



California Environmental Protection Agency
Department of Toxic Substances Control
PALOS VERDES LANDFILL
Palos Verdes Peninsula
Public Input Sought On Draft Remedial Action Plan

Fact Sheet #8

October 1995

INTRODUCTION

The Department of Toxic Substances Control (DTSC) seeks your input on a draft Remedial Action Plan (RAP) to clean up hazardous waste contamination at the Palos Verdes Landfill site. The County Sanitation Districts of Los Angeles County (Sanitation Districts) seek your input on the proposed Negative Declaration for the project.

This fact sheet also provides information about the remedial action proposal for the site, the health risk assessment, an environmental review, a brief history, and future activities. The site is located at 25706 Hawthorne Boulevard on the Palos Verdes Peninsula. DTSC is overseeing the activities of the former landfill operator, the Sanitation Districts, to investigate hazardous and other waste contamination resulting from past activities conducted at the Palos Verdes Landfill.

PUBLIC INPUT SOUGHT

DTSC seeks your input on the draft RAP during the 30 day comment period (October 6 to November 6, 1995). During this comment period a public meeting has been scheduled (please see the announcement on this page). All comments received during this period will be reviewed and responded to, and the draft RAP will be modified as appropriate before it is finalized by DTSC.

SITE CONDITIONS

The remedial investigation confirmed that landfill gas is generated by the Palos Verdes Landfill. This is normal and is caused by the degradation of the waste material in the landfill. Ground water contamination was also confirmed and its extent defined. Risk estimates based on the investigation results do not exceed levels used by DTSC to protect human health and are not a cause for concern.

There are four possible pathways that can result in public exposure to contaminants. Over 2,000 samples of air, surface water, soil, and ground water were collected and analyzed during the remedial investigation to evaluate these pathways. A health risk assessment was then performed to determine potential impacts the landfill could have on human health and the environment.

No impacts to the air, surface water, or subsurface soil were identified during the remedial investigation. Some surface soil samples from the service roads contained polynuclear

aromatic hydrocarbons, or PAHs. The levels of these PAHs are comparable to those found in urban road dust. Ground

PUBLIC MEETING ANNOUNCEMENT

South Coast Botanic Garden
26300 Crenshaw Boulevard
6:30 p.m., Thursday, October 19, 1995

DTSC and the Sanitation Districts will hold a public meeting to provide more information about the draft Remedial Action Plan (RAP) and proposed Negative Declaration for the former Palos Verdes Landfill site and to receive public input. We encourage you to attend this community meeting and share your comments and questions. You may submit written comments on the draft RAP during the 30 day public comment period from October 6 to November 6, 1995, to:

Chris Fox, Project Manager
Department of Toxic Substances Control
245 West Broadway, Suite 350
Long Beach, CA 90802-4444

Written comments on the proposed Negative Declaration may be submitted during the same 30 day public comment period to:

Lisa Rothbart, Solid Waste Management Dept.
County Sanitation Districts of Los Angeles County
1955 Workman Mill Road
Whittier, CA 90601-4998

Both DTSC and the Sanitation Districts encourage you to take an active interest in the issues affecting the remediation of the former landfill site. Further information is available at the local information repositories or from the project contacts (see back page of this fact sheet).

water contamination, discussed below, was identified during the investigation.

Ground Water. Ground water sampling data show two different areas, or plumes, of contamination. One plume is near Hawthorne Boulevard in Torrance, and the other lies to the northeast of the South Coast Botanic Garden at Crenshaw Boulevard and Rolling Hills Road. Both plumes extend off site, as shown on the map on page 2.

The Hawthorne Boulevard plume contains volatile organic compounds and arsenic. The Crenshaw Boulevard plume contains volatile organic compounds. Contaminated ground water extends approximately 500 to 800 feet off site to the northeast as shown on the map to the right. The contaminated ground water does not affect any drinking water sources. The area under the landfill and the areas of identified off site contamination are not drinking water sources.

Health Risk Assessment Results.

The goal of the risk assessment study was to determine potential impacts the Palos Verdes Landfill could have on human health and the environment. The estimated risks are determined by evaluating the potential for exposure to contamination and by evaluating to what degree that exposure is considered a safe level. Health effects are evaluated for noncarcinogenic (not cancer causing) and carcinogenic (cancer causing) effects.

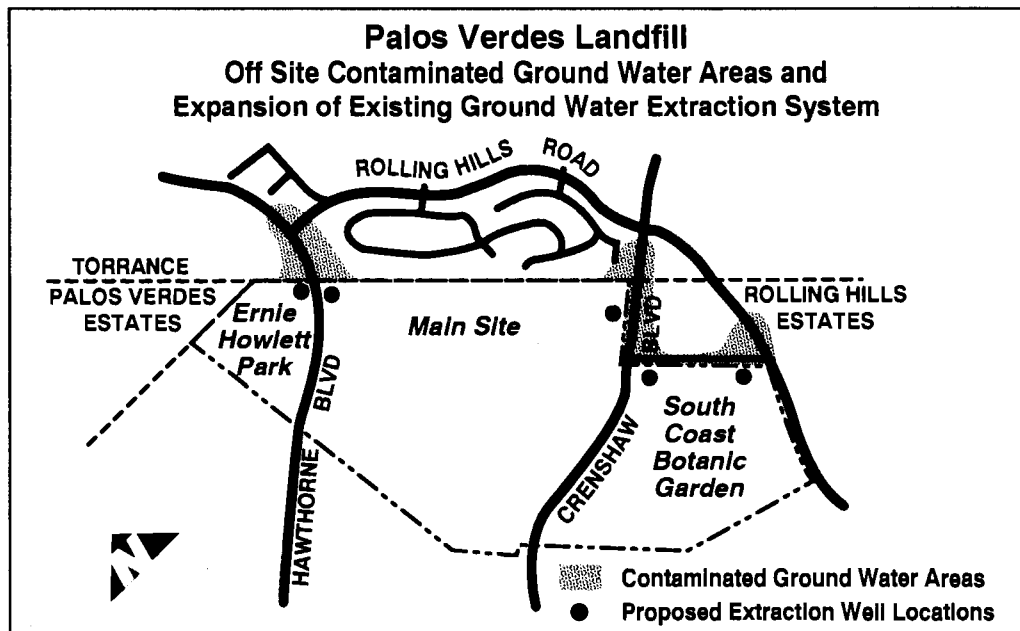
In the health risk assessment, current and possible future exposures from the Palos Verdes Landfill were considered under the assumption that no additional remedial measures would be taken. Possible risks to off site residents, on site workers, and recreational visitors to the landfill site were evaluated. Based on the health risk assessment, the potential exposures and estimated risks do not exceed DTSC levels protective of human health. The exposures and risks are not a cause for concern as long as conditions do not deteriorate.

An environmental evaluation was performed to determine possible impacts to other ecological receptors, including horses. This evaluation indicated that the exposures of horses and other animals to contaminants are low, and the chances of any adverse effects on health are minimal.

FEASIBILITY STUDY

A Feasibility Study was prepared to identify, develop, and evaluate remedial action alternatives for the site. Four remedial action alternatives were developed and considered for both the Hawthorne and Crenshaw Boulevard plumes; one additional alternative was also considered for the Crenshaw Boulevard plume. One alternative was selected for each plume as the recommended alternative.

- *No Action/Institutional Controls.* A no action response means the air, soil, and ground water would be left "as is."
- *Natural Attenuation.* This alternative involves the natural action of microbes in the soil and water to weaken the strength of the contamination.



- *Vertical Wells Collection, Treatment, and Discharge.* In this alternative, wells are drilled straight down to pump out contaminated water which is then treated to meet permit standards before it is discharged to the sanitary sewer.
- *Horizontal Wells Collection, Treatment, and Discharge.* In this alternative, wells are drilled at an angle and continue horizontally. The wells are used to pump out contaminated water, and this water is treated to permit standards and discharged to the sanitary sewer.

For the Crenshaw Boulevard plume, a fifth alternative was also considered:

- *Funnel and Gate Treatment and Containment.* A physical barrier is constructed in an approximately "v" shape to funnel contaminated ground water into an area where the contaminants can be neutralized.

All of these alternatives include continued monitoring. The alternative of containment of contaminated ground water through the use of vertical wells, collection, treatment, and discharge was selected, because it is protective of human health, uses well known technology, and will reduce the amount of contaminants in the ground water.

Alternatives were evaluated by using the following criteria required by the U.S. EPA:

- Overall protection of public health and the environment.
- Compliance with applicable or relevant and appropriate requirements.
- Long-term effectiveness and permanence.
- Reduction of toxicity, mobility, or volume.
- Short-term effectiveness.
- Implementability.
- Cost.
- State acceptance.
- Community acceptance.

REMEDIAL ACTION PROPOSAL

DTSC is the lead agency for the approval of the draft RAP. The draft RAP was prepared to address the four possible pathways for public exposure to contaminants. DTSC proposes the following appropriate further remedial measures.

The cleanup proposal for the Palos Verdes Landfill, presented in the draft RAP, includes continued operation of existing control measures and expansion of the existing vertical well extraction system. Possible migration of contaminants from landfill gas to the air would be controlled by continued operation of the landfill gas collection system. Surface water runoff would be directed off site through maintenance of the existing site grading and drainage structures. The existing soil cover would be maintained to prevent contact with the landfill contents.

Ground water contamination would be contained by expanding the existing extraction system. A subsurface barrier and extraction system were installed along Hawthorne Boulevard in 1986, and will continue to operate. Five additional extraction wells would be installed at the landfill as shown on the map on the opposite page. Up to ten additional extraction wells may be installed if needed. Contaminated ground water would be treated at the landfill in an existing treatment system and discharged to the sanitary sewer under an existing permit.

ENVIRONMENTAL REVIEW

An initial study was prepared for this site by the Sanitation Districts, which is the Lead Agency for the project under the California Environmental Quality Act (CEQA). The study indicates that the proposed remediation would not cause significant environmental effects. A proposed Negative Declaration has been prepared for this project by the Sanitation Districts.

DTSC is acting as a Responsible Agency under CEQA, and has determined that the proposed Negative Declaration made by the Sanitation Districts for the proposed project adequately addresses all potential environmental impacts for DTSC proposed action to approve the draft RAP for the site project. A Statement of Findings and a Notice of Determination will

be filed by DTSC pursuant to the requirements of CEQA prior to approval of the draft RAP.

The proposed Negative Declaration and supporting documents are available for public review and comment during the 30 day comment period which ends on November 6, 1995.

Site History

- BKK Corporation operated a small landfill (about 15 acres) at the South Coast Botanic Garden site from 1952 through 1957.
- The Sanitation Districts operated the Palos Verdes Landfill, consisting of the Main Site and the areas now developed as the South Coast Botanic Garden and Ernie Howlett Park (see map, page 2) from 1957 to 1980.
- A total of 23.6 million tons of waste were disposed of at the landfill. Municipal and commercial/industrial waste constituted 96% of this total; the remaining 4% was hazardous waste.
- Hazardous waste disposal was permitted for approximately the eastern two-thirds of the Main Site between 1964 and 1980.
- Landfill gas collection facilities have been operated at the Palos Verdes Landfill since 1976. The current Gas-to-Energy Plant was completed in 1988.
- In 1985 an area of ground water contamination was identified at Hawthorne Boulevard and the northern corner of the Main Site. A subsurface barrier system was installed in this area in 1986 to prevent migration of contaminated water.
- The landfill was listed on the Bond Expenditure Plan under the Hazardous Substance Clean-up Bond Act in 1986. It was listed because it received hazardous waste under permit and because of the contaminated ground water identified at the site.
- DTSC and the Sanitation Districts entered into an Enforceable Agreement in 1988. It defined the environmental investigation to be conducted at the landfill by the Sanitation Districts under the oversight of DTSC.

Copies of these documents can be found at the information repositories (see back page for repository locations).

FUTURE ACTIVITIES

DTSC will approve a final RAP following consideration of all comments and necessary modifications. Following this approval, a detailed design will be prepared to implement the

MAILING COUPON

If you wish to comment on or ask questions about the project or the draft RAP, please use the space below or a separate piece of paper and mail to DTSC. If you did not receive this fact sheet in the mail and would like to receive future mailings regarding the former Palos Verdes Landfill site, please complete this coupon and return it to the following address.

Department of Toxic Substances Control
Attention: Dr. Ed Schumacher, Public Participation Specialist
245 West Broadway, Suite 350
Long Beach, CA 90802-4444

Name: _____ Affiliation: _____ Phone: _____
Street: _____
City, State: _____ Zip Code: _____
Comments: _____

RAP. After implementation of the RAP, DTSC will determine whether to certify the site as functioning properly. Long term operation and maintenance of the remedial systems will then begin. All work is expected to be completed by mid-1997.

PUBLIC INVOLVEMENT OPPORTUNITIES

This fact sheet is a part of the DTSC public participation program for community members. A Community Relations Plan

has been placed in the information repositories. The purpose of the plan is to provide information to interested community members and to encourage public involvement in activities related to the site. Additional information may be obtained by reviewing documents located at the information repositories listed below or by contacting DTSC or Sanitation Districts project contacts (see below for project contact information). Other significant documents also will be placed in the repositories as they are updated and finalized.

FOR MORE INFORMATION

If you would like additional information about the Palos Verdes Landfill site, please call the contacts listed below or visit and refer to the documents available at one of the information repositories.

Project Contacts:

Chris Fox, Project Manager
DTSC
(310) 590-4954

Ed Schumacher, Public Participation Specialist
DTSC
(310) 590-5539

Mary Jacobs, Project Coordinator
Sanitation Districts
(310) 699-7411, x2413

Information Repositories:

Peninsula Center Library
650 Deep Valley Drive
Rolling Hills Estates, CA 90274
(310) 377-9584

Torrance Civic Center Library
3301 Torrance Boulevard
Torrance, CA 90503
(310) 618-5959

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
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245 WEST BROADWAY, SUITE 350
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