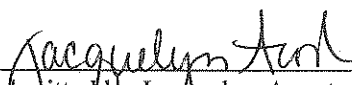


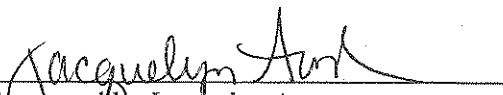


City of Carson Report to Mayor and City Council

January 21, 2014
Unfinished Business

SUBJECT: CONSIDER STATUS REPORT ON THE REGIONAL WATER QUALITY CONTROL BOARD ENVIRONMENTAL INVESTIGATION AND CARSON DECLARATION OF THE EXISTENCE OF AN EMERGENCY WITHIN THE CAROUSEL TRACT


Submitted by Jacquelyn Acosta
Acting City Manager


Approved by Jacquelyn Acosta
Acting City Manager

I. SUMMARY

This item is on the agenda at the request of Mayor Pro Tem Santarina to provide updates at all regularly scheduled City Council meetings related to the environmental investigation of the Carousel Tract.

II. RECOMMENDATION

RECEIVE and FILE.

III. ALTERNATIVES

TAKE another action as the City Council deems appropriate consistent with the requirements of law.

IV. BACKGROUND

Revised Site-Specific Cleanup Goal Report

On October 21, 2013, Shell Oil Products US (Shell) submitted a Revised Site-Specific Cleanup Goal Report to the Regional Board to address certain deficiencies and comments addressed in the Regional Board letter dated August 21, 2013. The Regional Board, the Office of Environmental Health Hazard Assessment (OEHHA) and the UCLA Expert Panel are currently evaluating the revised report. The Regional Board staff indicates that information has been received from OEHHA and the UCLA Expert Panel and their response will be finalized and submitted to Shell on or about January 21, 2014.

Cleanup and Abatement Order

On March 11, 2011, the Regional Board issued Cleanup and Abatement Order (CAO) No. R4-2011-0046 directing Shell to investigate the Carousel Tract and provide remedial action to cleanup and abate the waste in the soil, soil vapor and groundwater associated with contamination from the former tank farm. On October 31, 2013, the Regional Board issued a notice for the Proposed Draft Revised Cleanup and Abatement Order No. R4-2011-0046 (Draft Revised CAO) to include a description of the developer's role to decommission the reservoirs and

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January 21, 2014

conduct waste removal and grading activities. The Draft Revised CAO also explains the history of acquisitions and renaming of the original development company leading to the Dole Food Company, Inc. (Dole) being named as an additional responsible party. Dole received an extension from the initial December 6, 2013 response deadline to January 13, 2014. On January 6, 2014, another request for an extension was submitted to the Regional Board (Exhibit No. 1). On January 7, 2014, the Regional Board authorized an extension to January 21, 2014 (Exhibit No. 2).

Community Meeting with Congresswoman Hahn

Congresswoman Hahn has expressed interest in meeting with the residents of the Carousel Tract to better understand their concerns and issues with the ongoing environmental investigation. A tentative meeting date is set for January 23, 2014 at the Congresswoman Juanita Millender-McDonald Community Center. The City Council will be advised of the actual date, time and location of the community meeting when it is confirmed.

Correspondence and Updates from the Regional Board

On January 8, 2014, the Regional Board responded to the June 28, 2013 submittal of a report titled *Assessment of Environmental Impact and Feasibility of Removal of Residual Concrete Reservoir Slabs*. The report concluded that the concrete reservoir slabs do not require removal. The Regional Board determined that the report does not provide enough information regarding the residual concrete slabs and 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 (Exhibit No. 3).

On January 13, 2014, the Regional Board responded to the November 27, 2013 submittal of a report titled *Revised Community Outdoor Air Sampling and Analysis Report*. The Regional Board and OEHHA concurred with the conclusion in the revised report that outdoor air concentrations are similar to concentrations measured in regional studies conducted in the area and do not indicate that the site or downwind concentrations are significantly different from upwind concentrations. No further evaluation is required from the Regional Board at this time (Exhibit No. 4).

The Regional Board staff has advised that UCLA has augmented the UCLA Expert Panel with the retention of a consulting firm to assist with community outreach. The firm of Laura Valles and Associates will work with the Regional Board in disseminating information and providing community discussion related

to the Carousel Tract environmental investigation and steps to prepare and implement the remedial action plan.

Timeline of Activities

A general timeline that tracks past and current activities of the Carousel Tract environmental investigation is included as Exhibit No. 5.

V. **FISCAL IMPACT**

None.

VI. **EXHIBITS**

1. Letter from Gibson Dunn dated January 6, 2014 (pgs. 5-6)
2. Letter from Regional Board to Dole dated January 7, 2014 (pgs. 7-9)
3. Letter from Regional Board to Shell dated January 8, 2014 (pgs. 10-13)
4. Letter from Regional Board to Shell dated January 13, 2014 (pgs. 14-18)
5. Carousel Tract Environmental Investigation Timeline. (pgs. 19-21)

Prepared by: Sheri Repp-Loadsman, Planning Officer

TO: Rev06-19-2013

Reviewed by:

City Clerk	City Treasurer
Administrative Services	Public Works
Community Development	Community Services

Action taken by City Council

Date _____ Action _____

TO: Rev06-19-2013

Reviewed by:

City Clerk	City Treasurer
Administrative Services	Public Works
Community Development	Community Services

Action taken by City Council

Date _____ Action _____

GIBSON DUNN

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Tel 213.229.7000
www.gibsondunn.com

Patrick W. Dennis
Direct: +1 213.229.7567
Fax: +1 213.229.6567
PDennis@gibsondunn.com

Client: 22695-00100

January 6, 2014

Paula Rasmussen
Assistant Executive Officer
Los Angeles Regional Water Quality Control Board
320 West 4th Street
Suite 200
Los Angeles, California 90013

Re: In the Matter of Cleanup and Abatement Order No. R4-2011-0046
Former Kast Property Tank Farm
(SCP No. 1230, Site ID No. 2040330, File No. 11-043)

Dear Ms. Rasmussen:

As you know, our client, Dole Food Company ("Dole") is preparing comments on the draft Cleanup and Abatement Order ("CAO") circulated by the Regional Board's staff on October 31, 2013. The current deadline is January 13, 2014 and we are now asking for a modest one week continuance of that deadline, until January 21 (January 20 is a state holiday) for the reasons set forth next.

Since October 31 we have engaged experts to assist us in providing comments on the draft CAO and they have all been working over the past two months, including right through the year-end holiday period, to try to finalize their reports. In addition, we have continued to take depositions of percipient witnesses to the redevelopment activities of Dole's subsidiary, Barclay Hollander Corporation ("Barclay Hollander"), at the Kast Property between 1966 and 1968. Since October 31 the depositions of two additional percipient witnesses have been noticed, Lowell Anderson and Al Vollmer. While we were able to complete the deposition of Lowell Anderson late last year and we incorporated his testimony into our comments, Mr. Vollmer's deposition could not be set until January 13 – the currently-scheduled date for his deposition – because of his own health reasons and the schedules of lawyers representing various parties in the civil litigation.

We believe Mr. Vollmer's testimony will be important to the issues under consideration by the Regional Board and we would like to have the opportunity to complete his deposition next week and include his testimony in our submission to the Board. Further, the additional week will allow us to better refine our comments on the draft CAO, and allow our experts to



GIBSON DUNN

Paula Rasmussen
January 6, 2014
Page 2

finalize their reports in a more methodical manner now that the year-end holidays are over. The final work product from both of these efforts will be improved and even more focused on the key issues facing the Board, with the additional time sought.

Therefore we are asking for an additional 8 days – until January 21 – to submit Dole's comments to the Regional Board on the draft CAO.

Thank you for your prompt attention to this request. Please do not hesitate to call me if you have any questions.

Very truly yours,



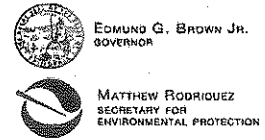
Patrick W. Dennis

PWD/hhk

cc: Samuel Unger
Teklewold Ayalew
Frances L. McChesney
Douglas J. Weimer

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Los Angeles Regional Water Quality Control Board

January 07, 2014

Michael Carter, President
Dole Food Company, Inc.
c/o Patrick W. Dennis
Gibson, Dunn & Crutcher LLP
333 South Grand Avenue
Los Angeles, CA 90071-3197

SUBJECT: APPROVAL OF AN EXTENSION REQUEST FOR THE OPPORTUNITY TO SUBMIT COMMENTS ON THE PROPOSED DRAFT CLEANUP AND ABATEMENT ORDER PURSUANT TO CALIFORNIA WATER CODE SECTION 13304 CLEANUP AND ABATEMENT ORDER NO. R4-2011-0046

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 NO. 2040330, CAO NO. R4-2011-0046)

Dear Mr. Carter:

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.

In accordance with a Regional Board letter, dated November 15, 2013, Dole Food Company (Dole) was offered the opportunity to submit comments on the proposed draft Cleanup and Abatement Order No. R4-2011-0046 for the former Kast Property Tank Farm, by **January 13, 2014**. In response to the Regional Board letter, Gibson, Dunn and Crutcher LLP, on behalf of Dole, submitted a letter dated January 6, 2014. The letter indicates that more time is needed to take depositions of witnesses to the redevelopment activities of Barclay Hollander Corporation, at the Kast Property.

The Regional Board agrees that your letter provided good cause or rationale to grant the comment period extension request. Therefore, we approve your extension request for submittal of the comments *In the Matter of the Draft Cleanup and Abatement Order No. R4-2011-0046* by **5:00 pm on January 21, 2014**.

MARIA MEHRANIAN, CHAIR | SAMUEL UNGER, EXECUTIVE OFFICER

320 West 4th St., Suite 200, Los Angeles, CA 90013 | www.waterboards.ca.gov/losangeles

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EXHIBIT NO. 02



Michael Carter, President
Dole Food Company, Inc.

- 2 -

January 07, 2014

If you have any questions, please contact the project manager, Dr. Teklewold Ayalew at (213) 576-6739 (tayalew@waterboards.ca.gov), or Ms. Thizar Tintut-Williams, Site Cleanup Unit III Chief, at (213) 576-6723 (twilliams@waterboards.ca.gov).

Sincerely,



Paula Rasmussen
Assistant Executive Officer

cc: Mailing List

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Patrick W. Dennis
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Barclay Hollander Corporation
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Culver City, CA 90230

Frances L. McChesney
Attorney IV
Office of Chief Counsel
State Water Resources Control Board
1001 I Street, 22nd Floor
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frances.mcchesney@waterboards.ca.gov



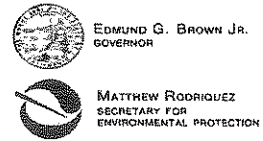
Michael Carter, President
Dole Food Company, Inc.

- 3 -

January 07, 2014

Jennifer Fordyce
Attorney III
Office of Chief Counsel
State Water Resources Control Board
1001 I Street, 22nd Floor
Sacramento, CA 95814
jennifer.fordyce@waterboards.ca.gov





Los Angeles Regional Water Quality Control Board

January 8, 2014

Douglas J. Weimer
Shell Oil Products US
Environmental Services Company
20945 S. Wilmington Avenue
Carson, CA 90810

SUBJECT: REVIEW OF ASSESSMENT OF ENVIRONMENTAL IMPACT AND FEASIBILITY OF REMOVAL OF RESIDUAL CONCRETE RESERVOIR SLABS PURSUANT TO CALIFORNIA WATER CODE SECTION 13304

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 NO. 2040330, CAO NO. R4-2011-0046)

Dear Mr. Weimer:

On June 28, 2013, the Los Angeles Regional Water Quality Control Board (Regional Board) received the Report titled *Assessment of Environmental Impact and Feasibility of Removal of Residual Concrete Reservoir Slabs* (Report) dated June 28, 2013 for the former Kast Tank Farm Property (Site) and prepared by URS Corporation (URS) on behalf of Shell Oil Products US (Shell). The Report is in response to the Cleanup and Abatement Order No. R4-2011-0046 (CAO) that directed Shell to "Conduct an assessment of any potential environmental impacts of the residual concrete slabs of the former reservoir that includes: (1) the impact of the remaining concrete floors on waste migration where the concrete floors might still be present; (2) whether there is a need for the removal of the concrete; and (3) the feasibility of removing the concrete floors beneath (i) unpaved areas at the Site, (ii) paved areas at the Site, and (iii) homes at the Site."

Prior to the construction of the residential properties at the Carousel Tract, the subject property was used as a tank farm which included three crude oil storage reservoirs, Reservoir Nos. 5, 6 and 7. Reservoir No. 5, the center reservoir had a capacity of 750,000 barrels (bbls), Reservoir No. 6, the southernmost reservoir, had a capacity of 750,000 bbls, and Reservoir No. 7, the northernmost reservoir, had a capacity of 2,000,000 bbls. According to the Phase I Environmental Site Assessment Report prepared by URS, the reservoirs consisted of concrete-lined earth slopes with frame roofs (asbestos composition covered) on wood posts, surrounded by earth levees averaging 20 feet in height with 7 foot wide walkways on top.

SUMMARY OF TECHNICAL REPORT

The Report provides information regarding the former onsite structures, discussion of the impact of concrete reservoir slabs on contaminant migration, and the need for feasibility and environmental impacts associated with slab removal. The Report cites the historic account of the site demolition and subsequent grading performed by Lomita Development Company (Lomita), as a designee for the purchase of the Site provided by the Pacific Soils Engineering, Inc. (PSE) reports dated January 7, 1966; March 11, 1966; July

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EXHIBIT NO. 03



31, 1967; and June 11, 1968. PSE performed geotechnical work and documented the following: 1) Lomita emptied and demolished the reservoirs, and graded the Site prior to developing the Site as residential housing; 2) part of the concrete floor of the central reservoir was removed by Lomita from the Site; and 3) the reservoir bottoms were left in place. In addition, the PSE report described that soil used to fill in the reservoirs and return the Property to its natural grade came from the berms surrounding each reservoir and surrounding the perimeter of the Site. In phases between 1967 and 1969, Lomita developed the Site into one- and two-story single family residential parcels and sold the developed lots to individual homeowners.

Based on more than 2,400 shallow soil borings advanced to a target completion depth of 10 feet below ground surface (bgs) at 265 of the 285 properties in the Carousel Tract, with an average of nine borings per property, a strong correspondence between boring refusal and the outlines of the reservoir slabs emerges. The observed concrete slabs are 4 to 6 inches thick. Boring logs indicated that refusal was encountered at 132 properties in one or more borings at depths ranging from less than 1 foot to 12 feet bgs and the soils were "variably oil stained" showing petroleum residues in shallow soil. In more than half of the properties situated in the northern Reservoir No. 7 and the central Reservoir No. 5, refusal was encountered in shallow soil borings. Refusal was more frequent in the north western approximately two-thirds of the Reservoir No. 7 and less frequent in the south-eastern one-third of the reservoir. Contrary to reports by PSE that the reservoir slab was entirely removed from the western half of the central reservoir (Reservoir No. 5), refusal was encountered in properties occupying the referenced area. Boring refusal was encountered less frequently in the area of southern Reservoir No. 6.

The findings and conclusions are summarized as follows:

1. Based on the lack of observed significant water above the slabs from 2,400 boring logs completed at residential properties at the Site and the PSE soil engineering report, Shell concluded that the residual concrete bases do not have a significant impact on the migration of contaminants;
2. There is no need for concrete slab removal based on consideration that the concrete slabs are no different than dense material residing within the soil profile or potentially impacted soils since the slabs are not significantly inhibiting the migration of infiltrating water or waste materials at the Site, and do not constitute a source material or unique waste material;
3. The feasibility of successful removal of slabs from larger yard areas, i.e., an area of approximately 250 square feet, was carried out with the slot-trench excavation pilot test conducted at 24612 Neptune Avenue. Concrete slabs can only be removed where they can be accessed for excavation by sufficiently large equipment to achieve excavation to 10 feet bgs;
4. The presence of utilities on residential lots as well as beneath city streets is complicated by both interruption of utility service and access to the residences; that will cause a great disruption to the community;
5. Large-scale excavation, whether in accessible areas of yards or full excavation of the residual reservoir slabs, could significantly impact the surrounding residents at properties outside of the former reservoir areas, as well as the neighboring community; and excavation involving full, or even partial, removal of the concrete slabs will almost certainly result in significant environmental impacts to the community; and
6. Based on all of the items listed above, Shell concludes that the concrete reservoir slabs do not require removal.



REGIONAL BOARD COMMENTS

Shell has implemented an extensive site assessment and monitoring program that includes sampling of all potentially impacted media at all accessible locations and depths. The inadequate decommissioning of the reservoirs and grading of the site resulted in soil and berms containing petroleum residue and concrete slabs to be distributed within ten feet of the ground surface. According to the PSE report, holes were bored into the reservoirs resulting in water and sludge discharging beneath the concrete reservoirs into the subsurface. The Report provides no information regarding whether liquid and sludge from the reservoirs and associated piping before the reservoirs were partially removed or buried in place.

The Regional Board requests that Shell map the known locations of the residual concrete slabs and apurtenance releases, where feasible. The seismic refraction method had limited success in mapping the concrete reservoir slabs and the locations have only been identified through boring refusals encountered across the site.

Based on the information provided in the Report and all other site characterization, data gaps exist in mapping the extent of the residual concrete slabs across the Carousel Tract.

DIRECTIVE TO ADDRESS REMOVAL AND/OR ISOLATION OF RESIDUAL SLABS

The results of the site assessment suggest that large volumes of total petroleum hydrocarbons remain underneath the homes and hardscape areas. The Regional Board staff considers the residual concrete slabs as a potential source material since the reservoirs were used to store crude oil. Although the Kast reservoirs were apparently above ground tanks before demolition, the residual slabs were buried with no records of decontamination or recycling. According to the California Code of Regulations (CCR) that govern tank removal activities in the state of California, the tank itself should be treated as contaminated regardless of whether it is to be recycled or disposed (CCR Title 23, Division 3, Chapter 16, Article 7).

Due to the potential adverse effects of the impact of the remaining concrete slabs on waste migration where the concrete floors might still be present, the Regional Board staff disagrees with report's conclusions that there is no need for residual slab removal. There is not sufficient information to make that determination. Therefore, additional evaluation regarding the feasibility of removing the concrete slabs beneath paved areas and the homes where the residual slabs extend underneath the foundation at the Site to the extent necessary to address long term health risks should be conducted. In developing the Remedial Action Plan for the Site, Shell should evaluate alternatives including removal of some or all of the residual concrete slabs as appropriate or isolation of the residual concrete slabs beneath the foundation of homes and paved areas using engineering techniques.

Based on the review of the information provided in the Report and documents in our file, and taking into account applicable law and policy, you are directed to include in the development of the Remedial Action Plan the following:

- Either remove the residual 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.



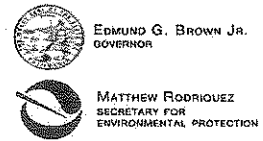
If you have any questions, please contact the project manager, Dr. Teklewold Ayalew at (213) 576-6739 (tayalew@waterboards.ca.gov), or Ms. Thizar Tintut-Williams, Site Cleanup Unit III Chief, at (213) 576-6723 (twilliams@waterboards.ca.gov).

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
Jim Dear, Mayor of Carson
Sheri Repp-Loadsman, City of Carson
Ky Truong, City of Carson
Jennifer Fordyce, Office of Chief Counsel, State Water Resources Control Board
Robert Romero, Department of Toxic Substances Control
Jackie Acosta, Carson Acting City Manager
James Carlisle, Office of Environmental Health Hazard Assessment
Bill Jones, Los Angeles County Fire Department
Barry Nugent, Los Angeles County Fire Department
Shahin Nourishad, Los Angeles County Fire Department
Miguel Garcia, Los Angeles County Fire Department
Alfonso Medina, Los Angeles County Department of Health
Cole Landowski, Los Angeles County Department of Health
Angelo Bellomo, Los Angeles County Department of Health
Karen A. Lyons, Shell Oil Products US
Alison Abbott Chassin, Shell Oil Products US
Roy Patterson, URS Corporation
Chris Osterberg, URS Corporation
Michelle Vega, Edelman
Robert Ettinger, Geosyntec
Mark Grivetti, Geosyntec
Thomas V. Girardi, Girardi and Keese Lawyers
Robert W. Bowcock, Integrated Resources Management, LLC





Los Angeles Regional Water Quality Control Board

January 13, 2014

Douglas J. Weimer
Shell Oil Products US
Environmental Services Company
20945 S. Wilmington Avenue
Carson, CA 90810

SUBJECT: REVIEW OF REVISED COMMUNITY OUTDOOR AIR SAMPLING AND ANALYSIS REPORT

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 NO. 2040330, CAO NO. R4-2011-0046)

Dear Mr. Weimer:

The California Regional Water Quality Control Board (Regional Board), Los Angeles Region, is the public agency with primary responsibility for the protection of groundwater and surface water quality for all beneficial uses within major portions of Los Angeles and Ventura Counties, including the above referenced site (Site).

Geosyntec Consultants (Geosyntec) and URS Corporation (URS) on behalf of Equilon Enterprises LLC, doing business as Shell Oil Products US (Shell), submitted a report entitled [name of 2010 report] (2010 Report), dated November 25, 2010, that outlined the results of the community outdoor air sampling conducted on four separate days from 18 locations in 2010 and evaluates the concentrations of contaminants detected in outdoor air. On October 30, 2013, the Regional Board directed Shell to revise the findings of the November 25, 2010, report to address comments in a memorandum prepared by the Office of Environmental Health Hazard Assessment (OEHHA) dated September 10, 2013 which warranted the revision of the findings of the previous report based on;

- (i) on-site and down-wind volatile organic compounds (VOC) concentrations exceeded the up-wind concentrations 68% - 71% of the time, and
- (ii) The average on-site and down-wind concentrations of benzene, ethylbenzene, xylenes, and PCE, exceeded the corresponding up-wind concentrations by 0.004 to 0.202 $\mu\text{g}/\text{m}^3$.

On November 27, 2013, Shell submitted a document entitled, *Revised Community Outdoor Air Sampling and Analysis Report* (Report) for Former Kast Property Tank Farm, prepared by Geosyntec and URS on behalf of Shell responding to the Regional Board's October 2013 directive,

In the Report, the statistical evaluation was revised as follows:

1. the statistical analysis was performed using a 1-tailed test;

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EXHIBIT NO. 04



2. all tests show that there is no evidence that the Site or downwind concentrations are different from the upwind concentrations;
3. outdoor air concentrations are similar to concentrations measured in regional studies conducted in the area, and
4. there is no evidence that the on-site or downwind outdoor air concentrations are different from the upwind concentrations;

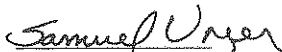
The Report also included an assessment of whether outdoor air contaminant concentrations within the Site boundary are statistically similar to upwind and downwind locations. The results were used to assess whether or not volatile subsurface contamination is contributing to concentrations of contaminants detected in outdoor air at the Site. Based on the statistical tests, the Report concludes that the target analyte outdoor air concentrations detected on the Site are not significantly different from the concentrations detected east or west of the Site.

The Regional Board and OEHHA reviewed the Report and the Regional Board concurs with the comments provided by OEHHA (copy attached).

The conclusions of the Report support the determination that further evaluation using the previous conditional recommendation of collecting subsurface VOC emissions from an isolated unpaved surface area with an emission isolation flux chamber is not warranted. Therefore, you are not required to develop a work plan for an additional soil-vapor survey method using Flux Chamber Measurements at this time.

If you have any questions, please contact the project manager, Dr. Teklewold Ayalew at (213) 576-6739 (tayalew@waterboards.ca.gov), or Ms. Thizar Tintut-Williams, Site Cleanup Unit III Chief, at (213) 576-6723 (twilliams@waterboards.ca.gov).

Sincerely,


Samuel Unger, PE
Executive Officer

Attachment: OEHHA Memorandum dated December 5, 2013

cc: Mailing List



Mailing List

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
Jim Dear, Mayor of Carson
Sheri Repp-Loadsman, City of Carson
Ky Truong, City of Carson
Jennifer Fordyce, Office of Chief Counsel, State Water Resources Control Board
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Alfonso Medina, Los Angeles County Department of Health
Cole Landowski, Los Angeles County Department of Health
Angelo Bellomo, Los Angeles County Department of Health
Karen A. Lyons, Shell Oil Products US
Alison Abbott Chassin, Shell Oil Products US
Roy Patterson, URS Corporation
Chris Osterberg, URS Corporation
Michelle Vega, Edelman
Robert Ettinger, Geosyntec
Mark Grivetti, Geosyntec
Thomas V. Girardi, Girardi and Keese Lawyers
Robert W. Bowcock, Integrated Resources Management, LLC



Office of Environmental Health Hazard Assessment

George V. Alexeeff, Ph.D., D.A.B.T., 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, 16th Floor • Oakland, California 94612



Matthew Rodríguez
Secretary for
Environmental Protection



Edmund G. Brown Jr.
Governor

MEMORANDUM

TO: Teklewold Ayalew, Ph.D., P.G.
Engineering Geologist
Regional Water Quality Control Board
320 West 4th Street, Suite 200
Los Angeles, CA 90013

FROM: James C. Carlisle, D.V.M., M.Sc.,
Staff Toxicologist
Air, Community, and Environmental Research Branch

DATE: December 5, 2013

SUBJECT: REVISED COMMUNITY OUTDOOR AIR SAMPLING AND ANALYSIS
REPORT, FORMER KAST PROPERTY, CARSON, CA
SWRCB#R4-09-17 OEHHA #880212-01

Document reviewed

- Revised Community Outdoor Air Sampling And Analysis Report, Former Kast Property, Carson, California, dated November 27, 2013

History

- In an August 19, 2013 memorandum, OEHHA agreed with Geosyntec's conclusion that there was no significant difference between the on-site VOC concentrations and VOC concentrations to the east and west of the site.
 - However, OEHHA was concerned that the power of the test was insufficient to detect small differences at the $P < 0.05$ level, and recommended a one-tailed test, which would increase the power to detect a small difference.
- In order to determine whether the VOC concentrations in the easterly samples or the on-site samples exceeded those on the west side of the site OEHHA calculated mean concentrations of BTEX, naphthalene, and, tetrachloroethene at stations OA1-4, OA 5-8, and OA 6-14 for each of the four sampling periods. From each of the group means for OA 5-8 and OA 6-14, OEHHA subtracted the corresponding mean from group OA1-4 then tabulated the signs of the differences. 38 out of 56 of the signs were positive, meaning that 68% of the time, the on-site or easterly (generally downwind) mean exceeded the westerly (generally upwind) mean. If the July 31 sample date (when the wind direction was less consistent) is omitted, the off-site or easterly mean exceeded the westerly mean 71% of the time.

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Current report

- In response to OEHHA's comments, Geosyntec re-analyzed the data using one-tailed hypothesis tests: two-factor ANOVA, two sample t-test, and the two-sample Mann-Whitney test and found no significant differences between the groups.
- Geosyntec re-analyzed the differences between means using a sign test and excluding duplicate samples (which OEHHA had included) and showed that fewer of the signs were positive (but still more than 50%).
- Geosyntec also conducted relative percent difference (RPD) analysis, which showed that the RPD (a measure of variability) within groups was similar to the RPD between groups.
- Geosyntec also included bar graphs that showed that the higher on-site means, and the easterly means, were due largely to a single or a few elevated values.
- Geosyntec also compared on-site air VOCs to MATES regional air VOCs. The maximum concentrations detected in the on-site and down-wind samples in the Community Air Study were well within the range of the corresponding VOCs detected in the MATES study.

Data re-analysis

- OEHHA re-analyzed the concentrations of BTEX, tetrachloroethene, and naphthalene detected at stations OA1-4, OA 5-8, and OA 6-14 for each of the four sampling periods using medians, which are less sensitive to extreme values than means. OEHHA subtracted the group medians for OA 5-8 and OA 6-14 from the corresponding group OA1-4 medians then tabulated the signs of the differences. 55% of the signs were positive, meaning that 55% of the time, the on-site or easterly median exceeded the westerly median. If the July 31 sample date (when the wind direction was less consistent) is omitted, the on-site or easterly median exceeded the westerly median 50% of the time.
- Benzene off-site or easterly median concentrations exceeded westerly median 75% of the time. However, the average differences ($+0.004 \mu\text{g}/\text{m}^3$ on-site and $+0.04 \mu\text{g}/\text{m}^3$ downwind), were in the *de minimus* range.

Conclusions

- OEHHA agrees with Geosyntec's conclusions that outdoor air concentrations are (1) similar to concentrations measured in regional studies conducted in the area and (2) do not indicate that the Site or downwind concentrations are significantly different from upwind concentrations.

Peer reviewed by _____

Hristo Hristov, MD, PhD

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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 contaminants 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
August 21, 2013	LARWQCB sent detailed letter to Shell denying proposed site-	LARWQCB incorporated OEHHA Memorandum dated July 22,



Carousel Tract Environmental Investigation Timeline

Date	Significant Actions/Reports	Notes
	specific cleanup goals and requiring revisions to be submitted by October 21, 2013	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 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.
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



Carousel Tract Environmental Investigation Timeline

Date	Significant Actions/Reports	Notes
		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. Regional Board 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.
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 23, 2014 (tentative)	Proposed community meeting organized by Congresswoman Hahn.	Tentatively scheduled at Juanita Millender-McDonald Community Center.

