOTAL HARDNESS	MG/L CACO3			1703 D	
TOTAL CYANIDE	MG/L CN			<0.005	
BORON	MG/L B			0.64	
ANIONS					
NITRATE NITROGEN	MG/L N	< 0.05 A	< 0.05 A	< 0.05 A	0.41
SULFATE	MG/L SO4	1050 A	1210 A	1150 A	1440
CHLORIDE	MG/L CL	146 A	161 A	155 A	165
TOTAL ALKALINITY	MG/L CACO3	539	672	557	664
BICARBONATE ALKALINITY	MG/L CACO3	539	672	557	664
TOTAL SULFIDE	MG/L S			< 0.1	
FLUORIDE	MG/L F			0.84	
CATIONS					
CALCIUM-HARDNESS	MG/L CACO3	884	1030	921	1160
MAGNESIUM-HARDNESS	MG/L CACO3	745	856	782	951
SODIUM	MG/L NA	171	178	172	185
POTASSIUM	MG/L K	4.4	5.2	4.8	4.8
IRON	MG/L FE			0.17 A	
MANGANESE	MG/L MN			0.41 A	
ORGANIC MATTER					
AMMONIA NITROGEN	MG/L N	< 0.1	< 0.1	< 0.1	< 0.1

FOOTNOTES : A-DUPLICATE SPIKE B-DUP & SPIKE C-AVERAGE OF DUPS D-CALCULATED VALUE E-AVERAGE

TABLE A.3

WATER QUALITY DATA - BARRIER THREE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M31A SJ23066 03/02/00	WELL M31A SJ27566 06/09/00	WELL M31A SJ31170 09/11/00	WELL M31A SJ34547 12/07/00
ORGANIC MATTER					
TOTAL BOD	MG/L O			< 2	
SOLUBLE BOD	MG/L O	< 2 B	< 2	< 2	< 2 B
TOTAL COD	MG/L O			< 10	
SOLUBLE COD	MG/L O	12	13	< 10	< 10 B
TOTAL ORGANIC CARBON	MG/L C	3.32 A	3.16	3.98	2.91
OIL & GREASE	MG/L EXTRAC			< 5	
TOTAL ORGANIC HALOGEN(TOX	UG/L			21 E	
METALS					
ARSENIC	MG/L AS			<.0010	
BARIUM	MG/L BA			0.04 A	
CADMIUM	MG/L CD			<0.002 A	
TOTAL CHROMIUM	MG/L CR			< 0.01 A	
COBALT	MG/L CO			< 0.01 A	
COPPER	MG/L CU			< 0.01 A	
LEAD	MG/L PB			< 0.01 A	
MERCURY	MG/L HG			<.0001	
NICKEL	MG/L NI			< 0.02 A	
SELENIUM	MG/L SE			.0015	
SILVER	MG/L AG			< 0.01 A	
ZINC	MG/L ZN			0.02 A	
ANTIMONY	MG/L SB			<.0005	
BERYLLIUM	MG/L BE			<.0025 A	
THALLIUM	MG/L TL			<0.001 A	
TIN	MG/L SN			< 0.06 A	
VANADIUM	MG/L V			< 0.05 A	
PESTICIDES, HERBICIDES, & ORGANOPHOSPHORUS					
2,4,5-T	UG/L			< 0.05	
DINOSEB	UG/L			< 0.1	
THIONAZIN	UG/L			< 1	
DIMETHOATE	UG/L			< 1	
DISULFOTON	UG/L			< 1	
METHYL PARATHION	UG/L			< 1	
ETHYL PARATHION	UG/L			< 1	
PHORATE	UG/L			< 1	
PP'-DDE	UG/L			< 0.01	
PP'-DDD	UG/L			< 0.01	
PP'-DDT	UG/L			< 0.01	

FOOTNOTES : A-DUPLICATE SPIKE B-DUP & SPIKE C-AVERAGE OF DUPS D-CALCULATED VALUE E-AVERAGE

TABLE A.3

WATER QUALITY DATA - BARRIER THREE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M31A SJ23066 03/02/00	WELL M31A SJ27566 06/09/00	WELL M31A SJ31170 09/11/00	WELL M31A SJ34547 12/07/00
PESTICIDES, HERBICIDES, & ORGANOPHOSPHORUS					
ALPHA-BHC	UG/L			< 0.01	
LINDANE (GAMMA-BHC)	UG/L			< 0.01	
HEPTACHLOR	UG/L			< 0.01	
HEPTACHLOR EPOXIDE	UG/L			< 0.01	
ALDRIN	UG/L			< 0.01	
DIELDRIN	UG/L			< 0.01	
ENDRIN	UG/L			< 0.01	
TOXAPHENE	UG/L			< 0.5	
METHOXYCLOR	UG/L			< 0.01	
2,4-D(ACID)	UG/L			< 0.5	
2,4,5-TP(SILVEX)	UG/L			< 0.05	
AROCLOR 1242	UG/L			< 0.1	
AROCLOR 1254	UG/L			< 0.05	
BETA-BHC	UG/L			< 0.01	
DELTA-BHC	UG/L			< 0.01	
ENDOSULFAN I	UG/L			< 0.01	
ENDOSULFAN II	UG/L			< 0.01	
ENDOSULFAN SULFATE	UG/L			< 0.1	
ENDRIN ALDEHYDE	UG/L			< 0.01	
AROCLOR 1016	UG/L			< 0.1	
AROCLOR 1221	UG/L			< 0.1	
AROCLOR 1232	UG/L			< 0.1	
AROCLOR 1248	UG/L			< 0.1	
AROCLOR 1260	UG/L			< 0.1	
TECHNICAL CHLORDANE	UG/L			< 0.05	
VOLATILE ORGANIC COMPOUNDS					
ALLYL CHLORIDE	UG/L			< 1	
BROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1
CHLOROPRENE	UG/L			< 1	
1,2-DIBROMO-3-CHLOROPROPA	UG/L	< 0.01	< 0.01	< 0.01	< 0.01
T-1,4-DICHLORO-2-BUTENE	UG/L	< 1	< 1	< 1	< 1
1,3-DICHLOROPROPANE	UG/L			< 0.3	
2,2-DICHLOROPROPANE	UG/L			< 1	
1,1-DICHLOROPROPENE	UG/L			< 1	
ISOBUTYL ALCOHOL	UG/L			< 10	
METHACRYLONITRILE	UG/L			< 10	
METHYL IODIDE	UG/L	< 1	< 1	< 1	< 1
METHYLENE BROMIDE	UG/L	< 1	< 1	< 1	< 1
PROPIONITRILE	UG/L			< 10	

FOOTNOTES : A-DUPLICATE SPIKE B-DUP & SPIKE C-AVERAGE OF DUPS D-CALCULATED VALUE E-AVERAGE

TABLE A.3

WATER QUALITY DATA - BARRIER THREE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M31A SJ23066 03/02/00	WELL M31A SJ27566 06/09/00	WELL M31A SJ31170 09/11/00	WELL M31A SJ34547 12/07/00
VOLATILE ORGANIC COMPOUNDS					
1,1,1,2-TETRACHLOROETHANE	UG/L	< 1	< 1	< 1	< 1
1,2,3-TRICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1
METHYL METHACRYLATE	UG/L			< 10	
ETHYL METHACRYLATE	UG/L			< 5	
METHYLENE CHLORIDE	UG/L	< 1	< 1	< 1	< 1
CHLOROFORM	UG/L	< 1	< 1	< 1	< 1
1,1,1-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1
CARBON TETRACHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3
1,1-DICHLOROETHENE	UG/L	< 1	< 1	< 1	< 1
TRICHLOROETHYLENE	UG/L	1	2	1	1
TETRACHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1
BROMODICHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1
BROMOFORM	UG/L	< 1	< 1	< 1	< 1
CHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1
VINYL CHLORIDE	UG/L	< 0.3	0.3	< 0.3	< 0.3
O-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1
M-DICHLOROBENZENE	UG/L			< 1	
P-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1
1,1-DICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1
1,1,2-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1
1,2-DICHLOROETHANE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3
BENZENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	UG/L	< 1	< 1	< 1	< 1
ETHYL BENZENE	UG/L	< 1	< 1	< 1	< 1
VINYL ACETATE	UG/L	< 10	< 10	< 10	< 10
O-XYLENE	UG/L	< 1	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHYLEN	UG/L	< 1	< 1	< 1	< 1
BROMOMETHANE	UG/L	< 1	< 1	< 1	< 1
CHLOROETHANE	UG/L	< 1	< 1	< 1	< 1
2-CHLOROETHYLVINYLETHER	UG/L			< 1	
CHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1
1,2-DICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5
ACROLEIN	UG/L			< 10	
ACRYLONITRILE	UG/L	< 10	< 10	< 10	< 10
ACETONITRILE	UG/L			< 20	
FREON 12 (CCL2F2)	UG/L			< 1	
FREON 11 (CCL3F)	UG/L	< 1	< 1	< 1	< 1

FOOTNOTES : A-DUPLICATE SPIKE B-DUP & SPIKE C-AVERAGE OF DUPS D-CALCULATED VALUE E-AVERAGE

TABLE A.3

WATER QUALITY DATA - BARRIER THREE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M31A SJ23066 03/02/00	WELL M31A SJ27566 06/09/00	WELL M31A SJ31170 09/11/00	WELL M31A SJ34547 12/07/00
VOLATILE ORGANIC COMPOUNDS					
1,2-DIBROMOETHANE	UG/L	< 0.01	< 0.01	< 0.01	< 0.01
ACETONE	UG/L	< 10	< 10	< 10	< 10
CIS-1,2-DICHLOROETHYLENE	UG/L	2	3	2	3
2-BUTANONE	UG/L	< 10	< 10	< 10	< 10
4-METHYL-2-PENTANONE	UG/L	< 10	< 10	< 10	< 10
STYRENE	UG/L	< 1	< 1	< 1	< 1
2,4,5-TRICHLOROPHENOL	UG/L			< 1	
M+P-XYLENE	UG/L	< 1	< 1	< 1	< 1
CARBON DISULFIDE	UG/L CS2	< 1	< 1	< 1	< 1
2-HEXANONE	UG/L C6H12O	< 5	< 5	< 5	< 5
ACID-BASE NEUTRAL EXTRACTABLE					
ACETOPHENONE	UG/L			< 1	
2-ACETYLAMINOFLUORENE	UG/L			< 1	
4-AMINOBIPHENYL	UG/L			< 1	
BENZYL ALCOHOL	UG/L			< 1	
P-CHLOROANILINE	UG/L			< 1	
CHLOROBENZILATE	UG/L			< 1	
DIALLATE	UG/L			< 1	
DIBENZOFURAN	UG/L			< 1	
2,6-DICHLOROPHENOL	UG/L			< 1	
P(DIMETHYLAMINO)AZOBENZEN	UG/L			< 1	
7,12-DIMETHYLBENZ(A)ANTHR	UG/L			< 10	
3,3'-DIMETHYLBENZIDINE	UG/L			< 1	
M-DINITROBENZENE	UG/L			< 1	
DIPHENYLAMINE	UG/L			< 1	
ETHYL METHANESULFONATE	UG/L			< 1	
FAMPHUR	UG/L			< 1	
HEXACHLOROPROPENE	UG/L			< 5	
ISODRIN	UG/L			< 1	
ISOSAFROLE	UG/L			< 1	
KEPONE	UG/L			< 10	
METHAPYRILENE	UG/L			< 20	
3-METHYLCHOLANTHRENE	UG/L			< 1	
METHYL METHANESULFONATE	UG/L			< 1	
2-METHYLNAPHTHALENE	UG/L			< 1	
1,4-NAPHTHOQUINONE	UG/L			< 1	
1-NAPHTHYLAMINE	UG/L			< 1	
2-NAPHTHYLAMINE	UG/L			< 1	
O-NITROANILINE	UG/L			< 1	

FOOTNOTES : A-DUPLICATE SPIKE B-DUP & SPIKE C-AVERAGE OF DUPS D-CALCULATED VALUE E-AVERAGE

TABLE A.3

WATER QUALITY DATA - BARRIER THREE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M31A SJ23066 03/02/00	WELL M31A SJ27566 06/09/00	WELL M31A SJ31170 09/11/00	WELL M31A SJ34547 12/07/00
ACID-BASE NEUTRAL EXTRACTABLE					
M-NITROANILINE	UG/L			< 1	
P-NITROANILINE	UG/L			< 1	
N-NITROSODI-N-BUTYLAMINE	UG/L			< 1	
N-NITROSODIETHYLAMINE	UG/L			< 1	
N-NITROSOMETHYLETHYLAMINE	UG/L			< 1	
N-NITROSOPIPERIDINE	UG/L			< 1	
N-NITROSOPYRROLIDINE	UG/L			< 1	
5-NITRO-O-TOLUIDINE	UG/L			< 1	
PENTACHLOROBENZENE	UG/L			< 1	
PENTACHLORONITROBENZENE	UG/L			< 5	
PHENACETIN	UG/L			< 1	
P-PHENYLENEDIAMINE	UG/L			< 20	
PRONAMIDE	UG/L			< 1	
SAFROLE	UG/L			< 1	
1,2,4,5-TETRACHLOROBENZEN	UG/L			< 1	
2,3,4,6-TETRACHLOROPHENOL	UG/L			< 1	
O-TOLUIDINE	UG/L			< 1	
O,O,O-TRIETHYLPHOSPHOROTH	UG/L			< 1	
SYM-TRINITROBENZENE	UG/L			< 5	
ACENAPHTHENE	UG/L			< 1	
ACENAPHTHYLENE	UG/L			< 1	
ANTHRACENE	UG/L			< 1	
BENZIDINE	UG/L			< 20	
BENZO(A)ANTHRACENE	UG/L			< 1	
BENZO(A)PYRENE	UG/L			< 0.2	
BENZO(B)FLUORANTHENE	UG/L			< 1	
BENZO(G.H.I.)PERYLENE	UG/L			< 1	
BENZO(K)FLUORANTHENE	UG/L			< 1	
BIS(2-CL-ETHOXY)METHANE	UG/L			< 1	
BIS(2-CHLOROETHYL)ETHER	UG/L			< 1	
BIS(2-CL-ISOPROPYL)ETHER	UG/L			< 1	
DIETHYLHEXYL PHTHALATE	UG/L			< 1	
4-BROMOPHENYL PHENYLETHER	UG/L			< 1	
BUTYLBENZYL PHTHALATE	UG/L			< 1	
2-CHLORONAPHTHALENE	UG/L			< 1	
4-CHLOROPHENYLPHENYLETHER	UG/L			< 1	
CHRYSENE	UG/L			< 1	
DIBENZO(A,H)ANTHRACENE	UG/L			< 1	
3,3'-DICHLOROBENZIDINE	UG/L			< 1	
DIETHYL PHTHALATE	UG/L			< 1	
DIMETHYL PHTHALATE	UG/L			< 1	

FOOTNOTES : A-DUPLICATE SPIKE B-DUP & SPIKE C-AVERAGE OF DUPS D-CALCULATED VALUE E-AVERAGE

TABLE A.3

WATER QUALITY DATA - BARRIER THREE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M31A SJ23066 03/02/00	WELL M31A SJ27566 06/09/00	WELL M31A SJ31170 09/11/00	WELL M31A SJ34547 12/07/00
ACID-BASE NEUTRAL EXTRACTABLE					
DI-N-BUTYL PHTHALATE	UG/L			< 1	
2,4-DINITROTOLUENE	UG/L			< 1	
2,6-DINITROTOLUENE	UG/L			< 1	
DI-N-OCTYL PHTHALATE	UG/L			< 1	
FLUORANTHENE	UG/L			< 1	
FLUORENE	UG/L			< 1	
HEXACHLOROBENZENE	UG/L			< 1	
HEXACHLOROBUTADIENE	UG/L			< 1	
HEXACHLOROCYCLOPENTADIENE	UG/L			< 5	
HEXACHLOROETHANE	UG/L			< 1	
INDENO(1,2,3-C,D)PYRENE	UG/L			< 1	
ISOPHORONE	UG/L			< 1	
NAPHTHALENE	UG/L			< 1	
NITROBENZENE	UG/L			< 1	
N-NITROSODIMETHYLAMINE	UG/L			< 1	
N-NITROSODI-N-PROPYLAMINE	UG/L			< 1	
PHENANTHRENE	UG/L			< 1	
PYRENE	UG/L			< 1	
2-CHLOROPHENOL	UG/L			< 1	
1,2,4-TRICHLOROBENZENE	UG/L			< 1	
2,4-DICHLOROPHENOL	UG/L			< 1	
2,4-DIMETHYLPHENOL	UG/L			< 1	
2,4-DINITROPHENOL	UG/L			< 6	
2-METHYL-4,6DINITROPHENOL	UG/L			< 1	
2-NITROPHENOL	UG/L			< 1	
4-NITROPHENOL	UG/L			< 1	
4-CHLORO-3-METHYLPHENOL	UG/L			< 1	
PENTACHLOROPHENOL	UG/L			< 1	
PHENOL	UG/L			< 1	
2,4,6-TRICHLOROPHENOL	UG/L			< 1	
N-NITROSODIPHENYLAMINE	UG/L			< 1	
O-CRESOL	UG/L			< 1	
M+P CRESOL	UG/L			< 1	

FOOTNOTES : A-DUPLICATE SPIKE B-DUP & SPIKE C-AVERAGE OF DUPS D-CALCULATED VALUE E-AVERAGE

TABLE A.3

WATER QUALITY DATA - BARRIER THREE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WEFI M31A SJ31169 09/11/00
CATIONS		
IRON	MG/L FE	0.08
MANGANESE	MG/L MN	0.40
METALS		
ARSENIC	MG/L AS	<.0010
BARIUM	MG/L BA	0.04
CADMIUM	MG/L CD	<0.002
TOTAL CHROMIUM	MG/L CR	< 0.01
COBALT	MG/L CO	< 0.01
COPPER	MG/L CU	< 0.01
LEAD	MG/L PB	< 0.01
MERCURY	MG/L HG	<.0001
NICKEL	MG/L NI	< 0.02
SELENIUM	MG/L SE	.0014
SILVER	MG/L AG	< 0.01
ZINC	MG/L ZN	0.02
ANTIMONY	MG/L SB	<.0005
BERYLLIUM	MG/L BE	<.0025
THALLIUM	MG/L TL	<0.001
TIN	MG/L SN	< 0.06
VANADIUM	MG/L V	< 0.05

TABLE A.3

WATER QUALITY DATA - BARRIER THREE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL R32B SJ23153 03/03/00	WELL R32B SJ27535 06/08/00	WELL R32B SJ31177 09/11/00	WELL R32B SJ31178 09/11/00	WELL R32B SJ34611 12/08/00	WELL R32B SJ34612 12/08/00
FIELD PARAMETERS							
DEPTH TO WATER	FEET	32.11	33.69	32.96		32.6	
DEPTH TO BOTTOM	FEET	129.7	129.6	129.6		129.5	
PERCENT METHANE IN GAS	%CH4	< 0.1	< 0.1	< 0.1		< 0.1	
PERCENT OXYGEN IN GAS	%O2	15	19	18		16	
FIELD WATER TEMPERATURE	DEG.C.	18.53	23.77	29.87		20.26	
FIELD PH	PH	7.18	7.25	7.58		6.88	
FIELD CONDUCTIVITY	UMHOS/CM	3636	3592	3735		3636	
FIELD DISSOLVED O2	MG/L	0.31	0.48	0.45		0.24	
GENERAL							
PH	PH	7.63	7.46	7.59	7.59	7.35	7.48
TOTAL DISSOLVED SOLIDS	MG/L	3049 A	2916	3120	3116	2956	2992
ANIONS							
NITRATE NITROGEN	MG/L N	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05 B	< 0.05
SULFATE	MG/L SO4	1610	1610	1600	1600	1650 B	1610
CHLORIDE	MG/L CL	276	260	261	259	280 B	299
VOLATILE ORGANIC COMPOUNDS							
BROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMO-3-CHLOROPROPA	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
T-1,4-DICHLORO-2-BUTENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
METHYL IODIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
METHYLENE BROMIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-TETRACHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-TRICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
METHYLENE CHLORIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROFORM	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CARBON TETRACHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-DICHLOROETHENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
TRICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
TETRACHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
BROMODICHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
BROMOFORM	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
VINYL CHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3

FOOTNOTES : A-DUP & SPIKE B-DUPLICATE SPIKE

TABLE A.3

WATER QUALITY DATA - BARRIER THREE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL R32B SJ23153 03/03/00	WELL R32B SJ27535 06/08/00	WELL R32B SJ31177 09/11/00	WELL R32B SJ31178 09/11/00	WELL R32B SJ34611 12/08/00	WELL R32B SJ34612 12/08/00
VOLATILE ORGANIC COMPOUNDS							
O-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
P-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,1-DICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROETHANE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
BENZENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
ETHYL BENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
VINYL ACETATE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10
O-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHYLEN	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
BROMOMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
ACRYLONITRILE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10
FREON 11 (CCL3F)	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMOETHANE	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ACETONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10
CIS-1,2-DICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
2-BUTANONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10
4-METHYL-2-PENTANONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10
STYRENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
M+P-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CARBON DISULFIDE	UG/L CS2	< 1	< 1	< 1	< 1	< 1	< 1
2-HEXANONE	UG/L C6H12O	< 5	< 5	< 5	< 5	< 5	< 5

FOOTNOTES : A-DUP & SPIKE B-DUPLICATE SPIKE

TABLE A.3

WATER QUALITY DATA - BARRIER THREE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M33A SJ23067 03/02/00	WELL M33A SJ27567 06/09/00	WELL M33A SJ31064 09/07/00	WELL M33A SJ34548 12/07/00
FIELD PARAMETERS					
DEPTH TO WATER	FEET	49.95	49.69	49.89	50.81
DEPTH TO BOTTOM	FEET	80.98	81.05	81.05	80.95
PERCENT METHANE IN GAS	%CH4	< 0.1	< 0.1	< 0.1	< 0.1
PERCENT OXYGEN IN GAS	%O2	16	20	18	20
FIELD WATER TEMPERATURE	DEG.C.	22.14	22.66	23.48	22.14
FIELD PH	PH	6.97	6.72	6.99	6.34
FIELD CONDUCTIVITY	UMHOS/CM	2533	2559	2654	2593
FIELD DISSOLVED O2	MG/L	0.26	0.39	0.45	0.34
FIELD DISSOLVED CO2	MG/L	89	205	112	489
GENERAL					
PH	PH	7.21	7.06	7.09	7.10
CONDUCTIVITY	UMHOS/CM			2570	
TOTAL DISSOLVED SOLIDS	MG/L	1856	1940	1992	1816 D
TOTAL HARDNESS	MG/L CACO3			1210 B	
TOTAL CYANIDE	MG/L CN			<0.005	
BORON	MG/L B			0.69	
ANIONS					
NITRATE NITROGEN	MG/L N	0.20	0.22	0.39	0.26
SULFATE	MG/L SO4	614	686	646	665
CHLORIDE	MG/L CL	154	160	153	159
TOTAL ALKALINITY	MG/L CACO3	476	614	624	610
BICARBONATE ALKALINITY	MG/L CACO3	476	614	624	610
TOTAL SULFIDE	MG/L S			< 0.1	
FLUORIDE	MG/L F			0.97	
CATIONS					
CALCIUM-HARDNESS	MG/L CACO3	609	607 A	642	649
MAGNESIUM-HARDNESS	MG/L CACO3	523	539 A	568	564
SODIUM	MG/L NA	174	165 A	183	179
POTASSIUM	MG/L K	4.8	5.5 A	5.0	4.4
IRON	MG/L FE			0.22 A	
MANGANESE	MG/L MN			0.58 A	
ORGANIC MATTER					
AMMONIA NITROGEN	MG/L N	< 0.1	0.1	< 0.1	< 0.1

FOOTNOTES : A-DUPLICATE SPIKE B-CALCULATED VALUE C-AVERAGE D-DUP & SPIKE

TABLE A.3

WATER QUALITY DATA - BARRIER THREE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M33A SJ23067 03/02/00	WELL M33A SJ27567 06/09/00	WELL M33A SJ31064 09/07/00	WELL M33A SJ34548 12/07/00
ORGANIC MATTER					
TOTAL BOD	MG/L O			< 2	
SOLUBLE BOD	MG/L O	< 2	< 2	< 2	< 2
TOTAL COD	MG/L O			11	
SOLUBLE COD	MG/L O	11	13	< 10	13
TOTAL ORGANIC CARBON	MG/L C	4.06	4.31	3.78	3.84
OIL & GREASE	MG/L EXTRAC			< 5	
TOTAL ORGANIC HALOGEN(TOX	UG/L			30 C	
METALS					
ARSENIC	MG/L AS			<.0010	
BARIUM	MG/L BA			0.04 A	
CADMIUM	MG/L CD			<0.002 A	
TOTAL CHROMIUM	MG/L CR			0.22 A	
COBALT	MG/L CO			< 0.01 A	
COPPER	MG/L CU			< 0.01 A	
LEAD	MG/L PB			< 0.01 A	
MERCURY	MG/L HG			<.0001	
NICKEL	MG/L NI			0.03 A	
SELENIUM	MG/L SE			<.0010	
SILVER	MG/L AG			< 0.02 A	
ZINC	MG/L ZN			< 0.01 A	
ANTIMONY	MG/L SB			<.0005	
BERYLLIUM	MG/L BE			<.0025 A	
THALLIUM	MG/L TL			<0.001 A	
TIN	MG/L SN			< 0.06 A	
VANADIUM	MG/L V			< 0.05 A	
PESTICIDES, HERBICIDES, & ORGANOPHOSPHORUS					
2,4,5-T	UG/L			< 0.05	
DINOSEB	UG/L			< 0.1	
THIONAZIN	UG/L			< 1	
DIMETHOATE	UG/L			< 1	
DISULFOTON	UG/L			< 1	
METHYL PARATHION	UG/L			< 1	
ETHYL PARATHION	UG/L			< 1	
PHORATE	UG/L			< 1	
PP'-DDE	UG/L			< 0.01	
PP'-DDD	UG/L			< 0.01	
PP'-DDT	UG/L			< 0.01	

FOOTNOTES : A-DUPLICATE SPIKE B-CALCULATED VALUE C-AVERAGE D-DUP & SPIKE

TABLE A.3

WATER QUALITY DATA - BARRIER THREE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M33A SJ23067 03/02/00	WELL M33A SJ27567 06/09/00	WELL M33A SJ31064 09/07/00	WELL M33A SJ34548 12/07/00
PESTICIDES, HERBICIDES, & ORGANOPHOSPHORUS					
ALPHA-BHC	UG/L			< 0.01	
LINDANE (GAMMA-BHC)	UG/L			< 0.01	
HEPTACHLOR	UG/L			< 0.01	
HEPTACHLOR EPOXIDE	UG/L			< 0.01	
ALDRIN	UG/L			< 0.01	
DIELDRIN	UG/L			< 0.01	
ENDRIN	UG/L			< 0.01	
TOXAPHENE	UG/L			< 0.5	
METHOXYCLOR	UG/L			< 0.01	
2,4-D(ACID)	UG/L			< 0.5	
2,4,5-TP(SILVEX)	UG/L			< 0.05	
AROCLOR 1242	UG/L			< 0.1	
AROCLOR 1254	UG/L			< 0.05	
BETA-BHC	UG/L			< 0.01	
DELTA-BHC	UG/L			< 0.01	
ENDOSULFAN I	UG/L			< 0.01	
ENDOSULFAN II	UG/L			< 0.01	
ENDOSULFAN SULFATE	UG/L			< 0.1	
ENDRIN ALDEHYDE	UG/L			< 0.01	
AROCLOR 1016	UG/L			< 0.1	
AROCLOR 1221	UG/L			< 0.1	
AROCLOR 1232	UG/L			< 0.1	
AROCLOR 1248	UG/L			< 0.1	
AROCLOR 1260	UG/L			< 0.1	
TECHNICAL CHLORDANE	UG/L			< 0.05	
VOLATILE ORGANIC COMPOUNDS					
ALLYL CHLORIDE	UG/L			< 1	
BROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1
CHLOROPRENE	UG/L			< 1	
1,2-DIBROMO-3-CHLOROPROPA	UG/L	< 0.01	< 0.01	< 0.01	< 0.01
T-1,4-DICHLORO-2-BUTENE	UG/L	< 1	< 1	< 1	< 1
1,3-DICHLOROPROPANE	UG/L			< 0.3	
2,2-DICHLOROPROPANE	UG/L			< 1	
1,1-DICHLOROPROPENE	UG/L			< 1	
ISOBUTYL ALCOHOL	UG/L			< 10	
METHACRYLONITRILE	UG/L			< 10	
METHYL IODIDE	UG/L	< 1	< 1	< 1	< 1
METHYLENE BROMIDE	UG/L	< 1	< 1	< 1	< 1
PROPIONITRILE	UG/L			< 10	

FOOTNOTES : A-DUPLICATE SPIKE B-CALCULATED VALUE C-AVERAGE D-DUP & SPIKE

TABLE A.3

WATER QUALITY DATA - BARRIER THREE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M33A SJ23067 03/02/00	WELL M33A SJ27567 06/09/00	WELL M33A SJ31064 09/07/00	WELL M33A SJ34548 12/07/00
VOLATILE ORGANIC COMPOUNDS					
1,1,1,2-TETRACHLOROETHANE	UG/L	< 1	< 1	< 1	< 1
1,2,3-TRICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1
METHYL METHACRYLATE	UG/L			< 10	
ETHYL METHACRYLATE	UG/L			< 5	
METHYLENE CHLORIDE	UG/L	< 1	< 1	< 1	< 1
CHLOROFORM	UG/L	< 1	< 1	< 1	< 1
1,1,1-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1
CARBON TETRACHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3
1,1-DICHLOROETHENE	UG/L	< 1	< 1	< 1	< 1
TRICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1
TETRACHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1
BROMODICHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1
BROMOFORM	UG/L	< 1	< 1	< 1	< 1
CHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1
VINYL CHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3
O-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1
M-DICHLOROBENZENE	UG/L			< 1	
P-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1
1,1-DICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1
1,1,2-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1
1,2-DICHLOROETHANE	UG/L	0.8	0.8	1	0.4
BENZENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	UG/L	< 1	< 1	< 1	< 1
ETHYL BENZENE	UG/L	< 1	< 1	< 1	< 1
VINYL ACETATE	UG/L	< 10	< 10	< 10	< 10
O-XYLENE	UG/L	< 1	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHYLEN	UG/L	< 1	< 1	< 1	< 1
BROMOMETHANE	UG/L	< 1	< 1	< 1	< 1
CHLOROETHANE	UG/L	< 1	< 1	< 1	< 1
2-CHLOROETHYLVINYLETHER	UG/L			< 1	
CHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1
1,2-DICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5
ACROLEIN	UG/L			< 10	
ACRYLONITRILE	UG/L	< 10	< 10	< 10	< 10
ACETONITRILE	UG/L			< 20	
FREON 12 (CCL2F2)	UG/L			< 1	
FREON 11 (CCL3F)	UG/L	< 1	< 1	< 1	< 1

FOOTNOTES : A-DUPLICATE SPIKE B-CALCULATED VALUE C-AVERAGE D-DUP & SPIKE

TABLE A.3

WATER QUALITY DATA - BARRIER THREE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M33A SJ23067 03/02/00	WELL M33A SJ27567 06/09/00	WELL M33A SJ31064 09/07/00	WELL M33A SJ34548 12/07/00
VOLATILE ORGANIC COMPOUNDS					
1,2-DIBROMOETHANE	UG/L	< 0.01	< 0.01	< 0.01	< 0.01
ACETONE	UG/L	< 10	< 10	< 10	< 10
CIS-1,2-DICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1
2-BUTANONE	UG/L	< 10	< 10	< 10	< 10
4-METHYL-2-PENTANONE	UG/L	< 10	< 10	< 10	< 10
STYRENE	UG/L	< 1	< 1	< 1	< 1
2,4,5-TRICHLOROPHENOL	UG/L			< 1	
M+P-XYLENE	UG/L	< 1	< 1	< 1	< 1
CARBON DISULFIDE	UG/L CS2	< 1	< 1	< 1	< 1
2-HEXANONE	UG/L C6H12O	< 5	< 5	< 5	< 5
ACID-BASE NEUTRAL EXTRACTABLE					
ACETOPHENONE	UG/L			< 1	
2-ACETYLAMINOFLUORENE	UG/L			< 1	
4-AMINOBIPHENYL	UG/L			< 1	
BENZYL ALCOHOL	UG/L			< 1	
P-CHLOROANILINE	UG/L			< 1	
CHLOROBENZILATE	UG/L			< 1	
DIALLATE	UG/L			< 1	
DIBENZOFURAN	UG/L			< 1	
2,6-DICHLOROPHENOL	UG/L			< 1	
P(DIMETHYLAMINO)AZOBENZEN	UG/L			< 1	
7,12-DIMETHYLBENZ(A)ANTHR	UG/L			< 10	
3,3'-DIMETHYLBENZIDINE	UG/L			< 1	
M-DINITROBENZENE	UG/L			< 1	
DIPHENYLAMINE	UG/L			< 1	
ETHYL METHANESULFONATE	UG/L			< 1	
FAMPHUR	UG/L			< 1	
HEXACHLOROPROPENE	UG/L			< 5	
ISODRIN	UG/L			< 1	
ISOSAFROLE	UG/L			< 1	
KEPONE	UG/L			< 10	
METHAPYRILENE	UG/L			< 20	
3-METHYLCHOLANTHRENE	UG/L			< 1	
METHYL METHANESULFONATE	UG/L			< 1	
2-METHYLNAPHTHALENE	UG/L			< 1	
1,4-NAPHTHOQUINONE	UG/L			< 1	
1-NAPHTHYLAMINE	UG/L			< 1	
2-NAPHTHYLAMINE	UG/L			< 1	
O-NITROANILINE	UG/L			< 1	

FOOTNOTES : A-DUPLICATE SPIKE B-CALCULATED VALUE C-AVERAGE D-DUP & SPIKE

TABLE A.3

WATER QUALITY DATA - BARRIER THREE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M33A SJ23067 03/02/00	WELL M33A SJ27567 06/09/00	WELL M33A SJ31064 09/07/00	WELL M33A SJ34548 12/07/00
ACID-BASE NEUTRAL EXTRACTABLE					
M-NITROANILINE	UG/L			< 1	
P-NITROANILINE	UG/L			< 1	
N-NITROSODI-N-BUTYLAMINE	UG/L			< 1	
N-NITROSODIETHYLAMINE	UG/L			< 1	
N-NITROSOMETHYLETHYLAMINE	UG/L			< 1	
N-NITROSOPIPERIDINE	UG/L			< 1	
N-NITROSOPYRROLIDINE	UG/L			< 1	
5-NITRO-O-TOLUIDINE	UG/L			< 1	
PENTACHLOROBENZENE	UG/L			< 1	
PENTACHLORONITROBENZENE	UG/L			< 5	
PHENACETIN	UG/L			< 1	
P-PHENYLENEDIAMINE	UG/L			< 20	
PRONAMIDE	UG/L			< 1	
SAFROLE	UG/L			< 1	
1,2,4,5-TETRACHLOROBENZEN	UG/L			< 1	
2,3,4,6-TETRACHLOROPHENOL	UG/L			< 1	
O-TOLUIDINE	UG/L			< 1	
O,O,O-TRIETHYLPHOSPHOROTH	UG/L			< 1	
SYM-TRINITROBENZENE	UG/L			< 5	
ACENAPHTHENE	UG/L			< 1	
ACENAPHTHYLENE	UG/L			< 1	
ANTHRACENE	UG/L			< 1	
BENZIDINE	UG/L			< 20	
BENZO(A)ANTHRACENE	UG/L			< 1	
BENZO(A)PYRENE	UG/L			< 0.2	
BENZO(B)FLUORANTHENE	UG/L			< 1	
BENZO(G.H.I.)PERYLENE	UG/L			< 1	
BENZO(K)FLUORANTHENE	UG/L			< 1	
BIS(2-CL-ETHOXY)METHANE	UG/L			< 1	
BIS(2-CHLOROETHYL)ETHER	UG/L			< 1	
BIS(2-CL-ISOPROPYL)ETHER	UG/L			< 1	
DIETHYLHEXYL PHTHALATE	UG/L			< 1	
4-BROMOPHENYL PHENYLETHER	UG/L			< 1	
BUTYLBENZYL PHTHALATE	UG/L			< 1	
2-CHLORONAPHTHALENE	UG/L			< 1	
4-CHLOROPHENYLPHENYLETHER	UG/L			< 1	
CHRYSENE	UG/L			< 1	
DIBENZO(A,H)ANTHRACENE	UG/L			< 1	
3,3'-DICHLOROBENZIDINE	UG/L			< 1	
DIETHYL PHTHALATE	UG/L			< 1	
DIMETHYL PHTHALATE	UG/L			< 1	

FOOTNOTES : A-DUPLICATE SPIKE B-CALCULATED VALUE C-AVERAGE D-DUP & SPIKE

TABLE A.3

WATER QUALITY DATA - BARRIER THREE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M33A SJ23067 03/02/00	WELL M33A SJ27567 06/09/00	WELL M33A SJ31064 09/07/00	WELL M33A SJ34548 12/07/00
ACID-BASE NEUTRAL EXTRACTABLE					
DI-N-BUTYL PHTHALATE	UG/L			< 1	
2,4-DINITROTOLUENE	UG/L			< 1	
2,6-DINITROTOLUENE	UG/L			< 1	
DI-N-OCTYL PHTHALATE	UG/L			< 1	
FLUORANTHENE	UG/L			< 1	
FLUORENE	UG/L			< 1	
HEXACHLOROBENZENE	UG/L			< 1	
HEXACHLOROBUTADIENE	UG/L			< 1	
HEXACHLOROCYCLOPENTADIENE	UG/L			< 5	
HEXACHLOROETHANE	UG/L			< 1	
INDENO(1,2,3-C,D)PYRENE	UG/L			< 1	
ISOPHORONE	UG/L			< 1	
NAPHTHALENE	UG/L			< 1	
NITROBENZENE	UG/L			< 1	
N-NITROSODIMETHYLAMINE	UG/L			< 1	
N-NITROSODI-N-PROPYLAMINE	UG/L			< 1	
PHENANTHRENE	UG/L			< 1	
PYRENE	UG/L			< 1	
2-CHLOROPHENOL	UG/L			< 1	
1,2,4-TRICHLOROBENZENE	UG/L			< 1	
2,4-DICHLOROPHENOL	UG/L			< 1	
2,4-DIMETHYLPHENOL	UG/L			< 1	
2,4-DINITROPHENOL	UG/L			< 6	
2-METHYL-4,6DINITROPHENOL	UG/L			< 1	
2-NITROPHENOL	UG/L			< 1	
4-NITROPHENOL	UG/L			< 1	
4-CHLORO-3-METHYLPHENOL	UG/L			< 1	
PENTACHLOROPHENOL	UG/L			< 1	
PHENOL	UG/L			< 1	
2,4,6-TRICHLOROPHENOL	UG/L			< 1	
N-NITROSODIPHENYLAMINE	UG/L			< 1	
O-CRESOL	UG/L			< 1	
M+P CRESOL	UG/L			< 1	

FOOTNOTES : A-DUPLICATE SPIKE B-CALCULATED VALUE C-AVERAGE D-DUP & SPIKE

TABLE A.3

WATER QUALITY DATA - BARRIER THREE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WEFI M33A SJ31063 09/07/00
CATIONS		
IRON	MG/L FE	0.05
MANGANESE	MG/L MN	0.57
METALS		
ARSENIC	MG/L AS	<.0010
BARIUM	MG/L BA	0.04
CADMIUM	MG/L CD	<0.002
TOTAL CHROMIUM	MG/L CR	0.01
COBALT	MG/L CO	< 0.01
COPPER	MG/L CU	< 0.01
LEAD	MG/L PB	< 0.01
MERCURY	MG/L HG	<.0001
NICKEL	MG/L NI	< 0.02
SELENIUM	MG/L SE	<.0010
SILVER	MG/L AG	< 0.01
ZINC	MG/L ZN	< 0.01
ANTIMONY	MG/L SB	<.0005
BERYLLIUM	MG/L BE	<.0025
THALLIUM	MG/L TL	<0.001
TIN	MG/L SN	< 0.06
VANADIUM	MG/L V	< 0.05

TABLE A.3

WATER QUALITY DATA - BARRIER THREE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL R34B SJ23151 03/03/00	WELL R34B SJ23152 03/03/00	WELL R34B SJ27536 06/08/00	WELL R34B SJ27537 06/08/00	WELL R34B SJ31297 09/13/00	WELL R34B SJ34613 12/08/00
FIELD PARAMETERS							
DEPTH TO WATER	FEET	47.36		47.86		46.67	48.51
DEPTH TO BOTTOM	FEET	129.8		129.7		129.7	129.6
PERCENT METHANE IN GAS	%CH4	2.1		< 0.1		< 0.1	< 0.1
PERCENT OXYGEN IN GAS	%O2	10		19		12	15
FIELD WATER TEMPERATURE	DEG.C.	20.01		22.33		23.16	20.68
FIELD PH	PH	7.13		7.1		7.51	6.82
FIELD CONDUCTIVITY	UMHOS/CM	3695		3651		3791	3692
FIELD DISSOLVED O2	MG/L	0.73		0.43		0.18	0.31
GENERAL							
PH	PH	7.70	7.60	7.44	7.48	7.47	7.52
TOTAL DISSOLVED SOLIDS	MG/L	3028	3014	2964 B	2968	3116	2952
ANIONS							
NITRATE NITROGEN	MG/L N	< 0.05 A	< 0.05	< 0.05	< 0.05	0.09	< 0.05
SULFATE	MG/L SO4	1530 A	1600	1600	1610	1550	1600
CHLORIDE	MG/L CL	253 A	275	278	280	272 C	279
VOLATILE ORGANIC COMPOUNDS							
BROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMO-3-CHLOROPROPA	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
T-1,4-DICHLORO-2-BUTENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
METHYL IODIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
METHYLENE BROMIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-TETRACHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-TRICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
METHYLENE CHLORIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROFORM	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CARBON TETRACHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-DICHLOROETHENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
TRICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
TETRACHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
BROMODICHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
BROMOFORM	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
VINYL CHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3

FOOTNOTES : A-DUPLICATE SPIKE B-DUP & SPIKE C-AVERAGE

TABLE A.3

WATER QUALITY DATA - BARRIER THREE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL R34B SJ23151 03/03/00	WELL R34B SJ23152 03/03/00	WELL R34B SJ27536 06/08/00	WELL R34B SJ27537 06/08/00	WELL R34B SJ31297 09/13/00	WELL R34B SJ34613 12/08/00
VOLATILE ORGANIC COMPOUNDS							
O-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
P-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,1-DICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROETHANE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
BENZENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
ETHYL BENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
VINYL ACETATE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10
O-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHYLEN	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
BROMOMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
ACRYLONITRILE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10
FREON 11 (CCL3F)	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMOETHANE	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ACETONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10
CIS-1,2-DICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
2-BUTANONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10
4-METHYL-2-PENTANONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10
STYRENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
M+P-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CARBON DISULFIDE	UG/L CS2	< 1	< 1	< 1	< 1	< 1	< 1
2-HEXANONE	UG/L C6H12O	< 5	< 5	< 5	< 5	< 5	< 5

FOOTNOTES : A-DUPLICATE SPIKE B-DUP & SPIKE C-AVERAGE

TABLE A.4

WATER QUALITY DATA

BARRIER 4 AND BARRIER 5 MONITORING WELLS

TABLE A.4

WATER QUALITY DATA - BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M41A SJ23426 03/10/00	WELL M41A SJ23427 03/10/00	WELL M41A SJ27635 06/12/00	WELL M41A SJ30880 09/01/00	WELL M41A SJ34632 12/11/00
FIELD PARAMETERS						
DEPTH TO WATER	FEET	51.78		44.7	45.1	44.7
DEPTH TO BOTTOM	FEET	59.17		59.17	59.14	59.18
PERCENT METHANE IN GAS	%CH4	< 0.1		< 0.1	< 0.1	< 0.1
PERCENT OXYGEN IN GAS	%O2	19		19	20	18
FIELD WATER TEMPERATURE	DEG.C.	19.7		23.37	20.9	20.02
FIELD PH	PH	6.46		6.61	7.03	6.67
FIELD CONDUCTIVITY	UMHOS/CM	3834		3858	3599	3435
FIELD DISSOLVED O2	MG/L	0.97		0.67	0.73	0.44
FIELD DISSOLVED CO2	MG/L			173	63	141
GENERAL						
PH	PH	6.88		6.85	7.43	7.19
CONDUCTIVITY	UMHOS/CM	3650		3780		3370
TOTAL DISSOLVED SOLIDS	MG/L	2770		2842 C	2792	2744
TOTAL HARDNESS	MG/L CACO3			789 D		
TOTAL CYANIDE	MG/L CN	<0.005	<0.005	<0.005 B		
BORON	MG/L B			2.40	1.56	1.81
ANIONS						
NITRATE NITROGEN	MG/L N	0.12		< 0.05 B	0.34	0.26
SULFATE	MG/L SO4	1390		1470 B	1410	1420
CHLORIDE	MG/L CL	163 A		161 B	207 A	132
TOTAL ALKALINITY	MG/L CACO3			402	384	376
BICARBONATE ALKALINITY	MG/L CACO3			402	384	376
FLUORIDE	MG/L F			0.98		
CATIONS						
CALCIUM-HARDNESS	MG/L CACO3	419	434	434	537	532
MAGNESIUM-HARDNESS	MG/L CACO3	352	361	355	473	477
SODIUM	MG/L NA	602	619	606	477	461
POTASSIUM	MG/L K	13.2	15.6	9.1	9.4	9.5
IRON	MG/L FE	15.6	47.5 B	3.64		
ORGANIC MATTER						
AMMONIA NITROGEN	MG/L N	0.9		0.6	< 0.1	< 0.1
SOLUBLE BOD	MG/L O			< 2 C	< 2	< 2
SOLUBLE COD	MG/L O	< 10		< 10 C	< 10	< 10

FOOTNOTES : A-AVERAGE B-DUPLICATE SPIKE C-DUP & SPIKE D-CALCULATED VALUE

TABLE A.4

WATER QUALITY DATA - BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M41A SJ23426 03/10/00	WELL M41A SJ23427 03/10/00	WELL M41A SJ27635 06/12/00	WELL M41A SJ30880 09/01/00	WELL M41A SJ34632 12/11/00
ORGANIC MATTER						
TOTAL ORGANIC CARBON	MG/L C	2.99	2.74	2.92	2.49	2.32
TOTAL ORGANIC HALOGEN(TOX	UG/L	5.2 A	4.3 A	7.6 A		
METALS						
ARSENIC	MG/L AS			.0012		
BARIUM	MG/L BA	0.10	0.12 B	0.03		
COBALT	MG/L CO	0.05	0.06 B	< 0.01		
SELENIUM	MG/L SE			<.0010		
ZINC	MG/L ZN	0.12	0.14 B	0.03		
ANTIMONY	MG/L SB			<.0005		
VOLATILE ORGANIC COMPOUNDS						
BROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMO-3-CHLOROPROPA	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
T-1,4-DICHLORO-2-BUTENE	UG/L	< 1	< 1	< 1	< 1	< 1
METHYL IODIDE	UG/L	< 1	< 1	< 1	< 1	< 1
METHYLENE BROMIDE	UG/L	< 1	< 1	< 1	< 1	< 1
1,1,1,2-TETRACHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,2,3-TRICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1
METHYLENE CHLORIDE	UG/L	< 1	< 1	< 1	< 1	< 1
CHLOROFORM	UG/L	< 1	< 1	< 1	< 1	< 1
1,1,1-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
CARBON TETRACHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-DICHLOROETHENE	UG/L	< 1	< 1	< 1	< 1	< 1
TRICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
TETRACHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
BROMODICHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
BROMOFORM	UG/L	< 1	< 1	< 1	< 1	< 1
CHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1
VINYL CHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
O-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1
P-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1
1,1-DICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,1,2-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROETHANE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
BENZENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	UG/L	< 1	< 1	< 1	< 1	< 1
ETHYL BENZENE	UG/L	< 1	< 1	< 1	< 1	< 1

FOOTNOTES : A-AVERAGE B-DUPLICATE SPIKE C-DUP & SPIKE D-CALCULATED VALUE

TABLE A.4

WATER QUALITY DATA - BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M41A SJ23426 03/10/00	WELL M41A SJ23427 03/10/00	WELL M41A SJ27635 06/12/00	WELL M41A SJ30880 09/01/00	WELL M41A SJ34632 12/11/00
VOLATILE ORGANIC COMPOUNDS						
VINYL ACETATE	UG/L	< 10	< 10	< 10	< 10	< 10
O-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHYLEN	UG/L	< 1	< 1	< 1	< 1	< 1
BROMOMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
CHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
CHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
ACRYLONITRILE	UG/L	< 10	< 10	< 10	< 10	< 10
FREON 11 (CCL3F)	UG/L	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMOETHANE	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ACETONE	UG/L	< 10	< 10	< 10	< 10	< 10
CIS-1,2-DICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
2-BUTANONE	UG/L	< 10	< 10	< 10	< 10	< 10
4-METHYL-2-PENTANONE	UG/L	< 10	< 10	< 10	< 10	< 10
STYRENE	UG/L	< 1	< 1	< 1	< 1	< 1
M+P-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
CARBON DISULFIDE	UG/L CS2	< 1	< 1	< 1	< 1	< 1
2-HEXANONE	UG/L C6H12O	< 5	< 5	< 5	< 5	< 5

FOOTNOTES : A-AVERAGE B-DUPLICATE SPIKE C-DUP & SPIKE D-CALCULATED VALUE

TABLE A.4

WATER QUALITY DATA - BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WEFI M41A SJ27636 06/12/00
CATIONS		
IRON	MG/L FE	< 0.05
METALS		
ARSENIC	MG/L AS	<.0010
BARIUM	MG/L BA	0.02
COBALT	MG/L CO	< 0.01
SELENIUM	MG/L SE	<.0010
ZINC	MG/L ZN	0.02
ANTIMONY	MG/L SB	<.0005

TABLE A.4

WATER QUALITY DATA - BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M42A SJ23511 03/13/00	WELL M42A SJ27642 06/12/00	WELL M42A SJ27643 06/12/00	WELL M42A SJ31391 09/15/00	WELL M42A SJ34633 12/11/00
FIELD PARAMETERS						
DEPTH TO WATER	FEET	40.96	41.15		41.62	41.37
DEPTH TO BOTTOM	FEET	57.38	57.41		57.4	57.4
PERCENT METHANE IN GAS	%CH4	< 0.1	< 0.1		< 0.1	< 0.1
PERCENT OXYGEN IN GAS	%O2	15	18		15	18
FIELD WATER TEMPERATURE	DEG.C.	21.61	22.43		23.05	20.32
FIELD PH	PH	7.02	7.04		6.96	6.77
FIELD CONDUCTIVITY	UMHOS/CM	4562	4545		4571	4636
FIELD DISSOLVED O2	MG/L	0.29	0.31		0.98	0.4
FIELD DISSOLVED CO2	MG/L	56	51		64	98
GENERAL						
PH	PH	7.43	7.25	7.24	7.32	7.30 F
CONDUCTIVITY	UMHOS/CM	4340	4330	4300		4490
TOTAL DISSOLVED SOLIDS	MG/L	3764	3740	3700	4124	3976
TOTAL HARDNESS	MG/L CACO3	1417 B	1424 B	1440 B		
TOTAL CYANIDE	MG/L CN	<0.005	<0.005	<0.005		
BORON	MG/L B	1.57	1.54	1.57	1.62	1.60
ANIONS						
NITRATE NITROGEN	MG/L N	0.07	0.63	0.95	0.27	0.07
SULFATE	MG/L SO4	2020	2170	2150	2170	2220
CHLORIDE	MG/L CL	160 A	172 A	166 A	183	186 A
TOTAL ALKALINITY	MG/L CACO3	332	317 D	312	331	330
BICARBONATE ALKALINITY	MG/L CACO3	332	317	312	331	330
FLUORIDE	MG/L F	0.64	0.62	0.61		
CATIONS						
CALCIUM-HARDNESS	MG/L CACO3	787	802 C	799	774 C	851
MAGNESIUM-HARDNESS	MG/L CACO3	630	622 C	642	597 C	663
SODIUM	MG/L NA	614	554 C	533	602 C	660
POTASSIUM	MG/L K	11.6	11.9 C	12.2	11.6 C	12.2
IRON	MG/L FE	0.27 C	< 0.05	< 0.05 C		
ORGANIC MATTER						
AMMONIA NITROGEN	MG/L N	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
SOLUBLE BOD	MG/L O	< 2	< 2	< 2	< 2	< 2
SOLUBLE COD	MG/L O	< 10	12	12	< 10 D	< 10

FOOTNOTES : A-AVERAGE B-CALCULATED VALUE C-DUPLICATE SPIKE D-DUP & SPIKE E-10% RULE EXCEEDED
F-AVERAGE OF DUPS

TABLE A.4

WATER QUALITY DATA - BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M42A SJ23511 03/13/00	WELL M42A SJ27642 06/12/00	WELL M42A SJ27643 06/12/00	WELL M42A SJ31391 09/15/00	WELL M42A SJ34633 12/11/00
ORGANIC MATTER						
TOTAL ORGANIC CARBON	MG/L C	2.36	2.22	2.22	2.59 C	2.09
TOTAL ORGANIC HALOGEN(TOX	UG/L	3.4 A	11 E	12 E		
METALS						
ARSENIC	MG/L AS	.0020	.0017	.0017		
BARIUM	MG/L BA	0.02 C	0.01	0.01 C		
COBALT	MG/L CO	< 0.01 C	< 0.01	< 0.01 C		
SELENIUM	MG/L SE	<.0010	<.0010	<.0010		
ZINC	MG/L ZN	0.01 C	0.01	0.01 C		
ANTIMONY	MG/L SB	.0006	<.0005	<.0005		
VOLATILE ORGANIC COMPOUNDS						
BROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMO-3-CHLOROPROPA	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
T-1,4-DICHLORO-2-BUTENE	UG/L	< 1	< 1	< 1	< 1	< 1
METHYL IODIDE	UG/L	< 1	< 1	< 1	< 1	< 1
METHYLENE BROMIDE	UG/L	< 1	< 1	< 1	< 1	< 1
1,1,1,2-TETRACHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,2,3-TRICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1
METHYLENE CHLORIDE	UG/L	< 1	< 1	< 1	< 1	< 1
CHLOROFORM	UG/L	< 1	< 1	< 1	< 1	< 1
1,1,1-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
CARBON TETRACHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-DICHLOROETHENE	UG/L	< 1	< 1	< 1	< 1	< 1
TRICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
TETRACHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
BROMODICHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
BROMOFORM	UG/L	< 1	< 1	< 1	< 1	< 1
CHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1
VINYL CHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
O-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1
P-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1
1,1-DICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,1,2-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROETHANE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
BENZENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	UG/L	< 1	< 1	< 1	< 1	< 1
ETHYL BENZENE	UG/L	< 1	< 1	< 1	< 1	< 1

FOOTNOTES : A-AVERAGE B-CALCULATED VALUE C-DUPLICATE SPIKE D-DUP & SPIKE E-10% RULE EXCEEDED
F-AVERAGE OF DUPS

TABLE A.4

WATER QUALITY DATA - BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M42A SJ23511 03/13/00	WELL M42A SJ27642 06/12/00	WELL M42A SJ27643 06/12/00	WELL M42A SJ31391 09/15/00	WELL M42A SJ34633 12/11/00
VOLATILE ORGANIC COMPOUNDS						
VINYL ACETATE	UG/L	< 10	< 10	< 10	< 10	< 10
O-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHYLEN	UG/L	< 1	< 1	< 1	< 1	< 1
BROMOMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
CHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
CHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
ACRYLONITRILE	UG/L	< 10	< 10	< 10	< 10	< 10
FREON 11 (CCL3F)	UG/L	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMOETHANE	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ACETONE	UG/L	< 10	< 10	< 10	< 10	< 10
CIS-1,2-DICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
2-BUTANONE	UG/L	< 10	< 10	< 10	< 10	< 10
4-METHYL-2-PENTANONE	UG/L	< 10	< 10	< 10	< 10	< 10
STYRENE	UG/L	< 1	< 1	< 1	< 1	< 1
M+P-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
CARBON DISULFIDE	UG/L CS2	< 1	< 1	< 1	< 1	< 1
2-HEXANONE	UG/L C6H12O	< 5	< 5	< 5	< 5	< 5

FOOTNOTES : A-AVERAGE B-CALCULATED VALUE C-DUPLICATE SPIKE D-DUP & SPIKE E-10% RULE EXCEEDED
F-AVERAGE OF DUPS

TABLE A.4

WATER QUALITY DATA - BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WEFI M42A SJ23509 03/13/00	WEFI M42A SJ27640 06/12/00	WEFI M42A SJ27641 06/12/00
CATIONS				
IRON	MG/L FE	< 0.05	< 0.05	< 0.05
METALS				
ARSENIC	MG/L AS	.0018	.0019	.0016
BARIUM	MG/L BA	0.02	0.02	0.01
COBALT	MG/L CO	< 0.01	< 0.01	< 0.01
SELENIUM	MG/L SE	<.0010	<.0010	<.0010
ZINC	MG/L ZN	0.03	0.01	0.01
ANTIMONY	MG/L SB	.0007	.0005	<.0005

TABLE A.4

WATER QUALITY DATA - BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M43A SJ23512 03/13/00	WELL M43A SJ27637 06/12/00	WELL M43A SJ31351 09/14/00	WELL M43A SJ31353 09/14/00	WELL M43A SJ34629 12/11/00	WELL M43A SJ34630 12/11/00
FIELD PARAMETERS							
DEPTH TO WATER	FEET	43.25	45.0	45.33		45.36	
DEPTH TO BOTTOM	FEET	60.0	58.8	60.2		60.02	
PERCENT METHANE IN GAS	%CH4	< 0.1	< 0.1	< 0.1		< 0.1	
PERCENT OXYGEN IN GAS	%O2	16	14	15		16	
FIELD WATER TEMPERATURE	DEG.C.	20.01	22.82	22.55		19.4	
FIELD PH	PH	7.05	7.14	7.01		6.73	
FIELD CONDUCTIVITY	UMHOS/CM	2819	2631	2724		2742	
FIELD DISSOLVED O2	MG/L	0.33	0.55	0.35		0.6	
FIELD DISSOLVED CO2	MG/L	69	52	71		138	
GENERAL							
PH	PH	7.38	7.27	7.38	7.40	7.28	7.30
CONDUCTIVITY	UMHOS/CM	2500	2610			2690	2600
TOTAL DISSOLVED SOLIDS	MG/L	1940	1986	2064	2012	2000	2044
TOTAL HARDNESS	MG/L CACO3	811 B	784 B				
TOTAL CYANIDE	MG/L CN	<0.005	<0.005				
BORON	MG/L B	1.00	0.88	0.96	0.95	1.17	1.27
ANIONS							
NITRATE NITROGEN	MG/L N	0.27	0.20	< 0.05 C	0.07	< 0.05	< 0.05
SULFATE	MG/L SO4	937	999	955 C	940	1020	990
CHLORIDE	MG/L CL	68.9 A	79.3 A	75.3 C	75.2 A	82.6 A	78.0 A
TOTAL ALKALINITY	MG/L CACO3	439	412	416	419	423	427 D
BICARBONATE ALKALINITY	MG/L CACO3	439	412	416	419	423	427 D
FLUORIDE	MG/L F	0.74	0.84				
CATIONS							
CALCIUM-HARDNESS	MG/L CACO3	395 C	380	385	357 C	402 C	387
MAGNESIUM-HARDNESS	MG/L CACO3	416 C	404	395	383 C	420 C	428
SODIUM	MG/L NA	372 C	317	345	332 C	371 C	354
POTASSIUM	MG/L K	8.0 C	7.7	7.4	7.2 C	7.4 C	7.4
IRON	MG/L FE	0.19	0.53				
ORGANIC MATTER							
AMMONIA NITROGEN	MG/L N	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
SOLUBLE BOD	MG/L O	< 2	< 2	< 2 D	< 2	< 2 D	< 2
SOLUBLE COD	MG/L O	< 10	< 10 D	< 10 D	< 10 D	< 10	< 10

FOOTNOTES : A-AVERAGE B-CALCULATED VALUE C-DUPLICATE SPIKE D-DUP & SPIKE

TABLE A.4

WATER QUALITY DATA - BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M43A SJ23512 03/13/00	WELL M43A SJ27637 06/12/00	WELL M43A SJ31351 09/14/00	WELL M43A SJ31353 09/14/00	WELL M43A SJ34629 12/11/00	WELL M43A SJ34630 12/11/00
ORGANIC MATTER							
TOTAL ORGANIC CARBON	MG/L C	2.68	4.08	2.55	2.56	2.34	2.32
TOTAL ORGANIC HALOGEN(TOX	UG/L	3.3 A	12 A				
METALS							
ARSENIC	MG/L AS	.0028	.0029				
BARIUM	MG/L BA	0.03	0.03				
COBALT	MG/L CO	< 0.01	< 0.01				
SELENIUM	MG/L SE	<.0010	.0010				
ZINC	MG/L ZN	< 0.01	0.02				
ANTIMONY	MG/L SB	.0006	.0005				
VOLATILE ORGANIC COMPOUNDS							
BROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMO-3-CHLOROPROPA	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
T-1,4-DICHLORO-2-BUTENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
METHYL IODIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
METHYLENE BROMIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-TETRACHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-TRICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
METHYLENE CHLORIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROFORM	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CARBON TETRACHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-DICHLOROETHENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
TRICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
TETRACHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
BROMODICHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
BROMOFORM	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
VINYL CHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
O-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
P-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,1-DICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROETHANE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
BENZENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
ETHYL BENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1

FOOTNOTES : A-AVERAGE B-CALCULATED VALUE C-DUPLICATE SPIKE D-DUP & SPIKE

TABLE A.4

WATER QUALITY DATA - BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M43A SJ23512 03/13/00	WELL M43A SJ27637 06/12/00	WELL M43A SJ31351 09/14/00	WELL M43A SJ31353 09/14/00	WELL M43A SJ34629 12/11/00	WELL M43A SJ34630 12/11/00
VOLATILE ORGANIC COMPOUNDS							
VINYL ACETATE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10
O-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHYLEN	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
BROMOMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
ACRYLONITRILE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10
FREON 11 (CCL3F)	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMOETHANE	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ACETONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10
CIS-1,2-DICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
2-BUTANONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10
4-METHYL-2-PENTANONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10
STYRENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
M+P-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CARBON DISULFIDE	UG/L CS2	< 1	< 1	< 1	< 1	< 1	< 1
2-HEXANONE	UG/L C6H12O	< 5	< 5	< 5	< 5	< 5	< 5

FOOTNOTES : A-AVERAGE B-CALCULATED VALUE C-DUPLICATE SPIKE D-DUP & SPIKE

TABLE A.4

WATER QUALITY DATA - BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WEFI M43A SJ23510 03/13/00	WEFI M43A SJ27638 06/12/00
CATIONS			
IRON	MG/L FE	< 0.05	< 0.05
METALS			
ARSENIC	MG/L AS	.0023	.0022
BARIUM	MG/L BA	0.03	0.03
COBALT	MG/L CO	< 0.01	< 0.01
SELENIUM	MG/L SE	<.0010	.0012
ZINC	MG/L ZN	0.01	0.01
ANTIMONY	MG/L SB	.0007	.0005

TABLE A.4

WATER QUALITY DATA - BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M47B SJ23080 03/02/00	WELL M47B SJ23081 03/02/00	WELL M47B SJ27670 06/13/00	WELL M47B SJ30933 09/05/00	WELL M47B SJ30934 09/05/00	WELL M47B SJ34971 12/19/00
FIELD PARAMETERS							
DEPTH TO WATER	FEET	48.02		44.97	41.43		38.21
DEPTH TO BOTTOM	FEET	129.5		129.5	129.6		129.5
PERCENT METHANE IN GAS	%CH4	< 0.1		< 0.1	< 0.1		< 0.1
PERCENT OXYGEN IN GAS	%O2	17		16	16		17
FIELD WATER TEMPERATURE	DEG.C.	19.61		22.85	22.23		20.68
FIELD PH	PH	8.28		8.2	8.26		7.9
FIELD CONDUCTIVITY	UMHOS/CM	5624		5577	5298		5409
FIELD DISSOLVED O2	MG/L	0.3		0.29	0.13		0.26
FIELD DISSOLVED CO2	MG/L	4		5	5		11
GENERAL							
PH	PH	8.37	8.36	8.21	8.17 F	8.28	8.30 F
CONDUCTIVITY	UMHOS/CM	5440	5450				5450
TOTAL DISSOLVED SOLIDS	MG/L	3728	3886	3796	4004	3868	4092
TOTAL HARDNESS	MG/L CACO3	85.7 B	915 B				
TOTAL CYANIDE	MG/L CN	<0.005	<0.005				
BORON	MG/L B	3.64	3.69	4.09	4.04	3.95	3.79
ANIONS							
NITRATE NITROGEN	MG/L N	< 0.05	< 0.05	0.11	0.39 D	0.13	< 0.05
SULFATE	MG/L SO4	1860	1870	1850	1820 D	1850	1830
CHLORIDE	MG/L CL	315 A	315 A	314 A	307 D	314	318 A
TOTAL ALKALINITY	MG/L CACO3	463	394	496	503	502	494
BICARBONATE ALKALINITY	MG/L CACO3	427	364	488	489	476	494
TOTAL SULFIDE	MG/L S	< 0.1	< 0.1				
FLUORIDE	MG/L F	1.84	1.87				
CATIONS							
CALCIUM-HARDNESS	MG/L CACO3	41.2 D	42.9	38.5 D	32.5	32.5	40.0 D
MAGNESIUM-HARDNESS	MG/L CACO3	44.5 D	48.6	46.1 D	41.2	41.2	49.8 D
SODIUM	MG/L NA	1300 D	1270	1250 D	1270	1250	1240 D
POTASSIUM	MG/L K	5.2 D	5.2	5.9 D	5.2	5.2	4.7 D
IRON	MG/L FE	0.07	< 0.05 D				
MANGANESE	MG/L MN	0.03	0.03 D				
ORGANIC MATTER							
AMMONIA NITROGEN	MG/L N	3.5	3.5	3.5	3.5	3.4	3.3

FOOTNOTES : A-AVERAGE B-CALCULATED VALUE C-10% RULE EXCEEDED D-DUPLICATE SPIKE E-SINGLE SPIKE
F-AVERAGE OF DUPS G-DUP & SPIKE

TABLE A.4

WATER QUALITY DATA - BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M47B SJ23080 03/02/00	WELL M47B SJ23081 03/02/00	WELL M47B SJ27670 06/13/00	WELL M47B SJ30933 09/05/00	WELL M47B SJ30934 09/05/00	WELL M47B SJ34971 12/19/00
ORGANIC MATTER							
TOTAL BOD	MG/L O	3	2				
SOLUBLE BOD	MG/L O	< 2	< 2	< 2	< 2 G	< 2	< 2
TOTAL COD	MG/L O	23	27				
SOLUBLE COD	MG/L O	27	24	30	24	25 G	22 G
TOTAL ORGANIC CARBON	MG/L C	6.49	6.53	8.88	6.83	6.83	6.44
OIL & GREASE	MG/L EXTRAC	< 5	< 5 E				
TOTAL ORGANIC HALOGEN(TOX	UG/L	14 C	8.1 A				
METALS							
ARSENIC	MG/L AS	.0088	.0089				
BARIUM	MG/L BA	< 0.01	< 0.01 D				
CADMIUM	MG/L CD	<0.004	<0.004 D				
TOTAL CHROMIUM	MG/L CR	< 0.01	< 0.01 D				
COBALT	MG/L CO	< 0.01	< 0.01 D				
COPPER	MG/L CU	< 0.01	< 0.01 D				
LEAD	MG/L PB	< 0.02	< 0.02 D				
MERCURY	MG/L HG	<.0001 D	<.0001				
NICKEL	MG/L NI	< 0.02	< 0.02 D				
SELENIUM	MG/L SE	<.0010	<.0010				
SILVER	MG/L AG	< 0.01	< 0.01 D				
ZINC	MG/L ZN	0.01	0.01 D				
ANTIMONY	MG/L SB	<.0005	<.0005				
BERYLLIUM	MG/L BE	<.0025	<.0025 D				
THALLIUM	MG/L TL	0.001	0.002 D				
TIN	MG/L SN	< 0.06	< 0.06 D				
VANADIUM	MG/L V	< 0.05	< 0.05 D				
VOLATILE ORGANIC COMPOUNDS							
BROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMO-3-CHLOROPROPA	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
T-1,4-DICHLORO-2-BUTENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
METHYL IODIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
METHYLENE BROMIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-TETRACHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-TRICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
METHYLENE CHLORIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROFORM	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CARBON TETRACHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3

FOOTNOTES : A-AVERAGE B-CALCULATED VALUE C-10% RULE EXCEEDED D-DUPLICATE SPIKE E-SINGLE SPIKE
F-AVERAGE OF DUPS G-DUP & SPIKE

TABLE A.4

WATER QUALITY DATA - BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M47B SJ23080 03/02/00	WELL M47B SJ23081 03/02/00	WELL M47B SJ27670 06/13/00	WELL M47B SJ30933 09/05/00	WELL M47B SJ30934 09/05/00	WELL M47B SJ34971 12/19/00
VOLATILE ORGANIC COMPOUNDS							
1,1-DICHLOROETHENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
TRICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
TETRACHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
BROMODICHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
BROMOFORM	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
VINYL CHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
O-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
P-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,1-DICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROETHANE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
BENZENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
ETHYL BENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
VINYL ACETATE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10
O-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHYLEN	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
BROMOMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
ACRYLONITRILE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10
FREON 11 (CCL3F)	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMOETHANE	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ACETONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10
CIS-1,2-DICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
2-BUTANONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10
4-METHYL-2-PENTANONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10
STYRENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
M+P-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CARBON DISULFIDE	UG/L CS2	< 1	< 1	< 1	< 1	< 1	< 1
2-HEXANONE	UG/L C6H12O	< 5	< 5	< 5	< 5	< 5	< 5

FOOTNOTES : A-AVERAGE B-CALCULATED VALUE C-10% RULE EXCEEDED D-DUPLICATE SPIKE E-SINGLE SPIKE
F-AVERAGE OF DUPS G-DUP & SPIKE

TABLE A.4

WATER QUALITY DATA - BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WEFI M47B SJ23078 03/02/00	WEFI M47B SJ23079 03/02/00
CATIONS			
IRON	MG/L FE	< 0.05	< 0.05
MANGANESE	MG/L MN	0.03	0.03
METALS			
ARSENIC	MG/L AS	.0091	.0086
BARIUM	MG/L BA	< 0.01	< 0.01
CADMIUM	MG/L CD	<0.003	<0.004
TOTAL CHROMIUM	MG/L CR	< 0.01	< 0.01
COBALT	MG/L CO	< 0.01	< 0.01
COPPER	MG/L CU	< 0.01	< 0.01
LEAD	MG/L PB	< 0.02	< 0.02
MERCURY	MG/L HG	.0001	<.0001
NICKEL	MG/L NI	< 0.02	< 0.02
SELENIUM	MG/L SE	<.0010	<.0010
SILVER	MG/L AG	< 0.01	< 0.01
ZINC	MG/L ZN	0.02	0.02
ANTIMONY	MG/L SB	<.0005	<.0005
BERYLLIUM	MG/L BE	<.0025	<.0025
THALLIUM	MG/L TL	0.003	0.002
TIN	MG/L SN	< 0.06	< 0.06
VANADIUM	MG/L V	< 0.05	< 0.05

TABLE A.4

WATER QUALITY DATA - BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M51A SJ23424 03/10/00	WELL M51A SJ27465 06/07/00	WELL M51A SJ30879 09/01/00	WELL M51A SJ34354 12/04/00
FIELD PARAMETERS					
DEPTH TO WATER	FEET	31.92	23.78	20.96	22.06
DEPTH TO BOTTOM	FEET	34.93	34.93	34.96	34.93
PERCENT METHANE IN GAS	%CH4	< 0.1	< 0.1	< 0.1	< 0.1
PERCENT OXYGEN IN GAS	%O2	8	13	12	14
FIELD WATER TEMPERATURE	DEG.C.	18.79		20.28	20.15
FIELD PH	PH	7.17		6.83	6.44
FIELD CONDUCTIVITY	UMHOS/CM	5042		6070	5814
FIELD DISSOLVED O2	MG/L	1.1		0.66	1.81
FIELD DISSOLVED CO2	MG/L	154		220	551
GENERAL					
PH	PH	7.93	7.21	7.23 D	6.98
CONDUCTIVITY	UMHOS/CM	4760	5550	5850	5400
TOTAL DISSOLVED SOLIDS	MG/L	3573	4420	5492	5470 F
TOTAL HARDNESS	MG/L CACO3	B	1770 E	2209 E	2290 E
TOTAL CYANIDE	MG/L CN		<0.005	<0.005	<0.005
BORON	MG/L B		1.71	1.52	1.59
ANIONS					
NITRATE NITROGEN	MG/L N		0.10	< 0.05 G	0.45 A
SULFATE	MG/L SO4	1360 A	2030	2490 G	2610
CHLORIDE	MG/L CL	285 A	266	256 G	263 A
TOTAL ALKALINITY	MG/L CACO3	1300	1110	846 F	865
BICARBONATE ALKALINITY	MG/L CACO3	1300	1110	846	865
TOTAL SULFIDE	MG/L S		0.3 D	< 0.1 D	< 0.1 D
FLUORIDE	MG/L F		0.38	0.42	0.52
CATIONS					
CALCIUM-HARDNESS	MG/L CACO3		739 G	999	1080
MAGNESIUM-HARDNESS	MG/L CACO3		1040 G	1210	1210
SODIUM	MG/L NA		820 G	724	783
POTASSIUM	MG/L K		29.9 G	29.6	27.8
IRON	MG/L FE		4.36	4.34	5.14
MANGANESE	MG/L MN		0.70	1.45	1.48
ORGANIC MATTER					
AMMONIA NITROGEN	MG/L N		< 0.1	0.1	< 0.1

FOOTNOTES : A-AVERAGE B-INSUFFICIENT SAMPLE C-AMENDED TEST RESULT D-AVERAGE OF DUPS E-CALCULATED VALUE
F-DUP & SPIKE G-DUPLICATE SPIKE

TABLE A.4

WATER QUALITY DATA - BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M51A SJ23424 03/10/00	WELL M51A SJ27465 06/07/00	WELL M51A SJ30879 09/01/00	WELL M51A SJ34354 12/04/00
ORGANIC MATTER					
TOTAL BOD	MG/L O		9 F	4	6 F
SOLUBLE BOD	MG/L O		4	2	9
TOTAL COD	MG/L O	24 C	60 F	33	36 F
SOLUBLE COD	MG/L O	22	19	32	30
TOTAL ORGANIC CARBON	MG/L C		16.9	10.9	12.2
OIL & GREASE	MG/L EXTRAC		< 5	< 4	< 5
TOTAL ORGANIC HALOGEN(TOX	UG/L		250 G	190 G	220 A
METALS					
ARSENIC	MG/L AS		.0329	.0079	.0084
BARIUM	MG/L BA		0.04	0.03	0.03
CADMIUM	MG/L CD		<0.002	<0.002	<0.002
TOTAL CHROMIUM	MG/L CR		< 0.01	< 0.01	< 0.01
COBALT	MG/L CO		< 0.01	< 0.01	< 0.01
COPPER	MG/L CU		< 0.01	< 0.01	< 0.01
LEAD	MG/L PB		< 0.01	< 0.01	< 0.01
MERCURY	MG/L HG		<.0001	<.0001	<.0001
NICKEL	MG/L NI		< 0.02	< 0.02	< 0.02
SELENIUM	MG/L SE		<.0010	<.0010	<.0010
SILVER	MG/L AG		< 0.01	< 0.01	< 0.01
ZINC	MG/L ZN		0.02	< 0.01	< 0.01
ANTIMONY	MG/L SB		<.0005	<.0005	<.0005
BERYLLIUM	MG/L BE		<.0025	<.0025	<.0025
THALLIUM	MG/L TL		<0.001	<0.001	<0.001
TIN	MG/L SN		< 0.06	< 0.06	< 0.06
VANADIUM	MG/L V		< 0.05	< 0.05	< 0.05
PESTICIDES, HERBICIDES, & ORGANOPHOSPHORUS					
2,4,5-T	UG/L			< 0.05	
DINOSEB	UG/L			< 0.1	
THIONAZIN	UG/L			< 1	
DIMETHOATE	UG/L			< 1	
DISULFOTON	UG/L			< 1	
METHYL PARATHION	UG/L			< 1	
ETHYL PARATHION	UG/L			< 1	
PHORATE	UG/L			< 1	
PP'-DDE	UG/L			< 0.01	
PP'-DDD	UG/L			< 0.01	
PP'-DDT	UG/L			< 0.01	

FOOTNOTES : A-AVERAGE B-INSUFFICIENT SAMPLE C-AMENDED TEST RESULT D-AVERAGE OF DUPS E-CALCULATED VALUE
F-DUP & SPIKE G-DUPLICATE SPIKE

TABLE A.4

WATER QUALITY DATA - BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M51A SJ23424 03/10/00	WELL M51A SJ27465 06/07/00	WELL M51A SJ30879 09/01/00	WELL M51A SJ34354 12/04/00
PESTICIDES, HERBICIDES, & ORGANOPHOSPHORUS					
ALPHA-BHC	UG/L			< 0.01	
LINDANE (GAMMA-BHC)	UG/L			< 0.01	
HEPTACHLOR	UG/L			< 0.01	
HEPTACHLOR EPOXIDE	UG/L			< 0.01	
ALDRIN	UG/L			< 0.01	
DIELDRIN	UG/L			< 0.01	
ENDRIN	UG/L			< 0.01	
TOXAPHENE	UG/L			< 0.5	
METHOXYCLOR	UG/L			< 0.01	
2,4-D(ACID)	UG/L			< 0.5	
2,4,5-TP(SILVEX)	UG/L			< 0.05	
AROCLOR 1242	UG/L			< 0.1	
AROCLOR 1254	UG/L			< 0.05	
BETA-BHC	UG/L			< 0.01	
DELTA-BHC	UG/L			< 0.01	
ENDOSULFAN I	UG/L			< 0.01	
ENDOSULFAN II	UG/L			< 0.01	
ENDOSULFAN SULFATE	UG/L			< 0.1	
ENDRIN ALDEHYDE	UG/L			< 0.01	
AROCLOR 1016	UG/L			< 0.1	
AROCLOR 1221	UG/L			< 0.1	
AROCLOR 1232	UG/L			< 0.1	
AROCLOR 1248	UG/L			< 0.1	
AROCLOR 1260	UG/L			< 0.1	
TECHNICAL CHLORDANE	UG/L			< 0.05	
VOLATILE ORGANIC COMPOUNDS					
ALLYL CHLORIDE	UG/L			< 1	
BROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1
CHLOROPRENE	UG/L			< 1	
1,2-DIBROMO-3-CHLOROPROPA	UG/L	< 0.01	< 0.01	< 0.01	< 0.01
T-1,4-DICHLORO-2-BUTENE	UG/L	< 1	< 1	< 1	< 1
1,3-DICHLOROPROPANE	UG/L			< 0.3	
2,2-DICHLOROPROPANE	UG/L			< 1	
1,1-DICHLOROPROPENE	UG/L			< 1	
ISOBUTYL ALCOHOL	UG/L			< 10	
METHACRYLONITRILE	UG/L			< 10	
METHYL IODIDE	UG/L	< 1	< 1	< 1	< 1
METHYLENE BROMIDE	UG/L	< 1	< 1	< 1	< 1
PROPIONITRILE	UG/L			< 10	

FOOTNOTES : A-AVERAGE B-INSUFFICIENT SAMPLE C-AMENDED TEST RESULT D-AVERAGE OF DUPS E-CALCULATED VALUE
F-DUP & SPIKE G-DUPLICATE SPIKE

TABLE A.4

WATER QUALITY DATA - BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M51A SJ23424 03/10/00	WELL M51A SJ27465 06/07/00	WELL M51A SJ30879 09/01/00	WELL M51A SJ34354 12/04/00
VOLATILE ORGANIC COMPOUNDS					
1,1,1,2-TETRACHLOROETHANE	UG/L	< 1	< 1	< 1	< 1
1,2,3-TRICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1
METHYL METHACRYLATE	UG/L			< 10	
ETHYL METHACRYLATE	UG/L			< 5	
METHYLENE CHLORIDE	UG/L	< 1	< 1	< 1	< 1
CHLOROFORM	UG/L	< 1	< 1	< 1	< 1
1,1,1-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1
CARBON TETRACHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3
1,1-DICHLOROETHENE	UG/L	< 1	< 1	< 1	< 1
TRICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1
TETRACHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1
BROMODICHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1
BROMOFORM	UG/L	< 1	< 1	< 1	< 1
CHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1
VINYL CHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3
O-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1
M-DICHLOROBENZENE	UG/L			< 1	
P-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1
1,1-DICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1
1,1,2-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1
1,2-DICHLOROETHANE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3
BENZENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	UG/L	< 1	< 1	< 1	< 1
ETHYL BENZENE	UG/L	< 1	< 1	< 1	< 1
VINYL ACETATE	UG/L	< 10	< 10	< 10	< 10
O-XYLENE	UG/L	< 1	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHYLEN	UG/L	< 1	< 1	< 1	< 1
BROMOMETHANE	UG/L	< 1	< 1	< 1	< 1
CHLOROETHANE	UG/L	< 1	< 1	< 1	< 1
2-CHLOROETHYLVINYLETHER	UG/L			< 1	
CHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1
1,2-DICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5
ACROLEIN	UG/L			< 10	
ACRYLONITRILE	UG/L	< 10	< 10	< 10	< 10
ACETONITRILE	UG/L			< 20	
FREON 12 (CCL2F2)	UG/L			< 1	
FREON 11 (CCL3F)	UG/L	< 1	< 1	< 1	< 1

FOOTNOTES : A-AVERAGE B-INSUFFICIENT SAMPLE C-AMENDED TEST RESULT D-AVERAGE OF DUPS E-CALCULATED VALUE
F-DUP & SPIKE G-DUPLICATE SPIKE

TABLE A.4

WATER QUALITY DATA - BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M51A SJ23424 03/10/00	WELL M51A SJ27465 06/07/00	WELL M51A SJ30879 09/01/00	WELL M51A SJ34354 12/04/00
VOLATILE ORGANIC COMPOUNDS					
1,2-DIBROMOETHANE	UG/L	< 0.01	< 0.01	< 0.01	< 0.01
ACETONE	UG/L	< 10	12	< 10	< 10
CIS-1,2-DICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1
2-BUTANONE	UG/L	< 10	< 10	< 10	< 10
4-METHYL-2-PENTANONE	UG/L	< 10	< 10	< 10	< 10
STYRENE	UG/L	< 1	< 1	< 1	< 1
2,4,5-TRICHLOROPHENOL	UG/L			< 1	
M+P-XYLENE	UG/L	< 1	< 1	< 1	< 1
CARBON DISULFIDE	UG/L CS2	< 1	< 1	< 1	< 1
2-HEXANONE	UG/L C6H12O	< 5	< 5	< 5	< 5
ACID-BASE NEUTRAL EXTRACTABLE					
ACETOPHENONE	UG/L			< 1	
2-ACETYLAMINOFLUORENE	UG/L			< 1	
4-AMINOBIPHENYL	UG/L			< 1	
BENZYL ALCOHOL	UG/L			< 1	
P-CHLOROANILINE	UG/L			< 1	
CHLOROBENZILATE	UG/L			< 1	
DIALLATE	UG/L			< 1	
DIBENZOFURAN	UG/L			< 1	
2,6-DICHLOROPHENOL	UG/L			< 1	
P(DIMETHYLAMINO)AZOBENZEN	UG/L			< 1	
7,12-DIMETHYLBENZ(A)ANTHR	UG/L			< 10	
3,3'-DIMETHYLBENZIDINE	UG/L			< 1	
M-DINITROBENZENE	UG/L			< 1	
DIPHENYLAMINE	UG/L			< 1	
ETHYL METHANESULFONATE	UG/L			< 1	
FAMPHUR	UG/L			< 1	
HEXACHLOROPROPENE	UG/L			< 5	
ISODRIN	UG/L			< 1	
ISOSAFROLE	UG/L			< 1	
KEPONE	UG/L			< 10	
METHAPYRILENE	UG/L			< 20	
3-METHYLCHOLANTHRENE	UG/L			< 1	
METHYL METHANESULFONATE	UG/L			< 1	
2-METHYLNAPHTHALENE	UG/L			< 1	
1,4-NAPHTHOQUINONE	UG/L			< 1	
1-NAPHTHYLAMINE	UG/L			< 1	
2-NAPHTHYLAMINE	UG/L			< 1	
O-NITROANILINE	UG/L			< 1	

FOOTNOTES : A-AVERAGE B-INSUFFICIENT SAMPLE C-AMENDED TEST RESULT D-AVERAGE OF DUPS E-CALCULATED VALUE
F-DUP & SPIKE G-DUPLICATE SPIKE

TABLE A.4

WATER QUALITY DATA - BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M51A SJ23424 03/10/00	WELL M51A SJ27465 06/07/00	WELL M51A SJ30879 09/01/00	WELL M51A SJ34354 12/04/00
VOLATILE ORGANIC COMPOUNDS					
1,2-DIBROMOETHANE	UG/L	< 0.01	< 0.01	< 0.01	< 0.01
ACETONE	UG/L	< 10	12	< 10	< 10
CIS-1,2-DICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1
2-BUTANONE	UG/L	< 10	< 10	< 10	< 10
4-METHYL-2-PENTANONE	UG/L	< 10	< 10	< 10	< 10
STYRENE	UG/L	< 1	< 1	< 1	< 1
2,4,5-TRICHLOROPHENOL	UG/L			< 1	
M+P-XYLENE	UG/L	< 1	< 1	< 1	< 1
CARBON DISULFIDE	UG/L CS2	< 1	< 1	< 1	< 1
2-HEXANONE	UG/L C6H12O	< 5	< 5	< 5	< 5
ACID-BASE NEUTRAL EXTRACTABLE					
ACETOPHENONE	UG/L			< 1	
2-ACETYLAMINOFLUORENE	UG/L			< 1	
4-AMINOBIPHENYL	UG/L			< 1	
BENZYL ALCOHOL	UG/L			< 1	
P-CHLOROANILINE	UG/L			< 1	
CHLOROBENZILATE	UG/L			< 1	
DIALLATE	UG/L			< 1	
DIBENZOFURAN	UG/L			< 1	
2,6-DICHLOROPHENOL	UG/L			< 1	
P(DIMETHYLAMINO)AZOBENZEN	UG/L			< 1	
7,12-DIMETHYLBENZ(A)ANTHR	UG/L			< 10	
3,3'-DIMETHYLBENZIDINE	UG/L			< 1	
M-DINITROBENZENE	UG/L			< 1	
DIPHENYLAMINE	UG/L			< 1	
ETHYL METHANESULFONATE	UG/L			< 1	
FAMPHUR	UG/L			< 1	
HEXACHLOROPROPENE	UG/L			< 5	
ISODRIN	UG/L			< 1	
ISOSAFROLE	UG/L			< 1	
KEPONE	UG/L			< 10	
METHAPYRILENE	UG/L			< 20	
3-METHYLCHOLANTHRENE	UG/L			< 1	
METHYL METHANESULFONATE	UG/L			< 1	
2-METHYLNAPHTHALENE	UG/L			< 1	
1,4-NAPHTHOQUINONE	UG/L			< 1	
1-NAPHTHYLAMINE	UG/L			< 1	
2-NAPHTHYLAMINE	UG/L			< 1	
O-NITROANILINE	UG/L			< 1	

FOOTNOTES : A-AVERAGE B-INSUFFICIENT SAMPLE C-AMENDED TEST RESULT D-AVERAGE OF DUPS E-CALCULATED VALUE
F-DUP & SPIKE G-DUPLICATE SPIKE

TABLE A.4

WATER QUALITY DATA - BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M51A SJ23424 03/10/00	WELL M51A SJ27465 06/07/00	WELL M51A SJ30879 09/01/00	WELL M51A SJ34354 12/04/00
ACID-BASE NEUTRAL EXTRACTABLE					
DI-N-BUTYL PHTHALATE	UG/L			< 1	
2,4-DINITROTOLUENE	UG/L			< 1	
2,6-DINITROTOLUENE	UG/L			< 1	
DI-N-OCTYL PHTHALATE	UG/L			< 1	
FLUORANTHENE	UG/L			< 1	
FLUORENE	UG/L			< 1	
HEXACHLOROBENZENE	UG/L			< 1	
HEXACHLOROBUTADIENE	UG/L			< 1	
HEXACHLOROCYCLOPENTADIENE	UG/L			< 5	
HEXACHLOROETHANE	UG/L			< 1	
INDENO(1,2,3-C,D)PYRENE	UG/L			< 1	
ISOPHORONE	UG/L			< 1	
NAPHTHALENE	UG/L			< 1	
NITROBENZENE	UG/L			< 1	
N-NITROSODIMETHYLAMINE	UG/L			< 1	
N-NITROSODI-N-PROPYLAMINE	UG/L			< 1	
PHENANTHRENE	UG/L			< 1	
PYRENE	UG/L			< 1	
2-CHLOROPHENOL	UG/L			< 1	
1,2,4-TRICHLOROBENZENE	UG/L			< 1	
2,4-DICHLOROPHENOL	UG/L			< 1	
2,4-DIMETHYLPHENOL	UG/L			< 1	
2,4-DINITROPHENOL	UG/L			< 6	
2-METHYL-4,6DINITROPHENOL	UG/L			< 1	
2-NITROPHENOL	UG/L			< 1	
4-NITROPHENOL	UG/L			< 1	
4-CHLORO-3-METHYLPHENOL	UG/L			< 1	
PENTACHLOROPHENOL	UG/L			< 1	
PHENOL	UG/L			< 1	
2,4,6-TRICHLOROPHENOL	UG/L			< 1	
N-NITROSODIPHENYLAMINE	UG/L			< 1	
O-CRESOL	UG/L			< 1	
M+P CRESOL	UG/L			< 1	

FOOTNOTES : A-AVERAGE B-INSUFFICIENT SAMPLE C-AMENDED TEST RESULT D-AVERAGE OF DUPS E-CALCULATED VALUE
F-DUP & SPIKE G-DUPLICATE SPIKE

TABLE A.4

WATER QUALITY DATA - BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WEFI M51A SJ27464 06/07/00	WEFI M51A SJ30878 09/01/00	WEFI M51A SJ34353 12/04/00
CATIONS				
IRON	MG/L FE	4.18 A	4.37	4.79 A
MANGANESE	MG/L MN	0.71 A	1.47	1.48 A
METALS				
ARSENIC	MG/L AS	.0256	.0074	.0079
BARIUM	MG/L BA	0.04 A	0.03	0.03 A
CADMIUM	MG/L CD	<0.002 A	0.002	<0.002 A
TOTAL CHROMIUM	MG/L CR	< 0.01 A	< 0.01	< 0.01 A
COBALT	MG/L CO	< 0.01 A	< 0.01	< 0.01 A
COPPER	MG/L CU	< 0.01 A	< 0.01	< 0.01 A
LEAD	MG/L PB	< 0.01 A	< 0.01 B	< 0.01 A
MERCURY	MG/L HG	<.0001	<.0001	<.0001
NICKEL	MG/L NI	< 0.02 A	< 0.02	< 0.02 A
SELENIUM	MG/L SE	<.0010	<.0010	<.0010
SILVER	MG/L AG	< 0.01 A	< 0.01	< 0.01 A
ZINC	MG/L ZN	< 0.01 A	0.01	< 0.01 A
ANTIMONY	MG/L SB	<.0005	<.0005	<.0005
BERYLLIUM	MG/L BE	<.0025 A	<.0025	<.0025 A
THALLIUM	MG/L TL	<0.001 A	<0.001	<0.001 A
TIN	MG/L SN	< 0.06 A	< 0.06	< 0.06 A
VANADIUM	MG/L V	< 0.05 A	< 0.05	< 0.05 A

FOOTNOTES : A-DUPLICATE SPIKE B-AMENDED TEST RESULT

TABLE A.4

WATER QUALITY DATA - BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M52B SJ23283 03/08/00	WELL M52B SJ23284 03/08/00	WELL M52B SJ27379 06/06/00	WELL M52B SJ30887 09/01/00	WELL M52B SJ30888 09/01/00	WELL M52B SJ34399 12/05/00	WELL M52B SJ34400 12/05/00
FIELD PARAMETERS								
DEPTH TO WATER	FEET	24.08		14.86	12.0		11.42	
DEPTH TO BOTTOM	FEET	119.8		119.9	119.9		120.0	
PERCENT METHANE IN GAS	%CH4	< 0.1		< 0.1	< 0.1		< 0.1	
PERCENT OXYGEN IN GAS	%O2	17		19	18		17	
FIELD WATER TEMPERATURE	DEG.C.	18.98		21.19	20.33		20.18	
FIELD PH	PH	7.83		7.76	7.77		6.94	
FIELD CONDUCTIVITY	UMHOS/CM	2255		2267	2226		2391	
FIELD DISSOLVED O2	MG/L	0.11		0.23	0.06		0.09	
FIELD DISSOLVED CO2	MG/L	24		27	26		180	
GENERAL								
PH	PH	8.06 A	8.04	7.89	8.12	8.15	7.91 A	7.92
CONDUCTIVITY	UMHOS/CM	2220	2220	2260	2320	2300	2280	2290
TOTAL DISSOLVED SOLIDS	MG/L	1354	1343	1374	1500	1404	1388	1440
TOTAL HARDNESS	MG/L CACO3	44.0 C	37.8 C	36.6 C	211 C	211 C	51.8 C	42.0 C
TOTAL CYANIDE	MG/L CN	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
BORON	MG/L B	3.85	3.79	3.48	3.72	3.69	3.62	3.74
ANIONS								
NITRATE NITROGEN	MG/L N	< 0.05 B	< 0.05	< 0.05	0.08	0.09	< 0.05	0.23 B
SULFATE	MG/L SO4	83.3 B	82.0 E	84.4 E	99.1 E	85.1 E	91.6 E	90.4 B
CHLORIDE	MG/L CL	191 B	189	186	189	185	193	184 B
TOTAL ALKALINITY	MG/L CACO3	949	906	878	887	884	895	900
BICARBONATE ALKALINITY	MG/L CACO3	949	906	878	873	828	895	900
TOTAL SULFIDE	MG/L S	< 0.1 A	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
FLUORIDE	MG/L F	2.47	2.45	2.42	2.43	2.42	2.52	2.55
CATIONS								
CALCIUM-HARDNESS	MG/L CACO3	25.5	23.0 B	21.0	< 30 B	< 30	29.2	24.7 B
MAGNESIUM-HARDNESS	MG/L CACO3	18.5	14.8 B	15.6	< 33 B	< 33	22.6	17.3 B
SODIUM	MG/L NA	519	525 B	525	549 B	533	562	577 B
POTASSIUM	MG/L K	5.2	5.4 B	5.2	5.6 B	5.4	4.8	5.1 B
IRON	MG/L FE	0.25	0.20	0.45	0.26	0.28 B	0.78 B	0.77
MANGANESE	MG/L MN	0.04	0.04	0.05	0.05	0.05 B	0.07 B	0.07
ORGANIC MATTER								
AMMONIA NITROGEN	MG/L N	1.0	0.9	1.1	1.0	0.9	0.3	0.2

FOOTNOTES : A-AVERAGE OF DUPS B-DUPLICATE SPIKE C-CALCULATED VALUE D-DUP & SPIKE E-AVERAGE

TABLE A.4

WATER QUALITY DATA - BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M52B SJ23283 03/08/00	WELL M52B SJ23284 03/08/00	WELL M52B SJ27379 06/06/00	WELL M52B SJ30887 09/01/00	WELL M52B SJ30888 09/01/00	WELL M52B SJ34399 12/05/00	WELL M52B SJ34400 12/05/00
ORGANIC MATTER								
TOTAL BOD	MG/L O	11 D	9	20	< 2	3	4	4
SOLUBLE BOD	MG/L O	6	5	11	< 2	2	17	12
TOTAL COD	MG/L O	29	22	23 D	19 D	19	35	21
SOLUBLE COD	MG/L O	24	20	23	18	19	19	19
TOTAL ORGANIC CARBON	MG/L C	7.30 B	7.23	8.16	6.88	7.72	7.08	7.08
OIL & GREASE	MG/L EXTRAC	< 5	< 5	< 5	< 5	< 5	< 5	< 5
TOTAL ORGANIC HALOGEN(TOX	UG/L	12 E	13 E	13 E	17 E	16 E	18 E	20 E
METALS								
ARSENIC	MG/L AS	.0126	.0125	.0167	.0113	.0111	.0120	.0126
BARIUM	MG/L BA	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01 B	< 0.01 B	< 0.01
CADMIUM	MG/L CD	<0.002	<0.002	<0.002	<0.002	<0.002 B	<0.002 B	<0.002
TOTAL CHROMIUM	MG/L CR	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01 B	< 0.01 B	< 0.01
COBALT	MG/L CO	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01 B	< 0.01 B	< 0.01
COPPER	MG/L CU	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01 B	< 0.01 B	< 0.01
LEAD	MG/L PB	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01 B	< 0.01 B	< 0.01
MERCURY	MG/L HG	<.0001 B	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
NICKEL	MG/L NI	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02 B	< 0.02 B	< 0.02
SELENIUM	MG/L SE	<.0010	<.0010	<.0010	<.0010	<.0010	<.0010	<.0010
SILVER	MG/L AG	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01 B	< 0.01 B	< 0.01
ZINC	MG/L ZN	0.02	0.02	0.02	0.03	0.05 B	0.01 B	0.02
ANTIMONY	MG/L SB	<.0005	<.0005	.0005	<.0005	<.0005	<.0005	<.0005
BERYLLIUM	MG/L BE	<.0025	<.0025	<.0025	<.0025	<.0025 B	<.0025 B	<.0025
THALLIUM	MG/L TL	0.001	<0.001	<0.001	<0.001	<0.001 B	<0.001 B	<0.001
TIN	MG/L SN	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06 B	< 0.06 B	< 0.06
VANADIUM	MG/L V	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05 B	< 0.05 B	< 0.05
VOLATILE ORGANIC COMPOUNDS								
BROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMO-3-CHLOROPROPA	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
T-1,4-DICHLORO-2-BUTENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
METHYL IODIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
METHYLENE BROMIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-TETRACHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-TRICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
METHYLENE CHLORIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROFORM	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CARBON TETRACHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3

FOOTNOTES : A-AVERAGE OF DUPS B-DUPLICATE SPIKE C-CALCULATED VALUE D-DUP & SPIKE E-AVERAGE

TABLE A.4

WATER QUALITY DATA - BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL M52B SJ23283 03/08/00	WELL M52B SJ23284 03/08/00	WELL M52B SJ27379 06/06/00	WELL M52B SJ30887 09/01/00	WELL M52B SJ30888 09/01/00	WELL M52B SJ34399 12/05/00	WELL M52B SJ34400 12/05/00
VOLATILE ORGANIC COMPOUNDS								
1,1-DICHLOROETHENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TRICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TETRACHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
BROMODICHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
BROMOFORM	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
VINYL CHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
O-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
P-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-DICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROETHANE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
BENZENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
ETHYL BENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
VINYL ACETATE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10
O-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHYLEN	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
BROMOMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
ACRYLONITRILE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10
FREON 11 (CCL3F)	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMOETHANE	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ACETONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10
CIS-1,2-DICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-BUTANONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-METHYL-2-PENTANONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10
STYRENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
M+P-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CARBON DISULFIDE	UG/L CS2	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-HEXANONE	UG/L C6H12O	< 5	< 5	< 5	< 5	< 5	< 5	< 5

FOOTNOTES : A-AVERAGE OF DUPS B-DUPLICATE SPIKE C-CALCULATED VALUE D-DUP & SPIKE E-AVERAGE

TABLE A.4

WATER QUALITY DATA - BARRIER FOUR AND BARRIER FIVE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WEFI M52B SJ23281 03/08/00	WEFI M52B SJ23282 03/08/00	WEFI M52B SJ27378 06/06/00	WEFI M52B SJ30885 09/01/00	WEFI M52B SJ30886 09/01/00	WEFI M52B SJ34397 12/05/00	WEFI M52B SJ34398 12/05/00
CATIONS								
IRON	MG/L FE	0.19	0.18	0.37 A	0.20	0.22	0.62	0.64
MANGANESE	MG/L MN	0.04	0.04	0.05 A	0.05	0.05	0.06	0.06
METALS								
ARSENIC	MG/L AS	.0117	.0118	.0149	.0113	.0116	.0126	.0115
BARIUM	MG/L BA	< 0.01	< 0.01	< 0.01 A	< 0.01	< 0.01	< 0.01	< 0.01
CADMIUM	MG/L CD	<0.002	<0.002	<0.002 A	<0.002	<0.002	<0.002	<0.002
TOTAL CHROMIUM	MG/L CR	< 0.01	< 0.01	< 0.01 A	< 0.01	< 0.01	< 0.01	< 0.01
COBALT	MG/L CO	< 0.01	< 0.01	< 0.01 A	< 0.01	< 0.01	< 0.01	< 0.01
COPPER	MG/L CU	< 0.01	< 0.01	< 0.01 A	< 0.01	< 0.01	< 0.01	< 0.01
LEAD	MG/L PB	< 0.01	< 0.01	< 0.01 A	< 0.01	< 0.01	< 0.01	< 0.01
MERCURY	MG/L HG	<.0001	<.0001	<.0001	<.0001 A	<.0001	<.0001	<.0001
NICKEL	MG/L NI	< 0.02	< 0.02	< 0.02 A	< 0.02	< 0.02	< 0.02	< 0.02
SELENIUM	MG/L SE	<.0010	<.0010	<.0010	<.0010	<.0010	<.0010	<.0010
SILVER	MG/L AG	< 0.01	< 0.01	< 0.01 A	< 0.01	< 0.01	< 0.01	< 0.01
ZINC	MG/L ZN	0.01	0.01	0.01 A	0.01	0.01	< 0.01	< 0.01
ANTIMONY	MG/L SB	<.0005	<.0005	<.0005	<.0005	<.0005	<.0005	<.0005
BERYLLIUM	MG/L BE	<.0025	<.0025	<.0025 A	<.0025	<.0025	<.0025	<.0025
THALLIUM	MG/L TL	0.001	0.001	<0.001 A	<0.001	<0.001	<0.001	<0.001
TIN	MG/L SN	< 0.06	< 0.06	< 0.06 A	< 0.06	< 0.06	< 0.06	< 0.06
VANADIUM	MG/L V	< 0.05	< 0.05	< 0.05 A	< 0.05	< 0.05	< 0.05	< 0.05

FOOTNOTES : A-DUPLICATE SPIKE

TABLE A.5

WATER QUALITY DATA

OFFSITE MONITORING WELLS

TABLE A.5

WATER QUALITY DATA - OFFSITE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL EMP1 SJ23289 03/08/00	WELL EMP1 SJ27287 06/02/00	WELL EMP1 SJ27288 06/02/00	WELL EMP1 SJ31066 09/07/00	WELL EMP1 SJ31067 09/07/00	WELL EMP1 SJ35157 12/22/00
FIELD PARAMETERS							
DEPTH TO WATER	FEET	21.98	16.02		16.14		16.27
DEPTH TO BOTTOM	FEET	34.11	33.88		34.0		33.85
PERCENT METHANE IN GAS	%CH4	< 0.1	< 0.1		< 0.1		< 0.1
PERCENT OXYGEN IN GAS	%O2	17	20		18		18
FIELD WATER TEMPERATURE	DEG.C.	16.34	22.62		23.35		17.85
FIELD PH	PH	6.63	6.73		6.68		6.28
FIELD CONDUCTIVITY	UMHOS/CM	2007	2253		2311		2411
FIELD DISSOLVED O2	MG/L	0.46	0.62		0.22		0.45
GENERAL							
PH	PH	6.95	6.94	6.92	7.11	7.12	7.40
TOTAL DISSOLVED SOLIDS	MG/L	1199	1528	1538	1688	1688	1828
ANIONS							
NITRATE NITROGEN	MG/L N	< 0.05	0.19	0.15 A	0.74	0.68	0.49
SULFATE	MG/L SO4	260	336	334 A	435 B	428 B	497
CHLORIDE	MG/L CL	144	188	188 A	219 B	217 B	246
VOLATILE ORGANIC COMPOUNDS							
BROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMO-3-CHLOROPROPA	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
T-1,4-DICHLORO-2-BUTENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
METHYL IODIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
METHYLENE BROMIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-TETRACHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-TRICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
METHYLENE CHLORIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROFORM	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CARBON TETRACHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-DICHLOROETHENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
TRICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
TETRACHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
BROMODICHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
BROMOFORM	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
VINYL CHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3

FOOTNOTES : A-DUPLICATE SPIKE B-AVERAGE

TABLE A.5

WATER QUALITY DATA - OFFSITE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL EMP1 SJ23289 03/08/00	WELL EMP1 SJ27287 06/02/00	WELL EMP1 SJ27288 06/02/00	WELL EMP1 SJ31066 09/07/00	WELL EMP1 SJ31067 09/07/00	WELL EMP1 SJ35157 12/22/00
VOLATILE ORGANIC COMPOUNDS							
O-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
P-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,1-DICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROETHANE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
BENZENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
ETHYL BENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
VINYL ACETATE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10
O-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHYLEN	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
BROMOMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
ACRYLONITRILE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10
FREON 11 (CCL3F)	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMOETHANE	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ACETONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10
CIS-1,2-DICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
2-BUTANONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10
4-METHYL-2-PENTANONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10
STYRENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
M+P-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CARBON DISULFIDE	UG/L CS2	< 1	< 1	< 1	< 1	< 1	< 1
2-HEXANONE	UG/L C6H12O	< 5	< 5	< 5	< 5	< 5	< 5

FOOTNOTES : A-DUPLICATE SPIKE B-AVERAGE

TABLE A.5

WATER QUALITY DATA - OFFSITE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL EMP2 SJ23597 03/14/00	WELL EMP2 SJ27466 06/07/00	WELL EMP2 SJ31298 09/13/00	WELL EMP2 SJ34350 12/04/00	WELL EMP2 SJ34351 12/04/00
FIELD PARAMETERS						
DEPTH TO WATER	FEET	32.1	32.14	32.83	33.03	
DEPTH TO BOTTOM	FEET	229.7	229.7	229.8	229.5	
PERCENT METHANE IN GAS	%CH4	< 0.1	< 0.1	< 0.1	< 0.1	
PERCENT OXYGEN IN GAS	%O2	15	20	20	20	
FIELD WATER TEMPERATURE	DEG.C.	22.49	29.68	25.41	21.42	
FIELD PH	PH	7.03	7.08	7.36	6.69	
FIELD CONDUCTIVITY	UMHOS/CM	1172	1167	1205	1189	
FIELD DISSOLVED O2	MG/L	0.26	0.37	0.28	0.36	
GENERAL						
PH	PH	7.30	7.50	7.37	7.55 A	7.52
TOTAL DISSOLVED SOLIDS	MG/L	699	705	716	696	688
ANIONS						
NITRATE NITROGEN	MG/L N	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
SULFATE	MG/L SO4	197	265	214	208	201
CHLORIDE	MG/L CL	104	104	107	105 B	104
VOLATILE ORGANIC COMPOUNDS						
BROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMO-3-CHLOROPROPA	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
T-1,4-DICHLORO-2-BUTENE	UG/L	< 1	< 1	< 1	< 1	< 1
METHYL IODIDE	UG/L	< 1	< 1	< 1	< 1	< 1
METHYLENE BROMIDE	UG/L	< 1	< 1	< 1	< 1	< 1
1,1,1,2-TETRACHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,2,3-TRICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1
METHYLENE CHLORIDE	UG/L	< 1	< 1	< 1	< 1	< 1
CHLOROFORM	UG/L	< 1	< 1	< 1	< 1	< 1
1,1,1-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
CARBON TETRACHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-DICHLOROETHENE	UG/L	< 1	< 1	< 1	< 1	< 1
TRICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
TETRACHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
BROMODICHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
BROMOFORM	UG/L	< 1	< 1	< 1	< 1	< 1
CHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1
VINYL CHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3

FOOTNOTES : A-AVERAGE OF DUPS B-AVERAGE

TABLE A.5

WATER QUALITY DATA - OFFSITE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL EMP2 SJ23597 03/14/00	WELL EMP2 SJ27466 06/07/00	WELL EMP2 SJ31298 09/13/00	WELL EMP2 SJ34350 12/04/00	WELL EMP2 SJ34351 12/04/00
VOLATILE ORGANIC COMPOUNDS						
O-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1
P-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1
1,1-DICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,1,2-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROETHANE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
BENZENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	UG/L	< 1	< 1	< 1	< 1	< 1
ETHYL BENZENE	UG/L	< 1	< 1	< 1	< 1	< 1
VINYL ACETATE	UG/L	< 10	< 10	< 10	< 10	< 10
O-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHYLEN	UG/L	< 1	< 1	< 1	< 1	< 1
BROMOMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
CHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
CHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
ACRYLONITRILE	UG/L	< 10	< 10	< 10	< 10	< 10
FREON 11 (CCL3F)	UG/L	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMOETHANE	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ACETONE	UG/L	< 10	< 10	< 10	< 10	< 10
CIS-1,2-DICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
2-BUTANONE	UG/L	< 10	< 10	< 10	< 10	< 10
4-METHYL-2-PENTANONE	UG/L	< 10	< 10	< 10	< 10	< 10
STYRENE	UG/L	< 1	< 1	< 1	< 1	< 1
M+P-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
CARBON DISULFIDE	UG/L CS2	< 1	< 1	< 1	< 1	< 1
2-HEXANONE	UG/L C6H12O	< 5	< 5	< 5	< 5	< 5

FOOTNOTES : A-AVERAGE OF DUPS B-AVERAGE

TABLE A.5

WATER QUALITY DATA - OFFSITE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL EMP3 SJ23598 03/14/00	WELL EMP3 SJ27468 06/07/00	WELL EMP3 SJ27469 06/07/00	WELL EMP3 SJ31388 09/15/00	WELL EMP3 SJ31389 09/15/00	WELL EMP3 SJ34355 12/04/00
FIELD PARAMETERS							
DEPTH TO WATER	FEET	15.46	15.17		15.61		15.81
DEPTH TO BOTTOM	FEET	198.5	189.8		198.5		198.5
PERCENT METHANE IN GAS	%CH4	< 0.1	< 0.1		< 0.1		< 0.1
PERCENT OXYGEN IN GAS	%O2	14	17		21		18
FIELD WATER TEMPERATURE	DEG.C.	21.96	22.95		22.52		21.61
FIELD PH	PH	7.74	7.79		7.67		7.66
FIELD CONDUCTIVITY	UMHOS/CM	2895	2850		2830		2847
FIELD DISSOLVED O2	MG/L	0.12	0.1		0.04		0.08
GENERAL							
PH	PH	7.90	7.70	7.81	7.81	7.84	7.96
TOTAL DISSOLVED SOLIDS	MG/L	1990	1984	1982	1980	2030 C	2006 C
ANIONS							
NITRATE NITROGEN	MG/L N	< 0.05	< 0.05 A	< 0.05	0.09	< 0.05	< 0.05
SULFATE	MG/L SO4	1060	1030 A	1040	1020	1030	1070
CHLORIDE	MG/L CL	190	190 A	194	188 B	190 B	195 B
VOLATILE ORGANIC COMPOUNDS							
BROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMO-3-CHLOROPROPA	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
T-1,4-DICHLORO-2-BUTENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
METHYL IODIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
METHYLENE BROMIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-TETRACHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-TRICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
METHYLENE CHLORIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROFORM	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CARBON TETRACHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-DICHLOROETHENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
TRICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
TETRACHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
BROMODICHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
BROMOFORM	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
VINYL CHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3

FOOTNOTES : A-DUPLICATE SPIKE B-AVERAGE C-DUP & SPIKE

TABLE A.5

WATER QUALITY DATA - OFFSITE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL EMP3 SJ23598 03/14/00	WELL EMP3 SJ27468 06/07/00	WELL EMP3 SJ27469 06/07/00	WELL EMP3 SJ31388 09/15/00	WELL EMP3 SJ31389 09/15/00	WELL EMP3 SJ34355 12/04/00
VOLATILE ORGANIC COMPOUNDS							
O-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
P-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,1-DICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROETHANE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
BENZENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
ETHYL BENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
VINYL ACETATE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10
O-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHYLEN	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
BROMOMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
ACRYLONITRILE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10
FREON 11 (CCL3F)	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMOETHANE	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ACETONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10
CIS-1,2-DICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
2-BUTANONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10
4-METHYL-2-PENTANONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10
STYRENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
M+P-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1
CARBON DISULFIDE	UG/L CS2	< 1	< 1	< 1	< 1	< 1	< 1
2-HEXANONE	UG/L C6H12O	< 5	< 5	< 5	< 5	< 5	< 5

FOOTNOTES : A-DUPLICATE SPIKE B-AVERAGE C-DUP & SPIKE

TABLE A.5

WATER QUALITY DATA - OFFSITE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL EMP5 SJ23502 03/13/00	WELL EMP5 SJ23503 03/13/00	WELL EMP5 SJ27339 06/05/00	WELL EMP5 SJ30973 09/05/00	WELL EMP5 SJ34467 12/06/00
FIELD PARAMETERS						
DEPTH TO WATER	FEET	15.65		15.41	15.88	16.24
DEPTH TO BOTTOM	FEET	28.31		28.2	28.24	28.11
PERCENT METHANE IN GAS	%CH4	< 0.1		< 0.1	< 0.1	< 0.1
PERCENT OXYGEN IN GAS	%O2	17		10	13	15
FIELD WATER TEMPERATURE	DEG.C.	20.19		22.68	23.58	21.22
FIELD PH	PH	6.76		6.72	6.94	6.23
FIELD CONDUCTIVITY	UMHOS/CM	2295		2549	2629	2622
FIELD DISSOLVED O2	MG/L	0.27		0.14	0.71	0.33
FIELD DISSOLVED CO2	MG/L	191		233	141	707
GENERAL						
PH	PH	7.03 A	7.00	6.96	7.05	6.97 A
CONDUCTIVITY	UMHOS/CM				2580	
TOTAL DISSOLVED SOLIDS	MG/L	1639	1672	966	1888	1940
TOTAL HARDNESS	MG/L CACO3				1136 D	
TOTAL CYANIDE	MG/L CN				<0.005	
BORON	MG/L B				0.79	
ANIONS						
NITRATE NITROGEN	MG/L N	< 0.05	< 0.05	< 0.05	0.16	0.11 C
SULFATE	MG/L SO4	507	510	575	582	586 C
CHLORIDE	MG/L CL	149	149	164	171	168 C
TOTAL ALKALINITY	MG/L CACO3	627	633	696	701	684
BICARBONATE ALKALINITY	MG/L CACO3	627	607	696	701	614
TOTAL SULFIDE	MG/L S				< 0.1	
FLUORIDE	MG/L F				0.71	
CATIONS						
CALCIUM-HARDNESS	MG/L CACO3	579	592	682 C	667	724
MAGNESIUM-HARDNESS	MG/L CACO3	406	412	473 C	469	490
SODIUM	MG/L NA	154	156	169 C	179	196
POTASSIUM	MG/L K	5.0	5.2	4.7 C	4.8	4.8
IRON	MG/L FE				0.43	
MANGANESE	MG/L MN				0.56	
ORGANIC MATTER						
AMMONIA NITROGEN	MG/L N	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

FOOTNOTES : A-AVERAGE OF DUPS B-DUP & SPIKE C-DUPLICATE SPIKE D-CALCULATED VALUE E-AVERAGE

TABLE A.5

WATER QUALITY DATA - OFFSITE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL EMP5 SJ23502 03/13/00	WELL EMP5 SJ23503 03/13/00	WELL EMP5 SJ27339 06/05/00	WELL EMP5 SJ30973 09/05/00	WELL EMP5 SJ34467 12/06/00
ORGANIC MATTER						
TOTAL BOD	MG/L O				< 2	
SOLUBLE BOD	MG/L O	< 2 B	< 2	< 2	< 2	< 2 B
TOTAL COD	MG/L O				11	
SOLUBLE COD	MG/L O	13 B	11	12	12	15 B
TOTAL ORGANIC CARBON	MG/L C	5.62 C	5.52	6.52	4.82	4.87 C
OIL & GREASE	MG/L EXTRAC				< 5	
TOTAL ORGANIC HALOGEN(TOX	UG/L				28 E	
METALS						
ARSENIC	MG/L AS				.0039	
BARIUM	MG/L BA				0.05	
CADMIUM	MG/L CD				<0.002	
TOTAL CHROMIUM	MG/L CR				< 0.01	
COBALT	MG/L CO				< 0.01	
COPPER	MG/L CU				< 0.01	
LEAD	MG/L PB				< 0.01	
MERCURY	MG/L HG				<.0001	
NICKEL	MG/L NI				< 0.02	
SELENIUM	MG/L SE				<.0010	
SILVER	MG/L AG				< 0.01	
ZINC	MG/L ZN				0.03	
ANTIMONY	MG/L SB				<.0005	
BERYLLIUM	MG/L BE				<.0025	
THALLIUM	MG/L TL				<0.001	
TIN	MG/L SN				< 0.06	
VANADIUM	MG/L V				< 0.05	
PESTICIDES, HERBICIDES, & ORGANOPHOSPHORUS						
2,4,5-T	UG/L				< 0.05	
DINOSEB	UG/L				< 0.1	
THIONAZIN	UG/L				< 1	
DIMETHOATE	UG/L				< 1	
DISULFOTON	UG/L				< 1	
METHYL PARATHION	UG/L				< 1	
ETHYL PARATHION	UG/L				< 1	
PHORATE	UG/L				< 1	
PP'-DDE	UG/L				< 0.01	
PP'-DDD	UG/L				< 0.01	
PP'-DDT	UG/L				< 0.01	

FOOTNOTES : A-AVERAGE OF DUPS B-DUP & SPIKE C-DUPLICATE SPIKE D-CALCULATED VALUE E-AVERAGE

TABLE A.5

WATER QUALITY DATA - OFFSITE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL EMP5 SJ23502 03/13/00	WELL EMP5 SJ23503 03/13/00	WELL EMP5 SJ27339 06/05/00	WELL EMP5 SJ30973 09/05/00	WELL EMP5 SJ34467 12/06/00
PESTICIDES, HERBICIDES, & ORGANOPHOSPHORUS						
ALPHA-BHC	UG/L				< 0.01	
LINDANE (GAMMA-BHC)	UG/L				< 0.01	
HEPTACHLOR	UG/L				< 0.01	
HEPTACHLOR EPOXIDE	UG/L				< 0.01	
ALDRIN	UG/L				< 0.01	
DIELDRIN	UG/L				< 0.01	
ENDRIN	UG/L				< 0.01	
TOXAPHENE	UG/L				< 0.5	
METHOXYCLOR	UG/L				< 0.01	
2,4-D(ACID)	UG/L				< 0.5	
2,4,5-TP(SILVEX)	UG/L				< 0.05	
AROCLOR 1242	UG/L				< 0.1	
AROCLOR 1254	UG/L				< 0.05	
BETA-BHC	UG/L				< 0.01	
DELTA-BHC	UG/L				< 0.01	
ENDOSULFAN I	UG/L				< 0.01	
ENDOSULFAN II	UG/L				< 0.01	
ENDOSULFAN SULFATE	UG/L				< 0.1	
ENDRIN ALDEHYDE	UG/L				< 0.01	
AROCLOR 1016	UG/L				< 0.1	
AROCLOR 1221	UG/L				< 0.1	
AROCLOR 1232	UG/L				< 0.1	
AROCLOR 1248	UG/L				< 0.1	
AROCLOR 1260	UG/L				< 0.1	
TECHNICAL CHLORDANE	UG/L				< 0.05	
VOLATILE ORGANIC COMPOUNDS						
ALLYL CHLORIDE	UG/L				< 1	
BROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
CHLOROPRENE	UG/L				< 1	
1,2-DIBROMO-3-CHLOROPROPA	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
T-1,4-DICHLORO-2-BUTENE	UG/L	< 1	< 1	< 1	< 1	< 1
1,3-DICHLOROPROPANE	UG/L				< 0.3	
2,2-DICHLOROPROPANE	UG/L				< 1	
1,1-DICHLOROPROPENE	UG/L				< 1	
ISOBUTYL ALCOHOL	UG/L				< 10	
METHACRYLONITRILE	UG/L				< 10	
METHYL IODIDE	UG/L	< 1	< 1	< 1	< 1	< 1
METHYLENE BROMIDE	UG/L	< 1	< 1	< 1	< 1	< 1
PROPIONITRILE	UG/L				< 10	

FOOTNOTES : A-AVERAGE OF DUPS B-DUP & SPIKE C-DUPLICATE SPIKE D-CALCULATED VALUE E-AVERAGE

TABLE A.5

WATER QUALITY DATA - OFFSITE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL EMP5 SJ23502 03/13/00	WELL EMP5 SJ23503 03/13/00	WELL EMP5 SJ27339 06/05/00	WELL EMP5 SJ30973 09/05/00	WELL EMP5 SJ34467 12/06/00
VOLATILE ORGANIC COMPOUNDS						
1,1,1,2-TETRACHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,2,3-TRICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1
METHYL METHACRYLATE	UG/L				< 10	
ETHYL METHACRYLATE	UG/L				< 5	
METHYLENE CHLORIDE	UG/L	< 1	< 1	< 1	< 1	< 1
CHLOROFORM	UG/L	< 1	< 1	< 1	< 1	< 1
1,1,1-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
CARBON TETRACHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-DICHLOROETHENE	UG/L	< 1	< 1	< 1	< 1	< 1
TRICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
TETRACHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
BROMODICHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
BROMOFORM	UG/L	< 1	< 1	< 1	< 1	< 1
CHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1
VINYL CHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
O-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1
M-DICHLOROBENZENE	UG/L				< 1	
P-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1
1,1-DICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,1,2-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROETHANE	UG/L	0.5	0.5	0.8	< 0.3	< 0.3
BENZENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	UG/L	< 1	< 1	< 1	< 1	< 1
ETHYL BENZENE	UG/L	< 1	< 1	< 1	< 1	< 1
VINYL ACETATE	UG/L	< 10	< 10	< 10	< 10	< 10
O-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHYLEN	UG/L	< 1	< 1	< 1	< 1	< 1
BROMOMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
CHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
2-CHLOROETHYLVINYLETHER	UG/L				< 1	
CHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
ACROLEIN	UG/L				< 10	
ACRYLONITRILE	UG/L	< 10	< 10	< 10	< 10	< 10
ACETONITRILE	UG/L				< 20	
FREON 12 (CCL2F2)	UG/L				< 1	
FREON 11 (CCL3F)	UG/L	< 1	< 1	< 1	< 1	< 1

FOOTNOTES : A-AVERAGE OF DUPS B-DUP & SPIKE C-DUPLICATE SPIKE D-CALCULATED VALUE E-AVERAGE

TABLE A.5

WATER QUALITY DATA - OFFSITE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL EMP5 SJ23502 03/13/00	WELL EMP5 SJ23503 03/13/00	WELL EMP5 SJ27339 06/05/00	WELL EMP5 SJ30973 09/05/00	WELL EMP5 SJ34467 12/06/00
VOLATILE ORGANIC COMPOUNDS						
1,2-DIBROMOETHANE	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ACETONE	UG/L	< 10	< 10	< 10	< 10	< 10
CIS-1,2-DICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
2-BUTANONE	UG/L	< 10	< 10	< 10	< 10	< 10
4-METHYL-2-PENTANONE	UG/L	< 10	< 10	< 10	< 10	< 10
STYRENE	UG/L	< 1	< 1	< 1	< 1	< 1
2,4,5-TRICHLOROPHENOL	UG/L				< 1	
M+P-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
CARBON DISULFIDE	UG/L CS2	< 1	< 1	< 1	< 1	< 1
2-HEXANONE	UG/L C6H12O	< 5	< 5	< 5	< 5	< 5
ACID-BASE NEUTRAL EXTRACTABLE						
ACETOPHENONE	UG/L				< 1	
2-ACETYLAMINOFLUORENE	UG/L				< 1	
4-AMINOBIPHENYL	UG/L				< 1	
BENZYL ALCOHOL	UG/L				< 1	
P-CHLOROANILINE	UG/L				< 1	
CHLOROBENZILATE	UG/L				< 1	
DIALLATE	UG/L				< 1	
DIBENZOFURAN	UG/L				< 1	
2,6-DICHLOROPHENOL	UG/L				< 1	
P(DIMETHYLAMINO)AZOBENZEN	UG/L				< 1	
7,12-DIMETHYLBENZ(A)ANTHR	UG/L				< 10	
3,3'-DIMETHYLBENZIDINE	UG/L				< 1	
M-DINITROBENZENE	UG/L				< 1	
DIPHENYLAMINE	UG/L				< 1	
ETHYL METHANESULFONATE	UG/L				< 1	
FAMPHUR	UG/L				< 1	
HEXACHLOROPROPENE	UG/L				< 5	
ISODRIN	UG/L				< 1	
ISOSAFROLE	UG/L				< 1	
KEPONE	UG/L				< 10	
METHAPYRILENE	UG/L				< 20	
3-METHYLCHOLANTHRENE	UG/L				< 1	
METHYL METHANESULFONATE	UG/L				< 1	
2-METHYLNAPHTHALENE	UG/L				< 1	
1,4-NAPHTHOQUINONE	UG/L				< 1	
1-NAPHTHYLAMINE	UG/L				< 1	
2-NAPHTHYLAMINE	UG/L				< 1	
O-NITROANILINE	UG/L				< 1	

FOOTNOTES : A-AVERAGE OF DUPS . B-DUP & SPIKE C-DUPLICATE SPIKE D-CALCULATED VALUE E-AVERAGE

TABLE A.5

WATER QUALITY DATA - OFFSITE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL EMP5 SJ23502 03/13/00	WELL EMP5 SJ23503 03/13/00	WELL EMP5 SJ27339 06/05/00	WELL EMP5 SJ30973 09/05/00	WELL EMP5 SJ34467 12/06/00
ACID-BASE NEUTRAL EXTRACTABLE						
M-NITROANILINE	UG/L				< 1	
P-NITROANILINE	UG/L				< 1	
N-NITROSODI-N-BUTYLAMINE	UG/L				< 1	
N-NITROSODIETHYLAMINE	UG/L				< 1	
N-NITROSOMETHYLETHYLAMINE	UG/L				< 1	
N-NITROSOPIPERIDINE	UG/L				< 1	
N-NITROSOPYRROLIDINE	UG/L				< 1	
5-NITRO-O-TOLUIDINE	UG/L				< 1	
PENTACHLOROBENZENE	UG/L				< 1	
PENTACHLORONITROBENZENE	UG/L				< 5	
PHENACETIN	UG/L				< 1	
P-PHENYLENEDIAMINE	UG/L				< 20	
PRONAMIDE	UG/L				< 1	
SAFROLE	UG/L				< 1	
1,2,4,5-TETRACHLOROBENZEN	UG/L				< 1	
2,3,4,6-TETRACHLOROPHENOL	UG/L				< 1	
O-TOLUIDINE	UG/L				< 1	
O,O,O-TRIETHYLPHOSPHOROTH	UG/L				< 1	
SYM-TRINITROBENZENE	UG/L				< 5	
ACENAPHTHENE	UG/L				< 1	
ACENAPHTHYLENE	UG/L				< 1	
ANTHRACENE	UG/L				< 1	
BENZIDINE	UG/L				< 20	
BENZO(A)ANTHRACENE	UG/L				< 1	
BENZO(A)PYRENE	UG/L				< 0.2	
BENZO(B)FLUORANTHENE	UG/L				< 1	
BENZO(G.H.I.)PERYLENE	UG/L				< 1	
BENZO(K)FLUORANTHENE	UG/L				< 1	
BIS(2-CL-ETHOXY)METHANE	UG/L				< 1	
BIS(2-CHLOROETHYL)ETHER	UG/L				< 1	
BIS(2-CL-ISOPROPYL)ETHER	UG/L				< 1	
DIETHYLHEXYL PHTHALATE	UG/L				< 1	
4-BROMOPHENYL PHENYLETHER	UG/L				< 1	
BUTYLBENZYL PHTHALATE	UG/L				< 1	
2-CHLORONAPHTHALENE	UG/L				< 1	
4-CHLOROPHENYLPHENYLETHER	UG/L				< 1	
CHRYSENE	UG/L				< 1	
DIBENZO(A,H)ANTHRACENE	UG/L				< 1	
3,3'-DICHLOROBENZIDINE	UG/L				< 1	
DIETHYL PHTHALATE	UG/L				< 1	
DIMETHYL PHTHALATE	UG/L				< 1	

FOOTNOTES : A-AVERAGE OF DUPS B-DUP & SPIKE C-DUPLICATE SPIKE D-CALCULATED VALUE E-AVERAGE

TABLE A.5

WATER QUALITY DATA - OFFSITE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL EMP5 SJ23502 03/13/00	WELL EMP5 SJ23503 03/13/00	WELL EMP5 SJ27339 06/05/00	WELL EMP5 SJ30973 09/05/00	WELL EMP5 SJ34467 12/06/00
ACID-BASE NEUTRAL EXTRACTABLE						
DI-N-BUTYL PHTHALATE	UG/L				< 1	
2,4-DINITROTOLUENE	UG/L				< 1	
2,6-DINITROTOLUENE	UG/L				< 1	
DI-N-OCTYL PHTHALATE	UG/L				< 1	
FLUORANTHENE	UG/L				< 1	
FLUORENE	UG/L				< 1	
HEXACHLOROBENZENE	UG/L				< 1	
HEXACHLOROBUTADIENE	UG/L				< 1	
HEXACHLOROCYCLOPENTADIENE	UG/L				< 5	
HEXACHLOROETHANE	UG/L				< 1	
INDENO(1,2,3-C,D)PYRENE	UG/L				< 1	
ISOPHORONE	UG/L				< 1	
NAPHTHALENE	UG/L				< 1	
NITROBENZENE	UG/L				< 1	
N-NITROSODIMETHYLAMINE	UG/L				< 1	
N-NITROSODI-N-PROPYLAMINE	UG/L				< 1	
PHENANTHRENE	UG/L				< 1	
PYRENE	UG/L				< 1	
2-CHLOROPHENOL	UG/L				< 1	
1,2,4-TRICHLOROBENZENE	UG/L				< 1	
2,4-DICHLOROPHENOL	UG/L				< 1	
2,4-DIMETHYLPHENOL	UG/L				< 1	
2,4-DINITROPHENOL	UG/L				< 6	
2-METHYL-4,6DINITROPHENOL	UG/L				< 1	
2-NITROPHENOL	UG/L				< 1	
4-NITROPHENOL	UG/L				< 1	
4-CHLORO-3-METHYLPHENOL	UG/L				< 1	
PENTACHLOROPHENOL	UG/L				< 1	
PHENOL	UG/L				< 1	
2,4,6-TRICHLOROPHENOL	UG/L				< 1	
N-NITROSODIPHENYLAMINE	UG/L				< 1	
O-CRESOL	UG/L				< 1	
M+P CRESOL	UG/L				< 1	

FOOTNOTES : A-AVERAGE OF DUPS B-DUP & SPIKE C-DUPLICATE SPIKE D-CALCULATED VALUE E-AVERAGE

TABLE A.5

WATER QUALITY DATA - OFFSITE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WEFI EMP5 SJ30970 09/05/00
CATIONS		
IRON	MG/L FE	0.20
MANGANESE	MG/L MN	0.58
METALS		
ARSENIC	MG/L AS	.0029
BARIUM	MG/L BA	0.05
CADMIUM	MG/L CD	<0.002
TOTAL CHROMIUM	MG/L CR	< 0.01
COBALT	MG/L CO	< 0.01
COPPER	MG/L CU	< 0.01
LEAD	MG/L PB	< 0.01
MERCURY	MG/L HG	<.0001
NICKEL	MG/L NI	< 0.02
SELENIUM	MG/L SE	<.0010
SILVER	MG/L AG	< 0.01
ZINC	MG/L ZN	0.03
ANTIMONY	MG/L SB	<.0005
BERYLLIUM	MG/L BE	<.0025
THALLIUM	MG/L TL	<0.001
TIN	MG/L SN	< 0.06
VANADIUM	MG/L V	< 0.05

TABLE A.5

WATER QUALITY DATA - OFFSITE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL EMP6 SJ23288 03/08/00	WELL EMP6 SJ27542 06/08/00	WELL EMP6 SJ31229 09/12/00	WELL EMP6 SJ31230 09/12/00	WELL EMP6 SJ34602 12/08/00
FIELD PARAMETERS						
DEPTH TO WATER	FEET	27.6	27.2	27.55		27.87
DEPTH TO BOTTOM	FEET	227.5	227.3	227.6		225.4
PERCENT METHANE IN GAS	%CH4	< 0.1	< 0.1	< 0.1		< 0.1
PERCENT OXYGEN IN GAS	%O2	18	19	16		16
FIELD WATER TEMPERATURE	DEG.C.	20.32	22.15	24.15		20.84
FIELD PH	PH	7.37	7.34	7.22		7.0
FIELD CONDUCTIVITY	UMHOS/CM	1369	1353	1383		1356
FIELD DISSOLVED O2	MG/L	0.17	0.1	0.12		0.12
FIELD DISSOLVED CO2	MG/L	20	17			38
GENERAL						
PH	PH	7.62	7.52	7.61 E	7.59	7.50 E
CONDUCTIVITY	UMHOS/CM	1363	1342			1344
TOTAL DISSOLVED SOLIDS	MG/L	882	906	910 C	904	896
TOTAL HARDNESS	MG/L CACO3	378 B	378 B			404 F
TOTAL CYANIDE	MG/L CN	<0.005	<0.005			<0.005
BORON	MG/L B	0.33	0.26			0.33
ANIONS						
NITRATE NITROGEN	MG/L N	< 0.05	< 0.05 A	0.08	< 0.05	< 0.05
SULFATE	MG/L SO4	347	351	345 A	340	354
CHLORIDE	MG/L CL	87.6 A	90.0 A	85.1 A	87.5 A	89.8 A
TOTAL ALKALINITY	MG/L CACO3	264	216			217
BICARBONATE ALKALINITY	MG/L CACO3	264	216			217
TOTAL SULFIDE	MG/L S	< 0.1	< 0.1 E			< 0.1
FLUORIDE	MG/L F	0.55	0.50			0.58
CATIONS						
CALCIUM-HARDNESS	MG/L CACO3	233	226			242
MAGNESIUM-HARDNESS	MG/L CACO3	145	152			162
SODIUM	MG/L NA	159	154			165
POTASSIUM	MG/L K	5.2	5.4			4.9
IRON	MG/L FE	1.19 D	0.99 D			0.82 D
MANGANESE	MG/L MN	0.32 D	0.33 D			0.31 D
ORGANIC MATTER						
AMMONIA NITROGEN	MG/L N	0.3	0.3			0.1

FOOTNOTES : A-AVERAGE B-CALCULATED VALUE C-DUP & SPIKE D-DUPLICATE SPIKE E-AVERAGE OF DUPS
F-CHECK NOTES TO USER

TABLE A.5

WATER QUALITY DATA - OFFSITE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL EMP6 SJ23288 03/08/00	WELL EMP6 SJ27542 06/08/00	WELL EMP6 SJ31229 09/12/00	WELL EMP6 SJ31230 09/12/00	WELL EMP6 SJ34602 12/08/00
ORGANIC MATTER						
TOTAL BOD	MG/L O	< 2	< 2			< 2
SOLUBLE BOD	MG/L O	< 2	< 2			< 2
TOTAL COD	MG/L O	< 10 C	< 10 C			< 10
SOLUBLE COD	MG/L O	< 10	< 10			< 10
TOTAL ORGANIC CARBON	MG/L C	1.61	1.77			1.36
OIL & GREASE	MG/L EXTRAC	< 5	< 5			< 5
TOTAL ORGANIC HALOGEN(TOX	UG/L	7.2 A	7.4 A			7.2 A
METALS						
ARSENIC	MG/L AS	.0024	.0022			.0014
BARIUM	MG/L BA	0.02 D	0.02 D			0.02 D
CADMIUM	MG/L CD	<0.002 D	<0.002 D			<0.002 D
TOTAL CHROMIUM	MG/L CR	< 0.01 D	< 0.01 D			< 0.01 D
COBALT	MG/L CO	< 0.01 D	< 0.01 D			< 0.01 D
COPPER	MG/L CU	< 0.01 D	< 0.01 D			< 0.01 D
LEAD	MG/L PB	< 0.01 D	< 0.01 D			< 0.01 D
MERCURY	MG/L HG	<.0001	<.0001			<.0001
NICKEL	MG/L NI	< 0.02 D	< 0.02 D			< 0.02 D
SELENIUM	MG/L SE	<.0010	<.0010			<.0010
SILVER	MG/L AG	< 0.01 D	< 0.01 D			< 0.01 D
ZINC	MG/L ZN	0.07 D	0.04 D			0.01 D
ANTIMONY	MG/L SB	<.0005	<.0005			<.0005
BERYLLIUM	MG/L BE	<.0025 D	<.0025 D			<.0025 D
THALLIUM	MG/L TL	<0.001 D	<0.001 D			<0.001 D
TIN	MG/L SN	< 0.06 D	< 0.06 D			< 0.06 D
VANADIUM	MG/L V	< 0.05 D	< 0.05 D			< 0.05 D
VOLATILE ORGANIC COMPOUNDS						
BROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMO-3-CHLOROPROPA	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
T-1,4-DICHLORO-2-BUTENE	UG/L	< 1	< 1	< 1	< 1	< 1
METHYL IODIDE	UG/L	< 1	< 1	< 1	< 1	< 1
METHYLENE BROMIDE	UG/L	< 1	< 1	< 1	< 1	< 1
1,1,1,2-TETRACHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,2,3-TRICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1
METHYLENE CHLORIDE	UG/L	< 1	< 1	< 1	< 1	< 1
CHLOROFORM	UG/L	< 1	< 1	< 1	< 1	< 1
1,1,1-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
CARBON TETRACHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3

FOOTNOTES : A-AVERAGE B-CALCULATED VALUE C-DUP & SPIKE D-DUPLICATE SPIKE E-AVERAGE OF DUPS
F-CHECK NOTES TO USER

TABLE A.5

WATER QUALITY DATA - OFFSITE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WELL EMP6 SJ23288 03/08/00	WELL EMP6 SJ27542 06/08/00	WELL EMP6 SJ31229 09/12/00	WELL EMP6 SJ31230 09/12/00	WELL EMP6 SJ34602 12/08/00
VOLATILE ORGANIC COMPOUNDS						
1,1-DICHLOROETHENE	UG/L	< 1	< 1	< 1	< 1	< 1
TRICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
TETRACHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
BROMODICHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
BROMOFORM	UG/L	< 1	< 1	< 1	< 1	< 1
CHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1
VINYL CHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
O-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1
P-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1
1,1-DICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,1,2-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROETHANE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
BENZENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	UG/L	< 1	< 1	< 1	< 1	< 1
ETHYL BENZENE	UG/L	< 1	< 1	< 1	< 1	< 1
VINYL ACETATE	UG/L	< 10	< 10	< 10	< 10	< 10
O-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHYLEN	UG/L	< 1	< 1	< 1	< 1	< 1
BROMOMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
CHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
CHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
ACRYLONITRILE	UG/L	< 10	< 10	< 10	< 10	< 10
FREON 11 (CCL3F)	UG/L	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMOETHANE	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ACETONE	UG/L	< 10	< 10	< 10	< 10	< 10
CIS-1,2-DICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
2-BUTANONE	UG/L	< 10	< 10	< 10	< 10	< 10
4-METHYL-2-PENTANONE	UG/L	< 10	< 10	< 10	< 10	< 10
STYRENE	UG/L	< 1	< 1	< 1	< 1	< 1
M+P-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1
CARBON DISULFIDE	UG/L CS2	< 1	< 1	< 1	< 1	< 1
2-HEXANONE	UG/L C6H12O	< 5	< 5	< 5	< 5	< 5

FOOTNOTES : A-AVERAGE B-CALCULATED VALUE C-DUP & SPIKE D-DUPLICATE SPIKE E-AVERAGE OF DUPS
F-CHECK NOTES TO USER

TABLE A.5

WATER QUALITY DATA - OFFSITE MONITORING WELLS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	WEFI EMP6 SJ23287 03/08/00	WEFI EMP6 SJ27541 06/08/00	WEFI EMP6 SJ34601 12/08/00
CATIONS				
IRON	MG/L FE	0.69	0.70	0.73
MANGANESE	MG/L MN	0.32	0.35	0.32
METALS				
ARSENIC	MG/L AS	.0023	.0025	.0015
BARIUM	MG/L BA	0.02	0.02	0.02
CADMIUM	MG/L CD	<0.002	<0.002	<0.002
TOTAL CHROMIUM	MG/L CR	< 0.01	< 0.01	< 0.01
COBALT	MG/L CO	< 0.01	< 0.01	< 0.01
COPPER	MG/L CU	< 0.01	< 0.01	< 0.01
LEAD	MG/L PB	< 0.01	< 0.01	< 0.01
MERCURY	MG/L HG	<.0001	<.0001	<.0001
NICKEL	MG/L NI	< 0.02	< 0.02	< 0.02
SELENIUM	MG/L SE	<.0010	<.0010	<.0010
SILVER	MG/L AG	< 0.01	< 0.01	< 0.01
ZINC	MG/L ZN	< 0.01	0.01	< 0.01
ANTIMONY	MG/L SB	<.0005	<.0005	<.0005
BERYLLIUM	MG/L BE	<.0025	<.0025	<.0025
THALLIUM	MG/L TL	<0.001	<0.001	<0.001
TIN	MG/L SN	< 0.06	< 0.06	< 0.06
VANADIUM	MG/L V	< 0.05	< 0.05	< 0.05

TABLE A.6

WATER QUALITY DATA

SURFACE RUNOFF SAMPLES

TABLE A.6

WATER QUALITY DATA - SURFACE RUNOFF SAMPLES

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	RUN SD1 SJ21506 02/10/00	RUN SD1 SJ25041 04/17/00	RUN SD9 SJ21507 02/10/00	RUN SD9 SJ25042 04/17/00	RUN SD11 SJ21508 02/10/00	RUN SD11 SJ25043 04/17/00	RUN EQIP SJ21509 02/10/00	RUN EQIP SJ25044 04/17/00	RUN TRIP SJ21510 02/10/00	RUN TRIP SJ25045 04/17/00
GENERAL											
PH	PH	7.36 B	7.45	7.89	7.85	7.80	7.81	6.71	5.50		
CONDUCTIVITY	UMHOS/CM	1083	577	1390 C	1810	1230	1090 C	1.37	2.63		
SUSPENDED SOLIDS	MG/L	336	120	4270	5440	43640	25760	< 10	< 10		
CATIONS											
IRON	MG/L FE	19.0 A	6.64	269	348	2480	2510 A	0.06	< 0.05		
SOLUBLE IRON	MG/L FE	0.11	0.21	< 0.05	< 0.05	< 0.05 A	< 0.05 A	< 0.05	< 0.05		
ORGANIC MATTER											
TOTAL ORGANIC CARBON	MG/L C	49.2	61.8	47.7	64.4	43.5	30.0	< 0.5 A	0.660		
METALS											
ARSENIC	MG/L AS	.0053	.0035	.0639	.0813	0.528	0.450	<.0010	<.0010		
BARIUM	MG/L BA	0.13 A	0.08	1.44	1.7	11.8	11.2 A	< 0.01	< 0.01		
CADMIUM	MG/L CD	<0.002 A	<0.002	0.013	0.009	0.024	0.03 A	<0.002	<0.002		
TOTAL CHROMIUM	MG/L CR	0.02 A	< 0.01	0.34	0.5	2.69	2.9 A	< 0.01	< 0.01		
COBALT	MG/L CO	0.01 A	< 0.01	0.14	0.2	1.10	1.2 A	< 0.01	< 0.01		
COPPER	MG/L CU	0.04 A	0.03	0.49	0.5	2.52	2.8 A	< 0.01	< 0.01		
LEAD	MG/L PB	0.02 A	0.01	0.5	0.27	0.6	0.6 A	< 0.01	< 0.01		
MERCURY	MG/L HG	.0001 A	.0001	.0015	.0012	.0053	.0055	<.0001	.0001		
NICKEL	MG/L NI	< 0.02 A	< 0.02	0.25	0.3	1.70	2.0 A	< 0.02	< 0.02		
SELENIUM	MG/L SE	<.0010	.0026	.0059	.0082	.0440	.0347	<.0010	<.0010		
SILVER	MG/L AG	< 0.01 A	< 0.01	< 0.01	< 0.01	< 0.02	< 0.01 A	< 0.01	< 0.01		
ZINC	MG/L ZN	0.39 A	0.22	2.13	1.9	7.50	7.6 A	0.01	0.02		
ANTIMONY	MG/L SB	.0018	.0012	.0103	.0098	.0248	.0252	<.0005	<.0005		
BERYLLIUM	MG/L BE	<0.005 A	<.0025	<0.005	.0083	0.022	0.06 A	<.0025	<.0025		
VANADIUM	MG/L V	< 0.05 A	< 0.05	0.63	0.8	5.05	5.3 A	< 0.05	< 0.05		
SOLUBLE ARSENIC	MG/L AS	<.0010	.0021	.0015	.0014	<.0010	<.0010	<.0010	<.0010		
SOLUBLE BARIUM	MG/L BA	0.04	0.03	0.03	0.04	0.03 A	0.02 A	< 0.01	< 0.01		
SOLUBLE ANTIMONY	MG/L SB	.0015	.0010	.0027	.0017	.0017	.0009	<.0005	<.0005		
SOLUBLE CADMIUM	MG/L CD	<0.002	<0.002	<0.002	<0.002	<0.002 A	<0.002 A	<0.002	<0.002		
SOLUBLE CHROMIUM	MG/L CR	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01 A	< 0.01 A	< 0.01	< 0.01		
SOLUBLE COBALT	MG/L CO	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01 A	< 0.01 A	< 0.01	< 0.01		
SOLUBLE COPPER	MG/L CU	0.01	0.02	0.01	0.01	< 0.01 A	< 0.01 A	< 0.01	0.01		
SOLUBLE LEAD	MG/L PB	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01 A	< 0.01 A	< 0.01	< 0.01		
SOLUBLE MERCURY	MG/L HG	<.0001	<.0001 A	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		
SOLUBLE NICKEL	MG/L NI	< 0.02	< 0.02	0.02	< 0.02	< 0.02 A	< 0.02 A	< 0.02	< 0.02		
SOLUBLE SELENIUM	MG/L SE	.0011	.0025	.0023	.0018	.0042	.0041	<.0010	<.0010		

FOOTNOTES : A-DUPLICATE SPIKE B-AVERAGE OF DUPS C-DUP & SPIKE

TABLE A.6

WATER QUALITY DATA - SURFACE RUNOFF SAMPLES

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	RUN SD1 SJ21506 02/10/00	RUN SD1 SJ25041 04/17/00	RUN SD9 SJ21507 02/10/00	RUN SD9 SJ25042 04/17/00	RUN SD11 SJ21508 02/10/00	RUN SD11 SJ25043 04/17/00	RUN EQIP SJ21509 02/10/00	RUN EQIP SJ25044 04/17/00	RUN TRIP SJ21510 02/10/00	RUN TRIP SJ25045 04/17/00
METALS											
SOLUBLE BERYLLIUM	MG/L BE	<.0025	<.0025	<.0025	<.0025	<.0025 A	<.0025 A	<.0025	<.0025		
SOLUBLE SILVER	MG/L AG	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01 A	< 0.01 A	< 0.01	< 0.01		
SOLUBLE ZINC	MG/L ZN	0.14	0.14	0.05	0.03	0.02 A	0.02 A	0.01	0.01		
SOLUBLE VANADIUM	MG/L V	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05 A	< 0.05 A	< 0.05	< 0.05		
VOLATILE ORGANIC COMPOUNDS											
METHYLENE CHLORIDE	UG/L	< 1	< 5	< 1	< 2	< 1	< 2	< 1	< 1	< 1	< 1
CHLOROFORM	UG/L	< 1	< 5	< 1	< 2	< 1	< 2	< 1	< 1	< 1	< 1
1,1,1-TRICHLOROETHANE	UG/L	< 1	< 5	< 1	< 2	< 1	< 2	< 1	< 1	< 1	< 1
CARBON TETRACHLORIDE	UG/L	< 0.3	< 1.5	< 0.3	< 0.6	< 0.3	< 0.6	< 0.3	< 0.3	< 0.3	< 0.3
1,1-DICHLOROETHENE	UG/L	< 1	< 5	< 1	< 2	< 1	< 2	< 1	< 1	< 1	< 1
TRICHLOROETHYLENE	UG/L	< 1	< 5	< 1	< 2	< 1	< 2	< 1	< 1	< 1	< 1
TETRACHLOROETHYLENE	UG/L	< 1	< 5	< 1	< 2	< 1	< 2	< 1	< 1	< 1	< 1
BROMODICHLOROMETHANE	UG/L	< 1	< 5	< 1	< 2	< 1	< 2	< 1	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	UG/L	< 1	< 5	< 1	< 2	< 1	< 2	< 1	< 1	< 1	< 1
BROMOFORM	UG/L	< 1	< 5	< 1	< 2	< 1	< 2	< 1	< 1	< 1	< 1
CHLOROBENZENE	UG/L	< 1	< 5	< 1	< 2	< 1	< 2	< 1	< 1	< 1	< 1
VINYL CHLORIDE	UG/L	< 0.3	< 1.5	< 0.3	< 0.6	< 0.3	< 0.6	< 0.3	< 0.3	< 0.3	< 0.3
O-DICHLOROBENZENE	UG/L	< 1	< 5	< 1	< 2	< 1	< 2	< 1	< 1	< 1	< 1
M-DICHLOROBENZENE	UG/L	< 1	< 5	< 1	< 2	< 1	< 2	< 1	< 1	< 1	< 1
P-DICHLOROBENZENE	UG/L	< 1	< 5	< 1	< 2	< 1	< 2	< 1	< 1	< 1	< 1
1,1-DICHLOROETHANE	UG/L	< 1	< 5	< 1	< 2	< 1	< 2	< 1	< 1	< 1	< 1
1,1,2-TRICHLOROETHANE	UG/L	< 1	< 5	< 1	< 2	< 1	< 2	< 1	< 1	< 1	< 1
1,2-DICHLOROETHANE	UG/L	< 0.3	< 1.5	< 0.3	< 0.6	< 0.3	< 0.6	< 0.3	< 0.3	< 0.3	< 0.3
BENZENE	UG/L	< 0.5	< 2.5	< 0.5	< 1	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	UG/L	< 1	< 5	< 1	< 2	< 1	< 2	< 1	< 1	< 1	< 1
ETHYL BENZENE	UG/L	< 1	< 5	< 1	< 2	< 1	< 2	< 1	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHYLEN	UG/L	< 1	< 5	< 1	< 2	< 1	< 2	< 1	< 1	< 1	< 1
BROMOMETHANE	UG/L	< 1	< 5	< 1	< 2	< 1	< 2	< 1	< 1	< 1	< 1
CHLOROETHANE	UG/L	< 1	< 5	< 1	< 2	< 1	< 2	< 1	< 1	< 1	< 1
2-CHLOROETHYLVINYLETHER	UG/L	< 1	< 5	< 1	< 2	< 1	< 2	< 1	< 1	< 1	< 1
CHLOROMETHANE	UG/L	< 1	< 5	< 1	< 2	< 1	< 2	< 1	< 1	< 1	< 1
1,2-DICHLOROPROPANE	UG/L	< 1	< 5	< 1	< 2	< 1	< 2	< 1	< 1	< 1	< 1
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 2.5	< 0.5	< 1	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 2.5	< 0.5	< 1	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.5	< 2.5	< 0.5	< 1	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5
ACETONE	UG/L	< 10	< 50	< 10	< 20	< 10	23	< 10	< 10	< 10	< 10

FOOTNOTES : A-DUPLICATE SPIKE B-AVERAGE OF DUPS C-DUP & SPIKE

TABLE A.7

WATER QUALITY DATA

LIQUID COLLECTION AND REMOVAL SYSTEMS

TABLE A.7

WATER QUALITY DATA - LIQUID COLLECTION AND REMOVAL SYSTEMS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	CNYN 9 LCRS(F) SJ22976 03/01/00	CNYN 9 LCRS SJ22979 03/01/00	CNYN 9 LCRS(F) SJ27240 06/01/00	CNYN 9 LCRS SJ27241 06/01/00	CNYN 9 LCRS(F) SJ31046 09/07/00	CNYN 9 LCRS SJ31047 09/07/00	CNYN 9 LCRS(F) SJ34289 12/01/00	CNYN 9 LCRS SJ34292 12/01/00
FIELD PARAMETERS									
FIELD PH	PH		7.18				7.08		7.2
GENERAL									
PH	PH		7.47		7.55		7.55 D		7.28
CONDUCTIVITY	UMHOS/CM		9980		9070		8810		8600
TOTAL DISSOLVED SOLIDS	MG/L		9884		8860		8232		7564
TOTAL HARDNESS	MG/L CACO3		4880 A		4090 A		3550 A		3430 A
TOTAL CYANIDE	MG/L CN		<0.005		<0.005		<0.005		<0.005
BORON	MG/L B		4.97		4.55		4.73		4.39
ANIONS									
NITRATE NITROGEN	MG/L N		0.46		< 0.05 C		1.15		0.19
SULFATE	MG/L SO4		5060		3860		3410		2970
CHLORIDE	MG/L CL		885		924 C		942 C		1060 C
TOTAL ALKALINITY	MG/L CACO3		1070		1020		954		1130
BICARBONATE ALKALINITY	MG/L CACO3		1070		1020		954		1130
TOTAL SULFIDE	MG/L S		< 0.1		< 0.1 D		< 0.1		< 0.1
FLUORIDE	MG/L F		1.52		0.84		0.72		0.78
CATIONS									
CALCIUM-HARDNESS	MG/L CACO3		1400		1330		1330 B		1540 B
MAGNESIUM-HARDNESS	MG/L CACO3		3480		2760		2220 B		1890 B
SODIUM	MG/L NA		1000		1030		979 B		1110 B
POTASSIUM	MG/L K		23.2		22.0		21.8 B		18.7 B
IRON	MG/L FE	0.11	4.76	0.09	3.63	0.11	5.25	0.16	19.2
MANGANESE	MG/L MN	7.71	7.93	7.86	7.96	7.18	7.28	8.81	9.11
ORGANIC MATTER									
AMMONIA NITROGEN	MG/L N		7.3		7.4		7.7		9.9
TOTAL BOD	MG/L O		11		10		19 E		30
SOLUBLE BOD	MG/L O		4		< 2		< 2		7
TOTAL COD	MG/L O		227		211		219		288
SOLUBLE COD	MG/L O		225		210		211		249
TOTAL ORGANIC CARBON	MG/L C		65.0		70.4		73.8		89.8
OIL & GREASE	MG/L EXTRAC		< 5		< 5		< 4		< 5
TOTAL ORGANIC HALOGEN(TOX	UG/L		560 B		430 B		780 C		380 B

FOOTNOTES : A-CALCULATED VALUE B-DUPLICATE SPIKE C-AVERAGE D-AVERAGE OF DUPS E-DUP & SPIKE
F-CHECK NOTES TO USER

TABLE A.7

WATER QUALITY DATA - LIQUID COLLECTION AND REMOVAL SYSTEMS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	CNYN 9 LCRS(F) SJ22976 03/01/00	CNYN 9 LCRS SJ22979 03/01/00	CNYN 9 LCRS(F) SJ27240 06/01/00	CNYN 9 LCRS SJ27241 06/01/00	CNYN 9 LCRS(F) SJ31046 09/07/00	CNYN 9 LCRS SJ31047 09/07/00	CNYN 9 LCRS(F) SJ34289 12/01/00	CNYN 9 LCRS SJ34292 12/01/00
METALS									
ARSENIC	MG/L AS	.0026	.0040	.0032	.0050	.0029	.0089	.0027	.0082
BARIUM	MG/L BA	0.05	0.05	0.06	0.06	0.06	0.06	0.07	0.08
CADMIUM	MG/L CD	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
TOTAL CHROMIUM	MG/L CR	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
COBALT	MG/L CO	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
COPPER	MG/L CU	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
LEAD	MG/L PB	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
MERCURY	MG/L HG	<.0001	<.0001	.0001	<.0001	<.0001	<.0001	<.0001	<.0001
NICKEL	MG/L NI	0.08	0.08	0.03	0.02	0.03	0.02	0.03	0.03
SELENIUM	MG/L SE	<.0010	<.0010	<.0010	<.0010	<.0010	<.0010	<.0010	<.0010
SILVER	MG/L AG	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ZINC	MG/L ZN	0.01	0.03	0.04	0.07	< 0.01	0.01	0.01	0.01
ANTIMONY	MG/L SB	<.0005	<.0005	<.0005	<.0005	<.0005	<.0005	<.0005	<.0005
BERYLLIUM	MG/L BE	<.0025	<.0025	<.0025	<.0025	<.0025	<.0025	<.0025	<.0025
THALLIUM	MG/L TL	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
TIN	MG/L SN	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
VANADIUM	MG/L V	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PESTICIDES, HERBICIDES, & ORGANOPHOSPHORUS									
2,4,5-T	UG/L				< 0.05				< 0.05
DINOSEB	UG/L				< 0.1				< 0.1
THIONAZIN	UG/L				< 1				< 1
DIMETHOATE	UG/L				< 1				< 1 F
DISULFOTON	UG/L				< 1				< 1
METHYL PARATHION	UG/L				< 1				< 1
ETHYL PARATHION	UG/L				< 1				< 1
PHORATE	UG/L				< 1				< 1
PP'-DDE	UG/L				< 0.01				< 0.01
PP'-DDD	UG/L				< 0.01				< 0.01
PP'-DDT	UG/L				< 0.01				< 0.01
ALPHA-BHC	UG/L				< 0.01				< 0.01
LINDANE (GAMMA-BHC)	UG/L				< 0.01				< 0.01
HEPTACHLOR	UG/L				< 0.01				< 0.01
HEPTACHLOR EPOXIDE	UG/L				< 0.01				< 0.01
ALDRIN	UG/L				< 0.01				< 0.01
DIELDRIN	UG/L				< 0.01				< 0.01
ENDRIN	UG/L				< 0.01				< 0.01
TOXAPHENE	UG/L				< 0.5				< 0.5
METHOXYCLOR	UG/L				< 0.01				< 0.01
2,4-D(ACID)	UG/L				< 0.5				< 0.5

FOOTNOTES : A-CALCULATED VALUE B-DUPLICATE SPIKE C-AVERAGE D-AVERAGE OF DUPS E-DUP & SPIKE
F-CHECK NOTES TO USER

TABLE A.7

WATER QUALITY DATA - LIQUID COLLECTION AND REMOVAL SYSTEMS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	CNYN 9 LCRS(F) SJ22976 03/01/00	CNYN 9 LCRS SJ22979 03/01/00	CNYN 9 LCRS(F) SJ27240 06/01/00	CNYN 9 LCRS SJ27241 06/01/00	CNYN 9 LCRS(F) SJ31046 09/07/00	CNYN 9 LCRS SJ31047 09/07/00	CNYN 9 LCRS(F) SJ34289 12/01/00	CNYN 9 LCRS SJ34292 12/01/00
PESTICIDES, HERBICIDES, & ORGANOPHOSPHORUS									
2,4,5-TP(SILVEX)	UG/L				< 0.05				< 0.05
AROCLOR 1242	UG/L				< 0.1				< 0.1
AROCLOR 1254	UG/L				< 0.05				< 0.05
BETA-BHC	UG/L				< 0.01				< 0.01
DELTA-BHC	UG/L				< 0.01				< 0.01
ENDOSULFAN I	UG/L				< 0.01				< 0.01
ENDOSULFAN II	UG/L				< 0.01				< 0.01
ENDOSULFAN SULFATE	UG/L				< 0.1				< 0.1
ENDRIN ALDEHYDE	UG/L				< 0.01				< 0.01
AROCLOR 1016	UG/L				< 0.1				< 0.1
AROCLOR 1221	UG/L				< 0.1				< 0.1
AROCLOR 1232	UG/L				< 0.1				< 0.1
AROCLOR 1248	UG/L				< 0.1				< 0.1
AROCLOR 1260	UG/L				< 0.1				< 0.1
TECHNICAL CHLORDANE	UG/L				< 0.05				< 0.05
VOLATILE ORGANIC COMPOUNDS									
ALLYL CHLORIDE	UG/L				< 1				< 1
BROMOCHLOROMETHANE	UG/L		< 1		< 1		< 1		< 1
CHLOROPRENE	UG/L				< 1				< 1
1,2-DIBROMO-3-CHLOROPROPA	UG/L		< 0.01		< 0.01		< 0.01		< 0.01
T-1,4-DICHLORO-2-BUTENE	UG/L		< 1		< 1		< 1		< 1
1,3-DICHLOROPROPANE	UG/L				< 0.3				< 0.3
2,2-DICHLOROPROPANE	UG/L				< 1				< 1
1,1-DICHLOROPROPENE	UG/L				< 1				< 1
ISOBUTYL ALCOHOL	UG/L				< 10				< 10
METHACRYLONITRILE	UG/L				< 10				< 10
METHYL IODIDE	UG/L		< 1		< 1		< 1		< 1
METHYLENE BROMIDE	UG/L		< 1		< 1		< 1		< 1
PROPIONITRILE	UG/L				< 10				< 10
1,1,1,2-TETRACHLOROETHANE	UG/L		< 1		< 1		< 1		< 1
1,2,3-TRICHLOROPROPANE	UG/L		< 1		< 1		< 1		< 1
METHYL METHACRYLATE	UG/L				< 10				< 10
ETHYL METHACRYLATE	UG/L				< 5				< 5
METHYLENE CHLORIDE	UG/L		< 1		< 1		< 1		< 1
CHLOROFORM	UG/L		< 1		< 1		< 1		< 1
1,1,1-TRICHLOROETHANE	UG/L		< 1		< 1		< 1		< 1
CARBON TETRACHLORIDE	UG/L		< 0.3		< 0.3		< 0.3		< 0.3
1,1-DICHLOROETHENE	UG/L		< 1		< 1		< 1		< 1
TRICHLOROETHYLENE	UG/L		< 1		< 1		< 1		< 1

FOOTNOTES : A-CALCULATED VALUE B-DUPLICATE SPIKE C-AVERAGE D-AVERAGE OF DUPS E-DUP & SPIKE
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TABLE A.7

WATER QUALITY DATA - LIQUID COLLECTION AND REMOVAL SYSTEMS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	CNYN 9 LCRS(F) SJ22976 03/01/00	CNYN 9 LCRS SJ22979 03/01/00	CNYN 9 LCRS(F) SJ27240 06/01/00	CNYN 9 LCRS SJ27241 06/01/00	CNYN 9 LCRS(F) SJ31046 09/07/00	CNYN 9 LCRS SJ31047 09/07/00	CNYN 9 LCRS(F) SJ34289 12/01/00	CNYN 9 LCRS SJ34292 12/01/00
VOLATILE ORGANIC COMPOUNDS									
TETRACHLOROETHYLENE	UG/L		< 1		< 1		< 1		< 1
BROMODICHLOROMETHANE	UG/L		< 1		< 1		< 1		< 1
DIBROMOCHLOROMETHANE	UG/L		< 1		< 1		< 1		< 1
BROMOFORM	UG/L		< 1		< 1		< 1		< 1
CHLOROBENZENE	UG/L		< 1		< 1		< 1		< 1
VINYL CHLORIDE	UG/L		< 0.3		0.5		< 0.3		0.4
O-DICHLOROBENZENE	UG/L		< 1		< 1		< 1		< 1
M-DICHLOROBENZENE	UG/L				< 1				< 1
P-DICHLOROBENZENE	UG/L		4		5		3		8
1,1-DICHLOROETHANE	UG/L		< 1		2		< 1		1
1,1,2-TRICHLOROETHANE	UG/L		< 1		< 1		< 1		< 1
1,2-DICHLOROETHANE	UG/L		< 0.3		< 0.3		< 0.3		< 0.3
BENZENE	UG/L		0.5		0.5		< 0.5		0.9
TOLUENE	UG/L		2		< 1		2		3
ETHYL BENZENE	UG/L		< 1		< 1		2		< 1
VINYL ACETATE	UG/L		< 10		< 10		< 10		< 10
O-XYLENE	UG/L		1		2		1		2
TRANS-1,2-DICHLOROETHYLEN	UG/L		< 1		< 1		< 1		< 1
BROMOMETHANE	UG/L		< 1		< 1		< 1		< 1
CHLOROETHANE	UG/L		< 1		< 1		< 1		< 1
2-CHLOROETHYLVINYLETHER	UG/L				< 1				< 1
CHLOROMETHANE	UG/L		< 1		< 1		< 1		< 1
1,2-DICHLOROPROPANE	UG/L		< 1		< 1		< 1		< 1
CIS-1,3-DICHLOROPROPENE	UG/L		< 0.5		< 0.5		< 0.5		< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L		< 0.5		< 0.5		< 0.5		< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L		< 0.5		< 0.5		< 0.5		< 0.5
ACROLEIN	UG/L				< 10				< 10
ACRYLONITRILE	UG/L		< 10		< 10		< 10		< 10
ACETONITRILE	UG/L				< 20				< 20
FREON 12 (CCL2F2)	UG/L				< 1				< 1
FREON 11 (CCL3F)	UG/L		< 1		< 1		< 1		< 1
1,2-DIBROMOETHANE	UG/L		< 0.01		< 0.01		< 0.01		< 0.01
ACETONE	UG/L		< 10		< 10		32		< 10
CIS-1,2-DICHLOROETHYLENE	UG/L		3		4		2		5
2-BUTANONE	UG/L		< 10		< 10		22		< 10
4-METHYL-2-PENTANONE	UG/L		< 10		< 10		< 10		< 10
STYRENE	UG/L		< 1		< 1		< 1		< 1
2,4,5-TRICHLOROPHENOL	UG/L				< 1				< 1
M+P-XYLENE	UG/L		2		3		< 1		4
CARBON DISULFIDE	UG/L CS2		< 1		< 1		< 1		< 1
2-HEXANONE	UG/L C6H12O		< 5		< 5		< 5		< 5

FOOTNOTES : A-CALCULATED VALUE B-DUPLICATE SPIKE C-AVERAGE D-AVERAGE OF DUPS E-DUP & SPIKE
F-CHECK NOTES TO USER

TABLE A.7

WATER QUALITY DATA - LIQUID COLLECTION AND REMOVAL SYSTEMS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	CNYN 9 LCRS(F) SJ22976 03/01/00	CNYN 9 LCRS SJ22979 03/01/00	CNYN 9 LCRS(F) SJ27240 06/01/00	CNYN 9 LCRS SJ27241 06/01/00	CNYN 9 LCRS(F) SJ31046 09/07/00	CNYN 9 LCRS SJ31047 09/07/00	CNYN 9 LCRS(F) SJ34289 12/01/00	CNYN 9 LCRS SJ34292 12/01/00
ACID-BASE NEUTRAL EXTRACTABLE									
ACETOPHENONE	UG/L				< 1				< 1
2-ACETYLAMINOFLUORENE	UG/L				< 1				< 1
4-AMINOBIPHENYL	UG/L				< 1				< 1
BENZYL ALCOHOL	UG/L				< 1				< 1
P-CHLOROANILINE	UG/L				< 1				< 1
CHLOROBENZILATE	UG/L				< 1				< 1
DIALLATE	UG/L				< 1				< 1
DIBENZOFURAN	UG/L				< 1				< 1
2,6-DICHLOROPHENOL	UG/L				< 1				< 1
P(DIMETHYLAMINO)AZOBENZEN	UG/L				< 1				< 1
7,12-DIMETHYLBENZ(A)ANTHR	UG/L				< 10				< 10
3,3'-DIMETHYLBENZIDINE	UG/L				< 1				< 1
M-DINITROBENZENE	UG/L				< 1				< 1
DIPHENYLAMINE	UG/L				< 1				< 1
ETHYL METHANESULFONATE	UG/L				< 1				< 1
FAMPHUR	UG/L				< 1				< 1
HEXACHLOROPROPENE	UG/L				< 5				< 5
ISODRIN	UG/L				< 1				< 1
ISOSAFROLE	UG/L				< 1				< 1
KEPONE	UG/L				< 10				< 10
METHAPYRILENE	UG/L				< 20				< 20
3-METHYLCHOLANTHRENE	UG/L				< 1				< 1
METHYL METHANESULFONATE	UG/L				< 1				< 1
2-METHYLNAPHTHALENE	UG/L				< 1				< 1
1,4-NAPHTHOQUINONE	UG/L				< 1				< 1
1-NAPHTHYLAMINE	UG/L				< 1				< 1
2-NAPHTHYLAMINE	UG/L				< 1				< 1
O-NITROANILINE	UG/L				< 1				< 1
M-NITROANILINE	UG/L				< 1				< 1
P-NITROANILINE	UG/L				< 1				< 1
N-NITROSODI-N-BUTYLAMINE	UG/L				< 1				< 1
N-NITROSODIETHYLAMINE	UG/L				< 1				< 1
N-NITROSOMETHYLETHYLAMINE	UG/L				< 1				< 1
N-NITROSOPIPERIDINE	UG/L				< 1				< 1
N-NITROSOPYRROLIDINE	UG/L				< 1				< 1
5-NITRO-O-TOLUIDINE	UG/L				< 1				< 1
PENTACHLOROBENZENE	UG/L				< 1				< 1
PENTACHLORONITROBENZENE	UG/L				< 5				< 5
PHENACETIN	UG/L				< 1				< 1
P-PHENYLENEDIAMINE	UG/L				< 20				< 20
PRONAMIDE	UG/L				< 1				< 1

FOOTNOTES : A-CALCULATED VALUE B-DUPLICATE SPIKE C-AVERAGE D-AVERAGE OF DUPS E-DUP & SPIKE
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CONSTITUENT/WELL NO.	UNITS	CNYN 9 LCRS(F) SJ22976 03/01/00	CNYN 9 LCRS SJ22979 03/01/00	CNYN 9 LCRS(F) SJ27240 06/01/00	CNYN 9 LCRS SJ27241 06/01/00	CNYN 9 LCRS(F) SJ31046 09/07/00	CNYN 9 LCRS SJ31047 09/07/00	CNYN 9 LCRS(F) SJ34289 12/01/00	CNYN 9 LCRS SJ34292 12/01/00
ACID-BASE NEUTRAL EXTRACTABLE									
SAFROLE	UG/L				< 1				< 1
1,2,4,5-TETRACHLOROBENZEN	UG/L				< 1				< 1
2,3,4,6-TETRACHLOROPHENOL	UG/L				< 1				< 1
O-TOLUIDINE	UG/L				< 1				< 1
O,O,O-TRIETHYLPHOSPHOROTH	UG/L				< 1				< 1
SYM-TRINITROBENZENE	UG/L				< 5				< 5
ACENAPHTHENE	UG/L				< 1				< 1
ACENAPHTHYLENE	UG/L				< 1				< 1
ANTHRACENE	UG/L				< 1				< 1
BENZIDINE	UG/L				< 20				< 20
BENZO(A)ANTHRACENE	UG/L				< 1				< 1
BENZO(A)PYRENE	UG/L				< 0.2				< 0.2
BENZO(B)FLUORANTHENE	UG/L				< 1				< 1
BENZO(G.H.I.)PERYLENE	UG/L				< 1				< 1
BENZO(K)FLUORANTHENE	UG/L				< 1				< 1
BIS(2-CL-ETHOXY)METHANE	UG/L				< 1				< 1
BIS(2-CHLOROETHYL)ETHER	UG/L				< 1				< 1
BIS(2-CL-ISOPROPYL)ETHER	UG/L				< 1				< 1
DIETHYLHEXYL PHTHALATE	UG/L				< 1				< 1
4-BROMOPHENYL PHENYLETHER	UG/L				< 1				< 1
BUTYLBENZYL PHTHALATE	UG/L				< 1				< 1
2-CHLORONAPHTHALENE	UG/L				< 1				< 1
4-CHLOROPHENYLPHENYLETHER	UG/L				< 1				< 1
CHRYSENE	UG/L				< 1				< 1
DIBENZO(A,H)ANTHRACENE	UG/L				< 1				< 1
3,3'-DICHLOROBENZIDINE	UG/L				< 1				< 1
DIETHYL PHTHALATE	UG/L				< 1				< 1
DIMETHYL PHTHALATE	UG/L				< 1				< 1
DI-N-BUTYL PHTHALATE	UG/L				< 1				< 1
2,4-DINITROTOLUENE	UG/L				< 1				< 1
2,6-DINITROTOLUENE	UG/L				< 1				< 1
DI-N-OCTYL PHTHALATE	UG/L				< 1				< 1
FLUORANTHENE	UG/L				< 1				< 1
FLUORENE	UG/L				< 1				< 1
HEXACHLOROBENZENE	UG/L				< 1				< 1
HEXACHLOROBUTADIENE	UG/L				< 1				< 1
HEXACHLOROCYCLOPENTADIENE	UG/L				< 5				< 5
HEXACHLOROETHANE	UG/L				< 1				< 1
INDENO(1,2,3-C,D)PYRENE	UG/L				< 1				< 1
ISOPHORONE	UG/L				< 1				< 1
NAPHTHALENE	UG/L				< 1				1

FOOTNOTES : A-CALCULATED VALUE B-DUPLICATE SPIKE C-AVERAGE D-AVERAGE OF DUPS E-DUP & SPIKE
F-CHECK NOTES TO USER

TABLE A.7

WATER QUALITY DATA - LIQUID COLLECTION AND REMOVAL SYSTEMS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	CNYN 9 LCRS(F) SJ22976 03/01/00	CNYN 9 LCRS SJ22979 03/01/00	CNYN 9 LCRS(F) SJ27240 06/01/00	CNYN 9 LCRS SJ27241 06/01/00	CNYN 9 LCRS(F) SJ31046 09/07/00	CNYN 9 LCRS SJ31047 09/07/00	CNYN 9 LCRS(F) SJ34289 12/01/00	CNYN 9 LCRS SJ34292 12/01/00
ACID-BASE NEUTRAL EXTRACTABLE									
NITROBENZENE	UG/L				< 1				< 1
N-NITROSODIMETHYLAMINE	UG/L				< 1				< 1
N-NITROSODI-N-PROPYLAMINE	UG/L				< 1				< 1
PHENANTHRENE	UG/L				< 1				< 1
PYRENE	UG/L				< 1				< 1
2-CHLOROPHENOL	UG/L				< 1				< 1
1,2,4-TRICHLOROBENZENE	UG/L				< 1				< 1
2,4-DICHLOROPHENOL	UG/L				< 1				< 1
2,4-DIMETHYLPHENOL	UG/L				< 1				< 1
2,4-DINITROPHENOL	UG/L				< 6				< 6
2-METHYL-4,6DINITROPHENOL	UG/L				< 1				< 1
2-NITROPHENOL	UG/L				< 1				< 1
4-NITROPHENOL	UG/L				< 1				< 1
4-CHLORO-3-METHYLPHENOL	UG/L				< 1				< 1
PENTACHLOROPHENOL	UG/L				< 1				2
PHENOL	UG/L				< 1				< 1
2,4,6-TRICHLOROPHENOL	UG/L				< 1				< 1
N-NITROSODIPHENYLAMINE	UG/L				< 1				< 1
O-CRESOL	UG/L				< 1				< 1
M+P CRESOL	UG/L				< 1				< 1

FOOTNOTES : A-CALCULATED VALUE B-DUPLICATE SPIKE C-AVERAGE D-AVERAGE OF DUPS E-DUP & SPIKE
F-CHECK NOTES TO USER

TABLE A.7

WATER QUALITY DATA - LIQUID COLLECTION AND REMOVAL SYSTEMS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	EASTERN CANYONS LCS2(F) SJ22977 03/01/00	EASTERN CANYONS LCS2 SJ22980 03/01/00	EASTERN CANYONS LCS2(F) SJ27258 06/01/00	EASTERN CANYONS LCS2 SJ27260 06/01/00	EASTERN CANYONS LCS2(F) SJ30972 09/05/00	EASTERN CANYONS LCS2 SJ30975 09/05/00	EASTERN CANYONS LCS2(F) SJ34290 12/01/00	EASTERN CANYONS LCS2 SJ34293 12/01/00
FIELD PARAMETERS									
FIELD PH	PH		6.68				7.31		6.4
GENERAL									
PH	PH		7.22		7.11		7.46		7.49
CONDUCTIVITY	UMHOS/CM		3090		4390		6190		4670
TOTAL DISSOLVED SOLIDS	MG/L		2608		3516		4824		3884
TOTAL HARDNESS	MG/L CACO3		1658 A		1894 A		2291 A		2260 A
TOTAL CYANIDE	MG/L CN		<0.005		<0.005		<0.005		<0.005
BORON	MG/L B		0.67		1.15		2.06		1.09
ANIONS									
NITRATE NITROGEN	MG/L N		11.1		< 0.05 C		< 0.05		< 0.05
SULFATE	MG/L SO4		1360		1180 C		1320		1430
CHLORIDE	MG/L CL		135		390 C		823		426
TOTAL ALKALINITY	MG/L CACO3		350		925		1200		972
BICARBONATE ALKALINITY	MG/L CACO3		350		925		1200		972
TOTAL SULFIDE	MG/L S		< 0.1		< 0.1		< 0.1		60.0 E
FLUORIDE	MG/L F		0.55		0.48		0.51		0.59
CATIONS									
CALCIUM-HARDNESS	MG/L CACO3		859		919		991		1230
MAGNESIUM-HARDNESS	MG/L CACO3		799		975		1300		1030
SODIUM	MG/L NA		146		374		676		439
POTASSIUM	MG/L K		14.8		14.9		17.0		14.6
IRON	MG/L FE	0.47	4.96	< 0.05	2.35 C	< 0.05	2.37 C	0.75	83.1
MANGANESE	MG/L MN	2.21	2.21	9.09	9.23 C	5.36	5.78 C	12.7	18.2
ORGANIC MATTER									
AMMONIA NITROGEN	MG/L N		0.9		1.6		0.5		1.5
TOTAL BOD	MG/L O		3		7		3		37
SOLUBLE BOD	MG/L O		< 2		< 2		< 2		3
TOTAL COD	MG/L O		46		92		124		78
SOLUBLE COD	MG/L O		44		86		118		80
TOTAL ORGANIC CARBON	MG/L C		15.6		32.4 C		40.9		35.4
OIL & GREASE	MG/L EXTRAC		< 5		< 5		< 5 D		< 5
TOTAL ORGANIC HALOGEN(TOX	UG/L		36 B		260 C		200 C		160 B

FOOTNOTES : A-CALCULATED VALUE B-AVERAGE C-DUPLICATE SPIKE D-SINGLE SPIKE E-AVERAGE OF DUPS
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TABLE A.7

WATER QUALITY DATA - LIQUID COLLECTION AND REMOVAL SYSTEMS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	EASTERN CANYONS LCS2(F) SJ22977 03/01/00	EASTERN CANYONS LCS2 SJ22980 03/01/00	EASTERN CANYONS LCS2(F) SJ27258 06/01/00	EASTERN CANYONS LCS2 SJ27260 06/01/00	EASTERN CANYONS LCS2(F) SJ30972 09/05/00	EASTERN CANYONS LCS2 SJ30975 09/05/00	EASTERN CANYONS LCS2(F) SJ34290 12/01/00	EASTERN CANYONS LCS2 SJ34293 12/01/00
METALS									
ARSENIC	MG/L AS	.0050	.0078	.0028	.0074	.0046	.0095	.0186	0.149
BARIUM	MG/L BA	0.08	0.09	0.08	0.08 C	0.10	0.10 C	0.07	0.28
CADMIUM	MG/L CD	<0.002	<0.002	<0.002	<0.002 C	<0.002	<0.002 C	<0.002	<0.002
TOTAL CHROMIUM	MG/L CR	< 0.01	< 0.01	< 0.01	< 0.01 C	< 0.01	< 0.01 C	< 0.01	0.01
COBALT	MG/L CO	< 0.01	< 0.01	< 0.01	< 0.01 C	< 0.01	< 0.01 C	< 0.01	0.02
COPPER	MG/L CU	< 0.01	< 0.01	< 0.01	< 0.01 C	< 0.01	< 0.01 C	0.02	0.05
LEAD	MG/L PB	< 0.01	< 0.01	< 0.01	< 0.01 C	< 0.01	< 0.01 C	< 0.01	0.01
MERCURY	MG/L HG	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	.0001 C
NICKEL	MG/L NI	< 0.02	< 0.02	0.02	0.02 C	0.04	0.04 C	0.02	0.03
SELENIUM	MG/L SE	.0299	.0304	<.0010	<.0010	<.0010	<.0010	<.0010	.0032
SILVER	MG/L AG	< 0.01	< 0.01	< 0.01	< 0.01 C	< 0.01	< 0.01 C	< 0.01	< 0.01
ZINC	MG/L ZN	0.12	0.05	0.04	0.12 C	0.05	0.01 C	< 0.01	0.17
ANTIMONY	MG/L SB	.0007	.0008	.0005	.0005	<.0005	<.0005	<.0005	.0021
BERYLLIUM	MG/L BE	<.0025	<.0025	<.0025	<.0025 C	<.0025	<.0025 C	<.0025	<.0025
THALLIUM	MG/L TL	<0.001	<0.001	<0.001	<0.001 C	<0.001	<0.001 C	<0.001	<0.001
TIN	MG/L SN	< 0.06	< 0.06	< 0.06	< 0.06 C	< 0.06	< 0.06 C	< 0.06	< 0.06
VANADIUM	MG/L V	< 0.05	< 0.05	< 0.05	< 0.05 C	< 0.05	< 0.05 C	< 0.05	< 0.05
PESTICIDES, HERBICIDES, & ORGANOPHOSPHORUS									
2,4,5-T	UG/L				< 0.05				< 0.05
DINOSEB	UG/L				< 0.1				< 0.1
THIONAZIN	UG/L				< 1				< 1
DIMETHOATE	UG/L				< 1				< 1 F
DISULFOTON	UG/L				< 1				< 1
METHYL PARATHION	UG/L				< 1				< 1
ETHYL PARATHION	UG/L				< 1				< 1
PHORATE	UG/L				< 1				< 1
PP'-DDE	UG/L				< 0.01				< 0.01
PP'-DDD	UG/L				< 0.01				< 0.01
PP'-DDT	UG/L				< 0.01				< 0.01
ALPHA-BHC	UG/L				< 0.01				< 0.01
LINDANE (GAMMA-BHC)	UG/L				< 0.01				< 0.01
HEPTACHLOR	UG/L				< 0.01				< 0.01
HEPTACHLOR EPOXIDE	UG/L				< 0.01				< 0.01
ALDRIN	UG/L				< 0.01				< 0.01
DIELDRIN	UG/L				< 0.01				< 0.01
ENDRIN	UG/L				< 0.01				< 0.01
TOXAPHENE	UG/L				< 0.5				< 0.5
METHOXYCLOR	UG/L				< 0.01				< 0.01
2,4-D(ACID)	UG/L				< 0.5				< 0.5

FOOTNOTES : A-CALCULATED VALUE B-AVERAGE C-DUPLICATE SPIKE D-SINGLE SPIKE E-AVERAGE OF DUPS
F-CHECK NOTES TO USER

TABLE A.7

WATER QUALITY DATA - LIQUID COLLECTION AND REMOVAL SYSTEMS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	EASTERN CANYONS LCS2(F) SJ22977 03/01/00	EASTERN CANYONS LCS2 SJ22980 03/01/00	EASTERN CANYONS LCS2(F) SJ27258 06/01/00	EASTERN CANYONS LCS2 SJ27260 06/01/00	EASTERN CANYONS LCS2(F) SJ30972 09/05/00	EASTERN CANYONS LCS2 SJ30975 09/05/00	EASTERN CANYONS LCS2(F) SJ34290 12/01/00	EASTERN CANYONS LCS2 SJ34293 12/01/00
PESTICIDES, HERBICIDES, & ORGANOPHOSPHORUS									
2,4,5-TP(SILVEX)	UG/L				< 0.05				< 0.05
AROCLOR 1242	UG/L				< 0.1				< 0.1
AROCLOR 1254	UG/L				< 0.05				F
BETA-BHC	UG/L				< 0.01				< 0.01
DELTA-BHC	UG/L				< 0.01				< 0.01
ENDOSULFAN I	UG/L				< 0.01				< 0.01
ENDOSULFAN II	UG/L				< 0.01				< 0.01
ENDOSULFAN SULFATE	UG/L				< 0.1				< 0.1
ENDRIN ALDEHYDE	UG/L				< 0.01				< 0.01
AROCLOR 1016	UG/L				< 0.1				< 0.1
AROCLOR 1221	UG/L				< 0.1				< 0.1
AROCLOR 1232	UG/L				< 0.1				< 0.1
AROCLOR 1248	UG/L				< 0.1				< 0.1
AROCLOR 1260	UG/L				< 0.1				< 0.1
TECHNICAL CHLORDANE	UG/L				< 0.05				< 0.05
VOLATILE ORGANIC COMPOUNDS									
ALLYL CHLORIDE	UG/L				< 1				< 1
BROMOCHLOROMETHANE	UG/L		< 1		< 1		< 1		< 1
CHLOROPRENE	UG/L				< 1				< 1
1,2-DIBROMO-3-CHLOROPROPA	UG/L		< 0.01		< 0.01		< 0.01		< 0.01
T-1,4-DICHLORO-2-BUTENE	UG/L		< 1		< 1		< 1		< 1
1,3-DICHLOROPROPANE	UG/L				< 0.3				< 0.3
2,2-DICHLOROPROPANE	UG/L				< 1				< 1
1,1-DICHLOROPROPENE	UG/L				< 1				< 1
ISOBUTYL ALCOHOL	UG/L				< 10				< 10
METHACRYLONITRILE	UG/L				< 10				< 10
METHYL IODIDE	UG/L		< 1		< 1		< 1		< 1
METHYLENE BROMIDE	UG/L		< 1		< 1		< 1		< 1
PROPIONITRILE	UG/L				< 10				< 10
1,1,1,2-TETRACHLOROETHANE	UG/L		< 1		< 1		< 1		< 1
1,2,3-TRICHLOROPROPANE	UG/L		< 1		< 1		< 1		< 1
METHYL METHACRYLATE	UG/L				< 10				< 10
ETHYL METHACRYLATE	UG/L				< 5				< 5
METHYLENE CHLORIDE	UG/L		< 1		47		< 1		< 1
CHLOROFORM	UG/L		< 1		< 1		< 1		< 1
1,1,1-TRICHLOROETHANE	UG/L		< 1		< 1		< 1		< 1
CARBON TETRACHLORIDE	UG/L		< 0.3		< 0.3		< 0.3		< 0.3
1,1-DICHLOROETHENE	UG/L		< 1		< 1		< 1		< 1
TRICHLOROETHYLENE	UG/L		< 1		3		< 1		< 1

FOOTNOTES : A-CALCULATED VALUE B-AVERAGE C-DUPLICATE SPIKE D-SINGLE SPIKE E-AVERAGE OF DUPS
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TABLE A.7

WATER QUALITY DATA - LIQUID COLLECTION AND REMOVAL SYSTEMS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	EASTERN CANYONS LCS2(F) SJ22977 03/01/00	EASTERN CANYONS LCS2 SJ22980 03/01/00	EASTERN CANYONS LCS2(F) SJ27258 06/01/00	EASTERN CANYONS LCS2 SJ27260 06/01/00	EASTERN CANYONS LCS2(F) SJ30972 09/05/00	EASTERN CANYONS LCS2 SJ30975 09/05/00	EASTERN CANYONS LCS2(F) SJ34290 12/01/00	EASTERN CANYONS LCS2 SJ34293 12/01/00
VOLATILE ORGANIC COMPOUNDS									
TETRACHLOROETHYLENE	UG/L		< 1		1		< 1		< 1
BROMODICHLOROMETHANE	UG/L		< 1		< 1		< 1		< 1
DIBROMOCHLOROMETHANE	UG/L		< 1		< 1		< 1		< 1
BROMOFORM	UG/L		< 1		< 1		< 1		< 1
CHLOROBENZENE	UG/L		< 1		< 1		< 1		< 1
VINYL CHLORIDE	UG/L		< 0.3		< 0.3		< 0.3		< 0.3
O-DICHLOROBENZENE	UG/L		< 1		< 1		< 1		< 1
M-DICHLOROBENZENE	UG/L				< 1				< 1
P-DICHLOROBENZENE	UG/L		1		2		2		2
1,1-DICHLOROETHANE	UG/L		2		12		2		2
1,1,2-TRICHLOROETHANE	UG/L		< 1		< 1		< 1		< 1
1,2-DICHLOROETHANE	UG/L		0.6		< 0.3		1		0.7
BENZENE	UG/L		< 0.5		< 0.5		< 0.5		0.6
TOLUENE	UG/L		1		< 1		< 1		2
ETHYL BENZENE	UG/L		1		< 1		< 1		< 1
VINYL ACETATE	UG/L		< 10		< 10		< 10		< 10
O-XYLENE	UG/L		1		< 1		< 1		1
TRANS-1,2-DICHLOROETHYLEN	UG/L		< 1		< 1		< 1		< 1
BROMOMETHANE	UG/L		< 1		< 1		< 1		< 1
CHLOROETHANE	UG/L		< 1		< 1		< 1		< 1
2-CHLOROETHYLVINYLETHER	UG/L				< 1				< 1
CHLOROMETHANE	UG/L		< 1		< 1		< 1		< 1
1,2-DICHLOROPROPANE	UG/L		< 1		< 1		< 1		< 1
CIS-1,3-DICHLOROPROPENE	UG/L		< 0.5		< 0.5		< 0.5		< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L		< 0.5		< 0.5		< 0.5		< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L		< 0.5		< 0.5		< 0.5		< 0.5
ACROLEIN	UG/L				< 10				< 10
ACRYLONITRILE	UG/L		< 10		< 10		< 10		< 10
ACETONITRILE	UG/L				< 20				< 20
FREON 12 (CCL2F2)	UG/L				< 1				< 1
FREON 11 (CCL3F)	UG/L		< 1		< 1		< 1		< 1
1,2-DIBROMOETHANE	UG/L		< 0.01		< 0.01		< 0.01		< 0.01
ACETONE	UG/L		< 10		< 10		< 10		< 10
CIS-1,2-DICHLOROETHYLENE	UG/L		11		32		13		16
2-BUTANONE	UG/L		< 10		< 10		< 10		< 10
4-METHYL-2-PENTANONE	UG/L		< 10		< 10		< 10		< 10
STYRENE	UG/L		< 1		< 1		< 1		< 1
2,4,5-TRICHLOROPHENOL	UG/L				< 1				< 1
M+P-XYLENE	UG/L		< 1		< 1		< 1		2
CARBON DISULFIDE	UG/L CS2		< 1		< 1		< 1		< 1
2-HEXANONE	UG/L C6H12O		< 5		< 5		< 5		< 5

FOOTNOTES : A-CALCULATED VALUE B-AVERAGE C-DUPLICATE SPIKE D-SINGLE SPIKE E-AVERAGE OF DUPS
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TABLE A.7

WATER QUALITY DATA - LIQUID COLLECTION AND REMOVAL SYSTEMS

PUENTE HILLS LANDFILL

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ACID-BASE NEUTRAL EXTRACTABLE									
ACETOPHENONE	UG/L				< 1				< 1
2-ACETYLAMINOFLUORENE	UG/L				< 1				< 1
4-AMINOBIPHENYL	UG/L				< 1				< 1
BENZYL ALCOHOL	UG/L				< 1				< 1
P-CHLOROANILINE	UG/L				< 1				< 1
CHLOROBENZILATE	UG/L				< 1				< 1
DIALLATE	UG/L				< 1				< 1
DIBENZOFURAN	UG/L				< 1				< 1
2,6-DICHLOROPHENOL	UG/L				< 1				< 1
P(DIMETHYLAMINO)AZOBENZEN	UG/L				< 1				< 1
7,12-DIMETHYLBENZ(A)ANTHR	UG/L				< 10				< 10
3,3'-DIMETHYLBENZIDINE	UG/L				< 1				< 1
M-DINITROBENZENE	UG/L				< 1				< 1
DIPHENYLAMINE	UG/L				< 1				< 1
ETHYL METHANESULFONATE	UG/L				< 1				< 1
FAMPHUR	UG/L				< 1				< 1
HEXACHLOROPROPENE	UG/L				< 5				< 1
ISODRIN	UG/L				< 1				< 1
ISOSAFROLE	UG/L				< 1				< 1
KEPONE	UG/L				< 10				< 10
METHAPYRILENE	UG/L				< 20				< 20
3-METHYLCHOLANTHRENE	UG/L				< 1				< 1
METHYL METHANESULFONATE	UG/L				< 1				< 1
2-METHYLNAPHTHALENE	UG/L				< 1				< 1
1,4-NAPHTHOQUINONE	UG/L				< 1				< 1
1-NAPHTHYLAMINE	UG/L				< 1				< 1
2-NAPHTHYLAMINE	UG/L				< 1				< 1
O-NITROANILINE	UG/L				< 1				< 1
M-NITROANILINE	UG/L				< 1				< 1
P-NITROANILINE	UG/L				< 1				< 1
N-NITROSODI-N-BUTYLAMINE	UG/L				< 1				< 1
N-NITROSODIETHYLAMINE	UG/L				< 1				< 1
N-NITROSOMETHYLETHYLAMINE	UG/L				< 1				< 1
N-NITROSOPIPERIDINE	UG/L				< 1				< 1
N-NITROSOPYRROLIDINE	UG/L				< 1				< 1
5-NITRO-O-TOLUIDINE	UG/L				< 1				< 1
PENTACHLOROBENZENE	UG/L				< 1				< 1
PENTACHLORONITROBENZENE	UG/L				< 5				< 5
PHENACETIN	UG/L				< 1				< 1
P-PHENYLENEDIAMINE	UG/L				< 20				< 20
PRONAMIDE	UG/L				< 1				< 1

FOOTNOTES : A-CALCULATED VALUE B-AVERAGE C-DUPLICATE SPIKE D-SINGLE SPIKE E-AVERAGE OF DUPS
F-CHECK NOTES TO USER

TABLE A.7

WATER QUALITY DATA - LIQUID COLLECTION AND REMOVAL SYSTEMS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	EASTERN CANYONS LCS2(F) SJ22977 03/01/00	EASTERN CANYONS LCS2 SJ22980 03/01/00	EASTERN CANYONS LCS2(F) SJ27258 06/01/00	EASTERN CANYONS LCS2 SJ27260 06/01/00	EASTERN CANYONS LCS2(F) SJ30972 09/05/00	EASTERN CANYONS LCS2 SJ30975 09/05/00	EASTERN CANYONS LCS2(F) SJ34290 12/01/00	EASTERN CANYONS LCS2 SJ34293 12/01/00
ACID-BASE NEUTRAL EXTRACTABLE									
SAFROLE	UG/L				< 1				< 1
1,2,4,5-TETRACHLOROBENZEN	UG/L				< 1				< 1
2,3,4,6-TETRACHLOROPHENOL	UG/L				< 1				< 1
O-TOLUIDINE	UG/L				< 1				< 1
O,O,O-TRIETHYLPHOSPHOROTH	UG/L				< 1				< 1
SYM-TRINITROBENZENE	UG/L				< 5				< 5
ACENAPHTHENE	UG/L				< 1				< 1
ACENAPHTHYLENE	UG/L				< 1				< 1
ANTHRACENE	UG/L				< 1				< 1
BENZIDINE	UG/L				< 20				< 20
BENZO(A)ANTHRACENE	UG/L				< 1				< 1
BENZO(A)PYRENE	UG/L				< 0.2				< 0.2
BENZO(B)FLUORANTHENE	UG/L				< 1				< 1
BENZO(G.H.I.)PERYLENE	UG/L				< 1				< 1
BENZO(K)FLUORANTHENE	UG/L				< 1				< 1
BIS(2-CL-ETHOXY)METHANE	UG/L				< 1				< 1
BIS(2-CHLOROETHYL)ETHER	UG/L				< 1				< 1
BIS(2-CL-ISOPROPYL)ETHER	UG/L				< 1				< 1
DIETHYLHEXYL PHTHALATE	UG/L				< 1				2
4-BROMOPHENYL PHENYLETHER	UG/L				< 1				< 1
BUTYLBENZYL PHTHALATE	UG/L				< 1				< 1
2-CHLORONAPHTHALENE	UG/L				< 1				< 1
4-CHLOROPHENYLPHENYLETHER	UG/L				< 1				< 1
CHRYSENE	UG/L				< 1				< 1
DIBENZO(A,H)ANTHRACENE	UG/L				< 1				< 1
3,3'-DICHLOROBENZIDINE	UG/L				< 1				< 1
DIETHYL PHTHALATE	UG/L				< 1				< 1
DIMETHYL PHTHALATE	UG/L				< 1				< 1
DI-N-BUTYL PHTHALATE	UG/L				< 1				< 1
2,4-DINITROTOLUENE	UG/L				< 1				< 1
2,6-DINITROTOLUENE	UG/L				< 1				< 1
DI-N-OCTYL PHTHALATE	UG/L				< 1				< 1
FLUORANTHENE	UG/L				< 1				< 1
FLUORENE	UG/L				< 1				< 1
HEXACHLOROBENZENE	UG/L				< 1				< 1
HEXACHLOROBUTADIENE	UG/L				< 1				< 1
HEXACHLOROCYCLOPENTADIENE	UG/L				< 5				< 5
HEXACHLOROETHANE	UG/L				< 1				< 1
INDENO(1,2,3-C,D)PYRENE	UG/L				< 1				< 1
ISOPHORONE	UG/L				< 1				< 1
NAPHTHALENE	UG/L				< 1				< 1

FOOTNOTES : A-CALCULATED VALUE B-AVERAGE C-DUPLICATE SPIKE D-SINGLE SPIKE E-AVERAGE OF DUPS
F-CHECK NOTES TO USER

TABLE A.7

WATER QUALITY DATA - LIQUID COLLECTION AND REMOVAL SYSTEMS

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	EASTERN CANYONS LCS2(F) SJ22977 03/01/00	EASTERN CANYONS LCS2 SJ22980 03/01/00	EASTERN CANYONS LCS2(F) SJ27258 06/01/00	EASTERN CANYONS LCS2 SJ27260 06/01/00	EASTERN CANYONS LCS2(F) SJ30972 09/05/00	EASTERN CANYONS LCS2 SJ30975 09/05/00	EASTERN CANYONS LCS2(F) SJ34290 12/01/00	EASTERN CANYONS LCS2 SJ34293 12/01/00
ACID-BASE NEUTRAL EXTRACTABLE									
NITROBENZENE	UG/L				< 1				< 1
N-NITROSODIMETHYLAMINE	UG/L				< 1				< 1
N-NITROSODI-N-PROPYLAMINE	UG/L				< 1				< 1
PHENANTHRENE	UG/L				< 1				< 1
PYRENE	UG/L				< 1				< 1
2-CHLOROPHENOL	UG/L				< 1				< 1
1,2,4-TRICHLOROBENZENE	UG/L				< 1				< 1
2,4-DICHLOROPHENOL	UG/L				< 1				< 1
2,4-DIMETHYLPHENOL	UG/L				< 1				< 1
2,4-DINITROPHENOL	UG/L				< 6				< 6
2-METHYL-4,6DINITROPHENOL	UG/L				< 1				< 1
2-NITROPHENOL	UG/L				< 1				< 1
4-NITROPHENOL	UG/L				< 1				< 1
4-CHLORO-3-METHYLPHENOL	UG/L				< 1				< 1
PENTACHLOROPHENOL	UG/L				< 1				< 1
PHENOL	UG/L				< 1				< 1
2,4,6-TRICHLOROPHENOL	UG/L				< 1				< 1
N-NITROSODIPHENYLAMINE	UG/L				< 1				< 1
O-CRESOL	UG/L				< 1				< 1
M+P CRESOL	UG/L				< 1				< 1

FOOTNOTES : A-CALCULATED VALUE B-AVERAGE C-DUPLICATE SPIKE D-SINGLE SPIKE E-AVERAGE OF DUPS
F-CHECK NOTES TO USER

TABLE A.8

WATER QUALITY DATA

REUSED WATER MONITORING RESULTS

TABLE A.8

WATER QUALITY DATA - REUSED WATER

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	EFFI REUS(F) SJ22975 03/01/00	EFFL REUS SJ22978 03/01/00	EFFI REUS(F) SJ27257 06/01/00	EFFL REUS SJ27259 06/01/00	EFFI REUS(F) SJ30971 09/05/00	EFFL REUS SJ30974 09/05/00	EFFI REUS(F) SJ34291 12/01/00	EFFL REUS SJ34294 12/01/00
GENERAL									
PH	PH		7.39 B		7.44		7.22		7.15
CONDUCTIVITY	UMHOS/CM		2510		2580		2480		2660
RADIUM 226+228	PCI/L						0.228		
TOTAL DISSOLVED SOLIDS	MG/L		2040		2094		2000		2100
TOTAL HARDNESS	MG/L CACO3		999 C		1095 C		1046 C		1308 C
TOTAL CYANIDE	MG/L CN		<0.005		<0.005		<0.005		<0.005
BORON	MG/L B		0.70		0.56		0.51		0.41
GROSS ALPHA RADIOACTIVITY	PCI/L						< 3.93		
GROSS BETA RADIOACTIVITY	PCI/L						13		
ANIONS									
NITRATE NITROGEN	MG/L N		0.66 A		0.33		2.15		0.34
SULFATE	MG/L SO4		944 A		990		919		1060 E
CHLORIDE	MG/L CL		84.0 A		90.0 E		92.5 E		93.9 E
TOTAL ALKALINITY	MG/L CACO3		395		391		383		412
BICARBONATE ALKALINITY	MG/L CACO3		395		391		383		412
TOTAL SULFIDE	MG/L S		< 0.1		< 0.1		< 0.1		< 0.1
FLUORIDE	MG/L F		0.87		0.72		0.88		0.77
CATIONS									
CALCIUM-HARDNESS	MG/L CACO3		415		432		457 A		604
MAGNESIUM-HARDNESS	MG/L CACO3		584		663		589 A		704
SODIUM	MG/L NA		195		225		189 A		238
POTASSIUM	MG/L K		7.6		7.6		6.4 A		26.4
IRON	MG/L FE	0.64	3.30	0.79	3.20	1.09	1.34	1.63 A	1460
MANGANESE	MG/L MN	0.34	0.34	0.36	0.37	0.26	0.25	0.66 A	11.6
ORGANIC MATTER									
AMMONIA NITROGEN	MG/L N		1.8		2.2		0.6		1.6
TOTAL BOD	MG/L O		3 D		4		< 2		19
SOLUBLE BOD	MG/L O		< 2		< 2		< 2		< 2
TOTAL COD	MG/L O		< 10		< 10		< 10		17
SOLUBLE COD	MG/L O		< 10 D		< 10		< 10		< 10
TOTAL ORGANIC CARBON	MG/L C		1.81		3.03		1.65		1.59
OIL & GREASE	MG/L EXTRAC		< 5		< 5		< 5		< 5
TOTAL ORGANIC HALOGEN(TOX	UG/L		5.0 E		4.6 E		5.0 E		4.5 E

FOOTNOTES : A-DUPLICATE SPIKE B-AVERAGE OF DUPS C-CALCULATED VALUE D-DUP & SPIKE E-AVERAGE

TABLE A.8

WATER QUALITY DATA - REUSED WATER

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	EFFI REUS(F) SJ22975 03/01/00	EFFL REUS SJ22978 03/01/00	EFFI REUS(F) SJ27257 06/01/00	EFFL REUS SJ27259 06/01/00	EFFI REUS(F) SJ30971 09/05/00	EFFL REUS SJ30974 09/05/00	EFFI REUS(F) SJ34291 12/01/00	EFFL REUS SJ34294 12/01/00
METALS									
ARSENIC	MG/L AS	<.0010	.0011	<.0010	.0015	<.0010	<.0010	<.0010	0.213
BARIUM	MG/L BA	0.01	0.01	0.01	0.01	0.01	0.01	0.02 A	0.60
CADMIUM	MG/L CD	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002 A	<0.002
TOTAL CHROMIUM	MG/L CR	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01 A	0.07
COBALT	MG/L CO	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01 A	0.13
COPPER	MG/L CU	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01 A	0.06
LEAD	MG/L PB	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01 A	0.01
MERCURY	MG/L HG	<.0001 A	<.0001	<.0001	<.0001 A	<.0001	<.0001	<.0001	.0004
NICKEL	MG/L NI	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02 A	0.03
SELENIUM	MG/L SE	<.0010	<.0010	<.0010	<.0010	.0025	.0027	<.0010	.0019
SILVER	MG/L AG	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01 A	< 0.01
ZINC	MG/L ZN	0.01	0.02	0.06	0.06	0.01	0.01	< 0.01 A	0.44
ANTIMONY	MG/L SB	<.0005	<.0005	<.0005	<.0005	<.0005	<.0005	<.0005	.0029
BERYLLIUM	MG/L BE	<.0025	<.0025	<.0025	<.0025	<.0025	<.0025	<.0025 A	.0057
THALLIUM	MG/L TL	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001 A	< 0.01
TIN	MG/L SN	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06 A	< 0.06
VANADIUM	MG/L V	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05 A	0.10
PESTICIDES, HERBICIDES, & ORGANOPHOSPHORUS									
2,4,5-T	UG/L						< 0.05		
DINOSEB	UG/L						< 0.1		
THIONAZIN	UG/L						< 1		
DIMETHOATE	UG/L						< 1		
DISULFOTON	UG/L						< 1		
METHYL PARATHION	UG/L						< 1		
ETHYL PARATHION	UG/L						< 1		
PHORATE	UG/L						< 1		
PP'-DDE	UG/L						< 0.01		
PP'-DDD	UG/L						< 0.01		
PP'-DDT	UG/L						< 0.01		
ALPHA-BHC	UG/L						< 0.01		
LINDANE (GAMMA-BHC)	UG/L						< 0.01		
HEPTACHLOR	UG/L						< 0.01		
HEPTACHLOR EPOXIDE	UG/L						< 0.01		
ALDRIN	UG/L						< 0.01		
DIELDRIN	UG/L						< 0.01		
ENDRIN	UG/L						< 0.01		
TOXAPHENE	UG/L						< 0.5		
METHOXYCLOR	UG/L						< 0.01		
2,4-D(ACID)	UG/L						< 0.5		

FOOTNOTES : A-DUPLICATE SPIKE B-AVERAGE OF DUPS C-CALCULATED VALUE D-DUP & SPIKE E-AVERAGE

TABLE A.8

WATER QUALITY DATA - REUSED WATER

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	EFFI REUS(F) SJ22975 03/01/00	EFFL REUS SJ22978 03/01/00	EFFI REUS(F) SJ27257 06/01/00	EFFL REUS SJ27259 06/01/00	EFFI REUS(F) SJ30971 09/05/00	EFFL REUS SJ30974 09/05/00	EFFI REUS(F) SJ34291 12/01/00	EFFL REUS SJ34294 12/01/00
PESTICIDES, HERBICIDES, & ORGANOPHOSPHORUS									
2,4,5-TP(SILVEX)	UG/L						< 0.05		
AROCLOR 1242	UG/L						< 0.1		
AROCLOR 1254	UG/L						< 0.05		
BETA-BHC	UG/L						< 0.01		
DELTA-BHC	UG/L						< 0.01		
ENDOSULFAN I	UG/L						< 0.01		
ENDOSULFAN II	UG/L						< 0.01		
ENDOSULFAN SULFATE	UG/L						< 0.1		
ENDRIN ALDEHYDE	UG/L						< 0.01		
AROCLOR 1016	UG/L						< 0.1		
AROCLOR 1221	UG/L						< 0.1		
AROCLOR 1232	UG/L						< 0.1		
AROCLOR 1248	UG/L						< 0.1		
AROCLOR 1260	UG/L						< 0.1		
TECHNICAL CHLORDANE	UG/L						< 0.05		
VOLATILE ORGANIC COMPOUNDS									
ALLYL CHLORIDE	UG/L		< 1		< 1		< 1		< 1
BROMOCHLOROMETHANE	UG/L		< 1		< 1		< 1		< 1
CHLOROPRENE	UG/L		< 1		< 1		< 1		< 1
1,2-DIBROMO-3-CHLOROPROPA	UG/L						< 0.01		
T-1,4-DICHLORO-2-BUTENE	UG/L		< 1		< 1		< 1		< 1
1,3-DICHLOROPROPANE	UG/L		< 0.3		< 0.3		< 0.3		< 0.3
2,2-DICHLOROPROPANE	UG/L		< 1		< 1		< 1		< 1
1,1-DICHLOROPROPENE	UG/L		< 1		< 1		< 1		< 1
ISOBUTYL ALCOHOL	UG/L		< 10		< 10		< 10		< 10
METHACRYLONITRILE	UG/L		< 10		< 10		< 10		< 10
METHYL IODIDE	UG/L		< 1		< 1		< 1		< 1
METHYLENE BROMIDE	UG/L		< 1		< 1		< 1		< 1
PROPIONITRILE	UG/L		< 10		< 10		< 10		< 10
1,1,1,2-TETRACHLOROETHANE	UG/L		< 1		< 1		< 1		< 1
1,2,3-TRICHLOROPROPANE	UG/L		< 1		< 1		< 1		< 1
METHYL METHACRYLATE	UG/L		< 10		< 10		< 10		< 10
ETHYL METHACRYLATE	UG/L		< 5		< 5		< 5		< 5
METHYLENE CHLORIDE	UG/L		< 1		< 1		< 1		< 1
CHLOROFORM	UG/L		< 1		< 1		< 1		< 1
1,1,1-TRICHLOROETHANE	UG/L		< 1		< 1		< 1		< 1
CARBON TETRACHLORIDE	UG/L		< 0.3		< 0.3		< 0.3		< 0.3
1,1-DICHLOROETHENE	UG/L		< 1		< 1		< 1		< 1
TRICHLOROETHYLENE	UG/L		< 1		< 1		< 1		< 1

FOOTNOTES : A-DUPLICATE SPIKE B-AVERAGE OF DUPS C-CALCULATED VALUE D-DUP & SPIKE E-AVERAGE

TABLE A.8

WATER QUALITY DATA - REUSED WATER

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	EFFI REUS(F) SJ22975 03/01/00	EFFL REUS SJ22978 03/01/00	EFFI REUS(F) SJ27257 06/01/00	EFFL REUS SJ27259 06/01/00	EFFI REUS(F) SJ30971 09/05/00	EFFL REUS SJ30974 09/05/00	EFFI REUS(F) SJ34291 12/01/00	EFFL REUS SJ34294 12/01/00
VOLATILE ORGANIC COMPOUNDS									
TETRACHLOROETHYLENE	UG/L		< 1		< 1		< 1		< 1
BROMODICHLOROMETHANE	UG/L		< 1		< 1		< 1		< 1
DIBROMOCHLOROMETHANE	UG/L		< 1		< 1		< 1		< 1
BROMOFORM	UG/L		< 1		< 1		< 1		< 1
CHLOROBENZENE	UG/L		< 1		< 1		< 1		< 1
VINYL CHLORIDE	UG/L		< 0.3		< 0.3		< 0.3		< 0.3
O-DICHLOROBENZENE	UG/L		< 1		< 1		< 1		< 1
M-DICHLOROBENZENE	UG/L		< 1		< 1		< 1		< 1
P-DICHLOROBENZENE	UG/L		< 1		< 1		< 1		< 1
1,1-DICHLOROETHANE	UG/L		< 1		< 1		< 1		< 1
1,1,2-TRICHLOROETHANE	UG/L		< 1		< 1		< 1		< 1
1,2-DICHLOROETHANE	UG/L		< 0.3		< 0.3		< 0.3		< 0.3
BENZENE	UG/L		< 0.5		< 0.5		< 0.5		< 0.5
TOLUENE	UG/L		< 1		< 1		< 1		< 1
ETHYL BENZENE	UG/L		< 1		< 1		< 1		< 1
VINYL ACETATE	UG/L		< 10		< 10		< 10		< 10
O-XYLENE	UG/L		< 1		< 1		< 1		< 1
TRANS-1,2-DICHLOROETHYLEN	UG/L		< 1		< 1		< 1		< 1
BROMOMETHANE	UG/L		< 1		< 1		< 1		< 1
CHLOROETHANE	UG/L		< 1		< 1		< 1		< 1
2-CHLOROETHYLVINYLETHER	UG/L		< 1		< 1		< 1		< 1
CHLOROMETHANE	UG/L		< 1		< 1		< 1		< 1
1,2-DICHLOROPROPANE	UG/L		< 1		< 1		< 1		< 1
CIS-1,3-DICHLOROPROPENE	UG/L		< 0.5		< 0.5		< 0.5		< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L		< 0.5		< 0.5		< 0.5		< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L		< 0.5		< 0.5		< 0.5		< 0.5
ACROLEIN	UG/L		< 10		< 10		< 10		< 10
ACRYLONITRILE	UG/L		< 10		< 10		< 10		< 10
ACETONITRILE	UG/L		< 20		< 20		< 20		< 20
FREON 12 (CCL2F2)	UG/L		< 1		< 1		< 1		< 1
FREON 11 (CCL3F)	UG/L		< 1		< 1		< 1		< 1
1,2-DIBROMOETHANE	UG/L						< 0.01		
ACETONE	UG/L		< 10		< 10		< 10		< 10
CIS-1,2-DICHLOROETHYLENE	UG/L		< 1		< 1		< 1		< 1
2-BUTANONE	UG/L		< 10		< 10		< 10		< 10
4-METHYL-2-PENTANONE	UG/L		< 10		< 10		< 10		< 10
STYRENE	UG/L		< 1		< 1		< 1		< 1
2,4,5-TRICHLOROPHENOL	UG/L		< 1		< 1		< 1		< 1
M+P-XYLENE	UG/L		< 1		< 1		< 1		< 1
CARBON DISULFIDE	UG/L CS2		< 1		< 1		< 1		< 1
2-HEXANONE	UG/L C6H12O		< 5		< 5		< 5		< 5

FOOTNOTES : A-DUPLICATE SPIKE B-AVERAGE OF DUPS C-CALCULATED VALUE D-DUP & SPIKE E-AVERAGE

TABLE A.8

WATER QUALITY DATA - REUSED WATER

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	EFFI REUS(F) SJ22975 03/01/00	EFFL REUS SJ22978 03/01/00	EFFI REUS(F) SJ27257 06/01/00	EFFL REUS SJ27259 06/01/00	EFFI REUS(F) SJ30971 09/05/00	EFFL REUS SJ30974 09/05/00	EFFI REUS(F) SJ34291 12/01/00	EFFL REUS SJ34294 12/01/00
ACID-BASE NEUTRAL EXTRACTABLE									
ACETOPHENONE	UG/L		< 1		< 1		< 1		< 1
2-ACETYLAMINOFLUORENE	UG/L		< 1		< 1		< 1		< 1
4-AMINOBIPHENYL	UG/L		< 1		< 1		< 1		< 1
BENZYL ALCOHOL	UG/L		< 1		< 1		< 1		< 1
P-CHLOROANILINE	UG/L		< 1		< 1		< 1		< 1
CHLOROBENZILATE	UG/L		< 1		< 1		< 1		< 1
DIALLATE	UG/L		< 1		< 1		< 1		< 1
DIBENZOFURAN	UG/L		< 1		< 1		< 1		< 1
2,6-DICHLOROPHENOL	UG/L		< 1		< 1		< 1		< 1
P(DIMETHYLAMINO)AZOBENZEN	UG/L		< 1		< 1		< 1		< 1
7,12-DIMETHYLBENZ(A)ANTHR	UG/L		< 10		< 10		< 10		< 10
3,3'-DIMETHYLBENZIDINE	UG/L		< 1		< 1		< 1		< 1
M-DINITROBENZENE	UG/L		< 1		< 1		< 1		< 1
DIPHENYLAMINE	UG/L		< 1		< 1		< 1		< 1
ETHYL METHANESULFONATE	UG/L		< 1		< 1		< 1		< 1
FAMPHUR	UG/L		< 1		< 1		< 1		< 1
HEXACHLOROPROPENE	UG/L		< 5		< 5		< 5		< 5
ISODRIN	UG/L		< 1		< 1		< 1		< 1
ISOSAFROLE	UG/L		< 1		< 1		< 1		< 1
KEPONE	UG/L		< 10		< 10		< 10		< 10
METHAPYRILENE	UG/L		< 20		< 20		< 20		< 20
3-METHYLCHOLANTHRENE	UG/L		< 1		< 1		< 1		< 1
METHYL METHANESULFONATE	UG/L		< 1		< 1		< 1		< 1
2-METHYLNAPHTHALENE	UG/L		< 1		< 1		< 1		< 1
1,4-NAPHTHOQUINONE	UG/L		< 1		< 1		< 1		< 1
1-NAPHTHYLAMINE	UG/L		< 1		< 1		< 1		< 1
2-NAPHTHYLAMINE	UG/L		< 1		< 1		< 1		< 1
O-NITROANILINE	UG/L		< 1		< 1		< 1		< 1
M-NITROANILINE	UG/L		< 1		< 1		< 1		< 1
P-NITROANILINE	UG/L		< 1		< 1		< 1		< 1
N-NITROSODI-N-BUTYLAMINE	UG/L		< 1		< 1		< 1		< 1
N-NITROSODIETHYLAMINE	UG/L		< 1		< 1		< 1		< 1
N-NITROSOMETHYLETHYLAMINE	UG/L		< 1		< 1		< 1		< 1
N-NITROSOPIPERIDINE	UG/L		< 1		< 1		< 1		< 1
N-NITROSOPYRROLIDINE	UG/L		< 1		< 1		< 1		< 1
5-NITRO-O-TOLUIDINE	UG/L		< 1		< 1		< 1		< 1
PENTACHLOROBENZENE	UG/L		< 1		< 1		< 1		< 1
PENTACHLORONITROBENZENE	UG/L		< 5		< 5		< 5		< 5
PHENACETIN	UG/L		< 1		< 1		< 1		< 1
P-PHENYLENEDIAMINE	UG/L		< 20		< 20		< 20		< 20
PRONAMIDE	UG/L		< 1		< 1		< 1		< 1

FOOTNOTES : A-DUPLICATE SPIKE B-AVERAGE OF DUPS C-CALCULATED VALUE D-DUP & SPIKE E-AVERAGE

TABLE A.8

WATER QUALITY DATA - REUSED WATER

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	EFFI REUS(F) SJ22975 03/01/00	EFFL REUS SJ22978 03/01/00	EFFI REUS(F) SJ27257 06/01/00	EFFL REUS SJ27259 06/01/00	EFFI REUS(F) SJ30971 09/05/00	EFFL REUS SJ30974 09/05/00	EFFI REUS(F) SJ34291 12/01/00	EFFL REUS SJ34294 12/01/00
ACID-BASE NEUTRAL EXTRACTABLE									
SAFROLE	UG/L		< 1		< 1		< 1		< 1
1,2,4,5-TETRACHLOROBENZEN	UG/L		< 1		< 1		< 1		< 1
2,3,4,6-TETRACHLOROPHENOL	UG/L		< 1		< 1		< 1		< 1
O-TOLUIDINE	UG/L		< 1		< 1		< 1		< 1
O,O,O-TRIETHYLPHOSPHOROTH	UG/L		< 1		< 1		< 1		< 1
SYM-TRINITROBENZENE	UG/L		< 5		< 5		< 5		< 5
ACENAPHTHENE	UG/L		< 1		< 1		< 1		< 1
ACENAPHTHYLENE	UG/L		< 1		< 1		< 1		< 1
ANTHRACENE	UG/L		< 1		< 1		< 1		< 1
BENZIDINE	UG/L		< 20		< 20		< 20		< 20
BENZO(A)ANTHRACENE	UG/L		< 1		< 1		< 1		< 1
BENZO(A)PYRENE	UG/L		< 0.2		< 0.2		< 0.2		< 0.2
BENZO(B)FLUORANTHENE	UG/L		< 1		< 1		< 1		< 1
BENZO(G.H.I.)PERYLENE	UG/L		< 1		< 1		< 1		< 1
BENZO(K)FLUORANTHENE	UG/L		< 1		< 1		< 1		< 1
BIS(2-CL-ETHOXY)METHANE	UG/L		< 1		< 1		< 1		< 1
BIS(2-CHLOROETHYL)ETHER	UG/L		< 1		< 1		< 1		< 1
BIS(2-CL-ISOPROPYL)ETHER	UG/L		< 1		< 1		< 1		< 1
DIETHYLHEXYL PHTHALATE	UG/L		< 1		< 1		< 1		< 1
4-BROMOPHENYL PHENYLETHER	UG/L		< 1		< 1		< 1		< 1
BUTYLBENZYL PHTHALATE	UG/L		< 1		< 1		< 1		< 1
2-CHLORONAPHTHALENE	UG/L		< 1		< 1		< 1		< 1
4-CHLOROPHENYLPHENYLETHER	UG/L		< 1		< 1		< 1		< 1
CHRYSENE	UG/L		< 1		< 1		< 1		< 1
DIBENZO(A,H)ANTHRACENE	UG/L		< 1		< 1		< 1		< 1
3,3'-DICHLOROBENZIDINE	UG/L		< 1		< 1		< 1		< 1
DIETHYL PHTHALATE	UG/L		< 1		< 1		< 1		< 1
DIMETHYL PHTHALATE	UG/L		< 1		< 1		< 1		< 1
DI-N-BUTYL PHTHALATE	UG/L		< 1		< 1		< 1		< 1
2,4-DINITROTOLUENE	UG/L		< 1		< 1		< 1		< 1
2,6-DINITROTOLUENE	UG/L		< 1		< 1		< 1		< 1
DI-N-OCTYL PHTHALATE	UG/L		< 1		< 1		< 1		< 1
FLUORANTHENE	UG/L		< 1		< 1		< 1		< 1
FLUORENE	UG/L		< 1		< 1		< 1		< 1
HEXACHLOROBENZENE	UG/L		< 1		< 1		< 1		< 1
HEXACHLOROBUTADIENE	UG/L		< 1		< 1		< 1		< 1
HEXACHLOROCYCLOPENTADIENE	UG/L		< 5		< 5		< 5		< 5
HEXACHLOROETHANE	UG/L		< 1		< 1		< 1		< 1
INDENO(1,2,3-C,D)PYRENE	UG/L		< 1		< 1		< 1		< 1
ISOPHORONE	UG/L		< 1		< 1		< 1		< 1
NAPHTHALENE	UG/L		< 1		< 1		< 1		< 1

FOOTNOTES : A-DUPLICATE SPIKE B-AVERAGE OF DUPS C-CALCULATED VALUE D-DUP & SPIKE E-AVERAGE

TABLE A.8

WATER QUALITY DATA - REUSED WATER

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	EFFI REUS(F) SJ22975 03/01/00	EFFL REUS SJ22978 03/01/00	EFFI REUS(F) SJ27257 06/01/00	EFFL REUS SJ27259 06/01/00	EFFI REUS(F) SJ30971 09/05/00	EFFL REUS SJ30974 09/05/00	EFFI REUS(F) SJ34291 12/01/00	EFFL REUS SJ34294 12/01/00
ACID-BASE NEUTRAL EXTRACTABLE									
NITROBENZENE	UG/L		< 1		< 1		< 1		< 1
N-NITROSODIMETHYLAMINE	UG/L		< 1		< 1		< 1		< 1
N-NITROSODI-N-PROPYLAMINE	UG/L		< 1		< 1		< 1		< 1
PHENANTHRENE	UG/L		< 1		< 1		< 1		< 1
PYRENE	UG/L		< 1		< 1		< 1		< 1
2-CHLOROPHENOL	UG/L		< 1		< 1		< 1		< 1
1,2,4-TRICHLOROBENZENE	UG/L		< 1		< 1		< 1		< 1
2,4-DICHLOROPHENOL	UG/L		< 1		< 1		< 1		< 1
2,4-DIMETHYLPHENOL	UG/L		< 1		< 1		< 1		< 1
2,4-DINITROPHENOL	UG/L		< 6		< 6		< 6		< 6
2-METHYL-4,6DINITROPHENOL	UG/L		< 1		< 1		< 1		< 1
2-NITROPHENOL	UG/L		< 1		< 1		< 1		< 1
4-NITROPHENOL	UG/L		< 1		< 1		< 1		< 1
4-CHLORO-3-METHYLPHENOL	UG/L		< 1		< 1		< 1		< 1
PENTACHLOROPHENOL	UG/L		< 1		< 1		< 1		< 1
PHENOL	UG/L		< 1		< 1		< 1		< 1
2,4,6-TRICHLOROPHENOL	UG/L		< 1		< 1		< 1		< 1
N-NITROSODIPHENYLAMINE	UG/L		< 1		< 1		< 1		< 1
O-CRESOL	UG/L		< 1		< 1		< 1		< 1
M+P CRESOL	UG/L		< 1		< 1		< 1		< 1

FOOTNOTES : A-DUPLICATE SPIKE B-AVERAGE OF DUPS C-CALCULATED VALUE D-DUP & SPIKE E-AVERAGE

TABLE A.9

WATER QUALITY DATA

QUALITY ASSURANCE/QUALITY CONTROL DATA

TABLE A.9

WATER QUALITY DATA - QUALITY ASSURANCE/QUALITY CONTROL DATA

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	BLNK TRIP SJ22983 03/01/00	BLNK TRIP SJ23068 03/02/00	BLNK TRIP SJ23082 03/02/00	BLNK TRIP SJ23154 03/03/00	BLNK TRIP SJ23157 03/03/00	BLNK TRIP SJ23195 03/06/00	BLNK TRIP SJ23197 03/06/00	BLNK TRIP SJ23231 03/07/00	BLNK TRIP SJ23244 03/07/00	BLNK TRIP SJ23286 03/08/00
VOLATILE ORGANIC COMPOUNDS											
BROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMO-3-CHLOROPROPA	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
T-1,4-DICHLORO-2-BUTENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
METHYL IODIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
METHYLENE BROMIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-TETRACHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-TRICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
METHYLENE CHLORIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROFORM	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CARBON TETRACHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-DICHLOROETHENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TRICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TETRACHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
BROMODICHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
BROMOFORM	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
VINYL CHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
O-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
P-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-DICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROETHANE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
BENZENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
ETHYL BENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
VINYL ACETATE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
O-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHYLEN	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
BROMOMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
ACRYLONITRILE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
FREON 11 (CCL3F)	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMOETHANE	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ACETONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10

FOOTNOTES :

TABLE A.9

WATER QUALITY DATA - QUALITY ASSURANCE/QUALITY CONTROL DATA

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	BLNK TRIP SJ22983 03/01/00	BLNK TRIP SJ23068 03/02/00	BLNK TRIP SJ23082 03/02/00	BLNK TRIP SJ23154 03/03/00	BLNK TRIP SJ23157 03/03/00	BLNK TRIP SJ23195 03/06/00	BLNK TRIP SJ23197 03/06/00	BLNK TRIP SJ23231 03/07/00	BLNK TRIP SJ23244 03/07/00	BLNK TRIP SJ23286 03/08/00
VOLATILE ORGANIC COMPOUNDS											
CIS-1,2-DICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-BUTANONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-METHYL-2-PENTANONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
STYRENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
M+P-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CARBON DISULFIDE	UG/L CS2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-HEXANONE	UG/L C6H12O	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5

TABLE A.9

WATER QUALITY DATA - QUALITY ASSURANCE/QUALITY CONTROL DATA

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	BLNK TRIP SJ23290 03/08/00	BLNK TRIP SJ23425 03/10/00	BLNK TRIP SJ23428 03/10/00	BLNK TRIP SJ23504 03/13/00	BLNK TRIP SJ23513 03/13/00	BLNK TRIP SJ23565 03/14/00	BLNK TRIP SJ23599 03/14/00	BLNK TRIP SJ27261 06/01/00	BLNK TRIP SJ27289 06/02/00	BLNK TRIP SJ27292 06/02/00
VOLATILE ORGANIC COMPOUNDS											
ALLYL CHLORIDE	UG/L								< 1		
BROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROPRENE	UG/L								< 1		
1,2-DIBROMO-3-CHLOROPROPA	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
T-1,4-DICHLORO-2-BUTENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-DICHLOROPROPANE	UG/L								< 0.3		
2,2-DICHLOROPROPANE	UG/L								< 1		
1,1-DICHLOROPROPENE	UG/L								< 1		
ISOBUTYL ALCOHOL	UG/L								< 10		
METHACRYLONITRILE	UG/L								< 10		
METHYL IODIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
METHYLENE BROMIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
PROPIONITRILE	UG/L								< 10		
1,1,1,2-TETRACHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-TRICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
METHYL METHACRYLATE	UG/L								< 10		
ETHYL METHACRYLATE	UG/L								< 5		
METHYLENE CHLORIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROFORM	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CARBON TETRACHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-DICHLOROETHENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TRICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TETRACHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
BROMODICHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
BROMOFORM	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
VINYL CHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
O-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
M-DICHLOROBENZENE	UG/L								< 1		
P-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-DICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROETHANE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
BENZENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
ETHYL BENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
VINYL ACETATE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
O-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHYLEN	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1

FOOTNOTES :

TABLE A.9

WATER QUALITY DATA - QUALITY ASSURANCE/QUALITY CONTROL DATA

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	BLNK TRIP SJ23290 03/08/00	BLNK TRIP SJ23425 03/10/00	BLNK TRIP SJ23428 03/10/00	BLNK TRIP SJ23504 03/13/00	BLNK TRIP SJ23513 03/13/00	BLNK TRIP SJ23565 03/14/00	BLNK TRIP SJ23599 03/14/00	BLNK TRIP SJ27261 06/01/00	BLNK TRIP SJ27289 06/02/00	BLNK TRIP SJ27292 06/02/00
VOLATILE ORGANIC COMPOUNDS											
BROMOMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-CHLOROETHYLVINYLETHER	UG/L								< 1		
CHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
ACROLEIN	UG/L								< 10		
ACRYLONITRILE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
ACETONITRILE	UG/L								< 20		
FREON 12 (CCL2F2)	UG/L								< 1		
FREON 11 (CCL3F)	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMOETHANE	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ACETONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
CIS-1,2-DICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-BUTANONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-METHYL-2-PENTANONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
STYRENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
M+P-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CARBON DISULFIDE	UG/L CS2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-HEXANONE	UG/L C6H12O	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5

TABLE A.9

WATER QUALITY DATA - QUALITY ASSURANCE/QUALITY CONTROL DATA

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	BLNK TRIP SJ27338 06/05/00	BLNK TRIP SJ27341 06/05/00	BLNK TRIP SJ27376 06/06/00	BLNK TRIP SJ27380 06/06/00	BLNK TRIP SJ27467 06/07/00	BLNK TRIP SJ27470 06/07/00	BLNK TRIP SJ27538 06/08/00	BLNK TRIP SJ27540 06/08/00	BLNK TRIP SJ27568 06/09/00	BLNK TRIP SJ27577 06/09/00
VOLATILE ORGANIC COMPOUNDS											
BROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMO-3-CHLOROPROPA	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
T-1,4-DICHLORO-2-BUTENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
METHYL IODIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
METHYLENE BROMIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-TETRACHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-TRICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
METHYLENE CHLORIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROFORM	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CARBON TETRACHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-DICHLOROETHENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TRICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TETRACHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
BROMODICHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
BROMOFORM	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
VINYL CHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
O-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
P-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-DICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROETHANE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
BENZENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
ETHYL BENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
VINYL ACETATE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
O-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHYLEN	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
BROMOMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
ACRYLONITRILE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
FREON 11 (CCL3F)	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMOETHANE	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ACETONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10

FOOTNOTES :

TABLE A.9

WATER QUALITY DATA - QUALITY ASSURANCE/QUALITY CONTROL DATA

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	BLNK TRIP SJ27338 06/05/00	BLNK TRIP SJ27341 06/05/00	BLNK TRIP SJ27376 06/06/00	BLNK TRIP SJ27380 06/06/00	BLNK TRIP SJ27467 06/07/00	BLNK TRIP SJ27470 06/07/00	BLNK TRIP SJ27538 06/08/00	BLNK TRIP SJ27540 06/08/00	BLNK TRIP SJ27568 06/09/00	BLNK TRIP SJ27577 06/09/00
VOLATILE ORGANIC COMPOUNDS											
CIS-1,2-DICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-BUTANONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-METHYL-2-PENTANONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
STYRENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
M+P-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CARBON DISULFIDE	UG/L CS2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-HEXANONE	UG/L C6H12O	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5

TABLE A.9

WATER QUALITY DATA - QUALITY ASSURANCE/QUALITY CONTROL DATA

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	BLNK TRIP SJ27639 06/12/00	BLNK TRIP SJ27644 06/12/00	BLNK TRIP SJ27669 06/13/00	BLNK TRIP SJ27671 06/13/00	BLNK TRIP SJ30881 09/01/00	BLNK TRIP SJ30889 09/01/00	BLNK TRIP SJ30935 09/05/00	BLNK TRIP SJ30976 09/05/00	BLNK TRIP SJ31023 09/06/00	BLNK TRIP SJ31026 09/06/00
VOLATILE ORGANIC COMPOUNDS											
ALLYL CHLORIDE	UG/L					< 1			< 1	< 1	
BROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROPRENE	UG/L					< 1			< 1	< 1	
1,2-DIBROMO-3-CHLOROPROPA	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
T-1,4-DICHLORO-2-BUTENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-DICHLOROPROPANE	UG/L					< 0.3			< 0.3	< 0.3	
2,2-DICHLOROPROPANE	UG/L					< 1			< 1	< 1	
1,1-DICHLOROPROPENE	UG/L					< 1			< 1	< 1	
ISOBUTYL ALCOHOL	UG/L					< 10			< 10	< 10	
METHACRYLONITRILE	UG/L					< 10			< 10	< 10	
METHYL IODIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
METHYLENE BROMIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
PROPIONITRILE	UG/L					< 10			< 10	< 10	
1,1,1,2-TETRACHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-TRICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
METHYL METHACRYLATE	UG/L					< 10			< 10	< 10	
ETHYL METHACRYLATE	UG/L					< 5			< 5	< 5	
METHYLENE CHLORIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROFORM	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CARBON TETRACHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-DICHLOROETHENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TRICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TETRACHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
BROMODICHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
BROMOFORM	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
VINYL CHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
O-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
M-DICHLOROBENZENE	UG/L					< 1			< 1	< 1	
P-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-DICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROETHANE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
BENZENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
ETHYL BENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
VINYL ACETATE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
O-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHYLEN	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1

FOOTNOTES :

TABLE A.9

WATER QUALITY DATA - QUALITY ASSURANCE/QUALITY CONTROL DATA

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS		BLNK TRIP SJ27639 06/12/00	BLNK TRIP SJ27644 06/12/00	BLNK TRIP SJ27669 06/13/00	BLNK TRIP SJ27671 06/13/00	BLNK TRIP SJ30881 09/01/00	BLNK TRIP SJ30889 09/01/00	BLNK TRIP SJ30935 09/05/00	BLNK TRIP SJ30976 09/05/00	BLNK TRIP SJ31023 09/06/00	BLNK TRIP SJ31026 09/06/00
VOLATILE ORGANIC COMPOUNDS												
BROMOMETHANE	UG/L		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROETHANE	UG/L		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-CHLOROETHYLVINYLETHER	UG/L						< 1			< 1	< 1	
CHLOROMETHANE	UG/L		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROPROPANE	UG/L		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CIS-1,3-DICHLOROPROPENE	UG/L		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
ACROLEIN	UG/L						< 10			< 10	< 10	
ACRYLONITRILE	UG/L		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
ACETONITRILE	UG/L						< 20			< 20	< 20	
FREON 12 (CCL2F2)	UG/L						< 1			< 1	< 1	
FREON 11 (CCL3F)	UG/L		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMOETHANE	UG/L		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ACETONE	UG/L		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
CIS-1,2-DICHLOROETHYLENE	UG/L		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-BUTANONE	UG/L		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-METHYL-2-PENTANONE	UG/L		< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
STYRENE	UG/L		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
M+P-XYLENE	UG/L		< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CARBON DISULFIDE	UG/L	CS2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-HEXANONE	UG/L	C6H12O	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5

TABLE A.9

WATER QUALITY DATA - QUALITY ASSURANCE/QUALITY CONTROL DATA

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	BLNK TRIP SJ31048 09/07/00	BLNK TRIP SJ31065 09/07/00	BLNK TRIP SJ31068 09/07/00	BLNK TRIP SJ31112 09/08/00	BLNK TRIP SJ31139 09/08/00	BLNK TRIP SJ31171 09/11/00	BLNK TRIP SJ31180 09/11/00	BLNK TRIP SJ31231 09/12/00	BLNK TRIP SJ31234 09/12/00	BLNK TRIP SJ31271 09/13/00
VOLATILE ORGANIC COMPOUNDS											
ALLYL CHLORIDE	UG/L		< 1		< 1	< 1	< 1			< 1	
BROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROPRENE	UG/L		< 1		< 1	< 1	< 1			< 1	
1,2-DIBROMO-3-CHLOROPROPA	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
T-1,4-DICHLORO-2-BUTENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-DICHLOROPROPANE	UG/L		< 0.3		< 0.3	< 0.3	< 0.3			< 0.3	
2,2-DICHLOROPROPANE	UG/L		< 1		< 1	< 1	< 1			< 1	
1,1-DICHLOROPROPENE	UG/L		< 1		< 1	< 1	< 1			< 1	
ISOBUTYL ALCOHOL	UG/L		< 10		< 10	< 10	< 10			< 10	
METHACRYLONITRILE	UG/L		< 10		< 10	< 10	< 10			< 10	
METHYL IODIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
METHYLENE BROMIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
PROPIONITRILE	UG/L		< 10		< 10	< 10	< 10			< 10	
1,1,1,2-TETRACHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-TRICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
METHYL METHACRYLATE	UG/L		< 10		< 10	< 10	< 10			< 10	
ETHYL METHACRYLATE	UG/L		< 5		< 5	< 5	< 5			< 5	
METHYLENE CHLORIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROFORM	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CARBON TETRACHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-DICHLOROETHENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TRICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TETRACHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
BROMODICHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
BROMOFORM	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
VINYL CHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
O-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
M-DICHLOROBENZENE	UG/L		< 1		< 1	< 1	< 1			< 1	
P-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-DICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROETHANE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
BENZENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
ETHYL BENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
VINYL ACETATE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
O-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHYLEN	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1

FOOTNOTES :

TABLE A.9

WATER QUALITY DATA - QUALITY ASSURANCE/QUALITY CONTROL DATA

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	BLNK TRIP SJ31048 09/07/00	BLNK TRIP SJ31065 09/07/00	BLNK TRIP SJ31068 09/07/00	BLNK TRIP SJ31112 09/08/00	BLNK TRIP SJ31139 09/08/00	BLNK TRIP SJ31171 09/11/00	BLNK TRIP SJ31180 09/11/00	BLNK TRIP SJ31231 09/12/00	BLNK TRIP SJ31234 09/12/00	BLNK TRIP SJ31271 09/13/00
VOLATILE ORGANIC COMPOUNDS											
BROMOMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-CHLOROETHYLVINYLETHER	UG/L		< 1		< 1	< 1	< 1			< 1	
CHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
ACROLEIN	UG/L		< 10		< 10	< 10	< 10			< 10	
ACRYLONITRILE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
ACETONITRILE	UG/L		< 20		< 20	< 20	< 20			< 20	
FREON 12 (CCL2F2)	UG/L		< 1		< 1	< 1	< 1			< 1	
FREON 11 (CCL3F)	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMOETHANE	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ACETONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
CIS-1,2-DICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-BUTANONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-METHYL-2-PENTANONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
STYRENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
M+P-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CARBON DISULFIDE	UG/L CS2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-HEXANONE	UG/L C6H12O	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5

TABLE A.9

WATER QUALITY DATA - QUALITY ASSURANCE/QUALITY CONTROL DATA

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	BLNK TRIP SJ31299 09/13/00	BLNK TRIP SJ31352 09/14/00	BLNK TRIP SJ31359 09/14/00	BLNK TRIP SJ31390 09/15/00	BLNK TRIP SJ31392 09/15/00	BLNK TRIP SJ34295 12/01/00	BLNK TRIP SJ34352 12/04/00	BLNK TRIP SJ34356 12/04/00	BLNK TRIP SJ34401 12/05/00	BLNK TRIP SJ34403 12/05/00
VOLATILE ORGANIC COMPOUNDS											
ALLYL CHLORIDE	UG/L						< 1				
BROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROPRENE	UG/L						< 1				
1,2-DIBROMO-3-CHLOROPROPA	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
T-1,4-DICHLORO-2-BUTENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,3-DICHLOROPROPANE	UG/L						< 0.3				
2,2-DICHLOROPROPANE	UG/L						< 1				
1,1-DICHLOROPROPENE	UG/L						< 1				
ISOBUTYL ALCOHOL	UG/L						< 10				
METHACRYLONITRILE	UG/L						< 10				
METHYL IODIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
METHYLENE BROMIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
PROPIONITRILE	UG/L						< 10				
1,1,1,2-TETRACHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-TRICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
METHYL METHACRYLATE	UG/L						< 10				
ETHYL METHACRYLATE	UG/L						< 5				
METHYLENE CHLORIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROFORM	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CARBON TETRACHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-DICHLOROETHENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TRICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TETRACHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
BROMODICHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
BROMOFORM	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
VINYL CHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
O-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
M-DICHLOROBENZENE	UG/L						< 1				
P-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-DICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROETHANE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
BENZENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
ETHYL BENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
VINYL ACETATE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
O-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHYLEN	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1

FOOTNOTES :

TABLE A.9

WATER QUALITY DATA - QUALITY ASSURANCE/QUALITY CONTROL DATA

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	BLNK TRIP SJ31299 09/13/00	BLNK TRIP SJ31352 09/14/00	BLNK TRIP SJ31359 09/14/00	BLNK TRIP SJ31390 09/15/00	BLNK TRIP SJ31392 09/15/00	BLNK TRIP SJ34295 12/01/00	BLNK TRIP SJ34352 12/04/00	BLNK TRIP SJ34356 12/04/00	BLNK TRIP SJ34401 12/05/00	BLNK TRIP SJ34403 12/05/00
VOLATILE ORGANIC COMPOUNDS											
BROMOMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-CHLOROETHYLVINYLETHER	UG/L						< 1				
CHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
ACROLEIN	UG/L						< 10				
ACRYLONITRILE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
ACETONITRILE	UG/L						< 20				
FREON 12 (CCL2F2)	UG/L						< 1				
FREON 11 (CCL3F)	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMOETHANE	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ACETONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
CIS-1,2-DICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-BUTANONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-METHYL-2-PENTANONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
STYRENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
M+P-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CARBON DISULFIDE	UG/L CS2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-HEXANONE	UG/L C6H12O	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5

TABLE A.9

WATER QUALITY DATA - QUALITY ASSURANCE/QUALITY CONTROL DATA

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	BLNK TRIP SJ34469 12/06/00	BLNK TRIP SJ34472 12/06/00	BLNK TRIP SJ34549 12/07/00	BLNK TRIP SJ34551 12/07/00	BLNK TRIP SJ34604 12/08/00	BLNK TRIP SJ34614 12/08/00	BLNK TRIP SJ34631 12/11/00	BLNK TRIP SJ34634 12/11/00	BLNK TRIP SJ34972 12/19/00	BLNK TRIP SJ34986 12/19/00
VOLATILE ORGANIC COMPOUNDS											
BROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMO-3-CHLOROPROPA	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
T-1,4-DICHLORO-2-BUTENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
METHYL IODIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
METHYLENE BROMIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1,2-TETRACHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2,3-TRICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
METHYLENE CHLORIDE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROFORM	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,1-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CARBON TETRACHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,1-DICHLOROETHENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TRICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TETRACHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
BROMODICHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
BROMOFORM	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
VINYL CHLORIDE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
O-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
P-DICHLOROBENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1-DICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,1,2-TRICHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROETHANE	UG/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
BENZENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
ETHYL BENZENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
VINYL ACETATE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
O-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
TRANS-1,2-DICHLOROETHYLEN	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
BROMOMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CHLOROMETHANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROPROPANE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
ACRYLONITRILE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
FREON 11 (CCL3F)	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMOETHANE	UG/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ACETONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10

FOOTNOTES :

TABLE A.9

WATER QUALITY DATA - QUALITY ASSURANCE/QUALITY CONTROL DATA

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	BLNK TRIP SJ34469 12/06/00	BLNK TRIP SJ34472 12/06/00	BLNK TRIP SJ34549 12/07/00	BLNK TRIP SJ34551 12/07/00	BLNK TRIP SJ34604 12/08/00	BLNK TRIP SJ34614 12/08/00	BLNK TRIP SJ34631 12/11/00	BLNK TRIP SJ34634 12/11/00	BLNK TRIP SJ34972 12/19/00	BLNK TRIP SJ34986 12/19/00
VOLATILE ORGANIC COMPOUNDS											
CIS-1,2-DICHLOROETHYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-BUTANONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-METHYL-2-PENTANONE	UG/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
STYRENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
M+P-XYLENE	UG/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
CARBON DISULFIDE	UG/L CS2	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
2-HEXANONE	UG/L C6H12O	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5

TABLE A.9

WATER QUALITY DATA - QUALITY ASSURANCE/QUALITY CONTROL DATA

PUENTE HILLS LANDFILL

CONSTITUENT/WELL NO.	UNITS	BLNK TRIP SJ35151 12/22/00	BLNK TRIP SJ35158 12/22/00
VOLATILE ORGANIC COMPOUNDS			
BROMOCHLOROMETHANE	UG/L	< 1	< 1
1,2-DIBROMO-3-CHLOROPROPA	UG/L	< 0.01	< 0.01
T-1,4-DICHLORO-2-BUTENE	UG/L	< 1	< 1
METHYL IODIDE	UG/L	< 1	< 1
METHYLENE BROMIDE	UG/L	< 1	< 1
1,1,1,2-TETRACHLOROETHANE	UG/L	< 1	< 1
1,2,3-TRICHLOROPROPANE	UG/L	< 1	< 1
METHYLENE CHLORIDE	UG/L	< 1	< 1
CHLOROFORM	UG/L	< 1	< 1
1,1,1-TRICHLOROETHANE	UG/L	< 1	< 1
CARBON TETRACHLORIDE	UG/L	< 0.3	< 0.3
1,1-DICHLOROETHENE	UG/L	< 1	< 1
TRICHLOROETHYLENE	UG/L	< 1	< 1
TETRACHLOROETHYLENE	UG/L	< 1	< 1
BROMODICHLOROMETHANE	UG/L	< 1	< 1
DIBROMOCHLOROMETHANE	UG/L	< 1	< 1
BROMOFORM	UG/L	< 1	< 1
CHLOROBENZENE	UG/L	< 1	< 1
VINYL CHLORIDE	UG/L	< 0.3	< 0.3
O-DICHLOROBENZENE	UG/L	< 1	< 1
P-DICHLOROBENZENE	UG/L	< 1	< 1
1,1-DICHLOROETHANE	UG/L	< 1	< 1
1,1,2-TRICHLOROETHANE	UG/L	< 1	< 1
1,2-DICHLOROETHANE	UG/L	< 0.3	< 0.3
BENZENE	UG/L	< 0.5	< 0.5
TOLUENE	UG/L	< 1	< 1
ETHYL BENZENE	UG/L	< 1	< 1
VINYL ACETATE	UG/L	< 10	< 10
O-XYLENE	UG/L	< 1	< 1
TRANS-1,2-DICHLOROETHYLEN	UG/L	< 1	< 1
BROMOMETHANE	UG/L	< 1	< 1
CHLOROETHANE	UG/L	< 1	< 1
CHLOROMETHANE	UG/L	< 1	< 1
1,2-DICHLOROPROPANE	UG/L	< 1	< 1
CIS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5
TRANS-1,3-DICHLOROPROPENE	UG/L	< 0.5	< 0.5
1,1,2,2-TETRACHLOROETHANE	UG/L	< 0.5	< 0.5
ACRYLONITRILE	UG/L	< 10	< 10
FREON 11 (CCL3F)	UG/L	< 1	< 1
1,2-DIBROMOETHANE	UG/L	< 0.01	< 0.01
ACETONE	UG/L	< 10	< 10

FOOTNOTES :

TABLE A.9

WATER QUALITY DATA - QUALITY ASSURANCE/QUALITY CONTROL DATA

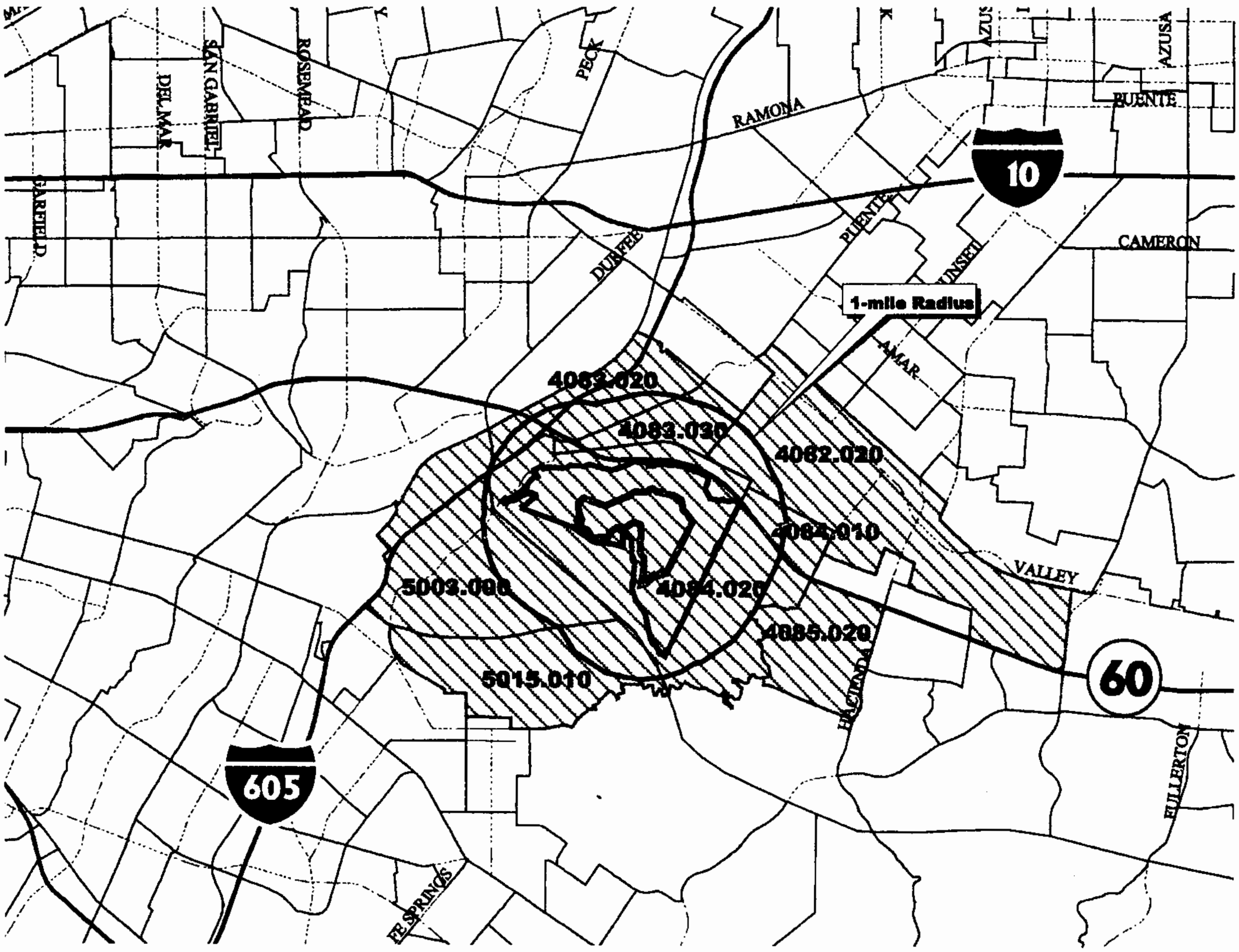
PUENTE HILLS LANDFILL

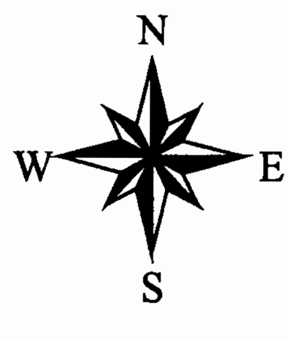
CONSTITUENT/WELL NO.	UNITS	BLNK TRIP SJ35151 12/22/00	BLNK TRIP SJ35158 12/22/00
VOLATILE ORGANIC COMPOUNDS			
CIS-1,2-DICHLOROETHYLENE	UG/L	< 1	< 1
2-BUTANONE	UG/L	< 10	< 10
4-METHYL-2-PENTANONE	UG/L	< 10	< 10
STYRENE	UG/L	< 1	< 1
M+P-XYLENE	UG/L	< 1	< 1
CARBON DISULFIDE	UG/L CS2	< 1	< 1
2-HEXANONE	UG/L C6H12O	< 5	< 5

APPENDIX F

LAND USE BACKGROUND INFORMATION

Puente Hills Landfill Operations Boundary Area
Census Tracts Analysis: Tracts That Intercept the 1-mile Radius





Puente Hills Landfill Property Boundary
Limit of Operations
Census Tracts: Intercept 1-mile Radius

0 1 2 3 4 5 Miles

Los Angeles County

Area	Race Population						Total Population
	White	Black	Hispanic	Asian or Pacific Islander	American Indian, Eskimo or Aleut	Other	
LA County	3,618,850	934,776	3,351,242	907,810	29,159	21,327	8,863,164
Percentage	**40.83**	**10.55**	**37.81**	**10.24**	**0.33**	**0.24**	**100.00**

Source: 1990 U.S. Census

San Gabriel Valley

Area	Race Population						Total Population
	White	Black	Hispanic	Asian or Pacific Islander	American Indian, Eskimo or Aleut	Other	
San Gabriel Valley	516,173	104,875	750,306	329,718	3,831	3,947	1,708,850
Percentage	**30.21**	**6.14**	**43.91**	**19.29**	**0.22**	**0.23**	**100.00**

Source: San Gabriel Valley Living Almanac, 2000

PHLF 1-Mile Radius

Tract	Race Population						Total Population
	White	Black	Hispanic	Asian or Pacific Islander	American Indian, Eskimo or Aleut	Other	
4082.02	539	59	1,584	126	20	6	2,334
4083.02	892	19	2,121	484	0	22	3,538
4083.03	1,101	8	2,261	542	0	0	3,912
4084.01	1,486	76	1,699	689	54	11	4,015
4084.02	3,008	66	1,486	782	20	0	5,362
4085.02	2,818	157	2,747	1,641	35	0	7,398
5003.00	1,260	52	980	706	0	2	3,000
5015.01	1,552	24	472	44	8	14	2,114
Sum	12,656	461	13,350	5,014	137	55	31,673
Percentage	**39.96**	**1.46**	**42.15**	**15.83**	**0.43**	**0.17**	**100.00**

Source: 1990 U.S. Census

Los Angeles County

Area	Median Household Income ($)						Totals
	<15,000	15,000 - 34,999	35,000 - 49,999	50,000 - 74,999	75,000 - 99,999	>100,000	
LA County	608,428	889,976	518,283	519,060	223,273	235,323	2,994,343
Percentage	**20.32**	**29.72**	**17.31**	**17.33**	**7.46**	**7.86**	**100.00**

Source: 1990 U.S. Census

San Gabriel Valley

Area	Median Household Income ($)						Totals
	<15,000	15,000 - 34,999	35,000 - 49,999	50,000 - 74,999	75,000 - 99,999	>100,000	
San Gabriel Valley	74,505	127,353	85,354	112,313	57,136	67,549	524,210
Percentage	**14.21**	**24.29**	**16.28**	**21.43**	**10.90**	**12.89**	**100.00**

Source: San Gabriel Valley Living Almanac, 2000

PHLF 1-Mile Radius

Tract	Median Household Income ($)						Totals
	<15,000	15,000 - 34,999	35,000 - 49,999	50,000 - 74,999	75,000 - 99,999	>100,000	
4082.02	150	126	115	108	17	24	540
4083.02	105	208	155	308	115	69	960
4083.03	80	188	244	385	122	92	1111
4084.01	235	357	198	320	94	61	1265
4084.02	193	246	336	435	281	277	1768
4085.02	283	542	319	561	296	212	2213
5003.00	62	160	131	286	183	205	1027
5015.01	43	191	163	166	112	179	854
Sum	1151	2018	1661	2569	1220	1119	9738
Percentage	**11.82**	**20.72**	**17.06**	**26.38**	**12.53**	**11.49**	**100.00**

Source: 1990 U.S. Census

APPENDIX G

EMERGENCY RESPONSE PLAN

EMERGENCY ACTION / FIRE PREVENTION PLAN FOR LANDFILL OPERATIONS

PROGRAM OVERVIEW

Plans for prompt response to emergencies caused by earthquake, fire, hazardous material releases, flooding, terrorist bomb threats, etc., are required to minimize loss of life and property. Poor planning can result in panic and possible actions which can worsen an emergency. Therefore, a prepared plan is necessary to ensure that emergency actions are taken that reduce the risk of injury, loss of life, and loss of property. This plan is also developed to meet the requirements of California Code of Regulations, Title 8, Sections 3320 and 3321 (*Emergency Action Plan* and *Fire Prevention Plan*, respectively).

APPLICABILITY

The following plan applies to all site employees including Landfill Engineering, Operations, Maintenance, and Administrative personnel. Energy Recovery Power Plant personnel are covered in their specific site plan.

DEFINITION OF TERMS

ASSEMBLY AREA — An area designated for meeting during an evacuation that is safe from the immediate dangers of an emergency situation.

CRITICAL OPERATIONS — An operation whose temporary suspension could create a hazard greater than the emergency at hand.

EVACUATION — A withdrawal or emptying from one area to another.

EMERGENCY SPILL RESPONSE PERSONNEL — Personnel which have received specific training in responding to release of chemicals/hazardous materials in a work area other than their own, may require up to 24 hours of training in compliance with 29 CFR 1910.120.

INCIPIENT STAGE FIRE — A fire in the initial or beginning stage and which can be controlled or extinguished by portable fire extinguishers.

RESPONSIBILITIES

LANDFILL SUPERINTENDENT

- Maintain site-specific written emergency action and fire prevention plans for each site.
- Determines what actions are necessary during an emergency.
- Accounts for evacuated personnel.
- Determines when conditions are safe for workers to return to their jobs.
- Meets with response agencies upon arrival.

- Completes an accident/incident report.
- Conducts periodic evacuation drills.
- Inspects and maintains fire extinguishers and sprinklers.

ENVIRONMENTAL HEALTH AND SAFETY STAFF

- Provides training for emergency action, fire prevention (use of portable fire extinguishers), and CPR/first-aid.
- Maintains training records.

EMERGENCY ACTION PLAN

The site specific *Emergency Action Plan* is attached. Once an emergency situation is recognized, it is reported to the superintendent (plant superintendent or site supervisor), or their designee.

The superintendent or designee will determine the nature of the emergency and take appropriate actions. These actions may include the following:

- Evacuating a building, or the site or facility.
- Dispatching qualified CPR/first-aid trained personnel to injured persons.
- Dispatching qualified persons trained in responding to incipient stage fires.
- Dispatching emergency spill response personnel.
- Contacting emergency response agencies by calling 911.
- Contacting management.

EVACUATION

Specific evacuation procedures have been developed by each landfill, and are detailed in the site or plant operating procedures. In general, the following steps will be followed by the superintendent or designee once a need for an evacuation is determined.

- Notify all on-site personnel that an evacuation is required via radio, by sounding an alarm, communicating over the Public Address (PA) system, or walking through the site or facility and verbally indicating in a manner that can be heard over noise of operations (and seen, for hearing impaired persons).
- Direct people to exit through the nearest exit, if safe, to a pre-designated evacuation assembly area, and remind them NOT to use any elevators, if applicable (a specific site or facility map is posted in strategic locations and is described in the site specific *Emergency Evacuation Plan*).
- Account for all site or facility personnel (remembering to account for any on-site contractors and visitors).
- Meet with Emergency Response Agency to communicate information about emergency.
- Direct people when safe to return to their respective jobs.

- Securing of the site or facility may include turning off all heavy equipment, notifying the weigh master to halt incoming trucks, and instructing on-site trucks to pull to the side of the road and turn off engines.

INJURY OR DEATH

The superintendent will be immediately notified of any injuries or deaths. In case of injury, the superintendent will do one of the following:

- Dispatch a qualified CPR/first-aid trained person to the site of the injured party.
- Direct the injured party to be taken to a nearby medical provider (only if injured party is conscious and can move under their own power).
- Call 911 to have ambulance dispatched to the site (always call 911 if injured party is unconscious or cannot move under their own power).
- Immediately notify upper management and Environmental Health and Safety staff of any major injury of death.

Do not move person who cannot move under their own power.

In the case of injury or death, the superintendent will notify management and the Districts Safety Administrator immediately.

Supervisors will also complete a **Supervisor's Report of Industrial Injury** ***within 24 hours.***

INCIPIENT STAGE FIRES

The superintendent or designee will be immediately notified if the reporting individual is not trained to fight incipient fires, is trained to fight incipient fires, but is unable to suppress the fire, or if the fire is more than an incipient fire. Once the superintendent is notified and determines that the fire cannot be controlled by trained on-site personnel, they will call 911 and notify site or facility personnel that an evacuation is necessary (refer to site specific *Emergency Evacuation Plan*).

For fire prevention measures, refer to the site specific *Fire Prevention Plan*.

MEETING EMERGENCY RESPONSE AGENCIES

If Emergency Response Agencies are called, the superintendent is responsible for meeting with the responding agency to provide information regarding:

- The nature and location of the emergency.
- Numbers of people involved (e.g., injured).
- On-site assistance available.

FIRE PREVENTION PLAN

A written plan has been developed by each site specific landfill describing the following:

- The site's potential fire hazards and possible ignition sources.
- Identification of persons responsible for maintaining fire prevention and control equipment.
- Identification of persons responsible for controlling the accumulation of combustible and flammable materials (including housekeeping).

The Districts' landfill staff has skills and equipment that can be used to combat incipient fires and augment trained fire fighters during general firefighting efforts. Employees and equipment may be assigned to a strike team or a task force during a firefighting emergency response. If an incipient fire exceeds Districts' capabilities, Districts' resources can be integrated into efforts by County and local fire fighting personnel and equipment using the Incident Command System.

RECORDKEEPING

TRAINING

Management will maintain all training records, via mainframe *Training Tracking System* or Districts' *Intranet System*.

INSPECTION AND MAINTENANCE

Inspection and maintenance records of instrumentation such as the plant radio, PA system, and alarms will be maintained by the Electrical and Instrumentation group.

Operations and Equipment Service personnel will periodically inspect fire extinguishers and fire fighting equipment. Qualified contractors will certify fire extinguishers annually.

EMERGENCY ACTION / FIRE PREVENTION PLAN FOR PUENTE HILLS LANDFILL

County Sanitation Districts of Los Angeles County

I. SUPERINTENDENT

Bob Hardwick	Refuse Site Superintendent	(562) 699-7411, Ext. 6030 (562) 877-8300 — Pager

II. EMERGENCY TYPES ANTICIPATED

The purpose of this Emergency Action/Fire Prevention Plan is to minimize injuries, loss of life or loss of property during emergencies. Some anticipated emergencies identified for this site include:

- Earthquake
- Chemical Spills
- Trash Fire
- Brush Fire
- Methane Explosion
- Landfill Gas Leak

The person identifying the emergency shall contact the Superintendent.

III. EVACUATION PROCEDURES

When an evacuation is necessary (e.g., when directed by the Superintendent), the following procedures shall be followed:

1. Notification for evacuation will be made by PA system or by radio communication.
2. Evacuation shall be by the nearest safe exit (site map posted at office).
3. Personnel shall assemble in the designated assembly area (see Attachment A, Section 3, Evacuation Assembly Areas in the *Emergency Evacuation Plan for Puente Hills Landfill*).
4. Accounting for personnel shall be conducted by Personnel in Charge (see Attachment A, Section 2, Personnel in Charge in the *Emergency Evacuation Plan for Puente Hills Landfill*).

IV. CRITICAL OPERATIONS

The following critical operations must be maintained during an emergency:

- None

Precautions required while maintaining operations:

- Not Applicable

V. MEDICAL/FIRST AID

Location of nearest emergency medical provider:

At Work Medical Group
12291 E. Washington Boulevard, #300
Whittier, CA 90606
(562) 945-6690

Location of first aid supplies:

- Office Cabinet
- All Vehicles

Persons qualified to perform CPR/First Aid: See Attachment B, Employee Training Summary

Do not move persons who are unconscious or cannot move under their own power. For emergency response, dial 911.

VI. POTENTIAL FIRE HAZARDS

- Brush
- Paper Refuse
- Trash
- Landfill Gases
- Methane
- Hazardous/Flammable Materials

Ignition sources might include the following:

- Hot Engines
- Welding
- Cigarettes/Lighters

VII. FIRE PREVENTION AND CONTROL RESOURCES

The following equipment are available at this site for the prevention and control fires:

Equipment Name	Location
Portable Fire Extinguishers	Office and in each vehicle
Smoke Alarms	Office
Heavy Equipment	Equipment Yard
Water Trucks	Equipment Yard

Procedures for inspecting and maintaining equipment:

- Heavy Equipment Operator and Equipment Service Coordinator check fire extinguishers monthly in vehicles. New/recharged extinguishers may be obtained from Puente Hills warehouse.

All Puente Hills field employees are trained to respond to incipient stage fires.

For fires that cannot be locally controlled, dial 911.

VIII. PROCEDURES FOR PREVENTING FIRES

All Puente Hills field personnel are responsible for controlling the accumulation of combustible and flammable materials.

- Housekeeping — Keep site clean and organized.
- Storage — Keep incompatible chemical separate.
- Permits — Hot work permits needed for welding.
- Other — Grounds keepers cut back brush every two months.

IX. OTHER EMERGENCY PROCEDURES

____

____

____

See Attachment C, Map/Floor Plan, showing emergency exits and control equipment.

ATTACHMENT A

Emergency Evacuation Plan

EMERGENCY EVACUATION PLAN
FOR PUENTE HILLS LANDFILL
County Sanitation Districts of Los Angeles County

1. All personnel in charge are to insure that all their staff are accounted for. Report all injuries and damages to Jerry Goodnight or the person in the highest position.

2. Personnel in Charge

   A. Field Office .... Jerry Goodnight and Janet Coke
   B. Scales .... Kathy Garcia and Larry Kincaid
   C. Equipment Yard .... Larry Isenberg and Sin Lim
   D. Dirt Operation .... Randy Gudmunson and Bill Morlarty
   E. Rubbish Operation .... Rocky Reed
   F. Water Truck Drivers and Laborers ...... Greg MacClean
   G. P.E.R.G. and Warehouse .... Rick Kernan and Lead Operator
   H. Site .... Bob Hardwick
   I. Warehouse .... Howard Wolfer

3. Evacuation Assembly Areas

   A. Field Office personnel to meet in parking lot and take direction from personnel in charge via radio in Jerry Goodnight, Pat Freeman, or Janet Coke's vehicle.
   B. Scales personnel will meet in the scale area parking lot and make contact by using the guards' radio.
   C. Equipment yard personnel are to remain in the yard and take direction via radio.
   D. Dirt Crew are to get directions via Unit 96.
   E. Rubbish Crew are to get directions via Unit 26.
   G. P.E.R.G. personnel are to report to site personnel via radio or phone.

4. Site Evacuation Points (See attached map)

   A. Workman Mill Gate.
   B. Crossroads Gate.
   C. Western Exit past Warehouse and Police Academy.
   D. Eastern property line through Canyon 4 to the gates at Los Robles, Orange Grove or Gale.

ATTACHMENT B

Employee Training Summary

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
ENVIRONMENTAL HEALTH/SAFETY

Employee Training Summary by Facility / Dept / Group
(Summary of all Employees by Courses)

FACILITY : Puente Hills Landfill
DEPARTMENT: Solid Waste Management SECTION: All JOB GROUPS: ALL

CATEGORY: Safety-Districts CLASSES: FA01,FA02

Employee Name	Fac Code	Dept/ Sec/Unt	Group Code	Date	File No.	Company Name/Topics	Instructor	Course
GUILLEN, MARK MANUEL	PH		EGTN	10/11/1994	A01101	SAFETY CONNECTION	DOUG SARVIS	FA01
RODRIGUEZ, ERNESTO JOSE	PH	/ /FE	DSNR	10/21/1993	A00948	SAFETY CONNECTION	DOUG SARVIS	FA01
BOYD, HARRY WILLIAM	PH	/ /FE	EGSR	12/13/1995	A01649	SAFETY CONNECTION	R. GUERRERO	FA01
BRANDON, JERROLD JEROME	PH	/ /FE	EGTN	04/08/1997	A02468	SAFETY CONNECTION	D. SARVIS	FA01
CAMPBELL, CHRISTOPHER CHARL	PH	/ /FE	EGTN	11/18/1999	A04117	THE SAFETY CONNECTION	D SARVIS	FA01
CRELENCIA, IKE BUHAY	PH	/ /FE	EGTN	03/15/1995	A01156	SAFETY CONNECTION	RON GUERRERO	FA01
FARROW-REID, MARK ELSON	PH	/ /FE	EGTN	03/11/1997	A02353	SAFETY CONNECTION	D. SARVIS	FA01
HASEGAWA, BRUCE ALAN	PH	/ /FE	EGTN	07/22/1999	A03833	THE SAFETY CONNECTION	R GUERRERO	FA01
KO, SIEW SUN	PH	/ /FE	EGTN	11/15/1995	A01538	SAFETY CONNECTION	RON GUERRERO	FA01
KWOCK, ELLIOT WALTER	PH	/ /FE	EGTN	03/11/1997	A02353	SAFETY CONNECTION	D. SARVIS	FA01
LOPEZ, SALVADOR	PH	/ /FE	EGTN	05/13/1997	A02560	SAFETY CONNECTION	RON GUERRERO	FA01
PERCY JR., ALBION BERNARD	PH	/ /FE	EGTN	08/17/1994	A01083	SAFETY CONNECTION	DOUG SARVIS	FA01
SWENSON, RANDY EARL	PH	/ /FE	EGTN	09/21/2000	A05026	THE SAFETY CONNECTION	RON GUERRERO	FA01
CAULKINS, RICHARD WAYNE	PH	/ /FE	ENGR	02/21/2001	A05334	THE SAFETY CONNECTION	RON GUERRERO	FA01
BAARTZ, MILTON BERNHARD	PH	/ /FE	ESPV	05/20/1999	A03691	THE SAFETY CONNECTION	TODD MUILENBURG	FA01
BIEDA, HELEN FRANCES	PH	/ /FE	ESPV	12/13/1995	A01649	SAFETY CONNECTION	R. GUERRERO	FA01
HENKES III, JUDD HENRY	PH	/ /FE	ESPV	10/29/1998	A03350	THE SAFETY CONNECTION	R GUERRERO	FA01
MYERS, LAWRENCE FRANCIS	PH	/ /FE	ESPV	05/13/1997	A02560	SAFETY CONNECTION	RON GUERRERO	FA01
VICK, WAYNE RUSSELL	PH	/ /FE	ESPV	04/16/1996	A01895	SAFETY CONNECTION	DOUG SARVIS	FA01
ARMSTRONG, GARY LEE	PH	/ /FE	SPVR	05/20/1999	A03691	THE SAFETY CONNECTION	TODD MUILENBURG	FA01
NERI, PHILLIP #	PH	/ /FE	SURV	11/05/1992	A00719	SAFETY CONNECTION	DOUG SARVIS	FA01
FARIAS, OCTAVIO	PH	/ /OM	GRMN	08/17/1994	A01083	SAFETY CONNECTION	DOUG SARVIS	FA01
GABRIEL, ROMAN GARY	PH	/ /OM	GRMN	02/04/1997	A02306	SAFETY CONNECTION	D. SARVIS	FA01
GALABIZ, REFUJIO LOPEZ	PH	/ /OM	GRMN	08/17/1994	A01083	SAFETY CONNECTION	DOUG SARVIS	FA01
MANZO, JOSE M.	PH	/ /OM	GRMN	10/11/1995	A01506	SAFETY CONNECTION	RON GUERRERO	FA01
MARTINEZ, ALBERTO	PH	/ /OM	GRMN	02/04/1997	A02306	SAFETY CONNECTION	D. SARVIS	FA01
MC CABE, SCOTT REESE	PH	/ /OM	GRMN	10/11/1995	A01506	SAFETY CONNECTION	RON GUERRERO	FA01
OCHOA, MAXIMILIANO	PH	/ /OM	GRMN	11/15/1995	A01538	SAFETY CONNECTION	RON GUERRERO	FA01
OROPEZA, SAMUEL MENDOZA	PH	/ /OM	GRMN	02/04/1997	A02306	SAFETY CONNECTION	D. SARVIS	FA01
WEAVER, MARK ALLEN	PH	/ /OM	HEMA	03/16/1993	A00653	SAFETY CONNECTION	DOUG SARVIS	FA01
MURILLO, SALVADOR	PH	/ /OM	HEMC	10/29/1992	A00380	SAFETY CONNECTION	DOUG SARVIS	FA01
GUDMUNDSON, RANDY SCOTT	PH	/ /OM	LFSS	04/13/1995	A01175	SAFETY CONNECTION	RON GUERRERO	FA01
ALARCON, MICHAEL	PH	/ /OM	MNCN	10/13/1999	A04036	THE SAFETY CONNECTION	T MUILENBERG	FA01
FOX, LARRY ROBERT	PH	/ /OM	MNCN	10/13/1999	A04036	THE SAFETY CONNECTION	T MUILENBERG	FA01
GUERRERO, CRUZ	PH	/ /OM	MNCN	10/28/1999	A04086	THE SAFETY CONNECTION	D SARVIS	FA01

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
ENVIRONMENTAL HEALTH/SAFETY

Employee Training Summary by Facility / Dept / Group
(Summary of all Employees by Courses)

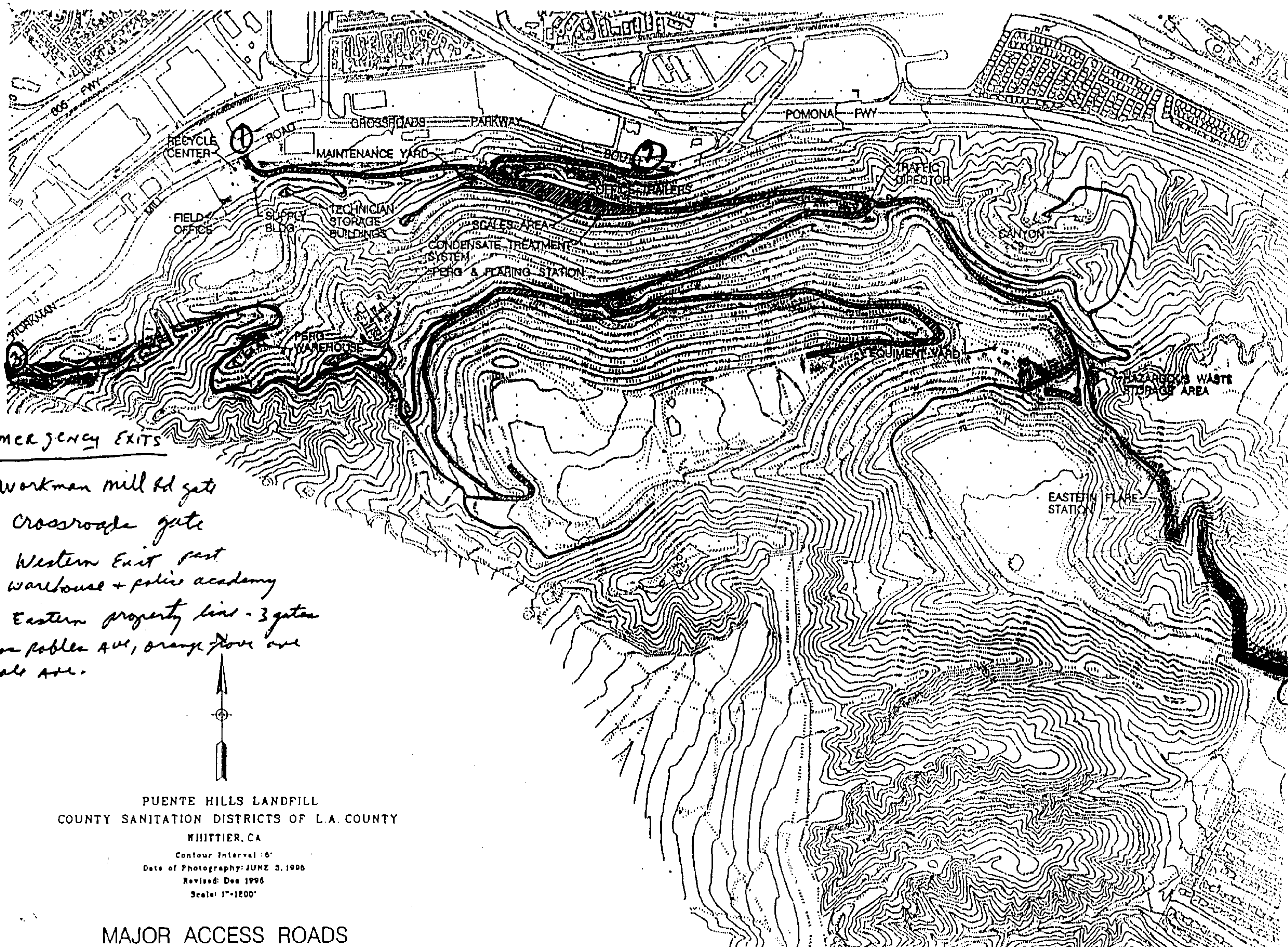
FACILITY : Puente Hills Landfill
DEPARTMENT: Solid Waste Management SECTION: All JOB GROUPS: ALL

CATEGORY: Safety-Districts CLASSES: FA01,FA02

Employee Name	Fac Code	Dept/ Sec/Unt	Group Code	Date	File No.	Company Name/Topics	Instructor	Course
MARQUEZ, DANIEL WAYNE	PH	/ /OM	MNCN	10/13/1999	A04036	THE SAFETY CONNECTION	T MUILENBERG	FA01
NELMS, JON MICHAEL	PH	/ /OM	MNCN	10/13/1999	A04036	THE SAFETY CONNECTION	T MUILENBERG	FA01
RIOS, RUBEN	PH	/ /OM	MNCN	10/13/1999	A04036	THE SAFETY CONNECTION	T MUILENBERG	FA01
VALDIVIA, ERIK	PH	/ /OM	MNCN	10/28/1999	A04086	THE SAFETY CONNECTION	D SARVIS	FA01
MAC CLEAN, GREGORY MARK	PH	/ /OM	PEOS	02/09/1995	A01131	SAFETY CONNECTION	DOUG SARVIS	FA01
MC INTURF, JIMMY LEE	PH	/ /OM	SUPT	01/30/1992	000003	MEDIC FIRST AID	DOUG SARVIS	FA01
LYNCH, ROBERT PUSSELL	PH	/ /OM	WHMR	11/04/1993	A00953	SAFETY CONNECTION	DOUG SARVIS	FA01
PEREZ, SERVANDO	PH	R/O	WHMR	/ /				FA01
WALKER, RANDY WAYNE	PH	R/O/FE	EGTN	05/23/1996	A01979	SAFETY CONNECTION	DOUG SARVIS	FA01
ADAMS, LAURA LOIS	PH	R/O/OM	GRMC	10/11/1995	A01506	SAFETY CONNECTION	RON GUERRERO	FA01
ISENBERG, LARRY LEE	PH	R/O/OM	HEMS	11/05/1996	A02164	SAFETY CONNECTION	D. SARVIS	FA01
KIME JR., PAUL WAYNE	PH	R/O/OM	LSSP	11/15/1995	A01538	SAFETY CONNECTION	RON GUERRERO	FA01
REED, ROCKY DEAN	PH	R/O/OM	RSSP	11/05/1996	A02164	SAFETY CONNECTION	D. SARVIS	FA01
GOODNIGHT, JERRY ALVIN	PH	R/O/OM	SUPT	10/11/1995	A01506	SAFETY CONNECTION	RON GUERRERO	FA01

ATTACHMENT C

Map / Floor Plan

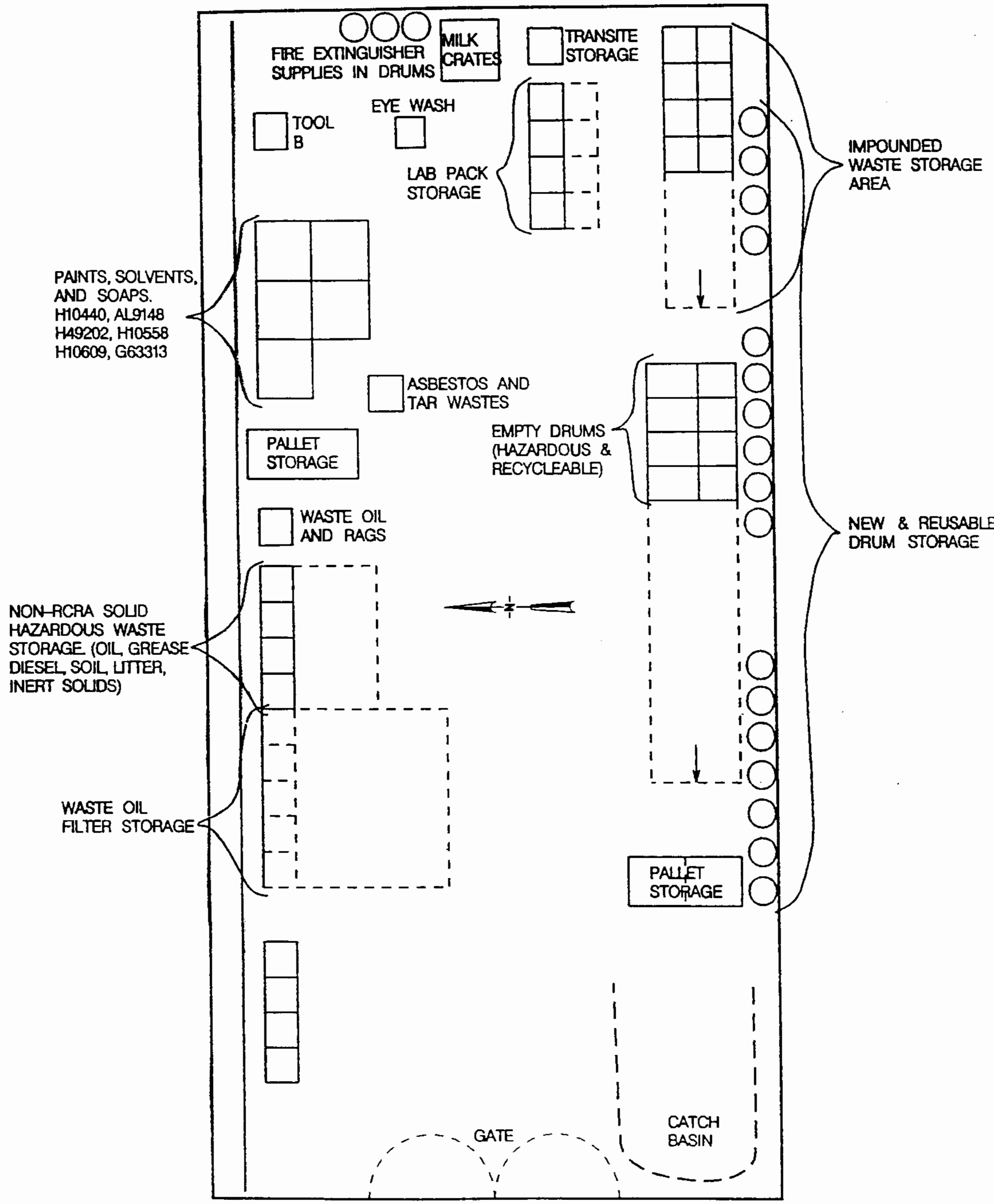


EMERGENCY EXITS

1. Workman mill Rd gate
2. Crossroads gate
3. Western Exit past warehouse + police academy
4. Eastern property line - 3 gates Los Robles Ave, orange Grove ave gale Ave.

PUENTE HILLS LANDFILL
COUNTY SANITATION DISTRICTS OF L.A. COUNTY
WHITTIER, CA
Contour Interval: 5'
Date of Photography: JUNE 3, 1996
Revised: Dec 1996
Scale: 1"=1200'

MAJOR ACCESS ROADS

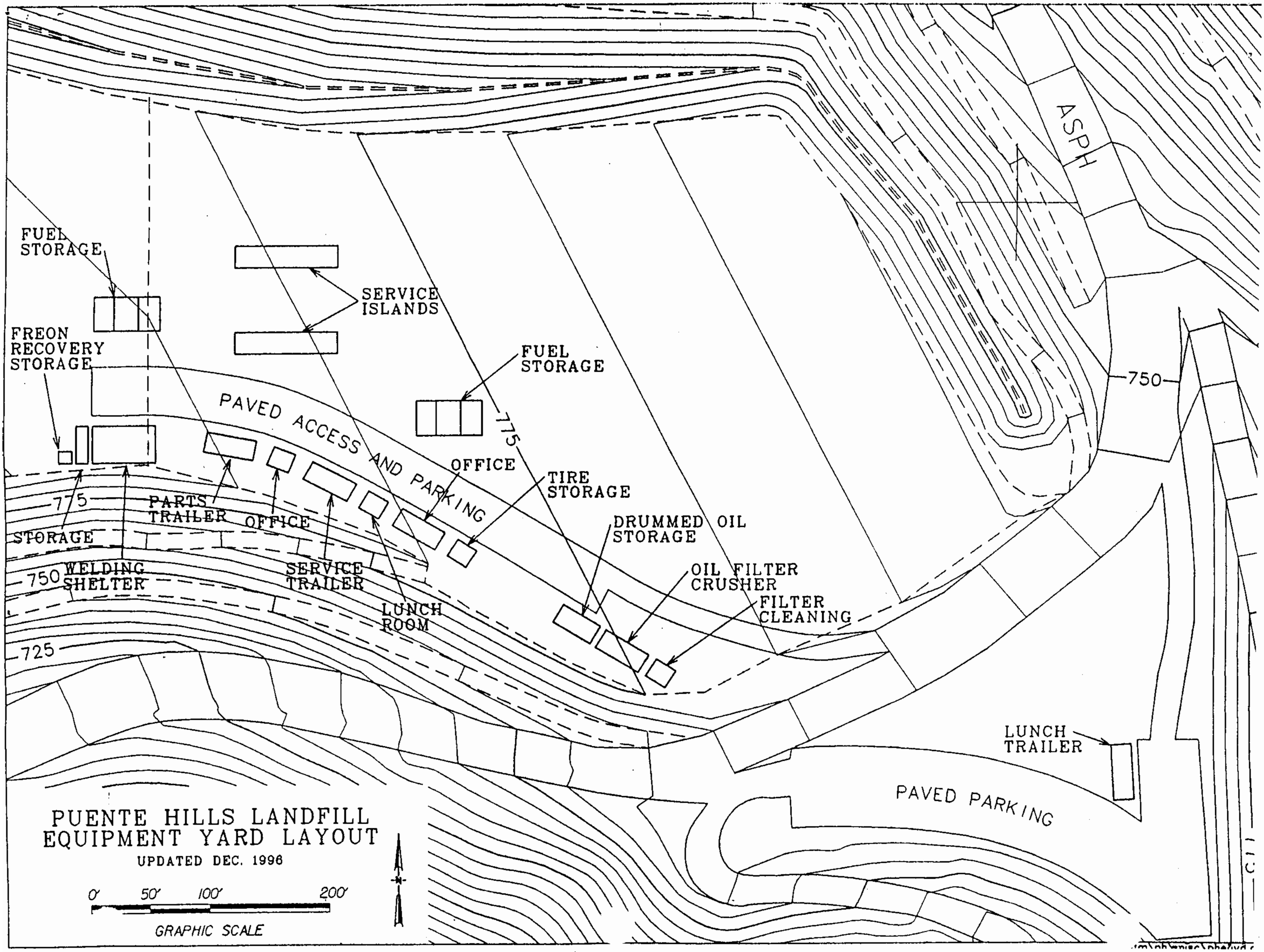


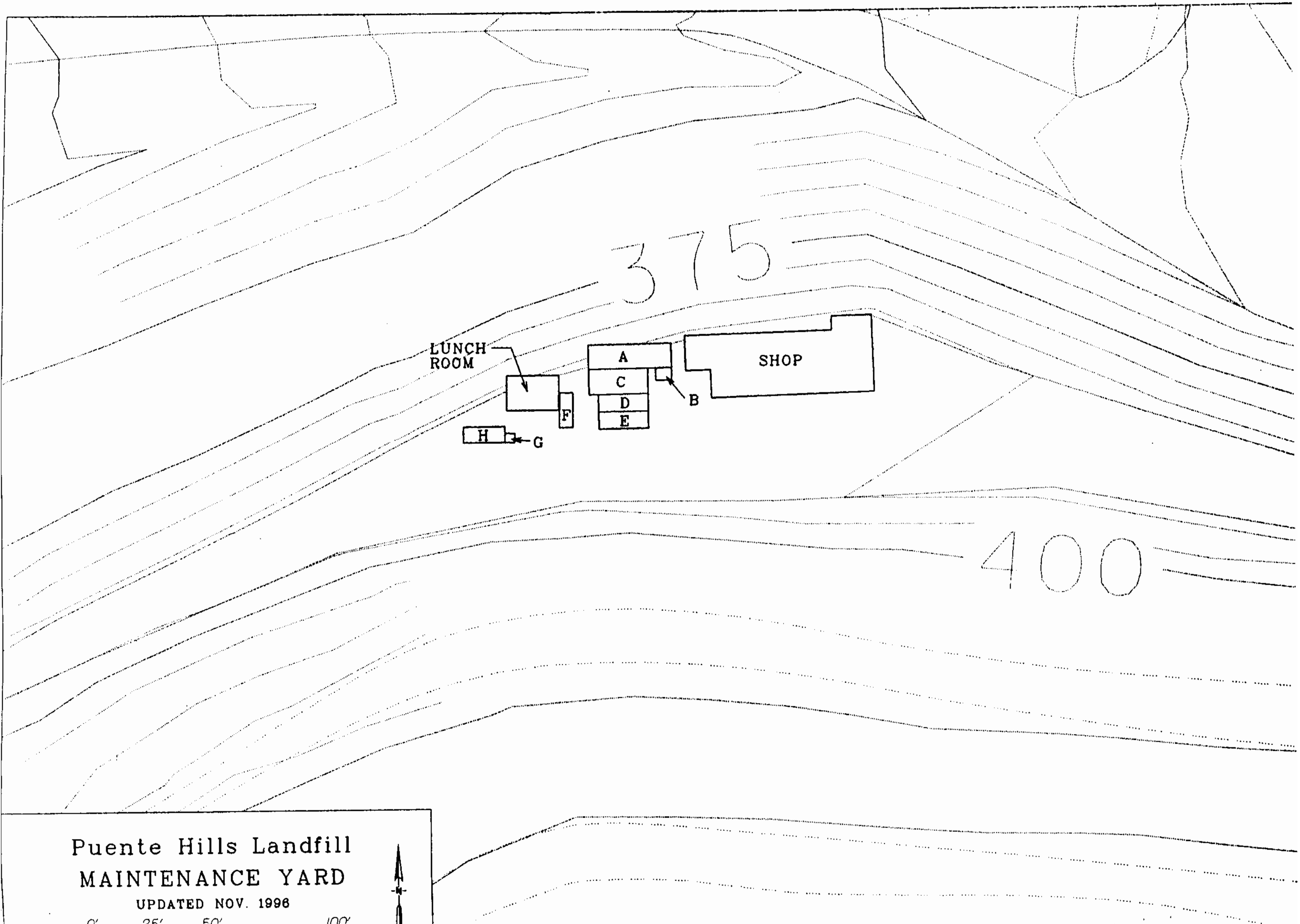
*LIQUID WASTE PROFILES

H10440 : Waste Mineral Spirits
H10558 : Waste Fuels & Petroleum Distillates
G52235 : Water & Oil/Water & Latex Paint
AL9148 : Waste Water Containing Flammables
H49202 : Waste Soaps
G63313 : Solvent Contaminated Waste Oil

PUENTE HILLS LANDFILL

HAZARDOUS WASTE STORAGE AREA


ASPH
750
FUEL STORAGE
SERVICE ISLANDS
FREON RECOVERY STORAGE
FUEL STORAGE
PAVED ACCESS AND PARKING
775
OFFICE
TIRE STORAGE
775
PARTS TRAILER
OFFICE
STORAGE
DRUMMED OIL STORAGE
OIL FILTER CRUSHER
FILTER CLEANING
750
WELDING SHELTER
SERVICE TRAILER
LUNCH ROOM
725
LUNCH TRAILER
PAVED PARKING
PUENTE HILLS LANDFILL
EQUIPMENT YARD LAYOUT
UPDATED DEC. 1996
0' 50' 100' 200'
GRAPHIC SCALE


375
400
SHOP
A
B
C
D
E
F
G
H
LUNCH ROOM
Puente Hills Landfill
MAINTENANCE YARD
UPDATED NOV. 1996
0' 25' 50' 100'

APPENDIX H

ALTERNATIVE DISCUSSION

APPENDIX H

ALTERNATIVE ANALYSIS

This appendix describes the quantitative analysis for the No Project and Expansion of Existing Landfills Alternatives. The discussion focuses on landfills capable of accepting Los Angeles County refuse if the Puente Hills Landfill were to close in 2003. Summary of the impacts and description of facilities evaluated are included in Section 6.0 Project Alternatives.

Generally, the disposal analysis used 2000 disposal generation rates to identify the required disposal capacity. During the year 2000, Los Angeles County disposed of 37,050 tpd to facilities located both in and out-of-county. This assumption would underestimate the actual disposal capacity need and would provide the low end of the capacity shortfall. The California Integrated Waste Management Board, in Title 14, Chapter 9, Article 9 of the California Code of Regulations details an approved methodology for determining future waste generation needs, diversion needs, and disposal capacity needs. The generation rates using the California Integrated Waste Management Board methodology projected the need to increase from 37,050 tpd in 2000 to 39,880 tpd in 2003. By 2013, the disposal need is projected to increase to 46,370 tpd, even with the full attainment of the 50 percent diversion requirement. Therefore, the shortfall would be somewhere between the difference in available capacity and the 37,050 tpd in 2000 and the 46,370 tpd in 2013. This simplified analysis demonstrates the need for additional capacity even at the existing disposal generation rates. The closure or reduction of any facility in Los Angeles County would only exacerbate the shortfall in disposal capacity.

The first analysis identifies capacity at existing permitted facilities capable of accepting refuse in 2003. The second analysis identifies capacity assuming that any facility capable of expansion is fully permitted by 2003 and can provide additional capacity if Puente Hills Landfill were to close. Each of the facilities is assumed to provide the same capacity throughout the project period from 2003 to 2013.

Each of the analysis is broken into two distinct time periods, the first is from the year 2000 to 2002 and the second from the year 2002 to 2003. This is necessary because Bradley West Landfill closes in 2002. At that time, the existing refuse disposal system will have to be redistributed to account for the loss in capacity. Currently Bradley West Landfill accepts 7,610 tons of refuse each day during a 6-day workweek. Puente Hills Landfill is assumed to use any available capacity after the closure of the Bradley West Landfill.

Ability of the Existing Solid Waste Management System Serving Los Angeles County to Continue to Provide Adequate Capacity in the Event that the Puente Hills Landfill Closes in 2003

As discussed above, Los Angeles County disposed of approximately 37,050 tpd. For the purposes of this analysis, it is assumed that the amount of waste currently being sent to all other existing facilities will continue to be sent to the same facilities. Upon closure of the Bradley West Landfill in 2002, the 7,610 tons currently accepted at the facilities would be redistributed to the sites closest to Bradley West Landfill. Each facility with available capacity would accept refuse up to their maximum permitted daily capacity. Once the maximum daily waste capacity is achieved, additional waste is redistributed to the next closest site to the Bradley West Landfill until all the refuse is allocated.

Note that both the Scholl Canyon Landfill and Calabasas Landfill operate under ordinances that restrict these sites from accepting waste outside of defined wastesheds surrounding these sites. The Bradley West Landfill currently receives waste generated from these jurisdictions that are allowed to dispose of waste at either the Calabasas Landfill or the Scholl Canyon Landfill. In 2000, the Bradley West Landfill received approximately 45 tpd from jurisdictions within the Calabasas Landfill wasteshed and approximately 90 tpd from jurisdictions within the Scholl Canyon Landfill wasteshed. After the closure of the Bradley West Landfill, it is assumed that the refuse from these wastesheds would return to the appropriate landfills.

For facilities located outside of Los Angeles County, it is further assumed that all remaining capacity not currently being used at these sites would be available for the exclusive use of Los Angeles County, even if additional future capacity is required within the host jurisdiction or other counties.

Based on these assumptions, in 2002 all Los Angeles County facilities and the Simi Valley Landfill in Ventura County would reach their maximum daily capacities. Only Colton Landfill in San Bernardino County and the El Sobrante Landfill in Riverside County would still have available daily capacity. However, the Colton Landfill had approximately 850,000 tons of capacity remaining at the end of 2000. At an increased daily acceptance rate, the Colton Landfill would close shortly after the Bradley West Landfill. This redistribution of refuse for the No Project Alternative is shown in Table 1.

In 2003, the Puente Hills Landfill would close at the expiration of its existing permits. This would require an additional 12,000 tpd to be allocated to alternative facilities. This would be in addition to the 7,610 tons allocated the previous year from the closure of the Bradley West Landfill. Therefore, over 19,600 tpd would have to be redistributed to alternate facilities using the existing solid waste management system.

Similar to the Bradley West allocation, it was assumed that waste would be received at alternate facilities starting with the closest to the Puente Hills Landfill wasteshed centroid. The additional waste is distributed to these facilities until their maximum permitted daily waste acceptance rate is achieved. Once the maximum daily waste acceptance rate is achieved, additional waste is distributed to the next closest site to the Puente Hills Landfill. This process would continue until the entire 37,050 tons of refuse is allocated to available facilities to the degree possible. The redistribution of refuse after the closure of Puente Hills Landfill is show in Table 2.

Similar to Bradley West Landfill, Puente Hills Landfill currently receives waste generated from jurisdictions within the Calabasas Landfill and the Scholl Canyon Landfill wasteshed. In 2000, the Puente Hills Landfill received approximately 30 tpd from jurisdictions within the Calabasas Landfill wasteshed and approximately 260 tpd from jurisdictions within the Scholl Canyon Landfill wasteshed. Upon closure of the Puente Hills Landfill, it was assumed that refuse would go back to the appropriate jurisdictions.

In 2003, all Los Angeles, Orange, Riverside, San Bernardino, and Ventura County facilities would reach their maximum daily capacities. These existing facilities would only be able to provide 24,819

TABLE 1 (No Expansion)

Projected re-distribution of Los Angeles County solid waste after the closure of the Bradley West Landfill in 2002

Assumes that AB 939 diversion requirement of 50% is fully achieved and that increases in population and/or economic activity do not increase the need for additional disposal capacity

	Conditions in 2000			Projected Conditions in 2002			
Facility	**Distance from the Bradley West Landfill (miles)**	**Average amount of waste received in 2000 (tons per day)**	**Running total of Los Angeles County waste disposed of in 2000 (tons per day)**	**Permitted maximum daily capacity in 2002 potentially available for use by Los Angeles County (tons per day)**	**Average amount of waste projected to be received in 2002 after the closure of the Bradley West Landfill (tons per day)**	**Running total of Los Angeles County waste disposed of in 2002 (tons per day)**	**Amount of excess permitted maximum daily capacity in 2002 potentially available for use by Los Angeles County (tons per day)**
Bradley West Landfill	0 miles	7,610 tpd	7,610 tpd	0 tpd	0 tpd	0 tpd	0 tpd
Sunshine Canyon Landfill	11 miles	4,640 tpd	12,250 tpd	6,000 tpd	6,000 tpd	6,000 tpd	0 tpd
Scholl Canyon Landfill	16 miles	1,410 tpd	13,660 tpd	only waste from within its defined wasteshed up to a maximum of 3,400 tpd	1,500 tpd (comprised of 1,410 tpd delivered to the site in 2000 and 90 tpd that had previously been delivered to the Bradley West Landfill in 2000)	7,500 tpd	0 tpd
Chiquita Canyon Landfill	23 miles	4,420 tpd	18,080 tpd	5,000 tpd	5,000 tpd	12,500 tpd	0 tpd
Commerce Refuse-to-Energy Facility	24 miles	340 tpd	18,420 tpd	467 tpd	467 tpd	12,967 tpd	0 tpd
Simi Valley Landfill (Ventura County)	27 miles	1,570 tpd (comprised of 310 tpd from Los Angeles County and 1,260 tpd from other jurisdictions)	18,730 tpd	3,000 tpd for all jurisdictions inside and outside of Ventura County	3,000 tpd (comprised of 1,740 tpd from Los Angeles County and 1,260 tpd from other jurisdictions)	14,707 tpd	0 tpd
Calabasas Landfill	31 miles	1,110 tpd	19,840 tpd	only waste from within its defined wasteshed up to a maximum of 3,500 tpd	1,155 tpd (comprised of 1,110 tpd delivered to the site in 2000 and 45 tpd that had previously been delivered to the Bradley West Landfill in 2000)	15,862 tpd	0 tpd
Puente Hills Landfill	32 miles	12,000 tpd	31,840 tpd	12,000 tpd	12,000 tpd	27,862 tpd	0 tpd
Southeast Resource Recovery Facility	44 miles	1,360 tpd	33,200 tpd	1,833 tpd	1,833 tpd	29,695 tpd	0 tpd
Spadra Landfill	44 miles	540 tpd	33,740 tpd	0 tpd	0 tpd	29,695 tpd	0 tpd
Antelope Valley Landfill	46 miles	570 tpd	34,310 tpd	1,800 tpd	1,800 tpd	31,495 tpd	0 tpd
Orange County Landfills	varies from 53 miles to 70 miles	2,500 tpd from outside of Orange County (comprised of 2,280 tpd from Los Angeles County and 220 tpd from other jurisdictions)	36,590 tpd	2,500 tpd from outside of Orange County	2,500 tpd from outside of Orange County (comprised of 2,280 tpd from Los Angeles County and 220 tpd from other jurisdictions)	33,775 tpd	0 tpd
Lancaster Landfill	62 miles	450 tpd	37,040 tpd	1,700 tpd	1,700 tpd	35,475 tpd	0 tpd
Colton Landfill (San Bernardino County)	70 miles	870 tpd (comprised of less than 1 tpd from Los Angeles County and 870 tpd from other jurisdictions)	37,040 tpd	2,583 tpd for all jurisdictions inside and outside of San Bernardino County	2,401 tpd (comprised of 1,531 tpd from Los Angeles County and 870 from other jurisdictions)	37,006 tpd	182 tpd
El Sobrante Landfill (Riverside County)	72 miles	2,990 tpd (comprised of 10 tpd from Los Angeles County and 2,980 tpd from other jurisdictions)	37,050 tpd	4,000 tpd for all jurisdictions inside and outside of Riverside County	2,990 tpd (comprised of 10 tpd from Los Angeles County and 2,980 tpd from other jurisdictions)	37,016 tpd	1,010 tpd

37,050 tpd: Projected disposal/transformation capacity need in 2002
37,016 tpd: Projected disposal/transformation capacity available and used in 2002
34 tpd: Projected shortfall in disposal capacity/transformation in 2002

Note: values shown in tons per day (tpd) are based 308 working days per year (six working days per week)

TABLE 2 (No Expansion)

Projected re-distribution of Los Angeles County solid waste after the closure of the Puente Hills Landfill in 2003

Assumes that AB 939 diversion requirement of 50% is fully achieved and that increases in population and/or economic activity do not increase the need for additional disposal capacity

Facility	Projected Conditions in 2002			Projected Conditions in 2003			
	Distance from the centroid of the Puente Hills Landfill wasteshed (miles)	Average amount of waste projected to be received in 2002 after the closure of the Bradley West Landfill (tons per day)	Running total of Los Angeles County waste disposed of in 2002 (tons per day)	Permitted maximum daily capacity in 2003 potentially available for use by Los Angeles County (tons per day)	Average amount of waste projected to be received in 2003 after the closure of the Puente Hills Landfill (tons per day)	Running total of Los Angeles County waste disposed of in 2003 (tons per day)	Amount of excess permitted maximum daily capacity in 2003 potentially available for use by Los Angeles County (tons per day)
Commerce Refuse-to-Energy Facility	3 miles	467 tpd	467 tpd	467 tpd	467 tpd	467 tpd	0 tpd
Puente Hills Landfill	14 miles	12,000 tpd	12,467 tpd	0 tpd	0 tpd	467 tpd	0 tpd
Scholl Canyon Landfill	20 miles	1,500 tpd	13,967 tpd	only waste from within its defined wasteshed up to a maximum of 3,400 tpd	1,760 tpd (comprised of 1,500 tpd delivered to the site in 2002 and 260 tpd that had previously been delivered to the Puente Hills Landfill in 2002)	2,227 tpd	0 tpd
Southeast Resource Recovery Facility	20 miles	1,833 tpd	15,800 tpd	1,833 tpd	1,833 tpd	4,060 tpd	0 tpd
Bradley West Landfill	25 miles	0 tpd	15,800 tpd	0 tpd	0 tpd	4,060 tpd	0 tpd
Spadra Landfill	26 miles	0 tpd	15,800 tpd	0 tpd	0 tpd	4,060 tpd	0 tpd
Sunshine Canyon Landfill	34 miles	6,000 tpd	21,800 tpd	6,000 tpd	6,000 tpd	10,060 tpd	0 tpd
Orange County Landfills	varies from 34 miles to 46 miles	2,500 tpd from outside of Orange County (comprised of 2,280 tpd from Los Angeles County and 220 tpd from other jurisdictions)	24,080 tpd	2,500 tpd from outside of Orange County	2,500 tpd from outside of Orange County (comprised of 2,280 tpd from Los Angeles County and 220 tpd from other jurisdictions)	12,340 tpd	0 tpd
Calabasas Landfill	42 miles	1,155 tpd	25,235 tpd	only waste from within its defined wasteshed up to a maximum of 3,500 tpd	1,185 tpd (comprised of 1,155 tpd delivered to the site in 2002 and 30 tpd that had previously been delivered to the Puente Hills Landfill in 2002)	13,525 tpd	0 tpd
Colton Landfill (San Bernardino County)	45 miles	2,401 tpd (comprised of 1,531 tpd from Los Angeles County and 870 from other jurisdictions)	26,766 tpd	0 tpd (closes by end of 2002)	0 tpd	13,525 tpd	0 tpd
Chiquita Canyon Landfill	46 miles	5,000 tpd	31,766 tpd	5,000 tpd	5,000 tpd	18,525 tpd	0 tpd
Simi Valley Landfill (Ventura County)	50 miles	3,000 tpd (comprised of 1,740 tpd from Los Angeles County and 1,260 tpd from other jurisdictions)	33,506 tpd	3,000 tpd for all jurisdictions inside and outside of Ventura County	3,000 tpd (comprised of 1,740 tpd from Los Angeles County and 1,260 tpd from other jurisdictions)	20,265 tpd	0 tpd
El Sobrante Landfill (Riverside County)	50 miles	2,990 tpd (comprised of 10 tpd from Los Angeles County and 2,980 tpd from other jurisdictions)	33,516 tpd	4,000 tpd for all jurisdictions inside and outside of Riverside County	4,000 tpd (comprised of 1,020 tpd from Los Angeles County and 2,980 tpd from other jurisdictions)	21,285 tpd	0 tpd
Antelope Valley Landfill	70 miles	1,800 tpd	35,316 tpd	1,800 tpd	1,800 tpd	23,085 tpd	0 tpd
Lancaster Landfill	85 miles	1,700 tpd	37,016 tpd	1,700 tpd	1,700 tpd	24,785 tpd	0 tpd

37,050 tpd: Projected disposal/transformation capacity need in 2003
24,785 tpd: Projected disposal/transformation capacity available and used in 2003
12,285 tpd: Projected shortfall in disposal capacity/transformation in 2003

Note: values shown in tons per day (tpd) are based 308 working days per year (six working days per week)

tpd of capacity. Based on the existing need of 37,050 tpd, there would be a capacity shortfall of 12,231 tpd. This amount is in addition to any waste generation increases from population and economic factors described by the California Integrated Waste Management Board methodology. According to the calculations, 46,370 tpd would be required by 2013, creating a 21,551 tpd shortfall. As waste generation increases, the shortfall in capacity would only become larger.

Orange County would be the only caveat to this assumption. At this time, Orange County is capable of accepting 2,500 tpd of out-of-county refuse. Approximately 2,280 tpd originates from within Los Angeles County in accordance with three Waste Disposal Agreements. Even if an additional Waste Disposal Agreement were to be executed by Orange County and some other hauler, only 220 tpd of additional potential capacity exists within the Orange County system at the Prima Deshecha Landfill. Since only a limited amount of potential capacity exists within the Orange County system and there are no contracts in place to provide for the utilization of this limited capacity, it is assumed that no additional disposal capacity is available in Orange County for use by Los Angeles County.

Capacity shortfall is predicted to be somewhere between 12,231 to 21,551 tpd according to this analysis. In addition to the impacts from reallocating the 12,000 tpd from the Puente Hills Landfill closure (e.g., increased haul distance), there are numerous potential impacts from the mismanagement of solid waste refuse from the identified shortfall in capacity. These impacts are discussed in more detail in Section 6.0. The travel and air emissions from reallocating 12,000 tpd from the Puente Hills Landfill are summarized in Table 6.0-3.

Ability of the Existing Solid Waste Management System Together with Potential Expansion of Existing Landfills Continue to Provide Adequate Capacity to Los Angeles County in the Event that the Puente Hills Landfill Closes in 2003

The following analysis identifies the available capacity in 2003 after the expansion of existing facilities. The analysis assumes three landfills with potential expansion capacity become fully permitted by 2003. It further assumes that all the available expansion capacity is for the exclusive use of Los Angeles County.

The expansion would include the Sunshine Canyon Landfill for an additional 5,000 tpd of capacity. The expansion of the El Sobrante Landfill for an additional 4,000 tpd in 2002, a total of 6,000 tpd in 2003, and a total of 7,500 tpd in 2004. The expansion of the Simi Valley Landfill in Ventura County would not add any additional daily capacity, however, it would extend the life of the landfill.

Similar to the previous analysis, in 2002 refuse would have to be reallocated after the closure of the Bradley West Landfill. The reallocation of the refuse is shown in Table 3. In 2003, the Puente Hills Landfill would close at the expiration of its existing permits. At that time, the 37,050 tpd of Los Angeles County waste would have to be redistributed again to the remaining available facilities.

According to the analysis, any available out-of-county capacity from the expansions would be used exclusively by Los Angeles County. This assumption is made regardless of disposal requirements of the host county in order to allocate as much Los Angeles County refuse as possible.

Based on these assumptions, as shown in Table 4, in 2003 all Los Angeles, Orange, Riverside, San Bernardino, and Ventura County facilities would reach their maximum daily capacities. These

TABLE 3 (Expansion of Existing Facilities)
Projected re-distribution of Los Angeles County solid waste after the closure of the Bradley West Landfill in 2002
Assumes that AB 939 diversion requirement of 50% is fully achieved and that increases in population and/or economic activity do not increase the need for additional disposal capacity

	Conditions in 2000			Projected Conditions in 2002			
Facility	**Distance from the Bradley West Landfill (miles)**	**Average amount of waste received in 2000 (tons per day)**	**Running total of Los Angeles County waste disposed of in 2000 (tons per day)**	**Permitted maximum daily capacity in 2002 potentially available for use by Los Angeles County (tons per day)**	**Average amount of waste projected to be received in 2002 after the closure of the Bradley West Landfill (tons per day)**	**Running total of Los Angeles County waste disposed of in 2002 (tons per day)**	**Amount of excess permitted maximum daily capacity in 2002 potentially available for use by Los Angeles County (tons per day)**
Bradley West Landfill	0 miles	7,610 tpd	7,610 tpd	0 tpd	0 tpd	0 tpd	0 tpd
Sunshine Canyon Landfill	11 miles	4,640 tpd	12,250 tpd	11,000 tpd	11,000 tpd	11,000 tpd	0 tpd
Scholl Canyon Landfill	16 miles	1,410 tpd	13,660 tpd	only waste from within its defined wasteshed up to a maximum of 3,400 tpd	1,500 tpd (comprised of 1,410 tpd delivered to the site in 2000 and 90 tpd that had previously been delivered to the Bradley West Landfill in 2000)	12,500 tpd	0 tpd
Chiquita Canyon Landfill	23 miles	4,420 tpd	18,080 tpd	5,000 tpd	5,000 tpd	17,500 tpd	0 tpd
Commerce Refuse-to-Energy Facility	24 miles	340 tpd	18,420 tpd	467 tpd	467 tpd	17,967 tpd	0 tpd
Simi Valley Landfill (Ventura County)	27 miles	1,570 tpd (comprised of 310 tpd from Los Angeles County and 1,260 tpd from other jurisdictions)	18,730 tpd	3,000 tpd for all jurisdictions inside and outside of Ventura County	2,518 tpd (comprised of 1,258 tpd from Los Angeles County and 1,260 tpd from other jurisdictions)	19,225 tpd	482 tpd
Calabasas Landfill	31 miles	1,110 tpd	19,840 tpd	only waste from within its defined wasteshed up to a maximum of 3,500 tpd	1,155 tpd (comprised of 1,110 tpd delivered to the site in 2000 and 45 tpd that had previously been delivered to the Bradley West Landfill in 2000)	20,380 tpd	0 tpd
Puente Hills Landfill	32 miles	12,000 tpd	31,840 tpd	12,000 tpd	12,000 tpd	32,380 tpd	0 tpd
Southeast Resource Recovery Facility	44 miles	1,360 tpd	33,200 tpd	1,833 tpd	1,360 tpd	33,740 tpd	473 tpd
Spadra Landfill	44 miles	540 tpd	33,740 tpd	0 tpd	0 tpd	33,740 tpd	0 tpd
Antelope Valley Landfill	46 miles	570 tpd	34,310 tpd	1,800 tpd	570 tpd	34,310 tpd	1,230 tpd
Orange County Landfills	varies from 53 miles to 70 miles	2,500 tpd from outside of Orange County (comprised of 2,280 tpd from Los Angeles County and 220 tpd from other jurisdictions)	36,590 tpd	2,500 tpd from outside of Orange County	2,500 tpd from outside of Orange County (comprised of 2,280 tpd from Los Angeles County and 220 tpd from other jurisdictions)	36,590 tpd	0 tpd
Lancaster Landfill	62 miles	450 tpd	37,040 tpd	1,700 tpd	450 tpd	37,040 tpd	1,250 tpd
Colton Landfill (San Bernardino County)	70 miles	870 tpd (comprised of less than 1 tpd from Los Angeles County and 870 tpd from other jurisdictions)	37,040 tpd	2,583 tpd for all jurisdictions inside and outside of San Bernardino County	870 tpd (comprised of less than 1 tpd from Los Angeles County and 870 tpd from other jurisdictions)	37,040 tpd	1,713 tpd
El Sobrante Landfill (Riverside County)	72 miles	2,990 tpd (comprised of 10 tpd from Los Angeles County and 2,980 tpd from other jurisdictions)	37,050 tpd	4,000 tpd for waste generated outside of Riverside County	2,990 tpd (comprised of 10 tpd from Los Angeles County and 2,980 tpd from other jurisdictions)	37,050 tpd	3,990 tpd

37,050 tpd: Projected disposal/transformation capacity need in 2002
37,050 tpd: Projected disposal/transformation capacity available and used in 2002
0 tpd: Projected shortfall in disposal capacity/transformation in 2002

Note: values shown in tons per day (tpd) are based 308 working days per year (six working days per week)

TABLE 4 (Expansion of Existing Facilities)
Projected re-distribution of Los Angeles County solid waste after the closure of the Puente Hills Landfill in 2003
Assumes that AB 939 diversion requirement of 50% is fully achieved and that increases in population and/or economic activity do not increase the need for additional disposal capacity

	Projected Conditions in 2002			Projected Conditions in 2003			
Facility	**Distance from the centroid of the Puente Hills Landfill wasteshed (miles)**	**Average amount of waste projected to be received in 2002 after the closure of the Bradley West Landfill (tons per day)**	**Running total of Los Angeles County waste disposed of in 2002 (tons per day)**	**Permitted maximum daily capacity in 2003 potentially available for use by Los Angeles County (tons per day)**	**Average amount of waste projected to be received in 2003 after the closure of the Puente Hills Landfill (tons per day)**	**Running total of Los Angeles County waste disposed of in 2003 (tons per day)**	**Amount of excess permitted maximum daily capacity in 2003 potentially available for use by Los Angeles County (tons per day)**
Commerce Refuse-to-Energy Facility	3 miles	467 tpd	467 tpd	467 tpd	467 tpd	467 tpd	0 tpd
Puente Hills Landfill	14 miles	12,000 tpd	12,467 tpd	0 tpd	0 tpd	467 tpd	0 tpd
Scholl Canyon Landfill	20 miles	1,500 tpd	13,967 tpd	only waste from within its defined wasteshed up to a maximum of 3,400 tpd	1,760 tpd (comprised of 1,500 tpd delivered to the site in 2002 and 260 tpd that had previously been delivered to the Puente Hills Landfill in 2002)	2,227 tpd	0 tpd
Southeast Resource Recovery Facility	20 miles	1,360 tpd	15,327 tpd	1,833 tpd	1,833 tpd	4,060 tpd	0 tpd
Bradley West Landfill	25 miles	0 tpd	15,327 tpd	0 tpd	0 tpd	4,060 tpd	0 tpd
Spadra Landfill	26 miles	0 tpd	15,327 tpd	0 tpd	0 tpd	4,060 tpd	0 tpd
Sunshine Canyon Landfill	34 miles	11,000 tpd	26,327 tpd	11,000 tpd	11,000 tpd	15,060 tpd	0 tpd
Orange County Landfills	varies from 34 miles to 46 miles	2,500 tpd from outside of Orange County (comprised of 2,280 tpd from Los Angeles County and 220 tpd from other jurisdictions)	28,607 tpd	2,500 tpd from outside of Orange County	2,500 tpd from outside of Orange County (comprised of 2,280 tpd from Los Angeles County and 220 tpd from other jurisdictions)	17,340 tpd	0 tpd
Calabasas Landfill	42 miles	1,155 tpd	29,762 tpd	only waste from within its defined wasteshed up to a maximum of 3,500 tpd	1,185 tpd (comprised of 1,155 tpd delivered to the site in 2002 and 30 tpd that had previously been delivered to the Puente Hills Landfill in 2002)	18,525 tpd	0 tpd
Colton Landfill (San Bernardino County)	45 miles	870 tpd (comprised of less than 1 tpd from Los Angeles County and 870 tpd from other jurisdictions)	29,762 tpd	2,583 tpd for all jurisdictions inside and outside of San Bernardino County	2,583 tpd (comprised of 1,713 tpd from Los Angeles County and 870 tpd from other jurisdictions)	20,238 tpd	0 tpd
Chiquita Canyon Landfill	46 miles	5,000 tpd	34,762 tpd	5,000 tpd	5,000 tpd	25,238 tpd	0 tpd
Simi Valley Landfill (Ventura County)	50 miles	2,518 tpd (comprised of 1,258 tpd from Los Angeles County and 1,260 tpd from other jurisdictions)	36,020 tpd	3,000 tpd for all jurisdictions inside and outside of Ventura County	3,000 tpd (comprised of 1,740 tpd from Los Angeles County and 1,260 tpd from other jurisdictions)	26,978 tpd	0 tpd
El Sobrante Landfill (Riverside County)	50 miles	2,990 tpd (comprised of 10 tpd from Los Angeles County and 2,980 tpd from other jurisdictions)	36,030 tpd	6,000 tpd for waste generated outside of Riverside County	6,000 tpd from Los Angeles County	32,978 tpd	0 tpd
Antelope Valley Landfill	70 miles	570 tpd	36,600 tpd	1,800 tpd	1,800 tpd	34,778 tpd	0 tpd
Lancaster Landfill	85 miles	450 tpd	37,050 tpd	1,700 tpd	1,700 tpd	36,478 tpd	0 tpd

37,050 tpd: Projected disposal/transformation capacity need in 2003
36,478 tpd: Projected disposal/transformation capacity available and used in 2003
572 tpd: Projected shortfall in disposal capacity/transformation in 2003

Note: values shown in tons per day (tpd) are based 308 working days per year (six working days per week)

existing facilities would only be able to provide 36,478 tpd of capacity, even though there would be a capacity need of 37,050 tpd. There would be insufficient capacity for 572 tpd.

The above analysis assumes that there will be no further increases in future disposal capacity need. However, even with the full attainment of the requirement for 50 percent diversion, changes in population and economic activity can effect future disposal needs. As discussed earlier, requirements by 2013 could increase the need to 46,370 tpd and create a shortfall of 9,892 tpd. Therefore, the shortfall in capacity identified would be between 538 tpd and 9,892 tpd.

The impacts of reallocating the 12,000 tpd from Puente Hills Landfill are summarized in Table 6.0-5. Additional resource specific impacts are expected from the unallocated refuse shortfall capacity. These impacts are discussed in more detail in Section 6.0 Project Alternatives.