

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



R0618

RAFAT A. SHAHID, Assistant Agency Director

October 18, 1994

Mr. Peter Wang
Encinal Terminals
1521 Buena Vista Ave.
Alameda, CA 94501

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

STID 3522

Re: Work plan for Soil and Ground water Characterization at
Tank Locations "A" and "B", located at 1521 Buena Vista
Ave., Alameda

Dear Mr. Wang,

This office has reviewed Geomatrix' work plan, dated September 19, 1994, for further soil and ground water investigations at tank locations "A" and "B". It is the understanding of this office that the proposed piezometers are equivalent to permanent monitoring wells, that can be monitored on a quarterly basis per the Regional Water Quality Control Board's guidelines. If not, permanent monitoring wells should be installed, and monitored for a minimum of four quarters. Additionally, please be reminded to screen the monitoring wells adequately above and below the shallowest and deepest historical water tables.

With the above conditions, the work plan is acceptable to this office. Field work should commence within 60 days of the date of this letter. A report documenting the proposed work shall be submitted to this office within 45 days after completing field activities.

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

Sincerely,

A handwritten signature in cursive script, appearing to read "Juliet Shin".

Juliet Shin
Senior Hazardous Materials Specialist

cc: Cheri Y. Page, R.G.
Geomatrix Consultants, Inc.
100 Pine St., 10th Floor
San Francisco, CA 94111

Edgar Howell

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY

DAVID J. KEARS, Agency Director



R0618

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

July 7, 1994

Mr. Peter Wang
Encinal Terminals
1521 Buena Vista Ave.
Alameda, CA 94501

STID 3522

Re: Work plan for Encinal Terminals, located at 1521 Buena Vista Avenue, Alameda, California

Dear Mr. Wang,

This office has reviewed GeoMatrix's work plan, dated June 22, 1994, for the above site. This office is requesting that you submit an addendum to this work plan, **within 60 days** of the date of this letter, addressing soil and ground water investigations related to the two recently removed diesel underground storage tanks, as outlined in the County's May 9, 1994 letter to Encinal Terminals. Soil samples collected from these diesel tanks identified up to 380 parts per million (ppm) Total Petroleum Hydrocarbons as diesel (TPHd). Additionally, according to Fugro West's Phase I Assessment Report, soil samples collected from borings placed around these former tanks identified up to 1,700 ppm TPHd and traces of TPH as gasoline, toluene, ethylbenzene, xylenes, and elevated levels of lead.

The addendum shall address the delineation of the extent and severity of soil contamination at these diesel tank sites, and a "wet" test for the elevated levels of lead identified in the soil. As stated in the May 9, 1994 letter, it appears that, based on Fugro West's investigations, soil contamination may be extensive in this area, and the extent of soil contamination should be delineated before assuming that overexcavation is the most practical remedial solution for this contamination.

Additionally, guidelines established by the California Regional Water Quality Control Board (RWQCB) require that ground water investigations be conducted when unacceptable levels of soil contamination are identified to indicate that there may have been an impact to ground water.

You are required to determine the extent and severity of any ground water contamination resulting from the release at both the diesel and gas/waste oil tank sites. These investigations must

Mr. Peter Wang
Re: 1521 Buena Vista Ave.
July 7, 1994
Page 2 of 4

be conducted in accordance with the RWQCB's Staff Recommendations for the Initial Evaluation and Investigation of Underground Tanks, and be consistent with requirements set forth in Article 11 of Title 23 California Code of Regulations. The major elements of such an investigation are summarized in the attached **Appendix A**. The major elements of the guidelines include, but are not limited to, the following:

- o At least one permanent ground water monitoring well must be installed within 10 feet of the observed soil contamination, oriented in the confirmed downgradient direction relative to ground water flow. In the absence of neighboring monitoring wells located within 100 feet of the site, or any other data identifying the confirmed downgradient direction, a minimum of three wells will be required to verify gradient direction. During installation of these wells, soil samples are to be collected at five-foot-depth intervals, any significant changes in lithology, and the soil/water interface.
- o Subsequent to the installation of the monitoring wells, these wells must be surveyed to an established benchmark, (i.e., Mean Sea Level) with an accuracy of 0.01 foot. Ground water samples are to be collected and analyzed quarterly, and water level measurements are to be collected monthly for the first three months, and then quarterly thereafter. If the initial ground water elevation contours indicate that ground water flow directions vary greatly than you will be required to continue monthly water level measurements until the ground water gradient behavior is known.

This Department will oversee the assessment and remediation of your site. Our oversight will include the review of and comment on work proposals and technical guidance on appropriate investigative approaches and monitoring schedules. The issuance of well drilling permits, however, will be through the Alameda County Flood Control and Water Conservation District, Zone 7, in Pleasanton. The RWQCB may choose to take over as lead agency if it is determined, following the completion of the initial assessment, that there has been a substantial impact to ground water.

After installing the required monitoring wells, subsequent reports are to be submitted quarterly until this site qualifies for final RWQCB "sign-off". Such quarterly reports are due the first day of the second month of each subsequent quarter.

Mr. Peter Wang
Re: 1521 Buena Vista Ave.
July 7, 1994
Page 3 of 4

The referenced initial and quarterly reports must describe the status of the investigation and must include, among others, the following elements:

- o Details and results of all work performed during the designated period of time: records of field observations and data, boring and well construction logs, water level data, chain-of-custody forms, laboratory results for all samples collected and analyzed, tabulations of free product thicknesses and dissolved fractions, etc.
- o Status of ground water contamination characterization
- o Interpretations of results: water level contour maps showing gradients, free and dissolved product plume definition maps for each target component, geologic cross sections, etc.
- o Recommendations or plans for additional investigative work or remediation

Please be reminded that, subsequent to placing and sampling the proposed five temporary piezometers, you will be required to install permanent monitoring wells in the area of the former gas tanks and waste oil sump. The same ground water investigation requirements, outlined above, also apply in this case as well. Please submit a detailed timetable, with the required work plan addendum, for when you plan to install the piezometers and permanent monitoring wells (for both the gas and diesel sites), delineate the extent of soil contamination at the diesel tank sites, conduct quarterly monitoring, etc.

This office has some conflicting information on the sampling and excavation of the former waste oil sump. Blymyer Engineer's (Blymyer) March 8, 1988 report and a phone conversation log, dated April 13, 1992, with Mr. Lewis, Blymyer, states that 700 ppm Oil & Grease was identified from a soil sample collected from beneath the sump following soil excavation. However, Blymyer's June 9, 1993 report states that a soil sample collected from beneath the sump, following excavation, identified 250 ppm Oil & Grease. This office has no lab analysis results for the soil sample identifying 250 ppm Oil & Grease. Please submit the lab results for this sample analysis with the work plan addendum.

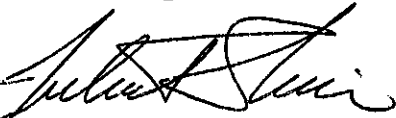
Mr. Peter Wang
Re: 1521 Buena Vista Ave.
July 7, 1994
Page 4 of 4

Lastly, Blymyer's June 9, 1993 report states that the stockpiled soil from the gas tank removals was hauled to Forward Landfill in Manteca. This office has no documentation for this soil disposal. Please submit the soil disposal documentation with the work plan addendum.

Again, please submit an addendum to June 22, 1994 work plan, incorporating all the above work and information, **within 60 days of the date of this letter**. Please be advised that this is a formal request for a work plan pursuant to **Section 2722 (c)(d) of Title 23 California Code of Regulations**. Any extensions of the stated deadlines, or modifications of the required tasks, must be confirmed in writing by either this agency or RWQCB.

If you have any questions or comments, please contact me at (510) 271-4530.

Sincerely,



Juliet Shin
Hazardous Materials Specialist

cc: Elizabeth A. Nixon
GeoMatrix
100 Pine Street, 10th Floor
San Francisco, CA 94111

Edgar Howell-File(JS)

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY

DAVID J. KEARS, Agency Director



R0618

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

May 9, 1994

Peter Wang
Encinal Terminals
1521 Buena Vista Avenue
Alameda, CA 94501

STID 3522

Re: Investigations at Encinal Terminals, located at 1521 Buena Vista Avenue, Alameda, California

Dear Mr. Wang,

This office received Blymyer Engineer's Preliminary Site Investigation, dated June 9, 1993, on April 11, 1994, and has had the opportunity to review this report. Although ground water samples collected from the newly installed wells, MW-1, MW-3, and MW-4, did not identify any contamination, it appears that these wells are not screened properly.

Having reviewed the ground water information for other Alameda sites, the water table consistently lies at approximately 5 to 10 feet below ground surface (bgs) in Alameda. Contrary to Blymyer's statement that the ground water at the site is semi-confined and lies at roughly 19 feet bgs, the depth-to-water and soil log information provided in Blymyer's report suggests that the water table also lies at approximately 5 feet bgs, which is consistent with the ground water information from the other Alameda sites.

As is commonly known, both dissolved phase and separate-phase hydrocarbons tend to float on top or near the top of the water table. However, monitoring wells MW-1, MW-3, and MW-4 are not screening across the water table, but rather 5 to 10 feet below the water table. Therefore, samples collected from the on-site monitoring wells may not be representative of the current ground water condition.

Furthermore, it appears that shallow ground water, at least above 10 feet bgs, has been impacted, according to the sampling results from boring SB-1. Well MW-4, located in the same area as SB-1, may not be identifying any ground water contamination due to the fact that it is screening from 15 to 35 feet bgs.

Therefore, you are required to install and sample monitoring wells that will be screened adequately above the water table, or submit a thorough explanation and detailed documentation

Mr. Peter Wang
Re: 1521 Buena Vista Ave
May 9, 1994
Page 2 of 3

supporting Blymyer's statement that the current on-site wells are screened adequately. A work plan will be due to this office **within 45 days** of the date of this letter.

You will be required to analyze future soil and ground water samples for TPHg, TPHd, BTEX, and Oil & Grease (using Method 5520 instead of 418.1).

Please submit the documentation or paper work for the disposal of excavated soil to Casmalia Resources and Forward Landfill in Manteca.

This office has received and reviewed portions of Fugro West's Phase I Assessment Report. According to the report, borings were placed around the recently removed underground storage tanks at the site and soil samples were collected from these borings and analyzed. Elevated levels of diesel, up to 1,700 ppm, and traces of gas and toluene, ethylbenzene, and xylenes were identified from the boring samples collected from 5 to 10 feet below ground surface. Additionally, elevated levels of lead were consistently identified in these samples.

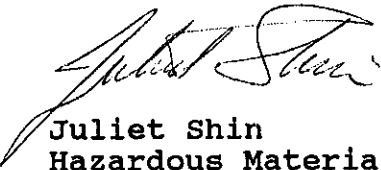
You are required to submit a work plan addressing the delineation of the extent and severity of soil contamination at these tank sites. The work plan shall also address ground water investigations and a "wet" test for lead. This office is aware that SEMCO recently submitted a work plan, dated April 29, 1994, proposing overexcavation of the tank pits, however, the reasoning behind their proposal was that the contaminated soil was thought to be limited in extent due to the "low levels" identified in the tank pit soil samples. However, based on the fact that elevated levels of diesel were identified from Fugro West's borings, it appears that the soil contamination may not be as limited in extent as initially presumed, therefore, this office recommends that the extent of soil contamination be delineated first, before assuming that overexcavation is the most practical remedial solution for the soil contamination.

The work plan, addressing the above investigations, is due to this office **within 45 days** of the date of this letter.

If you have any questions or comments, please contact me at (510) 271-4530.

Peter Wang
Re: 1521 Buena Vista Ave.
May 9, 1994
Page 3 of 3

Sincerely,



Juliet Shin
Hazardous Materials Specialist

cc: Elizabeth Nixon
Geomatrix
100 Pine Street, 10th Floor
San Francisco, CA 94111

Doug Fleming
SEMCO
1217 So. 7th Street
Modesto, CA 95351

Edgar Howell-File(JS)

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY

DAVID J. KEARS, Agency Director



R0618

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

April 6, 1994

Peter Wang
Encinal Terminals
1521 Buena Vista Ave.
Alameda, CA 94501

STID 3522

Re: Investigations at 1521 Buena Vista Ave., Alameda, CA

Dear Mr. Wang,

This office received a work plan from your consultants, Blymyer, on February 16, 1993, proposing the installation of two ground water monitoring wells and one piezometer. This work plan was approved on February 23, 1993. To this date, this office has not received a report documenting the proposed work. Per my conversation with you and your consultant, Laurie Buckman, on April 6, 1994, Blymyer **did** prepare a report and sent you a copy intended for this office. Please submit this report **within 30 days** of the date of this letter.

Additionally, per Article 5, Title 23 California Code of Regulations, you are required to implement quarterly ground water monitoring and reporting at the site. A quarterly ground water monitoring report is due to this office **within 45 days** of the date of this letter. Subsequent reports are to be submitted quarterly until this site qualifies for final RWQCB "sign-off". Such quarterly reports are due the first day of the second month of each subsequent quarter.

The referenced initial and quarterly reports must describe the status of the investigation and must include, among others, the following elements:

- o Details and results of all work performed during the designated period of time: records of field observations and data, boring and well construction logs, water level data, chain of custody forms, laboratory results for all samples collected and analyzed, tabulations of free product thicknesses and dissolved fractions, etc.
- o Status of ground water contamination characterization.
- o Interpretations of results: water level contour maps showing gradients, free and dissolved product plume definition maps for each target component, geologic cross sections, etc.

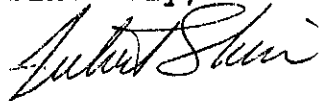
Mr. Peter Wang
Re: 1521 Buena Vista Ave.
April 6, 1994
Page 2 of 2

- o Recommendations or plans for additional investigative work or remediation.

Lastly, per our conversation on April 6, 1994, a Phase I Site Assessment was recently conducted at the site by Fugro Consultants, for Capitol Holdings, the lender for the site. It appears that this report documents some potential releases of contamination out at the site. As part of the reporting requirements, you are required to submit a copy of Fugro's investigation report to this office within 30 days of the date of this letter. Although you stated that you would not submit a copy of the whole report, for personal reasons, please be aware that all portions of the report pertaining to potential contaminant releases must be made available to this office for review.

If you have any questions or comments, please contact me at (510) 271-4530.

Sincerely,



Juliet Shin
Hazardous Materials Specialist

cc: Steven Boudrogh
Fugro West, Inc.
1050 Melody Lane, Ste 160
Roseville, CA 95678

Laurie Buckman
Blymyer Engineers, Inc.
1829 Clement Ave.
Alameda, CA 94501-1395

Edgar Howell-File(JS)

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director



R0618

RAFAT A. SHAHID, Assistant Agency Director

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

October 20, 1993

Mr. Chengben Wang
Alameda Liquid Bulk Terminal
P.O. Box 2453
Alameda, CA 94501

RE: 1521 Buena Vista Avenue, Alameda

I performed an inspection with Chris Jonas from my office at the above site on October 18, 1993. During our inspection, we noticed approximately twenty (20) drums of waste material that we were told was waste oil. These drums must be disposed of within 90 days. Please send a copy of your disposal receipt when it becomes available to this office.

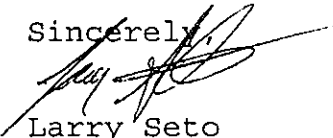
There is a 2,000 gallon underground tank on the site. If there are no plans to use this tank in the next 12 consecutive months, it must be removed in accordance to Section 2670(c), Title 23, California Code of Regulations. If the tank is going to be put back into service within this time frame, it must be registered with the State of California and the County. Please inform this office of your intentions within 30 days.

A Hazardous Materials Business Plan questionnaire was given to your Plant Manager at the conclusion of our inspection. Please complete this plan and return it to this office within 30 days.

If you have any questions, please contact me at 271-4320.

Thank-you in advance for your cooperation.

Sincerely,


Larry Seto
Sr. Hazardous Materials Specialist

cc: Chris Jonas, Environmental Health
Ed Howell, Chief, Hazardous Materials

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY

DAVID J. KEARS, Agency Director



R0618

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

February 23, 1993

Peter Wang
Encinal Terminals
1521 Buena Vista Avenue
Alameda, CA 94501

STID 3522

Re: Addendum to work plan for Encinal Terminals, located at
1521 Buena Vista Avenue, Alameda, California

Dear Mr. Wang,

This office has reviewed Blymer Engineer's "Addendum to Workplan", dated February 12, 1993. This work plan is acceptable to this office. Subsequent to the installation of the additional monitoring well, Well SB-1, you will be required to collect and analyze ground water samples on a quarterly basis from this well, in addition to the other on-site wells.

Field work should commence **within 60 days** of the date of this letter. A report documenting the installation and sampling of all the wells and borings shall be submitted to this office **within 45 days** after the completion of field activities.

If you have any questions or comments, please contact me at (510) 271-4530.

Sincerely,


Juliet Shin
Hazardous Materials Specialist

cc: Richard Hiatt, RWQCB

Laurie Buckman
Blymyer Engineers, Inc.
1829 Clement Ave.
Alameda, CA 94501-1395

Edgar Howell-File(JS)

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY

DAVID J. KEARS, Agency Director



R0618

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

November 3, 1992

Peter Wang
Encinal Terminals
1521 Buena Vista Avenue
Alameda, CA 94501

STID 3522

RE: The approval of the Revised Work Plan for investigations at
1521 Buena Vista Avenue, Alameda, California

Dear Mr. Wang,

This office has received and reviewed the revised work plan,
dated October 28, 1992, and approves of this work plan. Thank
you for your quick response.

Field work should commence within 60 days of the receipt of this
letter. A report documenting the results from work performed is
due to this office within 45 days of completion of activities.

Thank you for your cooperation. If you have any questions or
comments, please contact me at (510) 271-4530.

Sincerely,

Juliet Shin
Hazardous Materials Specialist

cc: Richard Hiett, RWQCB

Robert La Grone, Alameda Fire Dept.

Sue Black
Blymer Engineers, Inc.
1829 Clement Ave.
Alameda, CA 94501

Edgar Howell-File(JS)

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY

DAVID J. KEARS, Agency Director



R0618

RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

October 19, 1992

Peter Wang
Encinal Terminals
1521 Buena Vista Avenue
Alameda, CA 94501

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

STID 3522

RE: The approval of work plan for investigations at 1521 Buena Vista Avenue, Alameda, California

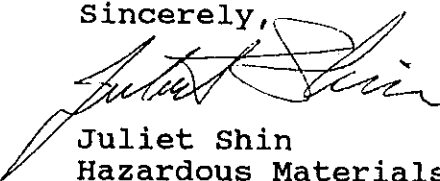
Dear Mr. Wang,

This office has received and reviewed the work plan, dated October 14, 1992, for the above site. In addition to soil samples being collected from boring SB-1, a grab ground water sample should also be collected and analyzed for waste oil constituents. Additionally, ground water investigations should be conducted to address the area downgradient of T-2. Per the conversation between Sue Black, Blymer Engineering, and myself on October 19, 1992, it will be acceptable to collect and analyze grab ground water samples from this area to determine whether releases from T-2 have impacted ground water. If the ground water samples identify unacceptable levels of contaminants, you may be required to install a permanent monitoring well in this area. With the above additional requirements, the work plan will be acceptable to this office.

Lastly, please be reminded to collect soil samples at changes in lithology, in addition to soil samples being collected at depth intervals of 5 feet.

If you have any questions or comments, please contact me at (510) 271-4530.

Sincerely,


Juliet Shin
Hazardous Materials Specialist

cc: Richard Hiatt, RWQCB

Robert La Grone, Alameda Fire Dept.

Mr. Peter Wang
RE: 1521 Buena Vista Ave.
October 19, 1992
Page 2 of 2

Sue Black
Blymer Engineers, Inc.
1829 Clement Ave.
Alameda, CA 94501

Edgar Howell-File (JS)

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY

DAVID J. KEARS, Agency Director



R0618

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

August 27, 1992

Peter Wang
Encinal Terminals
1521 Buena Vista Avenue
Alameda, CA 94501

STID 3522

RE: Work plan for investigations at 1521 Buena Vista Avenue,
Alameda, California

Dear Mr. Wang,

In April 1992, this office sent you a letter requiring that you submit a work plan for soil and ground water investigations at the above site. Per the conversation between Sue Black, Blymer Engineers, Inc., and myself on April 28, 1992, your consultants had begun preparing a work plan in April. However, to this date, this office has not yet received the completed work plan.

You are required to submit a work plan **within 45 days of the receipt of this letter** addressing those issues outlined in the April 15, 1992 letter from this office. 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 RWQCB.

Please be reminded to copy Richard Hiatt, at the San Francisco Bay Region-Water Quality Control Board, on all correspondence and reports regarding this site.

If you have any questions or comments, please feel free to contact me at (510) 271-4530.

Sincerely,

Juliet Shin
Hazardous Materials Specialist

Peter Wang
RE: 1521 Buena Vista Ave.
August 27, 1992
Page 2 of 2

cc: Richard Hiett, RWQCB

Robert La Grone, Alameda Fire Dept.

Sue Black
Blymer Engineers, Inc.
1829 Clement Ave.
Alameda, CA 94501

Mark Thompson, Alameda County District Attorney's Office

Edgar Howell-File (JS)

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



R0618

RAFAT A. SHAHID, Assistant Agency Director

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

April 15, 1992

Peter Wang
Encinal Terminals
1521 Buena Vista Avenue
Alameda, CA 94501

STID 3522

RE: Investigations at 1521 Buena Vista Avenue, Alameda, California

Dear Mr. Wang,

Alameda County Environmental Health Department, Hazardous Materials Division, has currently been delegated authority from the San Francisco Regional Water Quality Control Board (RWQCB) to oversee a large number of remediation cases within Alameda County. Therefore, we will be the lead contact agency for the oversight duties regarding this case.

The files for the case referenced above have recently been reviewed by our office. According to the Final Closure Report, dated March 8, 1988, three underground storage tanks (T-1, T-2, and T-3) were removed from the site on January 27, 1988. The analysis of groundwater samples collected from tank pits T-1 and T-3 identified up to 100,000 parts per billion (ppb) Total Petroleum Hydrocarbons (TPH) and 910 ppb Benzene. Additionally, the analysis of soil samples collected from these tank pits, and tank pit T-2, identified concentrations of TPH and Benzene.

Guidelines established by RWQCB requires that a groundwater investigation be conducted whenever an unauthorized release of product is suspected from an underground storage tank (UST). The groundwater contamination identified from the tank pits would indicate that such an event has occurred. The guidelines state that a groundwater monitoring well must be installed within ten feet downgradient of a former UST. Since groundwater contamination was documented in water collected from tank pits T-1 and T-3, monitoring wells will be required to be installed within 10 feet downgradient of these former USTs. Additionally, a third well must also be installed to complete the triangulation necessary to determine the groundwater gradient behavior.

You are required to submit a preliminary site assessment (PSA) work plan describing the proposed work at the site. It should include, among other elements, a depiction of the proposed locations for monitoring well installations and sampling plan. Initial soil and groundwater samples shall be analyzed for Total Petroleum Hydrocarbons as gasoline (TPHg) and Benzene, Toluene, Ethylbenzene, and Xylenes using appropriate EPA or DHS methods. Additionally, due to concern over the former above-ground waste oil tank, initial soil and groundwater samples should also be analyzed for TPH as diesel fuel, volatile organic compounds (EPA method 8010 or 8240) and oil and grease (EPA 5520 series).

The PSA must be conducted in accordance with the RWQCB's Staff Recommendation for the Initial Evaluation and Investigation of Underground Tanks, August 1990, and the State Water Resources Control Board's LUFT field manual. Please reference the attached Appendix A summarizing the technical scope of such a PSA proposal.

The PSA shall be conducted under the direction of a registered engineer/geologist. A technical report shall be submitted following completion of this initial stage of work at the site. Subsequent reports are to be submitted quarterly until this site qualifies for final RWQCB "sign-off".

The referenced initial and quarterly reports must describe the status of the investigation and must include, among others, the following elements:

- o Details and results of all work performed during the designated period of time: records of field observations and data, boring and well construction logs, water level data, chain-of-custody forms, laboratory results for all samples collected and analyzed, tabulations of free product thicknesses and dissolved fractions, etc.
- o Status of groundwater contamination characterization
- o Interpretation of results: water level contour maps showing gradients, free and dissolved product plume definition maps for each target component, geologic cross sections, etc.
- o Recommendations or plans for additional investigative work of remediation

The need for any follow-up investigative or remedial actions at this site will be based upon the data derived from this groundwater investigation.

If you have any questions or comments please contact Juliet Shin at
(510) 271-4320.

Sincerely,



Scott O. Seery, CHMM
Senior Hazardous Materials Specialist

Attachment

cc: Richard Hiett, RWQCB
Richard Quarante, Alameda Fire Dept.