

RECEIVED

By dehloptoxic at 8:31 am, Nov 17, 2006

C A M B R I A

November 16, 2006

Mr. Barney Chan
Alameda County Environmental Health Services
1131 Harbor Bay Parkway
Alameda, CA 94502

Re: **Response to Agency Letter of October 9, 2006**

Former Chevron SS #9-0329
340 Highland Avenue
Piedmont, California
Alameda County RO0000269



Dear Mr. Chan:

We have received an Alameda County Environmental Health Services (ACEHS) letter, dated October 9, 2006 (Attachment A) regarding the site referenced above. On behalf of Chevron Environmental Management Company (Chevron), Cambria Environmental (Cambria) has prepared this response. The concerns in your letter are addressed below.

Repair of Asphalt Cracks

Chevron agrees that the asphalt should be repaired as soon as possible and suggests that the property owner do so immediately.

Groundwater is a Potential Drinking Water Source

Bedrock beneath the site has been identified at a maximum depth of 6 feet below grade (fbg). Boring logs indicate that below this depth drill cuttings have been described as moist or damp, as opposed to the saturated conditions above. For groundwater to be considered of beneficial use, wells constructed within an aquifer must be capable of producing at least 200 gallons per day. Based on recorded purge data collected during groundwater sampling and the known thickness of the saturated zone, it does not appear that on site wells would sustain a flow of 200 gallons per day. Therefore, there is an insufficient wetted sediment thickness beneath the site to sustain groundwater production, and consequently, groundwater beneath the site should not be considered of beneficial use.

**Cambria
Environmental
Technology, Inc.**

5900 Hollis Street
Suite A
Emeryville, CA 94608
Tel (510) 420-0700
Fax (510) 420-9170

Water service in Piedmont is provided by East Bay Municipal Utility District and in a completely developed neighborhood there is a minimal likelihood that new wells would be installed. Additionally, use of the shallowest occurrence of groundwater is generally discouraged due to the high

C A M B R I A

potential for contamination by commonly used household and garden chemicals, septic systems and infiltration of other potential spills and releases. Alameda County Department of Public Works (ACDPW) requires permitted wells to be completed at depths greater than 20 feet. ACDPW also requires seals on domestic wells to be a minimum of 20 feet and on municipal or industrial wells to be a minimum of 50 feet. Data gathered to date indicate that there would be no communication between near surface groundwater and water produced from any permitted well.

Site Conceptual Model



The idea of a tub-like condition existing beneath the site arises from the existence of the shallow bedrock surface. To achieve the necessary burial depth for USTs, the tank cavity was dug into competent bedrock. Boring logs indicate that water occurs above the bedrock surface denoted from approximately 1.5 to 6 fbg, depending on site location. To accommodate the size of the USTs and specific engineering requirements, burial depth would be approximately 12-15 fbg. Groundwater traveling across the bedrock surface would fill in the tank cavity and remain perched due to the competent bedrock below it. Therefore, the bath tub scenario would be an applicable description of conditions as they relate to the USTs. Evidence for this scenario is presented in the document titled, *Site Conceptual Model and Workplan*, dated October 21, 2003. The fact that groundwater emerges through the weathered asphalt is more a function of hydraulic head resulting from the grade of the site and that the entire site is capped by asphalt and concrete. Since the asphalt capping continues downgradient of the site (out into the intersection) this condition would continue offsite. Offsite well C-6 has exhibited this condition with several reported depths to water of 0.00 fbg, although no reports of artesian conditions have been reported on field data sheets.

In May 1994, well MW-6 was drilled and completed on the south side of Highland Avenue, adjacent to Piedmont Park. The day following well completion, it was noted that artesian conditions existed, indicating an upward hydraulic gradient in the immediate area surrounding MW-6. However, at the same time, no upward hydraulic gradient was observed in any onsite wells. Nor have artesian conditions ever been observed in subsequently installed offsite wells C-5 and C-6, located at approximately the same elevation as former well MW-6. This suggests that there is no hydraulic connection between the former MW-6 and other site wells, and that bedrock beneath the site would appear to be laterally and vertically competent. Therefore, bedrock beneath the site does not give any indication of sufficient fracturing to provide migration pathways.

C A M B R I A



The previously conducted investigation consisting of hand augered borings on two extensive transects perpendicular to groundwater flow showed that no hydrocarbons have migrated downgradient to an area where they could emerge onto the surface. If there were multiple pathways by which groundwater were migrating, they would have been detected during the 2004-2005 hand augering investigation, as these transects were specifically designed to detect any channels or other possible preferential migration pathways. As expected, no potential preferential pathways were detected in the hand augered borings. Hydrocarbon impacted soil and groundwater were detected in several borings located in the lowest spot on the site which should correspond to the lowest bedrock surface, as well. However, no hydrocarbons in either soil or groundwater were detected in borings along the second transect, further downslope (and down gradient). Data acquired through several investigations conducted at and near the site suggest that the dissolved hydrocarbon plume is confined to the vicinity of the USTs, the dispenser island and, potentially, some near distance downgradient of the site.

Responsible Party Status

Chevron and Cambria feel that there is evidence of two to three generations of releases at the site. The fact that a 3/4-inch accumulation of separate phase hydrocarbons (SPH) was detected in well C-2 upon installation in 1983 suggests a non-oxygenated fuel release prior to 1983. This accumulation of SPH was a one time occurrence. Despite similar groundwater elevations subsequent to this, no measurable thicknesses of SPH have been observed since 1983. Increasing TPHg and benzene concentration trends from below saturation concentrations in well C-2 that peaked between 1993 and 1995 indicate a likely second gasoline release. The third release is evidenced by increasing MTBE concentrations in C-2 that peaked in 1997, seven years after Chevron ceased operations at the site. No copies of any filed Unauthorized Release Reports were located. The only evidence of releases is based on hydrocarbon detections in soil and groundwater. While the 1983 release definitely occurred while Chevron operated at the site, the two inferred subsequent releases, based on dissolved hydrocarbon constituent trends, would appear to have occurred after Chevron ceased operation at the site. It is on this basis that Chevron feels they are not the primary contributor to the environmental conditions existing beneath the subject site.

Site Closure Request

Chevron and Cambria contend that environmental conditions onsite do not warrant active remediation efforts. Several offsite investigations indicate that migration of impacted groundwater attenuates beneath the intersection and that utility trench backfill is not providing preferential pathways for hydrocarbon migration. ACEHS requested a preferential pathway study in a September 18, 2003

C A M B R I A

letter. A workplan, included in the Site Conceptual Model, was submitted on October 21, 2003 describing a scope of work to identify potential preferential pathways along the bedrock surface. Discussions between Cambria, Chevron and Mr. Scott Seery of ACEHS produced a verbal agreement that if no preferential migration pathways were discovered, case closure would be granted. No preferential pathways indicating hydrocarbon migration were discovered during the course of the investigation. If ACEHS does not concur with site closure at this time, it is felt that the only warranted site activity would be a possible resumption of groundwater monitoring coordinated by, and at the expense of, subsequent station operators.

Additional Groundwater Sampling



Historical groundwater data indicate that in February 2002 and February 2003, all wells were analyzed for ethanol, TBA, MTBE, DIPE, ETBE, TAME and lead scavengers 1,2-DCA (EDC) and EDB. With the exception of wells C-2 and C-4, analytic results indicate no oxygenates or lead scavengers were detected in any wells. Well C-2 contained MTBE, TBA and TAME, while C-4 contained 24 parts-per-billion (ppb) MTBE in February 2002 and 3 ppb MTBE in May 2006 (Well C-4 is located immediately adjacent to the drive slab on the downslope/downgradient side of the dispenser island). The sampling event of May 2006 was conducted to provide data for an evaluation of conditions as they related to the asphalt seep.

Upon receipt of you October 9, 2006 letter, and seeing a reference to your May 6, 2006 letter, Ms. Laura Genin notified you that she had never received a copy of the May 2006 letter. As a result, City of Piedmont Well No. 4 has not been sampled. We will begin the process to acquire well construction details and gain access to the well to collect a water sample. In addition to collecting a water sample from City of Piedmont Well No. 4, one final event of groundwater sampling will be conducted from all wells associated with the site to assess current groundwater conditions. Chevron declines the request to sample the surface waters of Piedmont Creek because there would be no way to differentiate any potential hydrocarbon detections from either infiltration from groundwater or some other upstream source. The creek runs through a culvert upstream of the park and it is unknown where it daylights up the slope and what potential sources may be elsewhere within its drainage.

CLOSING

We appreciate this opportunity to work with you on this project. Please contact Mr. Robert Foss at (510) 420-3348 or Mr. Satya Sinha at (925) 842-9876 if you have any questions or comments.

Mr. Barney Chan
November 16, 2006

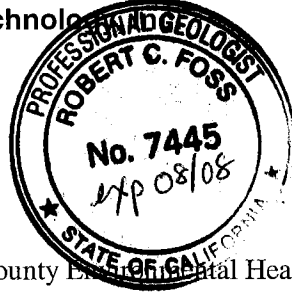
C A M B R I A

Sincerely

Cambria Environmental Technology, Inc.



Robert Foss, P.G. #7445
Associate Geologist



Attachment: A – Alameda County Department of Public Health Services Letter, October 9, 2006.

cc: Mr. Satya Sinha, Chevron, P.O. Box 6012, San Ramon, CA 94583
Mr. Ravi Randhawa, 4840 Bernal Ave. Apt A, Pleasanton, CA 94566-1133
Mr. Mir Ghafari, 68 Bates Blvd., Orinda, CA 94563
Mr. Fred Machouri, 1065 Shuey Dr., Moraga, CA 94556
Mr. Frank Hoffman, Hoffman Investment Co., 1760 Willow Rd., Hillsborough, CA 94010
Mr. Howard Perera, 340 Highland Avenue, Piedmont, CA 94611



II:\9-0329 Piedmont\Reg Response to 10-9-06 ltr\90329 Reg Response to 10-09-06 ltr.doc

Cambria Environmental Technology, Inc. (Cambria) prepared this document for use by our client and appropriate regulatory agencies. It is based partially on information available to Cambria from outside sources and/or in the public domain, and partially on information supplied by Cambria and its subcontractors. Cambria makes no warranty or guarantee, expressed or implied, included or intended in this document, with respect to the accuracy of information obtained from these outside sources or the public domain, or any conclusions or recommendations based on information that was not independently verified by Cambria. This document represents the best professional judgment of Cambria. None of the work performed hereunder constitutes or shall be represented as a legal opinion of any kind or nature.

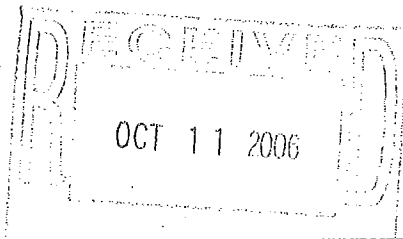
ATTACHMENT A

Alameda County Environmental Health Services Letter

October 9, 2006

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director



October 9, 2006

Mr. Satya Sinha
Chevron Environmental Management Co.
P.O. Box 6012, Room K2256
San Ramon, CA 94583

Mr. Howard Pereira
340 Highland Ave.
Piedmont, CA 94611
(510) 567-6700
FAX (510) 337-9335

Mr. Ravi Randhawa
5501 San Antonio St.
Pleasanton, CA 94566

Mr. Mir Ghafari
68 Bates Blvd.
Orinda, CA 94563

Mr. Fred Machouri
1065 Shuey Dr.,
Moraga, CA 94556

Mr. John Robinson
Hoffman Investment Co.
1035 Edwards Rd.,
Burlingame, CA 94010

Mr. Jeff Orwig
66 Ambleside Ct.
Danville, CA 94526

Dear Gentlemen:

Subject: Fuel Leak Case RO0000269, Chevron Station #9-0329, 340 Highland Ave.,
Piedmont, CA

Alameda County Environmental Health (ACEH) staff has reviewed the case file for the subject site including the August 3, 2006 Water Seep Assessment by Cambria. This report responds to concerns from the City of Piedmont regarding water seepage coming through cracks in the asphalt near the entrance of the subject service station. Evaluation of risk to human health was made using sampling results from a near-by well. In addition, a request for site closure was reiterated. We request that you address the following technical comments and submit the technical reports requested below.

TECHNICAL COMMENTS

1. Risk Evaluation of Groundwater of Water Seeping from Cracks in Asphalt- The evaluation of human health risks due to contaminated groundwater seeping from cracks in asphalt at the site was based on the May 2006 groundwater sample results from well C-2, which is proximal to the crack area. The water sample from well C-2 contained 2,400 ppb of TPHd, 6,100 ppb of TPHg, and 400, 9, 110, 27, 690 ppb of BTEX and MTBE, respectively. Potential vapor intrusion and dermal contact were the only potential exposure pathways considered in the risk evaluation. The Seep Assessment concludes that the concentrations for BTEX and MTBE detected in the groundwater sample from well C-2 would appear not to pose a human health risk from vapor intrusion or dermal contact. However, since the storm drain is a likely receptor for the seeping water, effects on aquatic habitat must also be considered. The concentrations of TPHg, TPHd, and benzene exceed ESLs for aquatic habitat

goals. Therefore, we recommend the asphalt cracks be repaired immediately to prevent discharge to storm drains and protect the public from accidental trips and falls and chemical odors.

Groundwater Is a Potential Drinking Water Source. Groundwater at the site is a potential drinking water source and drinking water toxicity must be considered for case closure. The concentrations of TPHg, TPHd, benzene, and MTBE detected in groundwater all exceed the ceiling values for taste and odor and drinking water toxicity. This type of risk evaluation is required in the context of site closure, as it includes all current and potential future exposure pathways.

2. Site Conceptual Model- The premise of a tub-like scenario existing on-site preventing contaminant migration is not likely the true scenario. As indicated by the upward hydraulic gradient causing the seep, groundwater is not likely to be in a static condition at the site. Groundwater is likely to discharge at the surface on site and down-gradient from the site due to an upward hydraulic gradient. In addition, groundwater would be expected to migrate off-site through multiple pathways. The exact pathways may be difficult to identify, however, the absence of off-site contaminant detection is not an indication that groundwater has not moved off-site, rather that the pathways have not yet been identified and sampled.
3. RP Status- Chevron has indicated in their reports that the presence of MTBE and TPHd in groundwater suggests a primary RP other than Chevron. Our office currently does not have sufficient information to re-delegate primary responsible party status and shall, therefore, continue to address our requests collectively to all responsible parties as currently named.
4. Site Closure Request- Current and past petroleum concentrations on-site are of concern. It appears that multiple releases have occurred at the site. The elevated on-site concentrations, past and present, indicate either ongoing releases and/or significant residual contamination without significant bio-attenuation occurring. Therefore, we do not concur with site closure at this time. To facilitate closure, we recommend on-site interim remediation be performed. Assuming your SCM is correct, in the absence of an on-going release, groundwater remediation would be expected to reduce on-site well concentrations. Please provide an interim remediation work plan as requested below.
5. Additional Groundwater Sampling- Our previous 5/2/06 letter requested all onsite wells be sampled for TPHg, MTBE, TAME, ETBE, DIPE, TBA, EDB, and EDC. Do tank-backfill wells still exist at the site? If so, please sample these wells and provide their results as requested. You were also requested to obtain the construction diagram and sample the City of Piedmont well #4 and sample the nearby creek. Please address these items and respond in the interim remediation work plan requested below.

TECHNICAL REPORT REQUEST

Please submit the following technical report to our office according to the following schedule:

- November 13, 2006 - Interim Remediation Work Plan
- November 13, 2006 - Onsite wells and City of Piedmont well #4 sample result, well construction diagram for well #4 and creek sampling data or response.

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

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. Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. 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 at http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting for more information on these requirements. In order to facilitate electronic correspondence, we request that you provide up to date electronic mail addresses for all responsible and interested parties. Please provide current electronic mail addresses and notify us of future changes to electronic mail addresses by sending an electronic mail message to me at barney.chan@acgov.org.

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.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to \$10,000 per day for each day of violation.

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

Sincerely,



Barney M. Chan
Hazardous Materials Specialist

cc: files, Donna Drogos
Ms. Laura Genin, Cambria Environmental, 5900 Hollis St., Suite A, Emeryville,
CA, 94608
Mr. Lawrence Rosenberg, Director of Public Works, City of Piedmont, 120 Vista
Ave., Piedmont, CA 94611
Mr. Chester Nakahara, Director of Public Works, City of Piedmont, 120 Vista
Ave., Piedmont, CA 94611