

**APPENDIX F**

**LETTER TO SAMUEL UNGER DATED JANUARY 17, 2014 RE: INFORMATION ON  
RESIDENTIAL PROPERTY REMEDIATION PROJECTS AND SUPPORTING  
DOCUMENTATION**

January 17, 2014

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 Toxic Substances Control, San Francisco Regional Water Quality Control Board and

Mr. Samuel Unger, P.E.

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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



Mark Grivetti P.G., C.Hg., C.E.G.  
Principal

cc:

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

Attachment

**ATTACHMENT**

## **PGE Former Fillmore MGP – San Francisco – 2010 – ongoing**

### **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 Toxic 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 “[l]imit 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

[http://www.envirostor.dtsc.ca.gov/public/profile\\_report.asp?global\\_id=60001254](http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=60001254)

Remedial Action Plan Former North Beach and Fillmore Manufactured Gas Plant Sites San Francisco, California. Haley and Aldrich. May 2012

## **Santa Maria Valley Sumps - Santa Maria – 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.  $5 \times 10^{-6}$  for 530 San Diego Street McDaniel Lambert, Inc. 2012). For cancer risk estimates equal to or greater than  $1 \times 10^{-5}$  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:

Doane-Allmon, Julie and Heather Boyd. 2005. Drilling Sump Restoration in Santa Maria Valley, California. Presented at the Remedial Technologies Symposium (RemTech 2005).

McDaniel Lambert, Inc. 2006. Screening Health Protective Levels for Soil, Santa Maria Valley Sumps. October 12, 2006.

McDaniel Lambert, Inc. 2012. Revised Human Health Risk Assessment, 530 San Diego Street, Park Villas II Residential Subdivision, Santa Maria, California, dated May 30, 2012.

[http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T10000004557](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000004557)

## **Watson Park/Terrace Properties - San Jose – 2007 - 2010**

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:

[http://www.envirostor.dtsc.ca.gov/public/profile\\_report.asp?global\\_id=70000112](http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=70000112)

URS Corporation, 2007. Draft Removal Action Workplan Terrace Drive Properties San Jose, California. October 2007.

## **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](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=SL0600177641)

Third Draft Remedial Action Work Plan. Grand Marina Village. Strategic Engineering & Science, Inc. January 2010.

ATTACHMENT A-1  
PGE Former Fillmore MGP

# COMMUNITY Notice

The mission of DTSC is to protect California's people and environment from harmful effects of toxic substances through the restoration of contaminated resources, enforcement, regulation and pollution prevention.

## 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 MGPs, 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 MGPs 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 MGPs 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](http://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](mailto: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](mailto:wayne.hagen@dtsc.ca.gov)

For media questions, please contact:

#### Sandy Nax

DTSC Public Information Officer  
(916) 327-6114  
[sandy.nax@dtsc.ca.gov](mailto: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.





**Matthew Rodriguez**  
Secretary for  
Environmental Protection



## Department of Toxic Substances Control

Deborah O. Raphael, Director  
700 Heinz Avenue  
Berkeley, California 94710-2721



**Edmund G. Brown Jr.**  
Governor

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.

Darrell Klingman, PG, CHG  
April 16, 2013  
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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](mailto:afone@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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Jesus Sotelo, PG  
Department of Toxic Substances Control  
[Jesus.Sotelo@dtsc.ca.gov](mailto:Jesus.Sotelo@dtsc.ca.gov)

\* Accomodation Recording \*

RECORDING REQUESTED BY:

PACIFIC GAS AND ELECTRIC COMPANY  
245 Market Street, N10A, Room 1015  
P.O. Box 770000  
San Francisco, California 94177

WHEN RECORDED, MAIL TO:

Department of Toxic Substances Control  
700 Heinz Avenue  
Berkeley, California 94710  
Attention: Branch Chief  
Brownfields and Environmental Restoration  
Program, Berkeley Office

We certify this to be a true and correct copy of the original.

Recorded on 6/21/2013

As Document # 2013-J691035  
First American Title Company

BY K. Clay

SPACE ABOVE THIS LINE RESERVED FOR RECORDER'S USE

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 "Covenantor"), 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 Covenantor 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.

Initials [Handwritten initials]

**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

Initials



impacted soil was mitigated by installation of a concrete surface barrier, which functions as an additional protective barrier. "Restricted Access Cap Area  $\geq$  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  $\geq$  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  $\geq$  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 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; 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-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.

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  $\geq$  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  $\geq$  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  $\geq$  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  $\geq$  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  $\geq$  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  $\geq$  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  $\geq$  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**

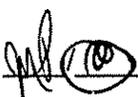
5.01. Enforcement. Failure of the Owner or Occupant to comply with this Covenant is a violation of this Covenant. Violation of this Covenant, including but not limited to, failure to submit, or the submission of any false statement, record or report to the Department, shall be grounds for the Department 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  $\geq 3$  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.

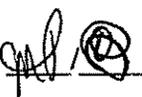
## **ARTICLE VIII**

### **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.

Initials 

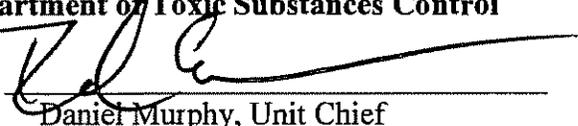
IN WITNESS WHEREOF, the Parties execute this Covenant as of the last date indicated below.

Covenantor:

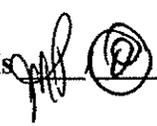
By:   
Marvin Penner, Manager  
Land Management  
Representing Pacific Gas and Electric Company

Date: 6-6-2013

Department of Toxic Substances Control

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

Date: 6/17/13

Initials 

## Exhibit A

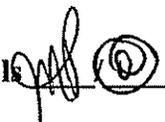
### DESCRIPTION OF THE PROPERTY

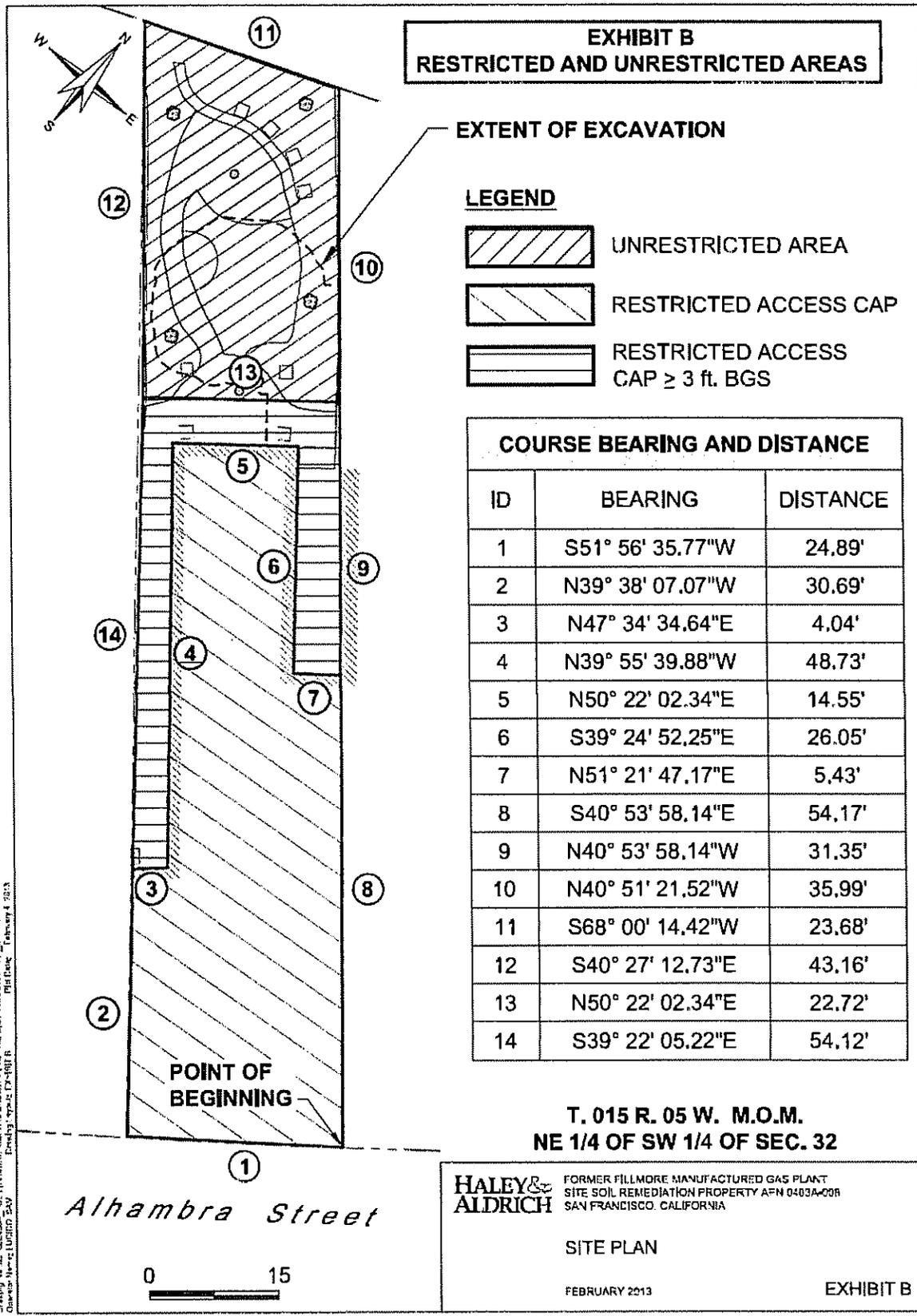
The following described real property, located in the City and County of San Francisco, State of California:

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

Initials 



Checking: M. J. GONZALES, P.E. (11174) REGISTERED PROFESSIONAL ENGINEER AND DISTANCE MEASUREMENT SPECIALIST, CALIFORNIA  
 Checked: M. J. GONZALES, P.E. (11174) REGISTERED PROFESSIONAL ENGINEER AND DISTANCE MEASUREMENT SPECIALIST, CALIFORNIA  
 Date: February 7, 2013

Initials

**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  $\geq$  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  $\geq$  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 

(Describe in detail; attach additional pages or documents, including maps, as necessary):

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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

Initials 

State of California )  
County of Sacramento )

### CALIFORNIA ALL-PURPOSE CERTIFICATE OF ACKNOWLEDGMENT

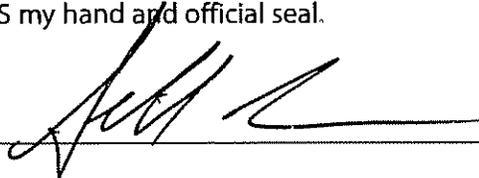
On June 6, 2013 before me, Seth William Curran, Notary Public  
(here insert name and title of the officer)

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 



(Seal)

#### 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) \_\_\_\_\_ Title(s)
- Guardian/Conservator
- Partner - Limited/General
- Trustee(s)
- Other: \_\_\_\_\_

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

Additional Information	
<b>Method of Signer Identification</b>	
Proved to me on the basis of satisfactory evidence: <input type="checkbox"/> form(s) of identification <input type="checkbox"/> credible witness(es)	
Notarial event is detailed in notary journal on: Page # _____ Entry # _____	
Notary contact: _____	
<b>Other</b>	
<input type="checkbox"/> Additional Signer(s)	<input type="checkbox"/> Signer(s) Thumbprint(s)
<input type="checkbox"/> _____	

# 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)

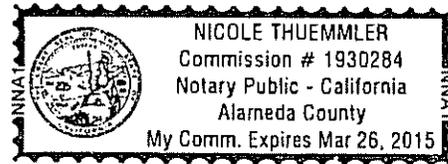
personally appeared Daniel Murphy

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  
Signature of Notary Public (Notary Seal)



## ADDITIONAL OPTIONAL INFORMATION

### DESCRIPTION OF THE ATTACHED DOCUMENT

Covenant to restrict use of  
(Title or description of attached document)

property APN 0463A-008  
(Title or description of attached document continued)

Number of Pages 9 Document Date 6/6/13  
6/13/13

(Additional information)

### CAPACITY CLAIMED BY THE SIGNER

- Individual (s)  
 Corporate Officer

(Title)

- Partner(s)  
 Attorney-in-Fact  
 Trustee(s)  
 Other \_\_\_\_\_

### 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 /are) 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



## Department of Toxic Substances Control



**Matthew Rodriguez**  
Secretary for  
Environmental Protection

Deborah O. Raphael, Director  
700 Heinz Avenue  
Berkeley, California 94710-2721

**Edmund G. Brown Jr.**  
Governor

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.

Darrell Klingman  
September 18, 2013  
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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,



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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.



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).



Figure 2 – 2004 aerial photograph showing agricultural lands and developed areas overlain with abandoned oil wells. Created by URS Corporation. Source of basemap: AirPhotoUSA, 2000. Source of oil well locations: DOGGR Map 312. September 2002.

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.

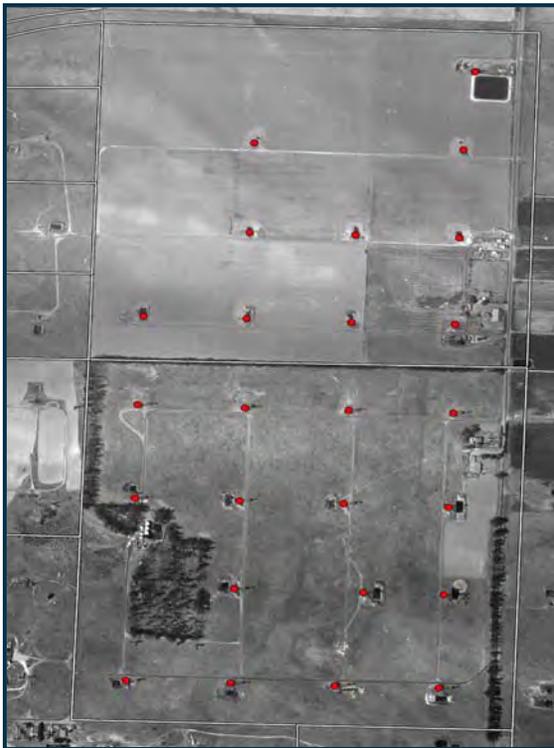


Figure 3 -1994 Aerial photograph of Fernandez and Signal Bradley Leases. Created by URS Corporation. Source of basemap: PAI-US-101, 1952.



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.

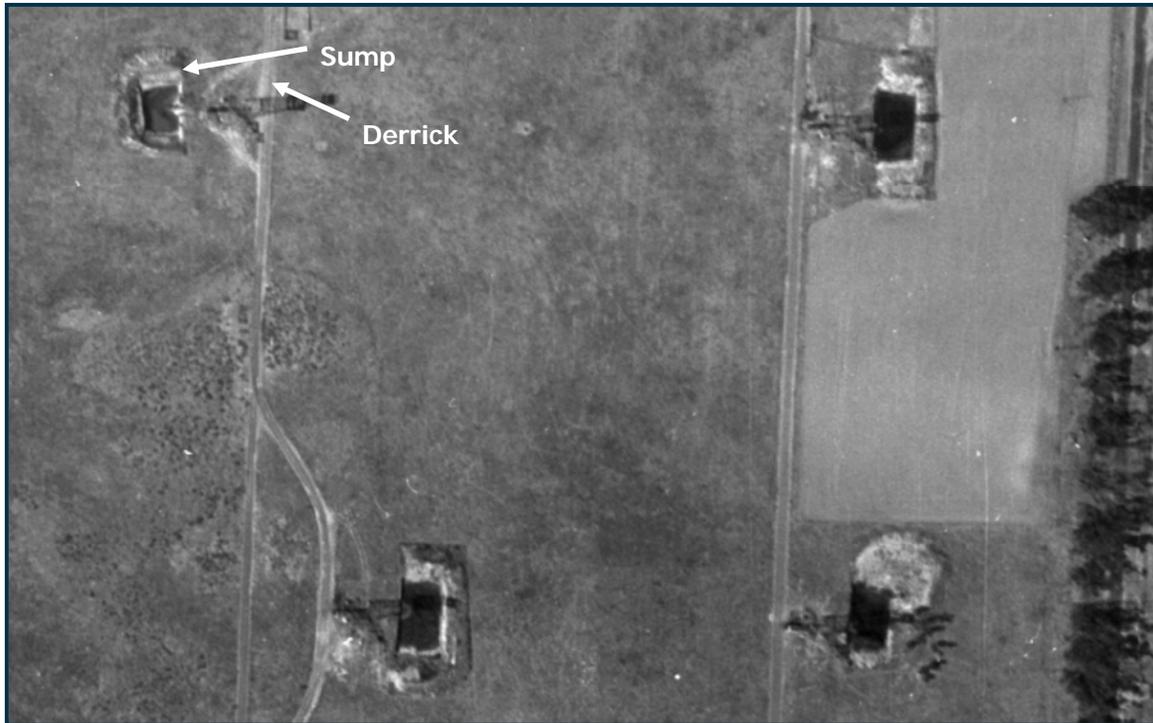


Figure 5 – Historical aerial photograph of Signal Bradley Lease. Derricks and associated drilling sumps. Created by URS. Source of basemap: PAI-US-101, 1952.

## **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.



Figure 6 – Aerial photo depicting the two sumps associated with well #9. Photo also illustrates estimated sump sizes (black rectangular shapes) and actual excavated areas (green areas). Created by URS Corporation. Source of aerial basemap: AirPhotoUSA, May 2002.

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 aeriels 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.



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 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.

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### FIGURES

Figure 1: Created by URS Corporation.

Figure 2: Created by URS Corporation. Source of aerial basemap: Golden State Aerial Surveys, Inc., May 2004 and AirPhotoUSA, May 2000. Source of oil well locations: DOGGR Map 312. September 2002.

Figures 3 and 4: Created by URS Corporation. Source of aerial basemap: Golden State Aerial Surveys, Inc., May 2004. Source of oil well locations: DOGGR Map 312. September 2002.

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.



# Fire Department

*"Serving the community since 1926"*

## HEADQUARTERS

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Fire Chief  
County Fire Warden

Christian J. Hahn  
Deputy Fire Chief

July 12, 2012

Mr. Jeff Merksamer  
Project Manager  
Upstream Business Unit  
Chevron Environmental Management Company  
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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](mailto:kate.sulka@sbcfire.com), or, Mr. Paul McCaw at (805)346-8219 or at [paul.mccaw@sbcfire.com](mailto: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

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

Attachment

# Office of Environmental Health Hazard Assessment



Matthew Rodriguez  
Secretary for  
Environmental Protection

George V. Alexeeff, Ph.D., D.A.B.T., Acting Director  
Headquarters • 1001 I Street • Sacramento, California 95814  
Mailing Address: P.O. Box 4010 • Sacramento, California 95812-4010  
Oakland Office • Mailing Address: 1515 Clay Street, 16<sup>th</sup> Floor • Oakland, California 94612



Edmund G. Brown Jr.  
Governor

## 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

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### 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  $5 \times 10^{-7}$  from contaminants in shallow soil and  $5 \times 10^{-6}$  from contaminants in deeper soil and  $3 \times 10^{-6}$  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

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California Environmental Protection Agency

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption.*

## 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.

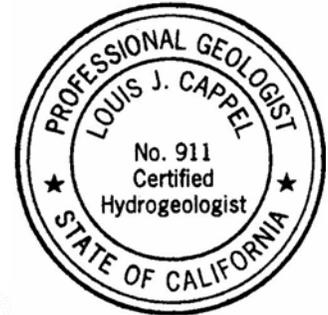
If you have any questions or comments please contact Mr. Louis Cappel at (805) 786-  
2650, ext. 26 or via e-mail at [lcappel@padreinc.com](mailto:lcappel@padreinc.com).

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

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### APPENDICES

APPENDIX A: CONTACT LIST

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## 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)<sup>1</sup> 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

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<sup>1</sup> Effective June 24, 2013 the Hazardous Materials Unit including the Site Mitigation Unit was transferred from SBCFD to EHS.

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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.

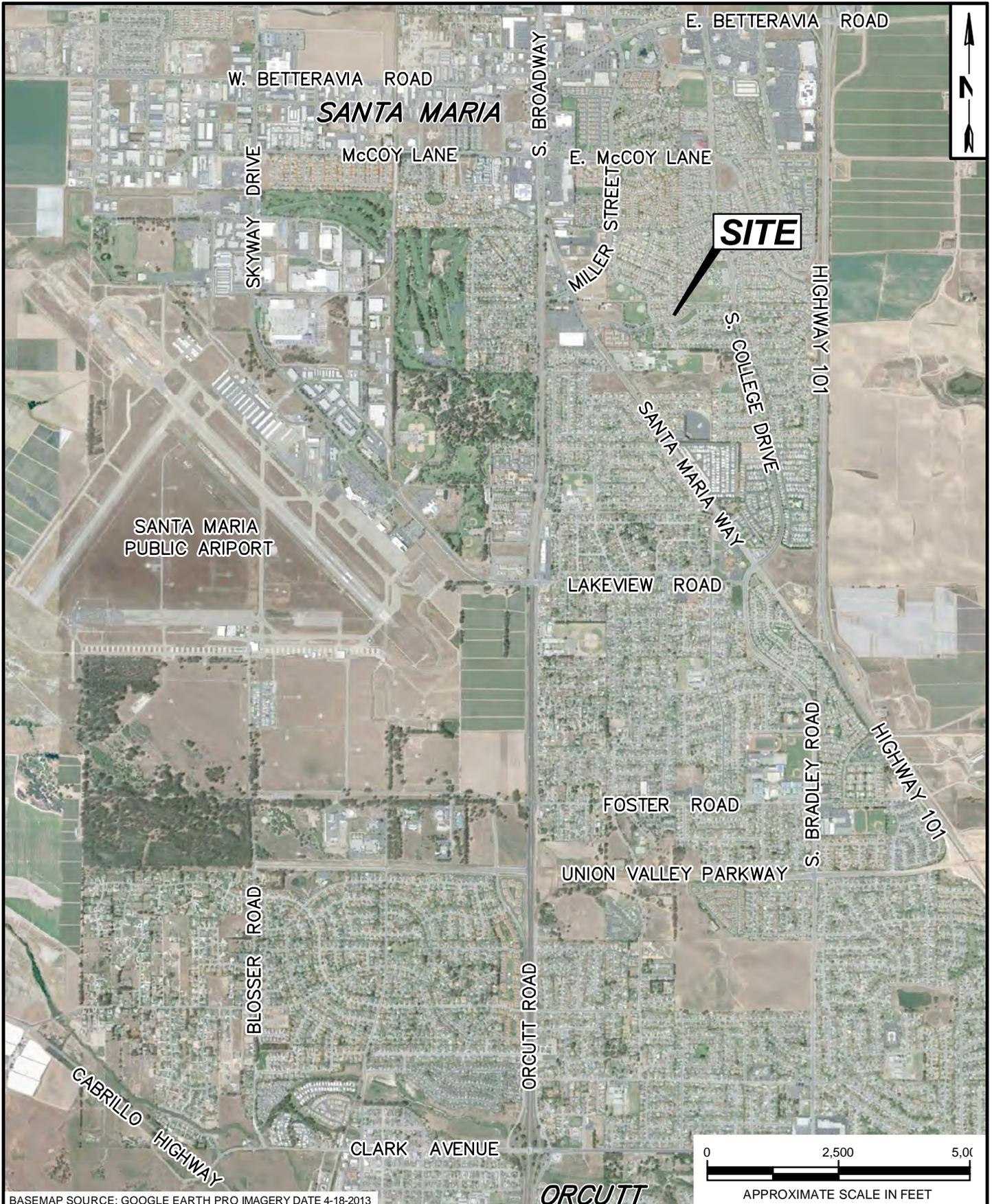
After receiving notification that potentially Affected Soil has been observed during Property construction activities, CEMC will arrange for a representative to appropriately collect samples of the soil (either in situ or from a segregated stockpile) for profiling purposes. The current property owner(s) 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.

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## PLATES

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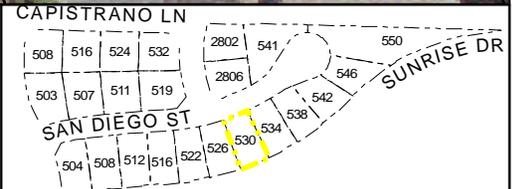
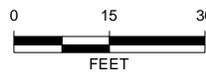
BASEMAP SOURCE: GOOGLE EARTH PRO IMAGERY DATE 4-18-2013

<p>PROJECT NAME:  <b>530 SAN DIEGO STREET          SANTA MARIA, CA</b></p> <p>PROJECT NUMBER: _____ DATE: _____</p>	<p><b>SITE LOCATION MAP</b></p>	<p>PLATE  <b>1</b></p>
-----------------------------------------------------------------------------------------------------------------------------	---------------------------------	----------------------------



**LEGEND:**

- Groundwater Monitoring Well
- Soil Boring
- Sub-Slab Vapor Probe
- Subject Property
- Property Boundary

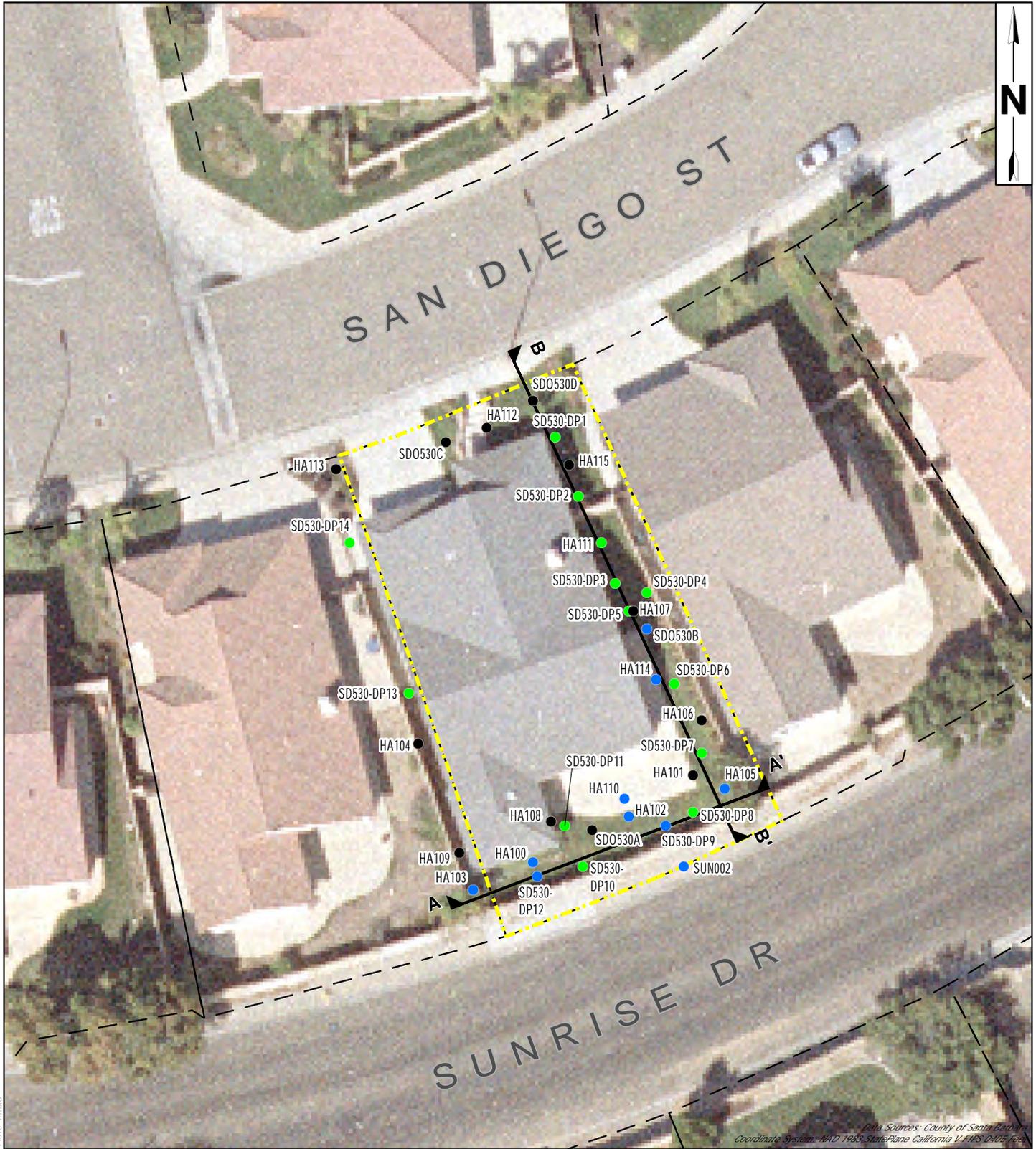


Data Sources: County of Santa Barbara  
Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet

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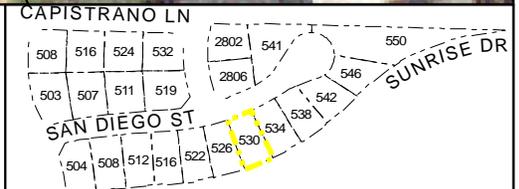
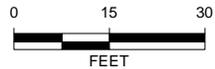
PROJECT NAME:	
530 SAN DIEGO STREET SANTA MARIA, CA	
PROJECT NUMBER:	DATE:
0801-0042	October 2013

## ASSESSMENT LOCATIONS



**LEGEND:**

- Maximum TPH Concentration in Soil Depths**
- <100 mg/kg
  - 100-999 mg/kg
  - >1,000 mg/kg
- ▲ Cross Section  
 □ Subject Property  
 □ Property Boundary

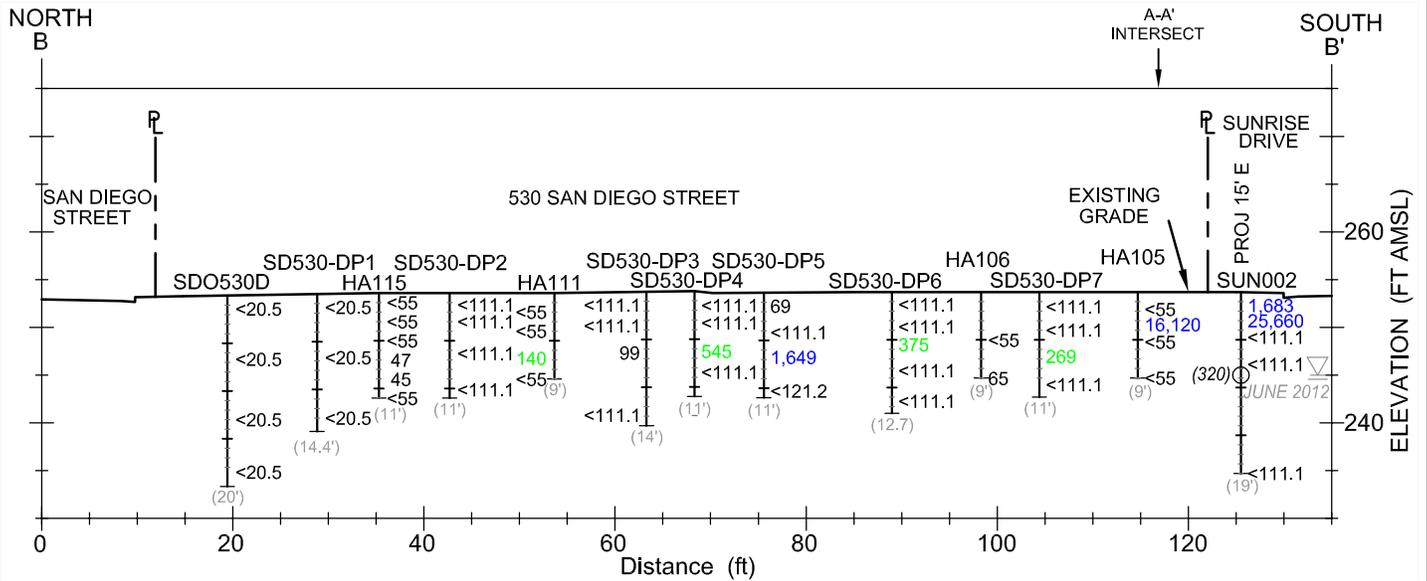
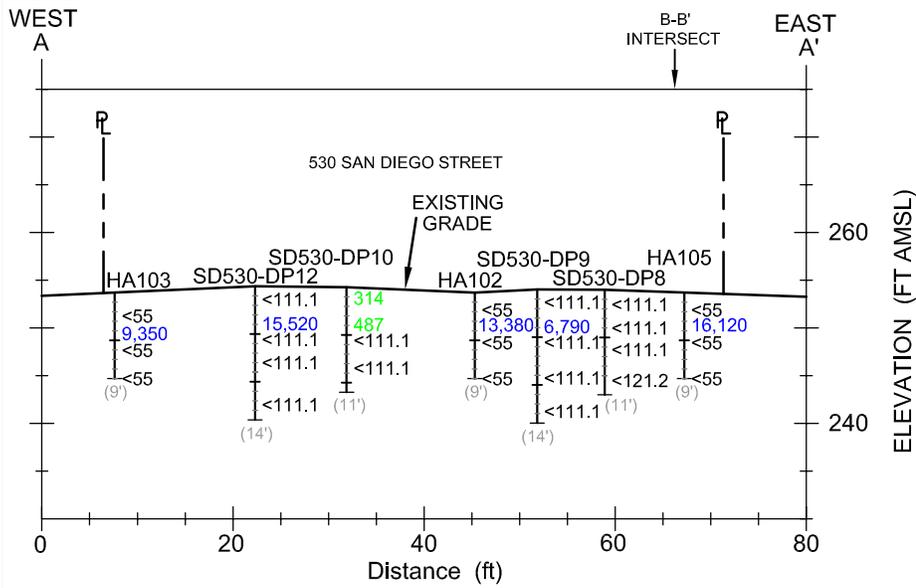


Data Sources: County of Santa Barbara  
 Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet

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PROJECT NAME:		530 SAN DIEGO STREET SANTA MARIA, CA
PROJECT NUMBER:	0801-0042	DATE: October 2013

**TPH DISTRIBUTION IN SOIL**



VERTICAL SCALE: 1" = 20 FEET  
 HORIZONTAL SCALE: 1" = 20 FEET

**LEGEND**

- SUN002 \*** ——— DRILL HOLE PROJECTED
- SD53-DP1** ——— DRILL HOLE LOCATION
- 1.0 FOOT GRADUATION
- 5.0 FOOT GRADUATION
- 1,649 ——— TPH in mg/kg
- (320) ——— TPH in ug/L
- (15') ——— TOTAL DEPTH

- TPH CONCENTRATION IN SOIL
- <60.0 <100 mg/kg
- 110 ≥100 mg/kg to <1,000 mg/kg
- 22,550 ≥1,000 mg/kg
- ▽ PERCHED GROUNDWATER
- (FT AMSL) ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- mg/kg MILLIGRAMS PER KILOGRAM
- ug/L MICROGRAMS PER LITER
- TPH TOTAL PETROLEUM HYDROCARBONS

\* SOILS GENERALLY CONSIST OF INTERBEDDED PARTLY GRAVEL SAND AND SILTY SAND

PROJECT NAME: <b>530 SAN DIEGO STREET SANTA MARIA, CA</b>	
PROJECT NUMBER: <b>0801-0042</b>	DATE: <b>September 2013</b>

<b>CROSS SECTIONS</b>
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PLATE <b>4</b>
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**APPENDIX A  
CONTACT LIST**

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**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



Department of  
Toxic Substances  
Control

*Preventing  
environmental  
damage from  
hazardous waste,  
and restoring  
contaminated  
sites for all  
Californians.*



State of California



California  
Environmental  
Protection Agency

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](mailto: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](mailto: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.

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To view the Terrace Drive documents and other related documents, please visit DTSC website at [www.dtsc.ca.gov](http://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](mailto: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](mailto: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](mailto: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.

**CONFORMED COPY:** This document has  
not been compared with the original.  
SANTA CLARA COUNTY CLERK-RECORDER

Doc#: 21032972  
1/04/2011 3:24 PM

**RECORDING REQUESTED BY:**

Catherine Coombs  
444 Terrace Drive  
San Jose, CA 95112

**WHEN RECORDED, MAIL TO:**

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

SPACE ABOVE THIS LINE RESERVED FOR RECORDER'S USE

**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~~ <sup>in December</sup>, 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.

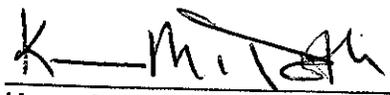
8.06. Statutory References. All statutory references include successor provisions.

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

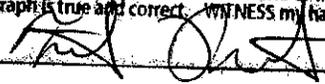
Covenantor:  
By:   
Catherine Coombs,  
Property Owner

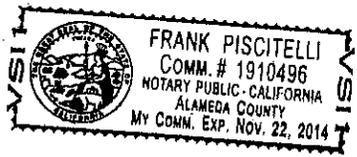
Date: November 6, 2010

Department of Toxic Substances Control

By:   
Karen M. Toth, Unit Chief

Date: December 31, 2010

STATE OF CALIFORNIA, COUNTY OF ALAMEDA  
On 12/31/10 before me, FRANK PISCITELLI, notary public  
personally appeared KAREN MARIE TOTTH  
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: 



57118\159454v3

# CALIFORNIA ALL PURPOSE ACKNOWLEDGMENT

State of California

County of Santa Clara

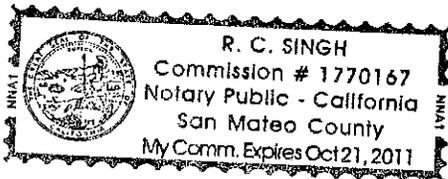
On 11/06/2010 before me, R. C. Singh, Notary Public  
Date Name and Title of Officer

personally appeared CATHERINE COMBS

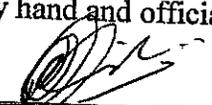
Name of Signer(s)

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

My Commission Expires: Oct 21, 2011

## OPTIONAL INFORMATION

### Description of Attached Document

Title or Type of Document: \_\_\_\_\_

Document Date: \_\_\_\_\_ Number of Pages: \_\_\_\_\_

# 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:

ALL OF LOT 24, AS SHOWN UPON THAT CERTAIN MAP ENTITLED, "TRACT NO. 566 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.

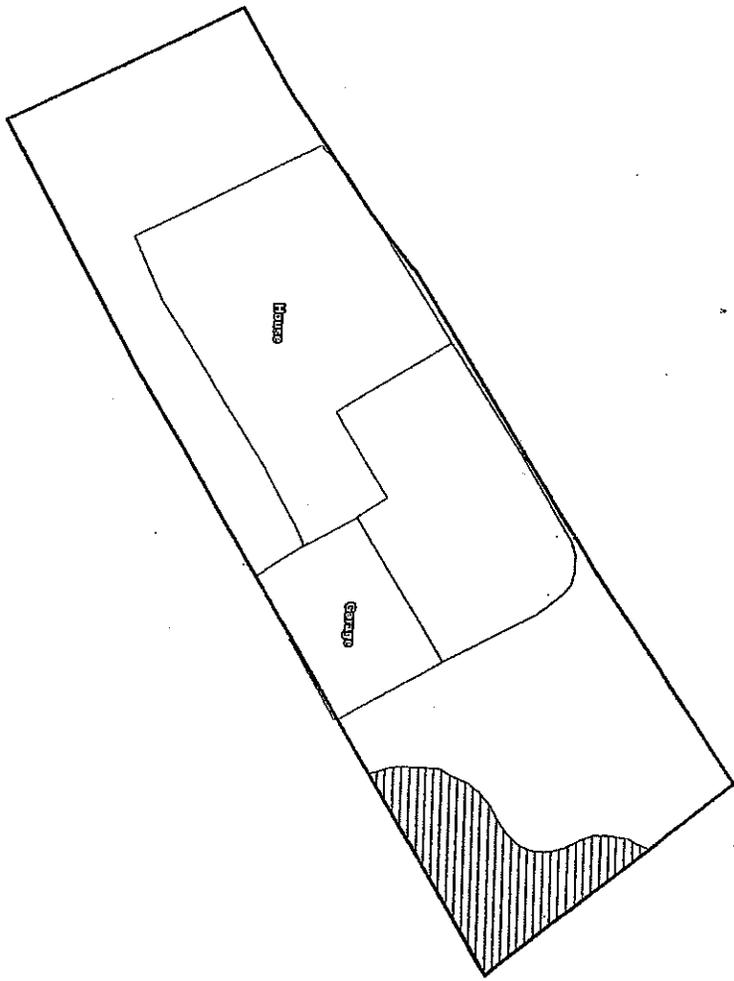
### PARCEL TWO:

PORTION OF LOT 23, AS SHOWN UPON THAT CERTAIN MAP ENTITLED, "TRACT NO. 566 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 ABOVE REFERRED TO; RUNNING THENCE NORTHWESTERLY ALONG THE SAID NORTHEASTERLY LINE OF TERRACE DRIVE 1.96 FEET; RUNNING THENCE NORTHWESTERLY ALONG THE SAID NORTHEASTERLY LINE WITH THE SAID DIVIDING LINE BETWEEN LOTS 23 AND 24, FOR A DISTANCE OF 160 FEET, MORE OR LESS, TO A POINT ON THE NORTHEASTERLY LINE OF SAID LOT 23; RUNNING THENCE SOUTH 39 DEG. 22' 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 160.48 FEET TO THE POINT OF BEGINNING.

APN: 249-63-008

# EXHIBIT A



 SOURCE: Public Survey (contd.)  
 March 2008 City of San Jose (overlaid)  
 SCALE: 1"=20' (1:240)  
 10' 0' 10' 20 Feet

444 TERRACE DRIVE (APN 24963008)  
 DATE: 10-18-08 EXHIBIT: B

**LEGEND**

-  Parcel Boundary
-  Restricted Soil Cap Area
-  Unrestricted

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 Jose, 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):

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Mark Piros  
Department of Toxic Substances Control  
Page 2

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

57118\160053v1

ATTACHMENT A-4  
Grand Marina Village



# California Regional Water Quality Control Board

## San Francisco Bay Region



Linda S. Adams  
Secretary for  
Environmental Protection

1515 Clay Street, Suite 1400, Oakland, California 94612  
(510) 622-2300 • Fax (510) 622-2460  
<http://www.waterboards.ca.gov/sanfranciscobay>

Arnold Schwarzenegger  
Governor

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](mailto: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

*Preserving, enhancing, and restoring the San Francisco Bay Area's waters for over 50 years*

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](mailto: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](mailto:donna.drogos@acgov.org)  
Norm Soderberg, Warmington, [Norm@warmingtongroup.com](mailto:Norm@warmingtongroup.com)  
Tom McCloskey, SES, [tmccloskey@sesinonline.net](mailto:tmccloskey@sesinonline.net)

**CASE CLOSURE SUMMARY**

**I. AGENCY INFORMATION**

Date: 7-15-2010

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				
Site Facility Address: 2051 and 2099 Grand Street, Alameda, CA 94501				
RB Case No.: 01-0288 / 01-0565 / 01S0668		Local Case No.:RO0000819 (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				
Tank No.	Size in Gallons	Contents	Closed In—Place/Removed?	Date
Tank 1	12,000	Gasoline	Removed - Alameda Fire Dept. (AFD) Permit # – F05-0119	10/19/2005
Tank 2	12,000	Diesel	Removed – AFD - F05-0119	10/19/2005
Tank A	250	Hydraulic Oil	Removed – AFD - F07-0097	6/15/2007
Tank B	500	Unknown Fuel	Removed – AFD - F07-0097	6/15/2007
UST 2	2,000	Unknown Fuel	Removed – AFD - F08-0151	10/22/2008

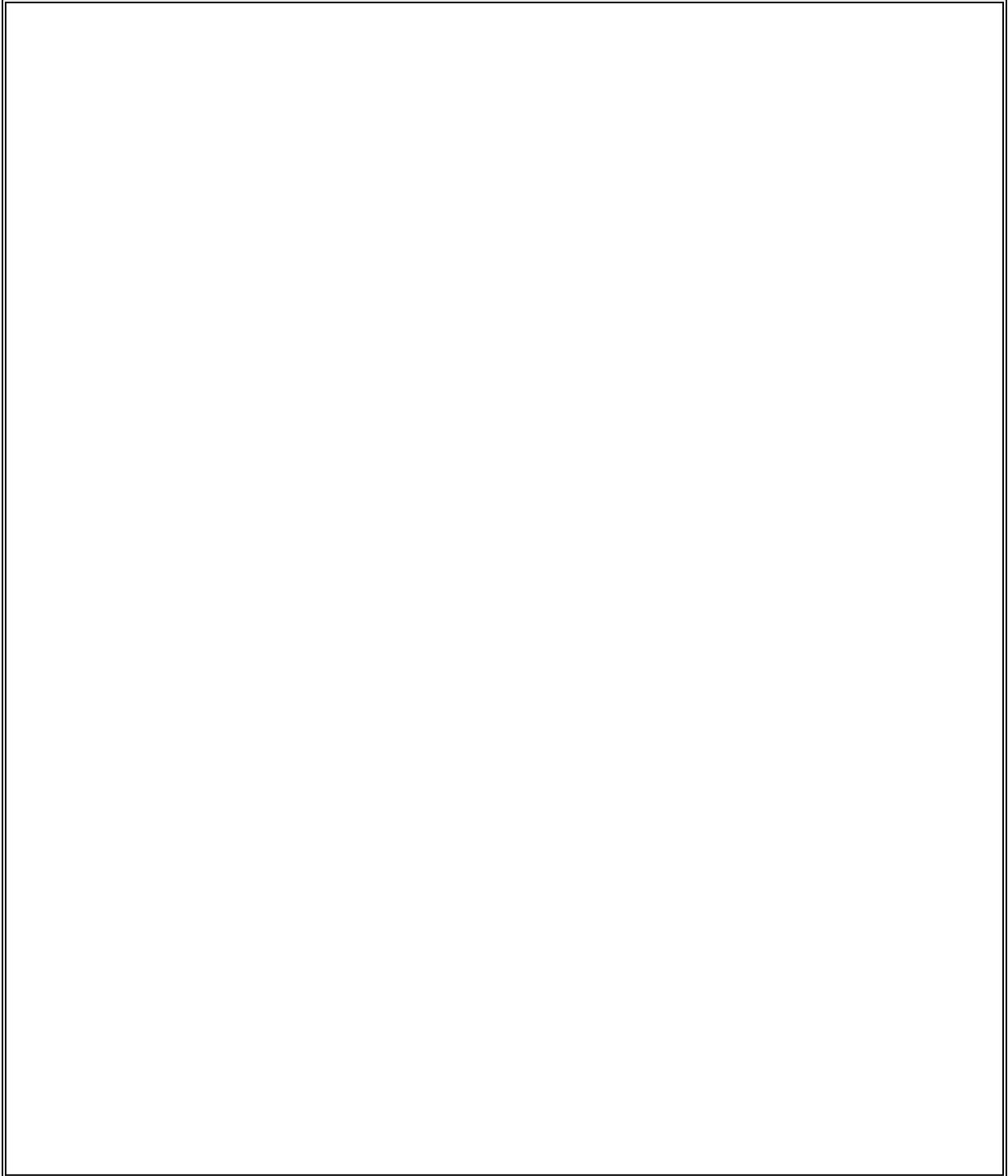
**III. RELEASE AND SITE CHARACTERIZATION INFORMATION**

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					Aquifer Name: ---				
Is surface water affected? No					Nearest surface water name: Alameda/Oakland Estuary				
Off-Site Beneficial Use Impacts (Addresses/Locations): None									
Report(s) on file?					Where is report(s) filed?				
<b>TREATMENT AND DISPOSAL OF AFFECTED MATERIAL</b>									
Material	Amount (Include Units)		Action (Treatment or Disposal w/Destination)				Date		
Tanks	5 Tanks		Disposal – 4 Tanks ECI , Richmond CA 1 Tank (UST2) – Sims Metal Recycling, Hayward CA				10/18/05 (2) 06/15/07 (2) 10/22/08 (1)		
Piping	10 feet		Disposal –ECI , Richmond CA				10/18/05		
Free Product	--		--				--		
Soil	270 cy / 400 cy		Disposal – Chemical Waste Management, Kettleman City CA				6/27/07 & 11/30/08		
Groundwater	350 Gallons (Oily water pumped from Tank A excavation)		Disposal – Evergreen Oil Inc, Newark CA				6/15/07		
Barrels									
<b>MAXIMUM DOCUMENTED POLLUTANT CONCENTRATIONS—BEFORE AND AFTER CLEANUP</b>									
POLLUTANT	Soil (ppm)		Water (ppb)		POLLUTANT	Soil (ppm)		Water (ppb)	
	Before	After	Before	After		Before	After	Before	After
TPH Gas	Unknown	450	Unknown	220	Zinc	Unknown	160	Unknown	37
TPH Diesel	Unknown	200	Unknown	5,500	Benzene	Unknown	0.088	Unknown	<0.5
TPH Oil	Unknown	22.7	Unknown	25,300	Ethylbenzene	Unknown	0.580	Unknown	<0.5
TRPH	Unknown	80	Unknown	129,000	Toluene	Unknown	0.098	Unknown	<0.5
Lead	Unknown	390*	Unknown	41	Xylenes	Unknown	2.0	Unknown	<0.5
Chromium	Unknown	39	Unknown	<5.0	1,2-Dichloro benzene	Unknown	<0.05	Unknown	0.7
Nickel	Unknown	33	Unknown	<10	Arsenic	18	18	NA	NA
<b>Comments (Depth of Remediation, etc.):</b>									



**VI. ADDITIONAL COMMENTS, DATA, ETC.**

A large, empty rectangular box with a double-line border, occupying most of the page below the section header. It is intended for providing additional comments, data, or other information related to the document.

This document and the related CASE CLOSURE LETTER shall be retained by the lead agency as part of the official site file.

CERTIFIED TO BE A TRUE  
AND CORRECT COPY  
First American Title Co. of Stockton

Recorded 4/5/10

201093304

M. Qao

**Recording Requested By:**

First American Title on behalf of:  
Warmington 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 15<sup>th</sup> day of April, 2010 by Warmington 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.

C. Exposure Pathways. The contaminants addressed in this Covenant are present in soil and groundwater on the Burdened Property. Without the mitigation measures which have been performed on the Burdened Property, exposure to these contaminants could take place via dermal contact, inhalation and ingestion. The risk of public exposure to the contaminants has been substantially lessened by the remediation and controls described herein.

D. Adjacent Land Uses and Population Potentially Affected. The Burdened Property is used for Residential Housing and community parks and is adjacent to Commercial land uses.

E. Full and voluntary disclosure to the Board of the presence of hazardous materials on the Burdened Property has been made and extensive sampling of the Burdened Property has been conducted.

F. Covenantor desires and intends that in order to benefit the Board, and to protect the present and future public health and safety, the Burdened Property shall be used in such a manner as to avoid potential harm to persons or property that may result from hazardous materials that may have been deposited on portions of the Burdened Property.

G. Environmental Fact Sheet. An Environmental Fact Sheet has been prepared for the Burdened Property and is attached hereto and incorporated herein by this reference as **Exhibit B**. Prospective purchasers of the Burdened Property must be made aware of the existence of the Environmental Fact Sheet and a copy provided to them prior to entering into any sales agreement. The seller is responsible for providing a copy of the Fact Sheet to prospective purchasers in a timely manner and prior to accepting any purchase offer.

## ARTICLE I GENERAL PROVISIONS

1.1 Provisions to Run with the Land. This Covenant sets forth protective provisions, covenants, conditions and restrictions (collectively referred to as "Restrictions") upon and subject to which the Burdened Property and every portion thereof shall be improved, held, used, occupied, leased, sold, hypothecated, encumbered, and/or conveyed. The restrictions set forth in Article III are reasonably necessary to protect present and future human health and safety or the environment as a result of the presence on the land of hazardous materials. Each and all of the Restrictions shall run with the land, and pass with each and every portion of the Burdened Property, and shall apply to, inure to the benefit of, and bind the respective successors in interest thereof, for the benefit of the Board and all Owners and Occupants. Each and all of the Restrictions are imposed upon the entire Burdened Property unless expressly stated as applicable to a specific portion of the Burdened Property. Each and all of the Restrictions run with the land pursuant to section 1471 of the Civil Code. Each and all of the Restrictions are enforceable by the Board.

1.2 Concurrence of Owners and Lessees Presumed. All purchasers, lessees, or possessors of any portion of the Burdened Property shall be deemed by their purchase, leasing, or possession of such Burdened Property, to be in accord with the foregoing and to agree for and among themselves, their heirs, successors, and assignees, and the agents, employees, and lessees of such owners, heirs, successors, and assignees, that the Restrictions as herein established must be adhered to for the benefit of the Board and the Owners and Occupants of the Burdened Property and that the interest of the Owners and Occupants of the Burdened Property shall be subject to the Restrictions contained herein.

1.3 Incorporation into Deeds and Leases. Covenantor desires and covenants that the Restrictions set out herein shall be incorporated in and attached to each and all deeds and leases of any portion of the Burdened Property. Recordation of this Covenant shall be deemed binding on all successors, assigns, and lessees, regardless of whether a copy of this Covenant and Agreement has been attached to or incorporated into any given deed or lease.

1.4 Purpose. It is the purpose of this instrument to convey to the Board real property rights, which will run with the land, to facilitate the remediation of past environmental contamination and to protect human health and the environment by reducing the risk of exposure to residual hazardous materials.

## ARTICLE II DEFINITIONS

2.1 Board. "Board" shall mean the California Regional Water Quality Control Board for the San Francisco Bay Region and shall include its successor agencies, if any.

2.2 Improvements. "Improvements" shall mean all buildings, roads, driveways, regradings, and paved parking areas, constructed or placed upon any portion of the Burdened Property.

2.3 Occupants. "Occupants" shall mean Owners and those persons entitled by ownership, leasehold, or other legal relationship to the exclusive right to use and/or occupy all or any portion of the Burdened Property.

2.4 Owner or Owners. "Owner" or "Owners" shall mean the Covenantor and/or its successors in interest, who hold title to all or any portion of the Burdened Property.

## ARTICLE III DEVELOPMENT, USE AND CONVEYANCE OF THE BURDENED PROPERTY

3.1 Restrictions on Development and Use. Covenantor promises to restrict the use of the Burdened Property as follows:

a. No Owners or Occupants of the Property or any portion thereof shall dig deeper than 2 feet from the existing grade for any purpose, drill, bore, otherwise construct, or use a well for the

purpose of extracting water for any use, including but not limited to, domestic, potable, or industrial uses, unless expressly permitted in writing by the Board.

b. The Covenantor agrees that the Board, and/or any persons acting pursuant to Board orders, shall have reasonable access to the Burdened Property for the purposes of inspection, surveillance, maintenance, or monitoring, as provided for in Division 7 of the Water Code.

c. No Owner or Occupant of the Burdened Property shall act in any manner that will aggravate or contribute to the existing environmental conditions of the Burdened Property. All use and development of the Burdened Property shall preserve the integrity of any capped areas.

d. The Owner shall notify the Board of each of the following: (1) The type, cause, location and date of any disturbance to any cap, any remedial measures taken or remedial equipment installed, and of the groundwater monitoring system installed on the Burdened Property pursuant to the requirements of the Board, which could affect the ability of such cap or remedial measures, remedial equipment, or monitoring system to perform their respective functions and (2) the type and date of repair of such disturbance. Notification to the Board shall be made by registered mail within ten (10) working days of both the discovery of such disturbance and the completion of repairs.

3.2 Enforcement. Failure of an Owner or Occupant to comply with any of the restrictions, as set forth in paragraph 3.1, shall be grounds for the Board, by reason of this Covenant, to have the authority to require that the Owner modify or remove any Improvements constructed in violation of that paragraph. Violation of the Covenant shall be grounds for the Board to file civil actions against the Owner as provided by law.

3.3 Notice in Agreements. After the date of recordation hereof, all Owners and Occupants shall execute a written instrument which shall accompany all purchase agreements or leases relating to the property. Any such instrument shall contain the following statement:

The land described herein contains hazardous materials (arsenic, lead and petroleum hydrocarbons) in soil and/or ground water under the property, and is subject to an environmental deed restriction dated as of (fill in), 2010, and recorded on (fill in), 2010, in the Official Records of Alameda County, California, as Document No. (fill in), which Covenant and Restriction imposes certain covenants, conditions, and restrictions on usage of the property described herein. This statement is not a declaration that a hazard exists.

In conjunction with and incorporated into the Environmental Deed Restriction as **Exhibit B** is an Environmental Fact Sheet, which has been prepared in order to provide an understanding of the residual environmental conditions in beneath the property. Any owner selling any portion of their property within this development must provide a copy of this Environmental Fact Sheet to all prospective purchasers. In addition, the property owner

must allow all prospective purchasers adequate time to review the Environmental Fact Sheet, prior to accepting a purchase offer. Should any prospective purchaser request a copy of the Environmental Deed Restriction, the seller must provide a copy in a timely manner.

#### ARTICLE IV VARIANCE AND TERMINATION

4.1 Variance. Any Owner or, with the Owner's consent, any Occupant of the Burdened Property or any portion thereof may apply to the Board for a written variance from the provisions of this Covenant.

4.2 Termination. Any Owner or, with the Owner's consent, any Occupant of the Burdened Property or a portion thereof may apply to the Board for a termination of the Restrictions as they apply to all or any portion of the Burdened Property.

4.3 Term. Unless terminated in accordance with paragraph 4.2 above, by law or otherwise, this Covenant shall continue in effect in perpetuity.

#### ARTICLE V MISCELLANEOUS

5.1 No Dedication Intended. Nothing set forth herein shall be construed to be a gift or dedication, or offer of a gift or dedication, of the Burdened Property or any portion thereof to the general public.

5.2 Notices. Whenever any person gives or serves any notice, demand, or other communication with respect to this Covenant, each such notice, demand, or other communication shall be in writing and shall be deemed effective (1) when delivered, if personally delivered to the person being served or official of a government agency 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:

*If To:* "Covenantor"  
Warmington Grand Marina Associates, LP  
3090 Pullman Street  
Costa Mesa, CA 92626

*If To:* "Board"  
Regional Water Quality Control Board  
San Francisco Bay Region  
Attention: Executive Officer  
1515 Clay Street, Suite 1400  
Oakland, California 94612

5.3 Partial Invalidity. If any portion of the Restrictions or terms set forth herein is determined to be invalid for any reason, the remaining portion shall remain in full force and effect as if such portion had not been included herein.

5.4 Article Headings. Headings at the beginning of each numbered article of this Covenant are solely for the convenience of the parties and are not a part of the Covenant.

5.5 Recordation. This instrument shall be executed by the Covenantor and by the Executive Officer of the Board. This instrument shall be recorded by the Covenantor in the County of Alameda within ten (10) days of the date of execution.

5.6 References. All references to Code sections include successor provisions.

5.7 Construction. Any general rule of construction to the contrary notwithstanding, this instrument shall be liberally construed in favor of the Covenant to effect the purpose of this instrument and the policy and purpose of the Water Code. If any provision of this instrument is found to be ambiguous, an interpretation consistent with the purpose of this instrument that would render the provision valid shall be favored over any interpretation that would render it invalid.

IN WITNESS WHEREOF, the parties execute this Covenant as of the date set forth above.

Covenantor:

Warmington Grand Marina Associates, LP,

a California limited partnership,

By: Warmington Residential California,

a California corporation, its general partner

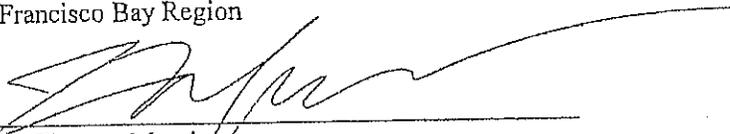
By:   
\_\_\_\_\_  
Title: Division President  
Date: 4/2/10

Agency:

State of California

Regional Water Quality Board,

San Francisco Bay Region

By:   
\_\_\_\_\_  
Thomas Mumley  
Title: Acting Executive Officer  
Date: Apr. 1, 2010

# CALIFORNIA ALL-PURPOSE CERTIFICATE OF ACKNOWLEDGMENT

State of California

County of Alameda

On APRIL 1, 2010 before me, Howard Leong, Notary Public  
(Here insert name and title of the officer)

personally appeared THOMAS MUMLEY

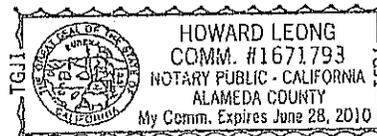
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s),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

Howard Leong  
 Signature of Notary Public

(Notary Seal)



## 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/are) 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

DESCRIPTION OF THE ATTACHED DOCUMENT <u>COVENANT</u> <small>(Title or description of attached document)</small> <hr/> <small>(Title or description of attached document continued)</small> <hr/> Number of Pages _____ Document Date _____ <hr/> <small>(Additional information)</small>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

CAPACITY CLAIMED BY THE SIGNER <input type="checkbox"/> Individual (s) <input type="checkbox"/> Corporate Officer <hr/> <small>(Title)</small> <input type="checkbox"/> Partner(s) <input type="checkbox"/> Attorney-in-Fact <input type="checkbox"/> Trustee(s) <input type="checkbox"/> Other _____
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

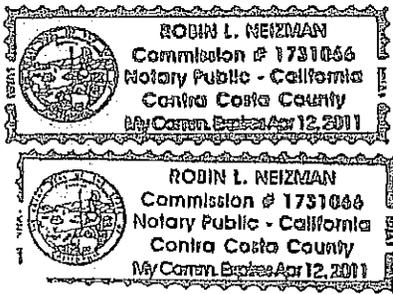
**CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT**

State of California

County of Contra Costa

On 4/2/10 before me, Robin L. Weizman, Notary Public  
Date Here Insert Name and Title of the Officer

personally appeared Gregory N. Mix  
Name(s) 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 [Handwritten Signature]  
Signature of Notary Public

Place Notary Seal Above

**OPTIONAL**

*Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document*

**Description of Attached Document**

Title or Type of Document: Covenant & Environmental Restriction

Document Date: \_\_\_\_\_ Number of Pages: \_\_\_\_\_

Signer(s) Other Than Named Above: \_\_\_\_\_

**Capacity(ies) Claimed by Signer(s)**

Signer's Name: \_\_\_\_\_  
 Individual  
 Corporate Officer — Title(s): \_\_\_\_\_  
 Partner —  Limited  General  
 Attorney In Fact  
 Trustee  
 Guardian or Conservator  
 Other: \_\_\_\_\_  
 Signer Is Representing: \_\_\_\_\_



Signer's Name: \_\_\_\_\_  
 Individual  
 Corporate Officer — Title(s): \_\_\_\_\_  
 Partner —  Limited  General  
 Attorney In Fact  
 Trustee  
 Guardian or Conservator  
 Other: \_\_\_\_\_  
 Signer Is Representing: \_\_\_\_\_



**EXHIBIT A**

**LEGAL DESCRIPTION OF PROPERTY**

Real property in the City of Alameda, County of Alameda, State of California, described as follows:

LOTS 1 THROUGH 40 AND PARCELS A, B, D AND E, AS SHOWN ON THE MAP ENTITLED "TRACT 7723, GRAND MARINA VILLAGE", FILED SEPTEMBER 8, 2009 IN BOOK 305 OF MAPS, PAGES 6 THROUGH 14, ALAMEDA COUNTY RECORDS.

APN: 072-0381-005 (portion), 072-0381-008 (portion) and 072-0381-011 (portion)



**EXHIBIT B**  
**ENVIRONMENTAL FACT SHEET**



## Environmental Fact Sheet

March 2010

### FORMER USES OF THE GRAND MARINA VILLAGE COMMUNITY AND SITE

The Grand Marina Village community and adjacent property ("Site") have had a long history of uses including: a fishing vessel fleet harbor for the Alaska Packer Association, a lumber yard, a ship repair yard, auto repair, carpentry, blacksmith and animal shelter facilities. The uses included above-ground storage tank farm, underground storage tanks, and related facilities for the storage of gasoline, diesel, fuel, fuel oil, kerosene, aviation fuel, and other petroleum compounds. The uses also included the storage of marine construction equipment. The Site was purchased in 1986 by Encinal Partners. Since that time, portions of the property were used as parking areas associated with the Grand Marina, dry storage of outriggers and boats, office areas, boat building and repair, car restoration, production of marine canvas products, and locksmith activities.

The conversion of the Site from these previous industrial uses to the current Grand Marina Village development included a series of environmental investigations and cleanup activities. These activities were overseen by the Regional Water Quality Control Board, San Francisco Bay Region (Water Board), which is one of the agencies under the larger California Environmental Protection Agency.

The initial cleanup activities that occurred 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. For additional information, please refer to the "Third Draft Remedial Action Work Plan, Grand Marina Village, Alameda, California, SES No. 074-01, Prepared for Warmington Homes, San Ramon, California, January 21, 2010". This report is available in the Warmington sales office during the construction of the community, at the City of Alameda, the Grand Marina Village

Owners' Association management company and at the Water Board's offices (note: Water Board file number 01S0668) for your review. The Water Board also maintains the complete case file for the Site electronically on its Geotracker website at: <https://geotracker.waterboards.ca.gov/>. Please use the case file to find the case on the website.

### CONTAMINANTS OF CONCERN AND CLEANUP PLAN

The primary contaminants of concern (COC) at the Site after completion of the initial clean up activities previously described were arsenic, lead, and petroleum hydrocarbons. The source of the arsenic and lead appears to be generally associated with dredged fill material that was placed on the property. Some of the arsenic may also be associated with surface application of herbicides for weed control.

The cleanup plan as described in Section 4.0 of the "Third Draft Remedial Action Work Plan" addresses the arsenic, lead and petroleum hydrocarbons. With respect to the petroleum hydrocarbon impacted soil the plan called for excavation and offsite disposal of all soil above the approved cleanup goals. There is also some residual

petroleum in the groundwater. The petroleum in groundwater is not migrating and no active cleanup is necessary. Additionally, the underlying groundwater is brackish and is not being used.

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 entire Site as a cap. In addition to the clean cap, an environmental deed restriction has been recorded on the deeds of all properties within the Site. 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. By preventing exposure to the underlying soil, health risks associated with the pollutants are effectively mitigated.

#### **HOMEOWNER RESPONSIBILITIES**

The homeowners in this Community will have no maintenance responsibility specific to the cleanup described above; however, limitations through the Environmental Deed Restriction attached hereto and described in the rules and regulations set forth by the Grand Marina Village Owners' Association limit the homeowners use on the property.

#### **ENVIRONMENTAL DEED RESTRICTION AND USE RESTRICTIONS**

Once the clean up was completed, the Water Board further requires all Owners be permanently restricted from digging deeper than 2 feet from the existing grade for any purpose, drill, bore, otherwise construct, or use a well for the purpose of extracting water for any use, including but not limited to, domestic, potable, or industrial uses. The Covenant and Environmental Deed Restriction on Property ("Deed Restriction") which this document is attached to is provided to you and recorded with the County of Alameda Recorder's Office.

The Rules adopted by the Grand Marina Village Owners' Association ("Association") further restrict owners from planting trees in the enclosed portions of the yards. The unenclosed portions of the yard are maintained by the Association and whose responsibility it is to adhere to the restrictions as set forth in the Deed Restriction.

Pursuant to Article III, Section 3.3 (Notice in Agreements) of the Environmental Deed Restriction recorded for the Site properties, **all prospective purchasers of any portion of the property must be given a copy of this Fact Sheet to review and consider, prior to committing to purchase any properties within the community. It is the responsibility of the property owner to provide prospective purchasers a copy of this Fact Sheet and allow adequate time to review it prior to accepting any commitment to purchase. Additionally, should a prospective purchaser request a copy of the Environmental Deed Restriction, the seller must provide a copy in a timely manner.**

#### **ARSENIC AND LEAD INFORMATION**

Attached as Exhibits B-1 and B-2 is information regarding arsenic and lead which is available on the U.S. Department of Health and Human Services, Public Health Service Agency for Toxic Substances and Disease Registry at: <http://www.atsdr.cdc.gov/tfacts2.html> and <http://www.atsdr.cdc.gov/tfacts13.html>. It is important to review the information and follow up on the information as it may be updated from time to time through the Public Health Service Agency.

This fact sheet answers the most frequently asked health questions (FAQs) about arsenic. For more information, call the ATSDR Information Center at 1-800-232-4636. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It is important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

**HIGHLIGHTS:** Exposure to higher than average levels of arsenic occur mostly in the workplace, near hazardous waste sites, or in areas with high natural levels. At high levels, inorganic arsenic can cause death. Exposure to lower levels for a long time can cause a discoloration of the skin and the appearance of small corns or warts. Arsenic has been found in at least 1,149 of the 1,684 National Priority List sites identified by the Environmental Protection Agency (EPA).

#### What is arsenic?

Arsenic is a naturally occurring element widely distributed in the earth's crust. In the environment, arsenic is combined with oxygen, chlorine, and sulfur to form inorganic arsenic compounds. Arsenic in animals and plants combines with carbon and hydrogen to form organic arsenic compounds.

Inorganic arsenic compounds are mainly used to preserve wood. Copper chromated arsenate (CCA) is used to make "pressure-treated" lumber. CCA is no longer used in the U.S. for residential uses; it is still used in industrial applications. Organic arsenic compounds are used as pesticides, primarily on cotton fields and orchards.

#### What happens to arsenic when it enters the environment?

- Arsenic occurs naturally in soil and minerals and may enter the air, water, and land from wind-blown dust and may get into water from runoff and leaching.
- Arsenic cannot be destroyed in the environment. It can only change its form.
- Rain and snow remove arsenic dust particles from the air.
- Many common arsenic compounds can dissolve in water. Most of the arsenic in water will ultimately end up in soil or sediment.
- Fish and shellfish can accumulate arsenic; most of this arsenic is in an organic form called arsenobetaine that is much less harmful.

#### How might I be exposed to arsenic?

- Ingesting small amounts present in your food and water or breathing air containing arsenic.
- Breathing sawdust or burning smoke from wood treated with arsenic.
- Living in areas with unusually high natural levels of arsenic in rock.
- Working in a job that involves arsenic production or use, such as copper or lead smelting, wood treating, or pesticide application.

#### How can arsenic affect my health?

Breathing high levels of inorganic arsenic can give you a sore throat or irritated lungs.

Ingesting very high levels of arsenic can result in death. Exposure to lower levels can cause nausea and vomiting, decreased production of red and white blood cells, abnormal heart rhythm, damage to blood vessels, and a sensation of "pins and needles" in hands and feet.

Ingesting or breathing low levels of inorganic arsenic for a long time can cause a darkening of the skin and the appearance of small "corns" or "warts" on the palms, soles, and torso.

Skin contact with inorganic arsenic may cause redness and swelling.

ToxFAQs Internet address is <http://www.atsdr.cdc.gov/toxfaq.html>

Almost nothing is known regarding health effects of organic arsenic compounds in humans. Studies in animals show that some simple organic arsenic compounds are less toxic than inorganic forms. Ingestion of methyl and dimethyl compounds can cause diarrhea and damage to the kidneys

#### How likely is arsenic to cause cancer?

Several studies have shown that ingestion of inorganic arsenic can increase the risk of skin cancer and cancer in the liver, bladder, and lungs. Inhalation of inorganic arsenic can cause increased risk of lung cancer. The Department of Health and Human Services (DHHS) and the EPA have determined that inorganic arsenic is a known human carcinogen. The International Agency for Research on Cancer (IARC) has determined that inorganic arsenic is carcinogenic to humans.

#### How can arsenic affect children?

There is some evidence that long-term exposure to arsenic in children may result in lower IQ scores. There is also some evidence that exposure to arsenic in the womb and early childhood may increase mortality in young adults.

There is some evidence that inhaled or ingested arsenic can injure pregnant women or their unborn babies, although the studies are not definitive. Studies in animals show that large doses of arsenic that cause illness in pregnant females, can also cause low birth weight, fetal malformations, and even fetal death. Arsenic can cross the placenta and has been found in fetal tissues. Arsenic is found at low levels in breast milk.

#### How can families reduce the risks of exposure to arsenic?

If you use arsenic-treated wood in home projects, you should wear dust masks, gloves, and protective clothing to decrease exposure to sawdust.

If you live in an area with high levels of arsenic in water or soil, you should use cleaner sources of water and limit contact with soil.

If you work in a job that may expose you to arsenic, be aware that you may carry arsenic home on your clothing, skin, hair, or tools. Be sure to shower and change clothes before going home.

#### Is there a medical test to determine whether I've been exposed to arsenic?

There are tests available to measure arsenic in your blood, urine, hair, and fingernails. The urine test is the most reliable test for arsenic exposure within the last few days. Tests on hair and fingernails can measure exposure to high levels of arsenic over the past 6-12 months. These tests can determine if you have been exposed to above-average levels of arsenic. They cannot predict whether the arsenic levels in your body will affect your health.

#### Has the federal government made recommendations to protect human health?

The EPA has set limits on the amount of arsenic that industrial sources can release to the environment and has restricted or cancelled many of the uses of arsenic in pesticides. EPA has set a limit of 0.01 parts per million (ppm) for arsenic in drinking water.

The Occupational Safety and Health Administration (OSHA) has set a permissible exposure limit (PEL) of 10 micrograms of arsenic per cubic meter of workplace air (10  $\mu\text{g}/\text{m}^3$ ) for 8 hour shifts and 40 hour work weeks.

#### References

Agency for Toxic Substances and Disease Registry (ATSDR). 2007. Toxicological Profile for Arsenic (Update). Atlanta, GA: U.S. Department of Public Health and Human Services, Public Health Service.

**Where can I get more information?** For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology and Environmental Medicine, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone: 1-800-232-4636, FAX: 770-488-4178. ToxFAQs Internet address via WWW is <http://www.atsdr.cdc.gov/toxfaq.html>. ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.



This fact sheet answers the most frequently asked health questions (FAQs) about lead. For more information, call the ATSDR Information Center at 1-800-232-4636. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It is important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

**HIGHLIGHTS:** Exposure to lead can happen from breathing workplace air or dust, eating contaminated foods, or drinking contaminated water. Children can be exposed from eating lead-based paint chips or playing in contaminated soil. Lead can damage the nervous system, kidneys, and reproductive system. Lead has been found in at least 1,272 of the 1,684 National Priority List sites identified by the Environmental Protection Agency (EPA).

#### What is lead?

Lead is a naturally occurring bluish-gray metal found in small amounts in the earth's crust. Lead can be found in all parts of our environment. Much of it comes from human activities including burning fossil fuels, mining, and manufacturing.

Lead has many different uses. It is used in the production of batteries, ammunition, metal products (solder and pipes), and devices to shield X-rays. Because of health concerns, lead from paints and ceramic products, caulking, and pipe solder has been dramatically reduced in recent years. The use of lead as an additive to gasoline was banned in 1996 in the United States.

#### What happens to lead when it enters the environment?

- Lead itself does not break down, but lead compounds are changed by sunlight, air, and water.
- When lead is released to the air, it may travel long distances before settling to the ground.
- Once lead falls onto soil, it usually sticks to soil particles.
- Movement of lead from soil into groundwater will depend on the type of lead compound and the characteristics of the soil.

#### How might I be exposed to lead?

- Eating food or drinking water that contains lead. Water pipes in some older homes may contain lead solder. Lead can leach out into the water

- Spending time in areas where lead-based paints have been used and are deteriorating. Deteriorating lead paint can contribute to lead dust.
- Working in a job where lead is used or engaging in certain hobbies in which lead is used, such as making stained glass.
- Using health-care products or folk remedies that contain lead

#### How can lead affect my health?

The effects of lead are the same whether it enters the body through breathing or swallowing. Lead can affect almost every organ and system in your body. The main target for lead toxicity is the nervous system, both in adults and children. Long-term exposure of adults can result in decreased performance in some tests that measure functions of the nervous system. It may also cause weakness in fingers, wrists, or ankles. Lead exposure also causes small increases in blood pressure, particularly in middle-aged and older people and can cause anemia. Exposure to high lead levels can severely damage the brain and kidneys in adults or children and ultimately cause death. In pregnant women, high levels of exposure to lead may cause miscarriage. High-level exposure in men can damage the organs responsible for sperm production.

#### How likely is lead to cause cancer?

We have no conclusive proof that lead causes cancer in humans. Kidney tumors have developed in rats and mice that had been given large doses of some kind of lead compounds. The Department of Health and Human Services

ToxFAQs™ Internet address is <http://www.atsdr.cdc.gov/toxfaqs.html>

(DHHS) has determined that lead and lead compounds are reasonably anticipated to be human carcinogens and the EPA has determined that lead is a probable human carcinogen. The International Agency for Research on Cancer (IARC) has determined that inorganic lead is probably carcinogenic to humans and that there is insufficient information to determine whether organic lead compounds will cause cancer in humans.

#### How can lead affect children?

Small children can be exposed by eating lead-based paint chips, chewing on objects painted with lead-based paint, or swallowing house dust or soil that contains lead. Children are more vulnerable to lead poisoning than adults. A child who swallows large amounts of lead may develop blood anemia, severe stomachache, muscle weakness, and brain damage. If a child swallows smaller amounts of lead, much less severe effects on blood and brain function may occur. Even at much lower levels of exposure, lead can affect a child's mental and physical growth.

Exposure to lead is more dangerous for young and unborn children. Unborn children can be exposed to lead through their mothers. Harmful effects include premature births, smaller babies, decreased mental ability in the infant, learning difficulties, and reduced growth in young children. These effects are more common if the mother or baby was exposed to high levels of lead. Some of these effects may persist beyond childhood.

#### How can families reduce the risks of exposure to lead?

- Avoid exposure to sources of lead.
- Do not allow children to chew or mouth surfaces that may have been painted with lead-based paint.
- If you have a water lead problem, run or flush water that has been standing overnight before drinking or cooking with it.
- Some types of paints and pigments that are used as make-up or hair coloring contain lead. Keep these kinds of products away from children.
- If your home contains lead-based paint or you live in an area contaminated with lead, wash children's hands and faces

often to remove lead dusts and soil, and regularly clean the house of dust and tracked in soil.

#### Is there a medical test to determine whether I've been exposed to lead?

A blood test is available to measure the amount of lead in your blood and to estimate the amount of your recent exposure to lead. Blood tests are commonly used to screen children for lead poisoning. Lead in teeth or bones can be measured by X-ray techniques, but these methods are not widely available. Exposure to lead also can be evaluated by measuring erythrocyte protoporphyrin (EP) in blood samples. EP is a part of red blood cells known to increase when the amount of lead in the blood is high. However, the EP level is not sensitive enough to identify children with elevated blood lead levels below about 25 micrograms per deciliter ( $\mu\text{g}/\text{dL}$ ). These tests usually require special analytical equipment that is not available in a doctor's office. However, your doctor can draw blood samples and send them to appropriate laboratories for analysis.

#### Has the federal government made recommendations to protect human health?

The Centers for Disease Control and Prevention (CDC) recommends that states test children at ages 1 and 2 years. Children should be tested at ages 3–6 years if they have never been tested for lead, if they receive services from public assistance programs for the poor such as Medicaid or the Supplemental Food Program for Women, Infants, and Children, if they live in a building or frequently visit a house built before 1950; if they visit a home (house or apartment) built before 1978 that has been recently remodeled; and/or if they have a brother, sister, or playmate who has had lead poisoning. CDC considers a blood lead level of 10  $\mu\text{g}/\text{dL}$  to be a level of concern for children.

EPA limits lead in drinking water to 15  $\mu\text{g}$  per liter.

#### References

Agency for Toxic Substances and Disease Registry (ATSDR). 2007. Toxicological Profile for lead (Update). Atlanta, GA: U.S. Department of Public Health and Human Services, Public Health Service.

**Where can I get more information?** For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology and Environmental Medicine, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone: 1-800-232-4636, FAX: 770-488-4178. ToxFAQs Internet address via WWW is <http://www.atsdr.cdc.gov/toxfaqs.html>. ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.



**APPENDIX G**

**DRAFT CEQA NOTICE OF PREPARATION (NOP) AND INITIAL STUDY (IS)**

# NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT

Date: March 19, 2014

To: State Clearinghouse  
Office of Planning and Research  
1400 Tenth Street  
Sacramento, CA 95814

and

Responsible Agencies, Trustee Agencies, Federal Agencies, and Interested Organizations and Individuals (see Attachment 1 for list of agencies)

Lead Agency: State of California Regional Water Quality Control Board, Los Angeles Region

Contact: Paula Rasmussen, Assistant Executive Officer  
Regional Water Quality Control Board  
320 West 4th Street, Suite #200  
Los Angeles, CA 90013  
Phone: (213) 213-576-6791  
E-mail: [PRasmussen@waterboards.ca.gov](mailto:PRasmussen@waterboards.ca.gov)

**Project Title:** Former Kast Property Tank Farm Site Remediation Project - Environmental Impact Report

**Project Applicant:** Shell Oil Products US

**Project Location:** The Former Kast Property Tank Farm (Site) is a 44-acre site located in Carson, California. The site is bounded to the north by East 244th Street, Lomita Boulevard to the south, Marbella Avenue to the west, and Panama Avenue to the east (see Figure 1). The Site currently is a residential neighborhood known as the Carousel Tract. Lomita Boulevard forms the jurisdictional boundary between the City of Los Angeles and the City of Carson. (See Figure 2 attached.)

**Project Description:** See Attachment 2 for a description of the Former Kast Property Tank Farm Remediation Project.

**Purpose of the Notice of Preparation:** The California Environmental Quality Act (CEQA) specifies that a public agency must prepare an Environmental Impact Report (EIR) for any project that it proposes to carry out or approve that may have a significant direct or indirect impact on the environment (Public Resources Code Section 21100[a]). The California Regional Water Quality Control Board, Los Angeles Region (LARWQCB) is the lead agency for the Former Kast Property Tank Farm Site Remediation Project. LARWQCB has determined that this project may have a significant impact on the environment and has determined that an EIR will be necessary to fully evaluate the potential environmental effects.

**Comments on the Notice of Preparation:** Responsible agencies, trustee agencies, Federal agencies, Native American Tribes, and interested organizations and individuals are encouraged to submit comments regarding the scope and content of the Draft EIR for LARWQCB's consideration. This Notice of Preparation (NOP) is being circulated for the required 30-day comment period. Comments on this NOP should be submitted as soon as possible and must be received no later than 5:00 p.m. on April 18, 2014. Please send written comments to: Thizar Tintut-Williams, LARWQCB Project Manager, 320 W. 4<sup>th</sup> Street, Suite 200, Los Angeles, CA 90013 or electronically to [twilliams@waterboards.ca.gov](mailto:twilliams@waterboards.ca.gov)

Prior studies, technical reports, the CEQA Initial Study and other documents related to the proposed project are available for review on the internet at <http://www.swrcb.ca.gov/rwqcb4/Kast/index.shtml> and at the following location(s):

Carson Public Library  
151 E. Carson St.  
Carson, CA 90745-2797  
(310) 830-0901

Tuesday - Thursday: 10 am - 8 pm, Saturday:  
8 am - 6 pm, Monday/Friday/Sunday: Closed

California Regional Water

Quality Control Board  
Los Angeles Region  
320 W. 4<sup>th</sup> Street, Suite 200  
Los Angeles, CA 90013

Electronic copies of the documents are also available on the Regional Board's website at:

<http://www.waterboards.ca.gov/losangeles/> under "Announcements"

**Contact:** If you have any questions or wish to discuss the project, please contact:

Gita Kapahi  
Director of Public Participation  
State Water Resources Control Board  
(916) 341-5501  
(gkapahi@waterboards.ca.gov)

Thizar Tintut-Williams  
Regional Board Project Manager  
(213) 576-6723  
thizar.williams@waterboards.ca.gov

### Media Inquiries

Tim Moran  
State Water Resources Control Board Public Information Officer  
(916) 327-8239  
[timothy.moran@waterboards.ca.gov](mailto:timothy.moran@waterboards.ca.gov)

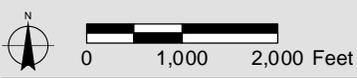
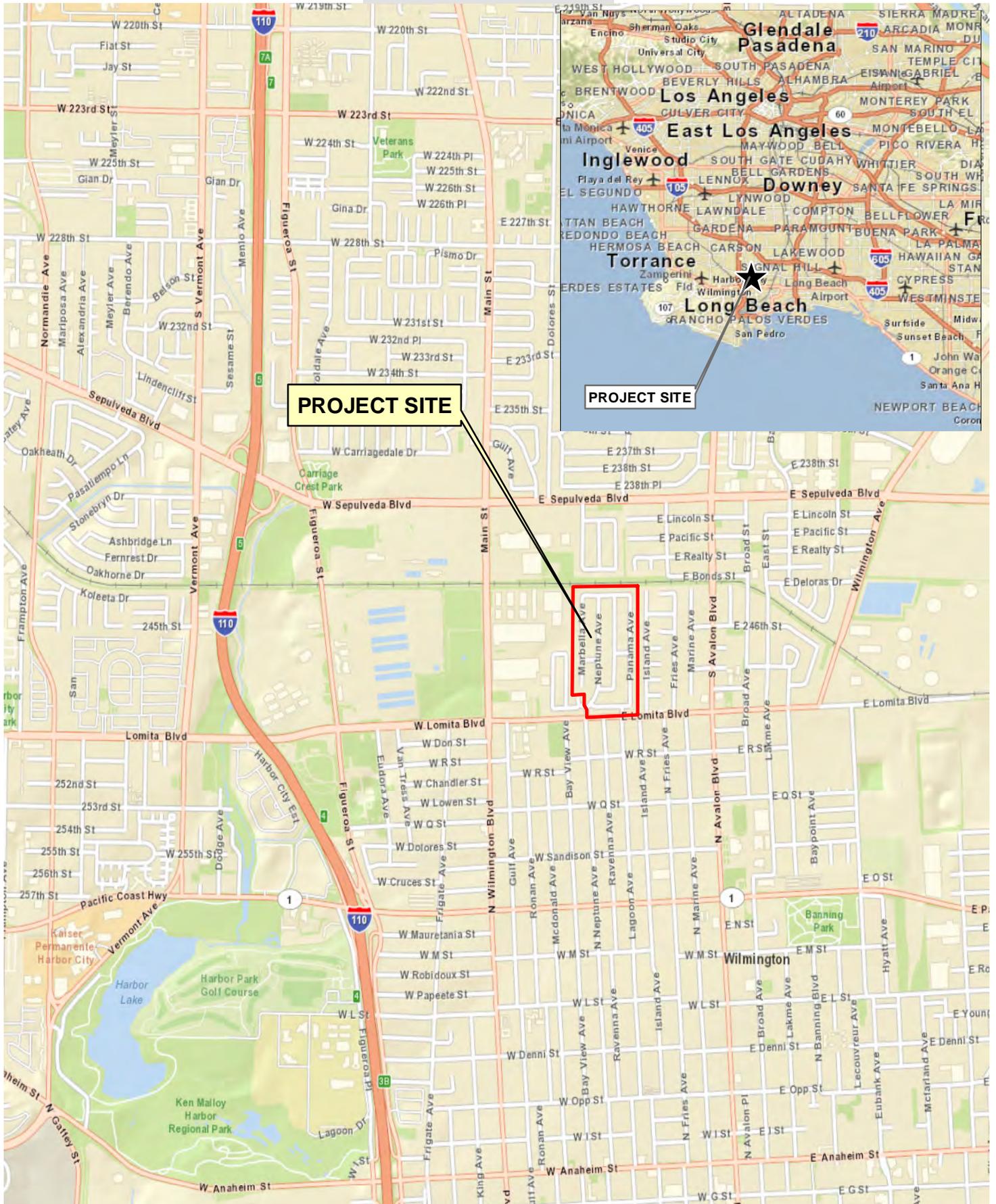
### Information for the Disabled and Hearing Impaired

Persons with hearing or speech impairments can contact us by using the California Relay Service Telecommunications Device for the Deaf (TDD). TDD is reachable only from phones equipped with a TDD Device. HEARING IMPAIRED REPLAY SERVICE: TDD to voice 1-(800)-735-2929; voice to TDD 1-(800)-735-2922.

### Environmental Effects To Be Evaluated in the Draft EIR

The purpose of an EIR is to identify and consider the potentially significant adverse environmental effects of a proposed project and identify measures that can reduce, avoid, or mitigate significant adverse impacts. The LARWQCB has conducted consultations with interested parties, including an inter-agency scoping call held on September 11, 2013, a written public comment period from September 9 through October 8, 2013 related to the Site-Specific Cleanup Goals, and a Community Open House conducted on September 24, 2013 at the Carson Community Center on the Draft Work Plan. In addition, the LARWQCB prepared an Initial Study on the Draft RAP, which is available at <http://www.swrcb.ca.gov/rwqcb4/Kast/index.shtml>. See Attachment 2 for a Project Description. Based on input received from previous public meetings and the Initial Study, LARWQCB has determined that the proposed project may have a significant impact on the following resource areas:

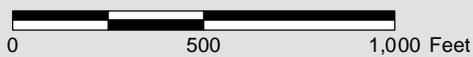
- Air Quality
- Greenhouse Gas
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Noise
- Transportation/Traffic
- Utilities (Solid Waste)



**Regional and Location Map**

FIGURE

**1**



### Aerial Photograph

KastSite RAP

Source: Microsoft, 2010; PCR Services Corporation, 2014.

FIGURE

2

# ATTACHMENT 1

## Distribution List for NOP (March 2014) - Agencies and RPs

[derrick.mims@asm.ca.gov](mailto:derrick.mims@asm.ca.gov)

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[roy.patterson@urs.com](mailto:roy.patterson@urs.com)

[nancy.meilahn.fowler@urs.com](mailto:nancy.meilahn.fowler@urs.com)

[rettinger@geosyntec.com](mailto:rettinger@geosyntec.com)

Air Resources Board

California Emergency Management Agency

Native American Heritage Commission

## ATTACHMENT 2 PROJECT DESCRIPTION

### Site History

The Kast Property Tank Farm was owned and operated by Shell Oil Company from 1924 through 1966, when it was sold to developers. The Site included three crude oil storage reservoirs with a total capacity of 3.5 million barrels. Reservoirs had concrete-lined bottoms and sidewalls with frame roofs on wood posts, surrounded by earth levees averaging 20 feet in height. Demolition of the three crude oil reservoirs by the developers began in 1966. Site redevelopment into a single family residential neighborhood began in approximately 1967 and the property is referred to as the Carousel Tract.

In 2008, residual oil was discovered in soil and groundwater at the Site. Subsequently, the LARWQCB issued orders to Shell requiring investigation and cleanup of the Site pursuant to the Porter-Cologne Water Quality Control Act (Porter-Cologne Act, California Water Code §§13000 et seq.). Comprehensive multi-media Site investigations have been underway since 2008 and have included assessments of soil, soil vapor, sub-slab soil vapor, indoor air, and groundwater impacts. To date, investigations have been conducted in city streets within the Carousel Tract, at 270 of the 285 residential properties in the Carousel Tract, the adjacent Monterey Pines and Island Avenue Tracts, the adjacent railroad right-of-way north of the Site, , and at the Wilmington Middle School.

In 2011 the LARWQCB issued a Cleanup and Abatement Order (CAO) that requires Shell to propose and submit a Remedial Action Plan (RAP) for the cleanup of the Carousel Tract. Primary contaminants of concern are methane, benzene and petroleum hydrocarbons. Additional site characterization investigations, remediation pilot tests, a Human Health Risk Assessment (HHRA) and a Feasibility Study have been completed for the Site. Additionally, Site-specific Cleanup Goals (SSCGs) for soil, soil vapor, and groundwater were established in response to the Regional Board's Review of the Revised Site-Specific Cleanup Goal Report and Directive dated January 23, 2014. The Former Kast Site Remediation Project has been proposed to remediate the site with the intent of achieving the SSCGs.

### Remedial Action Objectives

The Remedial Action Objectives are to:

- Remediate the site in compliance with Remedial Action Objectives (RAOs) approved by the LARWQCB. The RAOs are based on the HHRA completed for the site. Health risk assessments use two different values to evaluate potential health impacts: the Incremental Lifetime Cancer Risk (ILCR) and the non-cancer Hazard Index (HI). The ILCR is measured as the increased chance of developing cancer over a lifetime of exposure to a substance. In general, as specified in the National Oil and Hazardous Substances Pollution Contingency Plan, more commonly called the National Contingency Plan (NCP), the USEPA and Cal-EPA consider incremental cancer risks that are below about one (1) chance in 1,000,000 ( $1 \times 10^{-6}$ ) to be so small as to be negligible, and risks above one (1) chance in 10,000 ( $1 \times 10^{-4}$ ) to be sufficiently large that some sort of remediation is desirable. Incremental cancer risks that range between  $1 \times 10^{-6}$  and  $1 \times 10^{-4}$  may be considered to be acceptable.

When the HI is determined to be equal to or less than one (1), it is believed that there is no appreciable risk that non-cancer health effects will occur. If the HI exceeds 1, there may be concern for potential non-carcinogenic health effects. However, an HI above 1 does not indicate an effect will definitely occur due to the margin of safety associated with the exposure assumptions and chemical toxicity criteria used in health risk assessments. The following are RAOs for the project:

## Attachment 2 – Project Description

- Prevent human exposures to concentrations of constituents of concern (COCs) in soil, soil vapor, and indoor air such that the resultant predicted (i.e., cumulative) lifetime incremental cancer risks are within the NCP risk range of one in a million ( $1 \times 10^{-6}$ ) to one in ten-thousand ( $1 \times 10^{-4}$ ) and non-cancer HIs are less than 1 or concentrations are below background, whichever is higher. In the event that background concentrations of a specific COC exceed the risk-based SSCG for that constituent, the RAO for these constituents will be the background level. Potential human exposures include onsite residents and construction and utility maintenance workers. For onsite residents, the lower end of the NCP risk range (i.e.,  $1 \times 10^{-6}$ ) and a non-cancer hazard index less than 1 are proposed. The guidance provided in the NCP for site remediation is commonly used for projects in California and throughout the United States.
- Prevent fire/explosion risks in indoor air and/or enclosed spaces (e.g., utility vaults) that may result from the accumulation of methane generated from the degradation of petroleum hydrocarbons in soils and eliminate methane in the subsurface to the extent technologically and economically feasible.
- Remove or treat petroleum hydrocarbon light non-aqueous phase liquid (LNAPL) to the extent technologically and economically feasible, and where a significant reduction in current and future risk to groundwater will result.
- Reduce COCs in groundwater to the extent technologically and economically feasible to achieve, at a minimum, the water quality objectives in the LARWQCB Basin Plan to protect the designated beneficial uses, including municipal supply.
- Conduct the remediation in a manner that maintains residential land-use of the Site, avoids displacing residents from their homes and/or physically divides the established Carousel community.
- Conduct the ground-disturbing remediation activities in a timely manner to minimize the duration of construction activities in the community.

### **Proposed Project**

The approval and implementation of the RAP requires environmental review and compliance with the California Environmental Quality Act (CEQA). The LARWQCB will be evaluating the environmental impacts associated with the implementation of the RAP, in particular, the short-term impacts associated with the possible methods to be used and the extent of the cleanup. Shell evaluated several different methods during pilot tests for site cleanup, including:

- Soil vapor extraction (SVE);
- Excavation of soils impacted by petroleum hydrocarbons;
- Bioventing to biodegrade petroleum hydrocarbons in shallow soils;
- In-Situ chemical oxidation using ozone gas for cleanup of shallow soil; and
- Other technologies for cleanup of COCs in groundwater.

The proposed site remedy in the RAP will include shallow soil excavation, installation and long-term operation of a SVE and bioventing system, sub-slab vapor mitigation, recovery of light non-aqueous phase liquid hydrocarbons from groundwater wells, monitored natural attenuation of groundwater, and implementation of a soil management plan. The currently planned activities are described as follows:

- Excavation of shallow soils would occur at impacted residential properties identified based on the HHRA completed for the project. Excavation will be conducted in landscaped and hardscaped areas of identified residences (e.g., uncovered patios, walkways, etc.). Following excavation, hardscape and landscaping will be restored to like conditions. Based on findings of the HHRA and distribution of total petroleum hydrocarbon concentrations, approximately 180-185 properties have been identified for remedial excavation.
- Installation and operation of a SVE/bioventing system. This system will be installed and operated to

## Attachment 2 – Project Description

address volatile petroleum hydrocarbons, volatile organic compounds (VOCs), and methane in soil vapor and soils in areas beneath existing paved areas and concrete foundations of homes, soils remaining below the depth of excavation, and the deeper vadose zone. SVE wells and piping will be installed in City streets and on residential properties. The treatment system equipment will either be located onsite or offsite at a yet to be determined location.

- Installation of a system to vent soil vapor from beneath the slabs of approximately 30 properties based on the HHRA completed for the project.
- Light non-aqueous phase liquid (LNAPL) will be recovered where LNAPL has accumulated in two monitoring wells (MW-3 and MW-12) located in City streets to the extent technologically and economically feasible, and where a significant reduction in current and future risk to groundwater will result. LNAPL recovery will be conducted periodically (currently monthly) using dedicated pumps installed in the wells.
- Groundwater monitoring will continue as part of remedial actions. If, based on a 5-year review following initiation of full SVE system operation, groundwater contamination does not show a stable or decreasing trend evaluation and implementation of hot spot groundwater treatment will be conducted.

## Environmental Checklist Form

1. Project Title: Former Kast Property Tank Farm Site Remedial Action Plan
2. Lead Agency Name and Address: Los Angeles Regional Water Quality Control Board, 320 West 4th Street, Suite 200, Los Angeles, CA 90013
3. Contact Person and Phone Number: Paula Rasmussen, Assistant Executive Officer, (213)-576-6791
4. Project Location: City of Carson, CA; the Former Kast Property Tank Farm (Site) is a 44 acre site located in Carson, California. The site is bounded to the north by East 244th Street, Lomita Boulevard to the south, Marbella Avenue to the west, and Panama Avenue to the east (see Figure 1 attached). The Site currently is a residential neighborhood known as the Carousel Tract (see Figure 2 attached). Lomita Boulevard forms the jurisdictional boundary between the City of Los Angeles and the City of Carson.
5. Project Sponsor's Name and Address:  
Shell Oil Products US,  
Attn: Douglas Weimer  
20945 S. Wilmington Ave  
Carson, CA 90810
6. General Plan Designation: Low Density Residential                      7. Zoning: Residential
8. Description of Project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)  
The project is the implementation of a Remedial Action Plan (RAP) for the cleanup of the Carousel Tract in response to a Cleanup and Abatement Order (CAO) issued by the RWQCB in 2011. Primary contaminants of concern are methane, benzene and petroleum hydrocarbons. Additional site characterization investigations, remediation pilot tests, a Human Health Risk Assessment (HHRA) and a Feasibility Study have been completed for the Site. Additionally, Site-specific Cleanup Goals (SSCGs) for soil, soil vapor, and groundwater were established in response to the Regional Board's Review of the Revised Site-Specific Cleanup Goal Report and Directive dated January 23, 2014. The Former Kast Property Tank Farm Site Remediation Project has been proposed to remediate the site with the intent of achieving the SSCGs.  
  
See Attachment A, Project Description, for a more detailed description.
9. Surrounding Land Uses and Setting: Briefly describe the project's surroundings:  
The site is a residential community known as the Carousel Tract in an urban area within the southern portion of the City of Carson. Residential uses are located to the north, east, and south of the tract. Commercial and light manufacturing uses are located adjacent to the northwestern portion of the tract with residential uses adjacent to the southwestern portion of the site. The BNSF railroad right-of-way is on the northern boundary of the project site. In addition, the Wilmington Middle School is located approximately 600 feet from the southwest corner of the site.
10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)  
South Coast Air Quality Management District (SCAQMD), the City of Carson, and the Occupational Safety and Health Administration (OSHA).

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- |                                                              |                                                                   |                                                                        |
|--------------------------------------------------------------|-------------------------------------------------------------------|------------------------------------------------------------------------|
| <input type="checkbox"/> Aesthetics                          | <input type="checkbox"/> Agriculture and Forestry Resources       | <input checked="" type="checkbox"/> Air Quality                        |
| <input type="checkbox"/> Biological Resources                | <input type="checkbox"/> Cultural Resources                       | <input checked="" type="checkbox"/> Geology /Soils                     |
| <input checked="" type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards & Hazardous Materials | <input checked="" type="checkbox"/> Hydrology / Water Quality          |
| <input type="checkbox"/> Land Use / Planning                 | <input type="checkbox"/> Mineral Resources                        | <input checked="" type="checkbox"/> Noise                              |
| <input type="checkbox"/> Population / Housing                | <input type="checkbox"/> Public Services                          | <input type="checkbox"/> Recreation                                    |
| <input checked="" type="checkbox"/> Transportation/Traffic   | <input checked="" type="checkbox"/> Utilities / Service Systems   | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

DETERMINATION: (To be completed by the Lead Agency) On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

## EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - a) Earlier Analysis Used. Identify and state where they are available for review.
  - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
  - a) the significance criteria or threshold, if any, used to evaluate each question; and
  - b) the mitigation measure identified, if any, to reduce the impact to less than significance.

Issues:

<b>I. AESTHETICS -- Would the project:</b>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Discussion: The proposed remediation would occur in various locations within an existing residential neighborhood. There are no scenic vistas or designated state scenic highways in the project area. No historic buildings are located on the site. The remediation activities would result in temporary changes to the visual environment in the residential neighborhood due to the staging of materials and equipment on site during excavation and installation of remediation systems. Equipment that may be used on the site include drill rigs, backhoes, mini-excavators, rubber-tired loaders, water buffalo trailers and soil vapor extraction equipment. Stockpiling of excavated soils would be minimized and if possible excavated soils would be loaded and transported off site the same day. Although the project would create minor short-term changes to the visual character during implementation of the remedy, the disturbed area would be restored and the visual character of the site and surroundings would not be substantially degraded.</p>				

<b>II. AGRICULTURE AND FOREST RESOURCES:</b>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. -- Would the project:</p>				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non- agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<b>II. AGRICULTURE AND FOREST RESOURCES:</b>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion: The site is a residential development in a highly urban area with no agriculture or forest resources. The project would not conflict with existing zoning for agricultural use or convert agricultural or forest land to non-agricultural or non-forest use. Therefore, no impact would occur.				

<b>III. AIR QUALITY --</b> Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. -- Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Discussion: Air quality impacts and feasible mitigation will be assessed in the EIR to be prepared for the project.				

<b>IV. BIOLOGICAL RESOURCES --</b> Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

IV. <b>BIOLOGICAL RESOURCES</b> -- Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion: The project site is a residential development in a highly urbanized area. The site does not contain riparian habitat, a sensitive natural community, federally protected wetlands, migratory wildlife corridors, or native wildlife nursery sites.				

V. <b>CULTURAL RESOURCES</b> -- Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion: There are no known historic, archaeological, paleontological or unique geologic resources that exist at the site or near the site as described in a technical report entitled Cultural Resources Investigations, Former Kast Property, Carson, California, Site Cleanup No. 1230, Site ID 2040330 (URS, 2011). The remediation would result in excavation of shallow soils. However, given that the site has been previously disturbed with the removal of the reservoirs and development of homes and remediation activities would occur in these already disturbed areas, the likelihood of encountering cultural resources is considered low. Therefore, there would be no known significant cultural resources impacted by the project.				

<b>VI. GEOLOGY AND SOILS -- Would the project:</b>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion: The project would remediate impacted soil in an existing residential development and would not change the exposure of people or structures to adverse effects associated with ground shaking, ground failure, liquefaction, or expansive soils. Impacts and mitigation related to soil erosion and soil stability will be assessed in the EIR to be prepared for the project.

<b>VII. GREENHOUSE GAS EMISSIONS -- Would the project:</b>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion: Impacts and mitigation related to GHG emissions will be assessed in the EIR to be prepared for the project.

VIII. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion: Items a – d: Impacts and mitigation related to potential exposure to hazardous materials will be assessed in the EIR to be prepared for the project. The nearest school is the Wilmington Middle School located approximately 600 feet southwest from the southwest corner of the site. Therefore, these issues will be evaluated in the EIR that will be prepared for the project.				
Items e and f: The nearest airport to the site is the Torrance Municipal Airport, located over 3.3 miles to the west of the site. Therefore, no impacts would occur and no further evaluation is necessary.				
Item g: Lane closures needed during the soil excavation portion of the remedy would be done in accordance with the Traffic Management Plan and Encroachment Permits from the City of Carson. These temporary lane closures are not expected to interfere with emergency access or emergency evacuation plans. There may be temporary street blockage for several minutes at a time as trucks manuever to dump loads (backfill soil as an example), but no long-term closures are expected. Drilling and trenching in the streets for well and piping installation would be required for installation of the soil vapor extraction system. Similar to installation of water and sewer lines, there may be short-term blockages of driveways to individual residential properties for less than a day. Trenching that interferes with access would be covered with steel plates to allow access at night and if construction activities are delayed. Therefore, impacts would be less than significant and no further evaluation is necessary.				

IX. <b>HYDROLOGY AND WATER QUALITY</b> -- Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion: The site is not located in a 100-year floodplain and implementation of the RAP would not change drainage patterns within the Tract. Potential impacts to storm water may occur if storm water is exposed to contaminated soil during excavation activities. However, implementation of required best management practices would mitigate this potential impact. Impacts relative to water quality (Items a. and f.) will be assessed in the EIR to be prepared for the project.				

X. <b>LAND USE AND PLANNING</b> -- Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<b>X. LAND USE AND PLANNING -- Would the project:</b>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion: The implementation of the RAP would not change the existing land use within the Carousel Tract. Therefore, the project would have no impact with regard to land use and planning.				

<b>XI. MINERAL RESOURCES -- Would the project:</b>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion: The site has no known mineral resources and implementation of the RAP would not change the availability of mineral resources at the site. Therefore, no impact to mineral resources would occur and no further evaluation is necessary.				

<b>XII. NOISE -- Would the project:</b>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion: Items a., b., and d.: Impacts and mitigation related to potential noise and vibration exposure will be assessed in the EIR to be prepared for the project.				

<b>XII. NOISE</b> -- Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Item c.: The implementation of the RAP would not result in a substantial permanent increase in ambient noise levels in the vicinity since the cleanup is a short-term project. Thus, long-term noise analysis is not warranted. However, Item d. will be evaluated in the EIR as indicated below.				
Items e. and f.: The nearest airport to the site is the Torrance Municipal Airport, located over 3.3 miles to the west of the site. There is no private airstrip within the vicinity of the site. Therefore, no noise impacts relative to airports would occur and no further evaluation is necessary.				

<b>XIII. POPULATION AND HOUSING</b> -- Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion: The remediation project has no growth-inducing element and the project would not result in any impacts to population or housing. Population growth would not be affected and displacement of housing would not occur as the excavation would be conducted in landscaped and hardscaped areas of identified residences (e.g., uncovered patios, walkways, etc.). While some temporary relocation of residents may be required during excavation activities, there are a substantial number of hotel/motel rooms in the area and construction of replacement housing is not expected. Therefore, no significant impact with regards to population and housing would occur under the recommended project scope and no further analysis of the issue is necessary.				

<b>XIV. PUBLIC SERVICES</b> -- Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<b>XIV. PUBLIC SERVICES</b> -- Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Discussion: The project would not generate an increase in the demand for public services as the demand for public services is generally associated with population or employment growth. No new housing would be constructed that would generate a need for additional schools or parks. The RAP has no component or activity that would cause substantial adverse physical impacts requiring changes or impacts to fire, police, schools, parks or other public services facilities. The nature and extent of the proposed project would not generate a need for any new or physically altered governmental facilities. Therefore, no impact to public services would occur.				

<b>XV. RECREATION</b> -- Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion: No recreational facilities are on the project site and project activities would not require new/expanded recreational facilities or increase the use of existing facilities. The nature and extent of the proposed project would not generate a need for any new or physically altered recreational facilities. Therefore, no impact relative to recreation would occur and no further analysis is necessary.				

<b>XVI. TRANSPORTATION/TRAFFIC</b> -- Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<b>XVI. TRANSPORTATION/TRAFFIC -- Would the project:</b>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Discussion: Items a., e., and f.: Implementation of the RAP would result in short-term, temporary traffic. Due to the nature of the project, conflicts with adopted policies, plans or programs regarding the circulation system or alternative transportation facilities would not occur because these plans address the long-term status and maintenance of the circulation systems. As such, impacts would be less than significant and no further analysis of the plans is necessary.</p> <p>Item b.: Implementation of the RAP would require the exportation of impacted soil from the site and would therefore, generate truck trips. Thus, construction activities could adversely impact the circulation system. A traffic study will be prepared and will be included and summarized in the EIR to be prepared for the project.</p> <p>Item c: As indicated under Section VIII, Hazards and Hazardous Materials, the nearest airport to the site is the Torrance Municipal Airport, located over 3.3 miles to the west of the site. Therefore, no impacts with regard to air traffic patterns would occur and no further evaluation is necessary.</p> <p>Item d: The project would not result in any changes to the existing circulation system. Therefore, the project would not increase hazards due to a design feature and no further evaluation is necessary.</p>				

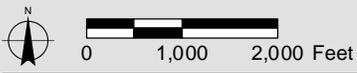
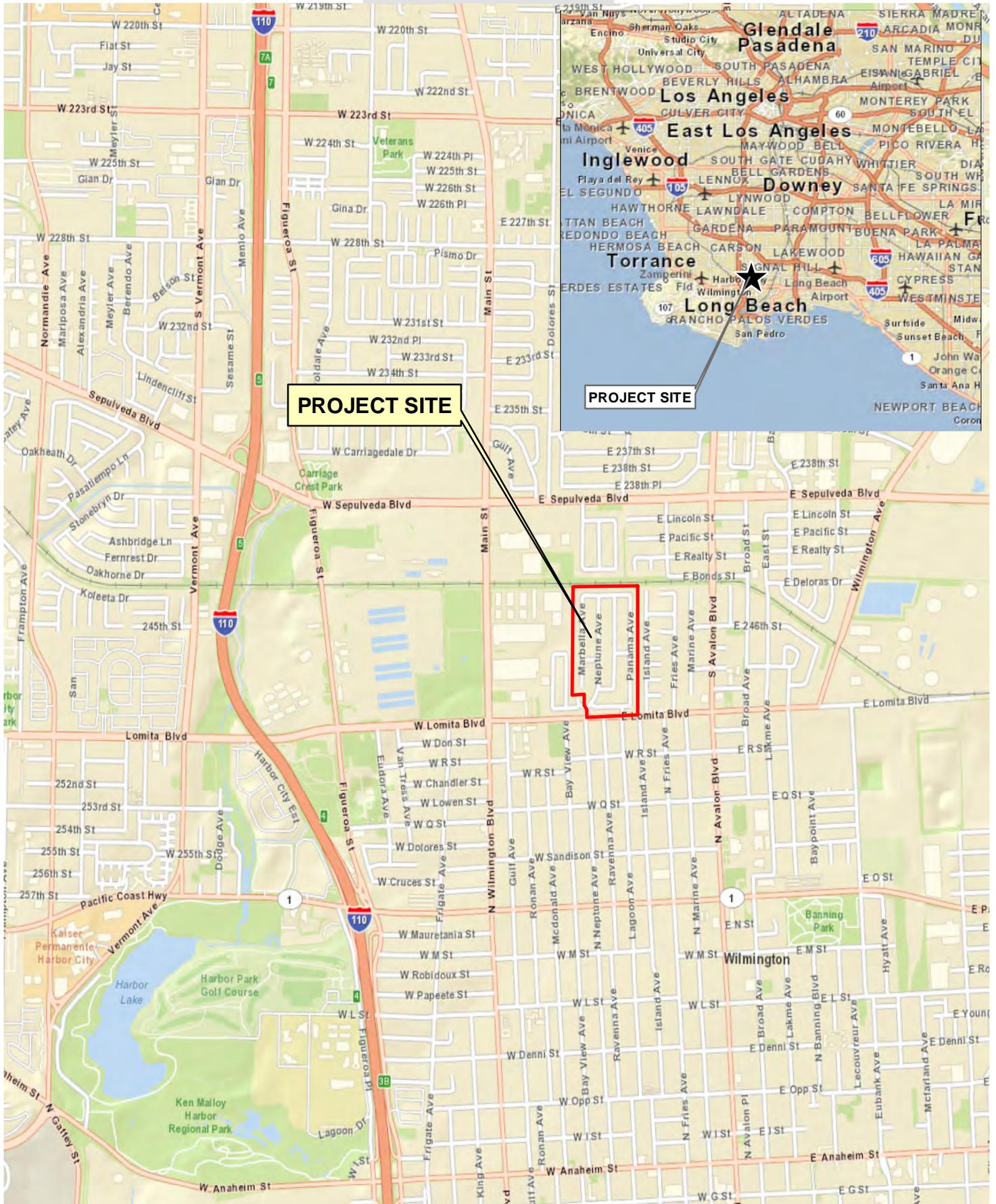
<b>XVII. UTILITIES AND SERVICE SYSTEMS -- Would the project:</b>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Discussion: Items a.-c. and e.: The implementation of the RAP would not include the development of uses that would generate new wastewater flows. The Project does not propose a change in land use that would result in greater average daily flows than are currently produced. Thus, no impacts regarding wastewater would occur with Project implementation. Further analysis of this issue in the EIR is not necessary. Potential impacts regarding runoff during the proposed remediation activities are addressed in Section IX, Hydrology and Water Quality, above.</p>				

Item d: The project could result in a marginal increase in water demand during the implementation of the RAP over what currently is experienced at the site. However, the amount of water usage is expected to be nominal as it would be limited primarily to watering down the site for dust control and irrigation of newly planted vegetation, and it would be short-term, lasting only through the duration of the project. It is expected that the City's municipal water sources can accommodate the project's water requirement. Furthermore, upon completion of the RAP, land uses are not expected to change from current uses, and therefore, no change to water demand would result that would generate a long-term effect to available water supplies provided by the City. As such, a less than significant impact would occur related to water supplies. Further analysis of this issue in the EIR is not necessary.

Items f. and g.: The impacted soil that would be excavated at the site would be disposed of at a facility that can accept such waste. The landfill disposal capacity for the materials will be assessed in the EIR to be prepared for the project. The project would comply with federal, state, and local statutes and regulations related to solid waste. Therefore, no further evaluation of consistency with the regulations would be necessary.

<b>VIII. MANDATORY FINDINGS OF SIGNIFICANCE</b>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Discussion:</b>				
Item a.: As analyzed in this Initial Study, the project could result in environmental impacts that would have the potential to degrade the quality of the environment. As such, an EIR will be prepared to further analyze and document the project's potentially significant impacts.				
Item b.: The project is not growth inducing and would not itself result in an increase in area population, employment, or new infrastructure. The issues relevant to this project are localized and primarily limited to the immediate vicinity of the site, with the exception of impacts regarding air quality, greenhouse gas emissions, noise, and truck traffic. Cumulative impacts for these issues will be assessed in the EIR to be prepared for the project.				
Item c.: Based on the preceding responses, the project could result in environmental effects that could result in substantial adverse impacts to human beings, either directly or indirectly, which requires further analysis within the EIR.				

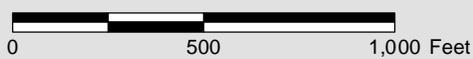
*Note: Authority cited: Sections 21083, 21083.05, Public Resources Code. Reference: Section 65088.4, Gov. Code; Sections 21080, 21083.05, 21095, Pub. Resources Code; Eureka Citizens for Responsible Govt. v. City of Eureka (2007) 147 Cal.App.4th 357; Protect the Historic Amador Waterways v. Amador Water Agency (2004) 116 Cal.App.4th at 1109; San Franciscans Upholding the Downtown Plan v. City and County of San Francisco (2002) 102 Cal.App.4th 656.*



**Regional and Location Map**

FIGURE

**1**



### Aerial Photograph

KastSite RAP

Source: Microsoft, 2010; PCR Services Corporation, 2014.

FIGURE

2

# ATTACHMENT A - PROJECT DESCRIPTION

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## Site History

The Kast Property Tank Farm was owned and operated by Shell Oil Company from 1924 through 1966, when it was sold to developers. The Site included three crude oil storage reservoirs with a total capacity of 3.5 million barrels. Reservoirs had concrete-lined bottoms and sidewalls with frame roofs on wood posts, surrounded by earth levees averaging 20 feet in height. Demolition of the three crude oil reservoirs by the developers began in 1966. Site redevelopment into a single family residential neighborhood began in approximately 1967 and the property is referred to as the Carousel Tract.

In 2008, residual oil was discovered in soil and groundwater at the Site. Subsequently, the Los Angeles Regional Water Quality Control Board (LARWQCB) issued orders to Shell requiring investigation and cleanup of the Site pursuant to the Porter-Cologne Water Quality Control Act (Porter-Cologne Act, California Water Code §§13000 et seq.). Comprehensive multi-media Site investigations have been underway since 2008 and have included assessments of soil, soil vapor, sub-slab soil vapor, indoor air, and groundwater impacts. To date, investigations have been conducted in city streets within the Carousel Tract, at 270 of the 285 residential properties in the Carousel Tract, the adjacent Monterey Pines and Island Avenue Tracts, the adjacent railroad right-of-way north of the Site, and at the Wilmington Middle School.

In 2011 the LARWQCB issued a Cleanup and Abatement Order (CAO) that requires Shell to propose and submit a Remedial Action Plan (RAP) for the cleanup of the Carousel Tract. Primary contaminants of concern are methane, benzene and petroleum hydrocarbons. Additional site characterization investigations, remediation pilot tests, a Human Health Risk Assessment (HHRA) and a Feasibility Study have been completed for the Site. Additionally, Site-specific Cleanup Goals (SSCGs) for soil, soil vapor, and groundwater were established in response to the Regional Board's Review of the Revised Site-Specific Cleanup Goal Report and Directive dated January 23, 2014. The Former Kast Site Remediation Project has been proposed to remediate the site with the intent of achieving the SSCGs.

## Proposed Project

The approval and implementation of the RAP requires environmental review and compliance with the California Environmental Quality Act (CEQA). The LARWQCB will be evaluating the environmental impacts associated with the implementation of the RAP, in particular, the short-term impacts associated with the possible methods to be used and the extent of the cleanup. Shell evaluated several different methods during pilot tests for site cleanup, including:

- Soil vapor extraction (SVE);
- Excavation of soils impacted by petroleum hydrocarbons;
- Bioventing to biodegrade petroleum hydrocarbons in shallow soils;
- In-Situ chemical oxidation using ozone gas for cleanup of shallow soil; and
- Other technologies for cleanup of COCs in groundwater.

The proposed site remedy in the RAP will include shallow soil excavation, installation and long-term operation of a SVE and bioventing system, sub-slab vapor mitigation, recovery of light non-aqueous phase liquid hydrocarbons from groundwater wells, monitored natural attenuation of groundwater, and implementation of a soil management plan. The currently planned activities are described as follows:

- Excavation of shallow soils would occur at impacted residential properties identified based on the HHRA completed for the project. Excavation will be conducted in landscaped and hardscaped areas of identified residences (e.g., uncovered patios, walkways, etc.). Following excavation, hardscape and landscaping will be restored to like conditions. Based on findings of the HHRA and distribution of total petroleum hydrocarbon concentrations, approximately 180-185 properties have been identified for remedial excavation.
- Installation and operation of a SVE/bioventing system. This system will be installed and operated to address volatile petroleum hydrocarbons, volatile organic compounds (VOCs), and methane in soil vapor and soils in areas beneath existing paved areas and concrete foundations of homes, soils remaining below the depth of excavation, and the deeper vadose zone. SVE wells and piping will be installed in City streets and on residential properties. The treatment system equipment will either be located onsite or offsite at a yet to be determined location.
- Installation of a system to vent soil vapor from beneath the slabs of approximately 30 properties based on the HHRA completed for the project.
- Light non-aqueous phase liquid (LNAPL) will be recovered where LNAPL has accumulated in two monitoring wells (MW-3 and MW-12) located in City streets to the extent technologically and economically feasible, and where a significant reduction in current and future risk to groundwater will result. LNAPL recovery will be conducted periodically (currently monthly) using dedicated pumps installed in the wells.
- Groundwater monitoring will continue as part of remedial actions. If, based on a 5-year review following initiation of full SVE system operation, groundwater contamination does not show a stable or decreasing trend evaluation and implementation of hot spot groundwater treatment will be conducted.