

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD—
LOS ANGELES REGION**

1000 SOUTH BROADWAY, SUITE 4027
LOS ANGELES, CALIFORNIA 90012-4596
(213) 620-4460



April 8, 1988

Mr. Robert Maki
UTILITY TRAILER
P.O. Box 1299
City of Industry, CA 91749

ADDITIONAL SUBSURFACE INVESTIGATION (FILE NO. 87-19/AB105.296)

On December 4, 1987, soil samples for laboratory analysis were taken from a soil plot at your facility. The soil plot is adjacent to a surface drainage conduit that services both your facility and Somitex Prints. The following are results from the soil samples analyses:

Methylene Chloride 84 parts per billion (ppb)
Hydrocarbons up to C₁₃

On December 11, 1987, a water sample was obtained from a borehole in the same plot. Laboratory analysis of the water sample indicated the following contaminants:

PCE	34 ppb
TCE	14 ppb
1,1-DCE	77 ppb
cis 1,1-DCE	21 ppb
1,1,1-TCA	2900 ppb
1,1-DCA	224 ppb
TOLUENE	11 ppb

From information submitted to the Board by your facility in the Chemical Use Questionnaire, many of the chemicals found in the soil and water samples are or may be stored at your facility. It is necessary to determine the vertical extent of local soil contamination and whether the underlying groundwater has been affected by the discharges.

You are directed to submit to the Board a work plan for the placement of a discovery/monitoring well in the soil plot area. Enclosed are the necessary requirements to be followed for the correct installation of this discovery/monitoring well. The due date for the submittal of this work plan is April 29, 1988.

*to well at Tard
receipt of
letter per
2/21/88*

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Please remember that the work plan should not be implemented until it has been reviewed and approved by Board staff. If you have any further questions, contact Dainis Kleinbergs at (213) 620-3680. **DINIS.**


ROY SAKAIDA
Senior Water Resources
Control Engineer

Enclosures

cc: Bill Jones, County of Los Angeles, Department of Health
Services
Seiichi Saito, County of Los Angeles, Department of
Health Services, Water and Sewage
Robert G. Berlien, Main San Gabriel Basin Watermaster
Kevin Snead, Stetson Engineering

RRS:PBC:dk

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STATE OF CALIFORNIA
California Regional Water Quality Control Board
Los Angeles Region

WORK PLAN REQUIREMENTS
for
INITIAL SUBSURFACE INVESTIGATIONS
(AB1803 FOLLOW-UP PROGRAM)

The objective of this initial investigation is to determine if there has been any leakage or spillage of materials which may have contaminated or has a potential for contaminating ground water. Your work plan should include, but not be limited to, the following:

SITE HISTORY: Provide a brief description of past and present business and specific activities at the site. Describe storage, handling, use, and disposal procedures for organic chemicals, such as chlorinated or aromatic solvents. List the previous businesses at the site, if known. Give name, address, and phone number of landlord/lessor if you do not own the site.

FACILITY MAP: Prepare a scaled site map of the facility and identify all potential sources for contamination, past and present. Examples include: chemical storage, transfer and use areas; above- and below-ground piping; sumps; pits; above- and under-ground tanks; and waste storage. Indicate dates of completion of buildings or pavings where possible.

SITE SOILS AND GEOLOGY: This phase of investigation should determine if contamination exists in the vadose zone; define source(s); and provide background geological data for the area.

1. Locate all proposed borings on the facility map and provide rationale for the number and location of the borings.
2. Specify the proposed depth for each boring and justify if less than 40 feet. Additional depths will be required if ground water is encountered or if there is obvious contamination at the bottom of the bore hole.
3. Identify the methods proposed for soil borings. Use EPA or State Department of Health Services guidelines.
4. Log all borings to provide soil types per USGS Soils Classification System and, if possible, the organic vapor concentrations encountered.
5. Provide a sampling plan to include equipment and procedures for collection and handling of soils. A sampling interval of 5 feet or change in soil material is required in each boring starting at just below surface, 5 ft, 10 ft, etc.
6. Discrete, undisturbed samples will be taken, sealed, and transported to the laboratory for analyses.

7. Describe any screening technique (OVA etc.) which would be used to select samples for analyses. Samples to be used for analyses must not be used for screening. EPA sample holding times and conditions must be strictly observed.
8. Provide the name of the laboratory selected for chemical analyses. This laboratory must be State Department of Health Services certified for procedures used and must use EPA Methods 8240 or 8010/8020 supplemented by methods necessary to analyze for any chemicals used on site, both past and present. Analytical data must meet EPA practical quantitation limits (5 to 10 ppb for selected VOC) or be justified.
9. Data when presented must indicate detection limits and whether a chemical was not detected or potentially exists below quantitation limits. QA/QC data are to be included in the report.

GROUNDWATER (HYDROGEOLOGY): Ground water must be monitored if any soil boring encounters free water or if any soil sample from a boring is found to contain contaminants. Site specific exceptions may be made based on depth to ground water and contaminants found.

1. Provide a contingency plan for conversion of soil borings that reach free water to ground water monitoring wells. This should include permitting and well design specifications such as characterizing the aquifer and matching filter pack and well screen to the aquifer.
2. Describe techniques to be used for field analysis of the ground water (temperature, pH, conductivity etc.) as well as for water sampling, handling and transport.
3. Provide the name of the laboratory selected for chemical analyses and specify use of EPA Methods 624 or 601/602.
4. Unfiltered samples are to be submitted to the laboratory for analyses and for report of sample turbidity. Turbidity must be less than 10 ppm. Limits of detection and QA/QC data should be provided with lab reports.

ADDITIONAL REQUIREMENTS:

1. Submit a copy of any previous subsurface investigations conducted at the site. Specify if requested by another agency or another unit of this Regional Board.
2. Submit evidence that subsurface investigations will be directed or conducted by a California registered geologist, certified engineering geologist, or registered civil engineer.
3. Submit a time schedule to complete the proposed activities. Investigations are to be completed within 6 to 8 weeks of plan approval.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

PHASE II SUBSURFACE INVESTIGATION
(AB 1803 FOLLOW-UP PROGRAM)

DATA REQUIREMENTS: All work plan requirements for the initial subsurface investigations must also be met in conducting this Phase II activity.

UNSATURATED ZONE (SOILS)

1. Ascertain lateral and vertical extent of contamination.
2. Determine soil properties which affect contaminant mobility in the vadose zone. Relate the specific residual contaminants with their potential long term effect on ground water quality.

SATURATED ZONE (WATER)

1. Determine specific aquifer properties for correct siting of monitoring well(s). Use of piezometer clusters is encouraged to ascertain aquifer properties.
2. Determine lateral and vertical extent of contaminant plume.

PROCEDURES

SOIL BORING

1. Justify and plot proposed location(s) for soil sampling.
2. Explain proposed sampling depth and drilling method.
3. Specify that boring logs will be signed off by appropriately registered or certified personnel.

DRILLING/SOIL SAMPLING

1. Describe sampling procedures:
 - Method and equipment proposed to collect the samples with minimal loss of volatiles.
 - Sampling interval (5 feet or at significant changes in soil/lithology as noted on the boring logs).
 - Number and type of soil samples (only discrete, undisturbed samples are acceptable).
2. If possible, take water samples from any boring which penetrates the uppermost saturated zone after converting to a monitoring well or piezometer.

MONITORING WELL CONSTRUCTION/DEVELOPMENT

1. Include in the well design, specifications/construction details such as:
 - Casing and screen materials, sand pack, and construction method,

- Proposed depth and type of annular seal,
 - Time for cement to set before commencing monitoring.
2. Provide for appropriate logging.
 3. Characterize aquifer materials for proper selection of filter pack and screen. Only commercially slotted screens are acceptable. Less than 10-20% of the filter pack should enter the well. This screen should extend a minimum of 20 feet below and 10 feet above the water table.
 4. The boring should not penetrate a competent clay layer below the saturated zone.
 5. Casing must be suspended and centralized such that it is not resting against the sides nor bottom of the hole prior to fixing in place.
 6. Place grout of either cement or cement/bentonite in an appropriate manner to avoid bridging.
 7. Establish benchmarks relative to mean sea level. Provide benchmark location and survey date. Measure water levels to 0.01 foot. Also provide well location using California Coordinates to the nearest foot (PLANE COORDINATE PROJECTION TABLES for CALIFORNIA).
 8. Describe methods to develop well such that the waters sampled are representative of the formation water. The water sampled must have less than 10 ppm settleable solids.

WATER SAMPLING

1. Describe details of sample collection:
 - Water sampling devices to be used,
 - Procedures to minimize loss of samples by adsorption and/or volatilization,
 - Purge techniques, tests (temp., pH, conductivity) to assure the collection of a representative water sample.
2. Describe methods for handling the samples collected.

SAMPLE ANALYSES

GENERAL

1. The laboratory must be certified by the California Department of Health Services for the specific required procedures.
2. Laboratory procedures and QA\QC sheets must be submitted with the results in the technical report.
3. Limits of detection must approach EPA's practical quantitation limits.
4. Proper chain of custody procedures must be used.

SOILS: Specify EPA Methods to determine existing facility contaminants, also use the required EPA Methods 8240 or 8010/8020 to quantify volatile organics. Specify detection limits.

WATER: Specify EPA Methods to quantify contaminants found in soil, also use EPA Methods 601/602 or 624. Specify detection limits. Submit samples to the laboratory in unfiltered form and report sample turbidity.

CALIF. REGIONAL WATER QUALITY CONTROL BOARD

Executive Officer's Report
April 25, 1988

<u>Discharger</u>	<u>Date</u>	<u>Subject</u>
Lubricating Specialties, Incorporated Pico Rivera	3-1-88	Overdue technical reports. Letter requested submittal by 3-16-88. (Not submitted as of 4-5-88).
Signal Hill Energy System, Inc. Norwalk	3-1-88	DMRs revealed noncompliance of WDRs. Letter directed submittal of corrective and preventive measures by 3-16-88. (Complied on 3-15-88).
Mobil Oil Corporation Torrance	3-3-88	Issuance of tentative Clean Up and Abatement Order. Board considered and adopted the ground water cleanup plan on 3-28-88.
Somitex Prints of CA, Inc. City of Industry	3-3-88	Site inspection revealed unpermitted discharge to storm drain system. Letter directed firm to cease discharge immediately and submit a report of preventive and corrective actions by 3- 21-88. (Complied on 4-1-88).
City of Los Angeles Department of Water & Power Los Angeles	3-4-88	Overdue technical reports. Letter requested submittal by 3-18-88. (Complied on 3-21-88).
Canale Foods, Inc. El Monte	3-9-88	DMRs revealed noncompliance of WDRs. Letter directed submittal of corrective and preventive measures by 3-23-88. (Complied on 3-31-88).
Simi Valley County Sanitation District Simi Valley	3-9-88	Overdue pretreatment report. Letter requested submittal by 3-30-88. (Complied on 3-31-88).

April 19 5:19 A.M.

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