ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
REBECCA GEBHART, Interim Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
LOCAL OVERSIGHT PROGRAM (LOP) FOR
HAZARDOUS MATERIALS RELEASES
1131 HARBOR BAY PARKWAY, SUITE 250
ALAMEDA, CA 94502
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January 12, 2017

Golden Empire Properties
5942 MacArthur Boulevard # B
Oakland, CA 94605
Attn.: Lynn Worthington
(Sent via electronic mail to: CafeRealty@aol.com)

Subject: Review of Work Plan for Additional Site Investigation- Fuel Leak Case No. RO0000271 and GeoTracker Global ID T0600100538, Exxon, 3055 35th Avenue, Oakland, CA 94619

Dear Mr. Worthington:

Alameda County Department of Environmental Health (ACDEH) staff has reviewed the case file including the recently submitted document entitled *Work Plan for Additional Site Investigation* (Work Plan), prepared for the subject site by Weber, Hayes & Associates (WHA) and dated December 12, 2016. The Work Plan was prepared to address comments made at the Joint Execution Team (JET) meeting, a conference call held on August 25, 2016 between Golden Empire Properties representative Lynn Worthington, WHA representatives Pat Hoban and Craig Drizin (consultants for Golden Empire Properties), Ben Heningburg and Kyle Cockerham of the State Water Resources Control Board (SWRCB), and Dilan Roe and Keith Nowell of the ACDEH.

At the meeting, it was agreed the case does not meet the SWRCB's Low Threat Underground Storage Tank Case Closure Policy (LTCP) Media Specific Criteria for Groundwater based on plume length, distance to nearest surface water body, and benzene concentrations; the Media Specific Criteria for Vapor Intrusion to Indoor Air for offsite receptors; and Direct Contact and Outdoor Air Exposure to onsite receptors. Based on these conclusions, Golden Empire Properties, through WHA, was tasked to prepare a work plan to address these criteria.

A phased approach was agreed upon with WHA to provide the JET members with a current benzene plume map and to conduct a foundation survey and utility map survey. WHA would incorporate its survey findings in preparation of a work plan to address the media specific criteria identified above. In conjunction with the surveys and execution of an approved work plan, WHA is tasked to update the existing corrective action plan/ feasibility study (CAP/FS), whose primary goal is to reduce benzene concentrations in groundwater and residual benzene concentrations in soil along the western property boundary. As agreed upon by the JET, the CAP/FS will also address potential elevated residual benzene in soil and groundwater in the vicinity of offsite borings B-14, B-15 and B-16 located in the downgradient residential neighborhood.

Additionally, WHA is requested to verify the validity of the previous Sensitive Receptor Survey, and if no longer valid, add a task item for updating the survey to the work plan described above.

ACDEH staff has reviewed the case file we generally concur with the recently proposed scope of work, provided that the modifications requested in the technical comments below are addressed and incorporated during the field implementation. We request that you address the following technical comments, submit the requested document, and upon ACDEH approval, perform the proposed work and send us the technical reports requested below.

TECHNICAL COMMENTS

1. Benzene Contaminant Plume Map and Foundation Survey: The purpose of the request for the current benzene contaminant plume map is to aid in the identification of residences downgradient of site that may have basements. The JET team agreed that a survey of residential building foundations within the benzene plume should be conducted prior to conducting the soil gas survey. WHA produced a benzene plume map presented as Figure 10 in the Work Plan. WHA defined the benzene plume using a 30 micrograms per liter (μg/L) isoconcentration contour based on the most recent groundwater data, collected in 2015. WHA stated they believe this is the current extent of benzene in groundwater.

The foundation survey identified the residential foundation types overlying the benzene plume to be slab-on-grade or raised foundations with crawl spaces. WHA did not identify any structures having subterranean basements over the plume.

ACDEH Comments: ACDEH notes the benzene residential groundwater vapor intrusion human health risk level environmental screening level (ESL) is 30 μg/L for the deep groundwater, fine to coarse scenario. However, ACDEH is of the opinion the 30 μg/L contour does not denote the extent of the benzene contaminant plume.

2. Sensitive Receptor Survey: Peralta Creek is located approximately 550 feet to the north-northwest, cross gradient to the site. The City of Oakland may discharge storm water to Peralta Creek due to its proximity to the site. Therefore, the JET agreed storm water outfall location(s) in the site vicinity should be identified in the sensitive receptor survey. It was noted at the meeting that the creek runs generally parallel to the plume flow direction and is therefore cross-gradient to the plume in the immediate vicinity of the site.

To address the storm water discharge, WHA proposes to obtain maps from the Alameda County Department of Public Works (ACPWA) of the storm drains near the site. The benzene plume and storm drains will be plotted on the same figure and examined to determine if benzene-impacted groundwater could be transported through existing storm drains to surface water. The results will be included in the technical report for this investigation.

ACDEH Comments: As the sensitive receptor survey conducted in 2006 by Cambria Environmental Technology, Inc. (Cambria) included a well search of both Department of Water Resources (DWR) and Alameda County Public Works Agency (ACPWA) databases within a radius of 2,000 feet of the site, ACDEH is in general agreement with the storm water discharge assessment. ACDEH requests that the location of the surface storm drain inlets in the site vicinity be plotted on the figure and the depth of both the storm drain piping and the outlet be included in the discussion section of the report.

ACDEH notes the nearest surface water body, Peralta Creek, is within 1,000 feet and down gradient of the leading edge of the petroleum hydrocarbon contaminant plume.

3. Direct Contact and Outdoor Air Exposure: The JET is in agreement that there is insufficient data for a determination if the case meets the Direct Contact and Outdoor Air Exposure (DCOAE) media specific criteria of the LTCP for onsite receptors. WHA proposes to advance four (4) onsite soil bores for the collection of soil samples at depths of 2, 4, 7, 8, and 10 feet below the ground surface (bgs), and at 5-foot intervals subsequently until groundwater is encountered.

WHA proposes to analyze the soil samples for total petroleum hydrocarbons (TPH) as gasoline (TPHg), benzene, toluene, ethylbenzene, and xylenes (collectively BTEX), methyl tertiary butyl ether (MTBE), tertiary butyl alcohol (TBA), and naphthalene. In addition, soil samples from 2 and 4 feet bgs will be analyzed for TPH as diesel (TPHd).

As indicated previously, the JET agrees the CAP/FS will also address potential elevated residual benzene in soil and groundwater in the vicinity of offsite borings B-14, B-15 and B-16 located in the downgradient residential neighborhood. WHA states that the soil bore B-15 is now inaccessible and that access to the B-16 location has been denied by the property owner. Therefore, WHA will only recover soil samples from an offsite boring adjacent to the former boring B-14 location to address the off-site investigation. Soil samples from bore B-14 will be recovered at 12, 14, 16, and 18 feet bgs for comparison to previous data.

ACDEH Comments: The locations of the proposed soil bores are shown on Figure 20 of the Work Plan. ACDEH is of the opinion that the four soil bore locations, all depicted near the site perimeter, may not adequately address the DCOAE criteria. Therefore, ACDEH requests an adequate number of soil bores be advanced within the site to characterize soil conditions in this area. Please submit a revised Figure 20 showing the locations of the proposed soil bores in the document requested below. Additionally, please assign boring identification labels for future reference.

ACDEH is unaware of the denial for access to the B-16 location and is unclear how to interpret the remark that the bore B-15 is now inaccessible. Both state and local agencies are committed to moving this case forward as agreed upon in the Expedited Claim Account Program (ECAP) process. These oversight agencies may have influence for gaining access to the B-16 location by means of a Request-for-Access letter. ACDEH requests the contact information for the owner and occupant for those properties where access has been denied. Please provide the contact information to the ACDEH in an electronic mail message to keith.nowell@acgov.org and cc the SWRCB, Attn.: Kyle Cockerham at Kyle.Cockerham@waterboards.ca.gov, by the date indicated below.

With regard to bore B-15, it is unclear if a structure or other non-temporary object has been place over this location. If so, it is unclear how far the nearest point to approach the B-15 location is and/or if access to the property has been denied. Please address these points in the document requested below.

ACDEH requests soil bore logs for all borings include photoionization detector (PID) readings, and when encountered, depth to first encountered water and depth to water just prior to borehole grouting.

4. Soil Gas Survey: The soil vapor survey is intended to address identified data gaps in the previous soil vapor studies and to evaluate if offsite conditions have changed since the 2008 survey. WHA proposes to advance four onsite and two (2) offsite soil gas sample points, located at 3033 and 3039 35th Avenue, for soil vapor sample collection. Soil vapor samples will be analyzed for TPHg, BTEX, MTBE, and oxygen to evaluate the current extent of hydrocarbons in soil vapor per LTCP vapor intrusion to indoor air media specific criteria.

Additionally, WHA proposes to recover soil vapor samples from four (4) of the existing off-site soil gas sample points, SV-7 through SV-10, installed by Conestoga-Rovers and Associates (CRA) in 2008. At the time of Work Plan preparation, WHA reports access to SV-9 had not been obtained.

The soil vapor samples will be analyzed for TPHg by EPA Method TO-3 and for BTEX, MTBE, and naphthalene by EPA Method TO-15.

ACDEH Comments: ACDEH requests the soil vapor investigation be implemented in general accordance with the July 2015 *Advisory- Active Soil Gas Investigations* prepared by California Environmental Protection Agency/ Department of Toxic Substances Control (Cal EPA / DTSC), and the Regional Water Quality Control Boards of the Los Angeles (LARWQCB) and San Francisco

(SFRWQCB) regions (Advisory). Please note the Advisory includes site conditions addressing rainfall, irrigation, and standing water in addition to sample collection, analyses, and other protocols.

ACDEH requests analyses of the soil vapor samples include TPHg, BTEX, MTBE, naphthalene, and the fixed gases oxygen, methane and carbon dioxide. ACDEH requests naphthalene soil gas analysis by EPA Test Method TO-17 in accordance with the Advisory, for one-third of the soil vapor samples, in addition to the EPA Test Method TO-15 analysis, for comparison of the reported concentrations. In addition, ACDEH requests collection and analysis of one duplicate soil vapor sample.

Appendix D of the Work Plan, *Field Methodologies*, indicates isopropyl alcohol may be used as the leak detection compound (LDC) and that a shroud will be used to encapsulate the system. Outside of Appendix D, there is no mention that the LDC will be included in the scope of analysis. Therefore, ACDEH requests that, in addition to shroud LDC concentration monitoring and reporting, the LDC be included in the scope of analysis for all soil vapor samples.

ACDEH notes a function of the soil vapor investigation is to evaluate possible changes in offsite conditions since the 2008 survey. Therefore, ACDEH requests the inclusion of the CRA offsite soil vapor points SV-11 through SV-14 into the Work Plan implementation. As indicated in Technical Comment 3 above, oversight agency access letters may be prepared to assist in gaining site access.

5. Groundwater Study and Plume Delineation: In order to satisfy the LTCP Media Specific-Groundwater criteria, WHA proposes to collect discrete grab groundwater (GGW) samples at four onsite and two offsite locations as depicted on Figure 20 of the Work Plan. Additionally, WHA proposes to conduct a standard groundwater monitoring event at the site, consisting of sampling groundwater from wells MW-1 through 4 and RW-5, 9, 13, and 14, in conjunction with the GGW sampling. WHA also proposes two additional borings may be drilled on Bartlett Street, if necessary, for recovery of GGW samples for benzene plume delineation.

All GGW samples will be analyzed for TPHg, BTEX, MTBE, TBA, and naphthalene.

ACDEH Comments: ACDEH recommends inclusion of all on-site monitoring wells (MWs) and remediation wells (RWs) in the network for the groundwater monitoring event.

Please provide ACDEH with a copy of the laboratory analytical report for the first phase of the plume delineation study for review and discussion prior to making a determination regarding the advancement of the Bartlett Street soil bores.

In addition, please add TPHd to the scope of groundwater analysis. ACDEH requests the TPHd analysis be performed without silica gel cleanup (SGC) for consistency with the San Francisco Bay Region, Regional Water Quality Control Board (SFBR-RWQCB). Analysis of a select number of samples may be performed both with and without SGC for comparison of TPHd concentration data.

SUBMITTAL ACKNOWLEDGEMENT STATEMENT

Please note that ACDEH has updated its Attachment 1 with regard to report submittals to ACDEH. ACDEH will now be requiring a Submittal Acknowledgement Statement, replacing the Perjury Statement, as a cover letter signed by the Responsible Party (RP). The language for the Submittal Acknowledgement Statement is as follows:

"I have read and acknowledge the content, recommendations and/or conclusions contained in the attached document or report submitted on my behalf to ACDEH's FTP server and the SWRCB's GeoTracker website."

Please make this change to this and future submittals to ACDEH.

TECHNICAL REPORT REQUEST

Please submit reports to ACDEH (Attention: Keith Nowell), and upload technical reports to the ACDEH FTP site (Attention: Keith Nowell) and to the SWRCB's Geotracker website, in accordance with the following specified file naming convention and schedule:

- **February 10, 2017**– Response to Comments, to include a revised Figure 20 (file to be named: RO0000271_WP_ADDEN_R_yyyy-mm-dd).
- **60 days following Response to Comments approval** – Laboratory Analysis Report presentation (file to be named: RO0000271_ANALYT_R_yyyy-mm-dd).
- **60 days following data review** – Feasibility Study and Corrective Action Plan (file to be named: RO0000271_FEASSTUD_CAP_R_yyyy-mm-dd).

Should you have any questions, please contact me at (510) 567--6764 or send me an electronic mail message at keith.nowell@acgov.org.

Sincerely,

Keith Nowell

Digitally signed by Keith Nowell
DN: cn=Keith Nowell, o=Alameda County, ou=Department of Environmental Health, email=keith.nowell@acgov.org, c=US
Date: 2017.01.12 11:23:08 -08'00'

Keith Nowell, PG, CHG
Hazardous Materials Specialist

Enclosures: Attachment 1 – Responsible Party (ies) Legal Requirements/Obligations and Electronic Report Upload (ftp) Instructions

cc: Ben Heningburg, State Water Resources Control Board, 1001 I Street, 15th floor, PO Box 2231, Sacramento, CA 95812
(*Sent via electronic mail to:* Benjamin.Heningburg@waterboards.ca.gov)

Kyle Cockerham, State Water Resources Control Board
(*Sent via electronic mail to:* Kyle.Cockerham@waterboards.ca.gov)

Pat Hoban and Craig Drizin Weber, Hayes & Associates, 120 Westgate Drive, Watsonville, CA 95076 (*Sent via electronic mail to: pat@weber-hayes.com*)

Craig Drizin, Weber, Hayes & Associates, 120 Westgate Drive, Watsonville, CA 95076
(*Sent via electronic mail to: craig@weber-hayes.com*)

Dilan Roe, ACDEH, (*Sent via electronic mail to dilan.roe@acgov.org*)
Paresh Khatri, ACDEH, (*Sent via electronic mail to paresh.khatri@acgov.org*)
Keith Nowell, ACDEH, (*Sent via electronic mail to keith.nowell@acgov.org*)

Geotracker, Electronic File

Attachment 1

Responsible Party(ies) Legal Requirements / Obligations

REPORT REQUESTS

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

Alameda County Department of Environmental Health's (ACDEH) Environmental Cleanup Oversight Programs, Local Oversight Program (LOP) and Site Cleanup Program (SCP) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program File Transfer Protocol (FTP) site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) GeoTracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the GeoTracker database over the Internet. Beginning July 1, 2005, these same reporting requirements were added to SCP sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in GeoTracker (in PDF format). Please visit the SWRCB website (http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/) for more information on these requirements.

ACKNOWLEDGEMENT STATEMENT

All work plans, technical reports, or technical documents submitted to ACDEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I have read and acknowledge the content, recommendations and/or conclusions contained in the attached document or report submitted on my behalf to ACDEH's FTP server and the SWRCB's GeoTracker website." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6731, 6735, and 7835) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately licensed or certified professional. For your submittal to be considered a valid technical report, you are to present site-specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this case meet this requirement. Additional information is available on the Board of Professional Engineers, Land Surveyors, and Geologists website at: http://www.bpelsg.ca.gov/laws/index.shtml.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, late reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to $10,000 per day for each day of violation.

Alameda County Environmental Cleanup Oversight Programs (LOP and SCP)	**REVISION DATE:** December 1, 2016
	ISSUE DATE: July 5, 2005
	PREVIOUS REVISIONS: October 31, 2005; December 16, 2005; March 27, 2009; July 8, 2010, July 25, 2010; May 15, 2014, November 29, 2016
SECTION: Miscellaneous Administrative Topics & Procedures	**SUBJECT:** Electronic Report Upload (ftp) Instructions

The Alameda County Environmental Cleanup Oversight Programs (LOP and SCP) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

REQUIREMENTS

- **Please do not submit reports as attachments to electronic mail.**
- Entire report including cover letter must be submitted to the ftp site as **a single portable document format (PDF) with no password protection**.
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- **Signature pages and acknowledgement and perjury statements must be included and have either original or electronic signature.**
- **Do not password protect the document**. Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted**.
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:

  RO#_Report Name_Year-Month-Date (e.g., RO#5555_WorkPlan_2005-06-14)

Submission Instructions

1) Obtain User Name and Password
   a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
      i) Send an e-mail to deh.loptoxic@acgov.org.
   b) In the subject line of your request, be sure to include **"ftp PASSWORD REQUEST"** and in the body of your request, include the **Contact Information, Site Addresses**, and the **Case Numbers (RO# available in Geotracker) you will be posting for**.

2) Upload Files to the ftp Site
   a) Open File Explorer using the Windows  key + E keyboard shortcut.
      i) Note: Netscape, Safari, and Firefox browsers will not open the FTP site as they are NOT being supported at this time.
   b) On the address bar, type in ftp://alcoftp1.acgov.org.
   c) Enter your User Name and Password. (Note: Both are Case Sensitive)
   d) Click Log On.
   e) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
   f) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.

3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
   a) Send email to deh.loptoxic@acgov.org notify us that you have placed a report on our ftp site.
   b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name @acgov.org. (e.g., firstname.lastname@acgov.org)
   c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload) If site is a new case without an RO#, use the street address instead.
   d) If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site.