



Legislation Text

File #: 2015-959, Version: 1

Report to Mayor and City Council

Tuesday, December 15, 2015

Discussion

SUBJECT:

CONSIDER STATUS REPORT ON THE REGIONAL WATER QUALITY CONTROL BOARD ENVIRONMENTAL INVESTIGATION AND CARSON DECLARATION OF THE EXISTENCE OF A LOCAL EMERGENCY WITHIN THE CAROUSEL TRACT (CITY COUNCIL)

I. SUMMARY

This item is on the agenda to provide updates at all regularly scheduled City Council meetings related to the environmental investigation of the Carousel Tract. The remediation project is moving into the implementation phase, and the California Regional Water Quality Control Board (Regional Board) held its first Outreach Committee meeting last month and its second meeting on December 9. The committee includes staff members of the Regional Board, the City, and residents of the community.

II. RECOMMENDATION

CONSIDER and DISCUSS.

III. ALTERNATIVES

TAKE such other action the City Council deems appropriate that is consistent with the requirements of law.

IV. BACKGROUND

History

The California Regional Water Quality Control Board, Los Angeles (Regional Board)

is the lead agency overseeing the environmental investigation and cleanup of the Carousel Tract. The Regional Board issued a Cleanup and Abatement Order No. R4-2011-0046 (CAO) on March 11, 2011 requiring Shell Oil Products US to investigate and clean up discharges of waste in soil and groundwater at the Carousel Tract site.

Recent Events

On December 3, 2015, the Regional Board sent a letter to Mr. Douglas J. Weimer, Shell Oil Products US (Exhibit No. 1) that is summarized as follows:

Cleanup and Abatement Order No. R4-2011-0046 (CAO), as amended, requires the responsible parties to submit and implement a Remedial Action Plan (RAP) for the former Kast Property Tank Farm (Carousel Tract). On July 10, 2015, the Regional Board approved the RAP submitted by Shell Oil Products US (Shell). To implement the RAP, AECOM and Geosyntec Consultants, on behalf of Shell, submitted the Remedial Design Implementation Plan (RDIP), dated October 15, 2015. The overall goal of the RDIP is to achieve the remedial action objectives (RAOs) and site-specific cleanup goals developed as set forth in the RAP.

The RDIP considered all activities necessary to fully implement each of the components of the CAO, and how these activities will be coordinated to facilitate construction/implementation in accordance with the approved RAP. The primary activities include but are not limited to:

1. Excavation of shallow soils throughout the accessible areas of front and back yards from both landscaped and hardscape areas of 208 identified residential properties;
2. Targeted deeper excavation of soils between 5 feet and approximately 10 feet below ground surface will be conducted at approximately 85 properties only where a 5-foot excavation is also scheduled;
3. Installation of soil vapor extraction wells in City streets and on approximately 224 residential properties as appropriate;
4. Installation of sub-slab depressurization (SSD) systems at 29 properties. Shell will also install SSD systems at homes were requested by homeowners in the Carousel neighborhood.

The work will be done by contractors licensed in the area of specialty who will be working under technical direction of licensed engineers and geologists.

The RDIP discusses the specific tasks necessary to implement the RAP including:

1. Conceptual excavation design, planned excavation equipment and methodologies and soil handling methods, waste handling, transportation,

treatment/recycling/disposal of wastes and backfilling with clean soil;

2. Property-Specific Remediation Plans (PSRPs) will be prepared for each property where remedial actions are planned, including excavations, SVE/bioventing and SSD systems. During the process of developing the PSRPs, Shell representatives and Regional Board staff, if available will meet with homeowners and non-homeowner residents to discuss relocation plans during remedial activities to identify property-specific features that may require special measures and to discuss property restoration options.

The Regional Board approved the RDIP including the component Property-Specific Remediation Plan process for the Carousel Tract with all excavation/trench backfill, compaction, grading and cleanup of conveyance pipeline trenching in accordance with the specifications and the safety requirements of the City, State and OSHA standards.

Residential Sampling Activity

Testing of property in the Carousel Tract is continuing and the latest reports are posted on the Regional Board's website at:

http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000000228

As of March 10, 2015, the completed Residential Sampling Activity is as follows:

- 272 homes have been screened for Methane. (95%)
- 273 homes have had soils sampled and vapor probes installed. (96%)
- 273 homes have had vapor probes sampled. (95%)
- 261 homes have had indoor air sampled. (91%)
- 244 of 261 homes have had their 2nd round of indoor air sampling. (94%)
- 86% of total homes in the Carousel Community have had second round of Indoor Air conducted

Timeline of Activities

A general timeline that tracks past and current activities of the Carousel Tract environmental investigation is included in the attachments (Exhibit No. 2).

For additional information regarding the Carousel community can be found at the following link:

<http://ci.carson.ca.us/department/communitydevelopment/carouseltract.asp>.

V. FISCAL IMPACT

None.

VI. EXHIBITS

1. Regional Board letter to Shell dated December 3, 2015. (pgs. 5-13)
2. Carousel Tract Environmental Investigation Timeline. (pgs. 14-22)

Prepared by: Zak Gonzalez II, Associate Planner, Planning Division



Los Angeles Regional Water Quality Control Board

December 3, 2015

Douglas J. Weimer
Shell Oil Products US
20945 S. Wilmington Ave.
Carson, CA 90810

SUBJECT: REVIEW OF REMEDIAL DESIGN AND IMPLEMENTATION PLAN PURSUANT TO CALIFORNIA WATER CODE SECTION 13304 ORDER

SITE: FORMER KAST PROPERTY TANK FARM LOCATED SOUTHEAST OF THE INTERSECTION OF MARBELLA AVENUE AND EAST 244TH STREET, CARSON, CALIFORNIA (SCP NO. 1230, SITE ID 2040330, REVISED CAO NO. R4-2011-0046)

Dear Mr. Weimer:

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) is the state regulatory agency responsible for protecting water quality in Los Angeles and Ventura Counties, including the above referenced site. To accomplish this, the Regional Board issues investigative orders and requirements for submission of technical reports authorized by the Porter-Cologne Water Quality Control Act.

Cleanup and Abatement Order No. R4-2011-0046 (CAO), as amended, requires the responsible parties to submit and implement a Remedial Action Plan (RAP) for the former Kast Property Tank Farm (Carousel Tract). On July 10, 2015, the Regional Board approved the RAP submitted by Shell Oil Products US (Shell). To implement the RAP, AECOM and Geosyntec Consultants, on behalf of Shell, submitted the document titled *Remedial Design Implementation Plan (RDIP)*, dated October 15, 2015. The overall goal of the RDIP is to achieve the remedial action objectives (RAOs) and site-specific cleanup goals developed as set forth in the RAP. The RDIP provides a detailed plan for implementing the remedial actions described in the approved RAP. The RDIP presents the framework and schedule for implementation of the selected remedy and presents the activities and sequencing necessary to complete the remedial design for the approved remedy selected in the RAP consistent with the approved time schedule for implementation of the RAP.

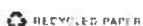
The Regional Board has reviewed the RDIP and approves the RDIP with clarifications as set forth in this letter.

BACKGROUND

The RDIP provides the procedures the Responsible Parties shall follow in designing and implementing the selected remedy for the Site as described in the RAP and consistent with the Final Environmental Impact Report (EIR) and the adopted Mitigation Monitoring and Reporting Program (MMRP) and project design features (PDFs).

CHARLES STRINGER, CHAIR | SAMUEL UNGER, EXECUTIVE OFFICER

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The RDIP is the phase in site cleanup where the technical specifications for cleanup remedies and technologies are designed. Remedial Action (RA) follows the remedial design phase and involves the actual construction or implementation phase of site cleanup. The RDIP considered all activities necessary to fully implement each of the components of the CAO, and how these activities will be coordinated to facilitate construction/implementation in accordance with the approved RAP. The primary activities are summarized as follows:

1. Excavation of shallow soils throughout the accessible areas of front and back yards from both landscaped and hardscaped areas of 208 identified residential properties.
2. Targeted deeper excavation of soils between 5 and approximately 10 feet below ground surface (bgs) will be conducted at approximately 85 properties only where a 5-foot excavation is also scheduled.
3. Installation of soil vapor extraction (SVE) wells in City streets and on approximately 224 residential properties, as appropriate.
4. Installation of sub-slab depressurization (SSD) systems at 29 properties. Shell will also install SSD systems at homes where requested by homeowners in the Carousel neighborhood.
5. Continue to recover light non-aqueous phase liquid from monitoring wells MW-3 and MW-12, if it accumulates at a measurable thickness to the extent technologically and economically feasible.
6. Continue groundwater monitoring.
7. Conduct periodic monitoring of soil, soil vapor probes, and sub-slab soil vapor probes.
8. Continue operations, monitoring, and maintenance activities, as necessary, following excavation and installation of the SVE/bioventing and SSD systems.

The work will be done by contractors licensed in their area of specialty who will be working under the technical direction of licensed engineers and geologists.

SUMMARY OF REMEDIAL DESIGN IMPLEMENTATION PLAN

The RDIP discusses the specific tasks necessary to implement the RAP including the following:

1. Conceptual excavation design, planned excavation equipment and methodologies, and soil handling methods, waste handling, transportation, treatment/recycling/disposal of wastes (Section 9.0) and backfilling with clean soil.
2. Geotechnical Investigation Report (Appendix K): The report provides the geotechnical properties of the soils at the project Site and offers geotechnical recommendations for the remedial excavations. The report states that if foundation support is required during excavation, in order to maximize impacted soil removal around houses, a shoring design specification will be prepared for review and approval by the City of Carson and Los Angeles County Department of Public Works (LACDPW). Standard trench shoring will also be performed for trenches that are deeper than 5 feet if personnel need to enter the trench, or where necessary to address unstable soil conditions.

3. SVE/bioventing system Operations and Maintenance (O&M) Plan (Appendix M): The plan provides the information necessary to operate and maintain the SVE/bioventing treatment system installed to address petroleum hydrocarbon impacted soil. The system is intended to operate cyclically (pulsed) to extract impacted soil vapor and introduce oxygen into the subsurface to stimulate biodegradation and operate 24 hours per day, 7 days per week. Due to the phased implementation of the remedial actions, not all wells will have been installed by the time of initial SVE/bioventing system startup.

Approximately 472 shallow zone residential wells will be installed. In addition, a total of 63 triple-nested well clusters (shallow, intermediate, and deep zones) will be installed in the streets with an average spacing of approximately 125 feet. The SVE/bioventing treatment systems will be installed to treat 3,000 standard cubic feet per minute (scfm) of extracted soil vapors. Two systems, each capable of extracting and treating 1,500 scfm, will be installed. Detailed design drawings and specifications for the SVE/bioventing system are provided in Appendix L.

4. Vapor Mitigation System Conceptual Design and Drawings (Appendix N, Drawings No. G-1, G-2, C-1, C-2, and C-3): These drawings represent the finished mitigation system for a typical structure. Subsequent individual structures may vary to some degree from this conceptual design of a SSD system (Section 11).
5. Paint Filter Liquid Test (Appendix P): The method is used to determine the presence of free liquids in a representative sample of waste using EPA Method 9095B.
6. Post-Excavation Documentary Sampling and Post-Construction Long-Term Sampling and Monitoring Plan (Appendix G): Soil samples will be collected to document concentrations of certain constituents of concern remaining on properties following excavation.
7. Mitigation Monitoring and Reporting Program Cross Reference Table (Appendix O): The table sets forth the EIR's MMRP PDFs identified to minimize the significance of potential environmental effects and mitigation measures that reduce the impacts to less than significant.
8. Property-Specific Remediation Plans (PSRPs) will be prepared for each property where remedial actions are planned, including excavations, SVE/bioventing and SSD systems. During the process of developing the PSRPs, Shell representatives and Regional Board staff, if available, will meet with homeowners and non-homeowner residents to discuss relocation plans during remedial activities, to identify property-specific features that may require special measures, and to discuss property restoration options. The PSRPs will have the following components:
 - a. PSRP process includes the following activities:
 - i. Property-specific topographic survey;
 - ii. Homeowner/tenant interviews to explain process, obtain relocation information, and discuss site Restoration options;
 - iii. Remedial excavation design and grading plan preparation;
 - iv. Residential SVE/Bioventing well and piping locations;
 - v. SSD system plan: to depict the locations and details for the SSD system for each property where one will be installed; and
 - vi. Relocation Information - general information about residents' relocation, including the anticipated length of time.

- b. Establishment of exclusion zones: Provide a physical and visual barrier that will keep local residents and pedestrians out of the work area or at each cluster of properties before the start of active remediation activities; and
 - c. Security during homeowner relocation: Onsite security will be provided by a combination of off-duty law enforcement officers and non-law enforcement security personnel.
 9. All work shall be in compliance with federal, state and local building and electrical codes. In addition, the work will be done under applicable permits or approvals issued by state and local agencies and governments for the following:
 - a. Grading Permits: A final geotechnical report and a remedial excavation grading plan will be prepared for clusters of up to 10 properties that will be excavated at a time and included in a single submittal for City of Carson and LACDPW review (Appendix K);
 - b. Permit to Construct/Operate SVE/bioventing equipment: In June 2015, an application was submitted to the South Coast Air Quality Management District (SCAQMD) for a permit for the SVE and oxidizer treatment systems. It is anticipated that the Permit to Construct will be finalized and issued in late 2015 (Appendices L, M, and N);
 - c. Excavation and Encroachment Permits: Submit construction traffic management plan and haul route plan (Appendix E) to the City of Carson Public Works Department. In order to conduct the work, the street and sidewalk surrounding each cluster of homes will be partially closed, and noise attenuation barriers installed;
 - d. Utility permits, plumbing and electrical permits for restoration, for each property from the City of Carson;
 - e. Landscaping permits from the City of Carson Planning Department and LACDPW;
 - f. Masonry permits for block wall reconstruction from the Los Angeles County Department of Building and Safety;
 - g. SCAQMD permit for Asbestos Notifications/Abatement;
 - h. SCAQMD permit for Rule 1166 Compliance Plan (See Appendix H);
 - i. Trenching Permit from California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) (See Appendix I);
 - j. Laydown yard planning approval permit, to stage equipment, store materials, for field offices, and provide parking for staff from the City of Carson (Appendix J); and
 - k. General Construction Stormwater National Pollutant Discharge Elimination System permit from State Water Resources Control Board, including Stormwater Pollution Prevention Plan (SWPPP, Appendix C).
 10. Sequence of planned remediation activities for each property (excavation, SVE/bioventing, and/or sub-slab depressurization) will proceed throughout the tract in clusters of residences. Each cluster will consist of a minimum of 4 to a maximum of 10 residences to be remediated within the same timeframe (Figure 9-5, Table 9-1).

The sequence of remediation activities by cluster has been established to begin construction near the topographic high point of the tract at the southern and southeast part of the tract and move to the low point in the northwest corner to best maintain control of the SVE/bioventing piping grades from high to low (generally south to north) in order to provide for gravity flow of condensate fall-out within the vapor stream.

11. The Surface Containment and Soil Management Plan (Appendix A): The plan is designed to be used in conjunction with existing administrative controls (e.g., City of Carson and Los Angeles County Codes regarding construction, grading, landscaping, and excavation and encroachment permits). The plan provides the detailed approach to control potential residential, construction, or utility worker exposure to soils that do not meet RAOs and that may remain at the Site following implementation of the excavation remedy outlined in the Revised RAP and RDIP. The plan is also intended to apply to all parties involved in soil disturbance activities at the Site (e.g., excavation, landscaping, utility installation), including the City of Carson, LACDPW, local utility providers, contractors, and residents. It also addresses handling and management of impacted soils during remedial construction activities in a manner that is protective of residents in the community and consistent with State and Federal laws and regulations.
12. Stormwater Pollution Prevention Plan (Appendix C): The plan is designed to comply with California's General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities. The plan addresses control of pollutants and their sources, including sources of sediment associated with construction activities and a plan to protect all exposed portions of the site within 48 hours prior to any likely precipitation event.
13. Health & Safety Plan (HSP) (Appendix B): The site-specific HSP is integral to the safe conduct of site operations that details job hazard analysis and safe work practices such as minimum protective clothing/equipment requirements,
14. Emergency Response Plan (Appendix F): Provides specific information on potential hazards that may arise during implementation of the RAP for the former Kast Property that may potentially affect the Carousel Tract community and to describe the risk mitigation and emergency response procedures that will be instituted during RAP implementation. The Plan also provides information on emergency notification services, based on existing public resources. Finally, the Plan provides a list of important public agency contacts and emergency preparedness resources.
15. Construction Traffic Management Plan and Haul Route Plan (Appendix E): This plan includes Site Traffic Control Plans including, but is not limited to, elements such as the designation of haul routes for construction-related trucks, any driveway turning movement restrictions, temporary traffic control devices, travel time restrictions for construction-related traffic, consolidation of construction truck deliveries, flag control, and designated staging and parking areas for workers and equipment.
16. Overview of RAP Relocation and Real Estate Plan (Appendix D): As part of implementation of the RAP, Shell is offering:
 - a. A Temporary Relocation Program to residents of properties while remedial actions are performed in or immediately adjacent to the yards of their residences. Langan Engineering and Environmental Services will be coordinating the Temporary Relocation Program; and

- b. **Optional Real Estate Program:** A voluntary program that ensures that participating homeowners who elect to sell their house to independent third party buyers after placing their home on the market will receive fair market value as determined through the appraisal process described in the Program Brochure.

17. A tentative project schedule for RAP implementation (Figure 16-1)

Regional Board Approval of RDIP

The Regional Board approves the RDIP, including the component Property-Specific Remediation Plan process for the Carousel Tract, with the following clarifications:

1. All excavation/trench backfill, compaction, grading and cleanup of all conveyance pipeline trenching for the SVE/bioventing system must be done in accordance with the specifications and the safety requirements of the City, State and OSHA standards. In order to implement the planned excavation methodologies and achieve the required degree of compaction, consistent with the following:
 - a. Provide frequent adjustments in compacting equipment, thickness of layers, moisture content, field density tests of compacted backfill materials and compactive effort or other means necessary to obtain the specified minimum relative density;
 - b. Use the most appropriate mechanical compaction rollers, or other mechanical tampers of a size and type necessary to achieve the compaction requirement;
 - c. Ensure that excavated soil backfill material shall be free from alkali, salt, and petroleum products, roots, sod, limbs, and other vegetative matter, slag, cinders, ashes and rubbish, or other material that in the opinion of the Regional Board staff may be objectional or deleterious; and
 - d. Ensure protection of work in place against displacement and/or settlement damage.
2. For remedial trench/pit excavations up to 10 feet in depth, the lower part will be backfilled with 2-sack slurry (also referred to as flowable fill or controlled low strength material (CLSM) (Section 9.1.4). Prior to backfilling, clarify what depth intervals are considered as the "lower part" backfilled with slurry, and followed by soil.
3. Once it is demonstrated that the SVE/bioventing treatment systems installed are operational and functional as per the O&M Plan, provide copies of the SCAQMD permit to the Regional Board;
4. The RDIP suggests three potential offsite locations for the treatment system. Although acoustical mitigation (sound proofing) will be provided, the Regional Board recommends the consideration from among the three potential locations, a location that is no less than 500 feet from the closest private residence.
5. Based on the testing data that consists of extraction system operating data, wellhead applied vacuum, flow rate, radius of influence and soil vapor methane and VOC concentrations from select monitoring points, you shall modify the spacing and number of wells in order to achieve the minimum flow requirement in the desired time;

6. Properly manifest and dispose of all wastes generated during the implementation of the RAP field activities in compliance with State and Federal regulations.
7. Change the reference to "RAP Implementation Task Force" (page 9-8 last paragraph) to the "Outreach Committee" throughout the RDIP document.
8. You shall notify the Regional Board of any significant scheduling problems or delays that may impact the overall schedule, together with recommended actions to overcome potential problems and delays, should they arise.
9. You shall notify Regional Board at least 7 days prior to the beginning of the fieldwork.

Reporting Information

10. Remediation Progress Reports: Upon completion of the installation of SVE/bioventing wells, trenching and piping, and construction of an off-site treatment system, you shall include the following information in the quarterly Remediation Progress Reports:
 - a) SVE system start-up and shakedown activities;
 - b) SCAQMD compliance sampling analytical results of effluent concentrations for total volatile organic compounds (VOCs) analysis reported as, at a minimum, hexane, methane, and benzene;
 - c) Operation and performance including baseline for preliminary performance evaluation, estimated pounds of VOCs and methane removed, influent and effluent VOCs and methane concentrations, operating parameters, oxidizer uptime, system optimization; and
 - d) Ongoing performance monitoring information that includes records for the following:
 - i. Distance of Soil Vapor Monitoring Probes (SVMPs) from SVE wells;
 - ii. multi-depth SVMPs data collection;
 - iii. Vacuum influence;
 - iv. Concentration of VOCs (ppmv), CH₄ (%), CO₂ (%), O₂ (%); and
 - v. Monitoring frequency as daily (week 1), weekly (6 weeks), monthly (6 months), quarterly.
11. Rebound Test Results Report: Conduct a rebound test two years following completion of the SVE operation and submit a rebound test results report, documenting the rebound test activities, comparison of contaminant concentrations during asymptotic conditions and following post-rebound testing at system inlet and in individual wells and evaluation on absence or presence of significant rebound.
12. Soil Excavation Completion Report and SVE System Installation Completion Report: Copies of the manifest(s) for waste disposal shall be included in the Soil Excavation Completion Report and the SVE System Installation Completion Report submitted to the Regional Board.
13. Construction Completion Report: Upon satisfactory completion of work on groups of properties referred to as clusters, submit a Construction Completion Report to the Regional Board **within 60 days** after the final inspection. The report shall include the following elements:

- a. A brief description of the outstanding construction items from the final inspection and an indication that the items were satisfactorily resolved;
 - b. A synopsis of the work defined in the approved RAP and RDIP certification that this work was performed;
 - c. An explanation of any changes to the work defined in the approved PSRPs final design, including as-built drawings of the constructed SSD system, and why the changes were necessary or beneficial for the cleanup; and
 - d. Copies of all permits and certifications that the constructed PSRPs or component of the RAP is operational and functional.
14. The Regional Board staff will review the Construction Completion Report and will provide comments to Shell. If necessary to address comments, Shell shall submit a revised Construction Completion Report **within 30 days** of receipt of those comments. Upon determination by the Regional Board that the report is acceptable, written notice of Regional Board's approval of the Construction Completion Report will be provided to Shell.

Conclusion

The Reports referenced in the RDIP are required by the CAO. Pursuant to section 13350 of the California Water Code, failure to submit the required reports by the due dates may result in monetary civil liability administratively imposed upon you by the Regional Board in an amount up to five thousand dollars (\$5,000) for each day the report is not received.

The State Water Resources Control Board (State Water Board) adopted regulations requiring the electronic submittals of information over the Internet using the State Water Board GeoTracker database. You are required to comply with the CAO by uploading all reports and correspondence prepared to date and additional required data formats to the GeoTracker system. Information about GeoTracker submittals, including links to text of the governing regulations, can be found on the Internet at the following link:

http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal

Please note that, the Regional Board requires you to include a perjury statement in all reports submitted under the 13304 order. The perjury statement shall be signed by a senior authorized Shell Oil Products US representative (and not by a consultant). The statement shall be in the following format:

“ I, [NAME], do hereby declare, under penalty of perjury under the laws of State of California, that I am [JOB TITLE] for Shell Oil Company that I am authorized to attest to the veracity of the information contained in [NAME AND DATE OF REPORT] is true and correct, and that this declaration was executed at [PLACE], [STATE], on DATE].”

If you have any questions, please contact Dr. Teklewold Ayalew, Project Manager, at (213) 576-6739 (teklewold.ayalew@waterboards.ca.gov), or Ms. Thizar Tintut-Williams, Site Cleanup Unit III Chief, at (213) 576-6723 (thizar.williams@waterboards.ca.gov).

Sincerely,



Samuel Unger, PE
Executive Officer

cc: Janice Hahn, Honorable Congresswoman, US House of Representatives,
California's 44th District
Mark Ridley-Thomas, Supervisor, Second District County of Los Angeles
Isadore Hall, III, Assembly member, 64th Assembly District
Frances L. McChesney, Office of Chief Counsel, State Water Resources Control Board
Jennifer Fordyce, Office of Chief Counsel, State Water Resources Control Board
James Carlisle, Office of Environmental Health Hazard Assessment
Robert Romero, Department of Toxic Substances Control
Bill Jones, Los Angeles County Fire Department
Barry Nugent, Los Angeles County Fire Department
Scott Mahan, Los Angeles County Fire Department
Michael A. Bravo, Los Angeles County Fire Department
Kim Clark, Los Angeles County Fire Department
Hoang Ly, Los Angeles County Fire Department
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Cyrus Rangan, Los Angeles County Department of Health
Ken Farfsing, Manager, City of Carson
Saied Naaesh, City of Carson
Zak Gonzalez II, City of Carson
Ky Truong, City of Carson
John Raymond, Community Development Director, City of Carson
Steve Onstot, Aleshire & Wynder, LLP
Alexander Morelam, Los Angeles Unified School District (LAUSD)
Patrick Schanen, LAUSD
Patrick W. Dennis, Gibson, Dunn & Crutcher LLP
Karen A. Lyons, Shell Oil Products US
Alison Abbott Chassin, Shell Oil Products US
Hal Dash, Cerrell Associates
Roy Patterson, AECOM Corporation
Chris Osterberg, AECOM Corporation
Michelle Vega, Edelman
Robert Ettinger, Geosyntec
Thomas V. Girardi, Girardi and Keese Lawyers
Robert W. Bowcock, Integrated Resources Management, LLC

Carousel Tract Environmental Investigation Timeline

Date	Significant Actions/Reports	Notes
March 11, 2008	DTSC informed LARWQCB about former Shell Oil Company Tank Farm	
May 2008	LAWRQCB initiated an environmental investigation	
December 2008	LAWRQCB approved proposed work plan submitted by Shell to investigate contaminates of concern	
December 31, 2008	LARWQCB issued California Water Code § 13267 Investigative Order	
October 15, 2009	Shell submitted Final Phase I Site Characterization Report	
March 2011	LARWQCB issued Cleanup and Abatement Order No. R4-201100046	
February 22, 2013	Shell submitted <i>Site-Specific Cleanup Goal Report</i>	
May 2013	LAWRQCB issued a fact sheet providing information and advising of comment period for <i>Site-Specific Cleanup Goal Report</i>	30-day comment period ending June 24, 2013
June 24, 2013	City submitted comments to <i>Site-Specific Cleanup Goal Report</i>	Forwarded reports by Everett & Associates and Soil/Water/Air Protection Enterprise
July 18, 2013	City Council conducted workshop to allow presentation by Mr. Sam Unger, Executive Director of LARWQCB	Presentation by Dr. Lorene Everett and James T. Wells PhD raising concerns related to environmental conditions
July 29, 2013	City Council adopted Resolution No. 13-081 declaring the existence of an emergency in the Carousel Tract	
July 30, 2013	Letters sent to the Governor, Attorney General, Los Angeles County Board of Supervisors and Mr. Unger	Requested immediate assistance due to emergency conditions in Carousel Tract
July 31, 2013	City staff, Mr. Bob Bowcock, Dr. Everett and Mr. Wells met with representatives of Los Angeles County Fire Department and Los Angeles County Department of Public Health	City Council declaration of emergency conditions discussed and copies of Everett & Associates reports transmitted for review

Carousel Tract Environmental Investigation Timeline

Date	Significant Actions/Reports	Notes
August 21, 2013	LARWQCB sent detailed letter to Shell denying proposed site-specific cleanup goals and requiring revisions to be submitted by October 21, 2013	LARWQCB incorporated OEHHA Memorandum dated July 22, 2013 and UCLA Expert Panel Interim Report dated July 24, 2013
September 11, 2013	City letter to Mr. Sam Unger	Expressing appreciation from City Council and community for response to <i>Site-Specific Cleanup Goal Report</i>
September 24, 2013	LARWQCB community open house CEQA scoping meeting	Request for input from community and public agencies related to evaluation of environmental impacts; comment period ends on October 8, 2013
September 30 – October 10, 2013	LARWQCB Public Participation Specialist to conduct office hours at Carson City Hall	Opportunity for LARWQCB to meet with residents and community stakeholders
October 8, 2013	CEQA scoping comments due to LARWQCB from September 9 through October 8, 2013	Comment letters sent by City of Carson and Bob Bowcock/Barbara Post
October 10, 2013	City staff arranging for a meeting with LARWQCB, LACoFD, Los Angeles County Department of Public Health, OEHHA, Mr. Bowcock, Dr. Everett and Mr. Wells PhD	Review of technical reports and discussion of public agencies responses and actions
October 21, 2013	Shell submitted a <i>Revised Site-Specific Cleanup Goal Report</i> to LARWQCB	Shell proposed to evaluate options that provide excavation in specific areas and does not include any further evaluation associated with the removal of homes
October 24, 2013	Los Angeles County Department of Public Health Letter to City of Carson	Letter states there is not an immediate health threat from site conditions

Carousel Tract Environmental Investigation Timeline

Date	Significant Actions/Reports	Notes
October 30, 2013	LARWQCB letter to Shell for review of <i>Community Outdoor Air Sampling and Analysis Report</i>	Based on statistical tests, LARWQCB concludes that outdoor air concentrations do not differ between the site and surrounding area. Shell is required to address OEHHA comments and to develop a work plan for an additional soil-vapor survey by November 29, 2013. LARWQCB determined on January 13, 2014 that no further evaluation required
October 31, 2013	LARWQCB notice on <i>Proposed Draft Revised Cleanup and Abatement Order No. R4-2011-0046</i>	The proposed draft order names Dole Food Company, Inc. as an additional responsible party. Comments and evidence must be submitted by 12:00 p.m. on December 6, 2013. Dole Food Company has requested an extension to January 2014 to provide comments. LARWQCB approved extension to January 13, 2014. On January 7, 2014, Regional Board approved extension to January 21, 2014
November 12, 2013	Letter to Carousel Tract Owners and Occupants advising of November 19, 2013 City Council Workshop	
November 19, 2013	City Council conducted workshop with Los Angeles County Department of Public Health and Los Angeles County Fire Department	
January 8, 2014	LARWQCB response to <i>Assessment of Environmental Impact and Feasibility of Removal of Residual Concrete Reservoir Slabs</i>	Directs Shell to either remove the residential concrete slabs as appropriate or isolate the residual concrete slabs beneath the foundation of the homes and paved areas using engineering techniques to the extent necessary to address long term health risks or nuisance concerns

Carousel Tract Environmental Investigation Timeline

Date	Significant Actions/Reports	Notes
January 13, 2014	LARWQCB response to <i>Revised Community Outdoor Air Sampling and Analysis Report</i>	LARWQCB concludes that outdoor air concentrations do not differ between the site and surrounding area. No further evaluation required
January 21, 2014	Dole response to <i>Proposed Draft Revised Cleanup and Abatement Order No. R4-2011-0046</i>	Dole requested to not be included in the Draft Order since their subsidiary, Barclay Hollander Corporation, did not discharge any of the contaminants of concern
January 23, 2014	Community meeting organized by Congresswoman Hahn	Meeting to hear from residents and discuss options for obtaining improved levels of response from the Regional Board
January 23, 2014	LARWQCB response to <i>Revised Site-Specific Cleanup Goal Report</i>	LARWQCB identified deficiencies in the Shell Revised Report and directed a remedial action plan, Human Health Risk Assessment and other environmental documents be submitted by March 10, 2014
February 10, 2014	LARWQCB clarification and revision to their January 8, 2014 letter (effective date of January 13, 2014) regarding the Residential Concrete Slab Report	LARWQCB removed reference to regulations for underground storage tanks
February 23, 2014	Shell submitted a Petition for Review and Request for Hearing to the State Water Resources Control Board in the matter of Cleanup and Abatement Order R4-2011-0046 (CAO)	The State Water Resources Control Board has not responded to Shell's petition
March 10, 2014	Shell submitted Remedial Action Plan (RAP), Human Health Risk Assessment (HHRA), and draft environmental documents to LARWQCB	LARWQCB set a tentative period of 30 day to review the documents and provide opportunity for public viewing
March 19, 2014	LARWQCB filed Notice of Preparation (NOP)	Preparation of a draft Environmental Impact Report in accordance to the California Environmental Quality Act (CEQA)
March 25, 2014	LARWQCB and PCR Service Corporation met with City's staff	As part of the draft Environmental Impact Report, staff discussed transportation, noise, and odor concerns with LARWQCB and PCR

Carousel Tract Environmental Investigation Timeline

April 18, 2014	LARWQCB received comments from LAUSD regarding the NOP	LARWQCB is reviewing LAUSD comments and will provide response
April 30, 2014	LARWQCB responded to Shell's RAP, FS, and HHRA	LARWQCB rejected Shell's proposed cleanup plan and revised RAP to be submitted by Shell by June 16, 2014 by 5 p.m.
April 30, 2014	LARWQCB issued notice of violation (NOV) to Shell for failure to submit a RAP based on approved site-specific cleanup goals	LARWQCB directed Shell to comply by June 16, 2014
May 23, 2014	LARWQCB met with Shell regarding the RAP	LARWQCB discussed deficiencies and revisions with Shell
June 3, 2014	LARWQCB issued notice of opportunity for additional public comment	The deadline to submit public comments is 5 p.m. on June 16, 2014
June 4, 2014	LARWQCB granted Shell a two-week extension to submit the revised RAP, FS, and HHRA	The revised documents are due on June 30, 2014
June 16, 2014	Shell submitted additional comments regarding the Proposed Revised Draft Cleanup and Abatement Order No. RB4-2011-0046	The Regional Board is reviewing Shell's comments
June 30, 2014	Shell submitted the revised RAP, FS, and HHRA to the Regional Board	The Regional Board is reviewing the revised documents
July 7, 2014	The City of Carson sent a letter notifying the Carousel Tract residents of the availability of the RAP, FS, and HHRA via the Regional Board	The documents are part of the draft EIR process

Carousel Tract Environmental Investigation Timeline

	website	
July 22, 2014	The Regional Board is reviewing the RAP, FS, HHRA and preparing the draft EIR. Testing of property in the Carousel Tract is ongoing	Testing result and the Regional Board latest activities are available at: http://geotracker.waterboards.ca.gov/
August 25, 2014	The Regional Board is reviewing the RAP, FS, HHRA and preparing the draft EIR.	No new dates set for meeting with the Carousel Tract residents
August 27, 2014	The Regional Board released August 2014 community update for the Carousel Tract	Tentative release of proposed RAP and Draft EIR in mid October 2014
September 19, 2014	Shell submitted the RAP Relocation Plan to the Regional Board	Tentative release of proposed RAP and Draft EIR at end of October 2014, and meeting with the Carousel Tract resident is projected to begin on November 2014
October 8, 2014	The Regional Board continues preparation of Draft EIR and review of the RAP	The Regional Board required the RAP addendums to be submitted by Shell on October 20, 2014. Meeting with the Carousel Tract residents is projected to occur in the middle of November 2014
October 15, 2014	The Regional Board scheduled community meetings	The Regional Board mailed invitations of community meetings to the Carousel Tract residents
October 15, 2014	Shell submitted addendums to the RAP, FS, and HHRA	The documents are posted on the Regional Board website
November 5, 2014	The Regional Board released the draft EIR proposed RAP for public review and comment	The draft EIR, proposed RAP and support documents are available at the Carson Library, the Los Angeles Regional Board Office and website

Carousel Tract Environmental Investigation Timeline

November 12,15,18,20, 2014	The Regional Board held community group meetings with Carousel Tract residents	The discussion was centered on the draft EIR and proposed RAP
November 22, 2014	The Regional Board hosted a public meeting at the Carson Community Center	The discussion centered on the draft EIR and proposed RAP
December 3, 2014	City of Carson Environmental Commission received the draft EIR and proposed RAP for review	City staff will submit the Commission's comments to the Regional Board
December 8, 2014	The Regional Board notified Dole Food Company Inc. (Dole) of its intention to revise the Cleanup and Abatement Order No. R4-2011-0046 CAO)	Barclay Hollander Corporation (Barclay), a wholly-owned subsidiary of Dole, to be named as responsible parties to the Carousel Tract contamination
December 24, 2014	Barclay sent a written request to the Regional Board	Barclay submitted additional written evidence, and schedule a formal evidentiary hearing with the Regional Board
January 6, 2015	Barclay sent a follow up letter to its December 24, 2014 Letter to the Regional Board	Barclay submitted additional documentary evidence to the Regional Board
January 6, 2015	Shell sent a letter to the Regional Board	Shell is opposed to Barclay's requests to submit additional evidence and for a formal evidentiary hearing
January 7, 2015	Integrated Resource Management, Inc. (IRM) responded to Barclay's December 24, 2014 Letter	IRM requested appropriate notice and opportunity to be heard for Carousel Tract residents. IRM also commented on the substance of the revised CAO and attached documentary evidence
January 9, 2015	The Regional Board sent an electronic letter to all interest parties	The Regional Board will consider additional comments on pending procedural request by 5 p.m., January 16, 2015

Carousel Tract Environmental Investigation Timeline

January 15, 2015	Site Cleanup Program Staff (SCP Staff) of the regional Board sent a response letter objecting inclusion of additional evidence into the record as requested by Barclay Hollander Corporation (Barclay)	SPC Staff is requesting opportunity to respond if a hearing for additional evidence is granted by the Chief Deputy Executive Officer of the Regional Board
January 16, 2015	Barclay sent a letter to the Regional Board	Barclay clarified its scope to submit additional evidence, seek clarification from the Regional Board, and request timing of evidential hearing.
February 20, 2015	The Regional Board released a "Notification of Work" to the public	Land (public streets) and aerial photographic survey activities are tentatively scheduled from March 2, 2015 to March 20, 2015 for the Carousel Tract and surrounding area
February 27, 2015	The Regional Board replied to parties and interested persons	The Regional Board accepted Mr. George Bach deposition dated November 19, 2014 into administrative record
March 11, 2015	The SCP Staff provided explanations to assumptions and copies of graphic results	The explanation addressed the three assumptions in memo dated March 20, 2014 from Dr. C.P. Lai to SCP Staff
April 2, 2015	SCP Staff, Barclay, and Shell submitted comments to the Regional Board regarding the revised CAO	Barclay is requesting inclusion of Mr. George Bach deposition dated November 19, 2014 into administrative record. SCP Staff and Shell opposed its inclusion
April 17, 2015	The Regional Board sent letter to all parties and interested persons	Informing all parties and interest persons of the separation of functions between the Advising Team and SCP Staff. The Regional Board intends to issued final action regarding Tentative Revised CAO on or after April 24, 2015
April 22, 2015	Barclay sent a letter to the Regional Board	Barclay is requesting delay of final action regarding the Tentative Revised CAO until depositions of the SCP Staff are completed

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April 30, 2015	Regional Board sent a letter to Dole and Barclay aka (BHC)	The Regional Board issued the Revised CAO adding Dole and Barclay as responsible parties
May 21, 2015	Barclay sent a letter to the Regional Board	Barclay requests stay and reconsideration of the Revised CAO
June 1, 2015	The Regional Board reported that Barclay filed a petition with State Water Board	Barclay is requesting the State Water Board to Review, petition for stay, and petition to submit supplemental evidence and to conduct a hearing
June 22, 2015	The Regional Board provided a copy of Barclay petition to the State Water Board	The Regional Board and Shell are proceeding with their work in the Carousel Tract regardless of the outcome of Barclay's petition