ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

R0858

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Program
80 Swan Way, Rm. 200
Oakland, CA 94621
(415)

November 3, 1989

Mr. Sam Rohn
Union Carbide Linde Division
2240 Camino Ramon
San Ramon, CA 94583

Re: Uriah Inc. environmental assessment report on Bayox facility, 1171 Ocean Ave., Oakland

Dear Mr. Rohn:

The Alameda County Department of Environmental Health, Hazardous Materials Division, has reviewed the "Limited Site Assessment" report cited above. As stated in its work plan dated June 16, 1989, Uriah Inc. intended the work completed to date to be "an appropriate first step towards satisfying [preliminary assessment requirements]." In our view, the work accomplished and documented in the October 4 report does represent a first step in defining the extent of contamination in the vicinity of the removed diesel tank at the Bayox site; however, more work needs to be done, as outlined in the following paragraphs.

Based on reported results, Uriah Inc. found minor soil contamination in only one boring, at a point approximately 15 feet cross-gradient from the excavation pit. No soil or water contamination was found in any of the other borings. However, only two of the six soil borings could be construed as somewhat downgradient, assuming that the calculated groundwater flow direction is accurate. Therefore, it is not surprising that no hydrocarbons were detected in these borings. The 1.6 ppm found in soil from boring LB-3 may be from sources other than the tank system, and the fact that no contamination was encountered in borings LB-1 and LB-2 does not by itself convince the Division that the diesel discovered during tank removal was insignificant and localized, as the the Uriah Inc. report concludes.

Overall, the work accomplished at the site is insufficient for two reasons: 1) it does not address all of the elements included in this office's letter to you dated May 16, 1989; and 2) it falls short of what Uriah Inc. proposed in its June 19 work plan. In order to draw valid conclusions about the source and magnitude of the petroleum release at the site, we need the additional pieces of information that were requested in our May 16 letter, in the attachment entitled "Work Plan Requirements for an Initial Subsurface Investigation." These information needs follow:

1. Describe the type of business and associated activities that take place at the site, including the number and capacity of operating tanks.

2. Describe previous businesses at the site.

3. Provide other tank information:

   - number of underground tanks, their uses, and construction material;

   - previous tank testing results and dates, including discussion of inventory reconciliation methods and results, for the last three years.

4. Other spill, leak, and accident history at the site, including any previously removed tanks.

5. Describe the hydrogeologic setting of the site vicinity and draw conclusions about site-specific groundwater hydraulics.

6. Prepare a vicinity map (including wells located on-site or on adjoining lots, as well as any nearby streams.

7. Describe methods for storing and disposing of all contaminated soil.

8. Explain the proposed locations of monitoring wells (including construction diagrams), and prepare a map to scale.

9. Describe the method of monitoring well construction and associated decontamination procedures:

   - expected depth and diameter of monitoring wells;

   - casing type, diameter, screen interval, and pack and slot sizing technique;

   - depth and type of seal;

   - development method and criteria for determining adequate development;

   - plans for disposal of cuttings and development water;

   - surveying plans for wells (requirements include surveying to established benchmark to 0.01 foot).

10. Groundwater sampling plans:

   - water level measurement procedure;

- well purging procedures and disposal protocol;
- sample collection and analysis procedures;
- quality assurance plan;
- chain-of-custody procedures.

At least one monitoring well must be installed within 10 feet of, and directly downgradient from, the excavation pit. Water levels must be recorded monthly, and the groundwater sampled quarterly. Laboratory analysis at a state-certified lab must include total petroleum hydrocarbons (diesel), total oil and grease, and BTE&X. Monitoring well construction must adhere to Regional Water Quality Control Board (RWQCB) specifications.

As mentioned, the work done at the site did not correspond to what was proposed. Uriah Inc. proposed eight soil borings, in locations surrounding the immediate tank excavation. Only six borings were actually drilled, none immediately downgradient of the excavation pit. In addition, all borings were installed further away from the pit than had been proposed. The proposal also stated that soil from the borings would be sampled at 5-foot intervals, down to the water table, beginning at 4 feet below grade. In fact, soil samples were collected at depths of 5 feet, except for LB-1, in which the sample came from about 7 feet. No samples from 9 feet were collected in any of the six borings, even though the water level in all but two of these borings (LB-1 and LB-2) was indicated as being deeper than 9 feet. The report does not explain these sampling inconsistencies. As a result, the soil at the site remains inadequately characterized, and additional soil sampling and analysis are needed.

We are requesting that you remedy each of the deficiencies noted in this letter by preparing a work plan for a supplemental site assessment and submitting it to this office and to the RWQCB (attn: Lester Feldman) within 30 days of the date of this letter, i.e., no later than **December 4, 1989.** <u>All work plans and reports submitted to this office must be signed by a California-Registered Geologist or Certified Engineering Geologist</u>.

The RWQCB is currently unable to manage the large number of fuel leak cases within Alameda County, and has therefore delegated this responsibility to our office. Because we are overseeing this site under the designated authority of the Water Board, this letter constitutes a formal request for technical reports, according to Sec. 13267(b) of the California Water Code. Failure to respond fully or in a timely manner to this request could result in civil

liabilities under the Water Code of up to $1,000 per day. Other violations of California law may also be cited.

If you have any questions about this letter, please contact the undersigned at 271-4320.

Sincerely,

Gilbert M. Wistar

Gil Wistar
Hazardous Materials Specialist

cc: Lester Feldman, RWQCB
Rafat A. Shahid, Asst. Agency Director, Environmental Health
files

ALAMEDA COUNTY
HEALTH CARE SERVICES
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R0858

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Program
80 Swan Way, Rm. 200
Oakland, CA 94621
(415)

Certified mailer #:P 833 981 409

May 16, 1989

Mr. Sam Rohn
Union Carbide - Linde
2420 Camino Ramon
San Ramon, CA 94583

Re: Unauthorized release from underground storage tank, 1171 Ocean Ave., Oakland

Dear Mr. Rohn:

The Alameda County Department of Environmental Health, Hazardous Materials Division, witnessed the removal of an underground diesel tank from the above site on March 22, 1989. Analytical results of a water sample taken during the removal indicate that it contained 800 ppm of total petroleum hydrocarbons, as diesel. This is evidence of tank leakage or diesel overfilling into the pit. Title 23 of the California Code of Regulations requires all such unauthorized releases from underground tanks to be reported. An unauthorized release report has been filed with this office; you must now initiate investigation and/or cleanup activities at this site.

First, a preliminary assessment should be conducted to determine the extent of soil and groundwater contamination that has resulted from the leaking tank. The information gathered by this investigation will be used to assess the need for additional actions at the site. The preliminary assessment should be designed to provide all of the information in the format shown in the attachment at the end of this letter. This format is based on the Regional Water Quality Control Board (RWQCB's) guidelines. You should be prepared to install one monitoring well, if you can verify the direction of groundwater flow in the immediate vicinity of the site, and three wells or piezometers, if you cannot.

Until cleanup is complete, you will need to submit reports to this office and to the RWQCB every three months (or at a more frequent interval, if specified at any time by either agency). These reports should include information pertaining to further investigative results; the methods and costs of cleanup actions implemented to date; and the method and location of disposal of any contaminated material.

Soils contaminated at hazardous waste concentrations should be transported by a licensed hazardous waste hauler and disposed of or treated at a facility approved by the California Department of Health Services. Soils contaminated below the hazardous waste threshold may be managed as nonhazardous, but are still subject to the RWQCB's waste discharge requirements.

Your work plan should be submitted to this office by **June 16, 1989.** A report describing the results of the preliminary site assessment should be submitted by **July 21, 1989.** Copies of the proposal and report should also be sent to the RWQCB (attention: Dyan Whyte). You may implement remedial actions before approval of the work plan, but final concurrence by this office will depend on the extent to which the work done meets the requirements described in this letter.

You will need to submit an additional deposit of $600 to cover costs that the Division of Hazardous Materials incurs during remediation oversight. If you have any questions about this letter or about remediation requirements established by the RWQCB, please contact Gil Wistar, Hazardous Materials Specialist, at 271-4320.

Sincerely,

fjc A. Shd

Rafat A. Shahid, Chief
Hazardous Materials Division

RAS:GW:gw

enclosure

cc: Howard Hatayama, DOHS (w/o enclosure)
Dyan Whyte, San Francisco Bay RWQCB (w/o enclosure)
Gil Jensen, District Attorney, Alameda County Consumer and Environmental Protection Agency (w/o enclosure)
files

WORK PLAN REQUIREMENTS FOR AN INITIAL SUBSURFACE INVESTIGATION

This outline should be followed by professional engineering or geologic consultants in preparing work plans to be submitted to the RWQCB and local agencies. Work plans should be signed by a California-registered engineer or geologist.

This outline should be referred to in context with the "Regional Board Staff Recommendations for Initial Evaluation and Investigation of Underground Tanks" (June 2, 1988).

PROPOSAL FORMAT

I. Introduction

A. State the scope of work

B. Provide information on site location, background, and history

1. Describe the type of business and associated activities that take place at the site, including the number and capacity of operating tanks.

2. Describe previous businesses at the site.

3. Provide other tank information:

- number of underground tanks, their uses, and construction material;

- filing status and copy of unauthorized release form, if not previously submitted;

- previous tank testing results and dates, including discussion of inventory reconciliation methods and results for the last three years.

4. Other spill, leak, and accident history at the site, including any previously removed tanks.

II. Site Description

A. Describe the hydrogeologic setting of the site vicinity

B. Prepare a vicinity map (including wells located on-site or on adjoining lots, as well as any nearby streams

C. Prepare a site map

D. Summarize known soil contamination and results of excavation

1. Provide results in tabular form and indicate location of all soil samples (and water samples, if appropriate). Sample dates, the identity of the sampler, and signed laboratory data sheets need to be included, if not already in possession of the County.

2. Describe any unusual problems encountered.

3. Describe methods for storing and disposing of all contaminated soil.

III. Plan for Determining Extent of Soil Contamination

A. Describe method for determining the extent of contamination within the excavation

B. Describe sampling methods and procedures to be used

1. If a soil gas survey is planned, then:

- identify number of boreholes, locations, sampling depths, etc.;

- identify subcontractors, if any;

- identify analytical methods;

- provide a quality assurance plan for field testing.

2. If soil borings are to be used to determine the extent of soil contamination, then:

- identify number, location (mapped), and depth of the proposed borings;

- describe the soil classification system, soil sampling method, and rationale;

- describe the drilling method for the borings, including decontamination procedures;

- explain how borings will be abandoned.

C. Describe how clean and contaminated soil will be differentiated, and describe how excavated soil will be stored and disposed of. If on-site soil aeration is to be used, then describe:

1. The volume and rate of aeration/turning;

2. The method of containment and cover;

3. Wet-weather contingency plans;

4. Results of consultation with the Bay Area Air Quality Management District.

Other on-site treatments (such as bioremediation) require permits issued by the RWQCB. Off-site storage or treatment also requires RWQCB permits.

D. Describe security measures planned for the excavated hole and contaminated soil

IV. Plan for Characterizing Groundwater Contamination

Construction and placement of wells should adhere to the requirements of the "Regional Board Staff Recommendations for Initial Evaluation and Investigation of Underground Tanks."

A. Explain the proposed locations of monitoring wells (including construction diagrams), and prepare a map to scale

B. Describe the method of monitoring well construction and associated decontamination procedures

1. Expected depth and diameter of monitoring wells.

2. Date of expected drilling.

3. Locations of soil borings and sample collection method.

4. Casing type, diameter, screen interval, and pack and slot sizing technique.

5. Depth and type of seal.

6. Development method and criteria for determining adequate development.

7. Plans for disposal of cuttings and development water.

8. Surveying plans for wells (requirements include surveying to established benchmark to 0.01 foot).

C. Groundwater sampling plans

1. Water level measurement procedure.

2. Well purging procedures and disposal protocol.

3. Sample collection and analysis procedures.

4. Quality assurance plan.

5. Chain-of-custody procedures.

V. Prepare a Site Safety Plan

ALAMEDA COUNTY
HEALTH CARE SERVICES
DAVID J. KEARS AGENCY
[illegible], Agency Director

R0858

470-27th Street, Third Floor
Oakland, California 94612
(415) 874-7237

January 27, 1988

Jim Gindt
BAYOX
1171 Ocean Ave
Oakland, CA 94608

Subject: Underground Storage Tank Unauthorized Release (Leak)/ Contamination Site Report

Dear Mr. Gindt:

On January 27, 1988 our office received a report from Petro Tech indicating that your 5,000 gallon diesel tank failed the precision tank test which was performed on January 20, 1988.

The California Administrative Code, Title 23, requires all unauthorized releases to be reported. Section 2652 (b) requires within 5 working days of detecting the release, the operator or permittee shall submit to the local agency (Alameda County Hazardous Materials Division) a full written report to include all of the following information which is known at the time of filing the report:

(1) List of type and quantity of hazardous substances released.
(2) The results of all investigations completed at that time to determine the extent of soil or ground water or surface water contamination due to the release.
(3) Method of cleanup implemented to date, proposed cleanup actions, and approximate cost of actions taken to date.
(4) Method and location of disposal of the released hazardous substance and any contaminated soils or ground water or surface water (indicate whether a hazardous waste manifest(s) is utilized).

(5) Proposed method of repair or replacement of the primary and secondary containers.
(6) Facility operator's name and telephone number.

Until cleanup is complete, the operator or permittee shall submit reports to the County and the Regional Water Quality Control Board (RWQCB) every 3 months or at a more frequent interval if specified by either agency. The reports shall include the information requested in (2), (3), and (4) of the above. The report requested above shall be prepared in accordance with the San Francisco Regional Water Qualtity Control Board's "Guidelines for Addressing Fuel Leaks", September 1985. The initial investigation report shall be submitted within 30 days and shall include a site safety plan.

Soils contaminated at hazardous waste concentrations shall be transported by a licensed hazardous hauler and disposed of or treated at a California Department of Health Services approved facility. Soils contaminated below hazardous waste concentrations may be managed as non-hazardous but are subject to waste discharge requirements of the Regional Board.

Enclosed is a "Underground Storage Tank Unauthorized Release (Leak)/ Contamination Site Report" which should be completed and returned within 5 working days. Additionally, our files show no record of underground storage tank registration with this office. Please complete the enclosed "Underground Tank Permit Application" and return it within 5 days. Should you have any questions regarding this letter please contact Lizabeth Rose, Hazardous Materials Specialist at (415) 874-7247.

Sincerely,

Rafat Shahid, Chief,
Hazardous Materials Division

RAS:LR:lr

Enclosure(s)

cc: RWQCB
DOHS, TSCD
City of Emeryville Fire Department