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

SOST
8-9-06

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

August 8, 2006

Mr. Dana Thurman
Chevron
6001 Bollinger Canyon Rd., K2236
P.O. Box 6012
San Ramon, CA 94583-2324

Dear Mr. Thurman:

Subject: Fuel Leak Case RO0000475, Chevron Station # 9-6991, 2920 Castro Valley Blvd., Castro Valley, CA 94546

Alameda County Environmental Health (ACEH) staff has reviewed the case file for the subject site including the May 9, 2006 Workplan for Remedial Pilot Test by Cambria. The work plan proposes performing a surfactant pilot test in monitoring well MW-7. The assumption is that residual contamination is located in this area and once removed, groundwater concentrations will decline. As you are aware, the County concerns are the effectiveness of the surfactant/vacuum recovery process, the radius of influence of the treatment and determining a way to monitor the treatment process. A site conceptual model has not been submitted, though it appears that there is the assumption that contamination is localized. Historical data indicates that "old" releases came from the form waste oil tank, from the UST pit and the southern dispenser island area. Elevated MTBE has been detected in groundwater samples from wells MW-2, MW-7 and MW-3, therefore the residual plume could extend this length. The persistent petroleum concentration detected in MW-7 may indicate that residual source remains in the tank pit or dispenser area, some of which was not sampled during the initial tank removal. Although the calculated volume of surfactant will be that which should reach a radius of at least 10' from the test well, there is no way proposed to verify this will be the case.

Please address the following technical comments prior to performing the proposed work.

TECHNICAL COMMENTS

1. Residual contamination from within the existing tank pit should be evaluated. This can be done by installing and sampling from an observation well within the tank pit.
2. The down-gradient extent of the plume should be better characterized. The temporary soil and groundwater results and the existing off-site well data should be evaluated to determine if additional off-site sampling is necessary to evaluate the size and strength of the contaminant plume.
3. The likelihood of a MTBE release migrating beyond the monitoring network should be examined. We request that you re-evaluate or perform an additional conduit study that details the potential migration pathways and potential conduits (utilities, storm drains, etc.) that may be present in the vicinity of the site. Provide a map showing the location and depth of all utility lines and trenches including sewers and storm drains within and near the plume area. The previous 4/2002 Soil Boring Utility Trench Investigation Report results were inconclusive.

The conduit study shall also include a detailed well survey of all wells (monitoring and production wells: active, inactive, standby, destroyed (sealed with concrete), abandoned (improperly destroyed); and dewatering, drainage, and cathodic protection wells) within a 1/4 mile radius of the subject site.

4. The area near former boring SB-5 should be investigated. Separate phase hydrocarbon was detected in the boring during the 4/2002 investigation and a monitoring well was proposed just south of this boring location by Delta Environmental.
5. Although we do not disapprove of the proposed surfactant remediation pilot test, in order to be appropriate remediation we believe it must be shown that the area of proposed treatment is the sole source area. Please provide your explanation and site conceptual model that supports that MW-7 is the sole source area.

TECHNICAL REPORT REQUEST

Please provide the technical report requested according to the following schedule:

- September 8, 2006- response to technical comments

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) now request submission of reports in electronic form. The electronic copy is intended to replace the need for a paper copy and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, electronic submittal of a complete copy of all reports is required in Geotracker (in PDF format). Please visit the State Water Resources Control Board for more information on these requirements (http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting).

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

If you have any questions, please call me at (510) 567-6765.

Sincerely,

Barney M. Chan
Hazardous Materials Specialist

cc: files, D. Drogos
Mr. David Herzog, Cambria Environmental, 2000 Opportunity Drive, Ste. 110.
Roseville, CA 95678

8_8_06 2920 Castro Valley Blvd

8-12-02

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

RO415

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

STID 651

August 5, 2002

Mr. Phil Briggs
Chevron Products Company
P.O. Box6004
San Ramon, CA 94583-09004

RE: Chevron Station No 9-6991 at 2920 Castro Valley Blvd., Castro Valley

Dear Mr. Briggs:

I have received and reviewed "Soil Boring and Utility Trench Investigation Report" dated April 29, 2002, by Mr. Tony Mikacich of Gettler-Ryan Inc. regarding the above referenced site.

This document reports result of the advancement of six soil borings SB-1 thorough SB-6 and proposes to install monitoring well MW-8 and MW-9 for further delineation of the existing plume at the above referenced site. This document also looked into possibilities of preferential pathway created by sewer line south of the property.

Water table has been generally detected around 10.5 feet. This report indicates groundwater flow to be northwesterly to southwesterly. However, the last two groundwater calculations seem to indicate a westerly to southwesterly direction. This report indicates that the most significant concentration of constituent was detected in SB5 with SPH in soil and groundwater. However, the soil concentration of SB5 at 10 feet within table 2 indicates 250ppm of TPHg, 53ppm of TPHd, and 0.99ppm of Xylene. There seems to be some errors in the document. The proposal for installment of MW-8 monitoring well seems acceptable to this office. However, the location of MW-9 should be further discussed as depicted within Figure 2 within this document. The flow gradient direction error has also been discussed previously.

Please contact this office in advance, several days, so that a representative of this office is to be present during the soil and groundwater sampling events.

Should you have any questions, please call me at (510)-567-6876.

Sincerely,

Amir K. Gholami, REHS
Hazardous Materials Specialist

C: Mr. Tony Mikacich, Gethler-Ryan Inc., 6747 Sierra Court, Suite G, Dublin, CA 94568
Files

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

P0475

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

October 24, 2001

Cheryle Canfield
Retail Compliance Specialist
Chevron Products Company
P.O. Box 6004, Room L 2376
San Ramon, California 94583-0904

Paul Goswamy, Operator
Chevron #96991
2920 Castro Valley Boulevard
Castro Valley, California 94546

NOTICE OF VIOLATION

Re: Inspection of Chevron #96991, 2920 Castro Valley Boulevard, Castro Valley, California 94546

Dear Ms. Canfield and Mr. Goswamy:

A regulatory compliance inspection was performed at the subject Chevron facility on October 23, 2001. Technicians from your contractor, Gettler Ryan, facilitated the inspection. The purpose of the inspection was to determine compliance with conditions of the facility underground storage tank (UST) operating permit, as well as provisions of Title 23, California Code of Regulations (CCR) and California Health and Safety Code (HSC) Chapter 6.7.

The following is a summary of non-compliant and other conditions noted at the time of the inspection:

- Print out of alarm history for the past year indicated that on October 30, 2000, at 12:14 am there was an alarm for a leak at the regular turbine pump sump. However, upon inquiring as to the cause of the alarm no records were available on site to describe the cause of the alarm or for the resolution of the leak alarm. Chevron is required to maintain records of all leak alarms in the operating logbook along with the resolution of that alarm. This requirement is a condition of the operating permit. The permit and conditions coverletter were present on-site. However, the manager stated to me that he had no prior knowledge of the two documents. Based on his statement it appears that staff training is inadequate.

- There is an 8" diameter monitoring well in the tank back fill. It is located on the southeast corner of the concrete pad. The monitoring well was found unsecured and without a waterproof cap on August 16, 2000. At that time Chevron was directed to secure the surface access point to the well. On October 17, 2000 this office received a letter from John Cattolico of Chevron indicating that the well had been secured. During the inspection that same well point was found unsecured against entry. Chevron has failed to provide a watertight cap on the well and failed to provide a secure surface structure.

Violations of provisions of the CHSC and CCR have been identified as follows:

Chevron is in violation of CHSC, Section 25999(b)(2) for failure to adhere to the permit conditions which require that all leak alarms be documented as to the cause of the alarm as well as the resolution of the condition which caused the alarm. Staff at the station are required to be trained to document and make notifications when a leak alarm is present.

Chevron is in violation of CCR, Title 23, Section 2649(d)(9) and CHSC Code Section 25299(a)(4)(6) for failure to properly secure a monitoring well with a surface security device and protect the well from surface intrusion.

Please be advised that HSC Sec. 25299(a) provide for civil liabilities imposed on the tank operator of up to $5000 per tank per day per violation for:

(2) Violation of any applicable requirement of the permit
(6) Violation of any applicable requirements of HSC Chapter 6.7
(9) Tampering with or otherwise disabling automatic leak detection devices or alarms

Please be further advised that HSC Sec. 25299(b) provides for civil liabilities imposed on the tank owner of up to $5000 per tank per day per violation for:

(4) Knowing failure to take reasonable and necessary steps to assure compliance with HSC Chapter 6.7 by the operator
(5) Violation of any applicable requirement of the permit issued for operation of the underground tank system
(6) Violation of any applicable requirements of HSC Chapter 6.7

At this time, Chevron and the operator are required to correct the tank system operation, maintenance and facility management issues identified in this inspection report, namely:

- Correct the operation and maintenance, and administrative record keeping problems identified during the October 23, 2001 inspection.

Pursuant to CHSC Sec. 25288(d), Chevron is required to submit a *Plan of Correction* **within 60 days**. This plan shall indicate the tasks to be completed, or those that have been completed already, and the schedule for doing so.

Please contact me at (510) 567-6781 if you have any questions about the content of this letter.

Sincerely,

Robert Weston
Senior Hazardous Materials Specialist

enclosures

Cc: Susan Hugo, Manager, ACDEH

06-14-01

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

RO475

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

STID 651

6/13/2001

Mr. Phil Briggs
Chevron Products Company
P.O. Box6004
San Ramon, CA 94583-09004

RE: Chevron Station No 9-6991 at 2920 Castro Valley Blvd., Castro Valley

Dear Mr. Briggs:

I am in receipt of faxed copy of "Work Plan for Soil Borings and Monitoring Well Installation" dated 6/13/2001 by Mr. Tony Mikacich of Gettler-Ryan Inc. regarding the above referenced site.

This workplan proposes to advance six soil borings SB-1 thorough SB-6 and to install monitoring well MW-8 along the sewer lines south of the property. This investigation will be performed in order to further delineate the extent of the plume and to determine whether actual preferential pathways exists along the sewer line in the southern portion of the above referenced property.

Per my discussion with Mr. Mikacich, I concur with this investigation. However, I believe a two-phase investigation seems to be more logical. In fact I believe that the installment of the proposed MW-8 might be more logical after the first phase investigation (soil borings) in order to properly locate this well and to ensure that it will be down-gradient of the plume instead of missing the existing plume. Furthermore, Figure 2 of last report revealed a westerly flow during this period.

Otherwise I generally concur with the specified workplan per my discussion with Mr. Mikacich of Gettler-Ryan Inc. Please be advised that more investigation might be deemed necessary based on the result of this workplan.

A representative of this office is to be present during the soil and groundwater sampling events. Please inform this office several days prior to the actual sampling events.

Please call me at (510)-567-6876, should you have any questions.

Sincerely,

Amir K. Gholami, REHS
Hazardous Materials Specialist

C: Mr. Tony Mikacich, Gethler-Ryan Inc., 6747 Sierra Court, Suite G, Dublin, CA 94568
Files

12-19-00

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

R0475

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

Stid 651

December 18, 2000

Mr. Phil Briggs
Chevron Products Company
P.O. Box6004
San Ramon, CA 94583-09004

RE: Chevron Station No 9-6991 at 2920 Castro Valley Blvd., Castro Valley

Dear Mr. Briggs:

I just received a phone call from Mr. Scott Boor of Blaine Tech Services, who informed me that he no longer is your consultant, and that Ms. Deanna Harding of Gethler-Ryan is presently your active consultant. Therefore, I would like to inform your consultant regarding the last correspondence in regard to the above referenced site to Ms. Harding of Gettler-Ryan.

As you are aware in my correspondence dated October 13th, 2000, I made the following comments:

1. According to Groundwater Monitoring Report dated 4-24-2000, there is high concentration of MTBE in MW-3 and MW-7 followed by MW-2 at 5600ppb, 4230ppb, and 413ppb respectively. While MW-2 and MW-3 wells both reveal some increase in MTBE concentration, MW-7 well indicated some decrease for MTBE.

2. Figure 2 revealed a westerly flow during this period.

3. In a letter by you dated June 3, 1999, you indicated:" It appears that the sanitary sewer lines could be preferential pathway since their depth ranges from 10.5 feet to 12.1 feet below grade and groundwater depth has varied over time from 8.27 to 12.54 feet below grade". Furthermore, you asked to delay further action to evaluate possible migration of hydrocarbon constituents and to confirm groundwater flow direction since there was some change in its direction in the past. Additionally, Mr. James A. Perkins of Pacific Environmental Group expressed concern over using any geoprobes near the backfill to the sewer lines south of the south due to having high risk of encountering the sewer line in his report dated May 24th, 1999. I then asked about the status of this investigation and the steps taken to remedy this situation.

Please call me at (510)-567-6876, should you have any questions.

Sincerely,

Amir K. Gholami, REHS
Hazardous Materials Specialist

C: Ms. Deanna Harding, Gethler-Ryan, 6747 Sierra Court, Suite G, Dublin, CA 94568
Files

12-14-00

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

R0475

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

Stid 651

December 13, 2000

Mr. Phil Briggs
Chevron Products Company
P.O. Box6004
San Ramon, CA 94583-09004

RE: Chevron Station No 9-6991 at 2920 Castro Valley Blvd., Castro Valley

Dear Mr. Briggs:

I have been recently assigned to oversee the remediation work conducted at the above referenced site. I have reviewed the files including the most recent Groundwater Monitoring Report dated 4-4-2000 by Mr. Scott Boor of Blaine Tech Services regarding the above referenced site. I would like to make the following comment regarding my review of the files:

- It has come to my attention that there was a letter by you dated June 3, 1999, where you have indicated:" It appears that the sanitary sewer lines could be preferential pathway since their depth ranges from 10.5 feet to 12.1 feet below grade and groundwater depth has varied over time from 8.27 to 12.54 feet below grade". Furthermore, you have asked to delay further action to evaluate possible migration of hydrocarbon constituents and to confirm groundwater flow direction since there was some change in its direction in the past. Additionally, In his report dated My 24, 1999, Mr. James A. Perkins of Pacific Environmental Group expressed concern over using any geoprobes near the backfill to the sewer lines south of the south due to having high risk of encountering the sewer line. I would like to know the status of this investigation and the steps taken to remedy this situation.

- Per Groundwater Monitoring Report dated 4-24-2000, High concentrations of MTBE still exists in MW-3 and MW-7 followed by MW-2 at 5600ppb, 4230ppb, and 413ppb. MW-2 and MW-3 wells both reveal some increase in MTBE concentration while MW-7 indicates some decrease for the same constituent.

- The flow gradient per figure 2 is westerly during this period.

If you have any questions, please do not hesitate to call me at (510) 567-6876.

Sincerely,

Amir K. Gholami, REHS
Hazardous Materials Specialist

C: Mr. Scott Boor, Blaine Tech Services, 1680 Rogers Ave., San Jose, CA 95112-1105
Files

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

R0475

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

August 23, 1999

STID 651

Phil Briggs
Chevron Products Company
P.O. Box 6004
San Ramon, CA 94583-0904

RE: Chevron Service Station #9-6991, 2920 Castro Valley Boulevard, Castro Valley

Dear Mr. Briggs:

I have reviewed the June 28, 1999 Cambria Environmental Technology, Inc. (Cambria) *Subsurface Utility Investigation Workplan*, as submitted under Chevron cover dated July 9, 1999. This workplan proposes the installation of 3 to 4 soil borings using Geoprobe® direct push tools. I understand that each sampling probe will be advanced into the porous backfill of the sanitary sewer trenches along both Anita Avenue and Castro Valley Boulevard. This work is an attempt to determine if sanitary sewer trenches serve as preferential pathways for the migration of contaminated groundwater from the subject Chevron site.

The cited Cambria work plan has been accepted as submitted.

Please call me at (510) 567-6783 when fieldwork has been scheduled or should you have any questions.

Sincerely,

Scott O. Seery, CHMM
Hazardous Materials Specialist

cc: Chuck Headlee, RWQCB
Gail Stanton, Castro Valley Sanitary District
Robert Foss, Cambria Environmental Technology, Inc.

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

R0475

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

June 16, 1999

STID 651

Mr. Phil Briggs
Chevron Products Company
P.O. Box 6004
San Ramon, CA 94583-09004

RE: Chevron Station #9-6991, 2920 Castro Valley Boulevard, Castro Valley – Request for Utility Conduit Investigation Workplan

Dear Mr. Briggs:

As we discussed today, please have your consultant submit a work plan for the intrusive evaluation of the sewer trenches that skirt the subject site. The May 24, 1999 Pacific Environmental Group, Inc. (PEG) utility survey report demonstrates that sewer line trenches in proximity to this site are at a depth consistent with that of underlying groundwater. Such utility trenches may act, therefore, as conduits for dispersion of the gasoline plume away from the site.

The requested work plan is due within 45 days of the date of this letter.

Please call me at (510) 567-6783 should you have any questions.

Sincerely,

Scott O. Seery, CHMM
Hazardous Materials Specialist

cc: Chuck Headlee, RWQCB
Robert Weston, ACDEH

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

P0475

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

May 5, 1999

STID 651

Mr. Phil Briggs
Chevron Products Company
P.O. Box 6004
San Ramon, CA 94583-0804

RE: Chevron Service Station, 2920 Castro Valley Boulevard, Castro Valley

LANDOWNER NOTIFICATION AND PARTICIPATION REQUIREMENTS

Dear Mr. Briggs:

This letter is to inform you of new legislative requirements pertaining to cleanup and closure of sites where an unauthorized release of hazardous substance, including petroleum, has occurred from an underground storage tank (UST). Section 25297.15(a) of Ch. 6.7 of the Health & Safety Code requires the primary or active responsible party to notify all current record owners of fee title to the site of: 1) a site cleanup proposal, 2) a site closure proposal, 3) a local agency intention to make a determination that no further action is required, and 4) a local agency intention to issue a closure letter. Section 25297.15(b) requires the local agency to take all reasonable steps to accommodate responsible landowners' participation in the cleanup or site closure process and to consider their input and recommendations.

For purposes of implementing these sections, you have been identified as the primary or active responsible party. Please provide to this agency, within twenty (20) calendar days of receipt of this notice, a complete mailing list of all current record owners of fee title to the site. You may use the enclosed "list of landowners" form (sample letter 2) as a template to comply with this requirement. If the list of current record owners of fee title to the site changes, you must notify the local agency of the change within 20 calendar days from when you are notified of the change.

If you are the sole landowner, please indicate that on the landowner list form. The following notice requirements do not apply to responsible parties who are the sole landowner for the site.

In accordance with Section 25297.15(a) of Ch. 6.7 of the Health & Safety Code, you must certify to the local agency that all current record owners of fee title to the site have been informed of the proposed action before the local agency may do any of the following:

1) consider a cleanup proposal (corrective action plan)

2) consider a site closure proposal

3) make a determination that no further action is required

4) issue a closure letter

You may use the enclosed "notice of proposed action" form (sample letter 3) as a template to comply with this requirement. Before approving a cleanup proposal or site closure proposal, determining that no further action is required, or issuing a closure letter, the local agency will take all reasonable steps necessary to accommodate responsible landowner participation in the cleanup and site closure process and will consider all input and recommendations from any responsible landowner.

Please call me at (510) 567-6783 should you have any questions about the content of this letter.

Sincerely,

Scott O. Seery, CHMM
Hazardous Materials Specialist

Attachments

cc: Chuck Headlee, RWQCB

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

E0475

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

December 1, 1998

STID 651

Mr. Phil Briggs
Chevron Products Company
P.O. Box 6004
San Ramon, CA 94583-09004

RE: Chevron Station #9-6991, 2920 Castro Valley Boulevard, Castro Valley

Dear Mr. Briggs:

I recently assumed management of this case. In doing so, I also recently completed review of the case file, up to and including the October 28, 1998 Blaine Tech Services, Inc. (BTS) 3rd quarter 1998 monitoring report. This report documents the sampling and monitoring of wells located at this site during August 1998.

Groundwater samples were collected from wells MW- 1, -2, and -7 during this reporting period. Concentrations of both MtBE and benzene rose markedly during this sampling event. MtBE concentrations are reported to be up to 47,000 ug/l in well MW-7, an increase of 35,000 ug/l from the June event. Benzene concentrations also increased in this well, from 16 ug/l in June to 350 ug/l in August.

Historically, MtBE has been sought in sampled groundwater at this site since December 1995. The initial sample collected from well MW-7 during that 1995 event indicated MtBE was not detected (<2.5 ug/l). During the next sampling event, in March 1996, MtBE was reported at a concentration of 5300 ug/l in this well. By June 1996, MtBE concentrations had risen to 14,000 ug/l in this same well. By September 1996, the MtBE concentration was reported to be 20,000 ug/l. Since then, reported MtBE concentrations had remained between 12,000 and 15,000 ug/l in MW-7, with a drop in March 1997 to 2100 ug/l, and another in March 1998 where MtBE was not detected (<2.5 ug/l).

MtBE has been sought only once (December 1995) in samples collected from wells MW-3 and –4. These wells are located cross- and down-gradient of both the UST cluster, and current and former dispenser islands. MtBE was reported at a concentration of 1400 ug/l in MW-3, and 9.9 ug/l in MW-4 during that sampling event. According to the approved sampling plan negotiated at that time, neither well has been sampled since.

At this time, please reinstate the sampling of well MW-3, adhering to a quarterly schedule. Hence, both MW-3 and -7 will be sampled and monitored each quarter.

Storm and sanitary sewer lines run beneath Castro Valley Boulevard and Anita Avenue. The trenches in which these lines are placed, and perhaps the lines themselves, may present preferential pathways for the migration of contaminated groundwater (i.e., MtBE) away from the site should such utility trenches be inundated by shallow groundwater. Historic depth-to-groundwater data for this site suggest that this may be occurring. This issue must be evaluated.

Please submit a work plan describing plans to evaluate these and other potential utility alignments as conduits for contaminant dispersal from the site. This work plan is due within 45 days of the date of this letter.

Please call me at (510) 567-6783 should you have any questions.

Sincerely,

Scott O. Seery, CHMM
Hazardous Materials Specialist

cc: Mee Ling Tung, Director, Environmental Health
Chuck Headlee, RWQCB
Robert Weston, ACDEH

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

RAFAT A. SHAHID, Assistant Agency Director

RO#475

Alameda County Environmental Health Dept.
Environmental Protection Division
1131 Harbor Bay Parkway, Room 250
Alameda CA 94502-6577
(510)567-6700 fax: (510)337-9335

StId 651

January 10, 1996

Mark Miller
Chevron U.S.A. Products Company
PO Box 5004
San Ramon CA 94583-0804

Subject: Investigations at Chevron Service Station #9-6991 located at 2920 Castro Valley Blvd., Castro Valley, CA

Dear Mr. Miller:

This office has completed a review of Gettler-Ryan Inc.'s Well Installation Report dated October 27, 1995 and Blaine Tech Services Inc.'s 3rd Quarter 1995 Groundwater Monitoring report dated November 2, 1995 for the subject site. Monitoring well MW-7 was installed downgradient of the former underground storage tank pit on August 30, 1995. Groundwater was most recently sampled and analyzed from monitoring wells MW-1 through MW-7 on September 25, 1995.

In response to your meeting with Scott Seery of this office and Kevin Graves with the RWQCB on January 26, 1995, regarding the Comprehensive Site Evaluation and Proposed Future Action Plan dated December 20, 1994, and your letter dated December 3, 1995, a *modified* version of the proposed monitoring and sampling schedule is approved. Groundwater has been sampled and analyzed at this site since October 1991. Because impact to groundwater appears to be localized to the site and contaminant concentrations continue to be low, a reduction in groundwater monitoring/sampling can be implemented as follows:

Well ID	Sampling schedule
MW-1	Annual (1st quarter)
MW-2	Semi-annual (1st and 3rd quarters)
MW-3	Discontinue sampling
MW-4	Discontinue sampling
MW-5	Discontinue sampling
MW-6	Discontinue sampling
MW-7	Quarterly

Please submit ground water monitoring reports to this office on a semi-annual basis for this site and begin analyzing/reporting for Methyl Tertiary Butyl Ether (MTBE) during the next groundwater sampling event. Attached is a letter from the San Francisco Regional

Quality Control Board dated May 2, 1995 which requires reporting of MTBE at all sites where a gasoline release occurred after 1983. The status of this site and sampling program will be reevaluated at the end of 1996.

Please note that the review of environmental assessment/investigations for the subject site has been transferred from Scott Seery to the undersigned of this office. Should you have questions, please contact me at (510)567-6755 and submit all reports to my attention. Thank you for your attention to these matters.

Sincerely,

Amy Leech

Amy Leech
Hazardous Materials Specialist

ATTACHMENT

c: Ed Laudani, Alameda County Fire Department
Kevin Graves, RWQCB
Gordon Coleman - File(ALL)

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

R0475

RAFAT A. SHAHID, Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
Environmental Protection Division
1131 Harbor Bay Parkway, #250
Alameda, CA 94502-6577
(510) 567-6700

August 8, 1995

STID 651

Mr. Mark Miller
Chevron U.S.A. Products Company
P.O. Box 5004
San Ramon, CA 94583-0804

RE: CHEVRON STATION #9-6991, 2920 CASTRO VALLEY BOULEVARD, CASTRO VALLEY

Dear Mr. Miller:

I have completed review of the July 21, 1995 Gettler-Ryan Inc. (GRI) well installation work plan, as submitted under Chevron cover of the same date. This work plan presents the scope of work associated with the installation of one additional well, designated MW-7, at the subject site.

The cited GRI work plan has been accepted as submitted. Please contact this office when field work has been scheduled to begin. I may be reached at 510/567-6783.

Sincerely,

Scott O. Seery, CHMM
Senior Hazardous Materials Specialist

cc: Rafat A. Shahid, Agency Director
Gil Jensen, Alameda County District Attorney's Office
Ed Laudani, Alameda County Fire Department
Stephen Carter, Gettler-Ryan Inc., 6747 Sierra Ct., Ste. J
Dublin, CA 94568

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

R0475

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

January 29, 1992

Mr. Mike Vomund
Chevron USA, Inc.
P.O. Box 5004
San Ramon, CA 94583-0804

SUBJECT: FIVE YEAR UNDERGROUND STORAGE TANK OPERATING PERMIT
2920 Castro Valley Blvd., Castro Valley, CA 94546

Dear Mr. Vomund:

Please find enclosed a five year underground storage tank permit to operate three (3), single walled tanks with double walled pressurized piping at the subject facility. To operate under a valid permit, you are required to comply with the conditions as described in the revised Title 23, California Code of Regulations (CCR) adopted effective August 9, 1991. The conditions are summarized below:

1) The owner or operator shall comply with the reporting and recording requirements for unauthorized releases, specified in Article 5.

2) Written records of all monitoring and maintenance performed shall be maintained for a period of at least three (3) years. These records must be made available, upon request within 36 hours, to a representative of this office.

3) An operating permit may be transferred to a new underground storage tank owner if all of the following are met: the new owner does not change any conditions of the permit; the transfer is registered with this office within 30 days of the change in ownership; and the tank permit application forms are completed to show the changes. Upon receiving the ownership transfer request this office may review, modify, or terminate the permit to operate the underground storage tank(s).

Title 23, specifies that non-visual monitoring/quantitative release detection be performed. The following methods may be utilized:

a) SINGLE WALLED UNDERGROUND STORAGE TANKS, Section 2643(c)(2)(A&B);
- **annual** tank integrity test, AND
- **monthly** inventory reconciliation

b) DOUBLE WALLED PRESSURIZED PIPING, Section 2643(d);
- **hourly** automatic line leak detector, AND
- **annual** line tightness test

You may utilize other release detection methods for tanks and piping as outlined in Appendix IV of Title 23, CCR. Enclosed is a copy of Appendix IV for your reference. You are required to send written notification to this office regarding any changes in the current monitoring methods.

Inventory reconciliation is an integral part of the non-visual monitoring/quantitative release detection method. The following summary is taken from Title 23, Section 2646.

a) The daily variation in inventory reconciliation shall be the difference between the physically measured inventory in storage and the calculated inventory in storage. Daily variations shall be summed for a period of one month. Monthly variations exceeding a variation of **1% of the monthly tank delivery plus 130 gallons** must be investigated in accordance with this section. Please find enclosed a sample worksheet to perform inventory reconciliation.

b) You are required to submit on an **ANNUAL** basis, a statement to this office which states that all inventory reconciliation data are within allowable variations or, submit a list of the days and corresponding variations which exceeded the allowable variations. Said statement shall be executed under penalty of perjury.

Please note that **after January 1, 1993**, inventory reconciliation, and any other leak detection method that utilizes manual stick

readings, shall NOT be used as part of non-visual monitoring for existing underground storage tanks, where the ground water level or the highest anticipated ground water level is less than 20 feet below the bottom of the tank. If this applies to tanks you operate, another release detection method(s) will need to be selected for tanks and piping as out-lined in Appendix IV.

Consult the revised Title 23, CCR for additional requirements. To obtain a copy of the amended regulations, you may contact the State Water Resources Control Board at (916) 657-0917.

Should you have any questions or concerns regarding the contents of this letter, please contact Robert Weston at (510) 271-4320.

Sincerely,

Scott O. Seery
Senior Hazardous Materials Specialist

SOS:RW:rw

c: Jack Edwards
Files

enclosures
2920.mem

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

RAFAT A. SHAMIM, Assistant Agency Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
80 Swan Way, Rm. 210
Oakland, CA 94621
(415) 271-4300

R0475

January 21, 1992

Mr. Eddie So
Regional Water Quality Control Board-
San Francisco bay Region
2101 Webster Street, 4th Floor
Oakland, CA 94612

RE: PILOT STUDY; CHEVRON STATION #9-6991, 2920 CASTRO VALLEY BOULEVARD, CASTRO VALLEY

Dear Mr. So:

Attached please find a copy of the Groundwater Technology, Inc. (GTI) response to the December 5, 1991 correspondence from this office. You may recall that the referenced December 5 correspondence addressed the results of an initial ground water investigation at this site. This investigation, as well as an investigation at another Chevron site in Oakland, involved the installation of 3/4-inch monitoring wells using an "experimental" Powercore drilling method. The initial results of the well installation at this site seemed less than favorable, primarily because of poor sample recovery, a possible limiting factor with this method.

Following lengthy consultation with your office, it was determined that the relative effectiveness of these small diameter wells had not been established, when compared to the larger-diameter wells in common use for such investigations. In the referenced December 5 correspondence, Chevron was requested to install additional standard sized wells (2-4") adjacent to the 3/4-inch wells installed previously. Further, Chevron was advised that the use of these 3/4-inch wells would not be allowed elsewhere unless proven as effective as larger-diameter wells. To address this point, Chevron was encouraged to use this site for a pilot study.

The attached GTI letter attempts to address some of the apparent limitations to the Powercore method, and informs us that Chevron will be using this site for a pilot study. However, GTI limits the installation of additional standard sized wells to one (1), asserting that only a single well is necessary to validate the data collected from all remaining 3/4-inch wells on-site.

Please review the attached letter at your earliest convenience. Please also provide written comments regarding this issue directly to Ms. Nancy Vukelich of Chevron U.S.A., where appropriate.

Please call me at 510/271-4320 with any questions or comments. I appreciate your attention to this matter.

Sincerely,

Scott O. Seery
Hazardous Materials Specialist

cc: Rafat A. Shahid, Assistant Agency Director, Environmental Health
Edgar Howell, Chief, Hazardous Materials Division
files

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

R0475

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

December 5, 1991

Ms. Nancy Vukelich
Chevron U.S.A. Inc.
2410 Camino Ramon
P.O. Box 5004
San Ramon, CA 94583-0804

RE: CHEVRON SERVICE STATION #9-6991, 2920 CASTRO VALLEY BOULEVARD, CASTRO VALLEY, ALAMEDA COUNTY

Dear Ms. Vukelich:

The Alameda County Environmental Health Department, Hazardous Materials Division, has completed review of the November 11, 1991 Groundwater Technology, Inc. (GTI) preliminary site assessment report (PSA), as submitted under Chevron cover dated November 14, 1991. The noted report documents the results of the PSA, conducted during September and October 1991, which included the installation of three (3) 3/4-inch diameter ground water monitoring using an "experimental" Powercore method, and soil and ground water sampling. Please be advised that the opinions and directives expressed in this letter are in concurrence with the San Francisco Bay Regional Water Quality Control Board (RWQCB).

Review of the cited report indicates that appropriate soil and ground water analyses were not performed as required. The approved GTI work plan, as amended June 14, 1991, acknowledged the requirement for soils and ground water collected from the well completed closest to the former waste oil tank pit (designated MW-1 in the Nov. 11 GTI report) to be analyzed for TPH as both gasoline and diesel, BTEX, TOG, halogenated hydrocarbons, semivolatile organic compounds, and specific metals. These requirements are in accordance with the RWQCB Staff Recommendations for the Initial Evaluation and Investigation of Underground Tanks. Soil and ground water collected from MW-1 were only analyzed for TPH-G, BTEX, and TOG.

The noted GTI work plan, as amended, further acknowledged that soil and ground water samples collected from the wells completed closest to the fuel tank cluster and former product lines (designated MW-2 and -3) would be analyzed for TPH as both gasoline and diesel, and BTEX. Soil and ground water collected from MW-2 and -3 were only analyzed for TPH-G and BTEX.

The limited laboratory analyses data do indicate, however, that ground water and, to a certain extent, soils beneath the site have been impacted by fuel hydrocarbons. Elevated concentrations of TPH-G and BTEX were detected in ground water collected from each well. TPH-G and benzene concentrations were as high as 230 and 45 micrograms per liter (ug/l or ppb), respectively, in MW-1; 110 and 5.1 ppb in MW-2; and, 81 and 1.9 ppb in MW-3. Benzene levels all exceed the state MCL of 1.0 ppb. TOG was not detected in water collected from MW-1. Collected soil samples show negligible or nondetectable concentrations of TPH-G, BTEX, and TOG.

The use of the Powercore method at this site, as previously stated, was an experiment to determine its applicability to well installations and soil sampling in shallow ground water environments. We can only state that, very preliminarily, the 3/4 inch monitoring wells constructed using this technique allowed the collection of ground water at this particular site. Whether or not the 3/4 inch wells allowed the collection of representative ambient ground water samples, or whether such wells will continue to allow the collection of such samples, is unknown.

The Powercore method does have some obvious, practical limitations. The November 11 report documents GTI's difficulty in recovering soil samples from MW-1 during coring. The report does not attempt to explain the possible cause(s) of this failed recovery. One possible explanation for failing to recover samples may be a consequence of the loose clayey- and gravelly-sands encountered in the unsaturated zone in boring MW-1 which, upon removal of the sample barrel, simply would not remain in the barrel. No mention is made whether or not finger-type sample retainers were used. Recovery appears to have been more successful where more cohesive clays and silts were encountered in MW-2 and -3.

Further compounding the difficulty in using this sampling method, the entire string of sample barrels must be removed from the formation to extract the continuous soil core and retrieve the brass-lined soil sample, and presumably to construct the well. Should the formation be poorly consolidated or, as is the case with sediments encountered in boring MW-3, saturated at shallow depth, there is no mechanism to prevent sloughing of the bore hole when the sample barrel is removed. This problem, according to the November 11 GTI report, prevented the collection of representative samples below a depth of 10 feet in MW-3.

Please bear in mind that the results of this experimental drilling project do not constitute a successful pilot study. Without thorough research and successful bench scale/pilot studies that document that Powercore-installed wells, in addition to the soil sampling component, function as effectively as their larger-diameter counterparts using more traditional well boring methods, this drilling method cannot be approved for use elsewhere in Alameda County.

This Department and the RWQCB invite the evaluation of new and innovative technologies that will save time, money, and other resources, and which are less disruptive to the sites being investigated. However, before new technologies can be accepted for widespread use, they must be shown to provide data which allow for the same reproducibility and level of confidence as with those investigative methods already in common use.

Be advised that if Chevron should decide to use the Castro Valley site for a pilot study, the Department and RWQCB will require Chevron to install additional wells of standard diameter (2-4"), using standard drilling techniques (e.g., hollow stem auger). Such wells must be constructed in close proximity to, and have the same overall length and screened intervals as, the existing 3/4 inch wells. All wells would have to be sampled and monitored the same day, and analyzed for the same range of target compounds.

In order to verify that the sample data collected from the 3/4 inch wells are truly representative, the following tasks are considered necessary to complete:

1) Advance one soil boring within 5 feet of each current 3/4 inch well (MW-1, -2, and -3) using standard drilling methods (e.g., hollow stem auger). During boring advancement, soil samples are to be collected every 5-feet, at any significant changes in lithology, or where there is obvious contamination (by visual, olfactory, or organic vapor analyzer indicators). Samples are to be analyzed for TPH-G/D and BTEX. Additionally, soil samples collected from that boring advanced closest to MW-1 (proximal to the former waste oil tank pit) must also be analyzed for halogenated hydrocarbons, semivolatile organic compounds, and metals (Cd, Cr, Ni, Pb, and Zn);

2) New wells are to be a minimum diameter of 2", completed to the same depth, screened over the same interval, and have the same slot size and filter pack as their 3/4 inch counterparts. Ground water collected from all wells (new and existing) is to be analyzed for the presence of TPH-G/D and BTEX. Ground water collected from wells proximal to the former waste oil tank will additionally be analyzed for halogenated hydrocarbons, semivolatile organic compounds, and metals (as listed above). **These analyses are to be performed on samples collected beginning December 1991.**

3) Ground water monitoring and sampling schedules are to adhere to those initially outlined in the June 26, 1991 correspondence from this Department: water level measurements are to be taken for 12 consecutive months; water samples are to be collected monthly for the first quarter, and then quarterly thereafter should contaminant levels stabilize or diminish, unless otherwise directed.

Please be further advised that, should Chevron decide not to use this site for a pilot study, the installation and monitoring of additional standard-sized wells will still be required, as outlined in Tasks 1-3, above. Solely monitoring the 3/4 inch wells currently on site will not be acceptable to this Department or RWQCB.

The results of these additional soil boring, well installation, and soil/water sample analyses, together with the well sampling information for the existing 3/4 inch wells, are to be presented in the 1991 4th quarter report, due for submittal February 1, 1992. The data must be presented such that two discrete data sets are shown, one data set representing each well type for the reported monitoring/sampling period. For example, ground water elevations and subsequent gradient determinations and maps for each well type must be generated and presented separately. All subsequent quarterly reports are to be presented in this fashion.

The 4th quarter 1991 report must also discuss any and all problems encountered earlier while using the Powercore drilling method, in terms of those difficulties noted during boring advancement, soil sampling, and well construction, development, and sampling, among other issues. Provide explanations for the apparent difficulties and possible solutions. The key is to openly discuss the merits and shortcomings of this technology.

Please feel free to contact me at 510/271-4320, and/or Mr. Eddie So of the RWQCB at 510/464-1255, to discuss the contents of this letter.

Sincerely,

Scott O. Seery, CHMM
Hazardous Materials Specialist

cc: Rafat A. Shahid, Assistant Agency Director, Environmental Health
Edgar Howell, Chief, Hazardous Materials Division
Gil Jensen, Alameda County District Attorney's Office
Lester Feldman, RWQCB
Howard Hatayama, DTSC
Bob Bohman, Castro Valley Fire Department
Sandra Lindsey, GTI
files

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

R0475

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

July 29, 1991

Mr. Jack Edwards
3209 Castro Valley Blvd., Suite #4
Castro Valley, CA 94546

Re: Chevron #96991, 2920 Castro Valley Blvd. Castro Valley

NOTICE OF VIOLATION

Dear Mr. Edwards:

As you are aware, on July 24, 1991, Cathy Gates from this office inspected the above premises with regard to issuance of a 5-year permit to operate three underground storage tanks (UST's). Our records indicate that the above facility is operating without any Underground Storage Tank Permits. In order to comply with California Hazardous Material and UST laws, and attain valid UST permits, you must comply with the following:

1) Section 2641(e),(f) Title 23, CCR - **Please submit quarterly reports to the letterhead address above within 10 days of the end of each quarter .** (Currently, these reports are mailed to 470 27th St., Oakland, and have not been received in this office.)

   Use the summary form provided during the inspection instead of the one now used. This form provides space for explanations of discrepancies for each date that exceeds the maximum allowable variance. **You must provide explanations for each listed date which demonstrate that the required steps were followed to prove a leak had not occurred.** (These steps are stated in 2644(f)(1-7), Title 23, CCR and on the back of the provided form.)

2) Sec. 2641(c)(5)(D), Title 23, CCR and Sec. 25292(b)(4)(C), 25291(f), 25291.5(d) Health and Safety Code - **Provide verification of the presence and proper function of in-line leak detectors.**

3) Sec. 2634(d), Title 23, CCR, Sec. 25291.5 - **Provide a maintenance and testing schedule for the CEI-3000 automatic leak detection system.** Include information on

who will be responsible for performing the maintenance and testing, and how records will be kept that demonstrate the schedule was met.

4) Sec. 2712, Title 23, CCR - **Please note that ALL records must be kept on-site for at least 3 years.** In addition to daily inventory reconciliation and quarterly summary reports, this should include precision tests, records for equipment repair, and any other pertinent records.

A 5-year permit will be issued when this office receives:

A. Verification of the presence of In-line leak detectors.
B. The CEI-3000 maintenace and testing plan.
C. Verification that **ALL** monitoring records will be kept on-site.

Please submit the above materials to this office no later than August 29, 1991. Failure to respond in a timely manner could result in civil liabilities under the Health and Safety Code.

Should you have any questions regarding this letter, please feel free to contact Cathy Gates at (415) 271-4320.

Sincerely,

Tom Peacock, Sr. HMS
Hazardous Materials Division

cc: Gil Jensen, Alameda County District Attorney, Consumer and Environmental Protection Division
Mike Vomund, Chevron U.S.A.
Terri Maxoutopoulis, Territory Manager Chevron U.S.A.
files

TP:CG:cg mem11

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

R0475

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

June 26, 1991

Ms. Nancy Vukelich
Chevron U.S.A. Inc.
2410 Camino Ramon
P.O. Box 5004
San Ramon, CA 94583-0804

RE: CHEVRON STATION #9-6991, 2920 CASTRO VALLEY BLVD., CASTRO VALLEY; PRELIMINARY SITE ASSESSMENT PROPOSAL

Dear Ms. Vukelich:

This Department has completed review of the June 14, 1991 Groundwater Technology, Inc. (GTI) addenda to the initial April 26, 1991 GTI preliminary site assessment work plan for the investigation of the referenced Chevron site in Castro Valley. The noted work plan proposes to use an experimental "Powercore" drilling method to investigate the extent of subsurface contamination at this site.

This proposal, as amended, has been accepted with the following conditions:

1) The soil sampling barrels shall be outfitted with stainless steel or brass sleeves during each sample collection event as the sampling barrels are advanced into native materials. Once samples are collected, sample sleeves shall be handled in the same fashion as those collected using standard California-modified, split-spoon samplers.

2) All samples collected in "borings" advanced within 10-feet of each perceived contaminant source (i.e., former piping runs, tanks) shall be analyzed for target compounds appropriate for each potential source. [See: Section III.1.a, of the RWQCB "Guidelines", 10 AUG 91 edition]

3) The June 14 addenda identifies one of the target compounds for soil and water collected from the boring/well advanced closest to the former waste oil tank as "nitrates". This should actually have read **nickel**.

4) Because of the ease of its use, a stainless steel bailer is encouraged over of a Teflon "pipette" for the collection of water samples.

5) We expect to receive a copy of GTI's SOP for sampling QA/QC, as this document was omitted from the June 14 addenda.

A report must be submitted within 45 days of the completion of this phase of work at the site. Subsequent reports are to be submitted **quarterly** for the duration of the investigation until eligible for final "sign-off" by the RWQCB.

Such quarterly reports are due the first day of the second month of each subsequent quarter (i.e., August 1, November 1, February 1, and May 1). Hence, a report documenting work occurring during the third quarter 1991 is due for submittal November 1, 1991; one documenting fourth quarter work is due February 1, 1992, and so forth.

Please adhere to the following minimum monitoring schedule for the initial year of the investigation at this site:

1) Water levels in each well are to be measured and recorded monthly for the next year, and then quarterly thereafter;

2) All (new) monitoring wells are to be sampled **monthly** for the first quarter. Such monthly sampling may be reduced to quarterly after the first three months if concentrations of target compounds remain stable, or diminish, unless otherwise directed;

3) As indicated previously, summary reports are to be submitted to this Department and the RWQCB **quarterly** for the life of this project.

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 may 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 stated deadlines, or modifications of the required tasks, must be confirmed in writing by either this agency or the RWQCB.

Should you have any questions, please call me at 415/ 271-4320.

Sincerely,

Scott O. Seery, CHMM
Hazardous Materials Specialist

cc: Rafat A. Shahid, Assistant Agency Director, Environmental Health
Edgar Howell, Chief, Hazardous Materials Division

cc: (con't)

Gil Jensen, Alameda County District Attorney's Office
Howard Hatayama, DHS
Lester Feldman, RWQCB
Bob Bohman, Castro Valley Fire Department
Glen Mitchell, GTI
files

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

R0475

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

June 4, 1991

Ms. Nancy Vukelich
Chevron U.S.A. Inc.
2410 Camino Ramon
P.O. Box 5004
San Ramon, CA 94583-0804

RE: CHEVRON STATION #9-6991, 2920 CASTRO VALLEY BLVD., CASTRO VALLEY; PRELIMINARY SITE ASSESSMENT PROPOSAL

Dear Ms. Vukelich:

Thank you for the submittal of the April 26, 1991 Groundwater Technology, Inc. (GTI) preliminary site assessment (PSA) work plan, as submitted under Chevron cover dated April 30, 1991. The noted work plan outlines proposed actions to assess the extent of contamination and subsurface conditions at the referenced site using an innovative approach. This approach utilizes "Powercore" drilling technology, and results in the completion of small diameter (0.75 inch) monitoring wells. This technique is reportedly limited to shallow ground water conditions. Proponents of this technique claim some cost benefits as a result of reduced drilling waste production, and minimized disruption of facility operations.

Although this technique appears attractive, several elements of the submitted work plan require clarification. This work plan may be approved for this stage of the investigation provided the following issues are resolved to the satisfaction of this Department:

1) Discuss soil sampling techniques used to meet the requirement for collection of "undisturbed" samples. GTI SOP 14 discusses the use of standard 18 x 2 inch ID split-spoon sample barrels incorporating three 2 x 6 inch brass inserts (California type), yet the work plan indicates that steel 2 inch x 2.5 foot sampling barrels will be used, and that each barrel will, when extracted from the ground between each drive, be "...opened, [allowing] inspection of the continuous soil core sample generated." How will volatile compounds be protected from atmospheric exposure if the cores are opened for inspection? Are there brass or stainless steel liners in these core samplers?

   This section of the work plan also indicates that the field geologist will "...select samples for laboratory analyses from the total core." How will samples be "selected?" [**Note:** SOP 14 discusses field screening techniques when using standard California-modified, split-spoon samplers; however, SOP 14 does not appear to pertain to the planned sampling technique. Hence, we will not assume that the topic of field screening/sample selection has been clarified.]

2) Soil samples collected from borings advanced in closest proximity to the fuel tank cluster and product piping are to be analyzed for total petroleum hydrocarbons as both gasoline and diesel (TPH-G/D), and the volatile compounds benzene, toluene, xylene, and ethylbenzene (BTXE). [Please note that elevated levels of TPH as both diesel and gasoline were discovered in soil during earlier work at the site in proximity to the fuel USTs and piping runs.]

   Those samples collected in the boring advanced closest to the location of the former waste oil tank are to be analyzed for TPH-G/D, BTXE, total oil and grease (TOG), chlorinated hydrocarbons, metals (Cd, Cr, Pb, Zn, and Ni), and semivolatile organic compounds (PCB, PCP, PNA and creosote). These additional analyses are required by the RWQCB for samples associated with waste oil tank leaks, a number of which were **not** analyzed for during the first round of sampling during tank closure, although required.

   The first round of water sample analyses will mimic those for soil samples. The target compounds appropriate for future water analyses will depend upon the outcome of the initial sampling episode.

   For your information, the state-certified laboratory proposed by GTI, Superior Analytical Laboratories, is not presently certified to conduct a number of the required analyses.

3) Soil samples are to be collected every 5 feet, when there are significant changes in lithology, or in areas of obvious contamination noted during boring advancement.

4) Sampling ground water monitoring wells using Peristaltic or air lift pumps is not acceptable. Ground water samples should be collected using means which reduce the loss of volatile compounds, such as with Teflon/stainless steel bailers, or gas-actuated positive displacement pumps. [**See**: Appendix A, Pg. A14, SWRCB LUFT Field Manual, Oct. 1989 edition]

5) The site map should show the former location of the waste oil tank relative to that of the proposed well in this area. The location of this well should be south-southwest, and within 10 feet, of the former waste oil tank pit.

6) Initial ground water data from monitoring wells located at the northwest corner of Anita Avenue and Castro Valley Blvd. indicate that the ground water flow direction at that site, as calculated from data collected December 1990, is towards the southwest. Whether this data is representative of conditions beneath the Chevron site is unclear; however, you may want to modify the proposed location of the well at the southeast corner of the site to reflect this information.

7) Please be certain that wells are surveyed to an established benchmark to an accuracy of 0.01 foot, and that values are referenced to mean sea level.

8) Please submit a ground water sampling QA/QC plan. It is recommended that the QA/QC sampling protocol include such elements as duplicate samples, and trip and equipment blanks, among others.

9) Please submit a Site Safety Plan. The scope of this plan must adhere to guidelines specified under Part 1910.120(i)(2) of 29CFR.

10) You are encouraged to use non-phosphate detergents (i.e., Liqui-Nox) when decontaminating sampling/purging equipment.

Please have your consultant respond in writing to the previous list of items within 15 days, or by June 20, 1991. The response should be in the form of an addendum to the April 26 work plan.

Please feel free to contact me at 415/271-4320 should you have any questions regarding the content of this letter.

Sincerely,

Scott O. Seery, CHMM
Hazardous Materials Specialist

cc: Rafat A. Shahid, Assistant Agency Director, Environmental Health
Edgar Howell, Chief, Hazardous Materials Division
Gil Jensen, Alameda County District Attorney's Office
Lester Feldman, RWQCB
Howard Hatayama, DHS
Bob Bohman, Castro Valley Fire Department
Jack Edwards
Glen Mitchell, GTI
files

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

R0475

Certified Mailer # P 367 604 368

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

April 24, 1991

Ms. Cynthia Wong
Chevron U.S.A. Inc.
2410 Camino Ramon
P.O. Box 5004
San Ramon, CA 94583-0804

RE: DEPOSIT/REFUND ACCOUNTS

Dear Ms. Wong:

This letter follows our telephone conversation this morning regarding the deposit/refund accounts for projects in Castro Valley which are presently in arrears, as they have been for several months. The monetary status of two of these projects was brought to Chevron's attention in November 1990 by way of correspondence requesting the remittance of additional funds to augment those already depleted. The initial notification was followed by a reminder phone call approximately 2 months later when the requested funds had not yet been remitted. To date, no additional funds have been received by this Department.

The following is a list of those sites for which additional funds are required:

	SITE	PROJECT	REQUESTED DEPOSIT
	3005 Castro Valley Blvd.	Station upgrades	$375
(R0350)	5269 Crow Canyon Rd.	UST closures	120
(R0475)	2920 Castro Valley Blvd.	UST closures and station upgrades	121.50*

* Denotes site where remittance of the noted balance will close this account

Once the requested funds are received, each project will be evaluated for closure, except where otherwise indicated. Any balances remaining after final hourly computation will be refunded.

We will expect remittance of the noted funds within 5 working days, **or by May 1, 1991.** Please remit 3 separate checks, one for each of the three accounts, referencing the type of project involved.

Please call me at 415/271-4320 should you have any questions.

Sincerely,

Scott O. Seery, CHMM
Hazardous Materials Specialist

cc: Rafat A. Shahid, Assistant Agency Director, Environmental Health
Edgar Howell, Chief, Hazardous Materials Division
Gil Jensen, Alameda County District Attorney's Office
files

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

R0475

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Program
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February 1, 1991

Ms. Nancy Vukelich
Chevron U.S.A. Inc.
2410 Camino Ramon
P.O. Box 5004
San Ramon, CA 94583-0804

RE: REQUEST FOR PRELIMINARY SITE ASSESSMENT; CHEVRON SERVICE STATION #9-6991, 2920 CASTRO VALLEY BOULEVARD, CASTRO VALLEY

Dear Ms. Vukelich:

This Department is in receipt and has completed review of the December 1990 Groundwater Technology, Inc. (GTI) report, as submitted under Chevron cover dated January 21, 1991, documenting the results of soil sample analyses and other activities associated with the closure of two (2) underground storage tanks (UST) from the referenced site beginning September 11, 1990.

Observations made at the time of closure, and later substantiated through analyses performed upon both soil and ground water samples, indicate that a confirmed release from the UST system(s) has occurred at this site. Initial concentrations of total oil and grease (TOG) were as high as 830 and 1400 parts per million (ppm) in samples AW and AE, respectively, both collected at a depth of 8 feet below grade (BG) at the bottom of the original waste oil UST pit following closure of this tank. A subsequent sample identified in the report as WOM, collected from a depth of 11 feet BG, had TOG concentrations of 2000 ppm. Additionally, sample WOM exhibited the presence of benzene, toluene, ethylbenzene, and total xylenes (BTEX) at concentrations of 26, 7.5, 6.4 and 22 ppm, respectively, as well as the chlorinated compound 1,2-dichlorobenzene at a concentration of 7.8 ppm.

A TOG concentration of 3200 ppm was detected in sample 6A, collected from a depth of 12 feet BG at the west end (sidewall?) of the pit following an initial limited overexcavation of this area. Other samples ranged in TOG concentration from nondetectable (ND) to 1500 ppm, the latter reflecting the analysis of sample 2A, also collected at a depth of 12 feet BG along the north edge (sidewall?) of the pit following the noted limited overexcavation. An extended overexcavation followed, with the resultant analyses indicating latent TOG concentrations ranging from ND to 480 ppm, the latter from sample PH1-10, reportedly collected from a "pothole" at a depth of 10 feet BG at the north edge of the excavation. Ground water collected from this excavation, present at approximately 11 feet BG with samples identified as WOWAT1 and WOWAT2, were analyzed only for total petroleum hydrocarbons as gasoline (TPH-G) with the results indicating 1400 and 510 parts per billion (ppb), respectively.

Because only the northern-most fuel UST was removed, samples collected from within this pit were limited to the pit's north end. Such samples were analyzed for TPH-G and BTEX. Only sample PITNC is noteworthy, with concentrations of TPH-G and BTEX at 63, 0.05, 0.01, 0.52 and 2 ppm, respectively. Ground water welling into the depression left following the removal of the noted tank, and flowing predominantly from the backfill surrounding the remaining tanks, had evident floating product on the water's surface. This water exhibited high concentrations of TPH-G and BTEX. Ground water sample PITWTR1 had concentrations of TPH-G and BTEX, respectively, of 51,000, 5800, 9600, 960 and 13,000 ppb; ground water sample PITWTR2, 54,000, 6200, 10,000, 1100 and 14,000 ppb.

Initial soil samples collected from the product piping trenches adjacent to the former fueling islands showed elevated levels of contamination, especially in the southern-most trench where samples TSW and TSE exhibited concentrations of 52 ppm TPH-G and 1000 ppm TPH as diesel (TPH-D), respectively, at a depth of 3 feet BG. (Note: Figure 3 indicates analyte concentrations in these samples as 34 and 600 ppm, respectively, which differs from the information presented in Table 2.) Following further excavation, latent contamination remains at a highest concentration of 140 ppm TPH-D in sample PT-N7, presumably collected from the north side of the southern-most piping trench at a depth of 7 feet BG (although Figure 4 illustrates that this sample was collected from the south side of the trench).

Clearly there has been a confirmed release at this site. As a result, you must perform additional environmental investigations to determine the lateral and vertical extent of both soil and ground water contamination associated with this release. Such an investigation shall be in the form of a Preliminary Site Assessment, or PSA. The information gathered by the PSA will be used to determine an appropriate course of action to remediate the site, if deemed necessary. The PSA must be conducted in accordance with the RWQCB Staff Recommendations for the Initial Evaluation and Investigation of Underground Tanks. The major elements of such an investigation are summarized in the attached Appendix A.

In order to proceed with a site investigation, you should obtain professional services of a reputable environmental/geotechnical firm. Your responsibility is to have the consultant submit for review a proposal outlining planned activities pertinent to meeting the criteria broadly outlined in this letter and the attached Appendix A.

This Department will oversee the assessment and remediation for this site. This oversight will include our review and comment on work proposals and technical guidance on appropriate investigative approaches. The issuance of well drilling permits, however, will be through the Alameda County Flood Control and Water Conservation District, Zone 7. 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 upon ground water.

The PSA proposal is due within 30 days of the date of this letter, **or by March 3, 1991.** Once this proposal has been reviewed and approved, **work should commence no later than April 3, 1991.** Accompanying this proposal must be a check payable to Alameda County totalling $855 to offset expenses incurred by this Department during oversight of this project. This deposit is placed into an account from which money is drawn at the rate of $67 per hour as time is dedicated to the project.

A report must be submitted within 30 days after the completion of this phase of work at the site. Subsequent reports must 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 (i.e., May 1, August 1, November 1, and February 1).

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

- 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.
- Status of ground water contamination characterization
- Interpretation of results: water level contour maps showing gradients, free and dissolved product plume definition maps for each target component, geologic cross sections, etc.
- Recommendations or plans for additional investigative work or remediation

All reports and proposals must be submitted under seal of a California-Registered Geologist, -Certified Engineering Geologist, or -Registered Civil Engineer. Please include a statement of qualifications for each lead professional involved with this project.

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.

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

Sincerely,

Scott O. Seery
Hazardous Materials Specialist

enclosure

cc: Rafat A. Shahid, Assistant Agency Director, Environmental Health
Edgar Howell, Chief, Hazardous Materials Division
Gil Jensen, Alameda County District Attorney's Office
Lester Feldman, RWQCB
Howard Hatayama, DHS
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Fred Hayden, GTI
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