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

RO#772

ENVIRONMENTAL HEALTH SERVICES
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
(510) 337-9335 (FAX)

StID 2949

May 6, 1997

Mr. Jim Pitzer
VA Medical Center
4951 Arroyo Road
Livermore, CA 94550

RE: Well Decommission at 4951 Arroyo Road, Livermore, CA

Dear Mr. Pitzer:

This office and the San Francisco RWQCB have reviewed the case closure summary for the above referenced site and concur that no further action related to the underground tank release is required at this time. Before a remedial action completion letter is sent, the onsite monitoring wells (MW-1 through MW-3) should be decommissioned, if they will no longer be monitored. Please notify this office upon completion of well destruction so a closure letter can be issued.

Well destruction permits may be obtained from Alameda County Flood Control and Water Conservation, Zone 7. They can be reached at (510) 484-2600.

If you have any questions, I can be reached at (510) 567-6762.

Sincerely,

eva chu
Hazardous Materials Specialist

vamedc6

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

RAFAT A. SHAHID, Assistant Agency Director

R0772

ALAMEDA COUNTY-ENV. HEALTH DEPT.
ENVIRONMENTAL PROTECTION DIV.
1131 HARBOR BAY PKWY., #250
ALAMEDA CA 94502-6577
(510)567-6700

StID 2949

February 28, 1995

Mr. Jim Pitzer-Operations Foreman
Veterans Administration MC
4951 Arroyo Rd
Livermore, CA 94550

RE: Additional Investigations at VA Medical Center, 4951 Arroyo Rd, Livermore 94550

Dear Mr. Pitzer:

This letter is a request for additional investigations at the onsite fire station, and for the proposed closure of two underground storage tanks adjacent to Building 62.

Please referenced my letter to you dated August 6, 1993 (attached) regarding the need to delineate the extent of soil contamination beneath the fire house. This can be done by advancing a soil boring approximately 10 to 20' inside the fire house, collecting soil samples at 5' intervals to a depth of 20', and analyzing selected soil samples for TPH-D, BTEX, and TOG.

Also, soil borings advanced around the tanks by Building 62 in July thru August 1993, in preparation for closure of the tanks in place must to repeated since the tanks are presently still in use. Angle borings can be advanced so soil samples can be collected from beneath each tank, or, if angle borings are not possible, soil borings may be advanced as near the center of each tank as possible to collect soil samples.

Please submit a workplan and/or an amended workplan for the above required investigations. If you have any questions, I can be reached at (510) 567-6762.

eva chu
Hazardous Materials Specialist

cc: Herman Dobkins, RCI, 5030 Shiloh Rd, Modesto, CA 95358
files

vamedc4

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

RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
State Water Resources Control Board
Division of Clean Water Programs
UST Local Oversight Program
80 Swan Way, Rm 200
Oakland, CA 94621
(510) 271-4530

R0772

StID 2949

August 6, 1993

Mr. Jim Pitzer-Operations Forman
Veterans Administration MC
4951 Arroyo Rd
Livermore, CA 94550

Subject: Site Closure Report for VA Medical Center Fire Station, 4951 Arroyo Road, Livermore 94550

Dear Mr. Pitzer:

This office has completed review of Certified Environmental Consulting's Site Closure Report, date June 1993, for the above referenced site. This report documents work performed to date to assess the soil and groundwater condition which may have been affected by the unauthorized release of petroleum products from two underground storage tanks (USTs) removed from the fire station location. Case closure cannot be recommended at this time for the following reasons:

1. Only one set of groundwater elevation has been submitted. Without water elevation from each quarterly monitoring episode it cannot be determined if groundwater flow direction is relatively consistent or that it fluctuates.

2. If groundwater flows to the northwest, a monitoring well should be located nearer the former excavation pit, within 10 feet and in the verified downgradient direction.

3. The extent of contamination beneath the fire house has not been determined. Portable drill rigs are available, which can be used indoors/in confined areas, to help delineate the extent of soil and groundwater contamination.

Please provide additional groundwater elevation data and a workplan for additional investigaion to further assess soil and groundwater conditions beneath the fire house. If another monitoring well is required, once installed, only water from the downgradient well need to be sampled and analyzed for TPH-D, BTEX, and TOG.

It is our understanding that other USTs at the VA Medical Center complex will be removed shortly. Be sure tank closure plans are submitted for approval prior to the start of excavation.

If you have any questions or comments, I can be reached at (510) 271-4530.

Sincerely,

eva chu
Hazardous Materials Specialist

cc: Scott Parker, CEC, 536 Stone Rd., Suite 1, Benicia 94510
files

vamedc3

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

RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
State Water Resources Control Board
Division of Clean Water Programs
UST Local Oversight Program
80 Swan Way, Rm 200
Oakland, CA 94621
(510) 271-4530

R0772

StID 2949

February 17, 1993

Mr. Jim Pitzer
Livermore VA Medical Center
4951 Arroyo Rd
Livermore, CA 94550

Subject: Site Closure for Livermore VA Medical Center, 4951 Arroyo Rd., Livermore, CA 94550

Dear Mr. Pitzer:

This office has completed review of the fourth quarter ground water monitoring report, dated January 25, 1993, prepared by Certified Environmental Consulting (CEC) for the above referenced site. A cover letter submitted by Mr. Ralph Kania with this report stated that the Livermore VA Medical Center will be submitting a letter of recommendation for case closure.

Attached please find a copy of the RWQCB outline showing the appropriate format and topics for the preparation of a final report summarizing the outcome of the site investigation.

As you are likely aware, site "closure" ultimately requires approval from the RWQCB. You are encouraged to evaluate the data generated to date in this project to identify any data gaps which may prevent this agency and the RWQCB from concurring with your bid for site closure. The final characterization and disposition of the stockpiled soil has not been adequately documented.

Please contact me if you have any questions.

Sincerely,

Eva Chu
Hazardous Materials Specialist

enclosure

cc: Sumadhu Arigala, RWQCB
Gil Jensen, Alameda County District Attorney's Office
Scott Parker, CEC, 140 W. Industrial Wy., Benicia 94510
Danielle Stefani, Livermore Fire Department
Edgar Howell/files

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

R0772

StID 2949

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

June 29, 1992

Marcelina Bell
VA Medical Center
4951 Arroyo Road
Livermore, CA 94550

Subject: Quarterly reports for the VA Medical Center 4951 Arroyo Road, Livermore 94550

Dear Ms. Bell:

This office has reviewed the file for the above referenced site with the following comments and requests:

1. When two abandoned underground storage tanks (USTs) were removed in November 1990, an unauthorized release of petroleum products was confirmed. Soil over-excavation removed much of the contaminated soil, leaving behind up to 6,500 parts per million (ppm) of total petroleum hydrocarbons as diesel (TPH-d) and 13,000 ppm total oil and grease (TOG) in the north wall beneath the fire station. Three monitoring wells were installed in January 1991. Quarterly groundwater monitoring and sampling began in November 1991. Samples have not been analyzed for TOG, though elevated levels of oil and grease were found in soil. Future sampling should include an analysis for TOG as well as TPH-d and BTEX.

2. Quarterly reports must describe the status of the investigation. Include details and results of all work performed, along with field observations and data, sampling protocol, water level data, chain of custody forms, laboratory results of all samples collected and analyzed, etc. Conclude reports with recommendations or plans for additional investigative work or remediation. All reports must be submitted under seal of a California Registered Geologist, Engineering Geologist of Civil Engineer.

3. It is unclear what has become of the 4,000+ cubic yards of excavated soil. Provide an update of the bioremediation process and sampling results which have been completed to date.

4. In a letter to Mr. Marvin O'Rear, from Mr. Gil Wistar of this office, dated November 21, 1990, Mr. Wistar requested the submittal of a work plan for an initial subsurface investigation of hydrocarbon contamination discovered in soil borings around the existing USTs at the VA Medical Center. The work plan was to specifically address elevated hydrocarbons found in soil adjacent to two 750-gallon gasoline tanks. The submitted work plan was approved in April 5, 1991. To our knowledge, the VA Medical Center has not proceeded with this investigation. In a recent conversation you share with Ms. Eva Chu of this office, you indicated that plans to remove and replace all existing USTs are being developed, and that the approved site investigation work plan would be implemented shortly thereafter. We understand that you will be installing above-ground tanks to replace the removed USTs.

   Prior to the removal of the USTs, this office will need to approve an Underground Tank Closure/ Modification Plan, a copy of which is enclosed with this letter. Submit this and the Above-Ground Tank Installation Plan, also included, for our review **within 45 days** of the date of this letter. Also include a time schedule for each phase of work at this site: tank removal, installation, and site contamination assessment.

Quarterly reports documenting all work performed should be sent to this office within 45 days upon completion of field activities. Copies of all reports and proposals must also be sent to Mr. Eddy So of the RWQCB.

Please be advised that this is a formal request for technical reports pursuant to California Water Code Section 13267(b). Any extensions of the stated deadlines, or modifications of the required tasks, must be confirmed in writing by either this agency or the RWQCB.

If you have any questions regarding the contents of this letter or the status of your case, please contact Ms. Eva Chu at (510)271-4530.

Sincerely,

for Scott O. Seery, CHMM
Senior Hazardous Materials Specialist

enclosures

cc: Eddy So, RWQCB
Gil Jensen, Alameda County District Attorney's Office
Scott Parker, CEC, 140 W. Industial Way, Benicia, CA 94510
Danielle Stefani, Livermore Fire Department
files

VAMedC

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

RAFAT A. SHAHID, Assistant Agency Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Division
80 Swan Way, Rm. 200
Oakland, CA 94621
(510) 271-4320

R0772

June 5, 1992

D.V.A. Medical Center
Engineering Dept.
Attn: Jim Petzer
4951 Arroyo Road
Livermore, CA 94550

Re: FIVE-YEAR PERMITS FOR OPERATION OF THREE UNDERGROUND STORAGE TANKS (UST'S) AT 4951 ARROYO ROAD, LIVERMORE.

According to our records the above mentioned facility has not received a five-year permit to operate UST's. Please complete the following items marked below and return them to me within 30 days. The example plans enclosed, should be used only as guidelines and may not meet your requirements under Title 23.

-- 1. Complete UST PERMIT FORM A-one per facility. (enclosed)
-- 2. Complete UST PERMIT FORM B-one per tank. (enclosed)
-- 3. Complete UST PERMIT FORM C-one per tank if information is available. (enclosed)
-- 4. A written tank monitoring plan. (enclosed)
-- 5. Results of precision tank test(s) (initial and annual).
-- 6. Results of precision pipeline leak detector tests (initial and annual).
-- 7. An accurate and complete plot plan. (enclosed)
-- 8. A written spill response plan. (enclosed)

Title 23 of the California Code of Regulation prohibits the operation of ANY UST without a permit. Please feel free to contact Amir K. Gholami at (510) 271-4320, if you have any questions which may arise in completing the mandatory five-year permit process.

Sincerely,

R. Arulanantham

Ravi Arulanantham
Senior Hazardous Materials Specialist

cc: Gil Jensen, Alameda County District Attorney
Rafat Shahid, Assistant Agency Director, Alameda County Department of Environmental Health

(5YR)

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

RAFAT A. SHAHID, Assistant Agency Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Division
80 Swan Way, Rm. 200
Oakland, CA 94621
(510) 271-4320

R0772

April 6, 1992

D.V.A. Medical Center
Engineering Department
Attn: Jim Petzer
4951 Arroyo Road
Livermore, CA 94550

Re: FIVE-YEAR PERMITS FOR OPERATION OF ELEVEN UNDERGROUND STORAGE TANKS (UST'S) AT 4951 ARROYO ROAD LIVERMORE.

According to our records the above mentioned facility has not received a five-year permit to operate UST's. Please complete the following items marked below and return them to me within 30 days. The example plans enclosed, should be used only as guidelines and may not meet your requirements under Title 23.

✓ 1. An accurate and complete plot plan.
- 2. A written spill response plan. (enclosed)
- 3. A written tank monitoring plan. (enclosed)
- 4. Results of precision tank test(s) (initial and annual).
- 5. Results of precision pipeline leak detector tests (initial and annual).
✓
- 6. Complete UST PERMIT FORM A-one per facility. (enclosed)
- 7. Complete UST PERMIT FORM B-one per tank. (enclosed)
- 8. Complete UST PERMIT FORM C-one per tank if information is available. (enclosed)

Title 23 of the California Code of Regulation prohibits the operation of ANY UST without a permit. Please feel free to contact Jeff Shapiro at (510) 271-4320, if you have any questions which may arise in completing the mandatory five-year permit process.

Sincerely,

R. Arulanantham

Ravi Arulanantham
Senior Hazardous Materials Specialist

c: Gil Jensen, Alameda County District Attorney,
Rafat Shahid, Assistant Agency Director, Alameda County Department of Environmental Health
Danielle Stefani, Hazardous Materials Specialist, City of Livermore Fire Department

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

R0772

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

March 27, 1991

Ms. Marcelina Bell
U.S. Veterans Administration Medical Center
4951 Arroyo Rd.
Livermore, CA 94550

Re: **599/90C V599C-473/599C04011, groundwater assessment and soil treatment at USVA Medical Center, Livermore**

Dear Ms. Bell:

Thank you for submitting the Augeas Corp. Source Removal Report dated February 14, 1991. This office has completed its review of the report, and concur with the approach presented for soil treatment. However, in order for the USVA to reuse the excavated soil on-site following remediation, oil & grease and TPH-diesel levels in this soil must be reduced to 50 ppm and 10 ppm, respectively, or to the analytical method detection limit in each case, whichever is lower.

It is acceptable for the USVA to leave the small amount of contaminated soil beneath the fire station in place, as long as there is a monitoring well directly downgradient of this area to detect any groundwater degradation that might result from this soil. According to the Augeas report, MW-1 would appear to meet this requirement. However, should the direction of groundwater flow in this area change significantly, one or more additional monitoring wells may have to be installed.

Please be sure that this office and the Regional Water Quality Control Board in Oakland are apprised in a timely manner of work performed at the site or work intended to be performed. 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: Kent Murray, Augeas Corp. (2252 Fort Point Dr., Gold River, CA 95670)
Howard Hatayama, DOHS
Lester Feldman, San Francisco Bay RWQCB
Rafat Shahid, Asst. Agency Director, Environmental Health
files

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

R0772

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

December 20, 1990

Mr. Marvin O'Rear
Medical Center Director
USVA Medical Center
4951 Arroyo Rd.
Livermore, CA 94550

Re: **Necessity for carrying out specific work tasks at the USVA Medical Center, Livermore**

Dear Mr. O'Rear:

During and following the removal of two underground tanks at the above facility, analytical results of soil samples indicated hydrocarbon levels well above regulatory thresholds of 100 ppm. These thresholds establish contaminant levels above which the San Francisco Bay Regional Water Quality Control Board (RWQCB) requires further site work. Therefore, the VA Hospital must now initiate further investigation and cleanup actions as outlined below.

This office will be the lead agency overseeing environmental investigation and cleanup activities at the site. The RWQCB is currently unable to manage the large number of leak cases within Alameda County, and has therefore delegated this authority to our office. However, the VA Hospital must keep the Water Board apprised of all actions taken to characterize and remediate contamination at this site, because the Board retains the ultimate responsibility for ensuring protection of waters of the state.

As mentioned above, additional work must be conducted to determine the extent of soil and groundwater contamination that has resulted from the leaking tank systems. The information gathered by this characterization will be used to assess the need for additional actions at the site. The conceptual work plan submitted by Augeas Corp. for soil removal and treatment (more detail on soil treatment should be provided to this office) satisfies the need for additional characterization/remediation. In addition, groundwater beneath the site needs to be characterized and monitored on an ongoing basis, to see what effects, if any, the contaminated soil has had on it.

Until cleanup is complete, please 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 must 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.

Please note that the deposit of $558 submitted to this office with the underground tank closure application has nearly been exhausted, and that an additional deposit of $375 is necessary for the county to continue oversight of remediation. Please remit a draft in this amount to our office as soon as possible. Hazardous materials specialists charge at a rate of $60/hour for work on all projects such as yours.

Because we are overseeing this site under the designated authority of the Water Board, this letter constitutes a formal request for technical reports, per Sec. 13267(b) of the California Water Code. Failure to respond in a timely manner 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 or about remediation requirements established by the RWQCB, please contact the undersigned at 271-4320.

Sincerely,

Gilbert M. Wistar

Gil Wistar
Hazardous Materials Specialist

cc: Kent Murray, Augeas Corp. (2252 Fort Point Dr., Gold River, CA 95670)
Howard Hatayama, DOHS
Lester Feldman, San Francisco Bay RWQCB
Gil Jensen, District Attorney, Alameda County Consumer and Environmental Protection Division
Rafat Shahid, Asst. Agency Director, Environmental Health
files

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

R0772

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

November 21, 1990

Mr. Marvin O'Rear
Medical Center Director
USVA Medical Center
4951 Arroyo Rd.
Livermore, CA 94550

Re: **Hydrocarbons discovered in soil borings around underground tanks at the USVA Medical Center, Livermore**

Dear Mr. O'Rear:

This is in response to your letter dated November 5, 1990, in which you express concern over the high levels of hydrocarbons in soil immediately south of two 750-gallon gasoline tanks. Regardless of how this contamination, which is most likely aged gasoline, got into the ground, the important point is that it is there and must be addressed. By all means, the USVA Medical Center should install additional borings around these tanks, and also plan to remediate any contaminated soil that could threaten groundwater. Moreover, due to the possibility that groundwater has already been affected, we may require that the Medical Center install one or more downgradient monitoring wells. This will depend on the results of further site investigation, and the extent to which we, in consultation with the Regional Water Quality Control Board (RWQCB) in Oakland, feel that groundwater is threatened.

Regarding the tank tightness tests that have been performed at the USVA facility, even though these are required under state law and generally provide good information about the condition of tanks and their associated piping, they are not absolute indicators. This is because the precision of these tests (taking into account the margins of error) does not permit iron-clad conclusions to be drawn about whether a tank system is actually leaking; a test can only determine whether a tank appears to be gaining or losing volume at a certain rate, with a 95% degree of confidence. Thus, state law requires not only annual precision testing, but daily inventory reconciliation and automatic pipeline shutdown devices, as an ongoing fuel tank monitoring "package."

This leads into my next point, which is that every underground tank at the Veterans Administration Medical Center appears to be surrounded with contaminated soil, and it is not appropriate to dismiss these recent sample results as insignificant just because all the tanks tested out as "tight." Again, the primary consideration is what is there, and it is only of secondary importance how it got there. Typically, even when underground tanks are in fact in sound condition, overfilling, careless handling, and other factors can create subsurface contamination.

According to RWQCB guidelines, whenever any hydrocarbons are found in relatively permeable soil around or beneath a tank, an assessment of soil and groundwater is required in that area. Enclosed is an outline of what such an assessment should include. Because all of the Medical Center's underground tanks have contamination around them, and groundwater is relatively shallow, we are requiring a full-fledged assessment of the entire tank family, along the lines of the enclosed outline. Until the project is complete, please 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 must 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.

Based on the above discussion and the attached guidelines, please prepare a work plan for the contamination assessment. This work plan must be submitted to this office no later than **January 25, 1991.** Copies of the proposal should also be sent to the RWQCB (attention: Lester Feldman). Please also submit a deposit of $500 to this office to cover our hourly costs of oversight for this project.

Because we are overseeing this site under the designated authority of the Water Board, this letter constitutes a formal request for technical reports, per Sec. 13267(b) of the California Water Code. Failure to respond in a timely manner 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 or about remediation requirements established by the RWQCB, please contact me at 271-4320.

Sincerely,

Gilbert M. Wistar

Gil Wistar
Hazardous Materials Specialist

enclosure

cc: Howard Hatayama, DOHS
Lester Feldman, San Francisco Bay RWQCB
Rafat Shahid, Asst. Agency Director, Environmental Health
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 must 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 show 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
AGENCY
DAVID J. KEARS, Agency Director

R0772

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

Certified Mailer # P 062 128 199

June 22, 1990

Mr. Marvin E. O'Rear
Medical Center Director
Veterans Administration Medical Center
4951 Arroyo Rd.
Livermore, CA 94550

NOTICE OF VIOLATION

Dear Mr. O'Rear:

On May 9, 1990, the Alameda County Department of Environmental Health, Hazardous Materials Division inspected the Veterans Hospital in Livermore. The purpose of this inspection was to check the facility's compliance with California law in the areas of: 1) hazardous material and waste storage, handling, and disposal; 2) underground tank monitoring and record-keeping; and 3) emergency response plans and procedures, including amounts and locations of hazardous materials stored on the facility. Results of this inspection indicated that the hospital is deficient in all three areas. You have stated in a letter to this office (599/00) that VAMC Livermore will not comply with state law regarding emergency response plans and procedures (as outlined in Chapter 6.95 of the California Health and Safety Code). As long as this remains official policy, then, the Medical Center will continue to be out of compliance with state law in this area.

During the course of its inspection, the Division noted the presence of 11 underground tanks, of which six are apparently used for fuel oil (diesel) storage, two contain gasoline for fueling vehicles, and two have been out of use for approximately 20 years. Information obtained during the inspection (verified by a search of our files) indicate that none of the tanks has been monitored or precision leak-tested according to state law.

In the first place, the presence of the two abandoned tanks puts VAMC Livermore in violation of Secs. 25292 and 25298 of the California Health and Safety Code (H&SC). These sections of code state that underground tanks must either be properly monitored, or undergo proper closure (i.e., removal) as soon as they go out of operation. Abandonment is specifically forbidden. Sec. 25299(a)

of the H&SC authorizes civil penalties of up to $5,000 per day to be assessed as long as violations of these provisions continue.

Therefore, we are requiring that VAMC Livermore close the two abandoned tanks under procedures established by this office. Tank closure includes the permanent removal of the tanks and cleanup of any soil or groundwater contamination that may have resulted from the tank systems. For these two tanks, please submit a completed closure plan to this office by **August 6, 1990**, the date agreed to and indicated on our May 7 inspection report.

Enclosed are forms and information regarding the closure of underground tanks in Alameda County. VAMC Livermore will need to hire a contractor and have the closure form filled out and sent in triplicate, along with a deposit of $558, to this office by the above due date.

In addition, the nine remaining underground tanks are out of compliance with Sec. 25292 H&SC, because they are not outfitted with suitable monitoring systems to detect unauthorized releases of diesel or gasoline. The Medical Center must implement an ongoing monitoring program that meets at least the provisions of this section of the H&SC and Title 23 of the California Code of Regulations (CCR).

With respect to Title 22, CCR, VAMC Livermore was found to be in violation of the following provisions.

1. Sec. 66508 - Waste oil and formaldehyde have been stored for over 90 days, and no beginning accumulation date was identified on their storage vessels. These containers were also not labeled properly. If VAMC Livermore generates more than 9 gallons of any hazardous waste on a monthly basis, that waste must be disposed of properly every 90 days.

2. Sec. 66492 - The facility could not produce sets of receipts that date back three years for disposal of waste oil, formaldehyde, or any other hazardous waste.

In accordance with Sec. 66328, VAMC Livermore must submit a Plan of Correction to this office within 30 days, or by **July 23, 1990.** This plan is to specify the actions VAMC Livermore will take to address each of the above violations, and their expected dates of completion. As indicated above, a completed tank closure plan is due to this office by August 6, 1990.

If you have any questions about this letter or about underground tank regulations enforced by this office, please contact the undersigned at 271-4320.

Sincerely,

Gilbert M. Wistar

Gil Wistar
Hazardous Materials Specialist

enc.

cc (letter only):
Howard Hatayama, DOHS
Gil Jensen, Alameda County District Attorney, Consumer and Environmental Protection Division
Rafat A. Shahid, Asst. Agency Director, Environmental Health
files