



## Introduction

The Los Angeles Regional Water Quality Control Board (Regional Board) wants you to know about the status of Cleanup and Abatement Order (CAO) No. R4-2011-0046 issued to Shell Oil Company (Shell) on March 11, 2011. This fact sheet summarizes what is being done to implement the CAO requirements. Among other requirements, Section 3.a. of the CAO required Shell to develop a pilot testing work plan to be approved by the Regional Board's Executive Officer that includes: 1) evaluation of the feasibility of removing impacted soils to 10 feet and removal reservoir concrete slabs encountered within the uppermost 10 feet, including areas beneath residential houses, using different excavation methods; 2) remedial options that can be carried out where site characterization (including indoor air testing) is completed; and 3) plans for relocation of residents during soil removal activities, plans for management of excavated soil on-site, and plans to minimize odors and noise during soil removal. Pursuant to the CAO, Shell has submitted the required Pilot Test Work Plan to the Regional Board for the Executive Officer's approval. Shell's Pilot Test Work Plan consists of the following three documents: 1) *Pilot Test Work Plan, Remedial Excavation and In-Situ Treatment Pilot Testing* dated May 10, 2011, prepared by URS Corporation and Geosyntec Consultants; 2) *Addendum to Pilot Test Work Plan, Remedial Excavation and In-Situ Treatment Pilot Testing*, dated August 15, 2011, prepared by URS Corporation and Geosyntec Consultants, and 3) *Addendum 2 to Pilot Test Work Plan, Remedial Excavation and In-Situ Treatment Pilot Testing*, dated August 26, 2011, prepared by URS Corporation. Collectively, these three documents are referred to as the "Work Plan." Regional Board staff has reviewed the Work Plan, which addresses the following:

## Site Assessment

Site investigations have detected soil impacts by a number of petroleum-related and some non-petroleum related contaminants. Total petroleum hydrocarbons quantified as gasoline-range organics (TPHg), diesel range organics (TPHd), and motor oil-range organics (TPHmo) have been detected in Site soils and groundwater. A number of volatile organic compounds (VOCs), including compounds associated with petroleum hydrocarbons (e.g., benzene, toluene, ethylbenzene, xylenes, trimethylbenzenes and other substituted aromatic compounds), and non-petroleum-related VOCs have been detected in Site soils to a lesser extent in soil vapor. In addition, polycyclic aromatic hydrocarbons (PAHs), including naphthalene and benzo(a)pyrene, have been detected in Site soils associated with hydrocarbon contaminants.

## Pilot Test Work Plan

The Work Plan considers the following cleanup and abatement methods or combinations thereof, to the extent that they may be applicable to Site conditions:

- Source removal;
- In-situ (meaning in-place) treatment of soil;
  - Chemical oxidation; and
  - Bioventing.
- Excavation or extraction of soil for onsite or offsite treatment; or for appropriate recycling, reuse, or disposal

The proposed scope of work included in the Work Plan is as follows:

1. Conduct excavation of impacted soil using five excavation/shoring methods or approaches for evaluation at no more than six (6) locations:
  - a. Large unshored excavation spanning front yard of two adjacent properties to approximately 10 feet with sloped sidewalls;
  - b. Unshored slot trenches to approximately 10 feet;
  - c. Slide-rail shored excavation to approximately 10 feet;
  - d. Trench box shored excavation to approximately 10 feet; and
  - e. Unshored surgical excavation to less than 10 feet.
2. Backfill excavated areas with clean soil or sand/cement slurry by performing the following tasks:
  - a. Import certified clean soil from an offsite source; and
  - b. Provide landscaping services, and the affected area will be landscaped per original conditions or as agreed to with the property owner.
3. Conduct laboratory bench testing to evaluate the potential effectiveness of oxidants (ozone and Sodium Persulfate) to treat compounds in site soils.
4. Assuming the results of the laboratory tests are promising, conduct field-scale In-Situ Chemical Oxidation pilot test at two (2) locations by injecting:
  - a. A colored tracer dye, such as Rhodamine or other suitable dye to evaluate the potential effectiveness of liquids oxidants to penetrate site soils and contact the constituents of concern; and
  - b. Ozone gas to evaluate its effectiveness on the constituents of concern.
5. Conduct bioventing pilot test at six locations using soil vapor extraction to supply oxygen to the subsurface to enhance microbial degradation of hydrocarbons.
6. Provide temporary relocation provisions for residents at affected properties during intrusive portions of the above pilot testing.

The Executive Officer has not yet approved the Work Plan. Rather, pursuant to the California Environmental Quality Act (CEQA) (Public Resources Code section 21000 *et seq.*), the Regional Board has evaluated the potential adverse environmental impacts associated with implementation of the Work Plan. This evaluation is detailed in a draft Initial Study (in the format of an expanded Environmental Checklist) in accordance with title 14, California Code of Regulations, section 15063. Based on the analysis and conclusions in the draft Initial Study, the Regional Board has prepared a draft Negative Declaration (ND).

***You are invited to provide public comment on the draft Negative Declaration.*** As required by CEQA, the draft Initial Study and draft ND are available for a 30-day public review and comment period, from September 7, 2011 to October 7, 2011.

The draft Negative Declaration, draft Initial Study, and other supporting documents (including the Work Plan) are available for review at the following locations:

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

Carson Public Library  
151 E. Carson Street  
Carson, CA 90745

Electronic copies of the documents are also available on the Regional Board's website at: <http://www.waterboards.ca.gov/losangeles/> under "Announcements"

All interested agencies and persons are invited to submit written comments during this period. Upon receipt and consideration of all comments received, the Regional Board's Executive Officer will decide whether to approve the Work Plan. If approved, the Regional Board will adopt the ND (and associated Initial Study) and will file a Notice of Determination with the State Clearinghouse and Los Angeles County Clerk.

Implementation of the field work aspect of the proposed Work Plan will begin after the approval of the Work Plan and adoption of the ND. However, necessary planning activities shall proceed in accordance with the schedule set forth in the CAO No. R4-2011-0046.

***The Regional Board needs your assistance with the implementation of the Work Plan.*** The Work Plan identifies specific properties that are proposed for implementation of the Pilot Test. A number of factors were considered to develop criteria for identifying potential pilot test locations suitable for addressing the objectives of the pilot tests. In order for Shell and its consultants to conduct the required remediation in a timely manner, the Regional Board requests the owners of the potential pilot test locations work cooperatively with Shell and its consultants and consider their requests and allow access onto your property to implement the Work Plan. Information gained from implementation of the pilot testing activities will be used to develop and assess different potential remedial strategies, and will be incorporated into the analysis and recommendations that will be contained in the proposed final remedy for the Site. We would appreciate hearing from you in writing regarding your decision.

### **Information Resources**

The Regional Board invites and encourages you to learn more about this site and to comment on its investigation. Work plans, sampling results and assessment reports for the Site are available for public review. For your convenience, core documents, including the Work Plan, have been placed in the Carson Public Library. The complete administrative file is available for review at the Regional Board's office and on the website listed below.

California Regional Water Quality Control Board  
Los Angeles Region  
320 W. 4<sup>th</sup> Street, Suite 200  
Los Angeles, CA 90013  
By appointment, please call (213) 576-6600 or fax your request to (213) 576-6717.

Website: <http://geotracker.waterboards.ca.gov/search.asp>

Fact sheets, work and meeting notices and other site-related notices will be distributed to community members and other stakeholders on the site mailing list.

### **Key Contacts**

If you have questions about this site, wish to share information or communicate concerns, please contact:

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

If you have any technical questions regarding the pilot test work plan related to the Environmental Investigation and Remediation of the Former Kast Property Tank Farm site, please contact the project manager, Dr. Teklewold Ayalew at (213) 576-6739 ([tayalew@waterboards.ca.gov](mailto:tayalew@waterboards.ca.gov)), or Ms. Thizar Tintut-Williams, Site Cleanup Unit III Chief, at (213) 576-6723 ([twilliams@waterboards.ca.gov](mailto:twilliams@waterboards.ca.gov)).