If the resident has pets that will not be staying at the hotel, the resident will be given the option to board the pets at a facility selected and reserved by Cartus, or to make their own arrangements to board pets with an allowance of $30 per day per pet. Additionally, Shell will pay for updated shots if the pet is not current on vaccinations required for boarding. Shell understands that some pets have special needs, such as regular medication, that might increase the cost of boarding a pet, and will take such special needs requests under consideration when provided an explanation of the need.

Security

While residents are temporarily relocated, onsite security, consisting of an off-duty law enforcement officer, will be present at each area where active remediation work is being conducted and the residents are relocated during the hours that URS or its subcontractor personnel are not present onsite. When working on both sides of a block, a security officer will be stationed on each street. A relief officer will be present in the neighborhood to relieve the onsite officer(s) for meal and rest breaks. In the event of an emergency, including suspicious persons/activities at or near the residence, emergency services will be contacted immediately by calling 911, followed by the resident or their designated legal representative, and URS. If the situation is not an emergency, URS will be notified immediately or, if after hours, at the start of the next working day. All verbal notifications will be followed by written documentation of the incident within 24 hours; including date, time, and description of the incident; who was contacted, and time the resident or their legal representative and URS representative were notified.
Attachment A

USE OF PROPERTY AND ACKNOWLEDGMENT OF PAYMENT TO OCCUPANTS

Company and Responsible Occupants agree as follows:

Agreement: This Use of Property and Acknowledgment of Payment to Occupants

Property Address:

Responsible Occupants (Owner or Tenant):

Company: Shell Oil Company

Activities: Excavation yard of Property including hardscape, and Restoration of Property

Leave Date:

Return Date:

Excavation and Restoration Period: The Leave Date through the Return Date

Number of Days in Excavation and Restoration Period:

Number of Nights in Excavation and Restoration Period:

Number of Occupants in Home (including Responsible Occupants) and Number of Pets to be Boarded:

Payment to Responsible Occupants: $XXX TOTAL PAYMENT AMOUNT If one or more Occupants decide to stay at the house after having asked for alternative accommodations, the amounts provided for those accommodations will be adjusted accordingly.

What Company will do: (a) Have the right to use the Property for Remediation purposes during the Excavation and Restoration Period; (b) Pay to the Responsible Occupants the Total Payment Amount; (c) Repair any damage to the Property caused by Company’s use of the Property during the Excavation and Restoration Period.

What Responsible Occupants will do: (a) Have all of the Occupants and pets leave the Home on or before the Leave Date and keep all Occupants and pets away from the Property during the entire Excavation Period until the specified Return Date; (b) Allow Company to use the Property during the Period for Excavation and Restoration (even if occupant elects to return during Restoration activities); (c) Notify Company of all known hazards or risks in the Property and in the Home; (d) Comply with all Rules of Occupancy at the temporary living facility/hotel during the Occupants’ stay.

No Admission of Liability: Company is not admitting to any liability relating to the Property or the Home or any environmental matter relating to the Property or the Home by signing and performing this Agreement or conducting the Excavation and Restoration.

Signed as of <Date>.

RESPONSIBLE OCCUPANTS:

COMPANY:

[Signature]

[Signature]

[Signature]
## Attachment B

### Sample Resident Questionnaire for Determining Temporary Relocation Assistance

Please provide all applicable information.

**Head of Household** (Select one adult to represent the family. This is the name of the person that the temporary assistance payment will be made out to or to whose account the payment will be sent):

**Primary Residence Address:**

**Occupancy Basis at Primary Address:**

- [ ] Owner
- [ ] Tenant
- [ ] Living with Friend or Family. No rent paid.

**Type of Primary Residence**

- [ ] House
- [ ] Mobile Home
- [ ] Apartment
- [ ] Other

**Name and Address of Landlord/Mortgage Holder at Primary Address:**

### Phone Numbers of Residents

<table>
<thead>
<tr>
<th>Residence phone</th>
<th>Cell phone (and name)</th>
<th>Head of Household work or other #</th>
</tr>
</thead>
</table>

### Occupants at Primary Address

<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Sex</th>
<th>Relationship to Head(s) of Household</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Needs? (e.g., handicap accessible, special provisions for health concerns)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many cars/trucks do you currently have that will require parking at the temporary address?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hotel/Extended Stay Facility Needs (Delete if not needed) (The company has ultimate discretion to determine the number of rooms needed.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Rooms: __________</td>
</tr>
<tr>
<td>Adjoining Rooms: □ No □ Yes</td>
</tr>
<tr>
<td>Explain:</td>
</tr>
</tbody>
</table>

| Refrigerator: □ No □ Yes |
| Explain: |

<table>
<thead>
<tr>
<th>Apartment Needs (Delete if not needed) (The company has ultimate discretion to determine the number of bedrooms needed.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of bedrooms needed:</td>
</tr>
<tr>
<td>Other needs:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Staying with Friends or Family:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name and address of friend or family:</td>
</tr>
<tr>
<td>Phone number of friend or family:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pet Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you have pets that will need to be temporarily relocated? □ No □ Yes</td>
</tr>
<tr>
<td>How many pets and what type:</td>
</tr>
<tr>
<td>Are your pets up to date on all required shots? □ No □ Yes</td>
</tr>
<tr>
<td>Do any of your pets have unique needs? (e.g., daily medication, large aquariums, etc.) □ No □ Yes If yes, please explain:</td>
</tr>
</tbody>
</table>
### Transportation Needs

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>How do your children get to school currently?</td>
<td></td>
</tr>
<tr>
<td>What is the name of the school(s) your children attend:</td>
<td></td>
</tr>
<tr>
<td>Will your children require transportation to school from the temporary living facility?</td>
<td></td>
</tr>
<tr>
<td>[ ] No  [ ] Yes  If yes, please provide details:</td>
<td></td>
</tr>
<tr>
<td>How far away is your workplace from your children's school(s)?</td>
<td></td>
</tr>
<tr>
<td>Do you have any other transportation needs?</td>
<td></td>
</tr>
</tbody>
</table>

### Additional Information

Please provide any other information that you feel would be helpful in addressing your temporary living needs.

I certify that the above information is accurate and true. I understand that if any information on this form changes, I need to inform the Company. I also understand that if any information on this form is found to be inaccurate, some or all of my temporary relocation assistance may be denied or withdrawn.

Signature: ___________________________________________

Printed name: _______________________________________

Date: ____________________________________________
APPENDIX F

LETTER TO SAMUEL UNGER DATED JANUARY 17, 2014 RE: INFORMATION ON RESIDENTIAL PROPERTY REMEDIATION PROJECTS AND SUPPORTING DOCUMENTATION
Mr. Samuel Unger, P.E., Executive Officer
California Regional Water Quality Control Board, Los Angeles Region
320 W. Fourth St., Suite 200
Los Angeles, California 90013

Re: Information on Residential Property Remediation Projects

Dear Mr. Unger:

On behalf of Shell Oil Company, Geosyntec Consultants is providing information on several residential property remediation projects, including the Santa Maria Valley Sumps program which you have mentioned, and three other recent projects that are relevant to the particular conditions at the Kast site. A summary is provided in this letter for the following sites:

PG&E Former MGP Sites - Marina District - San Francisco
Santa Maria Valley Sumps - Santa Maria
Watson Park/Terrance Drive Properties - San Jose
Grand Marina Village - Alameda

While each project has unique characteristics, there are similarities that we believe are relevant to consider as we develop the remedial strategy for the Kast Site. Each of these projects has the following features:

- Single-family residential properties have been developed over impacted soils
- Multiple residential properties have been affected
- Homes are primarily slab on grade construction
- Impacts are spread throughout the shallow soils
- Constituents of concern include chemicals that are primarily a concern for the direct contact pathways
- Constituents of concern include petroleum hydrocarbons, polycyclic aromatic hydrocarbons and metals
- The projects are using risk-based concepts to develop cleanup levels and remedial approaches

The projects are being overseen by state and local agencies including the Department of Toxics Substances Control, San Francisco Regional Water Quality Control Board and
Mr. Samuel Unger, P.E.

January 17, 2014
Page 2

Santa Barbara County Health with assistance from the Office of Environmental Health Hazard Assessment (OEHHA) for risk assessment review.

We would like to bring your attention in particular to the PG&E Former MGP Sites project in the Marina District and the Watson Park/Terrace Drive Properties in San Jose. These sites have widespread impacts that were discovered years after the residences were built. The relevant agencies have approved the use of shallow excavation around the homes and a land use covenant as the remedial strategy for protection of human health. For the PG&E MGP site, since petroleum related VOCs are also present, the remedial action plan also includes a soil vapor mitigation remedial option that will be employed if warranted. We believe that these projects provide an example of approaches that could be used at the Kast Site to achieve the Remedial Action Objectives (RAOs) to protect human health and the environment while preserving the integrity of the neighborhood.

We appreciate the opportunity to provide this information to you. If you would like to discuss this information please do not hesitate to contact us.

Thank you.

Sincerely,

Ruth Custance
Principal

cc:
Douglas Weimer, Shell Oil Products US
Paula Rasmussen, LARWQCB
Dr. Teklewold Ayalew, LARWQCB
Dr. Arthur Heath, LARWQCB
Thizar Tintut-Williams, LARWQCB

Attachment
Site Overview

The former North Beach and Fillmore Manufactured Gas Plant (MGP) Sites operated as manufactured gas plants (MGPs) within a few blocks of each other from the late 1800s to 1906 when they were both severely damaged from the April 1906 earthquake and ceased manufacturing gas. Starting in the late 1920s to early 1930s, residential structures started to be built on the Sites which now makes up a portion of the Marina District and consists of residential, residential mixed use, commercial and public properties.

Since 2010, individual property investigations have been conducted under oversight of the Department of Toxics Substances Control (DTSC) to evaluate if MGP residues are present in the subsurface soils and if so, to assess if their presence warrants some form of management. Notwithstanding the presence of impacts from MGP residues in subsurface soils from 1.5 feet (ft) to 10 ft below ground surface (bgs), DTSC has concluded based on the sampling data that "there is not a current health concern from MGP-related residues under existing conditions" for residents or occupants at the properties sampled or any surrounding populations.

Constituents of Potential Concern and Cleanup Goals

The Constituents of Potential Concern are Polycyclic Aromatic Hydrocarbons (PAHs), benzene, toluene, ethylbenzene and xylenes (BTEX) and cyanide. Target Action Levels have been developed for soil and soil vapor. For PAHs, a cleanup target level of 0.9 mg/kg in benzo(a)pyrene equivalents (BaP EQ) concentrations based on Northern California background is being used as an initial remediation target for the properties. Cleanup goals for BTEX (1.1 mg/kg for benzene, 5,000 mg/kg for toluene, 5.4 mg/kg for ethylbenzene, 600 mg/kg for p-xylene, 590 mg/kg for m-xylene, and 690 mg/kg for o-xylene) in soil are proposed, based on the residential Regional Screening Levels (RSLs), established by the USEPA (2011). The concentrations of chemicals measured in the soil vapor samples will be compared to available California Human Health Screening Levels (CHHSLs) for residential land use. The CHHSLs are being used as a starting point to assess whether additional actions pertaining to potential vapors may be warranted. A multiple lines of evidence approach is being used for each property.

Remedial Approach

A Site-wide Remedial Action Plan has been prepared evaluating different alternatives. One of the remedial action goals for the site is to "[I]mit the potential for resident, occupant, and
construction worker exposure to MGP constituents of potential concerns (COPCs).” To meet this goal, the following alternatives have been selected for the Sites (1) Soil Removal, (2) Surface Barrier and Institutional Controls; (3) Soil Removal, Subsurface Reinforced Barrier and Institutional Controls; and (4) Sub-slab Depressurization and Institutional Controls. Property-specific Remedial Design and Implementation Reports (RDIPs) will be prepared to identify the specific remedial alternative for each property. Impacted soils are being removed in accessible areas of the yards and not under houses or hardscape. After remediation, a removal action completion report and soil management plan will be prepared and a Land Use Covenant (LUC) will be recorded for each property. The house, concrete walkways and hardscape are considered part of the cap. In addition, DTSC recently approved a modification to the RAP to clarify that “soil left in place that is free of MGP-related contamination above cleanup goals or of clean soil material used as excavation backfill or in raised beds” is also considered part of the cap.

As of January 2014 remediation at one property has been completed where soils in accessible areas were removed to a depth of 3 to 5 feet bgs. As stated by DTSC:

For accessible areas of the Property, the cleanup goal for PAHs as met. For inaccessible areas (e.g., under the house,) no soil was excavated. For areas with limited accessibility, some impacted soil was removed, but there are PAH concentrations above the cleanup goal remaining. The house and concrete walkways and paving stones installed during property restoration act as a cap to limit exposure to MGP-residues. The Report indicates a need for institutional controls to prevent disturbance to the cap and the underlying impacted soil. Post-remedial conditions at the Property, specifically for MGP-related COPCs, are protective of human health.

The LUC was recorded in June 2013 restricting digging below a depth of 3 feet bgs. Another property was approved for closure as impacts were present at 4 feet below ground surface and soil overlying the impacts is within background concentrations. The LUC for this property was scheduled for completion in December 2013.

Attached as Attachment A-1 is a fact sheet prepared by DTSC. Examples of site documents for the two properties mentioned are also provided.
References


Santa Maria Valley Sumps - Santa María – early 2000’s - ongoing

The Santa Maria Valley was an active oilfield prior to residential and commercial development. Records from that time did not always indicate whether or not an oil-field sump was removed when the oil well was abandoned before development proceeded. As a result of the presence of the former sumps, residual petroleum hydrocarbon impacts have been found in residential communities in the valley.

A common practice was to cut off well casings at least 5 feet below ground surface (to accommodate agricultural land use), backfill and remove the associated facilities. Sumps were commonly abandoned in place by mixing the oil and drilling mud with clean soil to stabilize the sump material.

Several oil companies have been addressing the presence of petroleum hydrocarbons in existing residential neighborhoods arising from the presence of the former sumps as well as activities (such as possibly grading) that appear to have left distributed hydrocarbon impacts even where sumps do not exist. A new section of the Santa Barbara County’s Site Mitigation Unit (SMU) program was created and called the SMU-2 program when the County was designated to oversee the oilfield sump program. Site cleanup levels for this program were based on Leaking Underground Storage Tank (LUST) guidelines and at the time of program initiation the United States Environmental Protection Agency Region IX Preliminary Remedial Goals (PRGs). These guidelines include a Total Petroleum Hydrocarbon (TPH) Investigation Level (IL) of 100 mg/kg developed for LUST sites (Doane-Allmon and Boyd, 2005).

As a part of the remediation program a risk-based approach for addressing TPH was developed and approved by Santa Barbara County in late 2006. A residential Screening Health Protective Level (SHPL) of 1,830 mg/kg was developed for TPH based on the makeup of Santa Maria Valley crude oil (McDaniel Lambert, 2006). While this value was developed specifically for the sumps remediation program, companies have often used the TPH Investigation Level (IL) of 100 mg/kg as a conservative screening value. This value is considered conservative because it is based on refined petroleum product which has a significant amount of lighter ends and volatile organic chemicals. By contrast, crude oil is comprised primarily of heavier end hydrocarbons which do not pose as much of a hazard to potentially exposed populations.

According to the Santa Barbara County project manager, the decision to use the more conservative value was in part due to the fact that sumps are typically very defined in extent and chemical concentrations drop off rapidly. Thus, the volume of additional material that needs to be removed to achieve a value of 100 mg/kg is not considered appreciably different from the volume required to achieve a value of 1,830 mg/kg. Structures directly overlying a
sump have been removed and the TPH impacted soils have been removed and the site restored.

As the program has progressed, risk-based approaches are being used to address petroleum hydrocarbon impacts that are more distributed in nature, likely as a result of grading prior to redevelopment, or are not easily accessed such as along sewer lines or retaining walls as well as non-sump impacts under homes. Property-specific site investigations, risk assessments, remedial action plans and soil management plans are being developed with the Office of Environmental Health Hazard Assessment (OEHHA) providing review of the risk assessments.

The methods used to derive the SHPL value of 1,830 mg/kg for Total TPH are being used along with the 95-Upper Confidence Limit (95UCL) Concentration and a Hazard Index of 1 to determine if further action is warranted. For carcinogens, cancer risk estimates below or within the lower half of the EPA risk management range are considered less than significant (e.g. 5 x 10^{-6} for 530 San Diego Street McDaniel Lambert, Inc. 2012). For cancer risk estimates equal to or greater than 1 x 10^{-5} a Land Use Covenant is required and a soil management plan is required for all properties if residual impacts are left in place (Paul McCaw, Santa Barbara County, personal communication, January 2014). As shown in the attached Soil Management Plan for 530 San Diego Street (attached) residual petroleum hydrocarbons over 10,000 mg/kg are being left in place in shallow soils.

Attached as Attachment A-2 is a summary of the program that was prepared by URS Corporation and Conoco-Phillips for the Remediation Technologies Symposium (RemTech) 2005 conference. Recent examples of site documents for one property are also provided.

References:


http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000004557
In 2004 during construction of a new skate park, ash and other debris was uncovered from a former burn dump and landfill that was closed in the early 1930s. Soil samples indicated that the residual lead from burn ash/dump debris went down to a depth of 15 feet below ground surface in some areas.

In 2006 a cleanup of soil containing lead and burn ash was being conducted on 9 properties under a Time Critical Removal Action (TCRA) work plan. The TCRA activities for the Terrace Drive Properties included removing 3 to 5 feet of contaminated soil from the residential yards. Clean soil was imported to serve as a cap for the residual lead and burn ash/dump debris remaining on the individual residential properties at lower depths. Structures, asphalt, concrete, or other solid surfaces also serve as a part of the cap. After the TCRA removal activities on the properties were completed in August 2006, lead and burn ash/dump debris remain beneath the cap.

A Removal Action Workplan (RAW) was submitted to the Department of Toxic Substances Control (DTSC) in 2007 to address residual lead concentrations in soil and burn ash/dump debris-containing material on the Terrace Drive properties. The RAW evaluated several remedial alternatives (1) No Action, (2) Capping with Institutional Controls and (3) Complete Excavation with Offsite Disposal. The selected alternative was Capping with Institutional Controls. Because burn ash/dump debris remains on portions of the properties to a depth of 15 feet, Land Use Covenants (LUCs) to limit the potential for future exposure through controlling and limiting future excavation on the properties were recorded. The LUCs prohibit digging at depths greater than 3 feet and a soil management plan is required before digging in restricted areas.

Attached as Attachment A-3 are two fact sheets prepared by DTSC for the Terrace Properties Land Use Covenant and later adjacent Watson Park remediation. A Land Use Covenant for one of the properties is also provided.

References:


Grand Marina Village – Alameda – 2007 - 2010

Grand Marina Village is a development of 40 single-family residential homes located along the bay margin in Alameda California. The Site was developed by 1839 as a fishing vessel fleet harbor with subsequent uses being a lumber yard, ship repair yard, and other commercial/industrial uses.

The primary chemicals of concern were arsenic, lead and petroleum hydrocarbons and initial cleanup activities included the removal of above-ground petroleum storage tanks, underground storage tanks and over-excavation of contaminated soil in the area of a former above-ground storage tank farm. A second phase of cleanup for the petroleum impacts related to underground tanks and included the removal and offsite disposal of petroleum impacted soil exceeding approved cleanup goals.

The proposed cleanup goals were 9.0 ppm for arsenic, which corresponds to the naturally-occurring background concentration. The cleanup goal for lead was 80 ppm consistent with the CHHSL. The cleanup goals for petroleum hydrocarbons were 1,200 ppm for TPhg, TPhd, and TPho to address protection of groundwater quality and to prevent petroleum hydrocarbon constituents in groundwater from migrating to the nearby Alameda Estuary. The San Francisco Regional Water Quality Control Board issued a no further action letter in July 2010.

To address the arsenic and lead impacted soil, the cleanup plan called for placing a minimum of two feet of clean imported fill soil across the Site to act as a “clean cap” and prevent exposure. In addition to the clean cap, an environmental deed restriction has been recorded on the entire Site.

Attached as Attachment A-4 is the no further action letter issued by the SFRWQCB and the environmental deed restriction that has been recorded.

References:

http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=SL0600177641

ATTACHMENT A-1
PGE Former Fillmore MGP
PG&E Former Manufactured Gas Plants
San Francisco Marina District

Modifications to Remedial Action Plan Approved

The Department of Toxic Substances Control (DTSC) announces the recent approval of several modifications to the Remedial Action Plan (RAP) for PG&E’s former North Beach and Fillmore manufactured gas plant (MGP) sites.

After review and comment from the public and interested agencies, the RAP was approved in May, 2012. The RAP identifies potential health risks related to past MGP operations and evaluates and describes proposed cleanup options for the properties within the Sites. When participating property owners agree to an investigation, and the results indicate that cleanup is necessary, a remedial design and implementation plan (RDIP) is prepared for each property cleanup.

Since approval of the RAP, several property-specific RDIPs have been approved and implemented. When these RDIPs were developed they included minor modifications to the remedial alternatives in the RAP to address specific property conditions, access issues, and input obtained from property owners. DTSC’s review of these modifications indicated that they were consistent with the goals identified in the RAP, and the RDIPs were approved.

This Fact Sheet Will Inform You About:
- Site History
- Environmental Investigations
- What Are MGP Residues?
- Remedial Action Goals (Including Minor Modifications)

Site History
Manufactured Gas Plants, also known as MGP, were located in cities and towns across the United States to produce gas for lighting, heating and cooking from the mid 1800s through the mid 1900s. Beginning in 1883, the Fillmore MGP operated in the vicinity west of Fillmore and Bay streets. Beginning in 1891, the North Beach MGP operated north of Bay and Buchanan streets. Pacific Gas and Electric Company (PG&E) was formed in October 1905 and operated the MGP for six months until April 1906, when they were destroyed in the 1906 Earthquake. Some of the exhibits for the 1915 Pan Pacific International Exposition were located within the former MGP sites and residential development began in the area during the late 1920s.
Site Location Map

Environmental Investigations

Beginning in November 2010, PG&E, with oversight from DTSC, has been collecting soil and soil vapor samples from private properties where owners have granted access. In addition, soil samples have been collected in public rights-of-way, such as sidewalks, with approval from the City and County of San Francisco. The goal of this investigation is to determine if MGP-related residues are present in soil and, if so, implement the appropriate response activities.

Sampling conducted to date from public rights-of-way and private properties has shown a range of results. At some sampling locations no MGP residues have been encountered; at other locations potential MGP residues have been encountered at depths varying from near the surface to 10 feet below the ground surface. The potential MGP residues have been black, hard and asphalt-like in appearance. All results are compared against health and safety exposure levels issued by the State of California. Although results to date indicate there is not a current health concern from MGP-related residues under existing conditions, results in some locations have warranted cleanup activities.

What are MGP residues?

Residues from the operation of the former MGP located in the Marina District may include coal tar and spent coal or coke, and can include various chemical compounds including polycyclic aromatic hydrocarbons (PAHs).
Residues are generally black or dark gray and often have a mothball-like odor. The material may be hard and dry (spent coal or coke), oily or tar-like (oils, coal tar).

Some of the chemical compounds found in MGP residues may present health or environmental concerns. Health concerns may arise if direct and substantial contact with the residues were to occur for a prolonged period of time, or with very high concentrations.

**Remedial Action Goals**

Based upon sampling at the Sites, existing soil conditions do not raise health concerns related to MGP residues for residents at the properties sampled or any surrounding populations. There is currently no evidence of exposure to MGP residues. In the future, it is possible that MGP impacted soil at certain properties within the Sites may pose an increased risk to human health if these soils were brought to the surface or uncovered where contact with the residues could occur for a prolonged period of time. In order to protect the public, the following remedial action goals (RAGs) were established for the Sites:

- Limit the potential for resident, occupant, and construction worker exposure to MGP constituents of potential concern (COPCs);

- Limit the potential for exposure of the surrounding community to MGP COPCs during cleanup activities; and

- Meet all applicable guidance and regulations for cleanup at the Sites.

**Remedial Action Alternatives**  
*(Including Minor Modifications in Italics)*

Based upon these goals, various remedial action alternatives, including no action, were evaluated in detail based on their short- and long-term effectiveness, overall protectiveness of human health and the environment, cost, sustainability and other factors. These alternatives may be used singly or in combination on a specific property:

- **Soil Removal**: this would involve excavating and removing MGP impacted soil and replacing it with clean soil.

- **Surface Barrier and Institutional Controls**: this would involve installing a barrier ("cap") of material such as concrete to prevent or limit contact with MGP residues. Institutional controls would be used to prohibit the disturbance of the cap. Periodic cap inspections would be conducted.

  **Modification**: This alternative has been modified to include soil barriers. The soil barrier may consist of soil left in place that is free of MGP-related contamination, above cleanup goals or of clean soil material used as excavation backfill or in raised beds.

- **Soil Removal, Subsurface Reinforced Barrier and Institutional Controls**: soil containing MGP residue would be excavated according to an approved design plan. A reinforced barrier would be placed over the remaining MGP residue and the barrier would be covered with soil. Institutional controls would be implemented.

  **Modification**: Non-reinforced barriers, such as a geotextile layer, may also be used to prevent direct contact with subsurface soil containing MGP residues and to act as a marker layer.

- **Soil Vapor Mitigation and Institutional Controls**: if soil vapor is at a level deemed unsafe a soil vapor mitigation system would be installed and Institutional controls put in place. The soil vapor mitigation system would be checked periodically to make sure it is working properly.

The property-specific RDIP determines the specific cleanup alternative, or set of alternatives, best suited for each property.
Where to Find Site Documents

To encourage community review and input, DTSC has established the following Information Repositories for these sites and other means to access site documents.

Information Repositories:

DTSC File Room
700 Heinz Avenue
Berkeley, California 94710
(510) 540-3800

Marina Branch Library
1890 Chestnut Street
San Francisco, California 94123
(415) 355-2823

EnviroStor
Information about the Sites can be found online at www.envirostor.dtsc.ca.gov/public. Click on “Site Facility Search,” type “San Francisco” in the City field, and click on “Get Report.” Find “PG&E Former North Beach Manufactured Gas Plant” or “PG&E Former Filmore Manufactured Gas Plant” (on page 3) and click on “Report” next to the Site name.

If you also would like DTSC to notify you via email when new EnviroStor documents (i.e., workplans, reports, etc.) are available online for these sites, please sign up to receive email alerts on the EnviroStor report page.

For More Information:
For questions about site investigations, please contact:

Allan Fone
DTSC Project Manager
(510) 540-3836
allan.fone@dtsc.ca.gov

For questions regarding the public participation process, please contact:

Wayne Hagen
DTSC Public Participation Specialist
(510) 540-3911 or (866) 495-5651
TTY/TDD/STS users dial 711
(for the California Relay Service)
wayne.hagen@dtsc.ca.gov

For media questions, please contact:

Sandy Nax
DTSC Public Information Officer
(916) 327-6114
sandy.nax@dtsc.ca.gov

Si prefiere hablar con alguien en español acerca de esta información, favor de llamar a Jacinto Soto, Departamento de Control de Substancias Tóxicas. El número de teléfono es (510) 540-3842.

如閣下對此清理計劃有疑問，請致電 DTSC 職員 Henry Wong 黃先生，(510) 540-3770。

All documents made available to the public by DTSC can be provided in an alternate format (e.g. Braille, large print) or in another language as appropriate, in accordance with State and Federal law. Please contact Wayne Hagen noted above for assistance.
April 16, 2013

Darrell Klingman, PG, CHG
Environmental Remediation Department
Pacific Gas & Electric Company
3401 Crow Canyon Road, Room 177B
San Ramon, California 94583

Property APN 0463A008 – Remedial Action Completion Report

Dear Mr. Klingman:

The Department of Toxic Substances Control (DTSC) has completed its review of the Remedial Action Completion Report, Property APN 0463A008, Former Fillmore Manufactured Gas Plant, San Francisco, California, dated March 2013 (Report). DTSC reviewed the Report under a Voluntary Cleanup Agreement (Docket No. HSA-VCA 09/10-111) between Pacific Gas and Electric Company (PG&E) and DTSC. The subject property (Property) is located in the vicinity of the former Fillmore Manufactured Gas Plant (MGP) site.

Based on our review, DTSC has determined that the Report adequately addresses DTSC’s comments, which were provided by letter on January 18, 2013, and by email on March 13, 2013. The Report is therefore approved.

The Report describes the remediation activities conducted at the Property under the property-specific Remedial Design and Implementation Plan (RDIP) approved by DTSC on June 18, 2012. Soil impacted with polycyclic aromatic hydrocarbons (PAH) was excavated and removed from the Property for off-site disposal. For accessible areas of the Property, the cleanup goal for PAHs was met. For inaccessible areas (e.g., under the house), no soil was excavated. For areas with limited accessibility, some impacted soil was removed, but there are PAH concentrations above the cleanup goal remaining. The house and the concrete walkways and paving stones installed during property restoration act as a cap to limit exposure to MGP-residues. The Report indicates a need for institutional controls to prevent disturbance to the cap and the underlying impacted soil. Post-remedial conditions at the Property, specifically for MGP-related COPCs, are protective of human health.
If you have any questions about this letter, please contact me by phone at 510-540-3836 or by e-mail at afone@dtsc.ca.gov.

Sincerely,

[Signature]

Allan L. Fone, Ph.D., Project Manager
Brownfields and Environmental Restoration Program - Berkeley Office

cc: Gina Plantz, Vice President
Haley & Aldrich, Inc.
2033 N. Main Street, Suite 309
Walnut Creek, CA
gplantz@haleyadrich.com

Gerard Aarons, PG, CHG
Department of Toxic Substances Control
Jerry.Aarons@dtsc.ca.gov

Claudio Sorrentino, Ph.D.
Department of Toxic Substances Control
Claudio.Sorrentino@dtsc.ca.gov

Jesus Sotelo, PG
Department of Toxic Substances Control
Jesus.Sotelo@dtsc.ca.gov
COVENANT TO RESTRICT USE OF PROPERTY
ENVIRONMENTAL RESTRICTION

Re: APN: 0463A--008
134 Alhambra Street
City of San Francisco
County of San Francisco
DTSC Site Code 201873

This Covenant and Agreement ("Covenant") is made by and among Pacific Gas and Electric Company (the "Covenator"), the current owner of property situated in the City and County of San Francisco, State of California, described in Exhibit "A," attached hereto and incorporated herein by this reference (the "Property"), and the Department of Toxic Substances Control (the "Department"). Pursuant to Civil Code Section 1471, the Department has determined that this Covenant is reasonably necessary to protect present or future human health or safety or the environment as a result of the presence on the land (or portions of the land) of hazardous materials as defined in Health and Safety Code Section 25260 and hazardous substances as defined in Health and Safety Code Section 25316. The Covenator and the Department, collectively referred to as the "Parties," hereby agree, pursuant to Civil Code Section 1471, and Health and Safety Code sections 25355.5 that the use of the Property be restricted as set forth in this Covenant. The Parties further agree that this Covenant shall conform with the requirements of California Code of Regulations, Title 22, Section 67391.1.
ARTICLE I
STATEMENT OF FACTS

1.01. The Property comprises approximately 2,996 square feet, is located at 134 Alhambra Street, City and County of San Francisco, State of California, and is generally described as San Francisco County Assessor’s Parcel No. 0463A--008. The Property is located on the north side of Alhambra Street between Pierce Street and Mallorca Way. From approximately 1886 until 1906, the Property was part of a larger parcel that was used as a Manufactured Gas Plant (MGP) also known as the “Fillmore MGP.” Pacific Gas and Electric Company (PG&E) purchased the Fillmore MGP in 1905 and operated it until the MGP was destroyed as a result of the April 18, 1906 earthquake. Later, the Property was also part of an area owned by the City and County of San Francisco (the “City”) and used as the site of the Panama Pacific International Exhibition (PPIE), from approximately 1912 through 1916. After the PPIE, the Property was part of a larger residential development in the 1920’s and was first built in 1925. Currently, the Property is used as a single family residence.

1.02. PG&E and the Department entered into a Voluntary Cleanup Agreement (VCA, Docket No. HSA-VCA-09/10-111) for the Fillmore MGP site in May of 2010. Under the VCA, the Department provided oversight of investigation and remediation of MGP-related contamination at the Property in accordance with Health and Safety Code (HSC) Division 20, Chapter 6.8. Thereafter, PG&E conducted an Initial Site Investigation (“Preliminary Study”) on the Property. The Preliminary Study included the collection of subsurface soil samples and soil gas samples on the Property. Analytical data produced and submitted to The Department as a result of the Preliminary Study showed that subsurface soil (i.e., deeper than one (1) foot below ground surface (bgs)) at the Property contained residual MGP material with polynuclear aromatic hydrocarbons (PAH) concentrations above urban ambient concentrations, and that further action was required. The analytical results showed that no further action was required for soil gas.

1.03. In May, 2012, PG&E submitted to the Department a Remedial Action Plan (“RAP”) for the cleanup of MGP-related contamination at properties within the Fillmore MGP Site. The RAP included a health risk evaluation and developed unrestricted use cleanup goals for MGP-related contaminants of concern at the Site. The Department prepared an Initial Study and Negative Declaration (IS/ND) for the RAP pursuant to the California Environmental Quality Act (CEQA), Public Resources Code section 21000 et seq. The RAP and IS/ND were released for public review and subsequently approved by the Department on May 16, 2012. Pursuant to the approved RAP, PG&E submitted to the Department a property specific Remedial Design and Implementation Plan (RDIP) for the removal and off-site disposal of PAH-impacted subsurface soil at the Property. The Department approved the RDIP on June 18, 2012, and the remedy was implemented and completed as set forth in the Remedial Action Completion Report (RACR) submitted September 12, 2012 and approved by the Department on April 16, 2013.

1.04. No soil beneath the house on the Property was removed during implementation of the remedy. The Preliminary Report indicates that soil beneath the house is likely to contain PAH concentrations above the unrestricted use cleanup goal. In areas of the backyard adjacent to the house, soil containing PAH concentrations above the cleanup goal could not be removed below a depth of about three (3) feet below ground surface (bgs) due to limited access and to avoid

Initials
destabilizing the house, fences and other residential structures (see Exhibit A). In these areas a concrete slab is present which precludes direct contact with the PAHs in soil.

1.05. This Covenant is required as part of the property remediation because MGP residues in soil remain at concentrations that are above the unrestricted use cleanup goal in subsurface soil at the Property. A Cap is required to reduce the likelihood of soil disturbance and the potential for direct contact with residual PAH concentrations in soil above cleanup goals. The Cap consists of the house, a portion of the flagstone paving in the backyard, and the concrete walkways in the backyard along the sides of the house (Exhibit B). No Cap is required in those areas of the backyard where soil sampling and analysis has shown that PAH concentrations are below the cleanup goal (see Exhibit A).

1.07. Based on the above work and documentation, the Department has concluded that use of the Property as a single family residence, in accordance with the restrictions set forth in this Covenant, does not and will not pose an unacceptable risk to human health or the environment.

**ARTICLE II**

**DEFINITIONS**

2.01. Cap. “Cap” means the Restricted Access Cap Area and the Restricted Access Cap Area > 3 ft. BGS.

2.02. Department. “Department” means the California Department of Toxic Substances Control and includes its successor agencies, if any.

2.03. Environmental Restrictions. “Environmental Restrictions” means all protective provisions, covenants, restrictions, prohibitions, and terms and conditions as set forth in any section of this Covenant.

2.04. Lease. “Lease” means lease, rental agreement, or any other document that creates a right to use or occupy any portion of the Property.

2.05. Occupant. “Occupant” means Owner and any person or entity entitled by Ownership, leasehold, or other legal relationship to the right to occupy any portion of the Property.

2.06. Owner. “Owner” means the Covenantor, and all successors in interest including heirs and assigns, who at any time hold title to all or any portion of the Property.

2.07. Restricted Access Cap Area. “Restricted Access Cap Area” means those areas beneath the house where subsurface soil cannot be removed (see Sections 1.04 and 1.05). In those areas, contact with the soil is mitigated by the existing structure, which functions as a Cap. The Restricted Access Cap Area is shown on Exhibit “B,” which is attached hereto and incorporated herein by reference.

2.07. Restricted Access Cap Area > 3 ft. BGS. In some areas at the Property, impacted soil containing PAH concentrations above the unrestricted use cleanup goal remains in place at a depth of greater than three (3) feet bgs (see Sections 1.04 and 1.05). In those areas, contact with
impacted soil was mitigated by installation of a concrete surface barrier, which functions as an additional protective barrier. "Restricted Access Cap Area ≥ 3 ft. BGS" means those areas of the Property where such impacted soil remains at a depth of greater than three (3) feet BGS. The Restricted Access Cap Area ≥ 3 ft. BGS is shown on Exhibit "B," which is attached hereto and incorporated herein by reference.

2.08. Unrestricted Area. "Unrestricted Area" means all areas of the Property except the Restricted Access Cap Area and the Restricted Access Cap Area ≥ 3 ft. BGS. The Unrestricted Area consists of the portion of the backyard with PAH concentrations below the cleanup goal, and therefore a Cap is not required (see Section 1.06). Unrestricted Area is shown on Exhibit "B," which is attached hereto and incorporated herein by reference.

ARTICLE III
GENERAL PROVISIONS

3.01. Runs with the Land. This Covenant sets forth Environmental Restrictions that apply to and encumber the Property and every portion thereof no matter how it is held, used, occupied, leased, sold, hypothecated, encumbered, or conveyed. This Covenant: (a) runs with the land pursuant to Health and Safety Code Section 25355.5 and Civil Code Section 1471; (b) inures to the benefit of and passes with each and every portion of the Property; (c) is for the benefit of, and is enforceable by the Department, and (d) is imposed upon the entire Property unless expressly stated as applicable only to a specific portion thereof.

3.02. Binding upon Owner/Occupants. This Covenant binds all Owners of the Property, their heirs, successors, and assigns, and the agents, employees, and lessees of the Owners, heirs, successors and assignees. Pursuant to Civil Code section 1471, all successive Owners of the Property are expressly bound hereby for the benefit of the Department; this Covenant, and for the sole purpose of this Covenant, however, is binding on all Owners and Occupants, and their respective successors and assigns, only during their respective periods of ownership or occupancy except that such Owners or Occupants shall continue to be liable for any violations of, or non-compliance with, the Environmental Restrictions of this Covenant or any acts or omissions during their ownership or occupancy.

3.03. Incorporation into Deeds and Leases. This Covenant is hereby incorporated by reference in each and every deed and Lease for any portion of the Property.

3.04. Conveyance of Property. Not later than thirty (30) days after any conveyance of any Ownership interest in the Property (excluding Leases, and mortgages, liens, and other non-possessor encumbrances), the Owner conveying such interest shall provide written notice to the Department of the conveyance. The written notice shall include the name and mailing address of the new Owner of the Property and shall reference the site name and site code as listed on page one of this Covenant. The notice shall also include the Assessor’s Parcel Number (APN) noted on page one. If the new Owner’s property has been assigned a different APN, each such APN that covers the Property must be provided. The Department shall not, by reason of this Covenant, have authority to approve, disapprove, or otherwise affect proposed conveyance, except as otherwise provided by law or by administrative order.

Initials
3.05. Costs of Administering the Covenant to be paid by PG&E. The Department has already incurred and will in the future incur costs associated with the administration of this Covenant. PG&E has agreed that, pursuant to California Code of Regulations, Title 22, Section 67391.1(h), it shall pay all of the Department’s cost in administering this Covenant. The Department agrees that it shall look first to PG&E, and not to any Owner or Occupant of the Property, for payment of such costs. In the event that the Department is unable to recover such costs from PG&E, then Covenantor covenants for Covenantor and for all subsequent Owner that, pursuant to California Code of Regulations, title 22, section 67391.1(h), the then-current Owner of the Property shall pay the Department’s costs in administering this Covenant. In such case, the then current Owner of the Property shall retain any and all rights that it may have against PG&E with respect to such costs.

ARTICLE IV

REstrictions AND REQUIREMENTS

4.01. The Property may be used for residential purposes in accordance with current zoning.

4.02. Restrictions.

(a) There shall be no activities that will disturb soil within the Restricted Access Cap Area ≥ 3 ft. BGS at a depth of more than three (3) feet below grade, including, without limitation, excavation, grading, movement, or removal of soil, except pursuant to a Soil Management Plan approved by the Department, which includes advance notice to the Department before such activities may begin.

(b) There shall be no activities that will disturb soil within the Restricted Access Cap Area including, without limitation, excavation, grading, movement, or removal of soil, except pursuant to a Soil Management Plan approved by the Department, which includes advance notice to the Department before such activities may begin.

(c) Any contaminated soils brought to the surface by grading, excavation, trenching or backfilling shall be managed in accordance with all applicable provisions of state and federal law.

4.03. Non-Interference with Cap.

(a) Activities that may disturb the Cap (e.g., excavation, grading, removal, trenching, filling, or earth movement) shall not be permitted on the Restricted Access Cap Area and Restricted Access Cap Area ≥ 3 ft. BGS without prior written approval by the Department.

(b) All uses and development of the Restricted Access Cap Area and Restricted Access Cap Area ≥ 3 ft. BGS shall preserve the integrity or effectiveness of the Cap.

(c) The Cap shall not be altered without prior written approval by the Department.

4.03. Emergency Repairs. The restrictions described in Section 4.02 and 4.03 above, shall not apply to activities necessary for the maintenance, relocation, repair, replacement or upgrade of

Initials
utilities at, or run through, over, or under, the Property, provided that, where any emergency maintenance to utilities is performed more than three feet below ground surface within the Restricted Access Cap Area ≥ 3 ft. BGS, or within the Restricted Access Cap Area, the then-current owner of the affected Property shall provide written notice of such repairs to the Department within fourteen (14) days after completion of such repairs and shall provide a copy of this Covenant to any third party performing the excavation and/or repair work prior to starting the work. Any soil brought to the surface from more than three (3) feet below grade from the Restricted Access Cap ≥ 3 ft. BGS, or within the Restricted Access Cap Area, during such work shall be used, to the extent possible, for backfill in the trench or excavation from which the soil was removed. Any soil brought to the surface that needs to be removed from the Property and disposed-of will be characterized for disposal by PG&E and disposed of in accordance with all federal, state and local regulations.

4.04. Soil Management Plan. Prior to commencing any non-emergency activity more than three (3) feet below ground surface within the Restricted Access Cap Area ≥ 3 ft. BGS, or within the Restricted Access Cap Area, the then-current Owner of the affected Property shall provide to the Department a Soil Management Plan identifying the procedures for handling soil brought to the surface from more than three (3) feet below grade from any Restricted Access Cap Area ≥ 3 ft. BGS or Restricted Access Cap Area. The Soil Management Plan shall include a provision requiring advance notice to the Department before such soil activities begin.

4.05. Access for Department. The Department shall have reasonable right of entry and access to the Property for inspection, monitoring, and other activities consistent with the purposes of this Covenant as deemed necessary by the Department in order to protect the public health or safety, or the environment.

ARTICLE V
ENFORCEMENT

5.01. Enforcement. Failure of the Owner or Occupant to comply with this Covenant is a violation of this Covenant. Violation of this Covenant, including but not limited to, failure to submit, or the submission of any false statement, record or report to the Department, shall be grounds for the Department to pursue administrative, civil or criminal actions, as provided by law.

ARTICLE VI
ANNUAL COMPLIANCE LETTER AND REPORTING REQUIREMENT

6.01. Annual Compliance Letter. The Owner shall complete and send a compliance letter to the Department verifying compliance with this Covenant, including the Restrictions set forth in Article IV. PG&E shall provide the Owner with annual notification of the need for compliance with the Annual Compliance Letter requirement set forth in this paragraph 6.01.

6.02. Form of Annual Compliance Letter. The annual compliance letter shall be in a form substantially similar to the draft letter attached to this Covenant as Exhibit "C". The Owner shall send the Department the annual compliance letter by March 1st of each year and report on

Initials
activities during the prior calendar year. The annual compliance letter shall be sent to the Department at the address listed in Article 8.04.

6.03. Reporting Requirements. If the Owner identifies any violations of this Covenant during the annual inspection or at any other time, the Owner must within 10 days of identifying the violation: determine the identity of the party in violation, send a letter advising the party of the violation of the Covenant, and demand that the violation cease immediately. Additionally, a copy of any correspondence related to the violation of this Covenant shall be sent to the Department within 10 days of its original transmission.

**ARTICLE VII**

**VARIANCE, TERMINATION, AND TERM**

7.01. Variance. Owner, or any other aggrieved person, may apply to the Department for a written variance from the provisions of this Covenant. Such application shall be made in accordance with Health and Safety Code Section 25233.

7.02. Termination, Partial Termination or Modification. Owner, or any other aggrieved person, may apply to the Department for a termination, partial termination, or modification of one or more terms of this Covenant as they apply to all or any portion of the Property. Such application shall be made in accordance with Health and Safety Code Section 25224. To the extent future work at the Property eliminates the need for portions of the Property to be designated as a Restricted Access Cap Area or Restricted Access Cap Area ≥ 3 ft. BGS, or otherwise more accurately defines such areas, then, the Parties may modify Exhibit B as appropriate and record the revised Exhibit B in the County of San Francisco. To the extent future work or investigation at the Property more accurately defines the Unrestricted Area at the Property, the Parties may modify Exhibit B as appropriate and record the revised Exhibit B in the County of San Francisco.

7.03. Term. Unless ended in accordance with paragraph 7.02, by law, or by the Department in the exercise of its discretion, this Covenant shall continue in effect in perpetuity.

**ARTICLE VIII**

**MISCELLANEOUS**

8.01. No Dedication Intended. Nothing set forth in this Covenant shall be construed to be a gift or dedication, or offer of a gift or dedication, of the Property, or any portion thereof to the general public or anyone else for any purpose whatsoever.

8.02. Department and PG&E References. All references to the Department and PG&E include successor entities.

8.03. Recordation. The Covenantor shall record this Covenant, with all referenced Exhibits, in the County of San Francisco within ten (10) days of the receipt of a fully executed original.

Initials
8.04. Notices. Whenever any person gives or serves any Notice ("Notice" as used herein includes any demand or other communication with respect to this Covenant), each such Notice shall be in writing and shall be deemed effective: (1) when delivered, if personally delivered to the person being served or to an officer of a corporate party being served, or (2) three (3) business days after deposit in the mail, if mailed by United States mail, postage paid, certified, return receipt requested, whichever is sooner:

To Owner:

Pacific Gas and Electric Company
245 Market Street, N10A, Room 1015
P.O. Box 770000
San Francisco, California 94177

To Department:

Branch Chief
Brownfields and Environmental Restoration Program
Department of Toxic Substances Control
700 Heinz Avenue
Berkeley, CA 94710

Any Party may change its address or the individual to whose attention a Notice is to be sent by giving written Notice in compliance with this paragraph.

8.05. Partial Invalidity. If this Covenant or any of its terms are determined by a court of competent jurisdiction to be invalid for any reason, the surviving portions of this Covenant shall remain in full force and effect as if such portion found invalid had not been included herein.

8.06. Statutory References. All statutory references include successor provisions.

8.07. Incorporation of Exhibits. All exhibits and attachments to this Covenant are incorporated herein by reference.
IN WITNESS WHEREOF, the Parties execute this Covenant as of the last date indicated below.

Covenantor:

[Signature]

By: Marvin Penner, Manager
    Land Management
    Representing Pacific Gas and Electric Company

Date: 6-6-2013

Department of Toxic Substances Control

[Signature]

By: Daniel Murphy, Unit Chief
    Brownfields and Environmental Restoration Program

Date: 6/17/13
Exhibit A

DESCRIPTION OF THE PROPERTY

The following described real property, located in the City and County of San Francisco, State of California:

BEGINNING at a point on the northwesterly line of Alhambra Street, distant thereon 190.180 feet southwesterly from the southwesterly line of Mallorca Way; running thence southwesterly along the northwesterly line of Alhambra Street 25.036 feet; thence North 40° 49' 15" West 128.118 feet; thence North 66° 45' 12" East 23.646 feet, thence South 41° 59' 28" East 121.628 feet to the point of beginning.

BEING portion of Marina Gardens.

APN: 0463A-008
Exhibit C—Sample Letter

March 1, _____ (year)

_________, Branch Chief
Brownfields and Environmental Restoration Program
Department of Toxic Substances Control
700 Heinz Avenue
Berkeley, CA 94710

SUBJECT: ANNUAL COMPLIANCE LETTER — COVENANT TO RESTRICT USE OF PROPERTY

[Address], San Francisco, CA

Dear ______________:

This letter provides the Department of Toxic Substances Control (DTSC) with the Annual Compliance Report required by the Covenant To Restrict Use Of Property Environmental Restriction (Deed Restriction) recorded on _____, 2012, with respect to [Address], San Francisco, California (the Property).

Article VI of the Deed Restriction requires that the current owner of the Property complete an Annual Compliance Letter verifying compliance with Article IV of the Covenant.

The undersigned owner hereby certifies that, for the year commencing ____________, 20___, and ending ____________, 20___ (place a check mark in each applicable box):

☐ The Property was used for residential purposes.

☐ No activities took place at the Property that disturbed soil in the Restricted Access Cap Area, and/or soil in the Restricted Access Cap Area ≥ 3 ft. BGS at a depth of 3 feet below ground surface (bgs) or greater, except pursuant to a Soil Management Plan approved by DTSC.

☐ No activities took place at the Property that disturbed the Cap.

☐ No (MGP) contaminated soils were brought to the surface by grading, excavation, trenching or backfilling that were not managed according to a Soil Management Plan approved by DTSC.

☐ The following activities took place at the Property that 1) disturbed the Cap; 2) disturbed soil in the Restricted Access Cap Area and/or soil in the Restricted Access Cap Area ≥ 3 ft. BGS at a depth of more than three (3) feet below ground surface, without (or inconsistent with) a Soil Management Plan approved by DTSC; (3) or resulted in (MGP) contaminated soils being brought to the surface but not managed according to a Soil Management Plan approved by DTSC.

Initials ____________________________
As provided in the Notice of Settlement and Release regarding the Property recorded on April ____, 20___, PG&E is responsible to pay DTSC’s costs in administering the Deed Restriction, including costs associated with DTSC’s review of this Annual Notice.

Sincerely,

Property Owner, [Address], San Francisco, CA
State of California
County of Sacramento

CALIFORNIA ALL-PURPOSE
CERTIFICATE OF ACKNOWLEDGMENT

On June 6, 2013 before me, Seth William Curran, Notary Public
personally appeared Marvin Penner

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to
the within instrument and acknowledged to me that he/she/they executed the same in his/her/their
authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity
upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the
State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature

OPTIONAL INFORMATION

Although the information in this section is not required by law, it could prevent fraudulent removal and reattachment of this
acknowledgment to an unauthorized document and may prove useful to persons relying on the attached document.

Description of Attached Document
The preceding Certificate of Acknowledgment is attached to a document
titled for the purpose of

containing ______ pages, and dated ________

The signer(s) capacity or authority is/are as:

- Individual(s)
- Attorney-in-Fact
- Corporate Officer(s)
- Guardian/Conservator
- Partner - Limited/General
- Trustee(s)
- Other:

representing: Name(s) of Person(s) or Entity(ies) Signer is Representing

Method of Signer Identification

Proved to me on the basis of satisfactory evidence:

- Original form(s) of identification
- Credible witness(es)

Notarial event is detailed in notary journal on:

Page # Entry #

Notary contact:

Other

- Additional Signer(s)
- Signer(s) Thumbprint(s)
- Other:
CALIFORNIA ALL-PURPOSE
CERTIFICATE OF ACKNOWLEDGMENT

State of California

County of Alameda

On June 13, 2013 before me, Nicole Thuemmler, Notary Public (Here insert name and title of the officer)

personally appeared Daniel Murphy

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to
the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized
capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of
which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph
is true and correct.

WITNESS my hand and official seal.

Nicole Thuemmler (Notary Seal)

Signature of Notary Public

ADDITIONAL OPTIONAL INFORMATION

INSTRUCTIONS FOR COMPLETING THIS FORM

Any acknowledgment completed in California must contain verbiage exactly as
appears above in the notary section or a separate acknowledgment form must be
properly completed and attached to that document. The only exception is if a
document is to be recorded outside of California. In such instances, any alternative
acknowledgment verbiage as may be printed on such a document so long as the
verbiage does not require the notary to do something that is illegal for a notary in
California (i.e., certifying the authorized capacity of the signer). Please check the
document carefully, for proper notarial wording and attach this form if required.

- State and County information must be the State and County where the document
  signer(s) personally appeared before the notary public for acknowledgment.
- Date of notarization must be the date that the signer(s) personally appeared which
  must also be the same date the acknowledgment is completed.
- The notary public must print his or her name as it appears within his or her
  commission followed by a comma and then your title (notary public).
- Print the name(s) of document signer(s) who personally appear at the time of
  notarization.
- Indicate the correct singular or plural forms by crossing off incorrect forms (i.e. he/she/they is one) or circling the correct forms. Failure to correctly indicate this
  information may lead to rejection of document recording.
- The notary seal impression must be clear and photographically reproducible
  Impression must not cover text or lines. If seal impression smudges, re-seal if a
  sufficient area permits, otherwise complete a different acknowledgment form.
- Signature of the notary public must match the signature on file with the office of
  the county clerk.
  - Additional information is not required but could help to ensure this
    acknowledgment is not misused or attached to a different document
    - Indicate title or type of attached document, number of pages and date
    - Indicate the capacity claimed by the signer if the claimed capacity is a
      corporate officer, indicate the title (i.e. CEO, CFO, Secretary)
- Securely attach this document to the signed document.
September 18, 2013

Darrell Klingman, P.G., C.H.G.  
Environmental Remediation Department  
Pacific Gas & Electric Company  
3401 Crow Canyon Road, Room 177B  
San Ramon, California 94583

Property Investigation Report – APN 0463A015

Dear Mr. Klingman:

The Department of Toxic Substances Control (DTSC) has completed its review of the revised Property Investigation Report, APN 0463A015, Former Fillmore Manufactured Gas Plant Site, San Francisco, California, dated March 2013 (Report) and submitted to DTSC on March 20, 2013. DTSC reviewed the Report under a Voluntary Cleanup Agreement (Docket No. HSA-VCA 09/10-111) between Pacific Gas and Electric Company (PG&E) and DTSC. The subject property (Property) is located in the vicinity of the former Fillmore Manufactured Gas Plant (MGP) site. The former Fillmore MGP was operated by PG&E from 1905 to 1906.

Based on our review, DTSC approves the Report. According to the Report, potential MGP-related soil contamination above northern California urban ambient levels is present in subsurface soil, generally below 4 feet below ground surface and covered by soil within the range of ambient concentrations, hardscape, or the building's foundation. Under current property conditions, these potential MGP residues do not raise health risk concerns for residents at the Property or surrounding populations. Soil gas sampling indicates that there should be no health risk concern from MGP-related chemicals as a result of soil vapor intrusion. DTSC concurs that further sampling is not needed at this time. The Report recommends the implementation of institutional controls to limit potential future exposure to subsurface MGP residues that will remain in place.

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Darrell Klingman  
September 18, 2013  
Page 2

Please submit a hard copy of the Report to DTSC, and place a second hard copy in the Information repository at the San Francisco Public Library, Marina Branch. If you have questions about this letter, please contact me by phone at 510-540-3836 or by e-mail at Allan.Fone@dtsc.ca.gov.

Sincerely,

Allan L. Fone, Ph.D., Project Manager  
Brownfields and Environmental Restoration Program  
Berkeley Office

cc: Gina Plantz, Vice President  
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ATTACHMENT A-2
Santa Maria Valley Sumps
DRILLING SUMP RESTORATION IN SANTA MARIA VALLEY, CALIFORNIA

SANTA MARIA VALLEY LOCATION, HISTORY AND DESCRIPTION

The Santa Maria Valley is located in Santa Barbara County, within the Central Coast area of California, and approximately 150 miles northwest of Los Angeles. The Valley, triangular in shape, is approximately 10 miles wide and extends from the Pacific Ocean to approximately 25 miles inland. The City of Santa Maria resides in the central portion of the valley. Nearby are the communities of Orcutt to the south and Guadalupe to the west.

![Map of California with the Santa Maria Valley highlighted](Figure 1 – Santa Maria Regional Map. Created by URS Corporation.)

The Santa Maria area has a long and extensive history of agriculture and oil production. The soils of the Santa Maria River Valley have been farmed since the mid-1800s. Crops currently produced from the area include strawberries, celery, lettuce, peas, squash, cauliflower, spinach, broccoli, and beans (described at City of Santa Maria Web site). Cattle graze the rolling hills and fields surrounding the valley. The mild climate and sandy soils have been recognized as ideal conditions for growing grapes, and winemakers continue to establish vineyards within this Central Coast community.
Oil exploration in the area began in 1888. In the early 1900’s there were several dozen wells in the valley and by 1957 there were nearly 1,800 wells. Many of today’s existing major petroleum companies were involved in oil exploration and production in the Santa Maria Valley. By the 1980’s, production in the area had largely declined although a few wells are still active in the valley. Petroleum remains an essential part of California’s economy (described at San Joaquin Geological Society Web site).

The Santa Maria Valley has seen rapid commercial and residential growth during the last decade, as evidenced by a population increase in the City of Santa Maria from 80,000 in the year 2000 to almost 90,000 five years later (described at City of Santa Maria Web site). Although generations of migrant workers, farmers, ranchers, and oil industry workers still occupy the area, today’s residents are a diverse mixture. New families moving to the area are attracted to the rural setting and slightly less expensive real estate market than communities near larger California coastal cities. The proximity to vineyards, beaches, outdoor recreation, and local colleges continue to draw tourists, retirees, and professionals to the area.

As part of this growth, many former oilfield leases have been replaced with homes and retail businesses. With this development, comes the grading of soil, which can expose the top of a drilling sump, providing instant visual and olfactory evidence of the Valley’s rich history of oil production.

Drilling sumps are large earthen pits historically used to contain oil, production water, and drilling mud during drilling operations. Sumps vary in size from an average
residential lot, to the size of a football field. The configuration of an active sump, as observed on an aerial photograph, is typically square or rectangular in shape. The geometry of a sump removal excavation varies due to the mixing, grading and smearing of the material, which generally occurs during abandonment. The sumps were largely covered over when oil wells and leases were abandoned and their sizes and locations were not historically recorded. The California Department of Conservation’s Division of Oil, Gas, and Geothermal Resources (DOGGR) began to catalog sumps in the state that were visible and not covered over with soil or development in the early 1970s. A few years later, California Assembly Bill 2209 became law and provided for sump inspection and correction. By 1979, most of the sumps containing oil were eliminated or screened to prevent wildlife from entering (described at California Department of Conservation Web site). Although not required by law, oil companies have responded to landowner requests to remove drilling sumps when encountered, a fairly simple task when the valley was comprised mostly of open fields.

Some oil companies recognized the inevitable encroachment of homes, businesses, utilities, and roads across these former oil fields, and initiated efforts to address sumps before properties were developed. Some of these efforts were successful, but in other areas, site development was completed before the sumps were identified and remediated. On these developed properties, the constructed features of the community have increased the challenges involved in removing sumps.


Figure 4 - 2004 Aerial photograph of Fernandez and Signal Bradley Leases. Created by URS Corporation. Source of basemap: Golden State Aerial, 2005.
During operation, a typical oil lease in Santa Maria Valley might have contained a dozen wells, one or more sumps associated with each of the wells, a tank battery, and various associated pipelines. Roads connecting these features were traveled extensively due to drilling activities and maintenance requirements. Historically, it was common practice to spread crude oil from the sumps directly onto the oilfield roads to provide a more stable and durable road and control dust.

The wells themselves are subject to abandonment requirements through DOGGR. Historically, diligence put into the abandonment and cleanup of oil leases varied by company, and by provisions set forth in agreements with landowners. Programs were implemented by DOGGR in the mid-to-late 1980s to include: 1) re-abandonment of wells in an attempt to prevent construction from occurring on top of improperly abandoned wells (in other words, ensuring that all wells have cement plugs placed across specified subsurface intervals; well casings are cut off at least 5 feet below ground surface; a steel plate is welded around the circumference of the outer casing; and, a cement surface plug at least 25 feet in length is placed, and 2) removing unneeded cables, pipelines, and tanks from oil well and lease sites (California, 1998). Large surface features like tank batteries or other storage areas were generally disassembled when production ceased, but many of the oil lease features were left in place. It was common and acceptable practice to abandon sumps in place by mixing the oil and mud residues with clean soil for stabilization. Most of the oilfield roads were also left in place, some of which are still intact and used today, others have been paved over with commercial-grade asphalt, and some have eroded into hardened asphaltic fragments.

In recent years, oil companies started addressing sumps voluntarily in efforts to reduce liabilities and avert potential legal issues. Proactively addressing sumps is a challenging task. Among the obstacles encountered are determining the location and size of a sump with limited documentation, completing accurate assessment to establish the number and types of properties impacted, competing for remediation resources, addressing landowner concerns, working within a growing community where people may be unfamiliar with the history of the area and the oil industry, and the lack of regulatory guidelines specific to sumps.
SUMP MATERIAL CHARACTERISTICS

Sump material typically contains total petroleum hydrocarbons (TPH), with little or no volatile organic compounds, polynuclear aromatic hydrocarbons, metals, or polychlorinated biphenyls. Although the sump material is generally classified as non-hazardous relative to California (Title 22) and Federal (RCRA) hazardous waste criteria, full chemical characterization is necessary due to regulatory guidelines and disposal requirements. In 2004, more than 200,000 cubic yards of sump material was hauled from the Santa Maria Valley to appropriate disposal facilities and approximately 10 percent of this material was classified as hazardous.

Santa Maria Valley crude oil is characteristically heavy and viscous, with a typical carbon chain range of C25-C40. Due to this density, the sump material generally measures 1.8 tons per cubic yard. The heavy, viscous oil has been described as having the consistency of cold molasses. The definition of heavy crude oil, as adopted by the US Department of Energy and most often used by the petroleum industry, is any crude oil with a gravity ranging from 10° to 20° F. Most of the United States heavy oil lies within California and most of California’s heavy oil lies within the San Joaquin Valley and the central and southern coast regions. Without special refining equipment, heavy oil typically yields products such as residual fuel oil and asphalt (Guerard, 1998).
VOLUNTARY PROGRAM EVOLUTION

It became evident to property owners, lenders, and regulatory agencies that mechanisms would be needed to monitor and record the progress of sump removals. As land uses changed and environmental due diligence for property transactions increased, it became more important to property owners to have records documenting these removals. Although the work was being done out of good faith by oil companies, property owners often sought a second opinion to verify that a sump had been appropriately assessed and removed. With increasing development and new people moving into the community, a voluntary program was established by local and regional regulators.

California’s environmental regulatory structure includes nine Regional Water Quality Control Boards (RWQCBs) that enforce water quality standards and protect the beneficial uses of the State’s waters. The Central Coast RWQCB designated authority to the Santa Barbara County Fire Department (County) to oversee and regulate sump removal activities. The Santa Barbara County Petroleum Office is also an integral part of the program and represents the interests of DOGGR during sump removals and other oilfield related cleanups.

A new section of the County’s Site Mitigation Unit (SMU) program was created and called the SMU-2 program when the County was designated to oversee the oilfield sump program. As this was the County’s closest petroleum-related remediation program, it was established that companies choosing to voluntarily remove sumps would work with the County under the elements of the SMU-2 program. Site cleanup levels for this program are based on Leaking Underground Storage Tank (LUST) guidelines and United States Environmental Protection Agency Region IX Preliminary Remedial Goals (PRGs). As such, oil field drilling sump removals in this program are subject to the same requirements and cleanup standards as LUSTs.

As part of the SMU-2 program, the County provides input to work plans, witnesses confirmation sampling of excavated sumps, reviews laboratory results, and approves closure reports. The County will issue a No Further Action letter that can be provided to a landowner for their property records after a closure report for a sump or sumps has been approved. The oversight and input that the County provides is required, but not free. The oil companies are charged for the County’s time to provide these services. Although the County governs all of the Santa Maria Valley sump remediation work, any work occurring within a city’s limits (for example, the City of Santa Maria) is also subject to permit requirements and approvals by the appropriate city entity.

Oil companies deciding to address sumps initially complete legal reviews to determine whether or not a sump is their responsibility. Responsibility can come through direct operations of a former oil well or lease, acquisition of a company that directly operated an oil well or lease, agreements with landowners, or trading of lease production or lease cleanup responsibilities with other companies. Sometimes more than one company is responsible for sumps on the same lease. Property owners who become concerned that a sump may exist on their property typically contact DOGGR or city officials. These calls,
more frequent now than 10 years ago, are re-directed to the County. The County will in turn issue a written request to oil companies to determine whether or not the sump is their responsibility, and if appropriate, request them to address the issue with the homeowner. This process and disclosure of potential environmental liability keeps companies active in the SMU-2 program.

**SUMP IDENTIFICATION AND DELINEATION**

After a company has determined that a sump or series of sumps are its responsibility, delineation of the sump or sumps is needed. Precise delineation is important in determining potential disruptions to landowners and remediation costs. The delineation process involves: 1) reviewing available historical well documentation; 2) reviewing historic aerial photographs; 3) georeferencing aerial photographs and locating potential sump locations onto current aerial photographs; and, 4) developing and implementing the appropriate sampling and testing methods (soil boring, trenching, or geophysics) to assess and define the limits of the sump-impacted material.

A review of drilling and abandonment records for an oil well is essential to understanding the history of a well and its associated sump or sumps. DOGGR is responsible for overseeing the drilling, operation, maintenance, and abandonment of oil wells in California. Records of current and historic oil well activities are maintained at DOGGR offices, and are available for public review.

After obtaining well records, well drilling, abandonment, and/or re-working dates are identified and used to select the appropriate aerial photographs for review. A sequence of aerial photographs are selected and examined for evidence of sump features. Sump features most obviously include a large topographical depression; however other indications of a sump are more subtle and may only include stained, graded, or scarred topography. Fortunately, several good historical aerial photographs exist for the Santa Maria Valley area. The most common photographs used for sump interpretation include years 1938, 1943, 1950, 1953, 1960, and 1978. Most companies conducting sump remediation work within the valley have obtained copies of these photographs. Additional aerial photograph resources include the local DOGGR office and the University of California, Santa Barbara.

The importance of DOGGR files and historical aerial photographs became apparent during a sump remediation project in 2004. Oil well #9 was first drilled in 1944. The sump associated with the well was identified through aerial photograph review and confirmed during subsurface assessment activities. The same oil well was subsequently re-drilled in 1950, however no sump associated with the second drilling was observed in any of the aerial photographs reviewed. Upon further review of the aerial photographs, a graded area was observed north of the oil well. The sump associated with the 1944 drilling was observed to the south of the well. The locations of the two sumps are depicted on Figure 6. Subsurface assessment activities were conducted within the graded area located north of the well and a large sump was encountered. Only by reviewing the
drilling record and re-evaluating aerial photographs for topographical disturbances was the second sump discovered.

In addition to the two sumps associated with well #9, Figure 6 also illustrates a common occurrence in sump remediation projects; sumps and sump-impacted materials tend to be more extensive than what can be interpreted from an aerial photograph. Although considered an essential tool in identifying and locating sumps, the limitation of aerial photographs is that they are only a snapshot in time; single points of reference for the time the photograph was taken and single points of reference for a sump geometry that may change.

Early in the sump remediation program, a standard sump size was estimated to be approximately 2,500 cubic yards. The risk of using a standard size sump and the reason it is no longer employed was realized when estimated sump volumes and remediation costs were continually exceeded. Based on the experience of the oil companies and the variety of geometries and volumes observed in past sump restoration projects, it has been decided that no standard sump configuration exists and therefore one should not be assumed. This realization has led the oil companies to implement more extensive sump delineation efforts prior to commencing excavation activities.
Sump delineation efforts may consist of soil borings, trenching and/or geophysics. The method or methods employed are dependent on several criteria including the type of setting (residential, commercial or agricultural) and the size of the property or properties that are potentially affected. The planning, communication, and implementation of sump delineation efforts can take several weeks to several months to complete due to access agreements, permitting requirements, and scheduling conflicts.

The advancement of soil borings is typically performed using a hand auger and direct-push technology. Direct-push equipment can be mounted on a truck or a limited-access vehicle. One or both of these techniques may be used during assessment in a residential, commercial, or agricultural setting. In a residential setting, sump material may potentially exist beneath a homeowner property and the adjacent street. Subsurface conditions in grassy and other landscaped areas are generally assessed using a hand auger while direct-push technology is most often used in streets and driveways. Both of these methods create small diameter borings that can be easily backfilled and capped with material to match the original grade (i.e. asphalt, concrete, or grass). Agricultural conditions can also dictate the type of soil boring that is advanced. Hand-auger borings are generally advanced between row crops during the growing season, and direct-push technology or hand-auger borings can be advanced during crop rotation.

Trenching is obviously more intrusive than soil borings and therefore limited in its use at residential and commercial properties. Trenching has been used in agricultural areas during crop rotation and has been very efficient when several sumps exist within large parcels of land. Trenching creates good visual evidence of subsurface conditions from the ground surface to approximately 12 feet below ground surface. Considering that most sumps extend below depths of 12 feet, the trenching method can be limited in its ability to define the vertical limits of a sump. An additional challenge with trenching is that regulatory authorities define the soil removed from a trench as a waste, whether impacted or not, and require it to be appropriately disposed. In accordance with this definition, trenches excavated for sump delineation are not to be backfilled with the removed material, even pending immediate or future remediation.

The size of a property and its surrounding structures, or lack of structures, is important when evaluating geophysical methods for sump delineation. The geophysical methods that have recently been employed and are proposed for future use include resistivity surveys and seismic refraction surveys. These two methods have been selected based on the density of the sump material relative to the native soil and the anticipated depth of the sump-impacted material. The surveys are non-intrusive by nature and can be conducted in various types of settings.

The Santa Maria Valley is generally underlain with granular materials (sand) that have low conductive potential (moderate resistivity). Sump material has electrical properties that strongly contrast the surrounding granular material. The difference in the resistivity of these materials aids in the interpretation of the resistivity models, and the ability to identify sumps. Tomographic analysis of seismic refraction data enables interpretation of
velocity contrasts between backfilled excavations or sump boundaries and native material. Examples of how these geophysical methods have been used and may be used in the future are provided below.

A seismic refraction survey was conducted on a vacant residential lot. A resistivity survey could not be performed at this location due to the limited size of the area and the existence of surrounding structures. The tomographic models generated from the seismic refraction survey indicated the sump material had a lower velocity than that of the native and undisturbed subsurface materials. As anticipated, a decrease in lateral velocity was indicative of the disturbed or sump boundaries. The findings of this survey were compared to soil boring data collected from the site. The low velocity zones were correlative to the approximate limits of the sump boundaries as identified during the subsurface boring assessment.

A seismic refraction survey and resistivity survey are proposed for future sump identification and delineation in an agricultural setting. Because historical aerial photographs do not exist during the appropriate dates, a large area surrounding the abandoned wellhead will be surveyed. The objective of the proposed geophysical surveys is to locate one or more anomalies with a velocity contrast and/or difference in resistivity that suggests the presence of a disturbed area or sump boundary. Any and all anomalous areas identified during the surveys will be investigated using one or both of the soil boring methods previously described. Additional soil borings will be subsequently advanced to delineate the sump or sumps, as necessary.

Before potential boring locations can be evaluated, historic aerial photographs are brought into a GIS database using a common referencing system (georeferenced) with other features in the database. The task of georeferencing features from historical aerial photographs requires a GIS-trained individual to identify roads, buildings, and/or other topographical features that are identifiable through time. The quality and scale of the various aerial photographs can affect the ease or difficulty with which features can be georeferenced. Sump features and other pertinent information created from the historic aerials will automatically overlay with all other features in the GIS database. These sump features can then be viewed and analyzed within the current modern day landscape. For example, current aerial photographs along with parcel and street layers can be overlaid with the sump and wellhead layers to locate and identify potentially impacted parcels and the associated owners.

Figure 7 provides an example of how a sump and its associated features are georeferenced and viewed within a current aerial photograph. The information typically identified on the sump overlay photograph will include the abandoned wellhead, the estimated sump limits, sump related features, an area of potential impact, and as appropriate, property lines. The location of the abandoned wellhead is an important feature to include, not only because of potential impacts or liability, but because of its location relative to the location of the sump. A well location, as required by DOGGR, must be documented in the drilling and abandonment records, and is subsequently recorded on DOGGR maps. The sump is usually located within close proximity to the
well and can therefore be more easily located in the field once the abandoned well has been located. The area of potential impact is located outside the sump limits and associated sump features. The outline of the area of potential impact is somewhat arbitrary; however the objective is to create an outer limit where sump delineation efforts can confirm the presence or absence of sump impacted material. Data supporting the absence of sump-impacted material is equally as important as data confirming its presence.

In recent years oil companies have contracted high-quality resolution aerial photo flights for portions of the Valley and the City of Santa Maria. These aerial photographs not only document the significant development occurring within the area, but their high resolution provides an opportunity to evaluate potential boring locations prior to conducting site reconnaissance activities.

![Aerial photo interpretation of sump and potentially impacted area associated with sump within a residential and commercial setting. Created by URS Corporation. Source of aerial basemap: Landata Airborne Systems, Inc. October 2002.](image)

**Figure 7** – Aerial photo interpretation of sump and potentially impacted area associated with sump within a residential and commercial setting. Created by URS Corporation. Source of aerial basemap: Landata Airborne Systems, Inc. October 2002.

**CHALLENGES BY PROPERTY TYPE**

As of October 2005, hundreds of sumps in the Santa Maria Valley have been cleaned up. The sumps that have not yet been addressed may now exist beneath agricultural fields, parking lots, roads, houses or businesses, each posing a unique set of challenges for site remediation.
Sumps located in agricultural fields may appear to be the easiest to remediate; however, the timing of the remediation poses a unique problem. Crop rotation periods often provide the only opportunity to remove a sump or number of sumps. As an example, many sumps are located in what are now strawberry fields, which account for approximately 4,000 acres of agricultural land in the Santa Maria Valley. Strawberries are planted in October, harvesting begins in February and generally continues through August (Bendixen 48-53). The narrow window of opportunity (September and perhaps part of August and October) between harvesting and planting allows for access into the fields to excavate and backfill the sumps. Multiple companies choosing to remediate sumps in strawberry fields can result in fierce competition for remediation resources, most notably trucks. In addition to the stringent schedule and resource competition, oil companies may also be subject to financial penalties (i.e. compensating the farmer) if the fields are not available for planting within the deadline promised to a farmer.

Sumps in commercial areas pose a variety of traffic and safety challenges to the public. A business may need to shut down during certain hours of a day, or for a period of several weeks for the work to be completed. Financial compensation may be provided due to the business closure.

When a business is able to operate in conjunction with sump excavation, great attention is given to devising safe traffic plans for trucks and equipment. In addition to cautious entry and exit, there needs to be an appropriate turn-around radius, and room to load sump material or unload backfill material. Additional staff will be required to direct trucks and vehicles associated with the excavation work, and to manage regular business traffic. Staff may be employed to ensure safe management of pedestrian activity or to interact with interested passers-by, providing handouts and using specific talking points to describe the project and program.

Excavations and stockpiles are watered continuously and truck tires brushed free to minimize dust. Limited work hours may be established that help minimize noise and traffic. Proximity to residential neighborhoods, schools, and commuter routes may be considered in the appropriate work hours. Odor control may be employed to eliminate odors to business patrons or neighbors. Security guards may be employed to monitor the area during the non-excavation hours. Each setting dictates a specific plan to address these types of issues.

Residential sump projects can impact a number of homes directly and create the same safety and traffic challenges described above to surrounding neighborhoods. Even those residents that live along the path of the established truck routes will be impacted by safety concerns, traffic, and noise generated by trucks.

Different companies have different ways of approaching homeowners and the community about residential projects. Regardless of the approach, challenges exist in approaching the affected homeowner with an appropriate level of sensitivity. For a sump removal to take place in a residential area, the following must occur: 1) notification to a homeowner...
of the possible presence of a sump; 2) securing access; 3) soil testing to determine whether a sump exists or not; and 4) in some cases, purchasing the home. In addition to talking with directly affected homeowners, the surrounding neighbors are notified of potential traffic, noise and activity associated with the proposed work.

PUBLIC MISCONCEPTIONS AND CHALLENGES

Sump projects within commercial and residential areas are extremely visible. For example, field testing crews wearing hard hats and safety vests enter neighborhoods to complete soil sampling, residents move out of homes purchased by oil companies, houses often remain uninhabited for a period of months or years until demolition, and construction equipment and trucks are brought to the neighborhood for excavation and removal. As with any large-scale environmental effort, public concerns about health hazards become heightened. The diversity of the Santa Maria Valley population results in varying levels of knowledge of the area’s oilfield history, and varying levels of concern about oil-impacted soil.

Unfamiliarity and heightened concern can lead to misconceptions. The primary misconception regarding the sumps in Santa Maria is that the sump material poses a health hazard. Secondly, there are concerns that sump material migrates through the soil. In fact, the material is largely non-hazardous crude-oil impacted soil that is stable within the soil column. Minimal migration may have occurred, but generally the sump material is not mobile. The mobility of sump material is a critical misconception when sump material is proposed to be left in place.

In addition to the misconceptions discussed above, the existence of legal action involving oil companies, developers, and landowners for not disclosing knowledge of environmental impacts adds to community concerns. There have been claims, lawsuits, and settlements in the area that add to the challenges associated with sump remediation.

PROPERTY OWNER CHALLENGES

In situations where a residential property is impacted by a sump, an oil company will offer fair market value to purchase the home, pay for moving expenses and offer some compensation for the inconvenience. Even presented with this offer, some residents are still reluctant to move.

The real estate market and California tax structure may influence a homeowner’s motivation to sell or not, particularly when they understand that the sump material is not harmful to their health. The average home price in Santa Maria and real estate prices in California continues to increase. If a property owner sells a property they have owned for 30 years and purchases a new property, their property taxes will increase significantly.

Some potential alternatives to property purchase and demolition include: 1) allowing the home owner to retain ownership and have the oil company temporarily relocate the home; 2) demolition of only part of the home to complete remediation and then rebuild;
3) compensation for potential diminished property value; or 4) oil company purchase of the property and leasing it back to the resident.

**LEAVE IN PLACE CHALLENGES**

Leaving sump material in place is allowed by the County’s SMU-2 program under some circumstances. Sumps in residential areas may extend onto multiple properties. If the residual material can be assessed and delineated and shown not to be a hazard, the County will issue closure to the project. However, if the concentrations of the residual material proposed to be left in place are above the SMU-2 residential cleanup standards, a deed notification must be prepared to disclose the presence of contamination. This raises concerns regarding diminished property value and the ability to resell a property.

Oil companies and the County agree that the purpose of the SMU-2 program is to address sump materials on private properties, and that removal of material from underneath roadways is not necessary, provided that the material is determined to be non-hazardous. Several sumps are believed to lie entirely underneath busy city and residential streets. Excavation projects in these areas would result in traffic problems, safety issues, utility disconnects, and possible temporary relocation of surrounding residents. Oil companies and the County perceive this level of disruption to be unnecessary relative to the benefits of removing TPH-impacted soil (somewhat asphaltic and “road-like” in nature) from beneath a TPH-laden commercial asphalt.

Local regulators have requested oil companies to remove sump material from under the streets. These requests are based on misconceptions about potential health risks and migration of the sump material. Additional challenges include obtaining permits from local agencies when a portion of a sump exists under a street and that portion of the sump is not included in the proposed cleanup.

Although the LUST regulations offer the closest petroleum-related remediation program guidelines, the cleanup standards associated with the LUST program are quite stringent. The TPH action level of 100 milligrams per kilogram (mg/kg) may seem appropriate for releases of refined petroleum products that have various additives and hazardous components, but the same action level for TPH as unrefined crude oil by itself, which is often the case with sump material, makes it difficult to achieve full closure. It is not always feasible to remove every fragment of sump material in residential settings across multiple 1/2-acre or smaller properties.

Oil companies working in the area have proposed adoption of a risk-based closure process to address materials that may be left in place whether on private property, or beneath a street or parking lot. Although the concept and proposed risk assessment approach is well received by the County, there are challenges in adopting this process within the current regulatory structure and amongst heightened community concerns.
In addition to proposing a risk-based closure alternative, oil companies are also working together to discuss potential educational tools for the community, and share their findings regarding sump assessment and excavation, public reactions, and safety.

CLOSING

The Santa Maria Valley Sump Remediation Program lies in a part of the country where communities and regulators work hard to protect their land and natural resources, and where oil companies with ongoing business in the area seek to maintain good relationships with the public. Remediation work in former oil fields is not uncommon in the United States; however, the level of effort and proactive approach of removing sumps in the Santa Maria Valley is not typical. Challenges faced in identifying, assessing, and removing sumps and addressing community concerns have been many.
WORKS CITED

TEXT


FIGURES

Figure 1: Created by URS Corporation.


Figure 5: Photograph from Santa Maria Valley Historical Society Museum.

Figure 6: Created by URS Corporation. Source of aerial basemap: AirPhotoUSA, May 2000.

Figure 7: Created by URS Corporation. Source of aerial basemap: Landata Airborne Systems, Inc. October 2002.
July 12, 2012

Mr. Jeff Merksamer
Project Manager
Upstream Business Unit
Chevron Environmental Management Company
P.P. Box 1332
San Luis Obispo, CA 93406

Subject: Human Health Risk Assessment for 530 San Diego Street
Santa Maria, California
SMU Site #20152

Dear Mr. Merksamer:

The Santa Barbara County Fire Department, Fire Prevention Division (FPD), Site Mitigation Unit Program (SMU), submitted the Human Health Risk Assessment (HHRA) that was prepared by McDaniel Lambert Inc. (MLI), dated August 25, 2011, for 530 San Diego Street, Santa Maria, California to the State Office of Environmental Health Hazard Assessment (OEHHA) for their review and comment. The HHRA evaluated potential cancer and non-cancer health risks related to residual hydrocarbon soil impacts resulting from former oilfield operations at the site.

On May 8, 2012, FPD sent you a letter requesting your response to OEHHA’s comments. Following that request, MLI and OEHHA discussed these comments, and OEHHA followed up with a memo dated June 1, 2012. In this memo, OEHHA concluded that they concur with MLI’s cancer and non-cancer risk estimates. The results of the HHRA indicate that the upper-bound estimates of lifetime cancer and non-cancer risk are below, or within the lower half of, the EPA risk management range. Therefore, OEHHA, concurred, that health risk estimates for residential use of this property are less than significant. Please see the attached June 1, 2012 OEHHA memo for further details.

If you have comments or questions, please feel free to contact me at (805)686-8140 or at kate.sulka@sbcfire.com, or, Mr. Paul McCaw at (805)346-8219 or at paul.mccaw@sbcfire.com.

Sincerely,

Kate Sulka

Serving the cities of Buellton, Goleta and Solvang, and the Communities of Casmalia, Cuyama, Gaviota, Hope Ranch, Los Alamos, Los Olivos, Mission Canyon, Mission Hills, Orcutt, Santa Maria, Sisquoc, Vandenberg Village
Supervising Hazardous Materials Specialist
Fire Prevention Division
Santa Barbara County Fire Department

Cc: Mr. Charles Lambert, McDaniel Lambert, Inc.
Mr. Louis Cappel, Padre Associates, Inc.

Attachment
MEMORANDUM

TO: Paul McCaw,
Senior Hazardous Materials Specialist
Santa Barbara County Fire Department
Fire Prevention Division
1430 Mission Drive
Solvang, California 93463

FROM: James C. Carlisle, D.V.M., M.Sc.,
Lead Staff Toxicologist
Integrated Risk Assessment Branch

DATE: June 1, 2012

SUBJECT: REVISED HUMAN HEALTH RISK ASSESSMENT, 530 SAN DIEGO STREET, PARK VILLAS II RESIDENTIAL SUBDIVISION, SANTA MARIA, CALIFORNIA, OEHHA #830074-00

Documents reviewed
- Revised Human Health Risk Assessment, 530 San Diego Street, Park Villas II Residential Subdivision, Santa Maria, California, dated May 30, 2012, by McDaniel Lambert, Inc. (MLI)

Site Cancer Risks
- MLI estimated cancer risks of 5 x 10^{-7} from contaminants in shallow soil and 5 x 10^{-6} from contaminants in deeper soil and 3 x 10^{-6} from contaminants in sub-slab vapors.
- OEHHA was able to replicate and verify the revised cancer risk calculations.
- As recommended in my May 8, 2012 memo, the heading for columns 2-5 in Table 6-2 was changed to “Adult + child”.

Non-cancer hazards
- MLI estimated the hazard index for shallow (0-2 feet) soil contaminants for a child as 0.5 and for deeper (0-10 feet) soil contaminants as 0.7. These hazard indices are less than significant.
- Based on random checking of the results, OEHHA found no errors in the hazard quotient calculations.
Conclusions

- OEHHA agrees with the MLI cancer risk calculations. The upper-bound estimates of lifetime risk are in the lower half of the EPA risk management range (10^{-6} to 10^{-4}).
- OEHHA agrees with the reported hazard indices, which are less than significant.

Memo peer reviewed by:

Hristo Hristov, M.D., Ph.D.
Staff Toxicologist
October 1, 2013
Project No. 0801-0044

Chevron Environmental Management Company
Post Office Box 1332
San Luis Obispo, California 93406

Attention: Mr. Jeff Merksamer
Project Manager

Subject: Soil Management Plan, 530 San Diego Street, APN 109-360-008, Santa Maria, Santa Barbara County, California

Dear Mr. Merksamer:

Padre Associates, Inc., on behalf of Chevron Environmental Management Company, has prepared this Soil Management Plan for the subject property.

If you have any questions or comments please contact Mr. Louis Cappel at (805) 786-2650, ext. 26 or via e-mail at lcappel@padreinc.com.

Sincerely,

PADRE ASSOCIATES, INC.

Louis J. Cappel, P.G., C.Hg.
Senior Geologist

Jerome K. Summerlin, C.E.G., C.Hg.
Principal

cc: Mr. Robert Goodman, Esq., Rogers Joseph O'Donnell
SOIL MANAGEMENT PLAN

530 SAN DIEGO STREET, APN 109-360-008, SANTA MARIA, SANTA BARBARA COUNTY, CALIFORNIA

October 2013
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>2.0 PROPERTY CONDITIONS</td>
<td>1</td>
</tr>
<tr>
<td>2.1 Property Description</td>
<td>1</td>
</tr>
<tr>
<td>2.2 Environmental Investigation Summary</td>
<td>1</td>
</tr>
<tr>
<td>3.0 ROLES AND RESPONSIBILITIES</td>
<td>2</td>
</tr>
<tr>
<td>3.1 Notification</td>
<td>2</td>
</tr>
<tr>
<td>3.2 Profiling and Management</td>
<td>2</td>
</tr>
</tbody>
</table>

## PLATES

- Site Location Map ............................................. 1
- Assessment Locations ........................................ 2
- TPH Distribution in Soil .................................... 3
- Cross Sections ................................................ 4

## APPENDICES

APPENDIX A: CONTACT LIST
1.0 INTRODUCTION

Padre Associates, Inc. (Padre) prepared this Soil Management Plan (SMP) at the request of Chevron Environmental Management Company (CEMC) for the 530 San Diego Street property (the Property) located in Santa Maria, Santa Barbara County, California. The location of the Property is presented on Plate 1 - Site Location Map. CEMC is performing this work on behalf of Union Oil Company of California, as Operator of the Santa Maria Valley Oil and Gas Field Unit (Union Oil). This Property was identified to contain petroleum hydrocarbon-affected soil potentially associated with historical oilfield and oilfield servicing operations (Affected Soil). This SMP provides information about CEMC’s environmental assessment of the Property and outlines the process for working with CEMC to address Affected Soil related to excavation activities necessary for current or future on-Property construction activities. A contact sheet is provided as Appendix A.

2.0 PROPERTY CONDITIONS

2.1 PROPERTY DESCRIPTION

The Property address is 530 San Diego Street, Santa Maria, Santa Barbara County California, located on Assessor’s Parcel Number (APN) 109-360-008. The current property owner is Park Villas II Settlement, LLC.

2.2 ENVIRONMENTAL INVESTIGATION SUMMARY

Environmental assessment work conducted by CEMC in accordance with County of Santa Barbara Fire Department (SBCFD) direction, identified total petroleum hydrocarbons (TPH) in shallow soil at the Property. The historical assessment locations are illustrated on Plate 2. The lateral and vertical distribution of TPH indicated in soil samples are provided on Plates 3 and 4, respectively. A summary of all soil sample analytical data is provided in the document titled Case Closure, SMU-2, No Further Action (NFA), which will be submitted to the Santa Barbara County Public Health Department, Environmental Health Services, Site Mitigation Unit (EHS)¹ in conjunction with this SMP.

Affected Soil was identified between approximate depths of 1 foot to 7 feet at the Property. TPH was detected at concentrations ranging from 28 milligrams per kilogram (mg/kg) (HA107 at 1.5 feet) to 25,660 mg/kg (SUN002 at 3 feet). The TPH is reportedly comprised of mid- to high-molecular weight hydrocarbons. Affected groundwater was not identified at the Property.

A Property-specific Human Health Risk Assessment (HHRA) was prepared for the Property by McDaniel Lambert, Inc. (MDL) and submitted to the lead agency, SBCFD. As

¹ Effective June 24, 2013 the Hazardous Materials Unit including the Site Mitigation Unit was transferred from SBCFD to EHS.
indicated in SBCFD’s July 12, 2012, letter, the State Office of Environmental Health Hazard Assessment (OEHHA) concurred with the findings of the HHRA, as well as MDL’s response to comments that health risk estimates for residential use of the Property are less than significant.

3.0 ROLES AND RESPONSIBILITIES

This section outlines the process for requesting CEMC’s assistance identifying and managing Affected Soil.

3.1 NOTIFICATION

CEMC requests that the current property owner(s) provide CEMC with advance notice of plans to conduct construction activities that may encounter Affected Soil, if possible. If potentially Affected Soil is observed during necessary construction activities, and a CEMC-authorized representative is not on site, CEMC should be notified as early as possible to allow CEMC to profile the material and provide consultation on the eventual disposal or reuse of any Affected Soil. CEMC may be reached at (800) 338-5434.

3.2 PROFILING AND MANAGEMENT

This SMP was prepared as a prerequisite to obtaining a "no further action" letter (NFA) for the Property from EHS. Issuance of a NFA means that no further corrective action is required for the Property; accordingly, absent the identification of conditions that were not considered prior to issuance of the NFA or redirection from EHS, it is reasonable to presume that material excavated from the Property may be reused on the Property. Profiling is intended to ensure that reuse of excavated materials on-site is consistent with the NFA determination.

After receiving notification that potentially Affected Soil has been observed during Property construction activities, CEMC will arrange for a representative to appropriately collect samples of the soil (either in situ or from a segregated stockpile) for profiling purposes. The current property owner(s) should ensure that any excavated Affected Soil is appropriately containerized or stockpiled on plastic sheeting in a separate location from non-affected soil to allow for proper soil management and disposal. Any required permits associated with Affected Soil from the Santa Barbara County Air Pollution Control District (SBCAPCD) will be obtained by CEMC, and any necessary air monitoring activities will be performed by a CEMC representative.

If, based on a review of the profiling results, EHS prohibits excavated Affected Soil from being reused on the Property, then CEMC will coordinate with the property owner regarding the proper off-site disposal of that excavated soil. CEMC’s representative will prepare a letter-report documenting and summarizing the soil management activities, which will be signed and stamped by a Professional Geologist or appropriate Professional Engineer registered in the State of California.
PROJECT NAME: 530 SAN DIEGO STREET
SANTA MARIA, CA
PROJECT NUMBER: 0801-0042
DATE: October 2013

TPH DISTRIBUTION IN SOIL
PLATE 3

LEGEND:
Maximum TPH Concentration in Soil Depths
- <100 mg/kg
- 100-999 mg/kg
- >1,000 mg/kg
APPENDIX A
CONTACT LIST
Chevron Environmental Management Company
Attn.: Project Manager
P.O. Box 1332
San Luis Obispo, California 93406
(800) 338-5434

Consultant
Padre Associates, Inc.
Attn.: Project Manager
369 Pacific Street
San Luis Obispo, California 93401
(805) 786-2650

Regulatory Oversight
EHS
Attn.: Lead Case Worker
2125 South Centerpointe Parkway, Room 333
Santa Maria, California 93455
(805) 346-8219
ATTACHMENT A-3
Watson Park/Terrace Drive
Fact Sheet, November 2007

**Land Use Controls Proposed for Terrace Drive Properties**

The Department of Toxic Substances Control (DTSC) and the City of San Jose invite you to review and comment on the draft Removal Action Workplan (draft RAW) for the Terrace Drive Properties (see map on page 3). This cleanup action is part of the ongoing cleanup of Watson Park in San Jose, California.

In July 2006, DTSC mailed a fact sheet informing the surrounding community that a cleanup of soil containing lead and burn ash was being conducted on 9 properties under a Time Critical Removal Action (TCRA) workplan. The lead and burn ash contaminated soil exists to a depth of 15 feet below the ground surface. The TCRA activities for the Terrace Drive Properties included removing 3 to 5 feet of contaminated soil from the residential yards. Clean soil was imported to serve as a cap for the residual lead and burn ash/dump debris remaining on the individual residential properties. Structures, asphalt, concrete, or other solid surfaces also serve as a part of the cap.

The TCRA removal activities on the properties were completed in August 2006. However, lead and burn ash/dump debris remain beneath the cap. The draft RAW describes the prior cleanup actions, alternatives considered and the proposed remedy for the Terrace Drive Properties. The draft RAW is available for public review and comment. Before DTSC approves, modifies, or denies the draft RAW, DTSC will review and consider all comments received during the public comment period.

**Public Comment Period**

November 13, 2007 - December 12, 2007

We encourage you to review and comment on the draft RAW for the Terrace Drive Properties. DTSC will hold a 30-day public comment period beginning November 13, 2007 and ending on December 12, 2007. The draft RAW is available for your review at the information repositories listed on page 4 of this fact sheet. All e-mailed comments must be sent to the DTSC no later than 5 p.m. by December 12, 2007. Please submit your written comments to:

Katharine Hilf, DTSC Project Manager
700 Heinz Avenue
Berkeley, California 94710
or send an e-mail to Khilf@dtsc.ca.gov

DTSC understands the community's interest in the draft RAW and the proposed cleanup actions. Currently, a public meeting is not scheduled for this project; however, if you feel one is warranted you can request a meeting by contacting Ms. Kim Rhodes, Public Participation Specialist, toll-free at 866-495-5651 or 916-255-3651 or by e-mail to Krhodes1@dtsc.ca.gov. Please state your reason(s) in your request and DTSC will consider your request for a public meeting to discuss the draft RAW.
Investigation Findings
In 2004 during construction of a new skate park, ash and other debris was uncovered from a former burn dump and landfill that was closed in the early 1930's. In spring 2006, soil samples were taken throughout Watson Park to define the lateral and vertical extent of the burn dump materials. Based on the preliminary results, additional soil samples were taken from 11 properties adjacent to Watson Park. The lead most likely came from glass, ceramic glazes, and paints that are commonly found in burn dump waste. The soil samples indicated that elevated lead levels up to 6,200 parts per million depending on the location of the sample. The soil samples indicated that the residual lead from burn ash/dump debris went down to a depth of 15 feet below ground surface in some areas.

Proposed Removal Action Workplan
The draft RAW submitted by the City of San Jose summarizes all of the investigations conducted for the Terrace Drive Properties, outlines available cleanup alternatives, evaluates the alternatives and proposes a preferred alternative that would prevent or reduce potential risks to public health and the environment. Cleanup alternatives are screened and evaluated on the basis of their ability to prevent or reduce potential risk to public health and the environment, ability to be implemented, and cost.

Proposed Removal Action Workplan Activities
DTSC evaluated the following three proposed alternatives for the final remedy for the Terrace Drive Properties:

Alternative 1 – No Action: this alternative proposes no physical or institutional controls, no removal of soil and no monitoring.

Alternative 2 – Capping with Institutional Controls: this alternative proposes minimizing exposure to the contaminated soil on the Terrace Drive Properties. However, due to the residual contamination left on the properties after completion of the August 2006 TCRA, a Land Use Covenant (deed restriction) is proposed where lead is above cleanup goals (255 parts per million). A Land Use Covenant is a legal action or obligation that when implemented restricts certain activities and imposes future property use limitations. It also provides property owners notice that the property contains residual contamination.

Alternative 3 – Complete Excavation with Off-site Disposal: this alternative proposes complete excavation to below unrestricted levels, transporting contaminated soil to an appropriate landfill, and refilling the properties with clean soil.

DTSC Recommended Remedial Action Alternative
DTSC recommends Alternative 2, Capping with Institutional Controls, as the recommended alternative for the properties. Because burn ash/dump debris remains on portions of the properties to a depth of 15 feet, a Land Use Covenant to limit the potential for future exposure through controlling and limiting future excavation on the properties is proposed. The proposed Land Use Covenant for Terrace Drive Properties restricts the digging in limited access areas and below three feet in the restricted soil cap area without prior approval by DTSC.

California Environmental Quality Act - Notice of Exemption
DTSC evaluated any possible impacts of the removal action for this project, as required by the California Environmental Quality Act. DTSC has prepared a draft Notice of Exemption (NOE) which states that this removal action will not have significant impacts on the environment. The draft NOE is available for public review, along with other supporting documents in the information repositories.

Next Steps
At the completion of the public comment period, if comments are received from the community on the activities proposed in the draft RAW, DTSC will review and consider all comments before making a final decision on the draft RAW. DTSC will prepare a "Response to Comments" document that consists of all comments received and DTSC responses to the comments. Anyone who submits comments regarding the proposed draft RAW activities will receive a copy of the document. Additionally, a copy of the document will be placed in the information repositories listed on page 4. If comments are not received during the comment period, DTSC will approve the draft RAW and implement the plan as stated.
To view the Terrace Drive documents and other related documents, please visit DTSC website at www.dtsc.ca.gov. Click on “Find a site near you” in the middle of the page. On the first line, type in San Jose and select Watson Park from the alphabetical list of San Jose sites.
For More Information
Please contact the following individuals with any questions or concerns you may have regarding Terrace Drive Properties and the draft RAW.

For questions regarding the draft RAW: Katharine Hilf, DTSC Project Manager, at (510) 540-3817 or by e-mail to Khilf@dtsc.ca.gov.

For questions regarding the public participation process: Kim Rhodes, DTSC Public Participation Specialist, toll-free (866) 495-5651 or (916) 255-3651 or by e-mail to Krhodes1@dtsc.ca.gov.

For questions from the media: Angela Blanchette, DTSC Public Information Officer, at (510) 540-3732 or by-e-mail to Ablanche@dtsc.ca.gov.

Information Repositories
To view the draft RAW, CEQA NOE and other related documents please visit the following locations:

Dr. Martin Luther King, Jr. Library
150 East San Fernando Street
2nd Floor Reference Desk
San José, CA 95112

Northside Community Center
488 North 6th Street
San José, CA 95112

Empire Gardens Elementary School
1060 East Empire Street
San José, CA 95112
Hours: 8:00 a.m. to 5:00 p.m.

Department of Toxic Substances Control
700 Heinz Avenue
Berkeley, CA 94710
File Room: Monday - Friday 8 a.m. to 5 p.m.
By appointment only (510) 540-3800

Notice to the Hearing Impaired Individuals
TDD users can use the California Relay Service at 1-888-877-5378, please ask to speak with
Ms. Kim Rhodes at (916) 255-3651.
RECORDING REQUESTED BY:

Catherine Coombs
444 Terrace Drive
San Jose, CA 95112

WHENRecorded, MAIL TO:

Department of Toxic Substances Control
700 Heinz Avenue
Berkeley, California 94710
Attention: Barbara J. Cook, Chief
Northern California
Coastal Cleanup Operations Branch

COVENANT TO RESTRICT USE OF PROPERTY

ENVIRONMENTAL RESTRICTION

Re: APN 249-63-008; 444 Terrace Drive, City of San José, County of Santa Clara

DTSC Site No. 70000112

This Covenant and Agreement ("Covenant") is made by and among Catherine Coombs (the "Covenantor"), the current owner of property situated in the City of San José, County of Santa Clara, State of California, described in Exhibit "A," attached hereto and incorporated herein by this reference (the "Property"), and the Department of Toxic Substances Control (the "Department"). Pursuant to Civil Code Section 1471, the Department has determined that this Covenant is reasonably necessary to protect present or future human health or safety or the environment as a result of the presence on the land (or portions of the land) of hazardous materials as defined in Health and Safety Code Section 25260 and hazardous substances as defined in Health and Safety Code Section 25316. The Covenantor and the Department, collectively referred to as the "Parties," hereby agree, pursuant to Civil Code Section 1471, and Health and Safety Code sections 25222.1 and 25355.5 that the use of the Property be restricted as set forth in this Covenant. The Parties further agree that this
Covenant shall conform with the requirements of California Code of Regulations, Title 22, Section 67391.1.

ARTICLE I

STATEMENT OF FACTS

1.01. The Property comprises approximately .19 acres, and is located at 444 Terrace Drive, City of San José, County of Santa Clara, State of California, and generally described as Santa Clara County Assessor's Parcel No. 249-63-008. Prior to approximately 1950, the Property was part of an orchard that operated in the general area of the Property. Currently, the Property is used as a single family residence. The Property is located adjacent to an area owned by the City of San José (the "City") commonly referred to as Watson Park. From approximately 1913 through 1934, the City owned and operated portions of Watson Park as a municipal landfill and burn dump.

1.02. In early 2006, the City conducted a Preliminary Waste Characterization Study ("Preliminary Study") on the Property and approximately seven adjacent properties. The Preliminary Study included the collection of subsurface soil samples and surface soil samples from crawlspaces beneath structures on the properties. Analytical data for soil samples collected during the Preliminary Study included data from samples collected at the Property.

1.03. In July 2006, the City prepared a Removal Action Workplan ("RAW") documenting soil removal actions to be conducted on certain of the properties. The RAW set a cleanup level for lead in soil of 255 milligrams per kilogram (mg/kg). The Department approved the RAW on July 27, 2006 and the City's Addendum to the RAW on August 3, 2006. In August 2006, pursuant to the approved RAW, the City conducted soil excavation and removal activities as an Expedited Removal Action on certain of the subject properties, including the Property. The City collected confirmation soil samples from the excavation sidewalls and bottoms and analyzed for total lead remaining in place at the affected properties. Following the collection of the confirmation samples, the City placed a geotextile fabric on the excavation bottoms. Excavations at the properties were backfilled with imported fill material that met criteria established by the Department. Implementation of the RAW was documented in a Soil Removal Action Completion Report for Terrace Drive ("Completion Report") prepared by URS Corporation on behalf of the City (URS, March 5, 2007). The Department approved the Completion Report on March 28, 2007. Following
public comment, the Department approved the Final Remedial Action Workplan for the properties, including the Property, on March 14, 2008.

1.04 In August 2009, pursuant to the Terrace Drive Work Plan Phase II, in furtherance of the RAW (the "Phase II Work Plan"), the City removed additional impacted soil at the properties, including the Property. The purpose of the Phase II Work was to remove impacted or potentially impacted soil immediately adjacent to existing structures, to a depth of three feet below ground surface, and to the extent possible without destabilizing the structures. The Department verified and approved completion of the Phase II Work in November 2009.

1.05 Based on the above work and documentation, the Department has concluded that use of the Property as a single family residence, in accordance with the restrictions set forth in this Covenant, does not and will not pose an unacceptable risk to human health or the environment.

ARTICLE II
DEFINITIONS

2.01 Department. "Department" means the California Department of Toxic Substances Control and includes its successor agencies, if any.

2.02 Environmental Restrictions. "Environmental Restrictions" means all protective provisions, covenants, restrictions, prohibitions, and terms and conditions as set forth in any section of this Covenant.

2.03 Improvements. "Improvements" includes, but is not limited to: buildings, structures, roads, driveways, improved parking areas, wells, pipelines, or other utilities.

2.04 Lease. "Lease" means lease, rental agreement, or any other document that creates a right to use or occupy any portion of the Property.

2.05 Occupant. "Occupant" means Owners and any person or entity entitled by ownership, leasehold, or other legal relationship to the right to occupy any portion of the Property.

2.06 Owner. "Owner" means the Covenantor, and all successors in interest including heirs and assigns, who at any time hold title to all or any portion of the Property.

2.07 Restricted Soil Cap Area. In some areas at the Property, soil containing lead concentrations above the Department approved cleanup goal remains in place at a depth of greater than three (3) feet beneath ground surface (bgs). "Restricted Soil Cap Area(s)"
means those areas of the Property where such impacted soil remains at a depth of greater than three (3) feet bgs. Restricted Soil Cap Area(s) are shown on Exhibit “B,” which is attached hereto and incorporated herein by reference.

2.08. Unrestricted Area(s). “Unrestricted Area(s)” means all areas of the Property except the Restricted Soil Cap Area. Unrestricted Areas are shown on Exhibit “B,” which is attached hereto and incorporated herein by reference.

ARTICLE III

GENERAL PROVISIONS

3.01. Runs with the Land. This Covenant sets forth Environmental Restrictions that apply to and encumber the Property and every portion thereof no matter how it is improved, held, used, occupied, leased, sold, hypothecated, encumbered, or conveyed. This Covenant: (a) runs with the land pursuant to Health and Safety Code Sections 25222.1 and 25355.5 and Civil Code Section 1471; (b) inures to the benefit of and passes with each and every portion of the Property, (c) is for the benefit of, and is enforceable by the Department, and (d) is imposed upon the entire Property unless expressly stated as applicable only to a specific portion thereof.

3.02. Binding upon Owners/Occupants. Pursuant to the Health and Safety Code, this Covenant binds all Owners and Occupants of the Property, their heirs, successors, and assignees, and the agents, employees, and lessees of the owners, heirs, successors, and assignees. Pursuant to Civil Code section 1471, all successive owners of the Property are expressly bound hereby for the benefit of the Department.

3.03. Incorporation Into Deeds and Leases. This Covenant is hereby incorporated by reference in each and every deed and Lease for any portion of the Property.

3.04. Conveyance of Property. Not later than thirty (30) days after any conveyance of any ownership interest in the Property (excluding Leases, and mortgages, liens, and other non-possessory encumbrances), the Owner conveying such interest shall provide written notice to the Department of the conveyance. The written notice shall include the name and mailing address of the new owner of the Property and shall reference the site name and site code as listed on page one of this Covenant. The notice shall also include the Assessor’s Parcel Number (APN) noted on page one. If the new owner’s property has been assigned a different APN, each such APN that covers the Property must be provided. The Department shall not, by reason of this Covenant, have authority to approve, disapprove, or otherwise
affect proposed conveyance, except as otherwise provided by law or by administrative order.

3.05. Costs of Administering the Covenant to be paid by City. The Department has already incurred and will in the future incur costs associated with the administration of this Covenant. Pursuant to the Notice of Settlement and Release recorded against the Property on April 10, 2010, the City has agreed that, pursuant to California Code of Regulations, Title 22, Section 67391.1(h), it shall pay all of the Department's cost in administering this Covenant. The Department agrees that it shall look first to the City, and not to any Owner or Occupant of the Property, for payment of such costs. In the event that the Department is unable to recover such costs from the City, then Covenantor covenants for Covenantor and for all subsequent Owners that, pursuant to California Code of Regulations, title 22, section 67391.1(h), the then-current owner of the Property shall pay the Department's costs in administering this Covenant. In such case, the then current owner of the Property shall retain any and all rights that it may have against the City with respect to such costs.

ARTICLE IV

RESTRICTIONS AND REQUIREMENTS

4.01. Restrictions. There shall be no activities that will disturb soil within the Restricted Soil Cap Area(s) at a depth of more than three (3) feet below grade, including, without limitation, excavation, grading, movement, or removal of soil, except pursuant to a Soil Management Plan approved by the Department.

4.02. Emergency Repairs. The restrictions described in Section 4.01 above, shall not apply to activities necessary for the maintenance, relocation, repair, replacement or upgrade of utilities at, or run through, over, or under, the Property, provided that, where any emergency maintenance to utilities is performed more than three feet below ground surface within the Restricted Soil Cap Area(s), the then-current owner of the affected Property shall provide written notice of such repairs to the Department within fourteen (14) days after completion of such repairs. and shall provide a copy of this Covenant to any third party performing the excavation and/or repair work. Any soil brought to the surface from more than three (3) feet below grade from the Restricted Soil Cap Area(s) during such work shall be used, to the extent possible, for backfill in the trench or excavation from which the soil was removed.

4.03. Soil Management Plan. Prior to commencing any non-emergency activity
more than three feet below ground surface within the Restricted Soil Cap Area(s), the then-current Owner of the affected Property shall provide to the Department a Soil Management Plan identifying the procedures for handling soil brought to the surface from more than three (3) feet below grade from any Restricted Soil Cap Area.

4.04. Access for Department. The Department shall have reasonable right of entry and access to the Property for inspection, monitoring, and other activities consistent with the purposes of this Covenant as deemed necessary by the Department in order to protect the public health or safety, or the environment.

ARTICLE V
ENFORCEMENT

5.01. Enforcement. Violation of this Covenant, including but not limited to, failure to submit, or the submission of any false statement, record or report to the Department, shall be grounds for the Department to pursue administrative, civil or criminal actions, as provided by law.

ARTICLE VI
ANNUAL COMPLIANCE NOTICE

6.01. Annual Compliance Letter. The Owner shall send the Department a letter reporting on its compliance with the Restrictions set forth in Article IV of this Covenant for activities in the Restricted Areas. No report shall be required for Unrestricted Areas of the Property.

6.02. Form of Annual Compliance Letter. The annual compliance letter shall be in a form substantially similar to the draft letter attached to this Covenant as Exhibit “C”. The Owner shall send the Department the annual compliance letter by March 1st of each year and report on activities during the prior calendar year. The annual compliance letter shall be sent to the Department at the address listed in Article 8.04.

ARTICLE VII
VARIANCE, TERMINATION, AND TERM

7.01. Variance. Owner, or any other aggrieved person, may apply to the Department for a written variance from the provisions of this Covenant. Such application shall be made in accordance with Health and Safety Code Section 25233.

7.02. Termination or Partial Termination. Owner, or any other aggrieved person,
may apply to the Department for a termination or modification of one or more terms of this Covenant as they apply to all or any portion of the Property. Such application shall be made in accordance with Health and Safety Code Section 25234. To the extent future work at the Property eliminates the need for portions of the Property to be designated as Restricted Soil Cap Areas, or otherwise more accurately defines such areas, then, the Parties may modify Exhibit B as appropriate and record the revised Exhibit B in the County of Santa Clara. To the extent future work or investigation at the Property more accurately defines the Unrestricted Areas at the Property, the Parties may modify Exhibit B as appropriate and record the revised Exhibit B in the County of Santa Clara.

7.03. **Term.** Unless ended in accordance with paragraph 7.02, by law, or by the Department in the exercise of its discretion, this Covenant shall continue in effect in perpetuity.

**ARTICLE VIII**

**MISCELLANEOUS**

8.01. **No Dedication Intended.** Nothing set forth in this Covenant shall be construed to be a gift or dedication, or offer of a gift or dedication, of the Property, or any portion thereof to the general public or anyone else for any purpose whatsoever.

8.02. **Department and City References.** All references to the Department and the City include successor entities.

8.03. **Recordation.** The Covenantor shall record this Covenant, with all referenced Exhibits, in the County of Santa Clara within ten (10) days of the receipt of a fully executed original.

8.04. **Notices.** Whenever any person gives or serves any Notice ("Notice" as used herein includes any demand or other communication with respect to this Covenant), each such Notice shall be in writing and shall be deemed effective: (1) when delivered, if personally delivered to the person being served or to an officer of a corporate party being served, or (2) three (3) business days after deposit in the mail, if mailed by United States mail, postage paid, certified, return receipt requested, whichever is sooner:

**To Owner:**
Catherine Coombs  
444 Terrace Drive  
San Jose, CA 95112
To Department:
Mark Piros, Unit Chief
Brownfields and Environmental Restoration Program
Department of Toxic Substances Control
700 Heinz Avenue
Berkeley, CA 94710

Any Party may change its address or the individual to whose attention a Notice is to be sent by giving written Notice in compliance with this paragraph.

8.05. Partial Invalidity. If this Covenant or any of its terms are determined by a court of competent jurisdiction to be invalid for any reason, the surviving portions of this Covenant shall remain in full force and effect as if such portion found invalid had not been included herein.

8.06. Statutory References. All statutory references include successor provisions.

IN WITNESS WHEREOF, the Parties execute this Covenant as of the last date indicated below.

Covenantor: [Signature]
By: Catherine Coombs,
Property Owner
Date: November 6, 2010

Department of Toxic Substances Control
By: [Signature]
Karen M. Toth, Unit Chief
Date: December 31, 2010

FRANK PISCITELLI
COMM. # 1910495
NOTARY PUBLIC, CALIFORNIA
ALAMEDA COUNTY
My Commission Expires Nov. 22, 2014
CALIFORNIA ALL PURPOSE ACKNOWLEDGMENT

State of California

County of Santa Clara

On 11/06/2010 before me, R. C. Singh, Notary Public
Name and Title of Officer

personally appeared CATHARINE COMBS

Name of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal

Signature of Notary Public


OPTIONAL INFORMATION

Description of Attached Document

Title or Type of Document:

Document Date: Number of Pages:

SFBayNotary.com
EXHIBIT A

DESCRIPTION:

The land referred to herein is situated in the State of California, County of Santa Clara, City of San Jose, and is described as follows:

PARCEL ONE:


PARCEL TWO:

PORTION OF LOT 23, AS SHOWN UPON THAT CERTAIN MAP ENTITLED, "TRACT NO. 565 GARDEN TERRACE", WHICH MAP WAS FILED FOR RECORD IN THE OFFICE OF THE RECORDER OF THE COUNTY OF SANTA CLARA, STATE OF CALIFORNIA, ON JANUARY 17, 1949 IN BOOK 22 OF MAPS, AT PAGES 8 AND 9, AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE NORTHEASTERLY LINE OF TERRACE DRIVE AT THE DIVIDING LINE BETWEEN LOTS 23 AND 24, AS SAID DRIVE AND LOTS ARE SHOWN UPON THE MAP REFERRED TO; RUNNING THENCE NORTHWESTERLY ALONG THE SAID NORTHEASTERLY LINE OF TERRACE DRIVE 1,56 FEET; RUNNING THENCE NORTH 59 DEG. 21' EAST AND PARALLEL WITH THE SAID DIVIDING LINE BETWEEN LOTS 23 AND 24, FOR A DISTANCE OF 180 FEET, MORE OR LESS, TO A POINT ON THE NORTHEASTERLY LINE OF SAID LOT 23; RUNNING THENCE SOUTH 59 DEG. 21' EAST ALONG SAID LAST NAMED LINE 2 FEET, MORE OR LESS, TO THE SAID DIVIDING LINE BETWEEN LOTS 23 AND 24; RUNNING THENCE SOUTH 59 DEG. 21' WEST ALONG THE DIVIDING LINE BETWEEN SAID LOTS 23 AND 24, FOR A DISTANCE OF 180.48 FEET TO THE POINT OF BEGINNING.

APN: 249-03-036

EXHIBIT A
Exhibit B
March 1, _____ (year)

Mr. Mark Piros, Unit Chief  
Brownfields and Environmental Restoration Program  
Department of Toxic Substances Control  
700 Heinz Avenue  
Berkeley, CA 94710

Subject: Annual Compliance Letter – Covenant To Restrict Use Of Property  
444 Terrace Drive, San Jose, CA

Dear Mr. Piros:

This letter provides the Department of Toxic Substances Control (DTSC) with the Annual Compliance Report required by the Covenant To Restrict Use Of Property Environmental Restriction (Deed Restriction) recorded on April __, 2010, with respect to 444 Terrace Drive, San José, California (the Property).

Article VI of the Deed Restriction requires that the current owner of the Property provide a report "on its compliance with the Restrictions set forth in Article IV of this Covenant for activities in the Restricted Areas. No report shall be required for Unrestricted Areas of the Property."

The undersigned owner hereby certifies that, for the year commencing ____________, 20___, and ending ____________, 20___ (check one):

☐ No activities took place at the Property that disturbed any Restricted Soil Cap Area at a depth of more than three (3) feet below grade, except pursuant to a Soil Management Plan approved by DTSC.

☐ The following activities took place at the Property that disturbed a Restricted Soil Cap Area at a depth of more than three (3) feet below grade, without (or inconsistent with) a Soil Management Plan approved by DTSC. (Describe in detail; attach additional pages or documents, including maps, as necessary):

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

Exhibit C
As provided in the Notice of Settlement and Release regarding the Property recorded on April _____, 20___, the City of San Jose is responsible to pay DTSC's costs in administering the Deed Restriction, including costs associated with DTSC's review of this Annual Notice.

Sincerely,

Property Owner, 444 Terrace Drive, San Jose, CA
ATTACHMENT A-4
Grand Marina Village
July 16, 2010
File Nos. 01S0668, 01-0288, 01-0565 (mej)

Warmington Residential California
Northern California Division
Attn: Lincoln Leaman, Project Manager
2400 Camino Ramon, Suite 234
San Ramon, CA 94583
Lincoln@warmingtongroup.com

SUBJECT: No Further Action, Grand Marina Village, 2041, 2043, 2045, 2047 and 2051
Grand Avenue, Alameda, Alameda County

Dear Leaman:

Regional Water Board staff have reviewed the June 25, 2010, Draft Removal Action Completion report, prepared on behalf of Warmington Residential California (Warmington) by SES. This report documents the completion of the final phase of remediation at the subject property (Site). This letter confirms the completion of site investigation and remedial action for the pollutant releases at the Site.

The Site is located at the end of Grand Street along the bay’s edge in Alameda and is about 3 acres in size. Warmington purchased the property to redevelop into a residential project which includes single-family homes and two parks. The Site has been investigated and remediated to allow for this conversion from industrial to residential use. The Site had been impacted from a long history of industrial uses and the likely placement of impacted dredge spoils across portions of the surface. The primary chemicals of concern were arsenic, lead and petroleum hydrocarbons. Investigation and cleanup were conducted in a phased approach.

The initial cleanup activities included the removal of above-ground petroleum storage tanks, underground storage tanks and over-excavation of contaminated soil in the area of a former above-ground storage tank farm. A second phase of cleanup for the petroleum impacts related to underground tanks and included the removal and offsite disposal of petroleum impacted soil exceeding approved cleanup goals.

To address the arsenic and lead impacted soil, the cleanup plan called for placing a minimum of two feet of clean imported fill soil across the Site to act as a “clean cap” and prevent exposure. This was completed earlier on the residential portion of the Site. The final phase of cleanup addressed the two parks on the Site. Due to the amount of soil at the Site and final grades
needed, approximately 2,600 tons of surface soil (containing lead and arsenic) in the park areas was excavated to a depth of two feet and disposed offsite. Two feet of clean fill was then placed across this portion of the Site. With this final task completed, the entire Site now has a minimum of two feet of "clean fill" across it.

In addition to the clean cap, an environmental deed restriction has been recorded on the entire Site. Article III, Section 3.1 a. of this document prohibits digging or other intrusive activities below a depth of two feet across the entire Site, in order to prevent exposure to the underlying soil. All future owners and occupants of the Site must comply with the requirements set forth in the environmental deed restriction. Failure to do so, may subject any such party to enforcement action by this agency.

Based upon the available information, including the current land use, and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the pollutant releases at the subject site, except for compliance with the environmental deed restriction discussed above, is required.

If you have any questions, please contact Mark Johnson of my staff at (510) 622-2493 [e-mail mjohnson@waterboards.ca.gov].

Sincerely,

Bruce H. Wolfe
Executive Officer

Attachment: Case Closure Summary

cc w/attach: Donna Drogos, Alameda County Environmental donna.drogos@acgov.org
Norm Soderberg, Warmington, Norm@warmingtongroup.com
Tom McCloskey, SES, tmccloskey@sesinconline.net
III. AGENCY INFORMATION

Agency Name: SF Bay Regional Water Quality Control Board
Address: 1515 Clay Street, Suite 1400
City/State/Zip: Oakland, CA 94612
Phone: 510-622-2493
Responsible Staff Person: Mark Johnson
Title: Engineering Geologist

II. SITE INFORMATION

Site Facility Name: Grand Marina / Encinal Marina LTD. / Grand Marina Village
Facility Address: 2051 and 2099 Grand Street, Alameda, CA 94501
RB Case No.: 01-0288 / 01-0565 / 01S0668
Local Case No.: R00000819 (associated with RB Case no. 01-0288)
Priority:

Responsible Parties (include addresses and phone numbers)
Peter Wang – Grand Marina - P.O. Box 2453, Alameda, CA 94501  510.865.1200

<table>
<thead>
<tr>
<th>Tank No.</th>
<th>Size in Gallons</th>
<th>Contents</th>
<th>Closed In—Place/Removed?</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tank 1</td>
<td>12,000</td>
<td>Gasoline</td>
<td>Removed - Alameda Fire Dept. (AFD) Permit # – F05-0119</td>
<td>10/19/2005</td>
</tr>
<tr>
<td>Tank 2</td>
<td>12,000</td>
<td>Diesel</td>
<td>Removed - AFD - F05-0119</td>
<td>10/19/2005</td>
</tr>
<tr>
<td>UST 2</td>
<td>2,000</td>
<td>Unknown Fuel</td>
<td>Removed - AFD - F08-0151</td>
<td>10/22/2008</td>
</tr>
</tbody>
</table>

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and Type of Release: Two Decommissioned USTs, Three Unknown USTs, Arsenic and Lead in old Dredge fill

Site characterization complete? Yes
Date Approved by Oversight Agency: Third Draft RAW Approved by SF Bay RWQCB March 16, 2010

Monitoring wells installed? None
Number: --
Proper screened interval? --

Highest GW Depth Below Ground Surface: 7 feet
Lowest Depth: 16 feet
Flow Direction: North / North East
Most Sensitive Current Use: Residential Housing, Oakland Estuary

Most Sensitive Potential Use and Probability of Use: Community Park and Residential Housing

Are drinking water wells affected? No

Is surface water affected? No

Aquifer Name: ---

Nearest surface water name: Alameda/Oakland Estuary

Off-Site Beneficial Use Impacts (Addresses/Locations): None

Report(s) on file? Where is report(s) filed?

<table>
<thead>
<tr>
<th>POLLUTANT</th>
<th>Soil (ppm) Before</th>
<th>After</th>
<th>Water (ppb) Before</th>
<th>After</th>
<th>POLLUTANT</th>
<th>Soil (ppm) Before</th>
<th>After</th>
<th>Water (ppb) Before</th>
<th>After</th>
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</thead>
<tbody>
<tr>
<td>TPH Gas</td>
<td>Unknown</td>
<td>450</td>
<td>Unknown</td>
<td>220</td>
<td>Zinc</td>
<td>Unknown</td>
<td>160</td>
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<td>TPH Diesel</td>
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<td>200</td>
<td>Unknown</td>
<td>5,500</td>
<td>Benzene</td>
<td>Unknown</td>
<td>0.088</td>
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<td>TPH Oil</td>
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<td>22.7</td>
<td>Unknown</td>
<td>25,300</td>
<td>Ethylbenzene</td>
<td>Unknown</td>
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<td>&lt;0.5</td>
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<td>Unknown</td>
<td>129,000</td>
<td>Toluene</td>
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<td>0.098</td>
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<tr>
<td>Lead</td>
<td>Unknown</td>
<td>390*</td>
<td>Unknown</td>
<td>41</td>
<td>Xylenes</td>
<td>Unknown</td>
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<td>Chromium</td>
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<td>Unknown</td>
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<td>Unknown</td>
<td>0.7</td>
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<td>Unknown</td>
<td>33</td>
<td>Unknown</td>
<td>&lt;10</td>
<td>Arsenic</td>
<td>18</td>
<td>18</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

Maximum Documented Pollutant Concentrations—Before and After Cleanup

Comments (Depth of Remediation, etc.):
IV. CLOSURE

| Does the completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? | Yes |
| Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? | Yes |
| Does corrective action protect public health for current land use? | Yes |
| Site Management Requirements: Covenant and Environmental Restriction on Property – Deed Restriction | |
| Monitoring Wells Decommissioned: None | Number Decommissioned: --- | Number Retained: --- |
| List Enforcement Actions Taken: | |
| List Enforcement Actions Rescinded: | |

V. TECHNICAL REPORTS, CORRESPONDENCE, ETC. THAT THIS CLOSURE RECOMMENDATION WAS BASED UPON

VI. ADDITIONAL COMMENTS, DATA, ETC.
This document and the related CASE CLOSURE LETTER shall be retained by the lead agency as part of the official site file.
Recording Requested By:
First American Title on behalf of:
Wannington Grand Marina Associates, LP

When Recorded, Mail To:
California Regional Water Quality Control Board
Attn: Executive Officer
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612

COVENANT AND ENVIRONMENTAL RESTRICTION
ON PROPERTY

GRAND MARINA VILLAGE
Tract No. 7723 (40 Lots)
Alameda, California
County of Alameda

This Covenant and Environmental Restriction on Property (this "Covenant") is made as of the 15th day of April, 2010 by Wannington Grand Marina Associates, a California limited liability company, ("Covenantor") who is the Owner of record of that certain property situated in the City of Alameda, County of Alameda, State of California, which is more particularly described in Exhibit A attached hereto and incorporated herein by this reference (such portion hereinafter referred to as the "Burdened Property"), for the benefit of the California Regional Water Quality Control Board for the San Francisco Bay Region (the "Board"), with reference to the following facts:

A. The Burdened Property and groundwater underlying the property contains hazardous materials.

B. Contamination of the Burdened Property. Soil at the Burdened Property is believed to be contaminated as the result of the placement of contaminated dredged fill materials decades ago to expand the property. This was a common practice on the island of Alameda and elsewhere around the San Francisco Bay margin. These operations resulted in contamination of soil with arsenic and lead which constitute hazardous materials as that term is defined in Health & Safety Code Section 25260. These soils are capped by a minimum of 2 feet of imported, uncontaminated soils. Groundwater is contaminated with petroleum hydrocarbons from past surface spills and underground storage tanks since removed. The contaminated groundwater is not moving towards the estuary, does not contain volatile contaminants that threaten indoor air quality, and are gradually degrading over time via naturally-occurring degradation processes.

Water Board File No 0180668