

APPENDIX B

WASTE DISCHARGE REQUIREMENTS FOR THE PALMDALE WATER RECLAMATION PLANT



California Regional Water Quality Control Board Lahontan Region



Winston H. Hickox
Secretary for
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Protection

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Gray Davis
Governor

June 27, 2000

Charles W. Carry, General Manager
County Sanitation District of Los Angeles County
PO Box 4998
Whittier, CA 90607-4998

WDID NO. 6B190107069

Dear Mr. Carry:

ADOPTED REVISED WASTE DISCHARGE REQUIREMENTS FOR LOS ANGELES COUNTY SANITATION DISTRICT NO. 20 AND THE CITY OF LOS ANGELES WORLD AIRPORTS; PALMDALE WATER RECLAMATION PLANT, LOS ANGELES COUNTY

ADOPTED BOARD ORDER NO. 6-00-57

Enclosed is a copy of Board Order No. 6-00-57 which was adopted at the Regional Board meeting held in Bishop, California on June 14 and 15, 2000.

Sincerely,

Rebecca Phillips
Office Technician

Enclosure

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

BOARD ORDER NO. 6-00-57
WDID NO. 6B190107069

REVISED WASTE DISCHARGE REQUIREMENTS
FOR

**LOS ANGELES COUNTY SANITATION DISTRICT NO. 20 AND
THE CITY OF LOS ANGELES WORLD AIRPORTS
PALMDALE WATER RECLAMATION PLANT**

Los Angeles County

The California Regional Water Quality Control Board, Lahontan Region (Regional Board) finds:

1. Discharger

Mr. Charles W. Carry, Chief Engineer and General Manager of the County Sanitation Districts of Los Angeles County submitted a complete Report of Waste Discharge for the Los Angeles County Sanitation District No. 20 (LACSD) Palmdale Water Reclamation Plant (PWRP) on January 31, 2000. The City of Los Angeles World Airports (LAWA), previously the City of Los Angeles Department of Airports, is the land owner of the wastewater disposal/water recycling site. For the purposes of this Regional Board Order (Order), LACSD and LAWA are collectively referred to as the "Dischargers." For the purposes of wastewater reclamation (water recycling hereinafter), LACSD is designated as the "Producer" and LAWA is designated as the "Primary User." "Secondary Users" lease property from LAWA and apply a portion of the recycled water to various crops. Some lessees use only agricultural well water for irrigation supply. Secondary users are subject to change and are not named herein as Dischargers.

As the landowner, LAWA is a responsible party for the discharge and any condition or threatened condition of pollution or nuisance resulting from the discharge. Naming LAWA as a Discharger in this Order is consistent with past determinations by Regional Boards and the State Water Resources Control Board (SWRCB) in naming landowners as Dischargers. If LACSD fails to meet the requirements of this Order or future potential enforcement Orders with respect to wastewater disposal on LAWA land, the Regional Board will look to LAWA to meet and/or complete the requirements of this Order and/or potential future enforcement Orders. Before LAWA is required to meet and/or complete such requirements, LAWA will be so informed of such requirements in writing by the Regional Board Executive Officer, and a new time schedule for compliance with such requirements will be formally established. Hereinafter, the term "Dischargers" will be used to signify the scheme of primary responsibility for LACSD with respect to operation, monitoring and reporting for the collection and treatment system and disposal operations, and secondary responsibility for LAWA for disposal and water recycling operations, monitoring and reporting to implement this Order. LAWA, the Primary User, is responsible for the water quality effects and operations of its lessees, the unnamed Secondary Users for water recycling activities.

2. Location

The treatment and disposal and water recycling facilities are located approximately two miles northeast of central Palmdale, in the Lancaster Hydrologic Area of the Antelope Hydrologic Unit within portions of Sections 3, 9, 10, 11, 16, and 20, T6N, R11W, SBB&M as shown on Attachment "A", which is made a part of this Order. Primary treatment facilities are located at the LACSD's 30th Street East site. LACSD's approximately 170 acres of oxidation ponds are located at the 30th and 40th Street East sites. LACSD and LAWA are currently engaged in negotiations, which may result in changes in the disposal site(s) location(s). This move to an alternate disposal location is not expected to occur until at least five to ten years, pending agreement between the Dischargers.

3. Permit History

The Regional Board previously established Waste Discharge Requirements (WDRs) for LACSD under Board Order No. 6-93-18, which was adopted on March 11, 1993. The Regional Board previously adopted water recycling requirements (WRRs) for LAWA under Board Order No. 6-90-64, which was adopted on October 11, 1990.

4. Reason For Action

The Regional Board is revising Waste Discharge Requirements (WDRs) in accordance with a Statewide program to review and update WDRs and WRRs, to combine the previous WDRs and WRRs into one Board Order, and to address a threat to ground water quality beneath the disposal/water recycling site.

5. Description of Palmdale WRP

The PWRP currently collects, treats, and disposes of an average of 8.2 mgd of domestic wastewater generated from a population of approximately 125,000. Secondary wastewater treatment is provided by primary sedimentation tanks, anaerobic digesters, and six active oxidation ponds (approximately 170 acres). A seventh oxidation pond (Pond No. 1) is currently not in use, but the structure remains intact and operational. The oxidation ponds are underlain by low permeability native soils. Additional treatment is provided by the oxidation pond aeration system. Sludge from the anaerobic digesters is dried in drying beds and hauled off site for disposal. In 1993, the Facility's design capacity was increased from 8.0 to 15.0 million gallons per day (mgd). The major features of the expansion project included five primary sedimentation tanks, two digesters, additional oxidation pond aerators, additional effluent disposal pipeline, additional ground water monitoring wells and general upgrades of plant infrastructure systems. Typically, due to seasonal pond turn over, higher BOD values exceeding the limits in this Order are experienced in the spring and fall.

6. Disposal/Water Recycling Operations

The Primary User (LAWA) receives the recycled water of which a portion is subsequently distributed to Secondary Users (users who lease portions of the primary user's water recycling site for application of recycled water for agricultural purposes). Undisinfected treated effluent from the LACSD's 30th and 40th Street East site is conveyed by two gravity pipelines and a force main to the LAWA disposal/water recycling sites where effluent is discharged to land surface spreading (no crops grown on the landspreading site) and a portion is used to surface irrigate pasture, fodder and barley crops, pistachio trees, chestnut trees, Christmas trees and various other types of trees harvested for firewood. In 1999, approximately 7.72 mgd (99 percent) was disposed by landspreading, and 0.08 mgd (1 percent) was recycled as crop irrigation supply water. All crop harvesting is conducted by personnel employed by the primary or secondary users of recycled water, after harvest areas have been allowed to dry. Recently, a new crop of barley was planted at the disposal site, all of which uses recycled water. Accordingly, the current use of recycled water for crop irrigation is significantly greater than that reflected above (approximately 5 to 10 percent of the plant effluent). The capacities of the two gravity pipelines are 1.0 mgd and 3.1 mgd. The force main capacity is 16 mgd. The area available for water recycling is 2,560 acres. LACSD is currently negotiating with LAWA to provide additional and/or alternative areas for effluent disposal and water recycling. On March 14, 1989 the LAWA entered into an agreement with LACSD to use up to 9.5 mgd of recycled water at the LAWA Irrigation Site through March 1, 2001. The projected maximum flow now proposed to be disposed/recycled is 15.0 mgd. LACSD is currently negotiating with LAWA to provide additional and/or alternative areas for effluent disposal and water recycling. The LAWA disposal/water recycling site, received an average of 7.8 mgd of treated secondary effluent from the LACSD PWRP in 1999.

The Dischargers are discussing a potential shift in disposal operations to maximize water recycling for agricultural use. The current agreement between the Dischargers for the acquisition and conveyance of recycled water will expire March 1, 2001. Negotiations underway to renew this agreement will define the authority and scope of the Dischargers to implement changes in water recycling and disposal operations.

7. Water Recycling Criteria

Regulations set forth by the State Department of Health Services in Chapter 3 (Water Recycling Criteria), Title 22, Division 4, California Administrative Code require that sewage effluent which is used to irrigate fodder and fiber crops, and orchards where fruit does not contact irrigation waters must have a quality at least equivalent to that of primary effluent. Effluent limits contained in these revised waste discharge requirements are set at levels which require that all wastewater discharged to the LAWA water recycling site receive a secondary level of treatment to protect ground water quality. Treated effluent discharged to the water recycling sites will therefore be of higher quality than required by the State Department of Health Services.

8. Department of Health Services Consultation

In accordance with Section 13523 of the California Water Code, the Regional Board consulted with and received the recommendations of the State Department of Health Services concerning water recycling requirements, which are incorporated within the Order.

9. Authorized Disposal/Water Recycling Sites

The LAWA land spreading and water recycling sites described in Finding Nos. 2 and 6, and as shown on Attachment "A," are the only authorized disposal/water recycling sites.

10. Geohydrology

Soils of low permeability underlie portions of the oxidation pond sites. It is not conclusively known whether the low permeability soils are continuous under the oxidation ponds or whether these soils retard the percolation of effluent towards the ground water. A ground water monitoring program has been included in the monitoring and reporting program. The program is being used to determine if wastewater is percolating from the unlined oxidation ponds to ground water. Depth to ground water in the vicinity of the oxidation ponds is estimated to be 350 to 400 feet; and at the water recycling site, depth to ground water is estimated to be 260 to 400 feet. Background water quality in the area, represented by monitoring well MW1 is excellent with the 1999 average total dissolved solids occurring at concentration of approximately 150 mg/L and an average nitrate as N concentration of approximately 0.26 mg/L.

11. Ground Water Quality Degradation

Monitoring wells MW4 and MW18 in the disposal/water recycling agricultural irrigation area indicate elevated total dissolved solids (TDS) and nitrate (NO₃-N) concentrations. Values of NO₃-N in these wells had exceeded the drinking water maximum contaminant level (MCL) of 10 mg/L but have dropped to less than the MCL for more than a year and are declining. Local ground water quality degradation has occurred, which appears to be associated with treated wastewater landspreading disposal practices and irrigated agriculture operations. Additionally, lysimeter TDS and NO₃-N data from the vadose zone indicate a condition of threatened pollution exists in the effluent landspreading disposal area and irrigated agricultural areas. The concentrations decrease with depth and extend beneath both the effluent landspreading disposal area and non-effluent irrigated agricultural area. Agricultural practices by application of fertilizers and/or soil amendments to the area irrigated with recycled water or agricultural water supply well water may contribute to the ground water quality degradation and condition of threatened pollution if not managed properly. This Board Order contains requirements and time schedules to expand the degraded water plume investigation, develop and implement a corrective action plan, an effluent management plan, and a farm management plan to mitigate water quality degradation and reduce the threatened pollution of ground water.

12. Land Ownership

The Discharger's wastewater disposal/water recycling site is located on land owned by LAWA. The treatment facilities and oxidation ponds are located on land owned by the LACSD.

13. Lahontan Basin Plan

The Regional Board adopted a Water Quality Control Plan for the Lahontan Region (Basin Plan) which became effective on March 31, 1995, and this Order implements the Plan, as amended.

14. Beneficial Uses

The beneficial uses of the ground waters of the Lancaster Hydrologic Area of the Antelope Hydrologic Unit as set forth and defined in the Water Quality Control Plan for the Lahontan Region are:

- a. municipal and domestic supply (MUN);
- b. agricultural supply (AGR);
- c. industrial service supply (IND); and
- d. freshwater replenishment (FRSH).

15. California Environmental Quality Act (CEQA) Compliance

These WDRs govern an existing Facility, which the Dischargers are currently operating. The project consists only of the continued operation of the Facility and is therefore categorically exempt from provisions of the California Environmental Quality Act (Public Resources Code § 21000 et seq.) in accordance with Section 15301 of the CEQA Guidelines.

16. Notification of Interested Parties

The Regional Board has notified the Discharger and interested agencies and persons of its intent to update waste discharge requirements for the discharge.

17. Consideration of Public Comments

The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the Discharger shall comply with the following:

I. DISCHARGE SPECIFICATIONS

A. Effluent Limitations

1. The flows of wastewater to the secondary treatment and disposal facilities shall not exceed the following limits:

<u>Average¹</u> <u>Daily Flow (MGD)</u>	<u>Maximum</u> <u>Instantaneous Flow (MGD)</u>
15.0	37.5

2. All effluent discharged to the authorized disposal/water recycling sites shall not contain concentrations of parameters in excess of the following limits:

<u>Parameter</u>	<u>Units</u>	<u>30-Day Mean²</u>	<u>Maximum</u>
BOD ³	mg/L	30	45
Methylene Blue Active Substances	mg/L	1.0	2.0

3. All effluent discharged to the authorized disposal/water recycling sites shall have a pH of not less than 6.0 pH units nor more than 9.0 pH units.
4. All effluent discharged to the authorized disposal/water recycling sites shall have a dissolved oxygen concentration not less than 1.0 mg/L.

B. Water Recycling Requirements

The water recycling requirements are consistent with the California Department of Health Services (CDHS) Water Recycling Criteria in accordance with proposed Water Recycling Regulations.

1. The recycled water shall be confined to those lands described in Findings Nos. 2 and 6 of this Order. A revised engineering report shall be submitted for approval and these WDRs revised prior to discharged to any proposed areas unauthorized herein.
2. Discharge of recycled water to the Little Rock Wash is prohibited.
3. Discharge of recycled water, or runoff commingled with the recycled water, from the authorized water recycling site is prohibited.
4. No sod or food crop, with the exception of nut bearing or ornamental trees as specified in Water Recycling Requirement Nos. 5-6 below, shall be irrigated with recycled water. The Primary User must submit a revised engineering report for water recycling and revised water recycling requirements must be issued by the Regional Board before the application of recycled water to any existing or future sod or food crop may occur.
5. The spray irrigation of nut bearing or ornamental trees and/or the harvesting of nuts from the ground surface is prohibited.

1 The arithmetic mean of total daily flow values for each month.
 2 The arithmetic mean of lab results for effluent samples collected in a period of 30 consecutive days.
 3 Biochemical Oxygen Demand (5 day, 20°C of a filtered sample).

6. Christmas trees flood irrigated with recycled water shall be harvested no earlier than 30 days after the cessation of irrigation with the recycled water. The trees shall be cut at a point on the trunk that is a minimum of two feet above the ground surface for the protection of worker and public health.
7. The use of recycled water shall not cause a pollution or threatened pollution as defined in Section 13050(1) of the California Water Code.
8. The use of recycled water shall not cause a nuisance as defined in Section 13050(m) of the California Water Code.
9. The use of recycled water for irrigation of fiber or fodder crops shall be in accordance with DHS current water recycling criteria and guidelines.

C. Receiving Water Limitation

This discharge shall not cause a violation of any applicable water quality standard for receiving water (ground water) adopted by the Regional Board or the SWRCB as required by the Federal Water Pollution Control Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal Clean Water Act or amendments thereto, the Regional Board will revise and modify this Order in accordance with such more stringent standards.

The discharge shall not cause the presence of the following substances or conditions in ground or surface waters of the Antelope Hydrologic Unit:

1. Nondegradation

State Water Resources Control Board Resolution No. 68-16 "Statement of Policy With Respect to Maintaining High Quality of Waters In California", known as the Nondegradation objective, requires maintenance of existing high quality in surface waters, ground waters, or wetlands. Whenever the existing quality of water is better than the quality of water established in the Basin Plan, such existing quality shall be maintained unless appropriate findings are made under Resolution No. 68-16.

2. Bacteria - Waters shall not contain concentrations of coliform organisms attributable to human wastes. The median number of coliform organisms, over any seven day period, shall be less than 1.1/100 ml in ground waters.

3. Chemical Constituents

Ground waters designated as MUN shall not contain concentrations of chemical constituents in excess of the maximum contaminant level (MCL) or secondary maximum contaminant level (SMCL) based upon drinking water standards specified in the following provisions of Title 22 of the California Code of Regulations: Table 64431-A of Section 64431 (Inorganic

Chemicals), Table 64431-B of Section 64431 (Fluoride), Table 6444-A of Section 64444 (Organic Chemicals), Table 64449-A of Section 64449 (Secondary Maximum Contaminant Levels-Consumer Acceptance Limits), and Table 64449-B of Section 64449 (Secondary Maximum Contaminant Levels-Ranges). This incorporation-by-reference is prospective including future changes to the incorporated provisions as the changes take effect.

4. Chemicals Affecting the AGR Use - Waters designated as AGR shall not contain concentrations of chemical constituents in amounts that adversely affect the water for beneficial uses (i.e., agricultural purposes).
5. Chemicals - Waters shall not contain concentrations of chemical constituents that adversely affect the water for beneficial uses.
6. Radionuclides - Waters shall not contain concentrations of radionuclides in excess of limits specified in the California Code of Regulations, Title 22, Chapter 15, Article 5, Section 64443.
7. Taste and Odors - Ground waters shall not contain taste or odor-producing substances in concentrations that cause nuisance or that adversely affect beneficial uses. For ground waters designated as MUN, at a minimum, concentrations shall not exceed adopted secondary maximum contaminant levels specified in Table 64449-A of Section 64449 (Secondary Maximum Contaminant Levels-Ranges), and Table 64449-B of Section 64449 (Secondary Maximum Contaminant Levels-Ranges) of Title 22 of the California Code of Regulations, including future changes as the changes take effect.

D. General Requirements and Prohibitions

1. The discharge of wastewater except to the authorized disposal/water recycling sites is prohibited.
 2. The discharge to waters of the State shall not contain substances in concentrations that are toxic to, or produce detrimental physiological responses in humans, plants, animals, or aquatic life.
 3. There shall be no discharge, bypass, or diversion of raw or partially treated sewage, sewage sludge, grease, or oils from the collection, transport, treatment, or disposal facilities to adjacent land areas or surface waters.
 4. Surface flow or visible discharge of sewage or sewage effluent from the authorized disposal/water recycling sites to adjacent land areas or surface waters is prohibited.
 5. The vertical distance between the liquid surface elevation and the lowest point of a pond dike shall not be less than 2.0 feet.
 6. The discharge shall not cause a pollution as defined in Section 13050(l) of the California Water Code, or a threatened pollution.
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7. Neither the treatment nor the discharge shall cause a nuisance as defined in Section 13050(m) of the California Water Code.
8. The disposal of waste residue, including biosolids, shall be in a manner approved by the Regional Board's Executive Officer and in compliance with all local, State, and federal requirements. Waste biosolids shall be discharged only at a legal point of disposal in accordance with the provisions of Title 23 of the California Code of Regulations, Division 3, Chapter 15, and in accordance with 40 CFR Part 503.
9. The Dischargers shall comply with all existing federal and state laws and regulations that apply to biosolids use and disposal practices. The Dischargers shall further comply with all requirements regarding biosolids use and disposal specified in the Clean Water Act Section 405(d).
10. To address the condition of threatened pollution described in Finding No. 11, the discharge of treated wastewater effluent by landspreading at the authorized disposal/water recycling site is prohibited in accordance with the time schedule specified in Provision II.B.4, unless an acceptable antidegradation analysis is submitted and approved by the Regional Board Executive Officer.
11. Excessive ponding of treated wastewater effluent disposed by landspreading is prohibited.

II. PROVISIONS

A. Rescission of Waste Discharge Requirements and Water Recycling Requirements

Board Order Nos. 6-93-18 and 6-90-64 are hereby rescinded.

B. Time Schedules

The Discharger shall comply with the following time schedules in order to achieve compliance with Discharge Specifications I.D.2 and I.D.6 concerning the discharge to waters of the state of substances producing toxic or detrimental physiological responses to humans or animals, and conditions of pollution or threatened pollution. This time schedule is limited to the constituents of nitrates and total dissolved solids in ground water at the current disposal location.

1. Corrective Action Plan

By January 31, 2001 the Dischargers shall submit a Corrective Action Plan (CAP) and time schedule to address the condition of degraded ground water and previous pollution described in Finding No. 11. The Dischargers shall prepare and submit the CAP for approval by the Regional Board's Executive Officer in accordance with SWRCB Resolutions No. 92-49 "Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under

Water Code Section 13304" and No. 68-16 "Statement of Policy With Respect to Maintaining High Quality of Waters in California". The CAP shall contain, at a minimum, the following:

- a. Additional delineation of the areal and vertical extent of the degraded and/or polluted ground water plume(s) at the disposal/water recycling/irrigated agricultural site.
 - (1) Installation and monitoring of an additional ground water monitoring well(s) in the vicinity of monitoring well MW4.
 - (2) Installation and monitoring of an additional ground water monitoring well(s) in the vicinity of monitoring well MW18.
- b. An evaluation of the need for and method of ground water quality restoration in the existing plume(s) of degraded and/or polluted ground water. Included in this evaluation should be a time schedule for an antidegradation analysis, if appropriate, to address existing areas of degradation or areas affected by potential degradation and threatened pollution from alternate disposal methods.
- c. The Dischargers shall provide a Workplan and time schedule for identifying and properly destroying abandoned wells within the authorized disposal/water recycling sites. The Workplan must be prepared under the supervision of a Registered Civil Engineer. Upon approval by the Regional Board's Executive Officer, implementation of this Workplan must begin within 90 days. This Workplan must comply with all California State Regulations for well destruction.

2. Effluent Disposal Plan

By **January 31, 2001** the Dischargers shall submit an Effluent Disposal Plan (EDP) for approval by the Regional Board's Executive Officer. The EDP shall propose methods and a schedule to attain a shift from landspreading of effluent to maximize utilization of the recycled water for irrigated agriculture purposes or disposal by other means protective of ground water quality. An antidegradation analysis must be performed for any option (such as a percolation pond) which allows deep percolation.

3. Farm Management Plan

By **January 31, 2001** the Dischargers shall submit a Farm Management Plan (FMP) for approval by the Regional Board's Executive Officer. The FMP shall propose any changes in crop selection, fertilizer, soil amendment and/or chemical application rates, changes in crop locations, recycled water and agricultural supply well water application rates and nutrient loadings to minimize the threat to ground water quality. Nutrient loadings and application rates for recycled water or agricultural well water shall be proposed to reflect crop agronomic rates using best management practices. Time schedules for implementation of the FMP shall be included.

4. Implementation

- a. Immediately upon preparation, and upon approval of critical plan elements by the Regional Board's Executive Officer, the CAP, EDP and FMP shall be implemented.
- b. By June 14, 2003 the Dischargers shall have implemented the following plan elements and demonstrated compliance with Discharge Specifications I.D.2 and I.D.6.

CAP - Ground Water Investigation and installation of new wells
- Engineering Alternatives analysis to address existing conditions of ground water degradation

EDP - Modifications to Optimize Disposal Operations
- Crop Utilization Pilot Studies
- Completed approval of an anti-degradation analysis for continued use of land spreading or comply with General Requirement and Prohibition I.D.10.

FMP - Define and Implement Best Management Practices

5. Status Reports

The Dischargers shall submit semi-annual status reports due July 31 and January 31 of each year to the Regional Board summarizing the status of efforts to implement the CAP, EDP, and FMP, and to achieve compliance with Discharge Specifications I.D.2 and I.D.6. The semi-annual reports shall be submitted beginning January 31, 2001 and shall continue until the plans are fully implemented.

C. Secondary User Agreements

1. The Primary User shall include the following conditions in any oral or written provision for disposition of recycled water:
 - a. Any Secondary User of reclaimed wastewater from the above Primary User hereby authorizes, at all reasonable times, the Primary User or any authorized representative of the Regional Board to enter upon the property where the recycled water is being used and to investigate such person's use of recycled water.
 - b. Any Secondary User of recycled water from the Primary User shall report to the Primary User at least once each month the method of irrigation used and the name and final usage of all crops irrigated with recycled water during such period. Such user of recycled water from the Primary User agrees to insert the substance of this clause in any oral or written provision for disposition of recycled water.

D. Reporting Requirements

Pursuant to Section 13267 of the California Water Code, LACSD shall comply with Monitoring and Reporting Program No. 00-57 and the "Standard Provisions For Waste Discharge Requirements" dated September 1, 1994 (Attachment "C").


E. Plant Supervision

The LACSD wastewater treatment plant shall be supervised by persons possessing a Wastewater Treatment Plant Operator Certificate of appropriate grade pursuant to Chapter 14, Division 3, Title 23, California Code of Regulations.

F. Monitoring Program Availability

A copy of this Order and the Monitoring and Reporting Program shall be available at all times at the treatment plant for immediate reference by the plant operator.

I, Harold J. Singer, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Lahontan Region, on June 14, 2000.

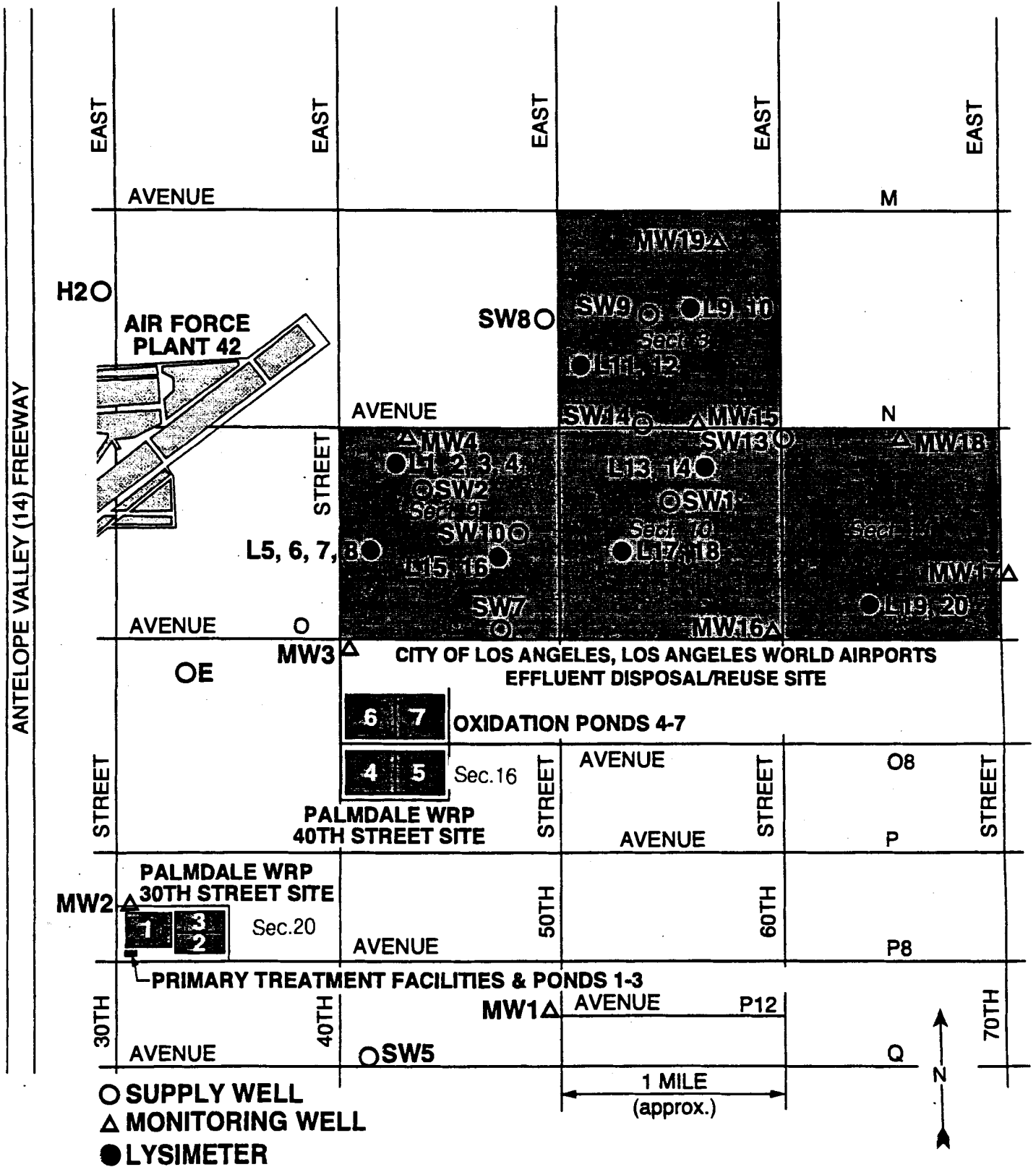

HAROLD J. SINGER
EXECUTIVE OFFICER

Attachments: A. Location Map
B. Facility Process Schematic
C. Standard Provisions

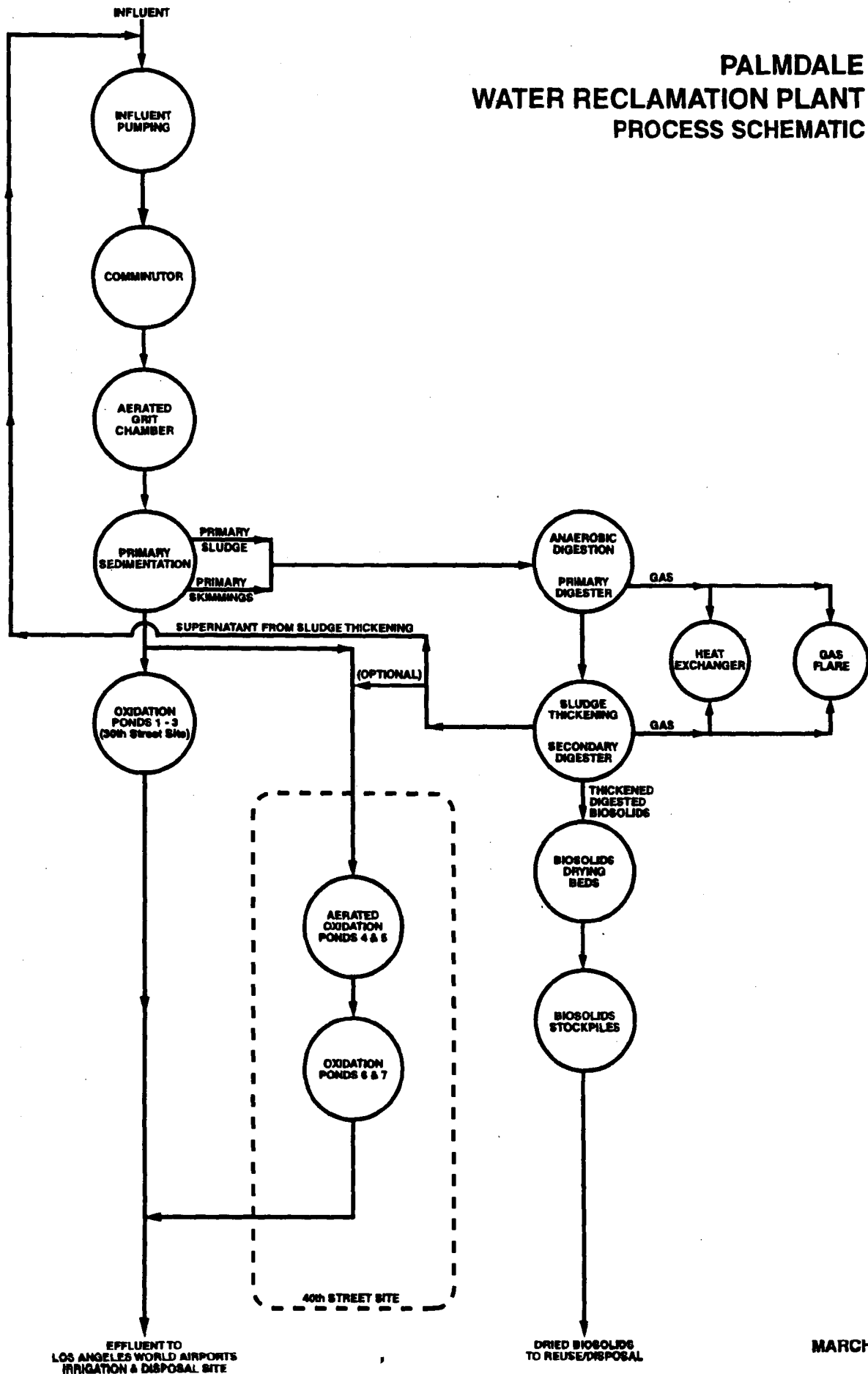
6/2000 PalmWDR

PALMDALE WATER RECLAMATION PLANT

Disposal/Reuse Sites, Wells and Lysimeters



PALMDALE WATER RECLAMATION PLANT PROCESS SCHEMATIC



MARCH 2000

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

STANDARD PROVISIONS FOR WASTE DISCHARGE REQUIREMENTS

1. Inspection and Entry

The Discharger shall permit Regional Board staff:

- a. to enter upon premises in which an effluent source is located or in which any required records are kept;
- b. to copy any records relating to the discharge or relating to compliance with the Waste Discharge Requirements;
- c. to inspect monitoring equipment or records; and
- d. to sample any discharge.

2. Reporting Requirements

- a. Pursuant to California Water Code 13267(b), the Discharger shall immediately notify the Regional Board by telephone whenever an adverse condition occurred as a result of this discharge; written confirmation shall follow within two weeks. An adverse condition includes, but is not limited to, spills of petroleum products or toxic chemicals, or damage to control facilities that could affect compliance.
- b. Pursuant to California Water Code Section 13260(c), any proposed material change in the character of the waste, manner or method of treatment or disposal, increase of discharge, or location of discharge, shall be reported to the Regional Board at least 120 days in advance of implementation of any such proposal. This shall include, but not limited to, all significant soil disturbances.
- c. The Owners/Discharger of property subject to Waste Discharge Requirements shall be considered to have a continuing responsibility for ensuring compliance with applicable Waste Discharge Requirements in the operations or use of the owned property. Pursuant to California Water Code Section 13260(c), any change in the ownership and/or operation of property subject to the Waste Discharge Requirements shall be reported to the Regional Board. Notification of applicable Waste Discharge Requirements shall be furnished in writing to the new owners and/or operators and a copy of such notification shall be sent to the Regional Board.
- d. If a Discharger becomes aware that any information submitted to the Regional Board is incorrect, the Discharger shall immediately notify the Regional Board, in writing and correct that information.
- e. Reports required by the Waste Discharge Requirements, and other information requested by the Regional Board, must be signed by a duly authorized representative of the Discharger. Under Section 13268 of the California Water Code, any person failing or refusing to furnish technical or monitoring reports, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in an amount of up to one thousand dollars (\$1,000) for each day of violation.

- f. If the Discharger becomes aware that their Waste Discharge Requirements (or permit) is no longer needed (because the project will not be built or the discharge will cease) the Discharger shall notify the Regional Board in writing and request that their Waste Discharge Requirements (or permit) be rescinded.

3. Right to Revise Waste Discharge Requirements

The Regional Board reserves the privilege of changing all or any portion of the Waste Discharge Requirements upon legal notice to and after opportunity to be heard is given to all concerned parties.

4. Duty to Comply

Failure to comply with the Waste Discharge Requirements may constitute a violation of the California Water Code and is grounds for enforcement action or for permit termination, revocation and reissuance, or modification.

5. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of the Waste Discharge Requirements which has a reasonable likelihood of adversely affecting human health or the environment.

6. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Discharger to achieve compliance with the Waste Discharge Requirements. Proper operation and maintenance includes adequate laboratory control, where appropriate, and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by the Discharger, when necessary to achieve compliance with the conditions of the Waste Discharge Requirements.

7. Waste Discharge Requirement Actions

The Waste Discharge Requirements may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for waste discharge requirement modification, revocation and reissuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any of the Waste Discharge Requirements conditions.

8. Property Rights

The Waste Discharge Requirements do not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

9. Enforcement

The California Water Code provides for civil liability and criminal penalties for violations or threatened violations of the Waste Discharge Requirements including imposition of civil liability or referral to the Attorney General.

10. Availability

A copy of the Waste Discharge Requirements shall be kept and maintained by the Discharger and be available at all times to operating personnel.

11. Severability

Provisions of the Waste Discharge Requirements are severable. If any provision of the requirements is found invalid, the remainder of the requirements shall not be affected.

12. Public Access

General public access shall be effectively excluded from disposal/treatment facilities.

13. Transfers

Providing there is no material change in the operation of the facility, this Order may be transferred to a new owner or operator. The owner/operator must request the transfer in writing and receive written approval from the Regional Board's Executive Officer.

14. Definitions

- a. "Surface waters" as used in this Order, include, but are not limited to, live streams, either perennial or ephemeral, which flow in natural or artificial water courses and natural lakes and artificial impoundments of waters. "Surface waters" does not include artificial water courses or impoundments used exclusively for wastewater disposal.
- b. "Ground waters" as used in this Order, include, but are not limited to, all subsurface waters being above atmospheric pressure and the capillary fringe of these waters.

15. Storm Protection

- a. All facilities used for collection, transport, treatment, storage, or disposal of waste shall be adequately protected against overflow, washout, inundation, structural damage or a significant reduction in efficiency resulting from a storm or flood having a recurrence interval of once in 100 years.

31-370.40.4 A



California Regional Water Quality Control Board Lahontan Region



Terry Tamminen
Secretary for
Environmental
Protection

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Arnold Schwarzenegger
Governor

April 26, 2004

WDID NO. 6B190107069

James F. Stahl, Gen Mgr
Co Sanitation Dist of Los Angeles
P.O. Box 4998
Whittier, CA 90607-4998
Attn: Stephen Maguin

Paul Green, Chief Operating Officer
Environmental Management Division
Los Angeles World Airports
PO Box 92216, WPC
Los Angeles, CA 90009-2216
Attn: Gary Brown

ADOPTED BOARD ORDER NO. 6-00-57A01 and MONITORING AND REPORTING PROGRAM NO. 6-00-57A02 FOR AMENDED WASTE DISCHARGE REQUIREMENTS (WDRS) AND AMENDED MONITORING AND REPORTING PROGRAM - LOS ANGELES COUNTY SANITATION DISTRICT NO. 20 AND THE CITY OF LOS ANGELES WORLD AIRPORTS; PALMDALE WATER RECLAMATION PLANT, LOS ANGELES COUNTY

Enclosed is the original signed Board Order No. 6-00-57A01 and Monitoring and Reporting Program No. 6-00-57A02 which were adopted at the Regional Water Quality Control Board meeting held in Palmdale, California on April 14, 2004.

Sincerely,

Rebecca Phillips
Office Technician

Enclosure: Adopted Board Order

c/

Jim Ritchie, Deputy Executive Dir
Long Range Planning - Env Affairs
Los Angeles World Airports
PO Box 92216 WPC
Los Angeles CA 90009-2216

Dr. Andrew Huang
Environmental Supervisor
Environmental Management Div.
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Dave Snyder
Co Sanitation Districts of Los Angeles
Water Quality & Soils Engineering, Section Head
P.O. Box 4998
Whittier Ca 90607-4998

DOC #

APR 29 04 AM 11:10

Ray Tremblay
Co Sanitation Districts of Los Angeles
Supervising Engineer
P.O. Box 4998
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California Environmental Protection Agency

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

BOARD ORDER NO. 6-00-57A01
WDID NO. 6B190107069

AMENDED WASTE DISCHARGE REQUIREMENTS
FOR

**LOS ANGELES COUNTY SANITATION DISTRICT NO. 20 AND
THE CITY OF LOS ANGELES WORLD AIRPORTS
PALMDALE WATER RECLAMATION PLANT**

Los Angeles County

The California Regional Water Quality Control Board, Lahontan Region (Regional Board) finds:

1. Discharger

Mr. James F. Stahl, Chief Engineer and General Manager of the County Sanitation Districts of Los Angeles County submitted an Amended Report of Waste Discharge (RWD) for the Los Angeles County Sanitation District No. 20 (LACSD) Palmdale Water Reclamation Plant (PWRP) dated October 24, 2003. The RWD was completed by submittal of an Engineering Report dated January 24, 2004, which documented compliance with Title 22, California Code of Regulations water recycling regulations. The City of Los Angeles World Airports (LAWA) is the owner of the Effluent Management Site (EMS), operated by LACSD. For the purposes of this Regional Board Order (Order), LACSD and LAWA are collectively referred to as the "Dischargers." This Amendment is intended to apply concurrently with Board Order No. 6-00-57, which remains in effect for the Dischargers, as described in this Order. For the purposes of water recycling, LACSD is designated as the "Producer" and "Distributor" for the current and proposed expanded reuse areas. At this time, LACSD is also designated as the "User" for the proposed reuse expansion area because a contractor operator has not yet been selected. Contract operators, whose contractual obligations are subject to change, are therefore unnamed herein, and are designated as "Users" for the current reuse area.

2. Facility

The PWRP currently collects, treats, and disposes of an average of 8.4 million gallons per day (mgd) of domestic wastewater generated from a population of approximately 125,000. Secondary wastewater treatment is provided by primary sedimentation tanks, anaerobic digesters, and six active, unlined oxidation ponds (approximately 170 acres). Additional treatment is provided by the oxidation pond aeration system. Sludge from the anaerobic digesters is dried in drying beds and hauled off site for disposal. The Facility consists of the unit processes used to provide secondary-level treatment, and the EMS. The Facility's design capacity is 15.0 mgd. The District has constructed temporary disinfection facilities and plans to construct permanent facilities by mid-2005. The Facility is located approximately two miles northeast of central Palmdale, in the Lancaster Hydrologic Area of the Antelope Hydrologic Unit within portions of Sections 16 and 20, T6N, R11W, SBB&M, as shown on Attachment "A", which is made a part of this Order.

Secondary-level treated, undisinfected effluent is currently discharged to 1,280 acres of land by land application and irrigated agriculture within portions of Sections 9, 10, and 11 of the EMS. An expansion of the EMS to include an additional 640 acres (Section 15) is authorized in this Amendment. Five center-pivot sprinkler irrigation systems, side roll, and manually moved sprinkler systems are currently used to apply recycled water at agronomic rates to fodder crops on the E ½ of Section 10 and the West ½ of Section 11. Section 3, the N ½ of Section 9, and the E ½ of Section 11 previously were authorized disposal/reuse areas specified in Board Order No. 6-00-57, but never received treated effluent. These areas are no longer part of the lease between LAWA and LACSD and are no longer considered part of the authorized disposal area. Additionally, LACSD and LAWA have revised the lease to add the W ½ and SE ¼ of Section 14, Section 15, and the NE ¼ of Section 16, T6N, R11W, SBB&M. Treated effluent is proposed to be applied to Section 15 by Fall 2004.

3. Permit History

The Regional Board previously established Waste Discharge Requirements (WDRs) for LACSD under Board Order No. 6-93-18, which was adopted on March 11, 1993. The Regional Board previously adopted separate water recycling requirements (WRRs) for LAWA under Board Order No. 6-90-64, which was adopted on October 11, 1990. The current Board Order No. 6-00-57, which combined WDRs and WRRs, was adopted on June 14, 2000. Cleanup and Abatement Order (CAO) No. R6V-2003-056 was adopted by the Regional Board on November 12, 2003, requiring the dischargers to abate the discharge contributing to the nitrate pollution and cleanup pollution and degradation of ground water caused by the discharge.

4. Reason For Action

The Regional Board is amending Board Order No. 6-00-57 to update the description of the authorized EMS to remove reference to Section 3, the N ½ of Section 9, and the E ½ of Section 11, which are no longer included in the Dischargers' lease agreement, and to add Section 15. The addition of Section 15 is proposed to provide additional crop acreage for water recycling to ultimately reduce the amount of landspreading to the S ½ of Section 9 and W ½ of Section 10. Reuse of recycled water in the expanded EMS areas is limited herein to applications at agronomic rates.

5. Water Recycling Criteria

Regulations set forth and revised by the State Department of Health Services (SDHS) in Chapter 3 (Water Recycling Criteria), Title 22, Division 4, Section 60001 (et seq.), California Code of Regulations (CCR), excerpted in Attachment "C", require that sewage effluent which is used to irrigate fodder and fiber crops, and orchards where fruit does not contact recycled waters must have a quality at least equivalent to that of undisinfected secondary effluent. Effluent limits to meet Title 22 criteria are set at levels which require that all wastewater discharged to the Dischargers' EMS water recycling sites receive a secondary level of treatment for proposed recycled water use for fodder, fiber and other appropriate crops. Treated effluent discharged to the water recycling sites must meet SDHS criteria.

The District intends to begin disinfecting the secondary effluent prior to recycled water use by adding sodium hypochlorite from an interim facility until a permanent facility is constructed.

6. Department of Health Services Consultation

An Engineering Report dated January 30, 2004, was submitted by the Dischargers. In accordance with Section 13523 of the California Water Code, the Regional Board consulted with the SDHS. In a letter dated March 4, 2004, SDHS provided its recommendations on the Engineering Report concerning WRRs, which are incorporated within the Order.

7. Authorized Effluent Management Site

The authorized EMS consists of the Dischargers' land application disposal in the southern half of Section 9 and western half of Section 10 and water recycling sites in the eastern half of Section 10, western half of Section 11 and all of Section 15 shown on Attachment "A." Sections 14 and 16 are not an authorized part of the EMS.

8. Lahontan Basin Plan

The Regional Board adopted a Water Quality Control Plan for the Lahontan Region (Basin Plan) which became effective on March 31, 1995, and this Order implements the Plan, as amended.

9. Beneficial Uses

The beneficial uses of the ground waters of the Lancaster Hydrologic Area of the Antelope Hydrologic Unit as set forth and defined in the Water Quality Control Plan for the Lahontan Region are:

- a. municipal and domestic supply (MUN);
- b. agricultural supply (AGR);
- c. industrial service supply (IND); and
- d. freshwater replenishment (FRSH).

10. California Environmental Quality Act (CEQA) Compliance

This Amended Order governs the continued operation of the Facility and an expansion of the EMS of the existing Facility, into Section 15, T6N, R11W, SBB&M. The project consists only of the continued operation of the Facility and the proposed expanded EMS. The continued operation of the existing Facility is categorically exempt from provisions of the CEQA (Public Resources Code § 21000 et seq.) in accordance with Section 15301 of the CEQA Guidelines.

The District's Board of Directors certified a Negative Declaration for the proposed Section 15 expansion on July 28, 2003. No mitigation measures were proposed in the environmental document. The Regional Board concurs with the findings of the Negative Declaration for Section 15.

11. Water Recycling Requirements

The Water Recycling Requirements specified in Board Order No. 6-00-57 are consistent with the current SDHS Water Recycling Criteria in Title 22, CCR, and remain in effect, except as amended herein.

12. Palmdale Airport

LAWA may develop the Palmdale Airport as discussed in the report titled "Destination 2030 Plan" provided by the Southern California Association of Governments (SCAG). This report projects that the Palmdale Airport may be processing 12.8 million passengers annually by the year 2030. The development of Palmdale Airport may have a future impact on LAWA leased land used for effluent disposal.

13. Notification of Interested Parties

The Regional Board has notified the Discharger and interested agencies and persons of its intent to amend WDRs for the discharge.

14. Consideration of Public Comments

The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the Discharger shall comply with the following:

I. DISCHARGE SPECIFICATIONS

A. Effluent Limitations

The effluent limitations specified in Board Order No. 6-00-57 remain in effect.

B. Water Recycling Requirements

1. The recycled water shall be confined to those lands described in Finding No. 7 of this Order.
2. All water recycling requirements and provisions not affected by this amendment remain in effect.

C. Receiving Water Limitation

The receiving water limitations specified in Board Order No. 6-00-57 remain in effect.

II. PROVISIONS

A. Authorized Effluent Management Site

The authorized EMS consists of the S ½ of Section 9, Section 10, W ½ of Section 11 (excluding all portions of Little Rock Wash), and Section 15, T6N, R11W, SBB&M. The areas within the EMS authorized for land application are the S ½ of Section 9 and the W ½ of Section 10.

B. Farm Management Plan

The Farm Management Plan (FMP) previously submitted in accordance with Board Order No. 6-00-57, Provision II.B.3 shall apply to the expanded EMS, Section 15, unless an amended plan is submitted by the Discharger and accepted by the Executive Officer.

C. Effluent Disposal Plan and Land Spreading Reduction

The Effluent Disposal Plan (EDP) previously submitted in accordance with Board Order No. 6-00-57, Provision II.B.2 shall apply to the expanded EMS, Section 15 unless an amended plan is submitted by the Discharger and accepted by the Executive Officer. There shall be reduction of effluent disposal by spreading commensurate with the expanded EMS area where recycled water is applied at agronomic rates.

D. Potential Loss of LAWA Leased Land

By **April 29, 2005**, the District shall submit a report that delineates when the current leases between the District and LAWA expire for each of the effluent disposal areas currently being used or proposed for use. The report shall include a plan describing the District's alternative(s) for effluent disposal, should the District lose the ability to use some or all of the LAWA land for waste disposal and reuse. The plan must include tasks and implementation schedules for major activities identified in the plan such that any new disposal or reuse area is available when the District no longer has use of sufficient LAWA property for waste disposal and reuse.

E. Status Reports

The Semiannual Corrective Action Compliance Status Reports previously required under Board Order No. 6-00-57 Section II.B.5., are hereby superceded by the Quarterly Compliance Status Reports specified in CAO No. R6V-2003-056 Section 3.2.

F. Abandoned Well Survey

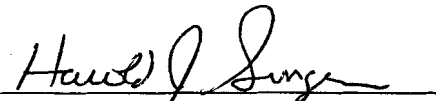
By **May 30, 2004**, the Dischargers shall provide a workplan and time schedule for identifying and properly destroying abandoned wells within the proposed expanded EMS, Section 15. The workplan must be prepared under the supervision of a Registered Civil Engineer. Upon acceptance by the Regional Board's Executive Officer, implementation of this workplan must begin within 90 days. This workplan must comply with all California State Regulations for well destruction. A Final Abandoned Well Investigation Report for the proposed expanded EMS areas shall be prepared and submitted in accordance with the workplan. No recycled water discharge may occur in Section 15 until the Final Abandoned Well Investigation Report has been submitted to the Regional Board and accepted by the Regional Board's Executive Officer.

G. Section 15 Ground Water Monitoring

There shall be no use of recycled water in the proposed expanded EMS, Section 15, until an initial round of ground water samples is collected, analyzed, and the results are submitted to the Regional Board to establish pre-discharge conditions. As a minimum, the parameters analyzed for the ground water samples shall include those identified for quarterly monitoring in MRP 00-57-A01, Section I.D.

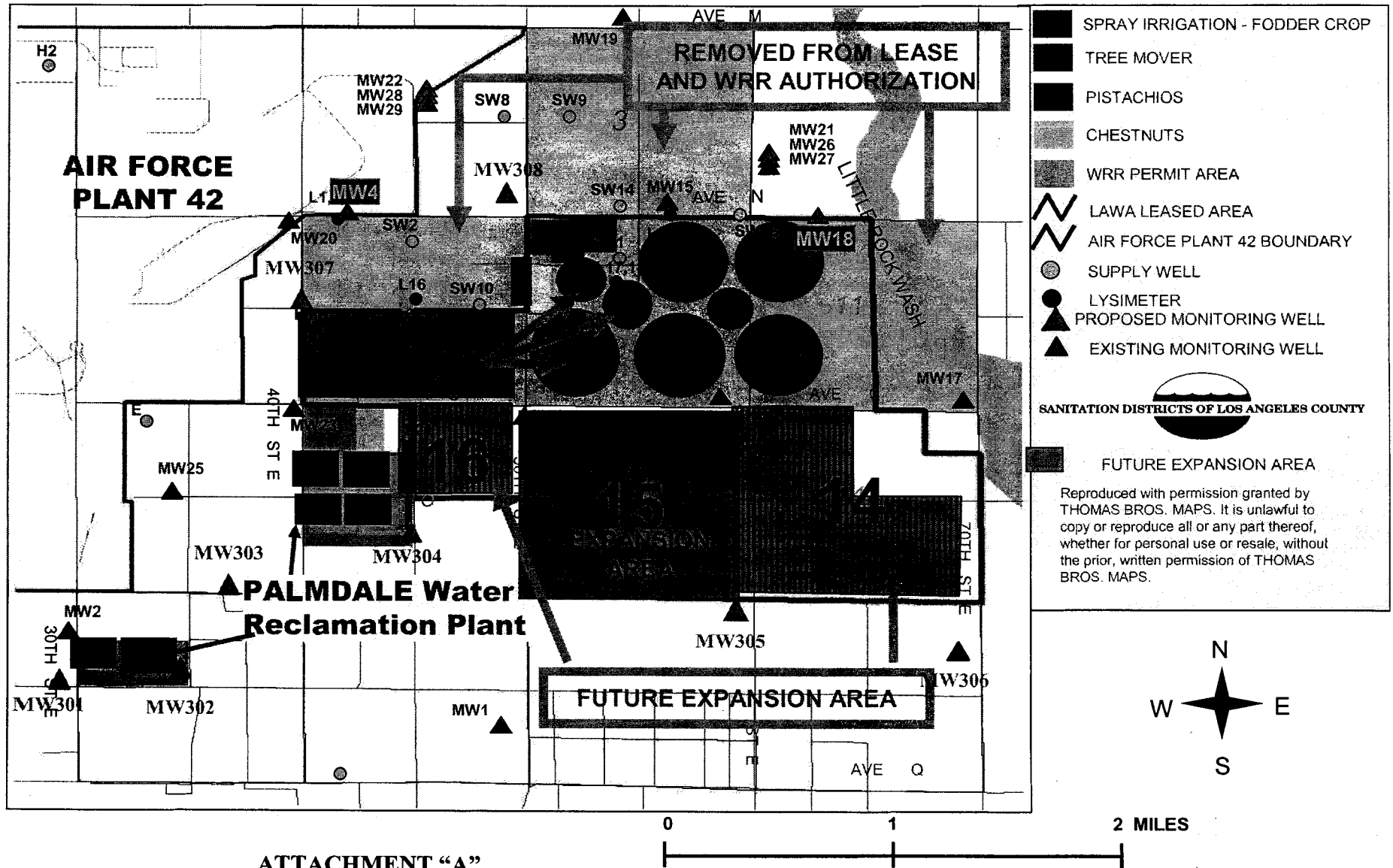
- H. The Dischargers shall notify the Regional Board in writing within 15 days of hiring a contractor operator to manage crop cultivation operations within Section 15 of the expanded reuse area. The designated contractor operator will be named as a "User" for the expanded reuse area in a subsequent amendment to the WDRs.

I, Harold J. Singer, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Lahontan Region, on April 14, 2004.



HAROLD J. SINGER
EXECUTIVE OFFICER

- Attachments: A. Location Map
B. Amended MRP 00-57A02
C. Excerpt – California Health Laws Related to Recycled Water – Title 22, CCR

PALMDALE WATER RECLAMATION PLANT - AGRICULTURAL REUSE EXPANSION AREAS (Current Amendment Section 15; Future NE1/4 Section 16, and NW1/4 & S1/2 Section 14)

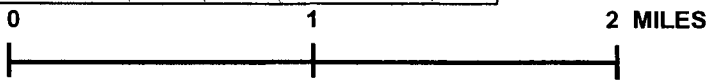
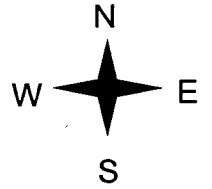


- SPRAY IRRIGATION - FODDER CROP
- TREE MOVER
- PISTACHIOS
- CHESTNUTS
- WRR PERMIT AREA
- LAWA LEASED AREA
- AIR FORCE PLANT 42 BOUNDARY
- SUPPLY WELL
- LYSIMETER
- PROPOSED MONITORING WELL
- EXISTING MONITORING WELL


SANITATION DISTRICTS OF LOS ANGELES COUNTY

FUTURE EXPANSION AREA

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California Regional Water Quality Control Board

Lahontan Region



Terry Tamminen
Secretary for
Environmental
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Arnold Schwarzenegger
Governor

August 13, 2004

WDID NO. 6B190107069

Lee Harrington
Harrington Farms
3380 Highway 33
Maricopa, CA 93252

Craig Van Dam
Antelope Valley Farming, LLC
9753 East Avenue F-8
Lancaster, CA 93535

ADOPTED BOARD ORDER NO. 6-00-57A02 FOR

**AMENDED WASTE DISCHARGE REQUIREMENTS - LOS ANGELES COUNTY
SANITATION DISTRICT (LACSD) NO. 20, THE CITY OF LOS ANGELES WORLD
AIRPORTS (LAWA), HARRINGTON FARMS AND ANTELOPE VALLEY FARMING;
PALMDALE WATER RECLAMATION PLANT, LOS ANGELES COUNTY**

Enclosed is a copy of the adopted Board Order No. 6-00-57A02 which was adopted at the
Regional Water Quality Control Board meeting Lancaster, California on July 26, 2004.

Sincerely,

Rebecca Phillips
Office Technician

Enclosure: Adopted Board Order

c: Mailing List

California Environmental Protection Agency

**LOS ANGELES COUNTY SANITATION DISTRICT #20
PALMDALE – MAILING LIST**

Raymond Tremblay, County Sanitation District of Los Angeles County
Dave Snyder, County Sanitation District of Los Angeles County
Gary Brown, Director, Environmental Mgt Div, Los Angeles World Airports
Jim Ritchie, Deputy Executive Director, Los Angeles World Airports
Andrew Huang, Environmental Supervisor, Los Angeles World Airports
Paul Green, Chief Operating Officer, Los Angeles World Airports
Lewis Trout, Senior Real Estate Officer, Palmdale Regional Airport

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

BOARD ORDER NO. 6-00-57A02
WDID NO. 6B190107069

AMENDED WASTE DISCHARGE REQUIREMENTS
FOR

LOS ANGELES COUNTY SANITATION DISTRICT NO. 20,
THE CITY OF LOS ANGELES WORLD AIRPORTS,
PALMDALE WATER RECLAMATION PLANT

Los Angeles County

The California Regional Water Quality Control Board, Lahontan Region (Regional Board) finds:

1. Board Order History

The Regional Board adopted Board Order No. 6-00-57 on June 14, 2000 establishing waste discharge and water recycling requirements for the production and use of recycled water from the Palmdale Water Reclamation Plant (WRP) and amended this Order (Board Order 6-00-57A01) on April 14, 2004.

2. Reason for Action

During the April 2004 meeting, the Regional Board requested that all users of recycled water be named in the Order. The purpose of this amended Order is to name the current recycled water users and specify that they are subject to recycled water use requirements.

3. Definitions

Discharger – Board Order No. 6-00-057, Finding 1, defines as Dischargers the Los Angeles County Sanitation District No. 20 (LACSD) - operator of the Palmdale WRP, and the City of Los Angeles World Airports (LAWA) - landowner of the disposal and recycled water use areas. These entities are primarily and secondarily responsible for compliance and monitoring prescribed by waste discharge requirements (WDRs) adopted by the Regional Board. Finding 1 of that Order also discusses the relationships for use of recycled water which are modified below based on new agreements between the two parties.

Producer – The LACSD is the producer of recycled water and is required to deliver recycled water meeting criteria established in Board Orders adopted by the Regional Board and regulations in Title 22, California Code of Regulations (CCR) adopted by the California Department of Health Services (CDHS).

Recycled Water – For purposes of this Amended Order, recycled water is treated effluent from the Palmdale WRP that complies with the criteria and treatment levels for the production of recycled water and its use specified in Section 60300, et seq., Title 22, CCR and adopted WDRs contained in Board Orders 6-00-57 and 6-00-57A01.

User – For purposes of this Order, a user of recycled water either directly or indirectly manages recycled water use areas and is subject to the requirements in Title 22, CCR, Section 60300 et seq. and Board Orders adopted by the Regional Board.

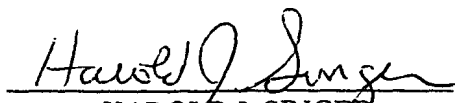
4. Users

The LACSD has an agreement with LAWA to expand agricultural operations onto leased land identified in Board Order 6-00-57A01, Finding 2, where treated effluent is either land disposed or recycled for agricultural uses by crop irrigation. Therefore, the LACSD is the primary user of recycled water and responsible for compliance with water recycling requirements adopted by the Regional Board, including monitoring and reporting requirements. The LACSD currently has agreements with two farming entities, Harrington Farms and Antelope Valley Farming LLC, to provide day-to-day management of the farming operations where recycled water is used. Therefore, Harrington Farms and Antelope Valley Farming LLC are secondary users of recycled water and responsible for compliance with water recycling requirements as ordered below. While not a direct user of recycled water, LAWA, as landowner, retains overall responsibility for the safe and proper use of recycled water on their property. This recycled water use relationship redefines the user relationships identified in Board Order 6-00-057 Finding 1.

IT IS HEREBY ORDERED that:

1. The Secondary Users listed in Finding 4 above, will be responsible for complying with the following requirements listed below.
 - a. Board Order 6-00-057, Section I.B (Water Recycling Requirements), I.C. (Receiving Water Limitations), and I.D.11. (General Requirements and Prohibitions);
 - b. Board Order 6-00-057A01, Section I.B (Water Recycling Requirements); and
 - c. Title 22, CCR, Sections 60304(d) and 60310.
2. The Secondary recycled water Users named in Finding 4, above, are responsible for compliance with paragraph 1.a., 1.b. and 1.c., above from the time they commence water use on the LAWA property under their control.
3. The District must notify the Regional Board at least 15 days prior to adding, removing or changing the Secondary Users of recycled water and, the District must ensure that agreements with Secondary Users require compliance with requirements stated herein.
4. All other Findings, Discharge Specifications, and Provisions of Board Order No's. 6-00-57 and No. 6-00-57A01 not amended by this Order, remain in effect.
5. Secondary Users are responsible for compliance with only the requirements listed in paragraph 1. above resulting from the user's operation.

I, Harold J. Singer, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Lahontan Region, on July 26, 2004.


HAROLD J. SINGER
EXECUTIVE OFFICER



31-370.40.4A

California Regional Water Quality Control Board Lahontan Region



Alan C. Lloyd Ph.D.
Agency Secretary

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Arnold Schwarzenegger
Governor

August 1, 2005

WDID NO. 6B190107069

James F. Stahl, Gen Mgr
Co Sanitation Dist of Los Angeles
P.O. Box 4998
Whittier, CA 90607-4998
Attn: Stephen Maguin

Paul Green, Chief Operating Officer
Environmental Management Division
Los Angeles World Airports
PO Box 92216, WPC
Los Angeles, CA 90009-2216
Attn: Gary Brown

ADOPTED BOARD ORDER NO. 6-00-57A03 and MONITORING AND REPORTING PROGRAM NO. 6-00-57A04 FOR AMENDED WASTE DISCHARGE REQUIREMENTS (WDRS) AND AMENDED MONITORING AND REPORTING PROGRAM - LOS ANGELES COUNTY SANITATION DISTRICT NO. 20 AND THE CITY OF LOS ANGELES WORLD AIRPORTS; PALMDALE WATER RECLAMATION PLANT, LOS ANGELES COUNTY

Enclosed are the original signed Board Orders for Waste Discharge Requirements No. 6-00-57A03 and Monitoring and Reporting Program No. 6-00-57A04 which were adopted at the Regional Water Quality Control Board meeting held in Bishop, California on July 13, 2005.

Sincerely,

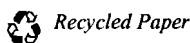
Rebecca Phillips
Office Technician

Enclosure: Adopted Board Order

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California Environmental Protection Agency



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

BOARD ORDER NO. 6-00-57A03
WDID NO. 6B190107069

AMENDED WASTE DISCHARGE REQUIREMENTS
FOR
LOS ANGELES COUNTY SANITATION DISTRICT NO. 20,
PALMDALE WATER RECLAMATION PLANT

Los Angeles County

The California Regional Water Quality Control Board, Lahontan Region (Regional Board) finds:

1. Discharger

The County Sanitation Districts of Los Angeles County District No. 20 (District) owns and operates the Palmdale Water Reclamation Plant. Effluent from this Facility is disposed to the Effluent Management Site owned by the City of Los Angeles World Airports (Airport). The District leases the Effluent Management Site from the Airport to: a) land dispose effluent and b) supply recycled water to irrigate fodder and fiber crops at agronomic rates. The California Water Code, Section 13270, exempts public agencies that lease land to other public agencies for waste disposal purposes from Waste Discharge Requirements (WDRs).

Therefore, the District only, and no longer the Airport, is referred to as the "Discharger". For the purposes of water recycling, the District is the "Producer", "Distributor" and "Primary User." Farmers responsible for day-to-day farming are "Secondary Users" and identified in Board Order 6-00-57-A03 which requires them to comply with Title 22, California Code of Regulations for recycled water use. This finding replaces Finding No. 1 of Board Order 6-00-57 and 6-00-57-A01.

2. Reason for Action

The District submitted an amended Report of Waste Discharge and amended Engineering Report of Recycled Water dated April 29, 2005. The District intends to expand agricultural reuse, primarily alfalfa, winter oats/barley and summer Sudan grass crops, to portions of Section 14 and 16 (Attachment A). Additionally, the District proposes to use recycled water for dust control and soil compaction during construction of the center pivot systems.

3. Order History

The Regional Board regulates the facility under the following active Board Orders.

Table 1 – Active Regional Board Orders for Palmdale Water Reclamation Plant

Order No.	Date	Purpose
		Waste Discharge Requirements
6-00-57	6-14-2000	Current revised Waste Discharge Requirements
6-00-57-A01	4-14-2004	Authorizes recycled water use in Section 15
6-00-57-A02	7-26-2004	Requires Secondary Users to comply with Title 22 criteria
		Monitoring and Reporting Programs
6-00-57-A01	2-26-2004	Replaces monitoring program No. 6-00-57

Order No.	Date	Purpose
6-00-57-A02	4-14-2004	Establishes Section 15 monitoring program
6-00-57-A03	10-13-2004	Modifies vadose zone monitoring program
		Enforcement Orders
R6V-2003-056	11-12-2003	Cleanup and Abatement Order for nitrate polluted groundwater
R6V-2004-039	10-13-2004	Cease and Desist Order to reduce and abate land spreading disposal of effluent

4. Recycled Water Criteria

The State Department of Health Services established recycled water criteria in Title 22, California Code of Regulations, Section 60001 et seq, that are included as Attachment C to Board Order 6-00-57-A01. The criteria specify that fodder and fiber crops can be irrigated with a minimum of “undisinfected secondary recycled water.” The District’s secondary treatment facilities produce water meeting this quality. The criteria also specify that water used for dust control and soil compaction to be “disinfected secondary-23 recycled water¹.” Since May 2004 the District has disinfected effluent with sodium hypochlorite using a temporary system. Beginning in August 2005, the District will have completed construction of permanent facilities to consistently achieve disinfected secondary-23 water. This exceeds the criteria for fodder and fiber crop uses but is necessary for dust control and construction soil compaction applications. After the center pivots are installed, the District intends to continue disinfecting all effluent that is land disposed or applied to crops for agricultural re-use. This and previous Orders require producers and users of recycled water to comply with applicable Title 22 criteria.

5. Secondary Users

Board Order 6-00-57-A02 identifies farmers that are under contract to manage day-to-day farming operations as “secondary users.” At this time, the District intends to produce and deliver recycled water to the expanded re-use areas of Sections 14 and 16 as the primary user and has not yet selected a secondary user. Board Order 6-00-57-A02 requires the Regional Board be notified of all secondary users and requires them to comply with Title 22 recycled water criteria.

6. Authorized Effluent Management Site

The Palmdale Water Reclamation Plant and authorized Effluent Management Site are described in more detail in the previously adopted orders that are still in effect. In addition, the authorized disposal areas will now include the northeast one-quarter of Section 16 and the west one-half, southeast one-quarter, and southwest one-quarter of the southwest one-quarter of the north-east quarter of Section 14, Tier 6 North, Range 11 West, San Bernardino Baseline and Meridian. The total area leased by the District from the Airport for disposal operations and called the Effluent Management Site is 2,680 acres. Portions of the northeast one-quarter of Section 14 contain the Little Rock Creek Drainage. Agricultural re-use is not authorized over that portion of the Effluent Management Site, shown on Attachment “A”, that drains directly to Little Rock Creek. Effluent is applied to crops above agronomic rates only to the south one-half of Section 9 and center pivots 6, 7 and 8 in Section 10, as shown on Attachment A.

¹ Disinfected secondary-23 recycled water means recycled water that has been oxidized and disinfected so that the median concentration of total coliform bacteria in the disinfected effluent does not exceed a most probable number (MPN) of 23 per 100 milliliters utilizing the bacteriological results of the last seven days for which analysis have been completed, and the number of total coliform bacteria does not exceed an MPN of 240 per 100 milliliters in more than one sample in any 30-day period.

7. Groundwater Nitrate Pollution

Land disposal of effluent has resulted in nitrate pollution in underlying groundwater. To address this, the Regional Board adopted enforcement Orders as described above. Expansion of the Effluent Management Site to include portions of Section 14 and 16 is intended, in part, to address the groundwater pollution by providing additional area to dispose effluent at agronomic rates to limit the over application during the winter season when there is low crop demand. The Cease and Desist Order establishes an October 15, 2008 date for which the Discharger must cease the discharge of nitrogen to groundwater that creates pollution. The area of affected groundwater is generally down gradient (north) of Sections 14 and 16.

8. Groundwater Degradation

Data from adjacent monitoring wells, reported in the 2004 Annual Monitoring Report, is shown in the table below.

Table 2 – 2004 Average Groundwater Quality in Wells Adjacent to Sections 14 and 16

Well No.	Location with respect To Sections 14 and 16	Total Dissolved Solids (mg/L)	Nitrate (mg/L)
MW-1*	Up gradient	187	1.11
MW-16	Down gradient	128	0.89
MW-24	Down gradient	168	0.86
MW-38	Up gradient	139	2.98
MW-39	Up gradient	186	1.50

* MW-1 data from 2005. This well was dry in 2004.

Background water quality in the vicinity of the Effluent Management Site generally has a total dissolved solids concentration of about 165 mg/L and nitrate of less than 2 mg/L. Therefore, groundwater quality in the vicinity of Section 14 and 16 is similar to natural background conditions. The extent to which offsite sources from agricultural fields or septic tank leach fields may contribute nitrate to local groundwater is unknown.

To evaluate the effect of using recycled water on receiving groundwater, the District submitted three groundwater degradation reports that include the Section 14 and 16 agricultural expansion areas². The District will limit the amount of water applied to the crop agronomic needs.

The Regional Board determines that some degradation is in the best interest of the people of the State provided that numerical water quality objectives are not violated. The degradation will provide public benefit in terms of wastewater management and produce a valuable crop. This finding satisfies Board Order 6-00-57, Discharge Specification I., C., 1, which requires that existing high quality water be maintained unless appropriate findings are made.

² a) Anti-degradation Analysis, Palmdale Water Reclamation Plant, June 2003, prepared by TRC Inc.
b) Degradation Analysis for TDS from Disinfection Process Modification at Palmdale Water Reclamation Plant, April 2004, prepared by the Los Angeles County Sanitation District Attachment 2 to the April 29, 2005 Report of Waste Discharge
c) Anti-degradation Analysis for Agricultural Reuse, April 2005, Palmdale Water Reclamation Plant

9. Department of Health Services Consultation

The Engineering Report, dated April 29, 2005 was submitted to the Department of Health Services. In accordance with Section 13523 of the California Water Code, the Regional Board consulted with the Department of Health Services. Their comments and recommendations are incorporated into this Order. The Department of Health Services accepted the District's Engineering Report in a letter dated June 6, 2005.

10. Lahontan Basin Plan

The Regional Board adopted a Water Quality Control Plan for the Lahontan Region (Basin Plan), which became effective on March 31, 1995, and this Order implements the Plan, as amended.

11. Ground Water Beneficial Uses

The beneficial uses of the ground waters of the Antelope Valley (Department of Water Resources Basin No. 6-44) as set forth and defined in the Water Quality Control Plan for the Lahontan Region are:

- a. Municipal and domestic supply (MUN);
- b. Agricultural supply (AGR);
- c. Industrial service supply (IND); and
- d. Freshwater replenishment (FRSH).

12. Surface Water Beneficial Uses

The beneficial uses of Little Rock Creek, an intermittent stream in the Antelope Hydrologic Unit (Department of Water Resources No. 626.00) as set forth and defined in the Water Quality Control Plan for the Lahontan Region are:

- a. Municipal and domestic supply (MUN);
- b. Groundwater recharge (GWR)
- c. Water contact recreation (REC-1)
- d. Non-contact water recreational (REC-2)
- e. Commercial and sport fishing (COMM)
- f. Cold freshwater habitat (COLD)
- g. Wildlife habitat (WILD)

13. California Environmental Quality Act (CEQA) Compliance

The project consists of the continued operation of the Facility and expansion of the recycled water disposal area to approximately 680 additional acres of the Effluent Management Site. The District circulated a Negative Declaration through the State Clearinghouse (SCH# 2004101097) for this project. On December 23, 2004, the District filed a Notice of Determination in compliance with Section 21152 of the Public Resources Code that it certified a Negative Declaration for the proposed Section 14 & 16 expansion. No mitigation measures were proposed in the environmental document.

14. Water Recycling Requirements

The Water Recycling Requirements specified in Board Order No. 6-00-57 and 6-00-57-A01 are consistent with the current Department of Health Services Water Recycling Criteria and remain in effect except as amended herein.

15. Notification of Interested Parties

The Regional Board has notified the Discharger and interested agencies and persons of its intent to amend WDRs for the discharge.

16. Consideration of Public Comments

The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the Discharger shall comply with the following.

Pursuant to Water Code Section 13270, for purposes of this Order and all previous Orders that are amended hereby, the Airport will no longer be treated as a Discharger. All other Findings, Discharge Specifications, Provisions, Standard Provisions, and General Provisions for Monitoring and Reporting that are identified in Board Order Nos. 6-00-57, 6-0057A1, and 6-00-57A2 remain in effect and unchanged.

I. DISCHARGE SPECIFICATIONS

Discharge Specifications I.B (Water Recycling Requirements) of Board Orders 6-00-57 and 6-00-57-A01 are replaced with the following.

A. Water Recycling Requirements

1. The use of recycled water is limited to the Effluent Management Site as described in the Finding 7 of Board Order 6-00-57-A01 and Finding 4 of this Order and as shown on Attachment A.
2. As described in Section 60323, Title 22, an Engineering Report must be submitted to the Regional Board and Department of Health Services for any material modification in the manner or method that recycled water is produced or used.
3. As described in Section 60304 (d), Title 22 recycled water used for producing fodder and fiber crops (agricultural fields), ornamental nursery stock (tree farm) and orchards where the recycled water does not come into contact with edible portion of the crop (pistachios) must meet the requirements of "Undisinfected secondary recycled water."
4. Pursuant to Title 22, Sections 60301.900 and 60301.650, "Undisinfected secondary recycled water" must be effluent that is fully oxidized in which the organic matter has been stabilized, is nonputrescible, and contains dissolved oxygen.

5. Pursuant to Title 22, Section 60301. 225, "Disinfected secondary recycled water-23 water" must be effluent that has been oxidized and disinfected so that the median concentration of total coliform bacteria in the disinfected effluent does not exceed a most probable number (MPN) of 23 per 100 milliliters utilizing the bacteriological results of the last seven days for which analysis have been completed, and the number of total coliform bacteria does not exceed an MPN of 240 per 100 milliliters in more than one sample in any 30-day period.
6. As described in Title 22, Section 60307 (b), recycled water used for dust control within the Effluent Management Site and soil compaction during construction of the center pivots in Sections 14 and 16 must meet the requirements of "Disinfected secondary recycled water-23 water."
7. The Discharger and Secondary Users must comply with all requirements for recycled water use areas as specified in Section 60310, Title 22.
8. The District, as producer of recycled water, must comply with all operational requirements specified in Sections 60325 (Personnel), 60327 (Maintenance), 60329 (Operating records and reports) and 60331 (Bypass) specified in Title 22.
9. The District, as producer of recycled water, must comply with the general Requirements of Design specified in Article 8, Title 22.
10. The District, as producer of recycled water, must comply with Reliability Requirements for Full Treatment specified in Article 10, Title 22 for production of water to meet the recycled water uses allowed in this Order.
11. Discharge of recycled water, or runoff commingled with recycled water off of the authorized Effluent Management Site, or to Little Rock Creek is prohibited.
12. The spray irrigation of nut bearing or ornamental trees and/or the harvesting of nuts from the ground surface is prohibited.
13. Christmas trees irrigated with recycled water shall be harvested no earlier than 30 days after the cessation of irrigation with recycled water. The trees shall be cut at a point on the trunk that is a minimum of two feet above the ground surface for the protection of worker and public health.
14. The use of recycled water shall not cause pollution or threatened pollution as defined in Section 13050(l) of the California Water Code.
15. The use of recycled water shall not cause nuisance as defined in Section 13050(m) of the California Water Code.
16. The Discharger shall not over apply recycled water above crop agronomic needs in the Effluent Management Site except for the south one-half of Section 9 and center pivots 6, 7 and 8 as shown on Attachment A.

II. PROVISIONS

A. Monitoring and Reporting Program

Pursuant to Section 13267 of the California Water Code, the Discharger must comply with the Monitoring and Reporting Program No. 00-57-A04.

B. Abandoned Wells

By **August 1, 2005**, and prior to use of recycled water in Sections 14 and 16, the Discharger shall submit a technical report documenting the destruction of the identified abandoned wells in those Sections. This report is needed to demonstrate that existing direct conduits to groundwater are sealed that may allow recycled water to reach groundwater. The report shall indicate conformance to the following:

1. Well destruction was completed in accordance with the work plan submitted May 28, 2004;
2. All work was completed under the supervision of a Registered Civil Engineer or Engineering Geologist; and
3. Well destruction conformed to California Well Standards, Department of Water Resources Bulletins 74-90 and 74-81.

C. Vadose Zone Monitoring


The Discharger initially proposed no additional vadose zone monitoring station adjacent to the Little Rock Wash but now have agreed to install additional stations by November 2005.

By **August 15, 2005**, the Discharger shall submit a revised Vadose zone monitoring plan that includes additional monitoring stations in fields within Section 14 adjacent to Little Rock Wash.

Prior to the use of recycled water for agricultural operations, or by **December 15, 2005**, whichever occurs first, the Discharger shall submit a report documenting the installation of the new stations. The Executive Officer may grant extensions if requested and justified. This report is needed to demonstrate that the Discharger has the ability to verify compliance with waste discharge requirements. The report shall indicate conformance to the following:

1. Vadose zone monitoring stations were installed in accordance with the work plans dated December 3, 2004 and August 19, 2004; and
2. All work was completed under the supervision of a Registered Civil Engineer or Engineering Geologist.

I, Harold J. Singer, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Lahontan Region, on July 13, 2005.



HAROLD J. SINGER
EXECUTIVE OFFICER

Attachment: A. Effluent Management Site Map

JC/rp/lacsd#20 (Palmdale) (lacsd20 wdr 6-00-57-A03)
6/2005

ATTACHMENT A - WDR

PALMDALE WATER RECLAMATION PLANT - EFFLUENT MANAGEMENT SITE

