SUPPLEMENTAL RCRA FACILITY INVESTIGATION (RFI) REPORT LOS ANGELES COUNTY DEPARTMENT OF AGRICULTURAL COMMISSIONER/ WEIGHTS AND MEASURES PICO RIVERA FACILITY 8841 EAST SLAUSON AVENUE PICO RIVERA, CALIFORNIA

Prepared for:

Los Angeles County
Department of Agricultural Commissioner/
Weights and Measures
12300 Lower Azusa Road
Arcadia, California 91006-5872

Prepared by:

SCS Engineers
3900 Kilroy Airport Way
Suite 100
Long Beach, California 90806
(562) 426-9544

File No. 0193171.01

February 2007

Environmental Consultants

3900 Kilroy Airport Way
Suite 100
Long Beach, CA 90806-6816

562 426-9544
FAX 562 427-0805
http://www.scsengineers.com

SCS ENGINEERS

February 6, 2007

Chia Rin Yen
Project Manager
Department of Toxic Substances Control
1011 N. Grandview Ave.
Glendale, California 91902
(818) 551-2182

SUBJECT: TRANSMITTAL OF SUPPLEMENTAL RCRA FACILITY INVESTIGATION (RFI) REPORT, LOS ANGELES COUNTY DEPARTMENT OF AGRICULTURAL COMMISSIONER/WEIGHTS AND MEASURES, 8841 EAST SLAUSON AVENUE, PICO RIVERA, CALIFORNIA

Dear Ms. Yen,

Enclosed are two copies of the subject document, revised to respond to comments contained in the Department of Toxic Substances Control letter to Ray Smith dated January 26, 2007. The Supplemental RFI Report describes current conditions, particularly in areas outside of the former 4,000-gallon underground storage tank, summarizes health risk assessment findings, and provides recommendations.

Responses to specific comments in the January 26 letter are as follows (numbers correspond to those used in the letter):

1. The title of the previously submitted Corrective Measures Study has been modified.

2. The term "non-HWMUs" replaces that of "non-RCRA units" throughout the document.

3. The text has been changed to indicate that a Class 2 permit modification will be submitted for closure of the RCRA HWMUs, including excavation of dieldrin impacted soil.

4. The text modification suggested in the letter has been made.

5. The text modification suggested in the letter has been made.

6. The recommendation of corrective action termination upon completion of closure activities for HWMUs has been added.

7. Sections 5 through 7 in the previous document, and accompanying tables and figures, have been deleted from the current report.

If additional copies of the report are required, or if you have any questions or need any additional information regarding the document, please call me at (562) 426-9544.

Sincerely,

Kenneth H. Lister, Ph.D., C.E.G.
Senior Technical Manager
SCS ENGINEERS

Enclosures

cc: Mr. Ray Smith – LA Co. Department of Agricultural Commissioner/Weights and Measures
Ms. Wendy Arano, DTSC

Environmental Consultants
3900 Kilroy Airport Way
Suite 100
Long Beach, CA 90806-6816
562 426-9544
FAX 562 427-0805
http://www.scsengineers.com

March 9, 2007

Maria Fabella
Project Manager
Department of Toxic Substances Control
1011 N. Grandview Ave.
Glendale, California 91902
(818) 551-2182

SUBJECT: TRANSMITTAL OF REPLACEMENT PAGES FOR SUPPLEMENTAL RCRA FACILITY INVESTIGATION (RFI) REPORT, LOS ANGELES COUNTY DEPARTMENT OF AGRICULTURAL COMMISSIONER/WEIGHTS AND MEASURES, 8841 EAST SLAUSON AVENUE, PICO RIVERA, CALIFORNIA

Dear Ms. Fabella,

Enclosed are two copies of revised pages 11 through 13 of the subject document, as requested in your e-mails of March 8, 2007. The request for a Class 2 Permit Modification for the subject facility, also requested in your e-mails, will be forwarded as a separate submittal.

Revised responses to specific comments in the January 26, 2007 letter from the Department of Toxic Substances Control (DTSC) to Ray Smith of the Los Angeles County Department of Agricultural Commissioner/Weights and Measures, are as follows (numbers correspond to those used in the letter, text in bold face is the original DTSC comment, and the response follows):

1. **Please revise the title of the document to "Supplemental RCRA Facility Investigation Report".** The title of the previously submitted Corrective Measures Study has been modified as suggested.

2. **The term "No[n]-RCRA Units" was used to refer [to] units under the corrective action; however, this term may be misleading. All units within the facility [are] subject to RCRA requirements and are considered RCRA units. DTSC suggests the term "no[n]-RCRA units" be replaced by "Non-HWMUs".** The term "non-HWMUs" replaces that of "non-RCRA units" throughout the document.

3. **Page 12, Soil Cleanup level – Please revise the term "RCRA areas" to "RCRA HWMU". Please add to the end of the first paragraph to indicate that a Class 2 permit modification will be submitted for closure of RCRA HWMUs including the excavation of the dieldrin contaminated soil. This addition is to provide clarity to the readers that the dieldrin was not left in place but remediated under a separate process.** The term "RCRA HWMU" replaces "RCRA areas" throughout the document. A sentence has been added to the first paragraph of the subsection "Health Risk Based Cleanup Level" on page 11 to indicate that a Class 2 Permit Modification will be submitted for closure of the RCRA HWMUs, including excavation of dieldrin impacted soil.

4. **Page 13, Fourth line – DTSC recommends that the sentences starting with "if impacted deeper soil are left in place it may be necessary to have a land use covenant (LUC) in place to restrict any soil disturbance in these areas" be replaced by "the risk of the impacted deeper soils should also be discussed."** The text modification suggested in the letter has been made and now appears on page 12, sixth line.

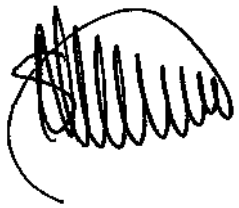
5. **Page 13, Second complete paragraph – please revised the last sentence to "… therefore the site will be protective of human health without any restrictions."** The text modification suggested in the letter has been made and now appears on page 12, second complete paragraph, last sentence.

6. **Page 14, Recommendations Regarding Corrective Action – Please add to the end of the paragraph that LACDAC recommends corrective action termination for the site upon the completion of the closure activities for HWMUs.** The recommendation of corrective action termination upon completion of closure activities for HWMUs has been added and now appears on page 13, last paragraph, last sentence.

7. **Based on the information provided in the report, no additional remediation is needed. Please delete all references regarding the evaluation of the alternatives for the site including pages 15 to 20, Sections 5 to 7; Tables 3, 4, and 5; Figure 6 and all references to these pages tables and figures.** Sections 5 through 7 in the previous document (Corrective Measures Study), and accompanying tables and figures, have been deleted from the Supplemental RFI.

If additional copies of the submitted pages or of the full report are required, or if you have any questions or need any additional information regarding the document, please call me at (562) 426-9544.

Sincerely,

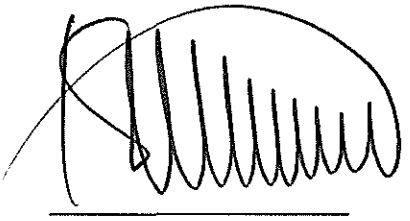


Kenneth H. Lister, Ph.D., C.E.G.
Senior Technical Manager
SCS ENGINEERS

Enclosures

cc: Mr. Ray Smith – LA Co. Department of Agricultural Commissioner/Weights and Measures
Ms. Wendy Arano, DTSC

This Supplemental RCRA Facility Investigation Report for the Los Angeles County Department of Agricultural Commissioner/Weights and Measures Pico Rivera Facility, located at 8841 East Slauson Avenue, Pico Rivera, California, dated February 2007, was prepared by the following:



Kenneth H. Lister, Ph.D.
Certified Engineering Geologist No. 1581
Certified Hydrogeologist No. 79
SCS ENGINEERS

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B - Health Risk Assessment Summary Tables

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SECTION 1

INTRODUCTION

BACKGROUND

SCS Engineers (SCS) was retained by the Los Angeles County Department of Agricultural Commissioner/Weights and Measures (LACDAC) to prepare a Supplemental RCRA Facility Investigation (RFI) Report to accompany the Closure Plan for the LACDAC Pico Rivera Facility located at 8841 East Slauson Avenue, Pico Rivera, California (Figure 1). This document describes current conditions and potential risk in portions of the site outside of the Resource Conservation and Recovery Act (RCRA) Hazardous Waste Management Units (HWMUs). In addition, the need for corrective action in these areas is evaluated. This document was prepared for submittal to the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) in accordance with guidelines presented in the following documents:

- RCRA Facility Investigation Guidance, Interim Final; United States Environmental Protection Agency (US EPA); May 1989.
- RCRA Corrective Action Plan (Final Guidance), United States Environmental Protection Agency (US EPA); May 1994.
- Test Methods for Evaluating Solid Waste (SW-846); US EPA; November 1986 (and updates).

Information regarding site investigation and data analysis is summarized in the following recent documents, all of which have been submitted to DTSC:

- RCRA Facility Investigation (RFI) Report, SCS, July 2001.
- RCRA Facility Investigation Additional Soil Sampling, Cesspool and Background Areas, SCS, September 2004.
- RCRA Facility Investigation Supplemental Soil Sampling, Background Area, SCS, February 2005.
- Baseline Human Health Risk Assessment, SCS, January 2006.
- RCRA Closure Plan, SCS, November 2006 (Revised January 2007).

The present document serves as a companion to the RCRA Closure Plan, which dealt with the permitted portions of the site.

PURPOSE AND SCOPE

The purpose of the present document is to present analytical and other site data, assess the need for corrective measures, and to provide recommendations. This document also reviews the results of health risk assessment previously conducted and establishes clean up objectives for non-HWMUs.

SECTION 2

DESCRIPTION OF CURRENT CONDITIONS

FACILITY DESCRIPTION

The subject site is an approximately 1.7-acre parcel which has been used by LACDAC since approximately 1930 for the following purposes: offices, raising of beneficial insects, mixing of rodent and bird baits for pest control, disposal of pesticides acquired from a pesticide collection program, and incineration of plants held under quarantine for pests or disease.

The subject site is located in a mixed residential, industrial, commercial area. The site is bounded on the north, west, and east by residential properties. Industrial facilities are located to the south, immediately across Slauson Avenue. Most of the site is surrounded by an 8-foot high concrete block wall on the east, north, and west sides and an 8-foot chain-link fence with a locked gate on the south. An approximately 50 by 200 foot grassy area at the southern end of the site is unfenced.

A map showing former locations of facilities at the site is included as Figure 2. RCRA units, and related facilities, not further discussed herein, consisted of a former 4,000-gallon fiberglass underground storage tank (UST), used to collect liquid pesticides from the public, and an associated bermed concrete pad (wash rack) at ground level, both located immediately west of the northern end of the main building; a former lockable, skid-mounted, steel storage container used to store solid-phase pesticides collected from the public, located approximately 80 feet north of the UST; and a cluster of nine roll-off steel bins that held soil excavated during removal of the 4,000-gallon UST, temporarily located in an area immediately west of the storage container until the taken off site for treatment/disposal.

Besides the RCRA units, the site contains or has contained the following facilities:

- The main building, located on the central portion of the site, is constructed of concrete blocks, has a wood-framed composition-shingle roof, and contains a raised wood sub-floor. Areas of the building where storage and mixing of pesticides took place were previously investigated and suspect building materials were removed and disposed off site. Site investigation included visual inspection of interior drain piping, near surface soil sampling below interior drain piping, near-surface confirmatory soil sampling below former pesticide storage/mixing areas, and sampling of near surface soils in the vicinity of the rear building entrance.

- A septic tank was located under a grassy area at the front of the main building. The septic tank was connected to an approximately 3 to 4 foot diameter 12 foot deep brick cesspool located approximately 10 feet east of the driveway. The areas of the septic tank and cesspool were investigated during the RFI. The septic tank and cesspool were removed and backfilled on July 9, 1996.

- A corrugated steel sheet on steel beam frame garage was formerly located on the northern portion of the site. The floor consisted of a concrete slab on grade. Pesticides were stored in the garage in the past. The garage floor and soil beneath the garage slab were sampled.

- One 800-, two 300-, and three 700- to 1,000-gallon steel weed oil tanks were located in

the northeastern portion of the site. These tanks, except for one of the 300-gallon tanks that was reportedly an UST, were on wood blocks above unpaved soil. They contained high viscosity petroleum used for weed control along roads. The weed oil reportedly did not contain pesticides or herbicides. Soil sampling took place at the location of the former tank areas.

- A steel cased water well with an approximately10-inch diameter surface casing was located near the concrete weed oil tank pad. This well was used to produce water for irrigation prior to development of the site in approximately 1930 and was not used after this time.

- An incinerator was located west of the main building on the southern portion of the site. The incinerator was used only to destroy quarantined plant matter which was infested with insects or diseased and was never used to incinerate pesticides or herbicides. The incinerator was demolished and taken off site for disposal. Near-surface soil sampling took place in this area.

- Asphalt paved areas formerly used for parking vehicles are located north and northeast of the main building. Near-surface soil sampling took place in these areas.

A more complete description of these facilities was included in the RFI Report (SCS, September 2001).

CHEMICALS USED ON-SITE

The following are rodenticides formerly used for mixing bait in the northwestern suite of rooms within the main building:

- Strychnine sulfate.
- Sodium monofluoroacetate.
- Thallium sulfate.
- Zinc phosphide.
- Diphacinone.
- Chlorophacinone.
- Prolin.
- Warfarin.
- Pival.

All rodenticides were received and stored in powdered or pellet form and stored in glass or metal containers. Containers may also have been temporarily stored in the garage.

The following is an organophosphate insecticide that was stored as a solution in glass bottles in the main building:

- Dibrom.

In addition, the following chlorophenoxy herbicides were formerly stored in the northwestern suite of rooms in the main building:

- 2,4 Dichlorophenoxyacetic acid; 2,4-D.
- 2-(2,4,5-Trichlorophenoxy)propionic acid; 2,4,5-TP or Silvex.

- 2,4,5-Trichlorophenoxyacetic acid; 2,4,5-T.

These herbicides were received and stored in liquid form in an aqueous or organic solution. They were stored in glass, metal or plastic containers. Some of these chemicals may also have been temporarily stored in the garage.

Other pesticides and herbicides were received at the site for temporary storage and disposal in connection with the LACDAC pesticide collection program. Compounds known to have been collected and stored on-site as part of the LACDAC pesticide collection program were listed in the RFI Report (SCS, July 2001). Liquid pesticides and pesticide container rinsings were collected in the 4,000-gallon UST described above. Pesticides collected through this program were never handled or stored in any on-site building except for the sea bin container in which pesticides received in solid form through the collection program were stored.

High viscosity petroleum hydrocarbons were stored in the former above ground weed oil tanks. Weed oil consisted predominantly of straight-chain and normal cyclic hydrocarbons and had little or no VOCs and no trace metal content. VOCs were not stored on site except very small volumes which may have been contained in liquid pesticide formulations. Organic liquids which may have been ingredients in pesticide formulations include xylenes and kerosene.

Trace metals which may have been used on site, either as a component of pesticides used or collected on site, or as dyes for rodenticides mixed on site, include the following:

- Arsenic
- Cadmium
- Copper
- Lead
- Mercury
- Thallium
- Zinc

Thallium and zinc were components of rodenticides used on the site, copper may have been a component of rodenticide dyes. There is no evidence that any other trace metal was used on site or would have been received as a component of a discarded pesticide.

INTERIM CORRECTIVE ACTION MEASURES

The following Interim Corrective Action Measures have been implemented at the site:

Interim Corrective Action Measure	Date
4,000 Gallon UST Removal*	1992
Wash Pad Removal*	1992/1994
Soil Bin Removal*	1995
Interior Building Material Removal	1994
Weed Oil Tank Removal	1985
Garage Removal	1994
Incinerator Removal	1994
Water Well Abandonment	1995
Removal of Cesspool	1996
Removal of Metal Storage Van*	2001

RCRA-related interim measures listed above are marked with an asterisk. Interim measures related to Non-HWMUs are briefly described below.

Building Material Sampling/Removal

Areas with potential to contain contaminated building materials were previously investigated, and selected areas of the building interior were removed and disposed off site at the ECDC Landfill in East Carbon, Utah during 1994.

Weed Oil Tank Removal

A 300-gallon UST was removed from the northeast portion of the subject site in 1985. Above ground weed oil storage tanks were also removed from the site.

Garage Removal

The on-site garage was dismantled and the roof, walls, frame, and concrete pad were removed from the site during 1994.

Incinerator Removal

The plant incinerator was dismantled and removed from the site in 1994.

Water Well Abandonment

An unused steel cased water well with 10-inch diameter surface casing of depth approximately 35 feet, was located on the northeast portion of the subject site. Abandonment consisted of pressure grouting, excavating around the upper portion of the casing, cutting the casing below grade, and backfilling around the sealed well. The well was abandoned under Los Angeles County Health Department permit and in accordance with appropriate California well standards (Department of Water Resources, 1991).

Removal of Cesspool

Removal consisted of removal of sludge from within the cesspool using bucket auger, removal of the upper portion of the cesspool and surrounding soil using a backhoe, and using an open flight auger to remove the remaining portion of the cesspool and underlying soil to a depth of 15 to 16 feet below ground surface (bgs). Soil and other materials were containerized and later disposed off site. These activities took place between June 1996 and January 1997.

SITE CHARACTERIZATION

Regional Topographic, Geologic, and Hydrogeologic Information

Topographic Information

The subject site is located in Township 2 South, Range 12 West, Section 26 (San Bernardino Baseline and Meridian) at an elevation of approximately 150 feet above mean sea level [United States Geological Survey (USGS) Whittier, California 7.5 Minute Topographic Map, 1965, photorevised 1981). The site is located in the Downey Plain approximately 4 miles southwest of the Whittier Narrows Flood Control Basin. The site is located approximately 1.5 miles west of

the San Gabriel River and approximately 0.75 miles east of the Rio Hondo River. Regional topography slopes gradually towards the southwest at about 30 feet per mile. The topography of the site is nearly flat except an approximately 10 foot wide strip near Slauson Avenue where ground slopes steeply down about 5 to the street.

Geologic Information

Geologic maps (California Division of Water Resources, Bulletin 104, Appendix A, 1961) indicate that the surficial sediments consist of Recent age stream and floodplain deposits composed of interbedded gravel, sand, silt, and clay. Sediments below these reportedly consist of similar deposits of the Pleistocene Lakewood Formation. The Whittier fault located approximately 4 miles north of the site is the closest known active fault to the subject site.

Investigations conducted by SCS indicate that soils beneath the site to depths of up to 55 feet bgs generally consist of fine to coarse-grained sand interbedded with fine gravel, silts, and clay. Soil samples indicate that interbedded layers of gravel, sand, silt, and clay are present beneath the site at depths from 19 feet bgs to approximately 33 feet bgs. Within this interval, silt and clay layers up to four feet thick were encountered.

Hydrogeologic Information

The site is within the Montebello Forebay area of the Central Ground Water Basin. Bulletin 104 of the California Department of Water Resources indicates that the first regional aquifer in the vicinity of the subject site is the Gaspur aquifer located between depths of approximately 50 and 100 feet bgs. No surface bodies of water are present at the site.

Based on regional groundwater maps published by DPW (Costal Plain, Shallow Aquifer Groundwater Contour Map, Fall 1978 and Hydrologic Report 1992-93) and on topography, groundwater is anticipated to flow in a south to southwest direction. This is consistent with water level measurements conducted in on-site wells. The Rio Hondo Spreading (percolation) Basins located approximately 0.5 miles to the northwest may seasonally influence groundwater flow direction.

The closest active municipal water supply wells are operated by the Pico Rivera Department of Public Works and Pico Water District and are located approximately 0.35 miles east and 0.4 miles west of the subject, respectively.

Review of a hydrograph from DPW Keywell No. 1601T located approximately 0.75 miles northeast of the subject site indicates that seasonal water level fluctuations in the area can average 10 to 15 feet per year. On-site water level measurements have indicated a range of approximately at least 17 feet since February 1997. The most recent on-site monitoring indicates groundwater gradient flow in a southerly direction with a gradient of approximately 0.005 ft/ft.

During drilling, groundwater was encountered in monitoring wells MW-1, MW-2, and MW-3 at a depth of approximately 38 feet bgs. Due to falling groundwater level during the period 1997 to 2001, three deeper replacement wells (MW-1D, MW-2D, MW-3D) were installed in June 2003. Groundwater monitoring well locations are shown on Figure 3 and construction details in Table 1. The most recent groundwater map indicates southwesterly flow with a gradient of approximately 0.002 ft/ft.

Weather Conditions

The site is located approximately 10 miles southeast of downtown Los Angeles. The climate in both locations is similar. At downtown Los Angeles the average seasonal rainfall is approximately 14.8 inches, the annual average high temperature is 75 degrees F, and the average annual low is 57 degrees F. Most rainfall occurs between November and April. Winds are generally light and tend to be from the south and southwest during the day with north winds in the evenings in the fall and winter (National Weather Service).

SECTION 3

INVESTIGATION RESULTS SUMMARY

GENERAL

The RFI Report (SCS, July 2001) provides a description of environmental sampling and sample analysis that occurred at the site during the main phases of investigation. Surface air samples were collected in connection with health and safety monitoring and analyzed for organochlorine and organophosphorous pesticides. No pesticides were detected in these air filter samples. Soil and groundwater sampling results are summarized in tables contained in Appendix A.

Subsurface samples were collected in the vadose and saturated groundwater zone. A total of 147 vadose zone soil and sludge samples were collected from 30 near surface and trench locations and from 13 boring locations during the RFI. Shallow soil samples were collected using hand auger methods to a depth of 5 feet bgs and soil samples from hollow stem auger borings were collected to a maximum depth of 48 feet. Selected soil samples were analyzed for pesticides and herbicides, semi-volatile organic compounds, strychnine, trace metals, and petroleum hydrocarbons. In addition, soil vapor samples were collected at a depth to 15 feet bgs in 20 locations and analyzed for volatile organic compounds (VOCs).

Post-RFI soil sampling and analysis was conducted in background and cesspool areas in June 2003, July 2004, and February 2005. Background samples were collected for metals analysis in six locations to depths of 10 feet bgs, with confirmation samples analyzed for arsenic in an additional three locations to five feet bgs. Samples were also collected to depths of 25 feet bgs in the cesspool area for analysis of arsenic and strychnine. Cesspool area samples indicated background level concentrations of arsenic in all samples and no detectable strychnine.

Three monitoring wells were installed on the site and groundwater samples from these have been analyzed for pesticides and herbicides, strychnine, VOCs, selected trace metals, and general water quality parameters. Groundwater monitoring was initiated in February 1997.

SUMMARY OF INVESTIGATION RESULTS FROM NON-HWMU

Pesticides and Herbicides

EPA 8080, 8140, and 8150 constituents were detected in low concentrations in some soil samples collected outside of the RCRA HWMUs. Substances detected include DDT and its breakdown products DDD and DDE, dalapon, and silvex. The maximum concentration of DDT detected was 1.5 mg/kg in a 1-foot depth sample collected near a doorway to the former garage (SS8-4-1). No pesticides were detected in 3- and 5-foot depth samples collected in this location. Concentrations of all other pesticides/herbicides detected were below 1 mg/kg.

Total Recoverable Petroleum Hydrocarbons

Petroleum hydrocarbons were detected in a few soil samples in the area of the weed oil tanks in the northeastern portion of the site. Only one sample contained concentrations exceeding 200 mg/kg TRPH, SS9-4-1 collected at a depth of 1 foot in the vicinity of a former 800 gallon weed oil tank, where 6,300 mg/kg TRPH was detected. Samples collected at depths of 3 and 5 feet bgs in the same area did not contain detectable concentrations of petroleum hydrocarbons.

Volatile Organic Compounds

One soil sample (SS6-4-1) collected in the area of the former garage contained a low concentration of toluene. Other than this, volatile organics were not detected in soil vapor or soil samples collected during site investigation activities in the area of the site outside the UST area. Elevated concentrations of semi-volatile organic compounds were not detected.

Strychnine

Strychnine was detected in two samples, both of which were collected in the immediate vicinity of the cesspool (T4-4-12C and CP-4-15). The highest concentration of strychnine was 6,900 mg/kg in a sample of sludge collected within the cesspool at a depth of 12 feet below surrounding grade. All material tested with detectable concentrations of strychnine was subsequently excavated and removed.

Trace Metals

Trace metals detected were generally within the normal background ranges for native southern California soils. The notable exception to this was elevated concentrations of thallium, arsenic, lead, zinc, copper, and cadmium detected in samples of the sludge contained within the cesspool. This material was removed, as previously discussed, and confirmatory samples of soils beneath the cesspool collected at depths of 20 to 30 feet indicated low to non-detect concentrations of thallium, lead, zinc, copper, and cadmium. Arsenic was detected at concentrations slightly above the southern California background range in two samples at depths of 15 and 20 feet bgs collected, respectively, immediately adjacent to and below the former cesspool and at concentrations within the southern California background range at depths of 25 and 30 feet bgs immediately below the cesspool.

SUMMARY OF GROUNDWATER SAMPLING RESULTS

Groundwater samples have been collected quarterly since the initial monitoring round with the exception of times when water levels were too low to allow purging and sampling. Groundwater sampling took place on the following dates:

- February 14, 1997
- May 14, 1997
- October 29, 1997
- January 1, 1998
- April 29, 1999
- March 24, 2000
- May 26, 2000
- August 16, 2000
- May 21, 2001
- April 28, 2003
- August 7, 2003
- March 25, 2004
- May 4, 2004
- January 20, 2005

The most recent groundwater monitoring report was dated March 2005 (SCS). DTSC letter of March 24, 2005 recommended cessation of regular monitoring.

Pesticides and Herbicides

EPA 8080 and 8140 constituents were not detected in any groundwater samples. Two herbicides, dicamba and dinoseb, analyzed by EPA Method 8150 were detected in monitoring wells MW-1 (upgradient) and MW-2 at concentrations of 0.51 and 1.9 μg/l, respectively during the first round of monitoring in February 1997. During the second round of monitoring, in May 1997, dinoseb was detected in MW-2 at a concentration of 12 ug/l. No pesticides or herbicides have been detected in any samples from monitoring episodes subsequent to the second round.

Volatile Organic Compounds

Methyl ethyl ketone (MEK) was detected in groundwater samples collected from monitoring well MW-1 (upgradient) at a concentration of 13 μg/l during the first round of sampling in February 1997. No EPA 8260 compounds were detected in monitoring wells MW-2 and MW-3. No other VOCs were detected in any other well during the first monitoring round and no VOCs have been detected in any groundwater samples subsequently.

Strychnine

Strychnine has not been detected in groundwater samples collected at the subject site.

Trace Metals

Trace metals, arsenic, cadmium, copper, lead, mercury, thallium, and zinc, were not detected in groundwater samples collected beneath the subject site during most rounds of monitoring. Relatively low concentrations of arsenic, copper, lead, and zinc were detected in samples collected during a few monitoring rounds. These substances have been detected from the upgradient well and from downgradient wells.

General Water Quality Parameters

Cations, anions, alkalinity, hardness, and TDS have been detected at ranges typical of potable groundwater.

SECTION 4

CORRECTIVE ACTION OBJECTIVES

SUMMARY OF HEALTH RISK ASSESSMENT

The HRA (SCS, January 2006) evaluated potential exposures to construction workers and potential adult and child residents. The following exposure pathways were evaluated depending on the receptor population: soil ingestion, dermal contact with soil, inhalation of soil particulates and volatiles released from soil. In addition, the vapor intrusion exposure pathway was evaluated for the adult and child residents. This pathway is not a concern for construction workers since this is an indoor pathway and construction workers are assumed to be working outdoors. Both cancer and non-cancer health risks were evaluated.

The risk assessment methods used in the HRA were selected to be consistent with recommendations of the California regulatory agencies primarily responsible for reviewing site risk assessments in California. These agencies include the DTSC and the California Office of Environmental Health Hazard Assessment (OEHHA). If risk guidance was not available from the California agencies for some aspect of the risk assessment, recommendations of the United States Environmental Protection Agency were selected.

The results of the HRA show that cumulative cancer risks for the construction worker and adult and child residents are above the DTSC and OEHHA negligible cancer risk threshold of 1×10^{-6}, but within the USEPA target risk range of 1×10^{-6} to 1×10^{-4} which is considered to be safe and protective of human health. The increased potential for cumulative cancer risks to the construction worker and residents is due to potential soil ingestion and dermal contact with dieldrin in soil in the RCRA portion of the site. Cumulative non-cancer risks for the construction worker, adult and child residents are all below the Hazard Index threshold of 1, indicating that potential exposures are not expected to result in adverse health effects. HRA summary tables are reproduced in Appendix B.

The HRA used the California Department of Toxic Substances Control Leadspread model to evaluate lead risks for on-site resident lead exposure; lead risks are considered insignificant. The USEPA Adult Lead Methodology model was used to assess risk from on-site exposure to lead for the construction worker. Lead risks are also considered insignificant for the construction worker.

HEALTH RISK BASED CLEANUP LEVEL

Soil Cleanup Level

The HRA found that the increased potential for cumulative cancer risks was due to potential soil ingestion and dermal contact with dieldrin in soil. Cleanup levels were developed for this substance based conservatively on residential site use and the negligible cancer risk threshold of 1×10^{-6}, as described above. A Class 2 Permit Modification will be submitted to DTSC for closure of RCRA HWMUs, including excavation of the dieldrin impacted soil. Since dieldrin was not detected outside of the RCRA HWMUs of the site, the cleanup level developed for this substance is not applicable to areas considered in this Supplemental RFI.

During the HRA, naturally occurring substances, such as trace metals, were first compared with site specific background values and added health risk only determined for those substances that had sample concentrations exceeding background. In addition, calculations in the HRA, and determination of the cleanup level, were based on a standard scenario that considers potential

ingestion and dermal contact in the upper 10 feet of the soil column only. In order to fulfill the objectives stated above, all soil to a depth of 10 feet below ground surface impacted by contaminant concentrations that exceed the cleanup level would be removed. Although soil impacted by contaminant concentrations that exceed the cleanup level located below the 10-foot depth do not present a significant health risk as per the HRA assumptions, based on conversations with DTSC staff, the risk of the impacted deeper soils should also be discussed. Applying this criterion to deeper soil in non-HWMUs, the contaminant of concern is arsenic, which was detected at concentrations above background in the area of the former cesspool but at a depth of greater than 10 feet bgs.

Concern regarding arsenic in soil in the former cesspool area was expressed by staff of the DTSC (letter dated November 2, 2005; also see letter dated October 5, 2005). During soil removal activities, soil and other materials with obviously elevated concentrations of arsenic has been removed to a depth of 15 feet bgs in the area of the former cesspool. Vertical and lateral confirmation samples were collected in the cesspool area (Figure 4). The only confirmation samples with arsenic concentrations above site background were collected at depths of 15 feet bgs or deeper (Figure 5). Although concentrations of arsenic above background do not exist in the 0- to 10-foot bgs zone where direct contact with receptors is considered possible, downward migration of arsenic was still considered of potential concern, as discussed below.

As indicated, arsenic levels exceeding background were detected at depths greater than 10 ft in a very small area of the site in close proximity to the former cesspool. Normally, contaminants detected below 10 ft. are not considered a health risk to future residents because there is no significant potential for contact with soils this deep. In other words, for the future resident, exposure pathways for these deep soils are incomplete. On the other hand, there is some potential that construction workers may come into contact with these deeper soils at some point. However, even for construction workers the exposure to arsenic in these soils would be insignificant for three reasons: 1) arsenic levels are only moderately elevated above the background range, 2) the area of the site impacted by the higher levels of arsenic is very small so that workers would be exposed mostly to soils containing arsenic levels closer to background (i.e., the higher arsenic-containing soils would be averaged out by the mostly lower arsenic-containing soils), and 3) the period of exposure for construction workers would be very short (weeks or months instead of years). These factors combined indicate that potential risks to future residents or construction workers would be insignificant and therefore the site will be protective of human health without any restrictions.

Protection of Groundwater

If soil with arsenic concentration above the cleanup level is left in place below a depth of 10 feet, it was agreed that vadose zone migration modeling should be conducted to assure that groundwater quality is not threatened. Modeling employed the USEPA approved SESOIL software. The SESOIL software used was supplied by Environmental Software Consultants as part of the "Seaview" package. The software includes pre- and post-processing modules to facilitate input and allow easier access to results.

SESOIL includes assumptions about environmental fate processes, the handling of temporal and spatial variations, and the applicability to different fate and transport scenarios. The user must specify climatic conditions and chemical specific information, both available from the published literature, and contaminant concentrations, to be developed based on site specific sample data. Model input soil parameters, including bulk density, permeability, effective porosity, total organic carbon content (TOC), and cation exchange capacity, were estimated based on conditions observed during site investigations and field tests conducted during these

observations.

The modeled soils section consisted of four soil layers with predominantly fine to medium grained sand from 0 to 37 feet bgs, predominantly clayey silt from 37 to 42 feet bgs, fine to coarse sand with some sandy silt from 42 to 68 feet bgs, and medium to coarse sand from 68 to 75 feet bgs. Physical soil parameters used for each of these layers in the SESOIL model are summarized in Table 2. Climatic parameters were based on the central Los Angeles database and chemical data on arsenic was from the Seaview database. The SESOIL model run represented 99 years of infiltration and downward migration of precipitation and resultant leaching of arsenic.

The results of SESOIL modeling indicate that arsenic leached from a base depth of impacted soil (approximately 31 feet bgs) to a maximum depth of approximately 39 feet bgs. The model also calculated that it would take 545.75 years for any arsenic from the soil zone with above background concentrations to leach to a depth at which transfer to groundwater could occur. From these model results it can be concluded that there is minimal potential for arsenic in the soil zone in this area to affect groundwater quality.

Model run documentation is included in Appendix C.

RECOMMENDATIONS REGARDING CORRECTIVE ACTION

Based on the above, active soil remediation in the cesspool area and other portions of the site outside HWMU's is not recommended. It is recommended that corrective action be terminated upon completion of the closure activities for the HWMUs.

SECTION 5

REFERENCES

Bradford, G. R., A. C. Chang, A. L. Page, D. Bakhtar, J. A. Frampton, and H. Wright. 1996 (March). Background Concentrations of Trace and Major Elements in California Soils, Kearney Foundation of Soil Science, Division of Agriculture and Natural Resources, University of California.

California Department of Water Resources; 1961. Planned Utilization of Ground Water Basins of the Coastal Plain of Los Angeles County, Appendix A, Ground Water Geology, Bulletin No. 104.

California Environmental Protection Agency, Department of Toxic Substances Control; 1994. Guidelines for Hydrogeological Characterization at Hazardous Waste Substance Release Sites, Interim Final.

Los Angeles County Department of Public Works; 1994. Hydrologic Report 1992-93.

Los Angeles County Department of Public Works; 1978. Coastal Plain Shallow Aquifer Ground ontour Map.

SCS Engineers; 1995 (March 3) Information on Binned Soils, Former Agricultural Facility, 8841 East Slauson Avenue, Pico Rivera, California (letter to Mr. Richard Wightman Deputy County Agricultural Commissioner).

SCS Engineers: 1995 (March). RCRA Facility Investigation (RFI) Work Plan, Los Angeles County Department of Agricultural Commissioner, Pico Rivera Facility, 8841 East Slauson Avenue, Pico Rivera, California.

SCS Engineers; 1995 (February) Revised Health and Safety Plan.

SCS Engineers: 2001 (July). RCRA Facility Investigation (RFI) Report, Los Angeles County Department of Agricultural Commissioner, Pico Rivera Facility, 8841 East Slauson Avenue, Pico Rivera, California.

SCS Engineers: 2004 (September). RCRA Facility Investigation Additional Soil Sampling, Cesspool and Background Areas, Los Angeles County Department of Agricultural Commissioner, Pico Rivera Facility, 8841 East Slauson Avenue, Pico Rivera, California.

SCS Engineers: 2005 (February). RCRA Facility Investigation Supplemental Soil Sampling, Background Area, Los Angeles County Dept. of Agricultural Commissioner/Weights and Measures, Pico Rivera Facility, 8841 East Slauson Avenue, Pico Rivera, California.

SCS Engineers: 2005 (March). Groundwater Monitoring Report, First Quarter 2005, Los Angeles County Dept. of Agricultural Commissioner/Weights and Measures, 8841 East Slauson Avenue, Pico Rivera, California.

SCS Engineers: 2006 (January). Baseline Human Health Risk Assessment, Former Los Angeles County Agricultural Commissioner Facility, 8841 East Slauson Avenue, Pico Rivera, California.

SCS Engineers: 2006 (November; Revised January 2007). RCRA Closure Plan, Los Angeles County Department of Agricultural Commissioner, Pico Rivera Facility, 8841 East Slauson Avenue, Pico Rivera, California.

US EPA Office of Solid Waste and Emergency Response; 1983. Hazardous Waste Land Treatment, SW-874 (Table 6.46).

US EPA; 1986 (and updates). Test Methods for Evaluating Solid Waste, SW-846.

US EPA; 1989. RCRA Facility Investigation (RFI) Guidance, Interim Final, SW 89-031.

US EPA; 1992. RCRA Ground-Water Monitoring, Draft Technical Guidance, 530-R-93-01.

US EPA; 1994. RCRA Corrective Action Plan, Final, OSWER Directive 9902.3-2A.

US Geological Survey; 1965 (photorevised 1981). Whittier California, 7.5 Minute, Topographic Map.

FIGURES

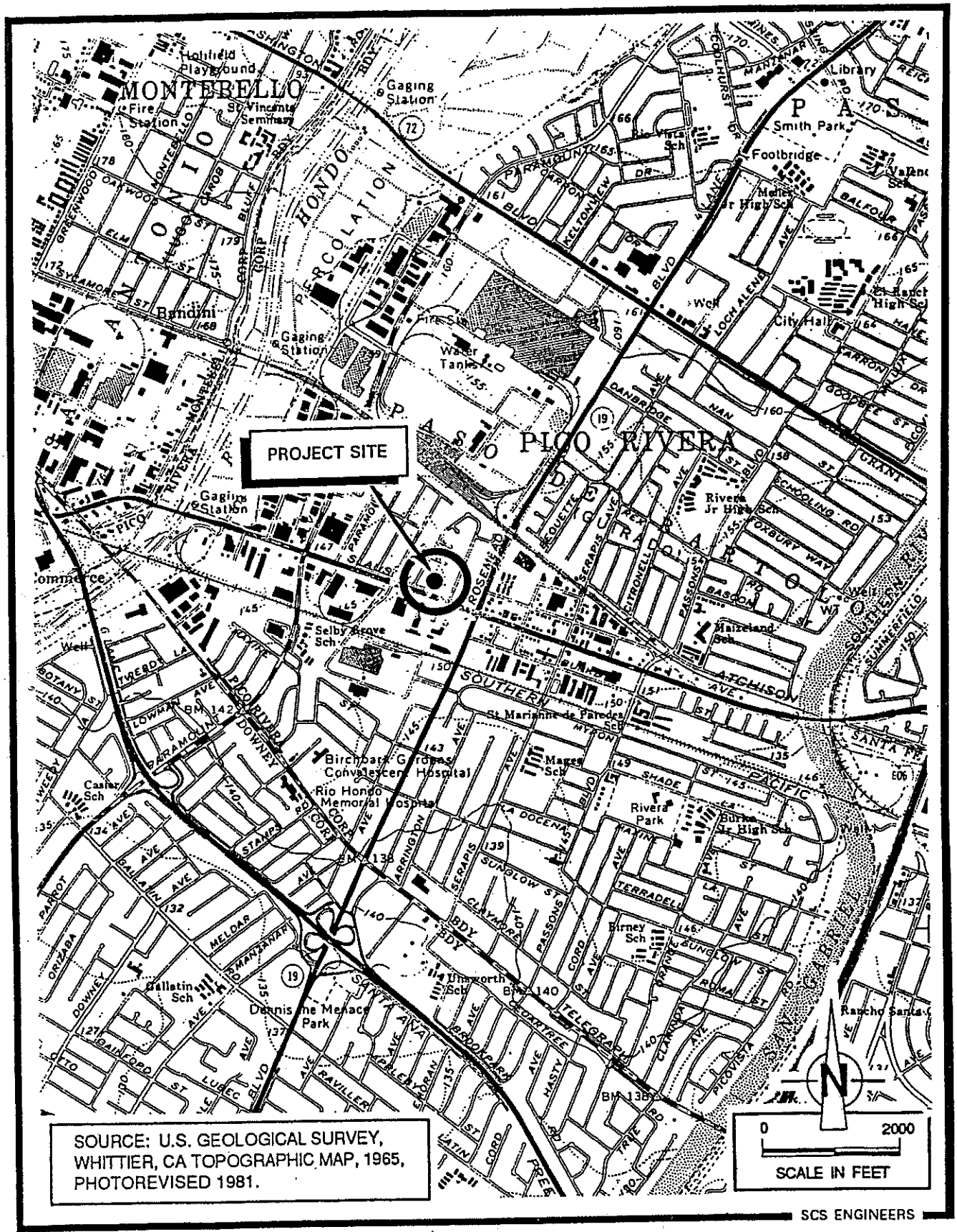


Figure 1. Project Site Location, Los Angeles County Department of Agricultural Commissioner, Pico Rivera Facility, 8841 E. Slauson Ave., Pico Rivera, CA.

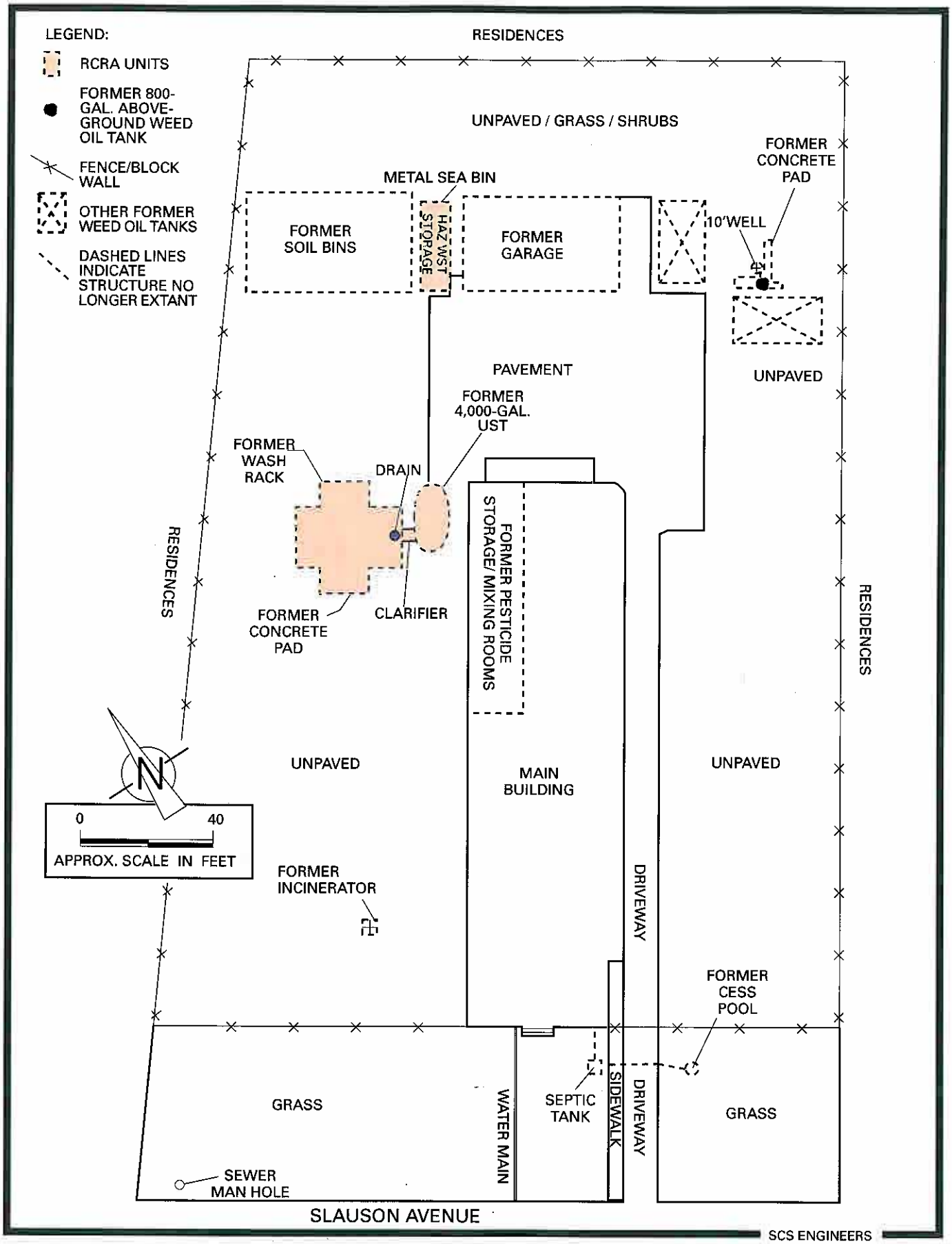


Figure 2. Map Showing Location of Facilities, Los Angeles County Department of Agricultural Commissioner/Weights and Measures, 8841 E. Slauson Ave., Pico Rivera, CA.

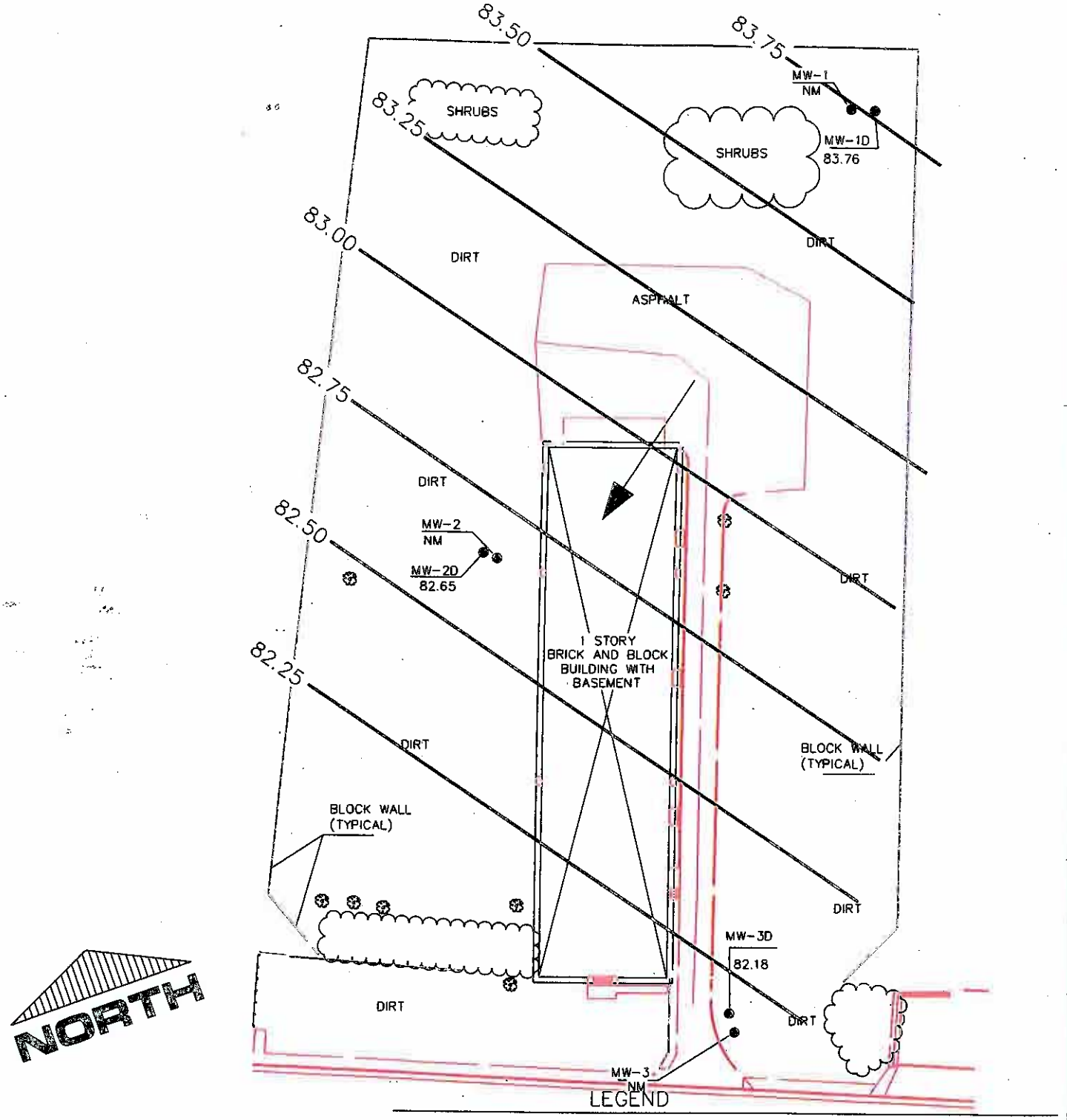


Figure 3. Groundwater Contour Map, 8841 East Slauson Avenue, Pico Rivera, CA

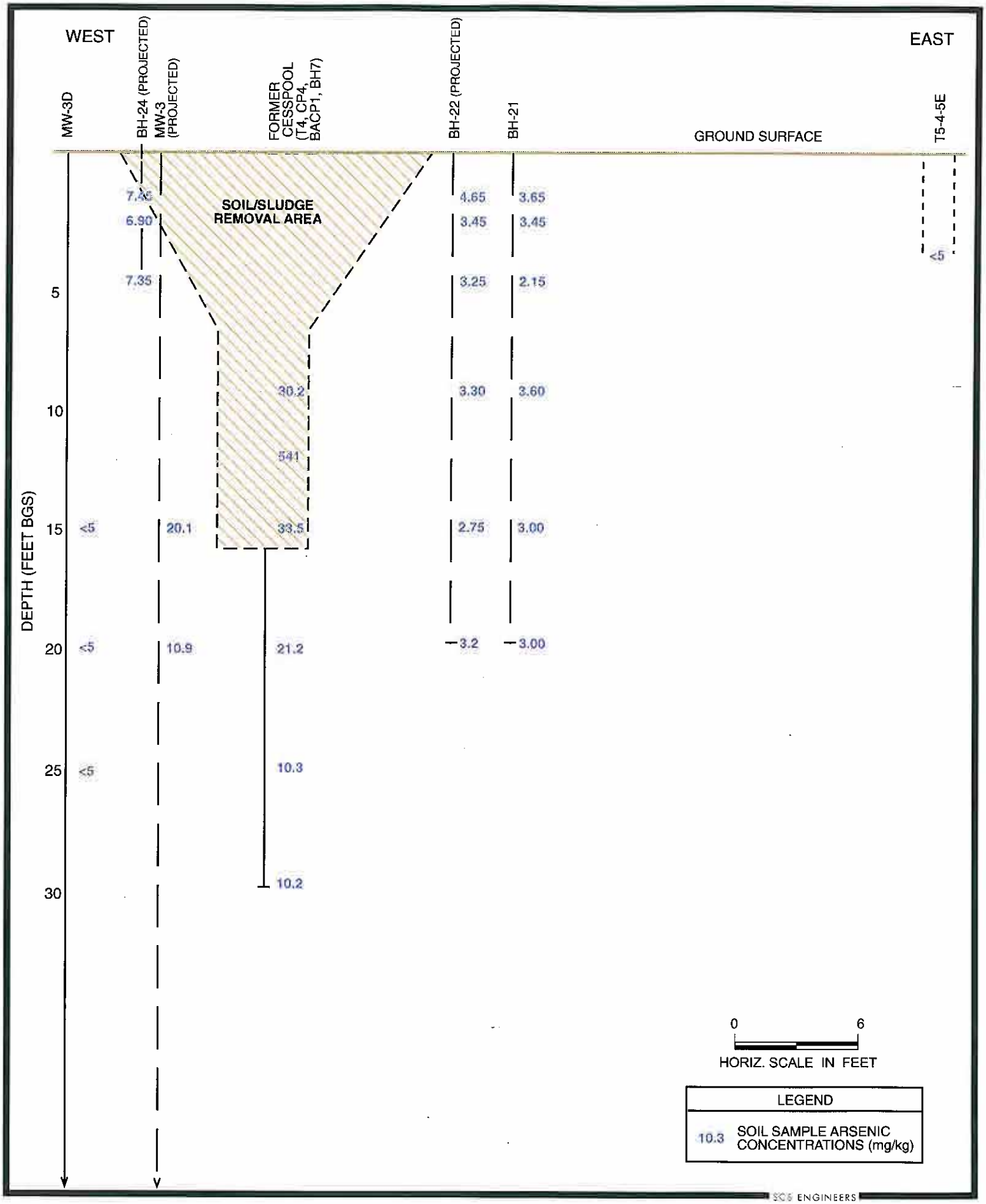


Figure 4. Cross Section in Area of Former Cesspool with Arsenic Concentrations, Los Angeles County Department of the Agricultural Commissioner, 8841 E. Slauson Ave., Pico Rivera, CA.

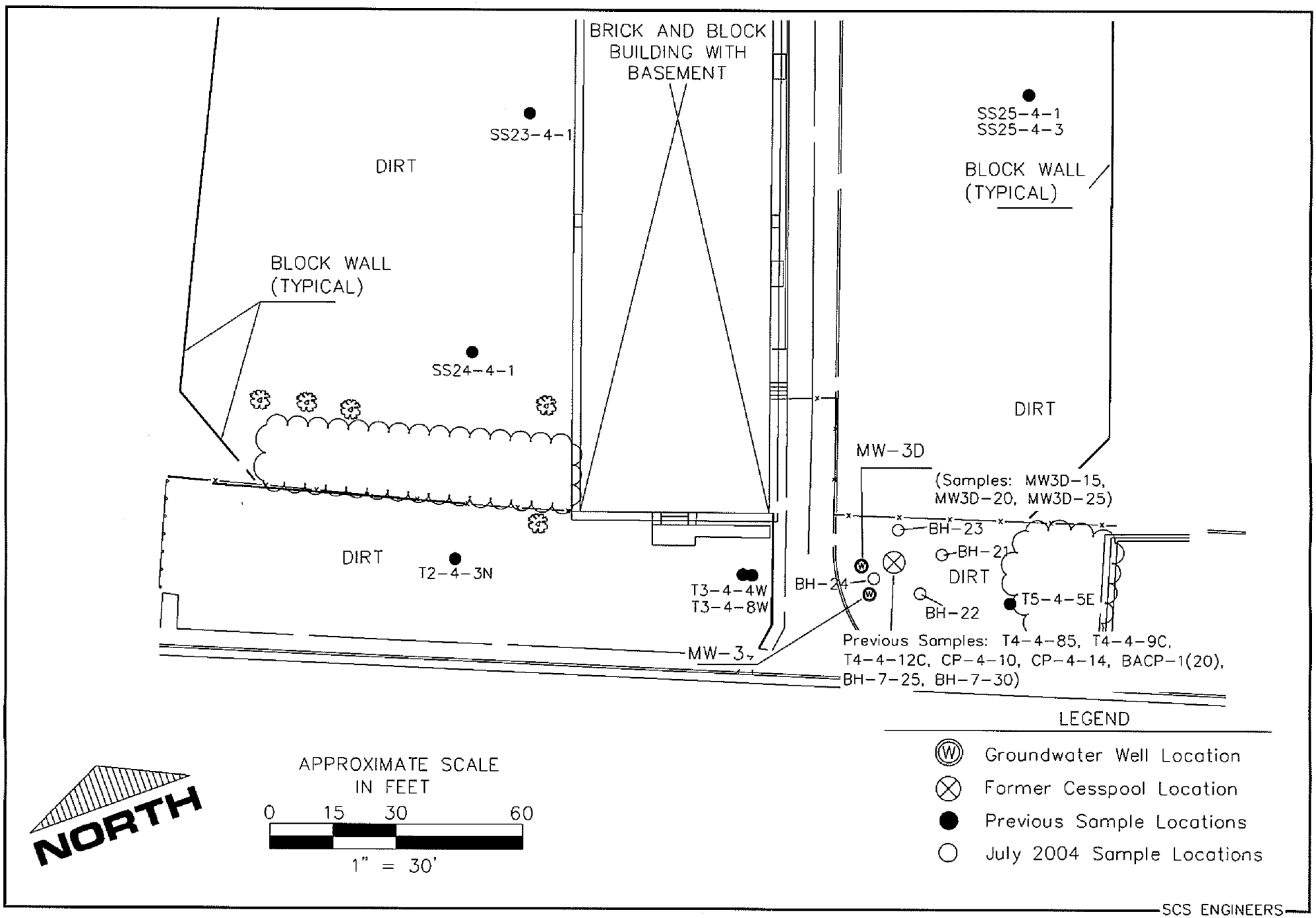


Figure 5. Map of the Area Surrounding the Former Cesspool Indicating Soil Sampling Locations, Los Angeles County Department of Agricultural Commisioner, 8841 East Slauson Avenue, Pico Rivera, CA

TABLES

Table 1.
Groundwater Monitoring Well Information
LACDAC Pico Rivera Facility
8841 E. Slauson Ave., Pico Rivera, CA

Well Number	Date Installed	Depth of Well (feet bgs)	Screened Interval (feet bgs)	Casing Material	Casing Diameter (inches)	Screen Slot Size (inches)	Filter Pack Size/Material
MW1	1/28-29/97	55	35 to 55	Schedule 40 PVC	4	0.010	#2-/16 Sand
MW2	1/28-29/97	55	35 to 55	Schedule 40 PVC	4	0.010	#2-/16 Sand
MW3	1/29/1997	55	35 to 55	Schedule 40 PVC	4	0.010	#2-/16 Sand
MW1D	6/23/2003	75	44 to 74	Schedule 40 PVC	2	0.010	#2-/16 Sand
MW2D	6/24/2003	75	44 to 74	Schedule 40 PVC	2	0.010	#2-/16 Sand
MW3D	6/25/2003	75	44 to 74	Schedule 40 PVC	2	0.010	#2-/16 Sand

bgs = below ground surface
brp = below reference point
MSL = Mean Sea Level

Table 2. SESOIL Model Input Parameters, LACDAC Pico Rivera Facility, 8841 E. Slauson Ave., Pico Rivera

Parameter	Lithology	Thickness	Bulk Density	Soil Pore Disconnect Index	Effective Porosity	Intrinsic Permeability	Organic Carbon	Cation Exchange
Layer/Units *		feet	g/cm3	unitless	proportion	cm2	percent	unitless
1	fine-coarse sand	37	1.4	3.7	0.25	1.00E-08	0.1	6
2	clayey silt	5	1.8	10	0.25	8.50E-11	0.15	6
3	fine-coarse sand	23	1.6	3.7	0.25	1.00E-08	0.1	6
4	sandy silt	3	1.8	4	0.25	2.00E-09	0.15	6
5	med-coarse sand	7	1.6	3.7	0.3	1.00E-08	0.1	6
Weighted Average			1.52	4.13	0.255			

* Layers 3 and 4, as listed above were combined for the SESOIL model run.

APPENDIX A
SUMMARY OF INVESTIGATION RESULTS

APPENDIX A
SUMMARY OF INVESTIGATION RESULTS

The following tables summarize the results of sample analysis conducted during site investigation. All samples except those highlighted are from the non-RCRA areas of the LACDAC site. Maps showing sample locations are also included.

TABLE 4-1

Los Angeles County Agricultural Commissioner Facility
Pico Rivera, California
Soil Analytical Results
(mg/kg)

SAMPLE	PESTICIDES/HERBICIDES							OTHER ORGANIC COMPOUNDS			Total Rec.
NUMBER	4,4-DDD	4,4-DDE	4,4-DDT	Dalapon	Silvex	2,4-D	Strychnine	DEHP	BAP	Toluene	Petr.Hydroc.
SS1-4-1	<0.005	<0.005	<0.005	0.32	<0.02	<0.2	<5				
SS2-4-1	<0.005	<0.005	<0.005	0.33	<0.02	<0.2	<5				
SS3-4-1	<0.005	<0.005	<0.005	0.2	<0.02	<0.2	<5				
SS4-4-1	<0.005	<0.005	<0.005	<0.1	<0.02	<0.2	<5				
SS4-4-3	<0.005	<0.005	<0.005	<0.1	<0.02	<0.2	<5				
SS5-4-1	<0.005	<0.005	<0.025	0.59	<0.02	<0.2	<5	<1.5	<0.06		190
SS6-4-1	<0.005	<0.005	<0.025	0.1	<0.02	<0.2		<1.5	<0.04	0.015	<50
SS7-4-1	<0.005	0.081	<0.05	0.12	0.21	<0.2	<5				
SS8-4-1	0.82	0.27	1.5	0.25	<0.02	<0.2	<5	<1.5	<0.05		50
SS9-4-1	<0.005	<0.005	0.0073	0.35	<0.02	<0.2		<1.5	<0.05		6300
SS10-4-1	<0.005	<0.005	<0.005	0.23	<0.02	<0.2		<1.5	<0.05		<50
SS11-4-1	<0.005	<0.005	<0.005	<0.1	<0.02	<0.2					
SS12-4-1	<0.005	<0.005	0.0064	0.26	<0.02	<0.2					50
SS13-4-1	<0.005	<0.005	<0.005	0.3	<0.02	<0.2	<5				65
SS14-4-1	<0.005	<0.005	<0.005	0.13	<0.02	<0.2	<5				
SS14-4-3	<0.005	<0.005	<0.005	0.13	<0.02	<0.2	<5				
SS15-4-1	<0.005	<0.005	<0.005	0.19	<0.02	<0.2	<5				
SS16-4-1	<0.005	<0.005	0.0074	0.21	<0.02	<0.2					
SS17-4-1	<0.005	<0.005	<0.005	0.14	<0.02	<0.2					
SS18-4-1	<0.025	<0.025	0.037	0.21	<0.02	<0.2					
SS19-4-1	<0.005	<0.005	<0.005	0.23	<0.02	0.55	<5				
SS20-4-1	<0.005	<0.005	0.007	0.12	<0.02	<0.2	<5				
SS21-4-1	<0.005	<0.005	0.053	<0.1	0.05	<0.2	<5				
SS22-4-1	<0.005	<0.005	<0.005	0.21	<0.02	<0.2					
SS23-4-1	<0.005	<0.005	<0.005	<0.1	<0.02	<0.2	<5				<50
SS24-4-1	0.0062	<0.005	0.021	0.17	<0.02	<0.2					
SS25-4-1	<0.005	<0.005	<0.005	0.13	<0.02	<0.2	<5				
SS25-4-3	<0.005	<0.005	<0.005	<0.1	<0.02	<0.2	<5				
BH1-4-1	<0.005	<0.005	0.027	<0.1	<0.02	<0.2	<5				<50
BH1-4-5	<0.005	<0.005	<0.005	0.36	<0.02	<0.2	<5			<0.0025	<50
BH1-4-10	<0.005	<0.005	<0.005	0.25	<0.02	<0.2	<5				
BH1-4-15	<0.005	<0.005	<0.005	<0.1	<0.02	<0.2					
BH1-4-20	<0.005	<0.005	<0.005	0.57	<0.02	<0.2					
BH2-4-1	<0.025	<0.005	0.032	0.31	<0.02	<0.2		1.5	0.05		<50
BH2-4-5	<0.005	<0.005	<0.005	<0.1	<0.02	<0.2		<1.5	<0.04	<0.0025	<50
BH2-4-10	<0.005	<0.005	<0.005	<0.1	<0.02	<0.2		4.2	<0.05		<20
BH2-4-15	<0.005	<0.005	<0.005								<50
BH2-4-20	<0.005	<0.005	<0.005								<50
BH3-4-1	<0.005	<0.005	<0.005	0.19	<0.02	<0.2			<0.06		<50
BH3-4-5	<0.005	<0.005	<0.005	<0.1	<0.02	<0.2		3.2	<0.05	<0.0025	<50
BH3-4-10	<0.005	<0.005	<0.005	0.34	<0.02	<0.2			<0.06		<50
BH3-4-15	<0.005	<0.005	<0.005								<20
BH3-4-20	<0.005	<0.005	<0.005								<20
BH4-4-10	<0.005	<0.005	<0.005	<0.1	<0.02	<0.2					
BH4-4-15	<0.005	<0.005	<0.005	<0.1	<0.02	<0.2					
BH4-4-20	<0.005	<0.005	<0.005	<0.1	<0.02	<0.2					
BH4-4-30	<0.005	<0.005	<0.005								
BH4-4-40	<0.005	<0.005	<0.005								
BH5-4-10	<0.005	<0.005	<0.025	0.36	<0.02	<0.2					
BH5-4-15	<0.025	<0.005	<0.025	0.14	<0.02	<0.2					
BH5-4-20	<0.025	<0.005	<0.025	<0.1	<0.02	<0.2					
BH5-4-22	<0.025	<0.005	<0.025	1.1	<0.02	<0.2					
BH5-4-30	<0.005	<0.005	<0.005								
BH5-4-40	<0.005	<0.005	<0.005								
BH6-4-10	<0.005	<0.005	0.008	0.37	<0.02	<0.2					
BH6-4-15	<0.005	<0.005	<0.005	<0.1	<0.02	<0.2					
BH6-4-20	<0.005	<0.005	<0.005	<0.1	<0.02	<0.2					
BH6-4-30	<0.005	<0.005	<0.005								
BH6-4-40	<0.005	<0.005	<0.005								
T1-4-5C											
T1-4-10C											
T2-4-3N											
T3-4-4W							<5				
T3-4-8W							<5				
T4-4-8S							<5				
T5-4-5E							58.4				
ST-4-3	<0.005	<0.005	<0.005	0.3	<0.02	<0.2					
ST-4-6	<0.005	<0.005	<0.005	0.17	<0.02	<0.2					

DEHP = diethylphthalate
BAP = Benzo(a) pyrene

4,4-DDD = Dichlorodiphenyldichloroethane
4,4-DDE = Dichlorodiphenyldichloroetheylene
4,4-DDT = Dichlorodiphenyltrichloroethane

2,4-D = Dichlorophenoxyacetic Acid
= Samples in area of 4000 g UST
= Samples in area of Sea Bin

TABLE 4-2
Los Angeles County Agricultural Commissoner Facility
Pico Rivera, California
Soil Analytical Results
(mg/km)

SAMPLE	METAL SPECIES							OTHERS
NUMBER	As	Cd	Cu	Pb	Hg	Tl	Zn	CN
SS1-4-1								
SS2-4-1								
SS3-4-1	<5	<0.25	19.6	7.7	<0.06	<5	44.8	
SS4-4-1	<5	<0.25	19	36.3	<0.06	<5	134	<0.1
SS4-4-3	<5	<0.25	13.7	16.3	0.08	<5	41.8	<0.1
SS5-4-1								
SS6-4-1	<5	<0.25	19	18.1	<0.06	<5	66.5	
SS7-4-1								
SS8-4-1								
SS9-4-1	<5	1.6	19.9	213	<0.06	<5	100	
SS10-4-1	<5	<0.25	17.3	37.4	<0.06	<5	62.4	
SS11-4-1								
SS12-4-1								
SS13-4-1	12.1	<0.25	29.7	7.8	<0.06	<5	51.9	
SS14-4-1	<5	<0.25	13	65.9	<0.06	<5	36.5	
SS14-4-3	<5	<0.25	9.7	<2.5	0.07	<5	23.6	
SS15-4-1								
SS16-4-1	<5	<0.25	22.8	50.5	<0.06	<5	66.6	<0.1
SS17-4-1	<5	<0.25	17	18.5	<0.06	<5	45.4	<0.1
SS18-4-1	<5	0.54	27.7	61.8	0.07	<5	74.8	<0.1
SS19-4-1								
SS20-4-1								
SS21-4-1								
SS22-4-1								
SS23-4-1								
SS24-4-1	<5	<0.25	14.3	48.6	<0.06	<5	52.6	
SS25-4-1	<5	<0.25	17.2	48.4	<0.06	<5	66.3	
SS25-4-3	<5	<0.25	13.7	4.2	<0.06	<5	34	
BH1-4-1	<5	<0.25	13.5	<2.5	0.22	<5	24.6	
BH1-4-5	<5	<0.25	11.1	<2.5	<0.06	<5	18.9	
BH1-4-10	<5	<0.25	9.8	<2.5	<0.06	<5	19.7	
BH1-4-15								
BH1-4-20								
BH2-4-1	<5	<0.25	10.5	<2.5	<0.06	<5	19.4	
BH2-4-5	<5	<0.25	12.9	<2.5	<0.06	<5	23.5	
BH2-4-10	<5	<0.25	11.9	<2.5	<0.06	<5	23.8	
BH2-4-15								
BH2-4-20								
BH3-4-1	<5	<0.25	12.3	<2.5	<0.06	<5	26	
BH3-4-5	<5	<0.25	10.6	<2.5	<0.06	<5	19.4	
BH3-4-10	<5	<0.25	12.4	<2.5	<0.06	<5	19.4	
BH3-4-15								
BH3-4-20								
BH4-4-10	5.9	<0.25	10.1	<2.5	<0.06	<5	24.7	<0.1
BH4-4-15								
BH4-4-20								
BH4-4-30								
BH4-4-40								
BH5-4-10	5.3	<0.25	8.6	<2.5	<0.06	<5	23.7	<0.10
BH5-4-15								
BH5-4-20								
BH5-4-22								
BH5-4-30								
BH5-4-40								
BH6-4-10	<5	<0.25	8.3	<2.5	<0.06	<5	18.7	<0.1
BH6-4-15								
BH6-4-20								
BH6-4-30								
BH6-4-40								
T1-4-5C	<5	<2.5	18.3	14.2	<1	<5	37.8	
T1-4-10C	<5	<2.5	11.3	15.1	<1	<5	26	
T2-4-3N	6.1	<2.5	19.2	15.9	<1	<5	37.4	
T3-4-4W	<5	<2.5	15.1	17.1	<1	<5	42	
T3-4-8W	<5	<2.5	10	10	<1	<5	16.6	
T4-4-8S	13.2	<2.5	8.5	10.2	<1	<5	18.4	
T5-4-5E	<5	<2.5	9	12.2	<1	<5	11.7	
ST-4-3								
ST-4-6								

As = Arsenic
Cd = Cadmium
Cu = Copper
Pb = Lead
Hg = Mercury
Tl = Thallium
Zn = Zinc
CN = Cyanide

TABLE 4-3
Los Angeles County Agricultural Commissioner Facility
Pico Rivera, California
Soil Analytical Results, Polychlorinated Dioxins/Furans (pg/g)

SAMPLE NUMBER	FURANS				DIOXINS			
	2,3,7,8-TCDF	1,2,3,4,6,7,8-HpCDF	1,2,3,4,7,8,9-HpCDF	OCDF	1,2,3,6,7,8-HxCDD	1,2,3,7,8,9-HxCDD	1,2,3,4,6,7,8-HpCDD	OCDD
SS1-4-1	<0.42	<1.6	<0.47	<2.2	<0.21	<0.35	<3.7	47
SS2-4-1	<0.60	<0.27	<0.15	<0.32	<0.28	<0.31	<0.31	<2.8
SS3-4-1	<0.24	<1.6	<0.42	<2.4	<0.23	<0.36	<2.4	25
SS16-4-1	1.2	20	<1.6	53	<3.6	<3.0	79	1000
SS17-4-1	<0.70	45	5.5	94	5.3	<4.3	140	1300
SS18-4-1	1.5	20	<2.8	52	6.4	5.4	120	1100
BH4-4-10	<0.11	<0.11	<0.10	<0.24	<0.16	<0.18	<0.23	<2.4
BH5-4-10	<0.23	<0.14	<0.19	<0.36	<0.24	<0.27	<0.43	<8.7
BH6-4-10	<0.1	<0.1	<0.14	<0.28	<0.17	<0.31	<0.25	<4.4
TEF	0.1	0.01	0.01	0.001	0.1	0.1	0.01	0.001

TEF = 2,3,7,8 TCDD Toxicity Equivalency Factor (1989 USEPA Interim)
TE = Toxicity Equivalent (as above)

2,3,7,8-TCDF = 2,3,7,8-tetrachlorodibenzofuran
1,2,3,4,6,7,8-HpCDF = 1,2,3,4,6,7,8-heptachlorodibenzofuran
1,2,3,4,7,8,9-HpCDF = 1,2,3,4,7,8,9-heptachlorodibenzofuran
OCDF = octochlorodibenzofuran

1,2,3,6,7,8-HxCDD = 1,2,3,6,7,8-hexachlorodibenzo-p-dioxin
1,2,3,7,8,9-HxCDD = 1,2,3,7,8,9-hexachlorodibenzo-p-dioxin
1,2,3,4,6,7,8-HpCDD = 1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxin
OCDD = octochlorodibenzo-p-dioxin

POLYCHLORINATED DIOXINS/FURANS, TOXICITY EQUIVALENCY FACTORS (TEF)

SAMPLE NUMBER	FURANS				DIOXINS				TOTAL TE (pg/g)
	2,3,7,8-TCDF	1,2,3,4,6,7,8-HpCDF	1,2,3,4,7,8,9-HpCDF	OCDF	1,2,3,6,7,8-HxCDD	1,2,3,7,8,9-HxCDD	1,2,3,4,6,7,8-HpCDD	OCDD	
SS1-4-1								0.047	0.047
SS3-4-1								0.025	0.025
SS16-4-1	0.12	0.2		0.053			0.79	1	2.163
SS17-4-1		0.45	0.055	0.094	0.53		1.4	1.3	3.829
SS18-4-1	0.15	0.2		0.052	0.64	0.54	1.2	1.1	3.882

TABLE 4-4
Los Angeles County Agricultural Commissioner Facility
Pico Rivera, California
Duplicate Soil Analytical Results (mg/kg)

SAMPLE NUMBER	PESTICIDES/HERBICIDES						OTHER ORGANICS		Total Rec.	METALS	
	4,4-DDD	4,4-DDE	4,4-DDT	Dalapon	Silvex	2,4-D	BAP	Toluene	Petr.Hydroc.	Cd	Hg
SS1-4-1 D	<0.005	<0.005	<0.005	0.29	<0.02	<0.2					
SS3-4-1 D	<0.005	<0.005	<0.005	0.25	<0.02	<0.2				<0.25	<0.06
SS5-4-1 D	<0.005	<0.005	<0.025	14	<0.02	<0.2	<0.06				
BH1-4-5B	<0.005	<0.005	<0.005	0.13	<0.02	<0.2		<0.0025		<0.25	<0.06
BH2-4-1B	<0.025	<0.005	0.0059	0.15	<0.02	<0.2	<0.06			<0.25	0.14
BH2-4-10B	<0.005	<0.005	<0.005	<0.1	<0.02	<0.2	<0.06		<20	<0.25	<0.06
BH4-4-10B	<0.005	<0.005	<0.005	<0.1	<0.02	<0.2				<0.25	<0.06
BH6-4-10B	<0.005	<0.005	<0.005	<0.1	<0.02	<0.2				<0.25	<0.06

DEHP = diethylphthalate
BAP = Benzo(a) pyrene

4,4-DDD = Dichlorodiphenyldichloroethane
4,4-DDE = Dichlorodiphenyldichloroetheylene
4,4-DDT = Dichlorodiphenyltrichloroethane

2,4-D = Dichlorophenoxyacetic Acid
Cd = Cadmium
Hg = Mercury

Table 4-5
Los Angeles County Agricultural Commissioner Facility, Pico Rivera, CA
Monitoring Wells and Additional Borings
Summary of Analytical Results - Soil, Additional Samples (1997 through 2001)

Sample Number and Depth	Date Collected	Pesticides/Herbicides			Volatile Organics	Petroleum Hydrocarbons		Metals							Strychnine
		EPA 8080 All Constituents	EPA 8140 All Constituents	EPA 8150 All Constituents	EPA 8260 All Constituents	EPA 418.1	EPA 8015 All Fractions	As	Cd	Cu	Pb	Hg	Tl	Zn	
		µg/kg	µg/kg	µg/kg	µg/kg	mg/kg	mg/kg	mg/kg							mg/l
MW1S-5-10	1/28/1997	ND	ND	ND	NA	NA	NA	<10.0	<0.50	10.9	<10.0	<0.040	<50.0	21.4	NA
MW1S-5-15	1/28/1997	ND	ND	ND	NA	NA	NA	<10.0	<0.50	16.3	<10.0	<0.040	<50.0	27.2	NA
MW1S-5-20	1/28/1997	ND	ND	ND	NA	NA	NA	<10.0	<0.50	6.2	<10.0	<0.040	<50.0	15.5	NA
MW1S-5-20(D)	1/28/1997	ND	ND	ND	NA	NA	NA	<10.0	<0.50	7.6	<10.0	<0.040	<50.0	16.1	NA
MW1S-5-30	1/28/1997	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW1S-5-40	1/28/1997	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW2S-5-15	1/28/1997	ND	ND	ND	NA	NA	NA	<10.0	<0.50	13.9	<10.0	<0.040	<50.0	25.8	NA
MW2S-5-20	1/28/1997	ND	ND	ND	NA	NA	NA	<10.0	<0.50	16.7	<10.0	0.040	<50.0	25.0	NA
MW2S-5-20(D)	1/28/1997	ND	ND	ND	NA	NA	NA	<10.0	<0.50	7.6	<10.0	<0.040	<50.0	15.2	NA
MW2S-5-30	1/28/1997	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW2S-5-40	1/28/1997	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW3S-5-15	1/29/1997	ND	NA	NA	NA	NA	NA	20.1	<0.50	6.4	<10.0	NA	<50.0	30.1	<0.1
MW3S-5-20	1/29/1997	ND	NA	NA	NA	NA	NA	10.9	<0.50	11.4	<10.0	NA	<50.0	33.9	<0.1
SS4-5-3	1/30/1997	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	50.7	NA
SS4-5-3(D)	1/30/1997	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	45.5	NA
SS4-5-5	1/30/1997	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.3	NA
SS5-5-3	1/30/1997	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SS5-5-5	1/30/1997	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SS8-5-3	1/30/1997	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SS8-5-5	1/30/1997	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SS9-5-3	1/30/1997	NA	NA	NA	ND	<10	ND	NA	<0.50	NA	<10.0	NA	NA	NA	NA
SS9-5-5	1/30/1997	NA	NA	NA	ND	<10	ND	NA	<0.50	NA	<10.0	NA	NA	NA	NA
SS14-5-3	1/30/1997	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10.0	NA	NA	NA	NA
SS14-5-5	1/30/1997	NA	NA	NA	NA	NA	NA	NA	NA	NA	<10.0	NA	NA	NA	NA
SS18-5-3	1/30/1997	NA	NA	NA	NA	NA	NA	NA	<0.50	NA	<10.0	NA	NA	NA	NA
SS18-5-5	1/30/1997	NA	NA	NA	NA	NA	NA	NA	<0.50	NA	<10.0	NA	NA	NA	NA

DEHP = diethylphthalate
BAP = Benzo(a) pyrene
2,4-D = Dichlorophenoxyacetic Acid

4,4-DDD = Dichlorodiphenyldichloroethane
4,4-DDE = Dichlorodiphenyldichloroetheylene
4,4-DDT = Dichlorodiphenyltrichloroethene

As = Arsenic
Cd = Cadmium
Cu = Copper
Pb = Lead

Hg = Mercury
Tl = Thallium
Zn = Zinc
CN = Cyanide

Table 4-6
Los Angeles County Agricultural Commissioner Facility, Pico Rivera, CA
Monitoring Wells and Additional Borings
Summary of Analytical Results - Soil, Additional Samples (1997 through 2001)

Sample Location	Depth	Pesticides/Herbicides																	
		EPA 8081[A]										EPA 8141[B]			EPA 8151A[C]		
		gama-Chlordane	alpha-Chlordane	Dieldrin	4,4'-DDT	4,4'-DDE	Heptachlor	gamma-BHC (Lindane)	delta-BHC	beta-BHC	Total Endrin	Heptachlor epoxide	Fensulfothion	Ronnel	Chlorpyrifos	2,4-D	2,4,5-TP (Silvex)	2,4,5-T
	(feet bgs)	mg/kg											mg/kg			mg/kg		
BH8-8	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	15	0.20	0.19	0.39	2.9	<0.17	<0.085	<0.085	<0.085	<0.085	<0.17	<0.085	<0.033	<0.033	<0.033	<0.060	<0.020	<0.020
	20	0.004	0.002	0.016	0.0075	<0.0034	<0.0017	<0.0017	<0.0017	<0.0017	<0.0034	<0.0017	<0.033	<0.033	<0.033	<0.060	<0.020	<0.020
	25	0.0017	0.002	0.0052	<0.0034	<0.0034	<0.0017	<0.0017	<0.0017	<0.0017	<0.0034	<0.0017	<0.033	<0.033	<0.033	<0.060	<0.020	<0.020
	30	<0.0017	<0.0017	<0.0034	<0.0034	<0.0034	<0.0017	<0.0017	<0.0017	<0.0017	<0.0034	<0.0017	<0.033	<0.033	<0.033	<0.060	<0.020	<0.020
	35	<0.0017	<0.0017	<0.0034	<0.0034	<0.0034	<0.0017	<0.0017	<0.0017	<0.0017	<0.0034	<0.0017	<0.033	<0.033	<0.033	<0.060	<0.020	<0.020
	40	<0.0017	<0.0017	<0.0034	<0.0034	<0.0034	<0.0017	<0.0017	<0.0017	<0.0017	<0.0034	<0.0017	<0.033	<0.033	<0.033	<0.060	<0.020	<0.020
	45	<0.0017	<0.0017	<0.0034	<0.0034	<0.0034	<0.0017	<0.0017	<0.0017	<0.0017	<0.0034	<0.0017	<0.033	<0.033	<0.033	<0.060	<0.020	<0.020
	47	<0.0017	<0.0017	<0.0034	0.012	<0.0034	<0.0017	<0.0017	<0.0017	<0.0017	<0.0034	<0.0017	<0.033	<0.033	<0.033	<0.060	<0.020	<0.020
	48	<0.0017	<0.0017	<0.0034	<0.0034	<0.0034	<0.0017	<0.0017	<0.0017	<0.0017	<0.0034	<0.0017	<0.033	<0.033	<0.033	<0.060	<0.020	<0.020
BH9-8	5	0.013	0.018	<0.0034	0.015	0.0046	<0.0017	<0.0017	<0.0017	<0.0017	<0.0034	<0.0017	<0.033	<0.033	<0.033	<0.060	<0.020	<0.020
	10	0.0063	0.0072	0.0092	<0.0034	<0.0034	<0.0017	<0.0017	<0.0017	<0.0017	<0.0034	<0.0017	<0.033	<0.033	<0.033	<0.060	<0.020	<0.020
	15	<8.5	<8.5	<17	97	<17	<8.5	<8.5	<8.5	<8.5	<17	<8.5	0.071	0.097	0.13	1.8	1.1	1.8
	20	0.053	0.05	0.056	0.20	<0.034	<0.017	<0.017	<0.017	<0.017	<0.034	<0.017	<0.033	<0.033	<0.033	<0.060	<0.020	<0.020
	25	<0.0017	<0.0017	<0.0034	<0.0034	<0.0034	<0.0017	0.0023	<0.0017	<0.0017	<0.0034	0.0072	<0.033	<0.033	<0.033	<0.060	<0.020	<0.020
	30	<0.0017	<0.0017	<0.0034	<0.0034	<0.0034	<0.0017	<0.0017	<0.0017	<0.0017	<0.0034	<0.0017	<0.033	<0.033	<0.033	<0.060	<0.020	<0.020
	35	<0.0017	<0.0017	<0.0034	<0.0034	<0.0034	<0.0017	<0.0017	<0.0017	<0.0017	<0.0034	<0.0017	<0.033	<0.033	<0.033	<0.060	<0.020	<0.020
	40	<0.0017	<0.0017	<0.0034	<0.0034	<0.0034	<0.0017	<0.0017	<0.0017	<0.0017	<0.0034	<0.0017	<0.033	<0.033	<0.033	<0.060	<0.020	<0.020
	45	<0.0017	<0.0017	<0.0034	<0.0034	<0.0034	<0.0017	<0.0017	<0.0017	<0.0017	<0.0034	<0.0017	<0.033	<0.033	<0.033	<0.060	<0.020	<0.020
	47	<0.0017	<0.0017	<0.0034	<0.0034	<0.0034	<0.0017	<0.0017	<0.0017	<0.0017	<0.0034	<0.0017	<0.033	<0.033	<0.033	<0.060	<0.020	<0.020
BH10-8	5	0.024	0.024	0.0046	0.028	0.015	0.002	<0.0017	<0.0017	<0.0017	<0.0034	0.0024	<1.6	<1.6	<1.6	<0.060	<0.020	<0.020
BH11-8	5	<0.0017	<0.0017	<0.0034	<0.0034	<0.0034	<0.0017	<0.0017	<0.0017	<0.0017	<0.0034	<0.0017	<0.033	<0.033	<0.033	<0.060	<0.020	<0.020
BH12-7	5	0.2	0.18	0.084	0.62	0.12	<0.034	<0.034	<0.034	<0.034	<0.068	<0.034	NA	NA	NA	NA	NA	NA
	10	0.02	0.016	0.045	<0.0034	<0.0034	0.0053	<0.0017	0.0055	0.0084	0.0034	0.0039	NA	NA	NA	NA	NA	NA
	15	0.023	0.016	0.042	0.011	<0.0068	<0.0034	<0.0034	<0.0034	<0.0034	<0.0068	<0.0034	NA	NA	NA	NA	NA	NA
	20	0.012	0.015	0.017	0.0320	0.0071	<0.0017	<0.0017	0.0019	<0.0017	<0.0034	0.0017	NA	NA	NA	NA	NA	NA
	25	<0.0017	<0.0017	<0.0034	<0.0034	<0.0034	<0.0017	<0.0017	<0.0017	<0.0017	<0.0034	<0.0017	NA	NA	NA	NA	NA	NA
BH13-7	5	0.11	0.098	<0.034	<0.034	<0.017	<0.017	<0.017	<0.017	<0.017	<0.034	<0.017	NA	NA	NA	NA	NA	NA
	10	0.0046	0.0038	0.0054	0.0049	<0.0034	<0.0017	<0.0017	<0.0017	<0.0017	<0.0034	<0.0017	NA	NA	NA	NA	NA	NA
	15	15.0	14.0	<17	110	<17	<8.5	30.0	<8.5	<8.5	<17	<8.5	NA	NA	NA	NA	NA	NA
	20	0.075	0.084	0.079	0.21	<0.034	<0.017	30.0	<0.017	<0.017	<0.034	<0.017	NA	NA	NA	NA	NA	NA
	25	0.045	0.044	0.059	0.55	<0.034	0.017	0.036	<0.017	<0.017	<0.034	<0.017	NA	NA	NA	NA	NA	NA
BH14-7	5	0.75	0.66	1.0	0.77	<0.34	0.19	<0.17	<0.17	<0.17	<0.34	<0.17	NA	NA	NA	NA	NA	NA
	10	0.11	0.092	<0.017	0.041	<0.034	<0.017	<0.017	<0.017	<0.017	<0.034	<0.017	NA	NA	NA	NA	NA	NA
	15	0.05	0.04	0.12	<0.017	<0.017	<0.0085	<0.0085	<0.0085	<0.0085	<0.017	<0.0085	NA	NA	NA	NA	NA	NA
	20	0.047	0.043	0.056	<0.034	<0.034	<0.017	<0.017	<0.017	<0.017	<0.034	<0.017	NA	NA	NA	NA	NA	NA
	25	<0.0017	<0.0017	<0.0034	<0.0034	<0.0034	<0.0017	<0.0017	<0.0017	<0.0017	<0.0034	<0.0017	NA	NA	NA	NA	NA	NA
Reg PRG		1.6	2	0.028	1.7	1.7	0.099	0.42	0.44	0.32	18	0.049		2700	180	840	440	550

NA = Not Analyzed
mg/kg = milligrams per kilogram
A = Other EPA 8081 compounds not detected.
B= Other EPA Method 8141 compounds not detected
C = Other EPA Method 8151A compounds not detected

2,4-D = Dichlorophenoxyacetic Acid
4,4-DDD = Dichlorodiphenyldichloroethane
4,4-DDE = Dichlorodiphenyldichloroethylene
4,4-DDT = Dichlorodiphenyltrichloroethane

DEHP = diethylphthalate
BAP = Benzo(a) pyrene

As = Arsenic
Cd = Cadmium
Cu = Copper
Pb = Lead

Hg = Mercury
Tl = Thallium
Zn = Zinc
CN = Cyanide

Table 4-7.
Summary of Analytical Results - Soil
Monitoring Wells and Additional Borings
LACDAC Pico Rivera Facility
8841 E. Slauson Ave., Pico Rivera, CA

Sample Location	Depth	Metals					
		As	Cd	Cu	Pb	Tl	Zn
	(feet bgs)	mg/kg					
BH8-6	5	NA	NA	NA	NA	NA	NA
	10	NA	NA	NA	NA	NA	NA
	15	4.1	<0.5	9.7	7.9	4.0	45.0
	20	1.2	<0.5	4.9	1.5	<1.0	16.0
	25	6.7	<0.5	15.9	3.5	<1.0	36.8
	30	6.0	<0.5	14.2	2.6	<1.0	35.9
	35	9.0	<0.5	24.2	5.1	<1.0	50.6
	40	3.7	<0.5	19.2	3.7	<1.0	50.3
	45	4.3	<0.5	7.6	2.0	<1.0	21.1
	47	4.4	<0.5	5.7	1.7	<1.0	19.1
	48	4.0	<0.5	4.8	1.4	<1.0	14.2
BH9-6	5	6.6	0.73	35.6	73.8	<1.0	119
	10	2.3	<0.5	9.0	1.9	<1.0	26.2
	15	<1.0	<0.5	7.3	1.6	<1.0	21.2
	20	<1.0	<0.5	4.6	1.2	<1.0	14.4
	25	5.7	<0.5	15.2	3.1	<1.0	35.5
	30	6.6	<0.5	13.7	3.0	<1.0	33.5
	35	9.4	<0.5	12.4	2.7	<1.0	33.8
	40	2.7	<0.5	19.3	3.7	<1.0	51.4
	45	2.0	<0.5	4.6	1.6	<1.0	16.2
	47	1.4	<0.5	4.6	1.5	<1.0	15.1
BH10-6	5	5.9	<0.5	16.7	23.0	<1.0	59.5
BH11-6	5	2.0	<0.5	10.3	2.3	<1.0	26.5
Res.PRG		21*	9.0	2800	130	6.0	22000

NA = Not Analyzed

mg/kg = milligrams per kilogram

As = Arsenic (* non-cancer end point PRG)
Cd = Cadmium
Tl = Thalium
Pb = Lead
Cu = Copper
Zn = Zinc

Table 4.8.
Summary of Soil Analytical Results
2004 Cesspool Area Sampling
Arsenic and Strychnine
LACDAC Pico Rivera Facility
8841 E. Slauson Ave., Pico Rivera, CA

Sample ID	Sample Depth (feet bgs)	Date Collected	Arsenic by EPA Method 7060A	Strychnine Liquid Chromatography - UV Absorption
			mg/kg	µg/kg
BH-21-1	1	7/22/2004	3.65	--
BH-21-2.5	2.5		3.45	--
BH-21-2.5 (Dup)	2.5		4.10	--
BH-21-5	5		2.15	--
BH-21-10	10		3.60	<10
BH-21-15	15		3.00	<10
BH-21-15 (Dup)	15		--	<10
BH-21-20	20		3.00	<10
BH-22-1	1		4.65	--
BH-22-2.5	2.5		3.45	--
BH-22-5	5		3.25	--
BH-22-5 (Dup)	5		5.90	--
BH-22-10	10		3.30	<10
BH-22-15	15		2.75	<10
BH-22-20	20		3.20	<10
BH-23-1	1		6.00	--
BH-23-2.5	2.5		7.30	--
BH-23-5	5		3.30	--
BH-23-10	10		3.75	<10
BH-23-15	15		3.60	<10
BH-23-20	20		3.90	<10
BH-24-1	1		7.45	--
BH-24-2.5	2.5		6.90	--
BH-24-5	5		7.35	--

mg/kg = milligrams per kilogram; equivalent to parts per million

µg/kg = micrograms per kilogram; equivalent to parts per billion

Table 4.9.
Summary of Soil Analytical Results
Background Sampling
Metals
LACDAC Pico Rivera Facility
8841 E. Slauson Ave., Pico Rivera, CA

Sample ID	Sample Depth (feet bgs)	Date Collected	CAM Title 22 Metals															
			Sb	As*	Ba	Be	Cd*	Cr	Co	Cu	Pb*	Hg*	Mo	Ni	Se	Ag	Tl*	V	Zn
			mg/kg																
BH-15-1	1	7/22/2004	<1.0	4.20	87.8	<1.3	<0.1	14.0	8.80	16.9	3.60	<0.1	<2.5	13.3	<1.0	<2.5	<0.5	27.2	59.3
BH-15-2.5	2.5		<1.0	3.24	36.7	<1.3	<0.1	5.70	3.90 J	6.90	1.60	<0.1	<2.5	5.10	<1.0	<2.5	<0.5	12.7	22.9
BH-15-5	5		<1.0	2.75	31.6	<1.3	<0.1	5.40	3.50 J	5.70	1.35	<0.1	<2.5	4.70 J	<1.0	<2.5	<0.5	11.0	20.4
BH-15-10	10		<1.0	3.75	42.2	<1.3	<0.1	8.10	4.70	8.20	2.15	<0.1	<2.5	6.50	<1.0	<2.5	<0.5	15.1	26.5
BH-16-1	1		<1.0	10.1	59.9	<1.3	<0.1	10.3	6.80	12.9	5.45	<0.1	<2.5	8.60	<1.0	<2.5	<0.5	20.0	42.4
BH-16-2.5	2.5		<1.0	3.55	38.7	<1.3	<0.1	4.60 J	3.10 J	5.70	1.45	<0.1	<2.5	4.00 J	<1.0	<2.5	<0.5	10.2	19.7
BH-16-5	5		<1.0	3.65	38.8	<1.3	<0.1	5.10	3.40 J	6.50	1.50	<0.1	<2.5	4.80 J	<1.0	<2.5	<0.5	10.6	22.0
BH-16-10	10		<1.0	3.10	22.4	<1.3	<0.1	3.40 J	<2.5	3.60 J	1.00	<0.1	<2.5	2.90 J	<1.0	<2.5	<0.5	6.90 J	13.7
BH-17-1	1		<1.0	4.95	63.6	<1.3	0.350	11.1	6.20	15.1	43.4	<0.1	<2.5	9.20	<1.0	<2.5	<0.5	19.3	95.4
BH-17-2.5	2.5		<1.0	5.10	72.7	<1.3	0.470	11.0	5.20	21.9	94.5	<0.1	<2.5	9.70	<1.0	<2.5	<0.5	16.8	139
BH-17-5	5		<1.0	6.85	32.9	<1.3	<0.1	5.10	3.50 J	6.30	1.35	<0.1	<2.5	4.50 J	<1.0	<2.5	<0.5	10.6	20.7
BH-17-10	10		<1.0	3.45	24.9	<1.3	<0.1	4.60 J	3.00 J	4.80 J	1.50	<0.1	<2.5	4.30 J	<1.0	<2.5	<0.5	8.50	17.3
BH-18-1	1		<1.0	4.25	77.5	<1.3	<0.1	13.3	8.10	16.1	3.60	<0.1	<2.5	11.1	<1.0	<2.5	<0.5	24.8	47.5
BH-18-2.5	2.5		<1.0	3.20	33.9	<1.3	<0.1	5.40	3.90 J	6.60	1.75	<0.1	<2.5	4.90 J	<1.0	<2.5	<0.5	12.1	23.9
BH-18-5	5		<1.0	2.65	21.1	<1.3	<0.1	2.80 J	<2.5	3.80 J	0.900	<0.1	<2.5	2.70 J	<1.0	<2.5	<0.5	6.2	14.3
BH-18-10	10		<1.0	2.99	36.6	<1.3	<0.1	5.7	3.70 J	6.70	1.45	<0.1	<2.5	4.80 J	<1.0	<2.5	<0.5	11.2	21.7
BH-19-1	1		<1.0	32.0	73.5	<1.3	0.104 J	13.1	8.00	18.0	12.9	<0.1	<2.5	10.6	<1.0	<2.5	<0.5	24.0	65.3
BH-19-2.5	2.5		<1.0	11.5	63.1	<1.3	<0.1	9.50	6.00	11.7	2.35	<0.1	<2.5	7.90	<1.0	<2.5	<0.5	19.2	33.7
BH-19-5	5		<1.0	7.95	42.5	<1.3	<0.1	5.50	4.10 J	6.90	1.65	<0.1	<2.5	5.00	<1.0	<2.5	<0.5	12.6	24.0
BH-19-10	10		<1.0	4.95	35.7	<1.3	<0.1	5.70	3.40 J	5.80	1.50	<0.1	<2.5	5.00	<1.0	<2.5	<0.5	11.0	20.7
BH-20-1	1		<1.0	4.95	62.6	<1.3	0.200	10.6	6.00	13.0	46.5	<0.1	<2.5	8.70	<1.0	<2.5	<0.5	19.9	92.5
BH-20-2.5	2.5		<1.0	4.90	74.0	<1.3	0.250	13.3	7.00	19.1	68.5	<0.1	<2.5	10.6	<1.0	<2.5	<0.5	22.7	125
BH-20-5	5		<1.0	3.25	29.6	<1.3	<0.1	4.80 J	3.20 J	5.50	1.40	<0.1	<2.5	4.70 J	<1.0	<2.5	<0.5	10.0	20.2
BH-20-10	10		<1.0	3.50	27.5	<1.3	<0.1	5.20	3.40 J	5.80	1.40	<0.1	<2.5	5.10	<1.0	<2.5	<0.5	10.7	19.5
Mean			all ND	4.73	47.1	all ND	0.10	7.64	4.64	9.73	9.05	all ND	all ND	6.61	all ND	all ND	all ND	14.72	42.0
Standard Deviation			all ND	2.31	20.0	all ND	0.11	3.55	2.05	5.47	17.98	all ND	all ND	2.91	all ND	all ND	all ND	6.00	36.0
UCL			all ND	5.59	54.9	all ND	0.195**	8.89	5.36	14.60	46.40	all ND	all ND	7.65	all ND	all ND	all ND	17.0	74.0

bgs = below ground surface

Mean and standard deviation are calculated using "J" values and substituting 1/2 detection limit for non-detect values.

J = Analyte detected above method detection limit (MDL) but below practical quantitiation limit (PQL)

UCL = Upper confidence interval based on mean plus confidence interval determined using statistic recommended by PrpUCL

* = Arsenic analyzed using EPA Method 7060A; Cadmium by EPA Method 7131A; Lead by EPA Method 7421; Mercury by EPA Method 7471; Thallium by EPA Method 7841

mg/kg = milligrams per kilogram; equivalent to parts per million

Shaded cell = outlier based on Dixon's test (not used in bkg calcs).

** UCL for Cd based on only 6 detections of which one was below the reporting limit

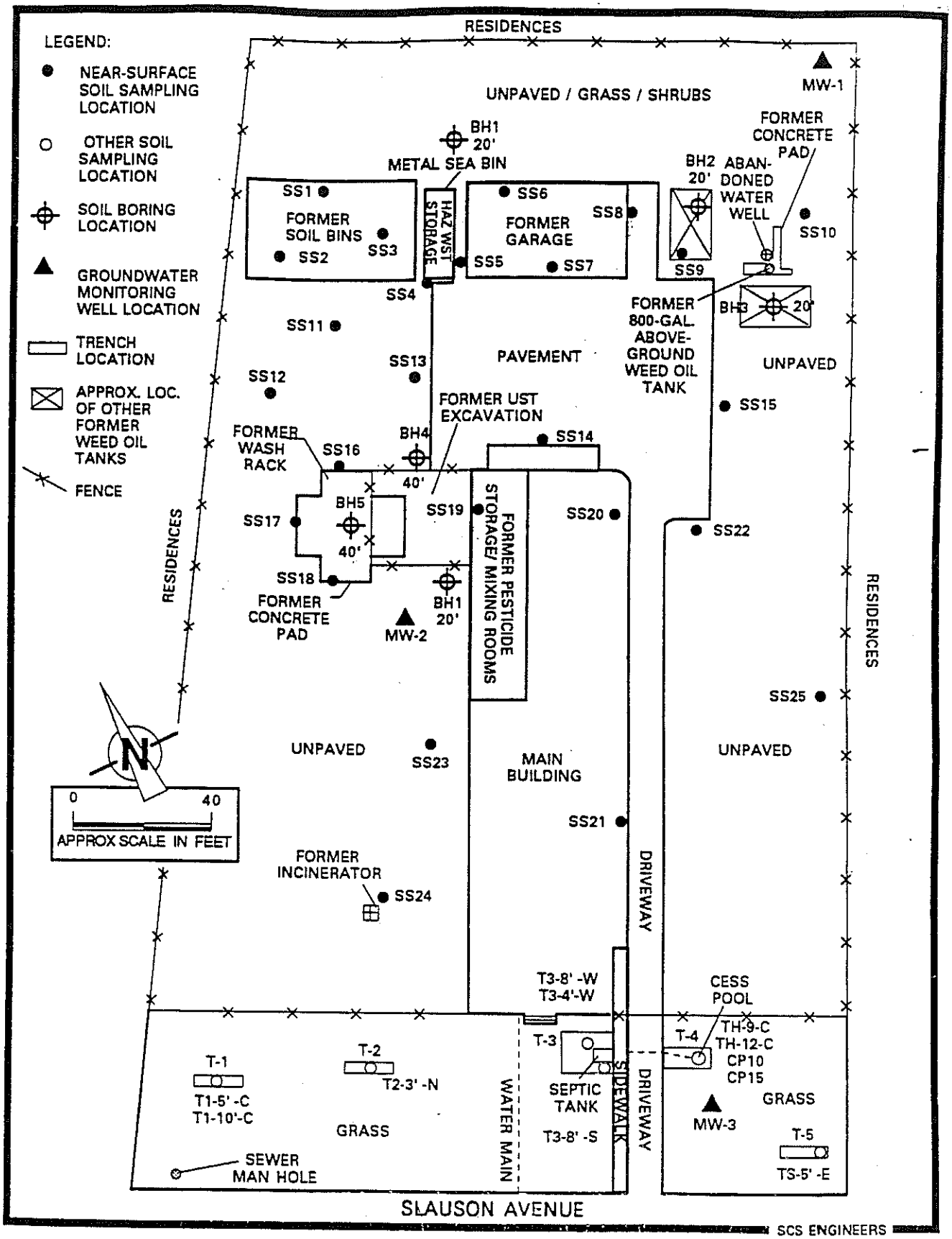


Figure . Map Showing Soil Sampling Locations and Groundwater Monitoring Well Locations, Los Angeles County Department of Agricultural Commissioner, Pico Rivera Facility, 8841 E. Slauson Ave., Pico Rivera, CA.

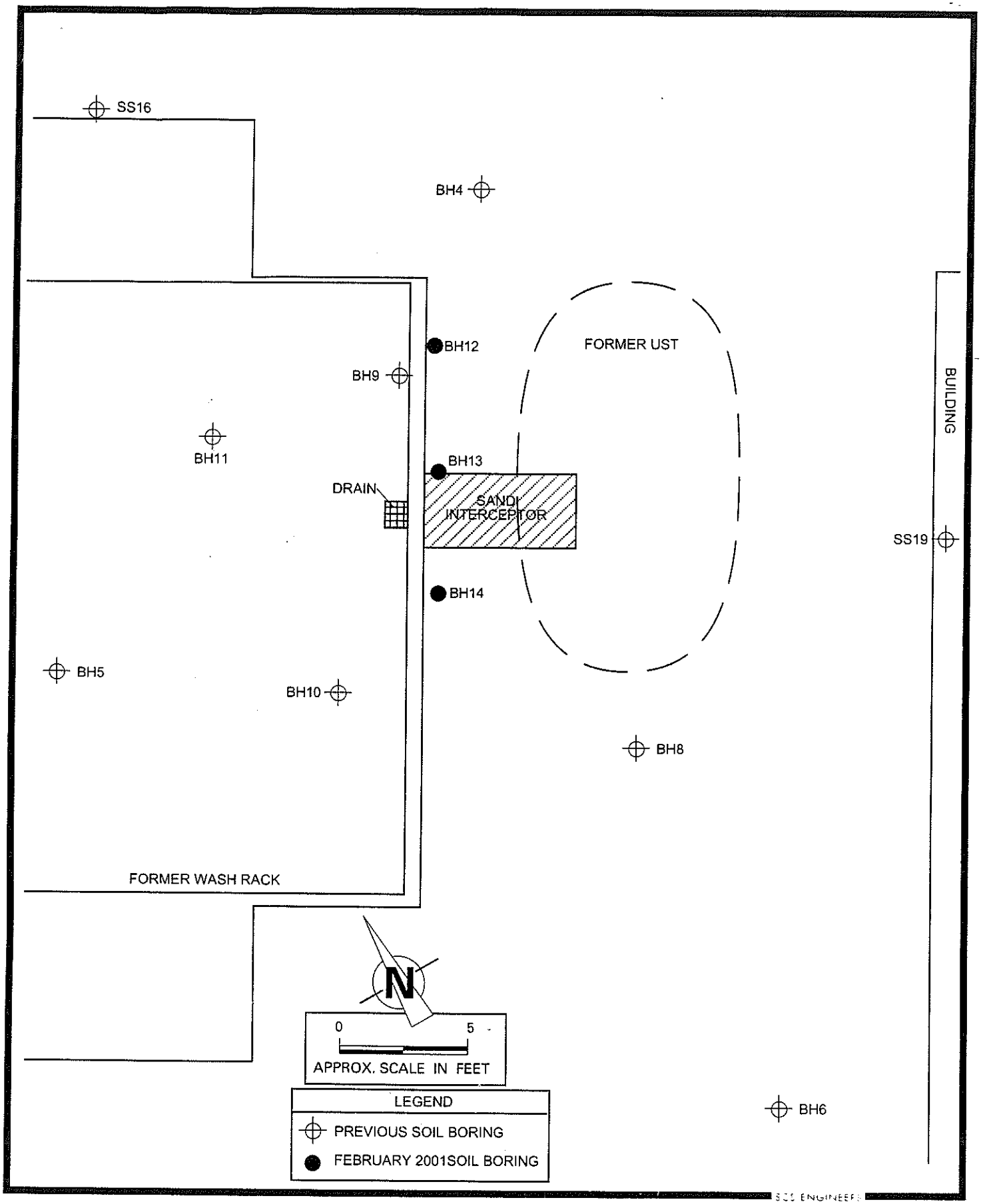


Figure . Map of Soil Borings in Vicinity of Former Wash Rack and Underground Storage Tank (UST), Los Angeles County Department of Agricultural Commissioner, Pico Rivera, CA.

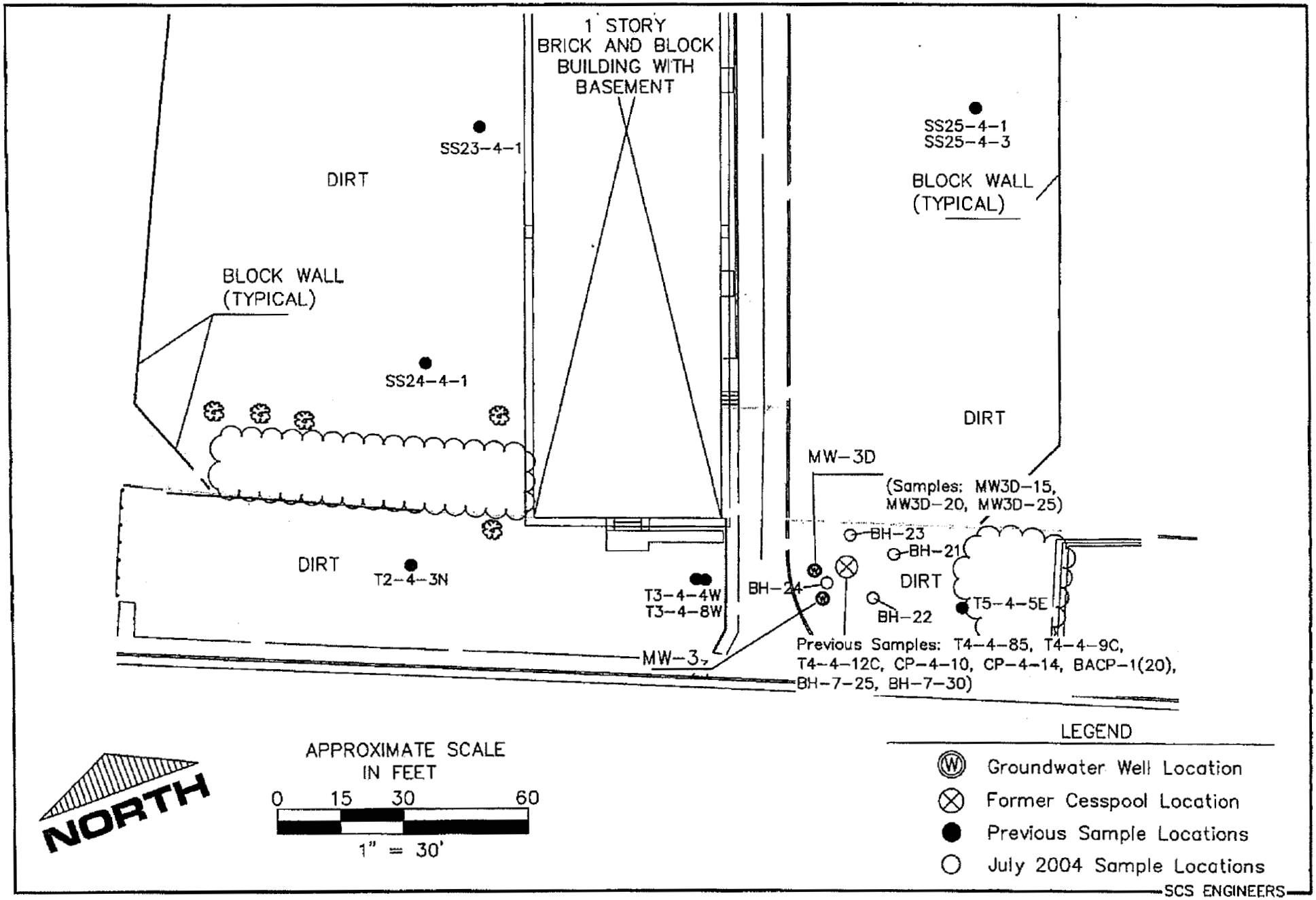


Figure . Map of the Area Surrounding the Former Cesspool Indicating Soil Sampling Locations, Los Angeles County Department of Agricultural Commisioner, 8841 East Slauson Avenue, Pico Rivera, CA

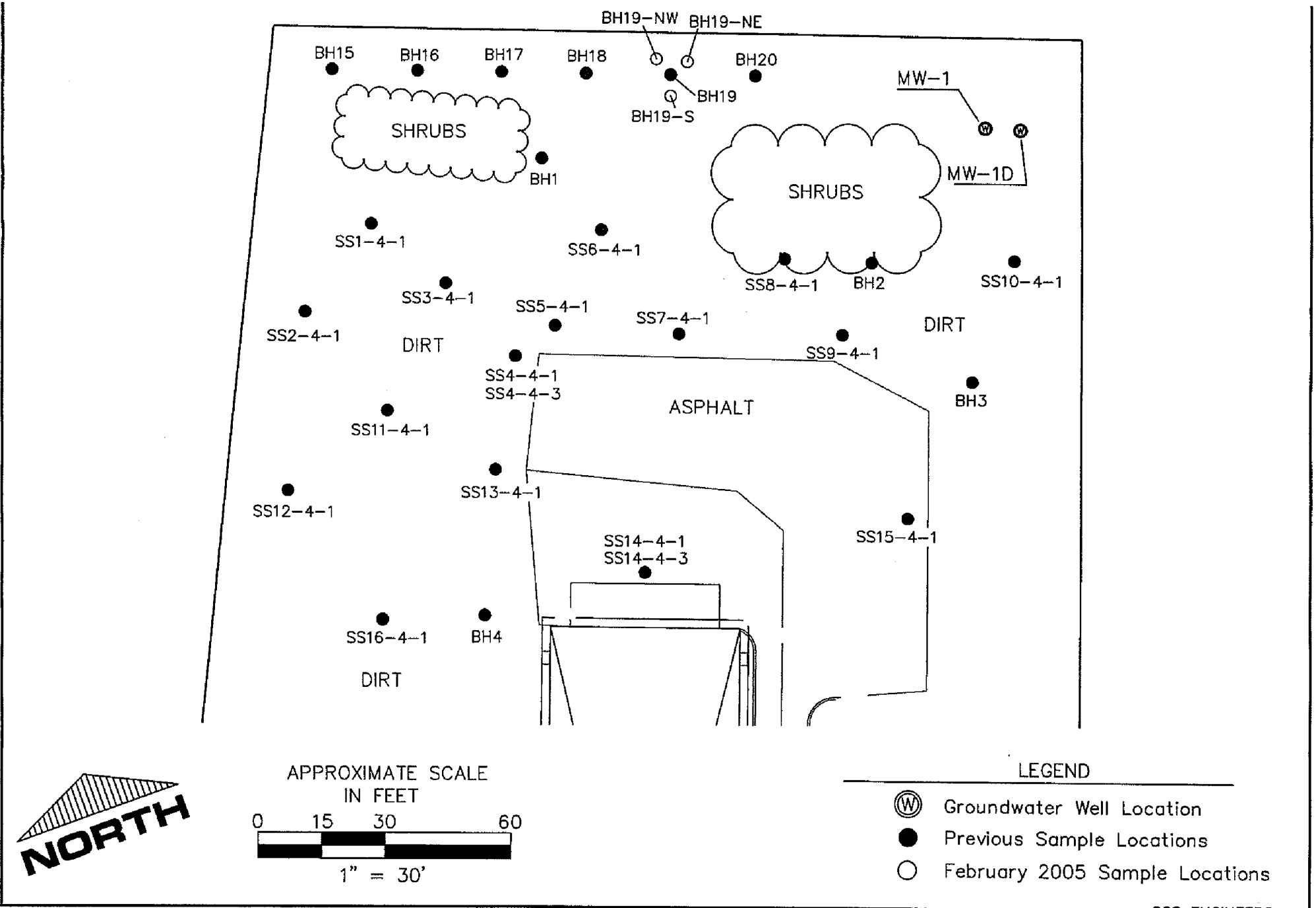


Figure . Map Showing Additional Background Soil Sampling Locations, Los Angeles County Department of Agriculture Commisioner/Weights and Measures, 8841 East Slauson Avenue, Pico Rivera, CA

APPENDIX B
HEALTH RISK ASSESSMENT SUMMARY TABLES

TABLE 1.
LIST OF CHEMICALS OF POTENTIAL CONCERN
AND EXPOSURE POINT CONCENTRATIONS (EPCs) - SOILS
LOS ANGELES COUNTY DEPARTMENT OF AGRICULTURAL COMMISSIONER / WEIGHTS AND MEASURES
8841 EAST SLAUSON AVENUE
PICO RIVERA, CALIFORNIA

Inorganics		Organics	
COPC[1]	EPC[2] (mg/kg)	COPC	EPC (mg/kg)
Metals		**VOCs**	
Cadmium	1.60E+00	Toluene	1.50E-02
Lead	7.62E+01	**SVOCs**	
		Benzo(a)pyrene	5.00E-02
		Diethylphthalate	4.20E+00
		Pesticides/Herbcides	
		beta-BHC	6.40E-03
		delta-BHC	5.50E-03
		alpha-chlordane	2.34E-01
		gamma-chlordane	2.63E-01
		2,4-Dichlorophenoxy Acetate Acid	5.50E-01
		Total DDT	2.59E+00
		Dalapon	3.33E+00
		Dieldrin	1.00E+00
		Endrin (Total)	3.40E-03
		Heptachlor	1.90E-01
		Heptachlor Epoxide	3.90E-03
		Silvex	2.10E-01
		Dioxins/Furans	
		Total Equivalent 2,3,7,8-Tetrachlorodibenzo-p-dioxin	5.60E-06

Notes:
[1] COPC = Chemical of potential concern
[2] EPC = Exposure Point Concentration

TABLE 2.
EXPOSURE PARAMETERS
LOS ANGELES COUNTY DEPARTMENT OF AGRICULTURAL COMMISSIONER / WEIGHTS AND MEASURES
8841 EAST SLAUSON AVENUE
PICO RIVERA, CALIFORNIA

Exposure Parameter[1]	Acronym	Receptors			Units	Reference
		Construction Worker	Resident			
			Adult	Child		
General Parameters						
Body Weight	BW	70	70	15	kg	DTSC (1992, 1994, 1996)
Averaging Time (carcinogens)	AT_c	25,550	25,550	25,550	days	DTSC (1992, 1994, 1996)
Averaging Time (noncarcinogens)	AT_n	365	8,760	2,190	days	DTSC (1992, 1994, 1996)
Conversion Factor	CF_s	1.00E-06	1.00E-06	1.00E-06	kg/mg	
Exposure Frequency	EF	250	350	350	days/year	DTSC (1992, 1994, 1996)
Exposure Duration	ED	1	24	6	years	DTSC (1992, 1994, 1996)
Soil Ingestion Pathway						
Soil Ingestion Rate	IR	330	100	200	mg/day	DTSC (1994), USEPA (2001)
Dermal Contact With Soil						
Skin Surface Area	SA_s	5,700	5,700	2,900	cm^2/event	DTSC (2000)
Soil-to-Skin Adherence Factor	AF	0.8	0.07	0.2	mg/cm^2	DTSC (2000)
Fraction of Chemical Dermally Absorbed[1]	ABS	Chemical-Specific	Chemical-Specific	Chemical-Specific	unitless	DTSC (1994)
Soil Contact Exposure Frequency	EF	250	350	350	events/year	DTSC (2000)
Inhalation of Soil Particulates and Volatiles						
Particulate Emission Factor	PEF	1.32E+09	1.32E+09	1.32E+09	m^3/kg	USEPA (2004)
Inhalation Rate	InhR	20	20	10	m^3/day	DTSC (1992, 1994, 1996)
Volatilization Factor	VF	Chemical-specific	Chemical-Specific	Chemical-Specific	m^3/kg	USEPA (2004)

Notes:

[1]Dermal absorption values, ingeneral: 1% for organics, 10% for organics, unless otherwise specified by DTSC (1994).

TABLE 3.
TOXICITY CRITERIA FOR CHEMICALS OF POTENTIAL CONCERN - ORGANICS
LOS ANGELES COUNTY DEPARTMENT OF AGRICULTURAL COMMISSIONER / WEIGHTS AND MEASURES
8841 EAST SLAUSON AVENUE
PICO RIVERA, CALIFORNIA

COPC	REFERENCE DOSES				CANCER SLOPE FACTORS			
	Oral Reference Dose (RfD_o)[a] (mg/kg-day)		Inhalation Reference Dose (RfD_i) (mg/kg-day)		Oral Slope Factor (CSF_o)[b] $(mg/kg\text{-}day)^{-1}$		Inhalation Slope Factor (CSF_i) $(mg/kg\text{-}day)^{-1}$	
VOCs								
Toluene	2.00E-01	IRIS, 2005	8.57E-02	OEHHA, 2005	NC	--	NC	--
SVOCs								
Benzo(a)pyrene	No Data	--	No Data	--	1.20E+01	OEHHA, 2005	3.90E+00	OEHHA, 2005
Diethylphthalate	8.00E-01	IRIS, 2005	8.00E-01	R	NC	--	NC	--
Pesticides/Herbicides								
beta-BHC[1]	3.00E-04	IRIS, 2005	3.00E-04	R	1.50E+00	OEHHA, 2005	1.50E+00	OEHHA, 2005
delta-BHC[1]	3.00E-04	IRIS, 2005	3.00E-04	R	No Data	--	No Data	--
alpha-chlordane[2]	5.00E-04	IRIS, 2005	5.00E-04	R	1.30E+00	OEHHA, 2005	1.20E+00	OEHHA, 2005
gamma-chlordane[2]	5.00E-04	IRIS, 2005	5.00E-04	R	1.30E+00	OEHHA, 2005	1.20E+00	OEHHA, 2005
2-4-Dichlorophenoxy Acetate Acid	No Data	--	No Data	--	No Data	--	No Data	--
Total DDT[3]	5.00E-04	IRIS, 2005	5.00E-04	R	3.40E-01	OEHHA, 2005	3.40E-01	OEHHA, 2005
Dalapon	3.00E-02	IRIS, 2005	3.00E-02	R	NC	--	NC	--
Dieldrin	5.00E-05	IRIS, 2005	5.00E-05	R	1.60E+01	OEHHA, 2005	1.60E+01	OEHHA, 2005
Endrin (Total)	3.00E-04	IRIS, 2005	3.00E-04	R	NC	--	NC	--
Heptachlor	5.00E-04	IRIS, 2005	5.00E-04	R	4.10E+00	OEHHA, 2005	4.10E+00	OEHHA, 2005
Heptachlor Epoxide	1.30E-05	IRIS, 2005	1.30E-05	R	5.50E+00	OEHHA, 2005	5.50E+00	OEHHA, 2005
Silvex	No Data	--	No Data	--	No Data	--	No Data	--
Dioxins/Furans								
Total Equivalent 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	1.00E-08	OEHHA, 2005	1.10E-08	OEHHA, 2005	1.30E+05	OEHHA, 2005	1.30E+05	OEHHA, 2005

Abbreviations:

COPC = chemical of potential concern
CSF_o = oral cancer slope factor
CSF_i = inhalation cancer slope factor
COPC = chemical of potential concern
EPC = exposure point concentration
mg/kg-day = milligrams per kilogram body weight per day
NC = Not a suspected carcinogen
R = Route-to-route extrapolation
RfD_o = oral reference dose
RfD_i = inhalation reference dose
"--" = not available or applicable

Notes:

[a] In the absence of dermal toxicity values, oral reference doses and/or cancer slope factors were used to evaluate exposure dermal exposure.
[1]Reference doses not available for beta-BHC, delta-BHC; reference doses for the surrogate compound gamma-BHC used.
[2]Reference doses and cancer slope factors not available for alpha-chlordane, gamma-chlordane; references doses, cancer slope factors for surrogate compound chlordane used.
[3]Reference dose and cancer slope factor for 4,4-DDT used.

References:

IRIS, 2005. Integrated Risk Information System (IRIS), USEPA online database. http://www.epa.gov/iris/.
OEHHA, 2005. Online Toxicity Criteria Database, Cal/EPA online database. http://www.oehha.ca.gov/risk/chemicaldb/index.asp.
USEPA, 2004. United States Environmental Protection Agency (USEPA) Region XI. Preliminary Remediation Goals Table, October 2004.

TABLE 4.
TOXICITY CRITERIA FOR CHEMICALS OF POTENTIAL CONCERN - INORGANICS
LOS ANGELES COUNTY DEPARTMENT OF AGRICULTURAL COMMISSIONER / WEIGHTS AND MEASURES
8841 EAST SLAUSON AVENUE
PICO RIVERA, CALIFORNIA

COPC	REFERENCE DOSES				CANCER SLOPE FACTORS			
	Oral Reference Dose (RfD_o)[a] (mg/kg-day)		Inhalation Reference Dose (RfD_i) (mg/kg-day)		Oral Slope Factor (CSF_o)[b] $(mg/kg\text{-}day)^{-1}$		Inhalation Slope Factor (CSF_i) $(mg/kg\text{-}day)^{-1}$	
Inorganics								
Cadmium	5.00E-04	IRIS, 2005	5.71E-06	OEHHA, 2005	NC	–	1.20E+01	OEHHA, 2005

Abbreviations:

COPC = chemical of potential concern
CSF_o = oral cancer slope factor
CSF_i = inhalation cancer slope factor
COPC = chemical of potential concern
EPC = exposure point concentration
mg/kg-day = milligrams per kilogram body weight per day
NC = Not a suspected carcinogen
R = Route-to-route extrapolation
RfD_o = oral reference dose
RfD_i = inhalation reference dose
"–" = not available or applicable

Notes:

[a] In the absence of dermal toxicity values, oral reference doses and/or cancer slope factors were used to evaluate exposure dermal exposure.

References:

IRIS, 2005. Integrated Risk Information System (IRIS), USEPA online database. http://www.epa.gov/iris/.
OEHHA/ARB, 2003. Office of Environmental Health Hazard Assessment (OEHHA)/Air Resources Board (ARB), OEHHA/ARB Approved Chronic Reference Exposure Levels and Target Organs Table, December 4, 2003.
OEHHA, 2005. Online Toxicity Criteria Database, Cal/EPA online database. http://www.oehha.ca.gov/risk/chemicaldb/index.asp.
USEPA, 2004. United States Environmental Protection Agency (USEPA) Region XI, Preliminary Remediation Goals Table, October 2004.

TABLE 5.
NON-CANCER RISKS
CHRONIC DAILY INTAKES AND HAZARD QUOTIENTS
CONSTRUCTION WORKER
LOS ANGELES COUNTY DEPARTMENT OF AGRICULTURAL COMMISSIONER / WEIGHTS AND MEASURES
8841 EAST SLAUSON AVENUE
PICO RIVERA, CALIFORNIA

COPC	EPC	CDI mg/kg-day)					Hazard Quotient
		Soil Ingestion	Dermal Contact with Soil	Inhalation of Particulate-Phase Chemicals in Outdoor Air	Inhalation of Vapor-Phase Chemicals in Outdoor Air	Total CDI	
Organics-Soil (mg/kg)							
VOCs							
Toluene	1.50E-02	4.84E-08	6.69E-08	NA	7.34E-07	8.49E-07	9.14E-06
SVOCs							
Benzo(a)pyrene	5.00E-02	1.61E-07	3.35E-07	7.41E-12		4.96E-07	NA
Diethylphthalate	4.20E+00	1.36E-05	1.87E-05	6.23E-10	NA	3.23E-05	4.04E-05
Pesticides/Herbcides							
beta-BHC	6.40E-03	2.07E-08	1.43E-08	9.49E-13	NA	3.49E-08	1.16E-04
delta-BHC	5.50E-03	1.78E-08	1.23E-08	8.15E-13	NA	3.00E-08	1.00E-04
alpha-chlordane	2.34E-01	7.56E-07	5.22E-07	3.47E-11	NA	1.28E-06	2.56E-03
gamma-chlordane	2.63E-01	8.50E-07	5.87E-07	3.90E-11	NA	1.44E-06	2.88E-03
2,4-Dichlorophenoxy Acetate Acid	5.50E-01	1.78E-06	1.23E-06	8.15E-11	NA	3.00E-06	NA
Total DDT	2.59E+00	8.36E-06	5.78E-06	3.84E-10	NA	1.41E-05	2.83E-02
Dalapon	3.33E+00	1.07E-05	7.43E-06	4.94E-10	NA	1.82E-05	6.06E-04
Dieldrin	1.00E+00	3.23E-06	2.23E-06	1.48E-10	NA	5.46E-06	1.09E-01
Endrin (Total)	3.40E-03	1.10E-08	7.59E-09	5.04E-13	NA	1.86E-08	6.19E-05
Heptachlor	1.90E-01	6.14E-07	4.24E-07	2.82E-11	NA	1.04E-06	2.07E-03
Heptachlor Epoxide	3.90E-03	1.26E-08	8.70E-09	5.78E-13	NA	2.13E-08	1.64E-03
Silvex	2.10E-01	6.78E-07	4.68E-07	3.11E-11	NA	1.15E-06	NA
Dioxins/Furans							
Total Equivalent 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	5.60E-06	1.81E-11	7.50E-12	8.31E-16	NA	2.56E-11	2.56E-03
Inorganics (mg/kg)							
Cadmium	1.60E+00	5.17E-06	2.14E-06	2.37E-10	NA	7.31E-06	1.47E-02
Total Hazard Index							0.2

Notes:
NA = Not applicable or available

TABLE 6.
CANCER RISKS AND CHRONIC DAILY INTAKES
CONSTRUCTION WORKER
LOS ANGELES COUNTY DEPARTMENT OF AGRICULTURAL COMMISSIONER / WEIGHTS AND MEASURES
8841 EAST SLAUSON AVENUE
PICO RIVERA, CALIFORNIA

COPC	EPC	CDI (mg/kg-day)					Cancer Risk
		Soil Ingestion	Dermal Contact with Soil	Inhalation of Particulate-Phase Chemicals in Outdoor Air	Inhalation of Vapor-Phase Chemicals in Outdoor Air	Total CDI	
Organics-Soil (mg/kg)							
VOCs							
Toluene	1.50E-02	6.92E-10	9.56E-10	NA	1.05E-08	1.21E-08	NC
SVOCs							
Benzo(a)pyrene	5.00E-02	2.31E-09	4.78E-09	1.06E-13	NA	7.09E-09	8.50E-08
Diethylphthalate	4.20E+00	1.94E-07	2.68E-07	8.90E-12	NA	4.61E-07	NA
Pesticides/Herbcides							
beta-BHC	6.40E-03	2.95E-10	2.04E-10	1.36E-14	NA	4.99E-10	7.49E-10
delta-BHC	5.50E-03	2.54E-10	1.75E-10	1.16E-14	NA	4.29E-10	NA
alpha-chlordane	2.34E-01	1.08E-08	7.46E-09	4.96E-13	NA	1.83E-08	2.37E-08
gamma-chlordane	2.63E-01	1.21E-08	8.39E-09	5.58E-13	NA	2.05E-08	2.67E-08
2,4-Dichlorophenoxy Acetate Acid	5.50E-01	2.54E-08	1.75E-08	1.16E-12	NA	4.29E-08	NA
Total DDT	2.59E+00	1.19E-07	8.25E-08	5.49E-12	NA	2.02E-07	6.87E-08
Dalapon	3.33E+00	1.54E-07	1.06E-07	7.05E-12	NA	2.60E-07	NC
Dieldrin	1.00E+00	4.61E-08	3.19E-08	2.12E-12	NA	7.80E-08	1.25E-06
Endrin (Total)	3.40E-03	1.57E-10	1.08E-10	7.20E-15	NA	2.65E-10	NC
Heptachlor	1.90E-01	8.76E-09	6.06E-09	4.02E-13	NA	1.48E-08	6.08E-08
Heptachlor Epoxide	3.90E-03	1.80E-10	1.24E-10	8.26E-15	NA	3.04E-10	1.67E-09
Silvex	2.10E-01	9.69E-09	6.69E-09	4.45E-13	NA	1.64E-08	NA
Dioxins/Furans							
Total Equivalent 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	5.60E-06	2.59E-13	1.07E-13	1.19E-17	NA	3.66E-13	4.75E-08
Inorganics (mg/kg)							
Cadmium	1.60E+00	7.38E-08	3.06E-08	3.39E-12	NA	1.04E-07	4.07E-11
Total Cancer Risk							**1.56E-06**

Notes:
NA = Not applicable or available
NC = Not a known or suspected carcinogen

TABLE 7.
NON-CANCER RISKS
CHRONIC DAILY INTAKES AND HAZARD QUOTIENTS
ADULT RESIDENTIAL RECEPTOR
LOS ANGELES COUNTY DEPARTMENT OF AGRICULTURAL COMMISSIONER / WEIGHTS AND MEASURES
8841 EAST SLAUSON AVENUE
PICO RIVERA, CALIFORNIA

COPC	EPC	CDI (mg/kg-day)					Hazard Quotient
		Soil Ingestion	Dermal Contact with Soil	Inhalation of Particulate-Phase Chemicals in Outdoor Air	Inhalation of Indoor Air (Vapor Intrusion)	Total CDI	
Organics-Soil (mg/kg)							
VOCs							
Toluene	1.50E-02	2.05E-08	8.20E-09	NA	JE Modeling[1]	2.87E-08	9.77E-03
SVOCs							
Benzo(a)pyrene	5.00E-02	6.85E-08	4.10E-08	1.04E-11	NA	1.09E-07	NA
Diethylphthalate	4.20E+00	5.75E-06	2.30E-06	8.72E-10	NA	8.05E-06	1.01E-05
Pesticides/Herbcides							
beta-BHC	6.40E-03	8.77E-09	1.75E-09	1.33E-12	NA	1.05E-08	3.51E-05
delta-BHC	5.50E-03	7.53E-09	1.50E-09	1.14E-12	NA	9.04E-09	3.01E-05
alpha-chlordane	2.34E-01	3.21E-07	6.40E-08	4.86E-11	NA	3.85E-07	7.69E-04
gamma-chlordane	2.63E-01	3.61E-07	7.20E-08	5.47E-11	NA	4.33E-07	8.65E-04
2,4-Dichlorophenoxy Acetate Acid	5.50E-01	7.53E-07	1.50E-07	1.14E-10	NA	9.04E-07	NA
Total DDT	2.59E+00	3.55E-06	7.08E-07	5.38E-10	NA	4.26E-06	8.51E-03
Datapon	3.33E+00	4.56E-06	9.10E-07	6.91E-10	NA	5.47E-06	1.82E-04
Dieldrin	1.00E+00	1.37E-06	2.73E-07	2.08E-10	NA	1.64E-06	3.29E-02
Endrin (Total)	3.40E-03	4.66E-09	9.29E-10	7.06E-13	NA	5.59E-09	1.86E-05
Heptachlor	1.90E-01	2.60E-07	5.19E-08	3.94E-11	NA	3.12E-07	6.24E-04
Heptachlor Epoxide	3.90E-03	5.34E-09	1.07E-09	8.09E-13	NA	6.41E-09	4.93E-04
Silvex	2.10E-01	2.88E-07	5.74E-08	4.36E-11	NA	3.45E-07	NA
Dioxins/Furans							
Total Equivalent 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	5.60E-06	7.68E-12	9.19E-13	1.16E-15	NA	8.60E-12	8.60E-04
Inorganics (mg/kg)							
Arsenic	1.60E+00	2.19E-06	2.62E-07	3.32E-10	NA	2.45E-06	4.97E-03
Total Hazard Index							**0.1**

Notes:
NA = Not applicable for off-site receptor populations/Not applicable or available.
[1]Hazard Quotient of 1.26E-02 calculated using the Johnson-Ettinger model. HQ added to total HQ for toluene

TABLE 8.
NON-CANCER RISKS
CHRONIC DAILY INTAKES AND HAZARD QUOTIENTS
CHILD RESIDENTIAL RECEPTOR
LOS ANGELES COUNTY DEPARTMENT OF THE AGRICULTURAL COMMISSIONER
8841 EAST SLAUSON AVENUE
PICO RIVERA, CALIFORNIA

COPC	EPC	CDI (mg/kg-day)					Hazard Quotient
		Soil Ingestion	Dermal Contact with Soil	Inhalation of Particulate-Phase Chemicals in Outdoor Air	Inhalation of Indoor Air (Volatiles Only)[1]	Total CDI	
Organics-Soil (mg/kg)							
VOCs							
Toluene	1.50E-02	1.92E-07	5.56E-08	NA	1.95E-04	1.96E-04	2.28E-03
SVOCs							
Benzo(a)pyrene	5.00E-02	6.39E-07	2.78E-07	2.42E-11	NA	9.17E-07	NA
Diethylphthalate	4.20E+00	3.22E-04	1.56E-05	2.03E-09	NA	3.38E-04	4.22E-04
Pesticides/Herbcides							
beta-BHC	6.40E-03	8.18E-08	1.19E-08	3.10E-12	NA	9.37E-08	3.12E-04
delta-BHC	5.50E-03	7.03E-08	1.02E-08	2.66E-12	NA	8.05E-08	2.68E-04
alpha-chlordane	2.34E-01	2.99E-06	4.34E-07	1.13E-10	NA	3.43E-06	6.85E-03
gamma-chlordane	2.63E-01	3.37E-06	4.88E-07	1.28E-10	NA	3.85E-06	7.71E-03
2,4-Dichlorophenoxy Acetate Acid	5.50E-01	7.03E-06	1.02E-06	2.66E-10	NA	8.05E-06	NA
Total DDT	2.59E+00	3.31E-05	4.80E-06	1.25E-09	NA	3.79E-05	7.58E-02
Dalapon	3.33E+00	4.26E-05	6.17E-06	1.61E-09	NA	4.87E-05	1.62E-03
Dieldrin	1.00E+00	1.28E-05	1.85E-06	4.84E-10	NA	1.46E-05	2.93E-01
Endrin (Total)	3.40E-03	4.35E-08	6.30E-09	1.65E-12	NA	4.98E-08	1.66E-04
Heptachlor	1.90E-01	2.43E-06	3.52E-07	9.20E-11	NA	2.78E-06	5.56E-03
Heptachlor Epoxide	3.90E-03	4.99E-08	7.23E-09	1.89E-12	NA	5.71E-08	4.39E-03
Silvex	2.10E-01	2.68E-06	3.89E-07	1.02E-10	NA	3.07E-06	NA
Dioxins/Furans							
Total Equivalent 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	5.60E-06	7.17E-11	6.23E-12	2.71E-15	NA	7.79E-11	7.79E-03
Inorganics (mg/kg)							
Cadmium	1.60E+00	2.05E-05	1.78E-06	7.75E-10	NA	2.22E-05	4.46E-02
Total Hazard Index							**0.5**

Notes:
NA = Not applicable for off-site receptor populations/Not applicable or available.
[1] CDI was calculated using the indoor air concentration predicted by the J&E Model.

TABLE 9.
CANCER RISKS AND CHRONIC DAILY INTAKES
ADULT AND CHILD RESIDENTIAL RECEPTOR
LOS ANGELES COUNTY DEPARTMENT OF THE AGRICULTURAL COMMISSIONER
88841 EAST SLAUSON AVENUE
PICO RIVERA, CALIFORNIA

COPC	EPC	CDI (mg/kg-day)					Cancer Risk
		Soil Ingestion	Dermal Contact with Soil	Inhalation of Particulate-Phase Chemicals in Outdoor Air	Inhalation of Indoor Air (Vapor Intrusion)	Total CDI	
Organics-Soil (mg/kg)							
VOCs							
Toluene	1.50E-02	8.81E-09	3.51E-09	NA	JE Modeling[1]	1.23E-08	NC
SVOCs							
Benzo(a)pyrene	5.00E-02	2.94E-08	1.76E-08	4.45E-12	NA	4.69E-08	5.63E-07
Diethylphthalate	4.20E+00	2.47E-06	9.84E-07	3.74E-10	NA	3.45E-06	NA
Pesticides/Herbcides							
beta-BHC	6.40E-03	3.76E-09	1.50E-09	5.69E-13	NA	5.26E-09	7.89E-09
delta-BHC	5.50E-03	3.23E-09	1.29E-09	4.89E-13	NA	4.52E-09	NA
alpha-chlordane	2.34E-01	1.37E-07	5.48E-08	2.08E-11	NA	1.92E-07	2.50E-07
gamma-chlordane	2.63E-01	1.55E-07	6.17E-08	2.34E-11	NA	2.16E-07	2.81E-07
2,4-Dichlorophenoxy Acetate Acid	5.50E-01	3.23E-07	1.29E-07	4.89E-11	NA	4.52E-07	NA
Total DDT	2.59E+00	1.52E-06	6.07E-07	2.30E-10	NA	2.13E-06	7.23E-07
Dalapon	3.33E+00	1.95E-06	7.80E-07	2.96E-10	NA	2.73E-06	NC
Dieldrin	1.00E+00	5.87E-07	2.34E-07	8.90E-11	NA	8.21E-07	1.31E-05
Endrin (Total)	3.40E-03	2.00E-09	7.96E-10	3.02E-13	NA	2.79E-09	NC
Heptachlor	1.90E-01	1.12E-07	4.45E-08	1.69E-11	NA	1.56E-07	6.40E-07
Heptachlor Epoxide	3.90E-03	2.29E-09	9.14E-10	3.47E-13	NA	3.20E-09	1.76E-08
Silvex	2.10E-01	1.23E-07	4.92E-08	1.87E-11	NA	1.72E-07	NA
Dioxins/Furans							
Total Equivalent 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	5.60E-06	3.29E-12	3.94E-13	4.99E-16	NA	3.68E-12	4.79E-07
Inorganics (mg/kg)							
Cadmium	1.60E+00	9.39E-07	1.12E-07	1.42E-10	NA	1.05E-06	1.71E-09
Total Cancer Risk (Adult and Child)							**1.61E-05**

Notes:
NA = Not applicable for off-site receptor populations/Not applicable or available.
NC = Not a known or suspected carcinogen.
[1]Cancer Risk calculated using the Johnson-Ettinger model. However, toluene is not a known or suspected carcinogen.

TABLE 10.
SUMMARY OF TOTAL RISKS
LOS ANGELES COUNTY DEPARTMENT OF AGRICULTURAL COMMISSIONER / WEIGHTS AND MEASURES
8841 EAST SLAUSON AVENUE
PICO RIVERA, CALIFORNIA

Receptor	Risk Assessment Results		Chemical Risk Driver	Relative Contribution to Total Risk	Exposure Pathway
Construction Worker	Hazard Index:	0.2	--	--	--
	Cancer Risk	**1.56E-06**	Dieldrin	80%	Direct Contact (Oral and Dermal)
Resident (Adult and Child)	Cancer Risk	**1.61E-05**	Dieldrin	82%	Direct Contact (Oral and Dermal)
Resident (Adult)	Hazard Index:	0.1	--	--	--
Resident (Child)	Hazard Index:	0.5	--	--	--

Notes:
Bold risk assessment results indicate exceedance of California Department of Toxic Substances Control (DTSC) and Office of Environmental Health Hazard Assessment (OEHHA) negligible cancer risk threshold of 1E-06 and non-cancer hazard index threshold of "1".

APPENDIX C
SESOIL MODEL RUN DOCUMENTATION

SESOIL Pollutant Cycle Report

Scenario Description:

SESOIL Output File: C:\SEVIEW63\LACDACD.OUT

SESOIL Process	Pollutant Mass (µg)	Percent of Total
Volatilized	0.000E+00	0.00
In Soil Air	2.208E+08	12.72
Sur. Runoff	0.000E+00	0.00
In Washld	0.000E+00	0.00
Ads On Soil	1.505E+09	86.68
Hydrol Soil	0.000E+00	0.00
Degrad Soil	0.000E+00	0.00
Pure Phase	0.000E+00	0.00
Complexed	0.000E+00	0.00
Immobile CEC	0.000E+00	0.00
Hydrol CEC	0.000E+00	0.00
In Soil Moi	1.685E+06	0.10
Hydrol Mois	0.000E+00	0.00
Degrad Mois	0.000E+00	0.00
Other Trans	0.000E+00	0.00
Other Sinks	0.000E+00	0.00
Gwr. Runoff	0.000E+00	0.00
Total Output	1.728E+09	99.49
Total Input	1.737E+09	
Input - Output	8.835E+06	

Maximum leachate concentration: 0.000E+00 **mg/l**

Climate File: LOS ANGELES, CIVIC CENTER
C:\SEVIEW63\LOSANGEL.CLM

Chemical File: Arsenic, Inorganic (Kd)
C:\SEVIEW63\ARSENICD.CHM

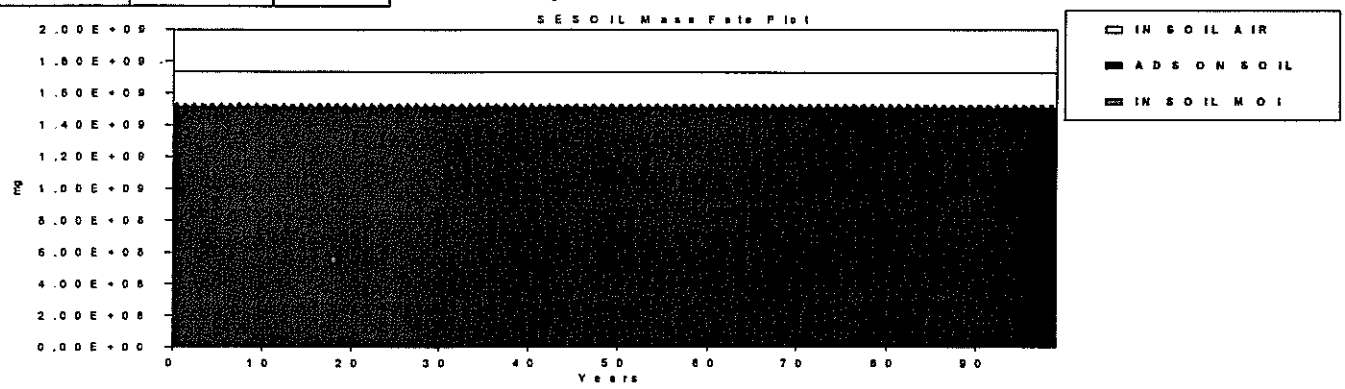
Soil File: Stratigraphic column
C:\SEVIEW63\LACDAC.SOI

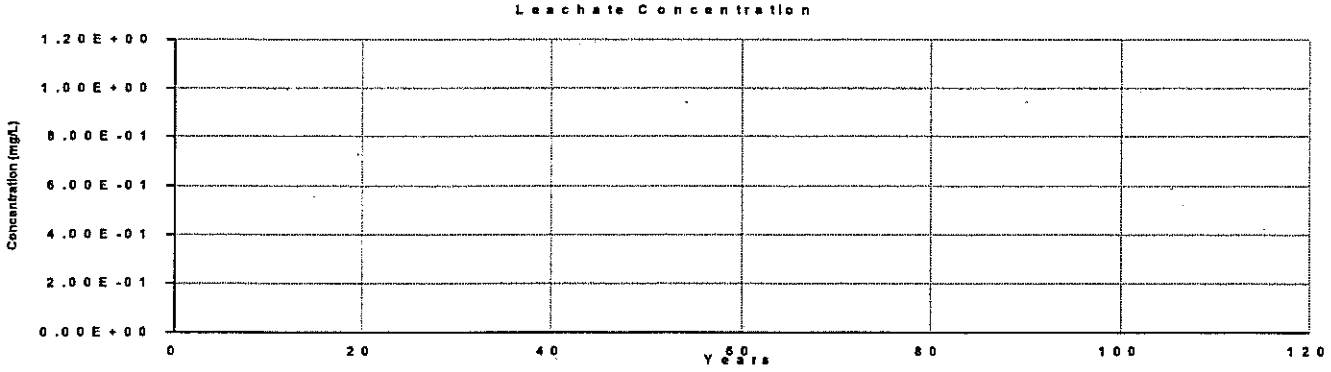
Application File: SEVIEW Default Application Parameters
C:\SEVIEW63\LACDAC.APL

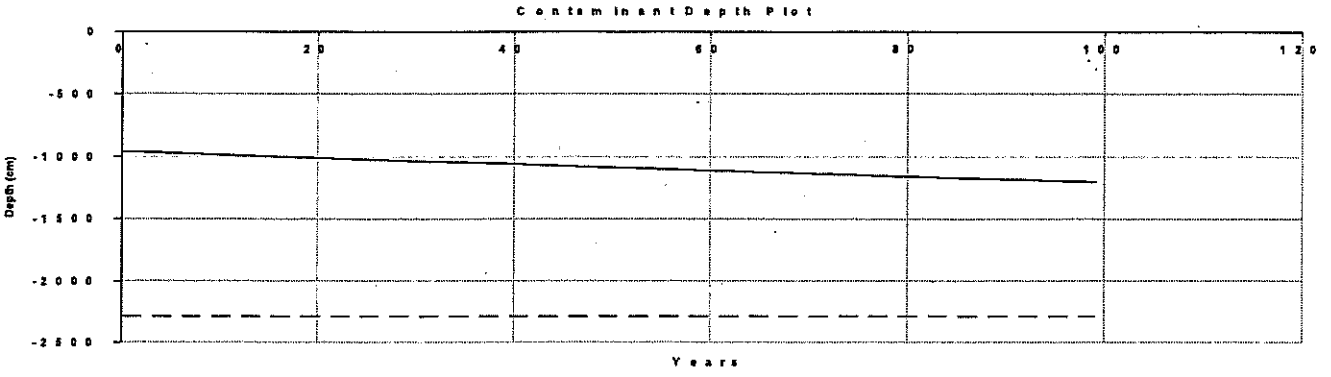
Starting Depth: 958.90 **cm**

Ending Depth: 1200.00 **cm**

Total Depth: 2288.00 **cm**







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*****
 ***** SESOIL : VERSION 6.3 -- January, 2006
*****
 ***** Copyright 1999-2006, Environmental Software Consultants, Inc.
*****
 *****
*****
 *****
*****
 ***** DEVELOPERS:  M. BONAZOUNTAS,ARTHUR D. LITTLE INC.   ,(617)864-
5770,X5871                    *****
 *****             J. WAGNER     ,DIS/ADLPIPE, INC.       ,(617)492-
1991,X5820                    *****
 *****
*****
 ***** MODIFIED EXTENSIVELY BY:
*****
 ***** D.M. HETRICK
*****
 ***** OAK RIDGE NATIONAL LABORATORY
*****
 ***** (615) 576-7556
*****
 ***** VERSION    :  SEPTEMBER 1986  (DECEMBER 1992)
*****
 *****
*****
 ***** FURTHER MODIFIED TO CORRECT MASS BALANCE
*****
 ***** ERROR IN POLLUTANT FATE CYCLE BY:
*****
 ***** M.J. BARDEN
*****
 ***** WISCONSIN DEPT. OF NATURAL RESOURCES
*****
 ***** (608) 264-6007
*****
 ***** VERSION: 2.1 -- JULY 1996
*****
 *****
*****
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*****

*******************************************************************************
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 *****
*****
 *****
*****
 ***** Modified to run to 999 Years
*****
 ***** Robert A. Schneiker
*****
```

***** Environmental Software Consultants, Inc.
*****
***** P.O. Box 2622
*****
***** Madison, Wisconsin 53701-2622
*****
***** Phone (608) 240-9878
*****
***** Fax: (608) 240-9878
*****
***** VERSION: 2.1esci -- March 1999
*****
*****
*****
*****
*****

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*****
*****
*****
***** Added contaminant load to sublayers
*****
***** Robert A. Schneiker
*****
***** Environmental Software Consultants, Inc.
*****
***** P.O. Box 2622
*****
***** Madison, Wisconsin 53701-2622
*****
***** Phone (608) 240-9878
*****
***** Fax: (608) 240-9878
*****
***** VERSION: 6.3 -- January, 2006
*****
*****
*****
*****
*****

****
****

****** MONTHLY SESOIL MODEL OPERATION ******
MONTHLY SITE SPECIFIC SIMULATION

RUN: 1

REGION : (1) LOS ANGELES, CIVIC CENTER
SOIL TYPE : (1) Stratigraphic column
COMPOUND : (1) Arsenic, Inorganic (Kd)
WASHLOAD DATA : (0)
APPLICATION AREA: (1) SEVIEW Default Application Parameters

WARNING- SOIL PERMEABILITY VARYS CONSIDERABLY AMONG LAYERS
SESOIL MAY NOT BE ACCURATE FOR SUCH AN INHOMOGENEOUS COLUMN

GENERAL INPUT PARAMETERS
==========

-- SOIL INPUT PARAMETERS --

SOIL DENSITY (G/CM**3):	1.52
INTRINSIC PERMEABILITY (CM**2):	.000
DISCONNECTEDNESS INDEX (-):	4.13
POROSITY (-):	.255
ORGANIC CARBON CONTENT (%):	.100
CLAY CONTENT (%):	.000
CATION EXCHANGE CAPACITY (MILLI EQ./100G DRY SOIL):	6.00
FREUNDLICH EXPONENT (-):	1.00

1

-- CHEMICAL INPUT PARAMETERS --

SOLUBILITY (UG/ML):	.347E+05
DIFFUSION COEFFICIENT IN AIR (CM**2/SEC):	.000
HENRYS LAW CONSTANT (M**3-ATM/MOLE):	.772
ADSORPTION COEFFICIENT ON ORGANIC CARBON(KOC):	.000
ADSORPTION COEFFICIENT ON SOIL (K):	29.0
MOLECULAR WEIGHT (G/MOL):	77.9
VALENCE (-):	.000
NEUTRAL HYDROLYSIS CONSTANT (/DAY):	.000
BASE HYDROLYSIS CONSTANT (L/MOL-DAY):	.000
ACID HYDROLYSIS CONSTANT (L/MOL-DAY):	.000
DEGRADATION RATE IN MOISTURE (/DAY):	.000
DEGRADATION RATE ON SOIL (/DAY):	.000
LIGAND-POLLUTANT STABILITY CONSTANT (-):	.000
NO. MOLES LIGAND/MOLE POLLUTANT (-):	.000
LIGAND MOLECULAR WEIGHT (G/MOL):	.000
DIFFUSION COEFFICIENT IN WATER (CM**2/SEC):	.000

-- APPLICATION INPUT PARAMETERS --

NUMBER OF SOIL LAYERS:	4
YEARS TO BE SIMULATED:	99
AREA (CM**2):	.105E+06
APPLICATION AREA LATITUDE (DEG.):	34.0
SPILL (1) OR STEADY APPLICATION (0):	1
MODIFIED SUMMERS MODEL USED (1), NOT USED (0):	0
INITIAL CHEMICAL CONCENTRATIONS GIVEN (1), NOT GIVEN (0):	1
DEPTHS (CM):	.113E+04

152. 793. 213.

NUMBER OF SUBLAYERS/LAYER	10

2 7 2

PH (CM):	7.5

7.5 7.5 7.5

INTRINSIC PERMEABILITIES (CM**2):	.10E-07

.85E-10 .90E-08 .10E-07

KDEL RATIOS (-):	1.0

1.0 1.0

```
 KDES RATIOS (-):                                                    1.0
1.0       1.0
 OC RATIOS (-):                                                      1.5
1.5       1.0
 CEC RATIOS (-):                                                     1.0
1.0       1.0
 FRN RATIOS(-):                                                      1.0
1.0       1.0
 ADS RATIOS(-):                                                      1.0
1.0       1.0
1
       YEAR-  1    MONTHLY INPUT PARAMETERS
       =========    ========================

       -- CLIMATIC INPUT PARAMETERS --

                              OCT       NOV       DEC       JAN       FEB       MAR
APR       MAY       JUN       JUL       AUG       SEP

 TEMP. (DEG C)            20.940    17.220    14.610    14.610    15.610
15.940    17.390    18.780    20.940    23.500    23.940    23.170
 CLOUD CVR (FRAC.)         .270      .260      .290      .310      .280
.270      .300      .340      .350      .180      .170      .210
 REL. HUM.(FRAC.)          .660      .550      .560      .565      .615
.630      .660      .680      .705      .685      .695      .660
 ALBEDO (-)                .250      .200      .200      .200      .200
.200      .200      .250      .250      .250      .250      .250
 EVAPOT. (CM/DAY)          .000      .000      .000      .000      .000
.000      .000      .000      .000      .000      .000      .000

 PRECIP. (CM)              .790     5.030     5.160     7.420     7.800
6.630     2.620      .480      .080      .030      .360     1.140
 M.TIME RAIN(DAYS)         .130      .460      .480      .580      .550
.430      .320      .120      .020      .020      .080      .100
 M. STORM NO. (-)          .690     1.830     2.300     3.570     3.080
3.400     2.110      .370      .090      .090      .190      .610
 M. SEASON (DAYS)        30.400    30.400    30.400    30.400    30.400
30.400    30.400    30.400    30.400    30.400    30.400    30.400


      INITIAL POLLUTANT CONCENTRATIONS IN UG/ML, INPUT   FOR MONTH  1 OF
YEAR 1


 LAYER 1:
     SUBLAYER              1         2         3         4         5         6
7         8         9        10
 INITIAL CONC. (UG/ML)  7.20E+00 7.35E+00 7.50E+00 7.50E+00 2.01E+01
1.61E+01 1.03E+01 1.03E+01 1.02E+01 0.00E+00


 LAYER 2:
     SUBLAYER              1         2
 INITIAL CONC. (UG/ML)  0.00E+00 0.00E+00


 LAYER 3:
     SUBLAYER              1         2         3         4         5         6
7
```

INITIAL CONC. (UG/ML) 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
0.00E+00 0.00E+00

LAYER 4:
SUBLAYER 1 2
INITIAL CONC. (UG/ML) 0.00E+00 0.00E+00

-- POLLUTANT INPUT PARAMETERS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
POL. INP-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TRNSFORMD-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SINKS-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LIG.INPUT-1 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
VOLATILIZATION MULT.-1	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00
SURFACE RUNOFF MULT.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
POL. IN RAIN (FRAC-SL)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

POL. INP-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TRNSFORMD-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SINKS-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LIG.INPUT-2 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
VOLATILIZATION MULT.-2	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00

POL. INP-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TRNSFORMD-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SINKS-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
LIG.INPUT-3 (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
VOLATILIZATION MULT.-3	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00

POL. INP-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TRNSFORMD-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SINKS-L (UG/CM**2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
LIG.INPUT-L (UG/CM**2) 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
VOLATILIZATION MULT.-L 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00
1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00
1

YEAR- 2 MONTHLY INPUT PARAMETERS

-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS --

			OCT	NOV	DEC	JAN	FEB
MAR	APR	MAY	JUN	JUL	AUG	SEP	

POL. INP-1 (UG/CM**2) 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
TRNSFORMD-1 (UG/CM**2) 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
SINKS-1 (UG/CM**2) 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
LIG.INPUT-1 (UG/CM**2) 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
VOLATILIZATION MULT.-1 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00
1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00
SURFACE RUNOFF MULT. 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
POL. IN RAIN (FRAC-SL) 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00

POL. INP-2 (UG/CM**2) 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
TRNSFORMD-2 (UG/CM**2) 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
SINKS-2 (UG/CM**2) 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
LIG.INPUT-2 (UG/CM**2) 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
VOLATILIZATION MULT.-2 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00
1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00

POL. INP-3 (UG/CM**2) 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
TRNSFORMD-3 (UG/CM**2) 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
SINKS-3 (UG/CM**2) 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
LIG.INPUT-3 (UG/CM**2) 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
VOLATILIZATION MULT.-3 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00
1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00

POL. INP-L (UG/CM**2) 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00

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 TRNSFORMD-L (UG/CM**2) 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
 SINKS-L (UG/CM**2)     0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
 LIG.INPUT-L (UG/CM**2) 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
 VOLATILIZATION MULT.-L 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00
1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00 1.00E+00
1
      YEAR-  3    MONTHLY INPUT PARAMETERS
      =========    ========================

      -- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

      -- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR
1
      YEAR-  4    MONTHLY INPUT PARAMETERS
      =========    ========================

      -- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

      -- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR
1
      YEAR-  5    MONTHLY INPUT PARAMETERS
      =========    ========================

      -- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

      -- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR
1
      YEAR-  6    MONTHLY INPUT PARAMETERS
      =========    ========================

      -- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

      -- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR
1
      YEAR-  7    MONTHLY INPUT PARAMETERS
      =========    ========================

      -- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

      -- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR
1
      YEAR-  8    MONTHLY INPUT PARAMETERS
      =========    ========================

      -- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

      -- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR
1
      YEAR-  9    MONTHLY INPUT PARAMETERS
      =========    ========================

      -- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

      -- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR
1
      YEAR- 10    MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

1

YEAR- 11 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

1

YEAR- 12 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

1

YEAR- 13 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

1

YEAR- 14 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

1

YEAR- 15 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

1

YEAR- 16 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

1

YEAR- 17 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

1

YEAR- 18 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

1

YEAR- 19 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

1

YEAR- 20 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 21 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 22 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

1

YEAR- 23 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

1

YEAR- 24 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

1

YEAR- 25 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

1

YEAR- 26 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

1

YEAR- 27 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 28 MONTHLY INPUT PARAMETERS

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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 29 MONTHLY INPUT PARAMETERS

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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 30 MONTHLY INPUT PARAMETERS

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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 31 MONTHLY INPUT PARAMETERS

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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 32 MONTHLY INPUT PARAMETERS

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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 33 MONTHLY INPUT PARAMETERS

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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 34 MONTHLY INPUT PARAMETERS

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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 35 MONTHLY INPUT PARAMETERS

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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 36 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 37 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 38 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 39 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 40 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 41 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 42 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

1

YEAR- 43 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 44 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 45 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 46 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 47 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 48 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 49 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

1

YEAR- 50 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

1

YEAR- 51 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

1

YEAR- 52 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

1

YEAR- 53 MONTHLY INPUT PARAMETERS

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=========    ========================

-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR
1
YEAR- 54    MONTHLY INPUT PARAMETERS
=========    ========================

-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR
1
YEAR- 55    MONTHLY INPUT PARAMETERS
=========    ========================

-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR
1
YEAR- 56    MONTHLY INPUT PARAMETERS
=========    ========================

-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR
1
YEAR- 57    MONTHLY INPUT PARAMETERS
=========    ========================

-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR
1
YEAR- 58    MONTHLY INPUT PARAMETERS
=========    ========================

-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR
1
YEAR- 59    MONTHLY INPUT PARAMETERS
=========    ========================

-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR
1
YEAR- 60    MONTHLY INPUT PARAMETERS
=========    ========================

-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR
1
YEAR- 61    MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR
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-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

1

YEAR- 62 MONTHLY INPUT PARAMETERS
========= ==========

-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

1

YEAR- 63 MONTHLY INPUT PARAMETERS
========= ==========

-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

1

YEAR- 64 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 65 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 66 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 67 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 68 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 69 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 70 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 71 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 72 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 73 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 74 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 75 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 76 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 77 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 78 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 79 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 80 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 81 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 82 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 83 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 84 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 85 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 86 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 87 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 88 MONTHLY INPUT PARAMETERS

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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 89 MONTHLY INPUT PARAMETERS

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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 90 MONTHLY INPUT PARAMETERS

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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 91 MONTHLY INPUT PARAMETERS

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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 92 MONTHLY INPUT PARAMETERS

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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 93 MONTHLY INPUT PARAMETERS

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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 94 MONTHLY INPUT PARAMETERS

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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 95 MONTHLY INPUT PARAMETERS

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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 96 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 97 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 98 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 99 MONTHLY INPUT PARAMETERS
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-- CLIMATIC INPUT PARAMETERS ARE SAME AS LAST YEAR

-- POLLUTANT INPUT PARAMETERS ARE SAME AS LAST YEAR

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YEAR- 1 MONTHLY RESULTS (OUTPUT)
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-- HYDROLOGIC CYCLE COMPONENTS --

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MOIS. IN L1 (%)	5.775	6.540	7.101	7.917	8.249	7.994	7.050	6.285	5.775	5.342	5.036	4.934
MOIS. BELOW L1 (%)	5.775	6.540	7.101	7.917	8.249	7.994	7.050	6.285	5.775	5.342	5.036	4.934
PRECIPATION (CM)	.849	4.994	5.122	7.363	7.824	6.659	2.682	.496	.146	.056	.364	1.143
NET INFILT. (CM)	.821	4.734	4.960	7.234	7.542	6.488	2.659	.467	.118	.055	.302	.986
EVAPOTRANS. (CM)	1.199	2.299	2.604	3.662	4.458	4.803	3.117	1.061	.448	.387	.493	.828
MOIS. RETEN (CM)	-1.020	1.457	1.069	1.555	.632	-.486	-1.797	-1.457	-.972	-.826	-.583	-.194