ALAMEDA COUNTY **HEALTH CARE SERVICES**

AGENCY COLLEEN CHAWLA, Director

DEPARTMENT OF ENVIRONMENTAL HEALTH LOCAL OVERSIGHT PROGRAM (LOP) For Hazardous Materials Releases 1131 HARBOR BAY PARKWAY ALAMEDA, CA 94502 (510) 567-6700 FAX (510) 337-9335

May 1, 2018

Mr. Bob Webster David D Bohannon Organization 60 31st Avenue San Mateo, CA 94403

(Sent via electronic mail to: Robert.Webster@ddbo.com)

Subject: Post-Remedial Implementation Plan; Fuel Leak Case No. RO0000167 and GeoTracker

Global ID T0600102098; Bohannon Development Property, 575 Paseo Grande, San

Lorenzo, CA 94580

Dear Mr. Webster:

Alameda County Environmental Health (ACDEH) has reviewed the case file, including the Submittal of Updated Conceptual Site Model and Post Remedial Work Plan, dated January 29, 2018. The report was prepared and submitted on your behalf by Stantec Consulting Services, Inc (Stantec). Thank you for submitting the Conceptual Site Model (SCM) and Post-Remedial Work Plan as discussed in the September 2017 meeting and the directive letter dated October 27, 2017.

Based on the review of the case file, and discussions in the meeting, ACDEH requests that you address the following technical comments and send us the documents requested below.

TECHNICAL COMMENTS

1. Post-Remedial Implementation Plan - The referenced one-page work plan proposes the injection of both oxygen (as air), and CytoNutrient from CytoCulture International, Inc. to facilitate aerobe and anaerobe microbial populations that may be present in deeper groundwater at a depth of approximately 12 to 16 feet below grade surface (bgs). Review of previous injections of peroxide (to facilitate oxidation of hydrocarbons) and nitrate (to facilitate anaerobic degradation of hydrocarbons) in different areas and different strata of the site appear, based on groundwater contaminant reductions observed at the site and vicinity, to indicate more success through the anaerobic degradation pathway. ACDEH also notes that CytoNutrient, does not appear to include nitrate, but is intended to supply nitrate (and ammonium), which has been previously used successfully at the site.

Review of the Groundwater Monitoring and Remediation Progress Report, dated April 23, 2007, references an EFI Global microbial study (not successfully located by ACDEH), that indicates "...abundant facultative bacteria in groundwater of well MW-4" in the summary of the nitrate injections contained in the report. This EFI Global report may also indicate aerobes may be present; however, because ACDEH has not been able to review the document, ACDEH this concern is unresolved. Therefore, please forward a copy of the document, or identify its location. ACDEH is also uncertain of documentation in support of, but is not currently opposed to, the injection of air / oxygen or of CytoNutrient, in the proposed targeted strata provided the existing microbial population will be receptive to the injections.

Thus ACDEH is concerned the injection of air / oxygen, or of CytoNutrient, may be counterproductive to the degradation of hydrocarbons by either pathway and therefore requests additional support and justification for both of the proposed injections in a Post-Remedial Implementation Plan (PRIP). The PRIP is requested to provide the support and rationale for the injections, and is requested to provide additional details, including at a minimum, microbial studies for these constituents, anticipated injection volumes, which have not been previously defined, injection spacing, evidence and justification in consideration of the proposed no further monitoring approach, and etc.

SUBMITTAL ACKNOWLEDGEMENT STATEMENT

Please note that ACDEH has updated 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 your submittals to ACDEH.

TECHNICAL REPORT REQUEST

Please submit the following technical reports and deliverables to the State Water Board's Geotracker website and notify your case worker by electronic mail (mark.detterman@acgov.org), in accordance with the following specified file naming convention and schedule, as provided below, and in the Responsible Party(ies) Legal Requirements/Obligations which is included as Attachment 1. Please note ACDEH no longer accepts reports on the ftp site.

 June 29, 2018 – Post-Remediation Implementation Plan File name: RO0000167_REM_RFC_R_yyyy-mm-dd

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.

Online case files are available for review at the following website: http://www.acgov.org/aceh/index.htm.

Thank you for your cooperation. ACDEH looks forward to working with you and your consultants to advance the case toward closure. If you have any questions, please call me at (510) 567-6876 or send me an electronic mail message at mark.detterman@acgov.org.

Sincerely,

Mark E. Detterman, PG, CEG

Senior Hazardous Materials Specialist

Enclosures: Attachment 1 – Responsible Party (ies) Legal Requirements / Obligations

Electronic Report Upload (ftp) Instructions

cc: Ernie Lotti, David D Bohannon Organization, 60 31st Avenue, San Mateo, CA 94403; (Sent via electronic mail to: Ernie.Lotti@ddbo.com)

Chris Maxwell, Stantec Consulting Corporation, 57 Lafayette Circle, 2nd Floor, Lafayette, CA 94549; (Sent via electronic mail to: Chris.Maxwell@stantec.com)

Eva Hey, Stantec Consulting Corporation, 57 Lafayette Circle, 2nd Floor, Lafayette, CA 94549; (Sent via electronic mail to: Eva.Hey@stantec.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)

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Mark Detterman, ACDEH; (Sent via electronic mail to: mark.detterman@acgov.org)
Electronic File, GeoTracker

Alameda County Environmental Cleanup	REVISION DATE:		
Oversight Programs	ISSUE DATE: July		
(LOP and SCP)	PREVIOUS REVISI 15, 2014, Decembe		

REVISION DATE: December 14, 2017
ISSUE DATE: July 25, 2012

PREVIOUS REVISIONS: September 17, 2013, May 15, 2014, December 12, 2016

SUBJECT: Responsible Party(ies) Legal

Requirements / Obligations

REPORT & DELIVERABLE REQUESTS

SECTION: ACDEH Procedures

Alameda County Department of Environmental Health (ACDEH) Cleanup Oversight Programs, Local Oversight Program (LOP) and Site Cleanup Program (SCP) require submission of all reports in electronic form to the State Water Board's (SWB) GeoTracker website in accordance with California Code of Regulations, Chapter 30, Division3, Title 23 and Division 3, Title 27.

<u>Leaking Underground Fuel Tank (LUFT) Cases</u>

Reports and deliverable requests are 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 (RP) in conjunction with an unauthorized release from a petroleum underground storage tank (UST) system.

Site Cleanup Program (SCP) Cases

For non-petroleum UST cases, reports and deliverables requests are pursuant to California Health and Safety Code Section 101480.

ELECTRONIC SUBMITTAL OF REPORTS

A complete report submittal includes the PDF report and all associated electronic data files, including but not limited to GEO_MAP, GEO_XY, GEO_Z, GEO_BORE, GEO_WELL, and laboratory analytical data in Electronic Deliverable Format[™] (EDF). Additional information on these requirements is available on the State Water Board's website (http://www.waterboards.ca.gov/water-issues/programs/ust/electronic submittal/)

- Do not upload draft reports to GeoTracker
- Rotate each page in the PDF document in the direction that will make it easiest to read on a computer monitor.

GEOTRACKER UPLOAD CERTIFICATION

Each report submittal is to include a GeoTracker Upload Summary Table with GeoTracker valid values¹ as illustrated in the example below to facilitate ACDEH review and verify compliance with GeoTracker requirements.

GeoTracker Upload Table Example

Report Title	Sampl e Period	PDF Report	GEO_ MAPS	Sample ID	Matrix	GEO _Z	GEO _XY	GEO_ BORE	GEO_WEL L	EDF
2016 Subsurface Investigation Report	2016 S1	✓	√	Effluent	SO					√
2012 Site Assessment Work Plan	2012	√	✓							
2010 GW Investigation	2008 Q4	✓	√	SB-10	W	√				✓
Report				SB-10-6	SO					✓
				MW-1	WG	✓	✓	✓	✓	✓
				SW-1	W	√	√	✓	✓	✓

GeoTracker Survey XYZ, Well Data, and Site Map Guidelines & Restrictions, CA State Water Resources Control Board, April 2005

Alameda County Environmental Cleanup Oversight Programs (LOP and SCP)

REVISION DATE: NA

ISSUE DATE: December 14, 2017

PREVIOUS REVISIONS: September 17, 2013, May

15, 2014, December 12, 2016

SUBJECT: Responsible Party(ies) Legal

Requirements / Obligations

ACKNOWLEDGEMENT STATEMENT

SECTION: ACDEH Procedures

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 the State Water Board's GeoTracker website." This letter must be signed by the Responsible Party, or legally authorized representative of the Responsible Party.

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 and include the professional registration stamp, signature, and statement of professional certification. 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

For LUFT cases, RP's non-compliance with these regulations may result in ineligibility to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse the cost of cleanup. Additional information is available on the internet at: https://www.waterboards.ca.gov/water_issues/programs/ustcf/

AGENCY OVERSIGHT

Significant delays in conducting site assessment/cleanup or report submittals may result in referral of the case to the Regional Water 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.