



**Palos Verdes Landfill  
REMEDIAL INVESTIGATION UPDATE**

Fact Sheet #4

May, 1991

**INTRODUCTION**

This is the fourth in a series of fact sheets designed to keep you updated on the investigation of potential hazardous waste contamination resulting from the Palos Verdes Landfill (PVLf). This fact sheet announces a community meeting to be held on June 12, 1991 (see box), and outlines the status of current and upcoming activities.

The PVLf, which has been closed since December, 1980, consists of 291 acres. It is divided into three sections by Hawthorne and Crenshaw Boulevards. The main site, which is the largest portion, is located between Hawthorne and Crenshaw Boulevards, southwest of Rolling Hills Road and the Country Hills Estates area, and northeast of Palos Verdes Drive North and the residences located in the area. The South Coast Botanic Garden and Ernie Howlett Park make up the balance of the former landfill.

**REMEDIAL INVESTIGATION STATUS**

The Remedial Investigation (RI) is designed to characterize the nature and extent of any potential contamination from the PVLf. It has been ongoing since April, 1990, and is being performed by the County Sanitation Districts of Los Angeles County (Sanitation Districts), and their contractors, under the oversight of the California Department of Health Services (DHS). The RI has been divided into four components aimed at investigating the potential pathways for contamination - namely, surface water runoff, groundwater, soil, and air (see box, page 2).

At this point in the RI, samples of rain water runoff, groundwater, and soil have been collected and analyzed. DHS' review of the preliminary analytical results has indicated that in some of the soil and groundwater samples there is some contamination. DHS staff toxicologists have also reviewed the data and found that there do not appear to be any indications of any immediate health or safety threats to area residents. This is because of the relatively low levels identified (compared to health based standards) and their subsurface locations.

**Surface Water and Sediment Characterization.** Samples of rain water runoff were collected during five storms in 1990 and 1991. Surface soil samples were also collected from 34 locations at the PVLf. These samples are being analyzed to determine whether any contaminants are being carried off of the landfill with rain water runoff.

**Hydrogeologic Characterization.** The purpose of this part of the RI is to define the site geology and hydrogeology. There

are four phases to this investigation. The first phase consisted of reviewing the available literature to locate any pertinent geologic, hydrologic, or seismic information in the PVLf area. A report summarizing this work was submitted to the DHS in March. Phases 2 and 3 consist of site investigations to better define the area geology and hydrology. The drilling performed in 1990 provided the field data necessary for these phases.

**COMMUNITY MEETING**

**A community meeting will be held on Wednesday, June 12, 1991, from 7:00 to 10:00 pm at the following location:**

**South Coast Botanic Garden  
26300 Crenshaw Boulevard  
Palos Verdes Peninsula, CA**

The DHS and the Sanitation Districts will present updates on the RI work, including a discussion of the results to date and future activities. We encourage you to attend the meeting, and to bring any concerns or questions for discussion. The community meetings are an important part of the Community Relations Plan for this project because they serve as a major avenue for keeping the DHS and the Sanitation Districts informed of your concerns.

The Sanitation Districts are now analyzing the data using geologic and hydrologic models, and statistical methods. The final report on Phases 2 and 3 is scheduled to be submitted to the DHS in November, 1991. The final phase will investigate the storm drain located along Hawthorne Boulevard and the lake at the South Coast Botanic Garden. These two features could potentially act as pathways for contaminant migration from the PVLf. Samples from the storm drain and the lake will be collected and analyzed this summer.

**Soil Characterization.** The results of analyses performed on soil samples collected during the field work performed last year are being evaluated. The primary focus of this study is to define the background soil conditions. Basically, this is done by statistically analyzing the levels of compounds that are present in soils that have not been in contact with potential contaminants from the PVLf. This is necessary to determine which compounds are naturally occurring in the soil.

**WORK PLAN STATUS**

**Surface Water and Sediment Characterization Plan (investigating runoff pathway)**

- Approved by DHS in August, 1989.
- Rain runoff sampling started in April, 1990.
- Final report due to DHS in February, 1992.

**Hydrogeologic Characterization Plan (investigating groundwater pathway)**

- Approved by DHS in December, 1989.
- Exploratory borings drilled between June and October, 1990.
- Thirteen piezometers (groundwater monitoring wells) and three lysimeters (soil pore liquid monitoring devices) were installed.
- Final report on Phases 2 and 3 due to DHS in November, 1991.
- Final report on Phase 4 due to DHS in March, 1992.

**Soil Characterization Plan (investigating soil pathway)**

- Approved by DHS in December, 1989.
- Samples collected from exploratory borings drilled during June - October, 1990.
- Final report due to DHS in June, 1991.

**Ambient Air/Landfill Gas Characterization Plan (investigating air pathway)**

- Approved by DHS in February, 1990.
- Ambient air, surface gas, and landfill gas sampling started in August, 1990.
- Monthly sampling will continue through August, 1991.
- Final report due to DHS in April, 1992.

**Ambient Air/Landfill Gas Characterization.** Ambient air, surface gas, and landfill gas sampling has been performed monthly since August, 1990. The results from the analyses performed on these samples will be used to determine whether any contaminants are being released from the landfill and carried offsite.

**INTERAGENCY BRIEFING**

The DHS held an Interagency Briefing in March, 1991, which was attended by representatives from local cities, the Central and West Basin Water Replenishment District, the Sanitation Districts, and local homeowner's groups. Some of the preliminary analytical results from soil, groundwater, and air sampling were presented. The general response to the meeting was positive, with interest in future meetings held at night expressed by representatives from two homeowner's groups.

**MONITORING ACTIVITIES**

***Groundwater Monitoring Program***

In January 1991, the Sanitation Districts began sampling site monitoring wells and lysimeters in accordance with the Palos Verdes Landfill RI/FS Site Sampling and Analysis Plan (SSAP). The SSAP outlines which wells are to be sampled and which monitoring parameters are to be analyzed. The wells being monitored include many of the existing monitoring wells at the site, as well as all thirteen monitoring wells and three lysimeters installed as part of the Hydrogeologic Characterization Plan (HCP). All wells are monitored on a quarterly basis for those parameters which will give good indications of landfill related contamination.

The monitoring will continue for at least one year. Based on the data collected during the HCP and the initial groundwater monitoring events, there do not appear to be additional areas of offsite groundwater contamination beyond those previously known near the landfill at Hawthorne Boulevard from water quality sampling performed prior to the HCP work.

***Radioactivity and Dioxin Sampling***

The Sanitation Districts prepared a sampling plan for radioactivity and dioxins in response to public concerns about these compounds. The sampling plan was submitted to DHS and was subsequently approved. The Sanitation Districts sampled several onsite wells for radioactivity and dioxins in December, 1990. The results of sampling for radioactivity have not yet been confirmed and will be reported in a later fact sheet.

Of the ten locations sampled for dioxins, one confirmed detection at an onsite location was found. Waters collected in an onsite sump showed 57 parts per trillion of OCDD. In scientific testing, OCDD has been found to be much less toxic than 2,3,7,8- TCDD, another member of the dioxin family of compounds. The waters collected in the sump are treated before discharge to the sanitary sewer system under an Industrial Waste permit. In response to the dioxin detection, the Sanitation Districts prepared a supplementary dioxin sampling program. The supplementary program includes periodic sampling of both onsite and offsite wells for dioxins. Results of this additional sampling will be reported in future fact sheets.

***Air Sampling***

In August 1990, the Sanitation Districts began sampling

ambient air, onsite surface gas, perimeter gas probes and collected landfill gas in accordance with the Ambient Air/Landfill Gas Characterization Plan. This program will continue through August, 1991.

Ambient air samples are collected twice monthly at four locations around the perimeter of the PVLf. Results to date have been comparable to background levels in the Los Angeles Air Basin as measured by the South Coast Air Quality Management District (SCAQMD).

Surface gas monitoring measures gas emissions through the surface of the PVLf. Each month samples are collected from about three inches above the surface of the landfill. Results to date have been below limits specified by the SCAQMD for similar monitoring programs at other landfill sites.

Perimeter gas probe monitoring involves the monthly sampling of 256 probes installed around the perimeter of the site which are designed to detect any subsurface gas migration. If gas is detected, appropriate steps to eliminate gas migration are taken. Daily monitoring is also performed until the gas levels subside. As part of a program for the Los Angeles County Department of Health Services, in-ground meter boxes are also monitored at residences to the northeast of the PVLf. This monitoring, performed monthly, shows that gas has not migrated to nearby residences.

The quality of the landfill gas collected by the site gas control system and burned in the onsite gas-to-energy plant is also characterized each month; results to date have been typical of landfill gas.

If you have any questions or concerns regarding landfill gas, you can contact the PVLf onsite staff at 377-3514 or 378-1928 (available 24 hours a day).

#### UPCOMING ACTIVITIES

##### *June, 1991*

The DHS and the Sanitation Districts will hold a community meeting to present preliminary results from the field activities that have occurred and outline the next phase of activities onsite. This will also be an opportunity to report on the interagency briefing and discuss any issues or concerns you may have about the investigation.

The final report on the Soil Characterization Plan is scheduled to be submitted to the DHS by the Sanitation Districts. After the DHS reviews and approves the report, it will be made available to the public at the Information Repositories.

##### *Summer/Fall, 1991*

Additional field work for the Hydrogeologic Characterization Plan is scheduled to be performed. Specifically, the storm drain running through the subsurface barrier at the northern corner of the main site will be investigated to determine if it presents a potential migration pathway. The integrity of the lake bottom liner at the South Coast Botanic Garden will also be investigated.

The DHS has requested that the Sanitation Districts investigate a former waste oil sump located northeast of the PVLf. The Sanitation Districts did not own or operate this former sump. Two borings will be drilled in the area near Rolling Hills Road and Fallenleaf Drive.

##### *November, 1991*

The final report on Phases 2 and 3 of the Hydrogeologic Characterization Plan is scheduled to be submitted to the DHS by the Sanitation Districts. After the DHS reviews and approves the report, it will be made available to the public at the Information Repositories.

#### MAILING COUPON

If you have any comments concerning the RI/FS project, or would like to be placed on the DHS mailing list, please fill out the information below and mail it to: Kristin Stultz, Public Participation Specialist, California Department of Health Services, Toxic Substances Control Program, 245 W. Broadway, Suite 350, Long Beach, CA 90802.

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CITY: \_\_\_\_\_ ZIP: \_\_\_\_\_

TELEPHONE: \_\_\_\_\_

COMMENTS: \_\_\_\_\_

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**January, 1992**

The DHS will issue another fact sheet to announce a community meeting scheduled for February. The fact sheet will also contain a summary of the results from the Soil Characterization Plan and Phases 2 and 3 of the Hydrogeologic Characterization Plan.

**February, 1992**

The DHS and the Sanitation Districts will hold a community meeting to present the results from the Soil Characterization Plan and Phases 2 and 3 of the Hydrogeologic Characterization Plan. Future activities of the investigation will also be discussed. A question and answer period will give interested parties an opportunity to voice any concerns or request further explanations. The final report on the Surface Water and Sediment Characterization Plan is scheduled to be submitted to the DHS by the Sanitation Districts. After the DHS reviews and approves the report, it will be made available to the public at the Information Repositories.

### **DHS PROJECT OFFICER**

Cynthia Martinez has taken a leave of absence from the DHS to pursue an advanced degree. Replacing her as the project officer on the Palos Verdes Landfill Remedial Investigation is Chuck Hodge. If you have any questions or comments, you can contact Chuck or Kristin Stultz, Public Participation representative for the DHS, at the phone numbers shown to the right.

### **FOR MORE INFORMATION**

More information about the site history, current investigation, project schedule and community concerns can be found in two prior fact sheets. To receive copies of these fact sheets, please contact DHS at the numbers listed below or return the enclosed mailing list coupon and indicate that you would like to receive the prior fact sheets.

**DHS Contacts:** If at any time during the remedial investigation you have questions or comments, please contact our office.

Chuck Hodge  
Project Officer  
(213) 590-4916

Kristin Stultz  
Public Participation  
(213) 590-4991

California Department of Health Services  
Toxic Substances Control Program  
245 W. Broadway, Suite 350  
Long Beach, CA 90802

**Information Repositories:** All site work plans, the Community Relations Plan and other reports can be reviewed at the reference desks of the following libraries.

Peninsula Center Library  
650 Deep Valley Drive  
Rolling Hills Estates, CA 90274  
(213) 377-9584

Torrance Civic Center Library  
3301 Torrance Boulevard  
Torrance, CA 90503  
(213) 618-5959

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