



**Shell Oil Products US**

November 18, 2002

R0433

Mr. Barney Chan  
Alameda County Health Care Services Agency  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-6577

**Alameda County**  
NOV 21 2002  
**Environmental Health**

**Subject: Former Shell Service Station**  
1230 14<sup>th</sup> Street  
Oakland, California

Dear Mr. Chan:

Attached for your review and comment is a copy of the *Subsurface Investigation Report and Corrective Action Plan – Addendum 2* for the above referenced site. Upon information and belief, I declare, under penalty of perjury, that the information contained in the attached document is true and correct.

As always, please feel free to contact me directly at (559) 645-9306 with any questions or concerns.

Sincerely,

**Shell Oil Products US**

*Karen Petryna*

Karen Petryna  
Sr. Environmental Engineer

November 18, 2002

Mr. Barney Chan  
Alameda County Health Care Services Agency  
Department of Environmental Health  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502

Re: **Subsurface Investigation Report and Corrective Action Plan – Addendum 2**  
Former Shell Service Station  
1230 14<sup>th</sup> Street  
Oakland, California  
Incident #: 97088250  
Cambria Project #: 244-0233



Dear Mr. Chan,

On behalf of Equilon Enterprises LLC dba Shell Oil Products US, Cambria Environmental Technology, Inc. (Cambria) is submitting this response to Alameda Health Care Services Agency's (ACHCSA) letter dated October 21, 2002 responding to Cambria's September 12, 2002 *Subsurface Investigation Report and Corrective Action Plan - Addendum*.


1. **Assessor Parcel Numbers for Neighboring Properties:** As requested, the assessor's parcel numbers have been added to the list of properties surveyed in Cambria's July 23, 2002 door-to-door well survey, provided in Table 1.
2. **Confirmation of Non-Existence of DeFremery Park Well:** Cambria has made a concerted effort to determine whether the well in DeFremery Park still exists. We have reviewed Department of Water Resources well records, conducted a site reconnaissance visit, and contacted City of Oakland employees who are knowledgeable about the park, including a former groundskeeper at the park, the current Plumbing and Area Maintenance Supervisor for Buildings and Grounds in the City of Oakland, and the current Supervisor of Parks and Recreation for the City of Oakland. Cambria has been unable to find evidence that this well still exists. We have exhausted all our avenues for determining the status of this well, and we do not know of any other resources for this information. Even if the well were to exist, it is certainly not in use. No known use of groundwater for municipal, industrial, or domestic uses is known in the area.
3. **a. Cleanup Levels and Goals:** Thank you for clarifying the difference between cleanup levels and cleanup goals. As stated in previous correspondence, the purpose of the proposed corrective action is to remediate site soils to the cleanup goals; thus, cleanup

Oakland, CA  
San Ramon, CA  
Sonoma, CA

**Cambria  
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levels for the proposed remedial action and the long-term cleanup goals are equivalent for this site. As requested, cleanup levels and goals are provided in Table 2. The cleanup levels and goals are based on the City of Oakland's risk-based screening levels (RBSLs) for volatilization of benzene, ethylbenzene, toluene and xylenes from subsurface soil and groundwater to indoor air in a residential setting, for Merritt Sands. Since the site is located in Oakland, Cambria believes that San Francisco Bay Regional Water Quality Control Board (SF RWQCB) guidance recommends use of the "Oakland RBSLs". As stated by the SF RWQCB on their website,




"The City of Oakland has developed a Risk-Based Corrective Action Program specifically for use in Oakland. This program can be used separately or in conjunction with the subject RBSL document for sites overseen by the RWQCB in Oakland"

Therefore, Cambria believes that use of the Oakland RBSLs and methodology to evaluate risks at the site is appropriate.

- b. Use of Total Petroleum Hydrocarbons as Gasoline (TPHg) Measurements:** Cambria's September 12, 2002 *Subsurface Investigation Report and Corrective Action Plan - Addendum* referred to the *Standard Guide for Risk-Based Corrective Action Applied at Petroleum Release Sites* (ASTM 1739-95) to explain why total petroleum hydrocarbons (TPH) were not included in the list of contaminants of concern. Section 6.4.3 of that document states that "the TPHs should not be used for risk assessment because the general measure of TPH provides insufficient information about the amounts of individual chemicals of concern present." In addition, the Oakland RBSLs do not include RBSLs for hydrocarbon mixtures such as TPHg. However, in response to your request, Cambria will include the RBSL for SF RWQCB Tier 1 RBSL for TPH (gasoline) contained in the RBSL Lookup Tables B and D for surface and subsurface soils and groundwater where groundwater is NOT a current or potential source of drinking water as one of the cleanup levels/goals for the site. (*Application of Risk-Based Screening Levels and Decision Making to Sites with Impacted Soil and Groundwater, Interim Final, Volumes I and II*, SF RWQCB, December 2001).
- c. Evaluation of All Complete Exposure Pathways:** An evaluation of all potential complete exposure pathways and justification for the elimination of those not evaluated was included in Cambria's March 7, 2002 *Risk-Base Corrective Action Report* (RBCA). A similar evaluation will be provided with any future risk assessment.
- d. Oakland RBCA Eligibility Checklist:** Cambria determined that the site met all of the requirements to be eligible for use of the Oakland RBCA methodology, and the Oakland

RBCA Eligibility Checklist was included in our March 7, 2002 RBCA. A copy is included for your reference (Attachment A).

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- e. Grain Size Analysis:* In compliance with the requirements of the *Oakland Urban Land Redevelopment Program: Guidance Document*, a grain size analysis of soil at the site will be obtained from post-remediation soil samples. The results will be used to verify the appropriateness of the use of the Oakland RBSLs for "Merritt Sands."
- 4. Evaluation of Human Health Risk Considering Current and Historic Depths to Water:** As stated above, Cambria believes that the use of Oakland RBSLs and methodology to evaluate risks at the site is appropriate. We are not aware of any requirement to consider historic depths to water in either the Oakland or SF RWQCB guidance document referenced in item 3b, above. Nor do we consider it appropriate or feasible to do so. According to protocol, we have evaluated the risk from current conditions in both soil and groundwater. Per your request, we will conduct remediation at the site, according to our corrective action plan, and thereafter, collect new soil and groundwater samples for analysis, and use those results in order to run a new risk analysis.
- 5. Remediation Verification Sampling Plan:** As noted in our September 12, 2002 addendum, remedial action is driven by potential risks due to benzene concentrations in groundwater, and there is no current indication of hydrocarbon impact to unsaturated soil above 12.5 feet below grade. Since there is no indication that unsaturated soils require remediation, we do not agree that further soil samples are warranted; however, our verification sampling plan will include soil as well as groundwater confirmation samples, as requested. Also, as requested, a remediation report and verification sampling work plan will be submitted 45 days after completion of remediation.
- 6. Information Notices:** As requested, we will post informational signs on the perimeter fence while remedial activities are in progress.

## SCHEDULE

We will schedule remediation activities upon completion of the public review process. As requested, the requested technical reports will be submitted according to the schedule proposed in your September 21, 2002 letter. Please note that the *Third Quarter 2002 Monitoring Report* was submitted on October 15, 2002.

**CLOSING**

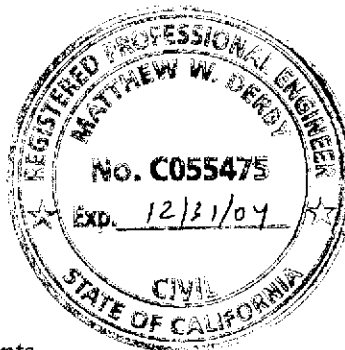
We hope that this response to your technical comments meets your approval. If you have any questions or comments, please call Melody Munz at (510) 420-3324.

Sincerely,  
**Cambria Environmental Technology, Inc.**



*M. Munz*  
Melody Munz  
Project Engineer

*Matthew W. Derby*  
Matthew W. Derby, P.E.  
Senior Project Engineer



Tables:           1 - Neighboring Property Owners/Residents  
                      2 - Proposed Cleanup Levels and Cleanup Goals

Attachment:     A - Oakland RBCA Eligibility Checklist

cc:               Karen Petryna, Shell Oil Products US, P.O. Box 7869, Burbank, CA 91510-7869  
                      Tom Saberi, 1045 Airport Boulevard, Suite 12, South San Francisco, CA 94080  
                      Matthew Dudley, Sedgwick, Detert, Moran, & Arnold, 1 Embarcadero Center,  
                      16<sup>th</sup> Floor, San Francisco, CA 94111-3628

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**Table 1. Neighboring Property Owners/Residents**  
Former Shell Service Station, Incident #97088250, 1230 14th Street, Oakland, CA

Address	Assessor's Parcel Number	Property Owner Name*	Property Owner Telephone	Resident Name	Resident Telephone
1418-1420 Union <sup>(2)</sup> (duplex)	5-377-20	Matthew Willingham	510-451-7877	Harris	
1426 Union	5-377-21	Grobelny	925-676-2610	Grobelny	925-676-2610
1430-32 Union (duplex)	5-377-22	Kelly		Occupant	
1434-36 Union (duplex)	5-377-23	Willingham	510-451-5340	Willingham	510-451-5340
1504 Union	5-377-24	Narcisse	510-813-7208	Roberts	510-813-7208
1508-10 Union (duplex)	5-377-25	Mack & Cleveland		Mack	
1520 Union	5-377-26	Robinson		Robinson	
1528-30 Union (duplex)	5-377-1-1	Robinson		Occupant	
1266 14th Street	5-376-9-1		510-839-1500	Comm-Air Mechanical	510-839-1500
1210 14th Street	5-377-15	Jones		Occupant	
1204-06-08 14th Street (triplex)	5-377-14	Secrease		Occupant	
1216 14th Street <sup>(2)</sup>	5-377-16	Irene Rong	510-272-0290	Jones	510-272-0290
1415 Magnolia	5-377-13-1	Bracey & Wilson		Occupant	
1419 Magnolia	5-377-12	Mackey	510-452-5547	Mackey	510-452-5547
1421-23 Magnolia (duplex)	5-377-11	Tyler		Scott	
1424 Magnolia	5-378-22	Miles & Wormley	510-625-9271	Pector	510-625-9271
1427 Magnolia	5-377-10-1	Sweeney		Sweeny	
1501 Magnolia	5-377-9-2	Kuang		Occupant	
1509 Magnolia	5-377-8	Garcia		Occupant	
1515 Magnolia	5-377-7	Donald		Donald	
1521 Magnolia	5-377-6	Phung		Fong	
1527 Magnolia	5-377-5	Harrison		Occupant	
1533 Magnolia	5-377-4	Lake		Occupant	
1539 Magnolia	5-377-3	Lee		Lee	
1219-21 16th Street (duplex)	5-377-2	Young		Occupant	
1225-27 16th Street (duplex)	5-377-1-4	Quin		Winslow	
1229-31 16th Street (duplex)	5-377-1-3	Daniels		Occupant	
1532 Magnolia	5-378-1	Cannon		Occupant	
1522 Magnolia	5-378-27	Quiyan		Quiyan	
1518-16 Magnolia (duplex)	5-378-26	Robinson		Robinson	
1512 Magnolia	5-378-25	Dawson		Occupant	
1508 Magnolia	5-378-24	Miles	510-832-7743	Miles	510-832-7743
1504 Magnolia	5-378-23	Bowie		Bowie	
1420 Magnolia	5-378-21	Parkinson	510-835-2290	Parkinson	510-835-2290
1416 Magnolia	5-378-20	Rambo		Rambo	
1410 Magnolia	5-378-19-2	Brooks		Occupant	

\* Owner name according to Alameda County Assessor's Records May 1999

<sup>(1)</sup> Ellen Wyrick-Parkinson, owner/tenant at 1420 Magnolia, is the president of the neighborhood association.

<sup>(2)</sup> Properties immediately adjacent to subject site

**Table 2. Cleanup Levels and Cleanup Goals**

Former Shell Service Station, Incident #97088250, 1230 14th Street, Oakland, CA

Chemical of Concern	Cleanup Level		Cleanup Goal	
	Soil <sup>(1)</sup> (ppm)	Groundwater <sup>(2)</sup> (ppb)	Soil <sup>(1)</sup> (ppm)	Groundwater <sup>(2)</sup> (ppb)
Benzene	0.7	1,400	0.7	1,400
Toluene	370	>Sol	370	>Sol
Ethylbenzene	SAT	>Sol	SAT	>Sol
Xylenes	SAT	>Sol	SAT	>Sol
TPHg	400 <sup>(3)</sup>	500 <sup>(3)</sup>	400 <sup>(3)</sup>	500 <sup>(3)</sup>

<sup>(1)</sup> Oakland RBSL for volatilization of BTEX from groundwater into indoor air in a residential setting, for Merritt Sands

<sup>(2)</sup> Oakland RBSL for volatilization of BTEX from subsurface soil to indoor air in a residential setting, for Merritt Sands

<sup>(3)</sup> SF RWQCB Tier 1 Lookup Table D, Interim Final December 2001

SAT = RBSL exceeds the saturated soil concentration of the chemical

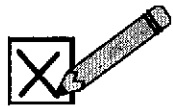
>Sol = RBSL exceeds solubility of chemical in water

**ATTACHMENT A**

**Oakland RBCA Eligibility Checklist**



## Oakland RBCA Eligibility Checklist



The Oakland Tier 1 RBSLs and Tier 2 SSTLs are intended to address human health and environmental concerns at the majority of small to medium-sized sites in Oakland where commonly-found contaminants are present. Large and/or complicated sites—especially those with continuing releases, special ecological concerns or unusual subsurface conditions—will likely require a Tier 3 analysis. The following checklist is designed to assist you in determining your site's eligibility for the Oakland RBCA levels.

CRITERIA	YES	NO
<b>Source:</b>		
Is there a continuing, <i>primary</i> source of a chemical of concern, such as a leaking container, tank or pipe? (This does <i>not</i> include secondary/residual sources.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is there any mobile or potentially-mobile free product?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Are there more than five chemicals of concern at the site, each of which is at a concentration greater than the lowest applicable Oakland RBCA level?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Pathways:</b>		
Are there any preferential migration pathways—such as sand or gravel channels, or utility corridors—that are potential conduits for the migration, on-site or off-site, of a chemical of concern?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is there a chemical of concern at the site within 20 feet of a surface water body?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If groundwater ingestion is <i>not</i> an exposure pathway of concern (i.e., MCLs will <i>not</i> figure in the risk analysis), does groundwater at the site both (a) exist at depths less than 10 feet <i>and</i> (b) contain volatile chemicals of concern? (If groundwater ingestion <i>is</i> an exposure pathway of concern, this criterion may be disregarded because the MCL-based Oakland RBCA levels will be protective for all potential groundwater-related exposure scenarios.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Are there any existing structures, either on site or off site, that (a) are intended for future use <i>and</i> (b) are adjacent to volatile chemicals of concern <i>and</i> (c) have foundations or basement walls that are less than 15 cm (6 inches) thick (i.e., do not meet Uniform Building Code standards)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Receptors:</b>		
Are there any immediate health risks to humans (i.e., explosive levels of a chemical or vapor concentrations that could cause acute health effects) as a result of contamination at the site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Are there any complete pathways to nearby ecological receptors, such as endangered species, wildlife refuge areas, wetlands or protected areas?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If you answer "no" to all questions, your site is eligible for the Oakland RBCA levels. If you answer "yes" to any of the questions, your site is *not* eligible for the Oakland Tier 1 or Tier 2 RBCA levels.