

ALAMEDA COUNTY  
HEALTH CARE SERVICES



AGENCY

DAVID J. KEARS, Agency Director

RO#449

April 25, 1997

Richard Sykes  
EBMUD  
P.O. Box 24055  
Oakland, CA 94623-1055

ENVIRONMENTAL HEALTH SERVICES

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

Re: Addendum 2 to the Materials Management Plan for Phase II and Phase III of the EBMUD Adeline Maintenance Facility construction sites.

Dear Mr. Sykes,

This office has reviewed over GeoPlexus, Inc.'s (Geoplexus) Subsurface Investigation Report and Response to Agency Comments on Addendum No. 2 to Materials Management Plan, dated January 22, 1997, for the above site. The responses to the County's comments in this report are acceptable.

Per the report, soil excavation will be conducted in the areas of the former petroleum underground storage tanks (sample locations 114, 133, 134, 135, 136, and 138), the area around the former auto shop (samples EB-3-3, B-12, B-13), and the area around the waste oil underground storage tank (sample B-9 and B-10), where sample concentrations exceeded the agreed upon cleanup threshold values. Please be reminded that confirmatory soil samples will need to be collected subsequent to the excavation in order to assure that the bulk of concentrations exceeding these threshold values have been removed. Also, please be reminded that the waste oil underground storage tank will be removed in Phase III under permit from this office and the Oakland Fire Department.

Excavated soils will need to be properly aerated through permit or disposed of off site to a certified facility. Although Geoplexus states that the 16ppm benzene identified in soil adjacent to the former underground storage tanks is limited, additional off-site delineation work of this contaminated soil will be required during the planned groundwater monitoring well installations, scheduled to take place after the implementation of Phase II and Phase III construction activities.

Lead and chromium concentrations identified from Borings B-12 and B-13 exceeded ten times the Title 22 CCR STLC values. If metal concentrations exceeding ten times the STLCs are identified after the proposed excavation, leachability tests using Method 1312 will need to be conducted, per the County's October 10, 1996 letter.

Please submit the anticipated schedule of work for the excavation and sampling activities, waste oil tank removal, soil disposal, and groundwater well installations. If you have any questions or comments, please contact me at (510) 567-6763.

Sincerely,

Juliet Shin  
Senior Hazardous Materials Specialist

cc: Eileen M. Fanelli, EBMUD, P.O. Box 24055, Oakland, CA 94623-1055  
David Glick, Geoplexus, Inc., 1900 Wyatt Drive, Suite 1, Santa Clara, CA 95054  
Chief

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



2130 Adeline St.  
RO #449

November 19, 1996

Richard Sykes  
EBMUD  
P.O. Box 24055  
Oakland, CA 94623-1055

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

Re: Risk Assessment for EBMUD Adeline Maintenance Facility, Phase 2 and Phase 3  
Construction sites

Dear Mr. Sykes,

This office has reviewed the September 12, 1996 Materials Management Plan for the above site which includes a human health risk assessment for soils. The following are some comments in response to our review, which Madhulla Logan of our office has already relayed to your consultant David Glick, Geoplexus, Inc., over the phone:

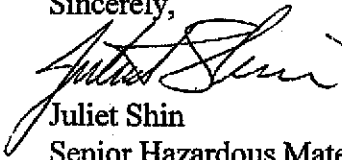
- o On Page 5, the report states that the values from the more conservative pathway, which it states is the "leaching to groundwater" pathway, was used to evaluate the cleanup values. However, looking at the Tier 1 table of ASTM RBCA, the "indoor air" pathway is more conservative than the "leaching to groundwater" pathway. This more conservative pathway should be used in assessing any human health threats from beneath the building footprint areas. The areas outside of the building areas may be based on the "leaching to groundwater" pathway.
- o The risk assessment only addresses soil contamination. Groundwater contaminant characterization has not yet been conducted at the site. Per my conversations with Eileen Fanelli, EBMUD, groundwater investigations will be initiated after the building construction is completed. As part of the groundwater investigations, an assessment of any potential human health risks from any groundwater contamination will be required. Perched water should also be assessed. If a potential human health threat is identified (e.g., vaporization into indoor air), EBMUD will be required to take corrective action measures.

Lastly, per my conversation with David Glick on November 19, 1996, a report addressing the recently conducted work at the site, as well as the County's October 10, 1996 letter and the above comments, will be submitted to this office within the next couple of weeks.

Mr. Richard Sykes  
Re: Adeline Maintenance Center  
November 19, 1996  
Page 2 of 2

If you have any questions or comments, please contact me at (510) 567-6763.

Sincerely,



Juliet Shin  
Senior Hazardous Materials Specialist

cc: Eileen Fanelli  
EBMUD  
P.O. Box 24055  
Oakland, CA 94623-1055

David Glick  
GeoPlexus, Inc.  
1900 Wyatt Drive, Ste 1  
Santa Clara, CA 95054

Acting Chief

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



✓ 2130 ADELINE ST  
RO# 449

October 10, 1996

Richard Sykes  
EBMUD  
P.O. Box 24055  
Oakland, CA 94623-1055

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

Re: Addendum No. 2 to the Materials Management Plan for the Adeline Maintenance Center,  
Oakland, California

Dear Mr. Sykes,

This office has reviewed a portion of Geoplexus, Inc.'s Addendum No. 2 to the Materials Management Plan for the Adeline Maintenance Center, dated September 12, 1996. Per my conversation with Eileen Fanelli today, the following is a list of comments on the workplan, excluding the risk assessment portion presented in Appendix 2A. Madhulla Logan in our office will begin review of the risk assessment within the next week.

- o On Page 2 of the Addendum, it states that "Based on the established threshold criteria, the remaining soil contamination beneath West Grand Avenue does not require excavation." However, according to our files, the benzene concentration in Sample MK143, located along Grand Avenue, identified 16 parts per million (ppm) benzene at 7-feet below ground surface (bgs). Therefore, this office is requesting that the Addendum address these concentrations through a risk assessment or some sort of investigation or corrective action proposal.
- o Per Figure 6 of the Addendum, two borings were proposed roughly in the area of former Boring 2-7 beneath the proposed building footprints. However, at least one additional boring should be placed in closer proximity to Boring 2-7 to better delineate the elevated contaminant levels previously identified in this boring. Contaminants identified in Boring 2-7 included elevated levels of Total Petroleum Hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, xylenes (BTEX), TPH as diesel (TPHd), Oil & Grease, and halogenated volatile compounds. If the waste oil underground storage tank (UST) is located in the immediate vicinity, sampling associated with the removal of this UST may also assist in delineating the observed contamination.

The location of the waste oil UST is unclear. Please submit a figure with the exact location of this UST.

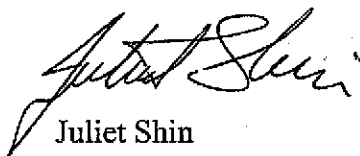
Mr. Richard Sykes  
Re: AMC  
October 10, 1996  
Page 2 of 3

- o Please be reminded that the removal of the waste oil UST should include permitting through this office and the City of Oakland Fire Department. Analysis of soil samples collected from this UST removal should include TPHg, TPHd, BTEX, Oil & Grease, halogenated volatiles (VOCs), polynuclear aromatic hydrocarbons (PNAs), and metals.
- o Page 5 of the Addendum mentions that the threshold criterias used for metals would be the TTLCs listed in Title 22 California Code of Regulations. However, it is unclear when soil samples collected from the Phase II and Phase III areas would be analyzed for metals. Additionally, if EBMUD is planning to use TTLCs as the threshold criteria, it should also be using some sort of leachability criteria as well. Typically, this office requests that a "WET" test be conducted when metal concentrations are identified at 10 times the STLC in soil. However, if in-situ metal concentrations are identified at the site at 10 times the STLC, this office will allow the application of Method 1312, which simulates acid rain with the use of sulfuric and nitric acid. This method is much more realistic and applicable for this site situation. However, it is the understanding of this office that off-hauled excavated soils from the site will be analyzed for STLC per the landfill disposal requirements.
- o Page 9 of the Addendum does not list the PNAs and VOCs analyses. Per my conversation with David Glick, Geoplexus, on October 9, 1996, these analyses only refers to the area with the former 4,000-gallon and 6,000-gallon underground storage tanks (Phase II) and not to the waste oil UST area.
- o The threshold criteria listed for ethylbenzene in Table 1, Page 4, does not match our copy of the Tier 1 Look-up Table values listed in the American Society for Testing and Materials' Risk-Based Corrective Action guidelines (ASTM RBCA, Version E-1739-95). Please clarify.
- o Groundwater investigations associated with the observed soil contamination was not mentioned in the schedule provided in the Addendum. This office is requesting that groundwater investigations begin immediately after the completion of the Phase II and Phase III work. A Tier II ASTM RBCA analysis may also be needed.

Mr. Richard Sykes  
Re: AMC  
October 10, 1996  
Page 3 of 3

Please submit a response to the above concerns for our review. If you have any questions or comments, please contact me at (510) 567-6763.

Sincerely,



Juliet Shin  
Senior Hazardous Materials Specialist

cc: Eileen Fanelli  
EBMUD  
P.O. Box 24055  
Oakland, CA 94623-1055

David Glick  
GeoPlexus, Inc.  
1900 Wyatt Drive, Ste 1  
Santa Clara, CA 95054

Acting Chief

ALAMEDA COUNTY  
HEALTH CARE SERVICES  
AGENCY



DAVID J. KEARS, Agency Director

March 31, 1993  
STID 3726

Joseph Damas  
EBMUD  
PO Box 24055  
Oakland CA 94623-1055

RE: EBMUD site  
2130 Adeline St.  
Oakland CA 94607

R0449  
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

Dear Mr. Damas,

As you may recall, three underground storage tanks (USTs) were removed from the above-referenced site in June 1987. The USTs included a 20-gallon diesel tank, a 500-gallon tank, and a 10,000-gallon tank. (Our records do not indicate what the contents of latter two tanks were.) A) Please indicate what the 20-gallon diesel tank was used for.

Soil sampling conducted in conjunction with tank removal indicated the presence of up to 460 ppm Total Volatile Hydrocarbons (TVH) and 15 ppm benzene. It appears that these levels were associated with the 20-gallon "diesel" tank. In addition, up to 170 ppm TVH and 3.6 ppm benzene was found during another tank removal. It is unclear which tank these levels were associated with. B) Please submit one map showing the locations of all three USTs and the sampling locations.

A proposal for an investigation to determine the possible impacts to groundwater was requested by this office by letters dated 2/18/88 and 8/2/88. Walter Bishop of your agency responded by letter dated 8/24/88, indicating that contractor's bids were being obtained for the installation of a groundwater monitoring well.

Please respond within 45 days or by May 15, 1993 as to the status of the subsurface investigation, including the above-mentioned items A) and B), at this site/these sites. Were groundwater monitoring wells ever installed? Have they been monitored? If not, please submit a proposal for a groundwater investigation within 60 days or by May 31, 1993.

All work should adhere to a) the Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites, dated 8/10/90; b) the State Water Resources Control Board LUFT Field Manual; and c) Article 11 of Title 23, California Code of Regulations. Reports and proposals must be submitted under seal of a California-Registered Geologist, -Certified Engineering Geologist, or -Registered Civil

Joseph Damas  
STID 3726  
March 31, 1993  
page 2 of 2

Engineer. All reports and documents pertaining to this investigation should also be sent to:

Rich Hiett  
San Francisco Bay Region  
Regional Water Quality Control Board  
2101 Webster St., Ste 500  
Oakland CA 94612

If you have any questions, please contact me at 510-271-4530.

Sincerely,



Jennifer Eberle  
Hazardous Materials Specialist

cc: Rich Hiett, RWQCB  
Ed Howell/file

je



ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



R0449

RAFAT A. SHAHID, Assistant Agency Director

January 25, 1993

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

E.B.M.U.D.  
2130 Adeline St.,  
Oakland, CA 94608

Re: **FIVE-YEAR PERMITS FOR OPERATION OF ONE  
UNDERGROUND STORAGE TANK (UST) AT  
2130 Adeline, Oakland, CA 94608**

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 Brian P. Oliva at 510/271-4320 if you have any questions which may arise in completing the mandatory five year permit process.

Sincerely,

Brian P. Oliva, REHS, REA  
Hazardous Materials Specialist

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

ALAMEDA COUNTY  
HEALTH CARE SERVICESAGENCY  
DAVID J. KEARS, Agency Director

R0449

February 11, 1991

DEPARTMENT OF ENVIRONMENTAL HEALTH  
Hazardous Materials Program  
80 Swan Way, Rm. 200  
Oakland, CA 94621  
(415)Ann Hayden  
City Attorney  
City of Emeryville  
Dept. of Public Works  
2200 Powell Street, 12th Floor  
Emeryville, California 94608**RE: Contamination at EBMUD - Adeline St. Interceptor Project**

Dear Ms. Hayden:

The Alameda County Department of Environmental Health, Hazardous Materials Division has received your letter regarding the EBMUD - Adeline Street Interceptor Project. As you know, contaminated soil had been uncovered during the construction. Total volatile hydrocarbon contamination as high as 20,000 parts per million in soil samples and 800 parts per billion in groundwater samples were detected. These volatile hydrocarbons maybe of a gasoline or mineral spirits constituents. Benzene, toluene, ethyl benzene and xylene in both soil and groundwater samples were less than the detectable limits.

Your statement that test results were below the county standards to be considered as a dangerous contaminated soil is incorrect. The County does not have a standard for hazardous waste concentrations. However, the Department of Health Services (DHS), by executive memorandum, determined that Total Petroleum Hydrocarbon (TPH) concentration of 1,000 parts per million in soil constituted a hazardous waste. The Regional Water Quality Control Board (SFRWQCB) as the agency responsible for ensuring the integrity of surface and subsurface water resources in this region, has concurred with the DHS waste classification of soils. As such, any contaminated soil at hazardous waste concentration must be excavated and transported by a licensed hazardous waste hauler to a disposal and treatment facility approved by the Department of Health Services. Copies of manifest for disposal must be sent to this office.

The preliminary levels of contamination found at the site exceeded RWQCB's guidelines. An environmental assessment is required to determine the extent of soil and /or groundwater contamination. The vertical and lateral extent of contamination must be identified and impact to groundwater must be investigated. An investigation - remediation workplan must be submitted to this office. Copies of the proposals and reports should also be sent to the RWQCB ( attention: Lester Feldman ).

Ann Hayden, City Attorney  
Page 2 of 2

It is the understanding of this office that the site in question belongs to the City of Emeryville. With this in mind, it appears the responsibility for further site investigation and subsequent clean up remains with Emeryville.

A misunderstanding seems to have developed concerning several of the points discussed between representatives of EBMUD, Emeryville and this office during a site visit on February 4, 1991. Contrary to your interpretation of this conversation, as communicated in the your letter, the county did not give EBMUD permission to proceed with their project with any form of release from responsibility or implied variance from any accepted evaluation or clean up standards or any form of implied cost sharing for any aspect of this environmental investigation. The discussion did, though, make clear this office's desire for written concurrence from both EBMUD and the City of Emeryville, that neither party would hinder or in any way interfere with any future attempt by any party who voluntarily chose to properly address and remediate this problem.

It must be clear and without question that you understand this office's position on the issues of "cost benefit" and cost sharing as they relate to this project. The Alameda County Environmental Health Department, Hazardous Materials Division will not at any point accept any portion of the financial burden for the costs incurred for evaluating and then abating this environmental contamination. It remains the opinion of this office that the degree of contamination discovered merit clean up and the benefit of this clean up out weighs the anticipated cost. As the representatives present at the February 4 meeting were informed, the sharing of expenses should be handled without county participation. Also, as discussed, the county considers the request to indemnify the City of Emeryville for costs associated with the anticipated environmental work a moot point since it remains an issue outside of our area of concern.

Should you have any questions regarding this letter, please contact me at (415) 271-4320.

Sincerely,

*Susan L. Hugo*  
Susan L. Hugo

Hazardous Materials Specialist

cc: Rafat A. Shahid, Asst. Agency Director, Environmental Health  
Edgar Howell, Chief, Hazardous Materials Division  
Gil Jensen, Alameda County District Attorney's Office  
Lester Feldman, Regional Water Quality Control Board  
Howard Hatayama, State Department of Health Services  
Ernest Avila, EBMUD  
Juan Arreguin, City of Emeryville