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

RO 1057 (330 Wood)
✓ RO 1056 (2920 4th St.)

LOP Site # 3611/3612

February 14, 1992

Mr. Richard K. Corbett
2068 First Street
Livermore, CA 94550

RE: 2920 FOURTH AND 330 WOOD STREETS, LIVERMORE

Dear Mr. Corbett:

Please find attached a copy of correspondence addressed to Mr. Dan Spruiell of J & W Development Company regarding the referenced site. We understand that your preference is for future correspondence regarding this site to be addressed to you, as iterated in your January 17, 1992 letter. We further understand that Mr. Spruiell no longer holds an ownership interest in this property. All future correspondence will be addressed to you.

Should you have any questions or comments please do not hesitate to call me at 510/271-4320.

Sincerely,

Scott O. Seery, CHMM
Senior Hazardous Materials Specialist

cc: Rafat A. Shahid, Assistant Agency Director, Environmental Health
Tom Peacock, ACDEH LOP
Gil Jensen, Alameda County District Attorney's Office
Eddie So, RWQCB
Howard Hatayama, DTSC
Danielle Stefani, Livermore Fire Department

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

R01057 (330 Wood)
R01056 (2920 4th St)

LOP Site # 3611/3612

February 13, 1992

Mr. Dan C. Spruiell
J & W Development Company
170 North "L" Street
Livermore, CA 94550

RE: 2920 FOURTH AND 330 WOOD STREETS, LIVERMORE

Dear Mr. Spruiell:

The Department has completed review of the January 28, 1992 Soil Tech Engineering (STE) report documenting activities associated with the advancement of a single boring and its completion as a ground water monitoring well at the referenced Livermore site. Such activities included the collection and analyses of soil and ground water samples during boring advancement and following well development, respectively.

Samples were analyzed for the presence of total petroleum hydrocarbons characterized as gasoline and diesel (TPH-G and -D), and for the volatile compounds benzene, toluene, ethylbenzene, and xylene (BTEX). The cited STE report documents that TPH-G/D and BTEX were not detected in either soil or ground water.

At this time, please adhere to the following sampling, monitoring, and reporting schedule:

1) Ground water shall be sampled and the results reported **quarterly** for the presence of TPH-G/D and BTEX.

2) Ground water elevations shall be measured and reported **quarterly**.

3) Summary reports shall be submitted **quarterly** until this site is eligible for final "sign off" by the RWQCB. Such reports are due the first day of the second month of each subsequent quarter (i.e., May 1, August 1, November 1, and February 1). Hence, the next report is due for submittal May 1, 1992 and shall document the results of work conducted during the first quarter of 1992.

Please call me at 510/271-4320 should you have any questions.

Sincerely,

Scott O. Seery, CHMM
Senior Hazardous Materials Specialist

cc: Rafat A. Shahid, Assistant Agency Director, Environmental Health
Tom Peacock, ACDEH LOP
Gil Jensen, Alameda County District Attorney's Office
Eddie So, RWQCB
Howard Hatayama, DTSC
Danielle Stefani, Livermore Fire Department

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

R01057 (330 Wood)
✓ R01056 (2920 4th St)

RAFAT A. SHAHID, Assistant Agency Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
80 Swan Way, Rm. 210
Oakland, CA 94621
(415) 271-4320

January 9, 1992

Mr. Dan C. Spruiell
J & W Development Company
170 North "L" Street
Livermore, CA 94550

RE: 2920 FOURTH AND 330 WOOD STREETS, LIVERMORE

Dear Mr. Spruiell:

It has come to the attention of this Department that a report documenting the results of all activities associated with the advancement of a single soil boring at the referenced site has not been submitted. The advancement of a single boring, and its subsequent conversion to a ground water monitoring well, was negotiated on your behalf by The Mark Group (TMG), the engineering consultant which had, according to our records, handled the environmental assessment and clean-up efforts at the site. This boring/well installation was outlined in a TMG letter proposal dated January 24, 1991. A subsequent phone call with Mr. Brian Deschaine of TMG, revealed that they did not, in fact, ever initiate this additional subsurface work.

During our phone conversation January 8, 1992, you indicated that Soil Tech Engineering, not TMG, recently advanced a boring at the site, subsequently converting it into a ground water monitoring well. Soil and ground water samples were apparently collected.

As approximately a year has passed since this additional work was expected to have been completed and a report issued, you are directed at this time to submit the report documenting all activities associated with the installation of the monitoring well at this site within 30 days of the date of this letter, or by February 8, 1992. This report must adhere to the technical and professional requirements outlined by the RWQCB Staff Recommendations for the Initial Evaluation and Investigation of Underground Tanks.

Please be advised that this is a formal request for technical reports pursuant to California Water Code Section 13267 (b). Failure to respond or a late response could result in the referral of this case to the RWQCB for enforcement, possibly subjecting the responsible party to civil penalties to a maximum of $1,000 per day. Any extensions of the stated deadlines, or modifications of the required tasks, must be confirmed in writing by either this agency or the RWQCB.

R01057
✓ R01056

Should you have any questions about the content of this letter, please call me at 415/271-4320.

Sincerely,

Scott O. Seery, CHMM
Hazardous Materials Specialist

cc: Rafat A. Shahid, Assistant Agency Director, Environmental Health
Gil Jensen, Alameda County District Attorney's Office
Tom Peacock, ACDEH LOP
Lester Feldman, RWQCB
Howard Hatayama, TSCD
Danielle Stefani, Livermore Fire Department

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

R01057 (330 Wood)
✓R01056 (2920 4th St)

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

January 28, 1991

Ms. Holly Foster
Baker & McKenzie
2 Embarcadero Center, Suite 2400
San Francisco, CA 94111

Dear Ms. Foster:

As you requested over the telephone, the Hazardous Materials Division has copied the most recent document on soil remediation for the site at 2920 - 4th St./330 Wood St. in Livermore. This copy is enclosed.

You will be billed for provision of this service; enclosed is a copy of the invoice sent to the Billing Department. Our hourly fee for site searches is $67, and there is a minimum charge of one hour's labor for such work.

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

Sincerely,

Gilbert M. Wistar

Gil Wistar
Hazardous Materials Specialist

Enclosure

cc: Rafat A. Shahid, Asst. Agency Director, Environmental Health

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

R01056

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

December 7, 1990

Ms. Doreen P. Meyer
Environmental Specialist
Harding Lawson Associates
1355 Willow Way, Suite 109
Concord, CA 94520

Dear Ms. Meyer:

In a letter to this office dated November 19, 1990, as well as in subsequent telephone conversations, you requested information on the following locations in Livermore:

(R01056) 1. J & W Development, 2920 4th St. (after July 1989).
(R02881) 2. Texaco service station, 4186 East Ave.
3. Allan Hyne, 792 S. I St.
(R02873) 4. Arco filling station, 286 S. Livermore Ave.
(R0769, R02525) 5. Shell service station, 318 S. Livermore Ave.
6. Clifford Bates, 887 S. Livermore Ave.
(R0904) 7. Unocal service station, 900 S. Livermore Ave. (after Feb. 1988)
8. Bud's Backhoe Service, 2060 S. Livermore Ave.
9. Hexcel, 10 Trevarno Rd. (information on groundwater plume).

In response, the Hazardous Materials Division has reviewed its hazardous waste generator, underground tank, Hazardous Materials Management Plan, and emergency response files for each of these sites. Pertinent information is outlined below, by site.

(R01056) **J & W Development, 2920 4th St.**

This site has had widespread soil contamination, resulting from the leakage of three underground storage tanks. The one diesel and two gasoline tanks were removed in July 1989, after which high levels of hydrocarbons were found beneath and adjacent to them. Diesel appeared to be the most prevalent hydrocarbon, and extended to a depth of about 35 feet below ground surface. Excavation in early 1990 to remove all contaminated soil resulted in the stockpiling of approximately 1,500 cubic yards; this soil was bioremediated over the spring and summer of 1990 on site, using "landfarming." This effort succeeded, since hydrocarbon levels in these soils have been reduced to "ND," and the soil has been replaced in the excavated pits. Groundwater is estimated to be at a depth of 60-65 feet; while there is no information available on whether groundwater has been affected, monitoring wells will be installed in the future.

(R02881) **Texaco, 4186 East Ave.**

This service station has six underground storage tanks, five gasoline and one waste oil. Our office last inspected the site in May 1990;

violations noted at the time were inadequate tank monitoring and recordkeeping, and lack of documentation for precision leak tests and daily inventory reconciliation. There is no information in the file regarding any unauthorized releases.

792 S. I St.

At this site there is a 550-gallon diesel underground tank that was installed in 1974. The owner is not currently using it. This office issued the owner/operator an interim operating permit in March 1988, with the last inspection taking place in October 1988. There are no records on file of precision leak tests or inventory reconciliation, nor is there any information on unauthorized releases.

(R02873) **Arco, 286 S. Livermore Ave.**

This is a "minimart" with three underground tanks. These tanks passed precision leak tests in March 1988 and March 1989. A leak was found in the supreme unleaded pipeline on September 25, 1990, after which Arco repaired the line and conducted a precision leak test of this and the other two tank systems. On November 13, all systems appeared tight, and the station has returned to business as usual. An investigation is planned for soil and possible groundwater contamination.

(R0769) **Shell, 318 S. Livermore Ave.**

(R02525) At this site, an operating service station, the waste oil tank was removed and replaced with a new one in August 1987; then, in December 1989, the four gasoline tanks were removed and replaced with three new tanks. According to file documents, less than 100 ppm of hydrocarbons were found beneath the waste oil tank, but up to 870 ppm of TPH-G was found beneath the gasoline tanks. Prior to the installation of the new gasoline tanks, additional soil was removed; after the new tanks went into operation, Shell's consultant drilled four soil borings that were converted to monitoring wells; nothing was detected in either the soil or water samples from these holes (collected and analyzed June 1990).

887 S. Livermore Ave.

One 550-gallon gasoline tank was removed from this residence in March 1990. Because no contamination was found in samples collected from beneath the tank, this office issued a "no further action" letter to the property owner.

(R0904) **Former Unocal, 900 S. Livermore Ave.**

This site is currently vacant, with all underground tanks at the site having been removed in 1987. The file information for early 1988

consists of a consultant's report to Unocal dated February 11, 1988. This report makes the following points:

- Additional excavation of the former waste oil pit occurred to a depth of about 9 feet, where the soil appeared clean;
- About 60 cubic yards of contaminated soil from this pit was hauled to a Class I disposal site; and
- Groundwater is estimated at a depth of 30 feet, but no wells were installed to test the water.

There are no other reports on this site to date.

Bud's Backhoe Service, 2060 S. Livermore Ave.

This is an unpaved contractor's staging yard behind a small horse ranch. There is surface storage of oils, solvent, and above-ground fuel tanks. The site is recorded as having two underground tanks, but there is no file on any underground tanks, and based on a site visit November 27, 1990 (no one was around), there appeared to be no USTs on the property.

Hexcel, 10 Trevarno Rd. [redacted]

This site is complex, with the RI/FS taking place under the oversight of the Regional Water Quality Control Board. The plume of contaminated groundwater has not been fully defined. Enclosed are several figures and a table, that provide some information on well locations and contaminants found in them.

This letter contains information limited to files in this office, and does not reflect data that may be available from other agencies or parties. You will be billed for provision of this service at the rate of $60 per hour; enclosed is a copy of the invoice sent to our Billing Department. If you have any questions concerning this letter, please contact the undersigned at 271-4320.

Sincerely,

Gilbert M. Wistar

Gil Wistar
Hazardous Materials Specialist

Enclosures

c: Rafat A. Shahid, Asst. Agency Director, Environmental Health
files

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

RO 785 (2322-38 1st St
RO 1057 (330 Wood)
✓RO 1056 (2920 4th St.)

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

July 3, 1990

Mr. Dan Spruiell
J & W Development
170 North L St.
Livermore, CA 94550

RE: **Work plan submitted by the Mark Group for 2920 4th St. and 330 Wood St.; abandoned underground tanks at 2322 and 2338 1st St.**

Dear Mr. Spruiell:

The Alameda County Department of Environmental Health, Hazardous Materials Division has completed its review of the Mark Group work plan referred to above. We concur with the soil cleanup approach, which consists of the following aspects: 1) excavate the remaining diesel-contaminated soil from Parcel 2 (2920 4th St. -- Parcel 1 is 330 Wood St.); 2) continue the bioremediation of soils on-site; and 3) backfill all soil that analytical results show is clean, i.e., has "non-detect" lab results.

However, after consultations with the San Francisco Bay Regional Water Quality Control Board (RWQCB) and Zone 7 of the Alameda County Flood Control and Water Conservation District (Zone 7), we are requiring a groundwater investigation at the site, as originally discussed in a previous letter from this office to you. The RWQCB typically needs a responsible party to provide "hard data" to back up claims that unauthorized releases from underground tanks have not affected groundwater; this means water quality data from beneath the site. Furthermore, Zone 7, which regulates water resource development in the Livermore/Amador Valleys, indicated that the aquitard referred to in the Mark Group work plan (at an apparent depth of 60-65 feet in this area) has historically been permeable to gasoline and in some cases to diesel. Therefore, while this layer may act as a barrier to polar water molecules, it may not prevent the downward migration of lighter-range, nonpolar hydrocarbons.

We are requiring that you install a minimum of three monitoring wells at the site, at least one of which shall be downgradient of the former tank in Parcel 1, and one downgradient of the former tank area in Parcel 2. The borings must be advanced until water is first encountered, whether groundwater directly on top of the aquitard described in the work plan, or beneath this confining layer. For each well, if unconfined water is found sitting on the aquitard, then the well should not penetrate the confining layer. Otherwise, the well must be installed carefully to avoid potential cross-contamination of the lower aquifer. All wells, once constructed and developed, shall be sampled on at least a quarterly basis for gasoline, diesel, and BTEX.

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Please submit an amended work plan to this office and to the RWQCB that incorporates the locations of the three wells and a schedule for implementation of the remaining soil work and the groundwater monitoring program. Also, please submit an additional deposit, made out to Alameda County in the amount of $400, for continued Hazardous Materials Division oversight of this case. Previously submitted funds have been exhausted. This amended plan and deposit are due on **August 3, 1990.**

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On an unrelated matter, as I discussed with you over the phone several weeks ago, there appears to be an abandoned underground tank adjacent to Grier Doors at 2322 1st St. in Livermore, separate from the tank already removed from behind this facility. In addition, under the sidewalk in front of Award Signs at 2338 1st St. (not currently occupied), there appear to be two old underground tanks. These abandoned tanks violate Secs. 25292 and 25298 of the California Health and Safety Code, which 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. Assuming that the three tanks are out of use, we are requiring that you, as both properties' owner, close them under procedures established by this office. The completed closure forms and deposits, made payable to Alameda County, are due in this office no later than **September 4, 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. Any questions about monitoring well requirements can be addressed to Rico Duazo at the RWQCB, at 464-0837.

Sincerely,

Gilbert M. Wistar

Gil Wistar
Hazardous Materials Specialist

cc: Bernie Dietz, The Mark Group (3480 Buskirk Ave., Pleasant Hill, CA, 94523)
Lester Feldman, RWQCB
Randy Griffith, Livermore Fire Dept.
Howard Hatayama, DOHS
Jerry Killingstad, Zone 7 (5997 Parkside Dr., Pleasanton 94566)
Rafat A. Shahid, Asst. Agency Director, Environmental Health
files

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

R01056

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

Certified Mailer # P 062 128 190

Mr. Dan Spruiell
J & W Development
170 North L St.
Livermore, CA 94550

May 17, 1990

NOTICE OF VIOLATION

Dear Mr. Spruiell:

This letter refers to your property at 2920 - 4th St. and 330 Wood St., in Livermore. On April 4, 1990, this office received the outline of a comprehensive work plan to come from the Mark Group. In the letter containing this outline, the Mark Group stated that we would receive the actual comprehensive work plan for the site around April 9, 1990. Our office had requested this work plan addendum, which would address groundwater as well as soil, to be submitted by April 2. Subsequently, through Bernie Dietz of the Mark Group, I verbally approved an extension to April 9. However, as of the date of this letter, we have not received an actual work plan addendum.

Therefore, you are in violation of Sec. 25298(c)(4) of the California Health and Safety Code (H&SC), regarding closure procedures for underground tanks, and Sec. 13267(b) of the California Water Code, regarding requests for technical reports. These violations will continue until you have addressed the elements in the Division's March 2, 1990 letter, as outlined in the Mark Group's April 3 letter.

Please submit a work plan addendum to this office no later than **June 1, 1990.** We are overseeing this site under the designated authority of the San Francisco Bay Regional Water Quality Control Board, so this letter constitutes a formal request for technical reports according to the Water Code. 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: Bernie Dietz, Mark Group (3480 Buskirk Ave., Suite 120, Pleasant Hill, CA 94523)
Randy Griffith, Livermore FD
Howard Hatayama, DOHS
Lester Feldman, San Francisco Bay RWQCB
Gil Jensen, District Attorney, Alameda County Consumer and Environmental Protection Agency
Rafat A. Shahid, Asst. Agency Director, Env. Hlth.

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

DEPT. OF ENVIRONMENTAL HLTH
HAZARDOUS MATERIALS PROG.
80 SWAN WAY, SUITE 200
OAKLAND, CA 94621
430-4530

Telephone Number: (415)

R01057 (330 Wood)
✓R01056 (2920 4th)

March 2, 1990

Mr. Dan Spruiell
J & W Development
170 North L St.
Livermore, CA 94550

RE: **Remedial work plan for 2920 - 4th St. and 330 Wood St., Livermore**

Dear Mr. Spruiell:

The Alameda County Department of Environmental Health, Hazardous Materials Division, has reviewed the soil remediation proposal submitted to this office by the Mark Group, Inc. It is our understanding that J & W Development has contracted with the Mark Group, rather than Uriah, Inc. for this work. As a plan for the remediation of existing stockpiled soils, the Mark Group document is adequate. However, the proposal does not address all of the elements required of a preliminary subsurface investigation, which were described in our letter to you dated 10/16/89.

In your letter to this office dated 11/29/89, you state that "all contaminated soil was removed from the ground as per the tests enclosed... [and] the remaining area is considered contaminated free." Soil sample results following overexcavation do show very low levels of petroleum hydrocarbons, but there is insufficient information regarding their collection. As a result, in a phone conversation on 12/19/89, I requested that J & W provide more detail on the overexcavation/sampling operation, including: 1) how much soil was removed; 2) the final size of the excavation pits; 3) how soil was stockpiled; and 4) from which specific locations the pit was sampled. Nothing has come of this request. Therefore, based on incomplete information, we cannot yet concur that soil remaining in the ground is free of contaminants.

The Mark Group proposal states that you may wish to backfill the remediated soil into the pits without regulatory agency approval. The "regulatory agency" referred to is our office, and this is unsound advice. We will not permit remediated soil to be replaced into any of the tank pits without written approval. In addition, depending on the total volume of stockpiled soil, backfilling may require approval or a permit from the San Francisco Bay Regional Water Quality Control Board (RWQCB).

A significant omission from the Mark Group work plan is any mention of groundwater investigation. Monitoring wells are required at this site, according to RWQCB guidelines. We spelled out this requirement

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in our 10/16/89 letter to you, and reiterated the need for monitoring wells in the 12/19/89 phone conversation. The groundwater investigation must include the following elements:

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.

As stated in our October 1989 letter, you will have to install one directly downgradient monitoring well for each of the three former tank locations. Each well must be within 10 feet of the excavation pit edges.

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We are requiring that you submit a work plan addendum to this office within 30 days, i.e., no later than **April 2, 1990.** This addendum must include a detailed description/site plan for the soil overexcavation that occurred in August 1989, as well as more information on final pit sampling. The addendum should also describe your plan for a groundwater assessment, including quarterly sampling, groundwater level measurements, and reporting to this office and to the RWQCB.

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.

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: Garry Reid, Mark Group (3480 Buskirk Ave., Suite 120, Pleasant Hill, CA 94523)
Randy Griffith, Livermore FD
Howard Hatayama, DOHS
Lester Feldman, San Francisco Bay RWQCB
Gil Jensen, District Attorney, Alameda County Consumer and Environmental Protection Agency
Rafat A. Shahid, Asst. Agency Director, Env. Hlth.
files

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

R01057 (330 Wood)
✓ R01056 (2920 4th)

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

October 16, 1989

Mr. Dan Spruiell
J & W Development Co.
170 North L St.
Livermore, CA 94550

Re: Unauthorized releases from underground storage tanks located at 2920-4th St. and 330 Wood St., Livermore

Dear Mr. Spruiell:

Thank you for sending the analytical results and unauthorized release reports for the tank removals at the addresses listed above. As you're aware, on July 24, 1989, two tanks were removed from 2920-4th St. (Site #1), and one tank was removed from 330 Wood St. (Site #2). It is our understanding that J & W Development owns both properties. Site #1 contained a diesel tank, and three soil samples were collected from the excavation; up to 9,400 ppm diesel was found in these samples. One sample was collected from the small gasoline tank at this site, and it contained 3,800 ppm gasoline. At Site #2, one of the samples was found to contain 1,800 ppm gasoline. These results indicate that substantial releases of hydrocarbons are likely to have occurred at all three tank locations. Title 23 of the California Code of Regulations requires all such unauthorized releases from underground tanks to be reported, which you have taken care of; your next step is to initiate further investigation and/or cleanup activities.

A preliminary assessment should be conducted at <u>each of the three tank locations</u> to determine the extent of soil and groundwater contamination that has resulted from the leaking tanks. The information gathered by this investigation will be used to assess the need for additional actions at each site. The preliminary assessment, which may be submitted as one document but must treat each tank site separately, 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. For each site, 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 monitoring wells 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 (i.e., above 1,000 ppm) 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.

You will need to hire a professional consultant as soon as possible to address these issues. Your work plan for the preliminary assessment should be submitted to this office by **November 20, 1989.** Copies of the proposal should also be sent to the RWQCB (attention: Lester Feldman). 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.

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

enclosure

cc: Randy Griffith, Livermore FD
Howard Hatayama, DOHS (w/o enclosure)
Lester Feldman, San Francisco Bay RWQCB (w/o enclosure)
Gil Jensen, District Attorney, Alameda County Consumer and Environmental Protection Agency (w/o enclosure)
Rafat A. Shahid, Director Env. Hlth.
files

R01057
✓R01056

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