

**The Goodyear Tire & Rubber
Company
Akron, Ohio 44316-0001**

Law Department

1144 East Market Street
Akron, Ohio 44316-0001

Direct Dial: 330.796.6738
Steven_Bordenkircher@goodyear.com

July 30, 2012

Ms. Karel Detterman
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502

RECEIVED

11:19 am, Aug 01, 2012

Alameda County
Environmental Health

Dear Ms. Detterman:

Attached for your review is the Revised Work Plan for Implementation of the Corrective Action Work Plan (Revised Work Plan) for the over-excavation of soil adjacent to a former underground storage tank (UST), the replacement of a groundwater monitoring well (MW-3), and continuation of semi-annual groundwater monitoring for the Goodyear DEX #9578, 3430 Castro Valley Boulevard, Castro Valley, California. This revised work plan was prepared for The Goodyear Tire & Rubber Company by Stantec Consulting Corporation. I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct, to the best of my knowledge.

If you have any questions, please don't hesitate to contact Stantec Project Manager Jack Hardin at 408-356-6124 extension 230.

Very truly yours,



Steven C. Bordenkircher
Senior Legal Counsel

Attachment

wc

cc: Mr. Jack Hardin, Stantec – Los Gatos



Stantec Consulting Services Inc.
15575 Los Gatos Boulevard Building C
Los Gatos CA 95032
Tel: (408) 356-6124
Fax: (408) 356-6138

Stantec

July 25, 2012

Ms. Karel Detterman
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502

Dear Ms. Detterman:

Reference: Revised Work Plan for Implementation of Corrective Action Work Plan, Replacement of a Groundwater Monitoring Well, and Continuation of Semi-Annual Groundwater Monitoring. Former Goodyear DEX #9578 3430 Castro Valley Boulevard Castro Valley, California

Stantec Consulting Services Inc. (Stantec) is pleased to present this Revised Work Plan for Implementation of the Corrective Action Work Plan (Revised Work Plan) for the over-excavation of soil adjacent to a former underground storage tank (UST); the replacement of a groundwater monitoring well (MW-3); and continuation of semi-annual groundwater monitoring at the above referenced Site. The original scope of work was approved in the June 18, 2009 letter from the Alameda County Environmental Health (ACEH) (Attachment A).

The site location and site plan are shown on Figures 1 and 2, respectively.

PROPOSED TASKS

Based upon the analytical results and soil conditions observed during the previous field activities, modifications to the original scope of work are required in order to effectively address removal of the petroleum impacted soils. The modified scope of work, in conjunction with the tasks to complete the work, are provided in the following sections.

Preliminary Activities

A Site-specific health and safety plan (HASP) will be prepared for use by personnel implementing the Revised Work Plan. The HASP will address the proposed field work, and a copy of the HASP will be available on-site at all times. Subcontractors performing field activities will be provided with a copy of the HASP prior to initiating work.

Stantec will conduct a pre-excavation meeting at the Site which will include the Stantec project manager, field staff, and subcontractors. The purpose of the meeting will be to coordinate Site activities with the current tenant, provide the subcontractors with an opportunity view the work site and provide input, and conduct an underground utility clearance prior to initiating field activities. The utility clearance will include notifying Underground Service Alert (USA) of the proposed work a minimum of 48 hours prior to initiating the field investigation, and securing the services of a private utility locating company to confirm the absence of underground utilities at each boring location.

Stantec will obtain a well installation permit from the Alameda County Public Works Agency, and arrange for the Agency field inspection, as necessary.

Reference: Revised Work Plan for Implementation of Corrective Action Work Plan, Replacement of a Groundwater Monitoring Well, and Continuation of Semi-Annual Groundwater Monitoring.

Soil Excavation

Excavation of Soils

The initial areal extent of the former UST excavation was based upon known Site data and was anticipated to be 15 feet wide by 30 feet long by 11 feet deep. As defined by the previous soil analytical results, the excavation will have to be 15 feet wide by 60 feet long in order to remove known petroleum impacted soils. The original anticipated excavation depth of 11 feet below ground surface (bgs) is not recommended for the entire excavation due to anticipated depth of first encountered groundwater at approximately 8 feet bgs. The maximum width of 15 feet has to be maintained due to the presence of a high pressure natural gas line to the west and the Site building to the east.

The excavation will be completed using a slot-cut scenario, where three-foot wide trenches will be excavated to approximately 8 feet bgs. Excavation activities will be conducted during non-operational hours (6:00 pm and 7:00 am on weekdays). The excavated soil will be stockpiled on visqueen in the pre-designated lay down area and disposed off-Site. Steel trench plates will be placed over the excavation daily by 7am, to facilitate service bay access.

Confirmation Sampling

One soil confirmation sample will be collected for approximately every 10 linear feet of excavation; it is anticipated that twenty confirmation soil samples will be collected. Confirmation samples will be collected from the deepest unsaturated portion of the excavation. Confirmation soil samples will be submitted to Test America Laboratories, Inc. in Pleasanton, California, a state certified laboratory, for 24-hour turn-around analysis under chain-of-custody protocol. Samples will be analyzed as specified in the ACEH directive for the following:

- Total Petroleum Hydrocarbons (TPH) as Gasoline Range Organics (GRO) by 8015B;
- TPH as Diesel Range Organics (DRO) by 8015B;
- Total Recoverable Petroleum Hydrocarbons (TRPH) by 1664;
- Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX) by 8260B;
- Methyl tert-butyl ether (MTBE) by 8260B;
- Semi-Volatile Organic Compounds (SVOCs) by 8270C;
- Lead (Pb) by 6010B; and
- Lead scavengers (ethylene dichloride [EDC] and ethylene dibromide [EDB]) by 8260B.

Application of Oxygen Releasing Compound Amendment

Stantec proposes applying approximately 400 pounds of an oxygen releasing compound to the excavation (i.e., that portion which is in communication with the first encountered water-bearing zone) prior to placement of backfill. Addition of the oxygen releasing compound is expected to stimulate and enhance bioremediation of petroleum hydrocarbons present in groundwater. The oxygen releasing compound selected for use is Regensis' Oxygen Releasing Compound (ORC), which is a combination of Calcium and OxyHydroxide $[\text{CaO}(\text{OH})_2]$ and Calcium Hydroxide $[\text{Ca}(\text{OH})_2]$. Regensis' recommended ORC application requirements and Material Safety Data Sheet are provided in Attachment B.

Reference: Revised Work Plan for Implementation of Corrective Action Work Plan, Replacement of a Groundwater Monitoring Well, and Continuation of Semi-Annual Groundwater Monitoring.

Backfilling, Compaction, and Site Restoration

After application of the ORC, the excavation will be backfilled with 2-sack sand and cement slurry. The excavation will then be resurfaced with concrete to match the pre-existing surface.

Groundwater Monitoring Well Installation and Development

Stantec will install the new monitoring well MW-5 down-gradient of the excavation to monitor post-remediation groundwater conditions. The two-inch diameter well will be screened at an appropriate interval to monitor groundwater conditions. The well will be developed according to industry standards and a groundwater sample collected approximately 72 hours following well development. Stantec will contract with a professional surveyor, registered in the State of California, to survey the location (X and Y coordinates) and elevation (Z coordinate) of the replacement monitoring well MW-5, and existing monitoring wells MW-1, MW-2, and MW-4. The well casing will be notched on the north side to provide a reference point for future depth to water measurements. The elevation of the well casing will be determined to within ± 0.01 feet with respect to mean sea level (MSL). Survey work will be performed in accordance with applicable standards of AB 2886.

Semi-Annual Groundwater Monitoring Event (Four Events)

As required by ACEH, Stantec will conduct semi-annual groundwater sampling at the Site. Given the groundwater monitoring wells have not been sampled since June 2009, the existing groundwater monitoring wells (MW-1, MW-2, and MW-4) will be redeveloped according to industry standards and a groundwater sample collected approximately 72 hours following well development. Groundwater samples will be submitted to Test America Laboratories, Inc. under chain-of-custody protocol for the following analyses, as specified in the ACEH directive:

- TPH-GRO by 8015B;
- TPH-DRO by 8015B;
- TRPH by 1664;
- BTEX by 8206B;
- MTBE by 8206B;
- SVOCs by 8270C;
- Pb by 6010B; and
- Lead scavengers (EDC and EDB) by 8260B.

Reporting

Following receipt of analytical results from the newly installed monitoring well MW-5, and existing monitoring wells MW-1, MW2, and MW-4, Stantec will prepare a letter report documenting the completion of the Corrective Action Work Plan and results from the semi-annual groundwater monitoring event. Stantec will submit the letter report to Goodyear and ACEH no later than 45 days after receipt of the semi-annual groundwater analytical results.

Reference: Revised Work Plan for Implementation of Corrective Action Work Plan, Replacement of a Groundwater Monitoring Well, and Continuation of Semi-Annual Groundwater Monitoring.

Following completion of the corrective action plan activities and the semi-annual groundwater sampling event, Stantec will proceed with the uploading the completed report, depth to water data, and analytical data, as required by the State Water Resource Control Board's Geotracker electronic reporting database and the ACEH FTP on-line database site.

SCHEDULE

Stantec has tentatively is scheduled to initiate field activities the week of August 13, 2012. Stantec anticipates that the Alameda County Public Works Agency, Water Resources Division will require ten (10) business days to process the permit for the well installation. Stantec anticipates that field activities will require eleven business days to complete, with a 24-hour lag time between confirmation sampling and backfilling activities.


If you have any questions regarding the scope of work, please contact Jack Hardin at (408) 356-6124 Ext. 230.

Sincerely,

STANTEC CONSULTING SERVICES INC.



Jack C. Hardin,
Managing Principal



Gary P. Messerotes, P.G.
Senior Geologist



Attachments:

- Figure 1 – Site Location Map
- Figure 2 – Site Plan

- Attachment A - ACEH Corrective Action Plan Approval Letter, dated June 18, 2009
- Attachment B – Oxygen Release Compound Installation Instructions

Cc: Ms. Karen Burlingame, The Goodyear Tire & Rubber Company, 1144 East Market Street, D/110F, Akron, OH 44316

**ATTACHMENT A -
ACEH CORRECTIVE ACTION PLAN APPROVAL LETTER**

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director



ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

June 18, 2009

Matthew McClellan
Goodyear Tire & Rubber Company
1144 East Market Street
Akron, OH 44316-0001

Melissa W. Phillips
Aimee L. West Trust
1352 A Street
Hayward, CA 94541-2927

Subject: Corrective Action Plan Approval for Fuel Leak Case No. RO0000474 and GeoTracker
Global ID T0600101801, Merritt Tire Sale, 3430 Castro Valley Boulevard, Castro
Valley, CA 94546

Dear Mr. McClellan and Ms. Phillips:

Alameda County Environmental Health (ACEH) staff has reviewed the case file for the above-referenced site including the recently submitted document entitled, "Corrective Action Work Plan," dated May 14, 2009, which was prepared by Stantec Consulting Corporation for the subject site. Stantec proposes to install up to six direct push borings on ten foot centers along a transect extending down-gradient of the former UST to determine the extent of the proposed excavation, which was selected as the most cost-effective remedial alternative to mitigate the effects of the unauthorized release that had occurred at the site.

The remedial alternative selected presented in the above-mentioned corrective action work plan (CAP) is acceptable. However, public participation is a requirement for the CAP process. Therefore, ACEH will notify potentially affected stakeholders who live or own property in the surrounding area of the proposed remediation described in the "Corrective Action Work Plan" through mailing of a fact sheet (enclosed). Public comments on the proposed remediation will be accepted for a period of thirty days beginning Monday, June 22, 2009 through Wednesday, July 22, 2009. Following the public comment period, the comments received including ACEH's comments described below, must be addressed and incorporated into a Final CAP. Should no comments be received, the "Corrective Action Work Plan" can be implemented without revision provided that the following comments are implemented during the field work.

TECHNICAL COMMENTS

1. **Confirmation Soil Sampling** – Stantec does not propose to collect bottom soil samples because the excavation will be extended into shallow groundwater. ACEH is concerned that if soil samples from the bottom are not collected, it will be difficult to determine whether

residual source material has been removed or remains at the site. Therefore, the proposed remediation alternative can be implemented provided that bottom samples are collected in addition to the proposed sidewall samples to delineate the vertical extent of soil impact.

2. **Cleanup Levels, Cleanup Goals & Water Quality Objectives** – Stantec proposes “using [San Francisco Bay Regional Water Quality Control Board’s] Environmental Screening Levels (ESLs) as soil and water quality goals to guide remedial activities at the site.” For clarification, please note that soil cleanup levels should ultimately (within a reasonable timeframe) achieve water quality objectives (cleanup goals) for groundwater in accordance with San Francisco Regional Water Quality Control Board Basin Plan. Please include a discussion that provides justification that the proposed cleanup levels will achieve water quality objectives within a reasonable time in the Final CAP.
3. **Groundwater Contaminant Plume Monitoring** – Stantec proposes to install a monitoring well down-gradient of the excavation to monitor post-remediation groundwater conditions and to continue semi-annual groundwater sampling performed during the second and fourth quarters of the year. ACEH concurs with Stantec’s proposal for monitoring well installation, however, we recommend that semi-annual groundwater sampling is conducted during the first and third quarters of the year.

NOTIFICATION OF FIELDWORK ACTIVITIES

Please schedule and complete the fieldwork activities by the date specified below and provide ACEH with at least three (3) business days notification prior to conducting the fieldwork.

TECHNICAL REPORT REQUEST

Please submit technical reports to ACEH (Attention: Paresh Khatri), according to the following schedule:

- **July 22, 2009** – End of 30-day Public Participation Period
- **July 31, 2009** – Final CAP
- **October 29, 2009** – Excavation & Monitoring Well Installation Report
- **Due within 30 Days of Sampling** – Semi-annual Monitoring Report (3rd Quarter 2009)
- **Due within 30 Days of Sampling** – Semi-annual Monitoring Report (1st Quarter 2010)

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

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) 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 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 Spills, Leaks, Investigations, and Cleanup (SLIC) 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 for more information on these requirements (http://www.swrcb.ca.gov/ust/electronic_submittal/report_rqmts.shtml).

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." 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 6735, 6835, and 7835.1) 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 registered 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 fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, later 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.

Mr. McClellan and Ms. Phillips
RO0000474
June 18, 2009, Page 4

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.

If you have any questions, please call me at (510) 777-2478 or send me an electronic mail message at paresh.khatri@acgov.org.

Sincerely,



Paresh C. Khatri
Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions
Public Participation Fact Sheet
List of Fact Sheet Recipients

cc: Jack Hardin, Stantec Consulting Corporation, 15575 Los Gatos Boulevard, Building C, Los Gatos, CA 95032
Neil Doran, Stantec Consulting Corporation, 15575 Los Gatos Boulevard, Building C, Los Gatos, CA 95032
Donna Drogos, ACEH
Paresh Khatri, ACEH
GeoTracker
File

Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC)	ISSUE DATE: July 5, 2005
	REVISION DATE: March 27, 2009
	PREVIOUS REVISIONS: December 16, 2005, October 31, 2005
SECTION: Miscellaneous Administrative Topics & Procedures	SUBJECT: Electronic Report Upload (ftp) Instructions

The Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) 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

- Entire report including cover letter must be submitted to the ftp site as a **single portable document format (PDF) with no password protection**. (Please do not submit reports as attachments to electronic mail.)
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- Signature pages 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)

Additional Recommendations

- A separate copy of the tables in the document should be submitted by e-mail to your Caseworker in **Excel** format. These are for use by assigned Caseworker only.

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 dehloptoxic@acgov.org
Or
 - ii) Send a fax on company letterhead to (510) 337-9335, to the attention of My Le Huynh.
 - 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) Using Internet Explorer (IE4+), go to <ftp://alcoftp1.acgov.org>
 - (i) Note: Netscape and Firefox browsers will not open the FTP site.
 - b) Click on File, then on Login As.
 - c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
 - d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
 - e) 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 dehloptoxic@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.



FACT SHEET ON ENVIRONMENTAL ASSESSMENT

RYNCK TIRE & BRAKE (FORMER MERRITT TIRE SALES)
3430 Castro Valley Blvd., Castro Valley, CA 94546
Fuel Leak Case No. RO0000474 and
GeoTracker Global ID T0600101801

Site Remediation Summary

This fact sheet has been prepared to inform community members and other interested stakeholders regarding the status of a proposed soil and groundwater cleanup at the Merritt Tire Sales located 3430 Castro Valley Boulevard, Castro Valley, California. Goodyear Tire & Rubber Company, the lead responsible party for the leaking underground storage tank case is proposing excavation and groundwater pumping as the remediation method to cleanup the site.

Site Background

The site is located on the north side of Castro Valley Boulevard, just west side of Redwood Road. It is bounded on the north by a bowling alley, on the east by Patio Drive, on the south by commercial properties and on the west by Redwood Road. The site currently operates as Rynck Tire and Brake. Land use immediately surrounding the site is commercial.

Remediation Alternative: Excavation with Groundwater Extraction

Soil excavation followed by groundwater extraction from the open pit is proposed to cleanup the soil and groundwater contamination at the site. Excavation removes the hydrocarbon contaminants from the soil. Groundwater extraction is proposed to cleanup the groundwater entering the excavation pit. The water in the pit will be pumped out and disposed of off-site to reduce the concentration of hydrocarbon contaminants in the groundwater. Clean backfill material would be imported as necessary to restore the site to match the existing grade. This method is effective because it would remove contaminated soil, which would be confirmed by soil and groundwater sampling and analysis.

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

Next Step

Goodyear Tire & Rubber Company is working with Alameda County Environmental Health (ACEH) to implement soil and groundwater cleanup at the site. The proposed alternative is described in a report prepared by Stantec Consulting Corporation on behalf of Goodyear Tire & Rubber Company: "Corrective Action Work Plan," dated May 14, 2009. The public is invited to review and comment on the cleanup action proposed in the Report. The electronic report is available for review on ACEH's website (<http://www.acgov.org/aceh/top/ust.htm>) or the State Water Resources Control Board's GeoTracker website (<http://www.geotracker.waterboards.ca.gov/>). The report and case file are also available for on-line review at ACEH located at 1131 Harbor Bay Parkway in Alameda, California. Please send a fax to 510-337-9335 to request a date and time to review the electronic case file. Please send written comments regarding the corrective action to Paresh Khatri at the address below. All written comments received by **July 22, 2009** will be forwarded to the Responsible Party and will be considered and responded to prior to a final determination on the proposed cleanup.

For Additional information, please contact:

Paresh Khatri Alameda County Environmental Health 1131 Harbor Bay Parkway, Ste 250 Alameda, CA 94502 Phone: 510-777-2478 E-mail: paresh.khatri@acgov.org	Jack Hardin Stantec Consulting Corporation 15575 Los Gatos Blvd, Bldg. C Los Gatos, CA 95032 Phone: 408-356-6124 E-mail: Jack.Hardin@stantec.com
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Site:
Goodyear Tire & Rubber
Company located at:
3430 Castro Valley Blvd.
Castro Valley, CA

Remediation proposed:
Excavation with groundwater
extraction and cleanup

Public Comment Period:
June 22 through July 22, 2009

RO0000474

June 18, 2009, Page 1

LIST OF FACT SHEET RECIPIENTS

COBURN RALPH G TRUSTEE ETAL
1371 OAKLAND BLVD #200
WALNUT CREEK, CA 94596

RESIDENT
3382 CASTRO VALLEY BLVD
CASTRO VALLEY, CA 94546

EDEN MANAGERMENTS & PERALTA LAND CO
504 W FIFTH ST
CARSON CITY, CA 89703

RESIDENT
20638 PATIO DR
CASTRO VALLEY, CA 94546

GREENSTEIN MOREY TR & GREENSTEIN MOREY TR
P O BOX 4278
MODESTO, CA 95352

RESIDENT
3446 CASTRO VALLEY BLVD
CASTRO VALLEY, CA 94546

NAHAS R T COMPANY
260 CALIFORNIA ST, 4TH FL
SAN FRANCISCO, CA 94111

RESIDENT
3385 CASTRO VALLEY BLVD
CASTRO VALLEY, CA 94546

NAHAS ROBERT T & EVA C TRS
504 W FIFTH ST
CARSON CITY, NV 89703

RESIDENT
3443 CASTRO VALLEY BLVD
CASTRO VALLEY, CA 94546

PALO ALTO SALINAS SAVINGS & LOAN ASSOCIATION
P.O. BOX 4900
SCOTTSDALE, AZ 85261

RESIDENT
3447 CASTRO VALLEY BLVD
CASTRO VALLEY, CA 94546

RESIDENT
20629 REDWOOD RD
CASTRO VALLEY, CA 94546

RESIDENT
3461 CASTRO VALLEY BLVD
CASTRO VALLEY, CA 94546

RESIDENT
20629 REDWOOD RD
CASTRO VALLEY, CA 94546

RUDY J A TRUST
3863 MABEL AVE
CASTRO VALLEY, CA 94546

RESIDENT
20634 PATIO DR
CASTRO VALLEY, CA 94546

SAFEWAY HOLDINGS INC
1371 OAKLAND BLVD #200
WALNUT CREEK, CA 94596

RESIDENT
3410 CASTRO VALLEY BLVD
CASTRO VALLEY, CA 94546

SCHWENG CHARLES & PATRICIA TRS
4355 MORELAND DR
CASTRO VALLEY, CA 94546

RESIDENT
3430 CASTRO VALLEY BLVD
CASTRO VALLEY, CA 94546

VANDERWALL MARIAN E TR
2450 ALMADEN ST
TULARE, CA 93274

RESIDENT
3389 VILLAGE DR
CASTRO VALLEY, CA 94546

WEST AIMEE L TR ETAL
1352 A ST
HAYWARD, CA 94541

RESIDENT
3396 CASTRO VALLEY BLVD
CASTRO VALLEY, CA 94546

**ATTACHMENT B -
OXYGEN RELEASE COMPOUND INSTALLATION INSTRUCTIONS**



REGENESIS

Oxygen Release Compound (ORC[®])

Installation Instructions

(Excavation Applications)

SAFETY:

Pure ORC is shipped to you as a fine powder, which is rated at -325 mesh (passes through a 44 micron screen). It is considered to be a mild oxidizer and as such should be handled with care while in the field. Field personnel should take precautions while applying the pure ORC. Typically, the operator should work up wind of the product as well as use appropriate safety equipment. These would include eye, respiratory protection and gloves as deemed appropriate by exposure duration and field conditions.

Although two options are discussed, application of ORC should never be applied by personnel within the tank excavation, unless proper shoring or sidewall cutback is in place.

GENERAL GUIDELINES:

ORC can be applied in a dry powder form or as a slurry. Field conditions dictate which form of ORC can be used most effectively.

Installation of ORC should be within the tank excavation floor and/or in an adequate backfill section thickness to account for the anticipated groundwater "smear zone".

Maximum treatment effect is obtained when ORC is mixed as thoroughly as possible within the backfill material. The more dispersed the ORC slurry/powder within the excavation backfill, the more effective the treatment.

The quantity of ORC to be used is generally calculated prior to moving into the field for installation. Generally it is applied at a rate of between 0.1% and 1.0% by weight of the soil matrix. The following illustrates a dilute application rate calculation:

Use a weight/weight percent of ORC/backfill material to ensure distribution of the ORC into the desired aquifer section. For example: a 0.15% weight of ORC to weight of backfill for the standard ORC weight (30 pounds) per container calculates as follows: $30 \text{ lb. ORC} / 0.15\% = 20,000 \text{ lbs. of soil matrix}$. Thus, to achieve a 0.15% mixture of ORC in the backfill material, 30 lb. of pure ORC should be mixed into 10 tons (20,000 lbs. \div 2,000 lbs./ton) of backfill, or approximately 7 - 10 cubic yards of soil depending on field conditions. Professional judgment should be used to select the appropriate soil mass per cubic yard for designing each site treatment.

CHOOSING THE FORM OF INSTALLATION:

Pure ORC is shipped to you in a powder form. Weather conditions (especially wind) may have a direct effect on the application of ORC as a tank backfill amendment.

Application of the dry powder may be difficult in windy conditions. To counter the effects of wind (and the subsequent potential loss of ORC), Regenesys recommends that a water source or a spray tank be on-site to wet down the ORC and the backfill material as ORC is applied.

Application of ORC in a slurry format is a very effective method and eliminates the wind issue.

Four somewhat different installation conditions can be encountered in the field:

- ORC in a pea gravel back-fill. ("Type 1")
- ORC in a soil back-fill. ("Type 2")
- ORC mixed in native soil in the bottom of a tank pit. ("Type 3")
- ORC installed in soil under standing water in the bottom of a tank pit. ("Type 4")

A single tank pit excavation can include more than one of these conditions, depending on the site and extent of treatment. Instructions for each condition are discussed separately in the following sections. After the installation instructions are detailed instructions for mixing the slurry, if that is the option chosen.

INSTALLATION INSTRUCTIONS:

"Type 1," ORC in a Pea Gravel Back-fill

The easiest method for installing ORC in pea gravel back-fill is to mix the ORC in the material in a backhoe or skid loader bucket before placing it in the excavation.

- **Dry Powder method**

Into each scoop of back-fill material add the appropriate portion of ORC being installed. Generally, it is advisable to moisten the material in the bucket to reduce wind blown ORC loss. Excessive winds make this method not feasible.

After mixing the dry powder in the bucket, it is dumped into the bottom of the excavation. The backhoe bucket can be used for further mixing in the excavation.

- **Slurry method**

Mix a 63% solids slurry of ORC and water (see "Steps to make ORC slurry"). This relatively thick slurry is used to help keep the ORC dispersed through the pea gravel, even when it contacts water in the bottom of the excavation during installation. It is generally desirable to avoid having the ORC run down through the pea gravel and collect in the bottom of the excavation. The thick slurry addresses this issue.

In each scoop of back-fill material, add the appropriate amount of ORC slurry. Pre-mix the materials in the backhoe bucket. After mixing, dump the slurry and back-fill into the bottom of the excavation. The backhoe bucket can be used for further mixing in the

excavation.

If the slurry method is being used, observe the physical behavior of the ORC in the fill material. If the ORC collects at the bottom of the back-fill material, increase the percent solids content by reducing the amount of water being used to make the slurry.

“Type 2,” ORC in a Soil Back-fill

Follow the instructions for the pea gravel back-fill method, except:

If the slurry method is being used, the solids content should be reduced. Typically a 50% solids is appropriate, although soil conditions sometimes dictate lower solids contents (see “Steps to make ORC slurry”).

“Type 3,” ORC Mixed in Native Soil in the Bottom of the Tank Pit

When ORC is added to the bottom of a tank pit it may be done by backhoe or injection.

CAUTION: Personnel should never work within the tank excavation, unless proper shoring or sidewall cutback is in place.

• Backhoe method

A skilled backhoe operator can distribute the ORC around the bottom of the tank excavation and, using the bucket, mix it thoroughly. If there are no winds, it may be possible to:

1. Put the dry ORC powder in the backhoe bucket,
2. Lower it to the bottom of the pit,
3. Gently deposit the ORC evenly on the remaining soil,
4. Use the bucket to mix the powder into the soil,
5. To mitigate dusting, if necessary, spray water into the excavation during the process.

An alternative backhoe method is to use a 50% (or less) solids ORC slurry (see “Steps to make ORC slurry) in place of the dry powder. This eliminates the dusting problem, and in some cases enhances the even distribution of ORC into the soil. Observe the slurry mixing behavior in the bottom of the excavation, and adjust the water content of the slurry to optimize mixing, if necessary.

• Injection method

If available, a pump and root feeder may be used to inject an ORC slurry into the excavation floor. This may require a more dilute slurry mix, and care should be taken to assure that the solids do not settle out of the slurry prior to injection.

“Type 4,” ORC installed in standing water in the bottom of a tank pit

Application of ORC into tank excavations with standing water requires the operator apply ORC in a slurry form. ORC powder application in this scenario is not advised because a portion of the ORC particle fraction is not likely to pass through the surface tension of the standing water. Caution: Personnel should never work within the tank excavation, unless proper shoring or sidewall cutback is in place.

- **Backhoe method**

A skilled backhoe operator can distribute the ORC slurry within the excavation, and mix it into the soil underlying the standing water with the bucket. Steps for installation:

1. Mix a high solids content ORC slurry (63% solids). See (“Steps to make ORC slurry”).
2. Pour slurry into the backhoe bucket.
3. Lower the bucket to the standing water level in the excavation, and deposit the slurry as evenly as possible across the excavation floor. The dense slurry (63% solids is 1.6 grams per ml) will tend to make the majority of the slurry sink quickly to the bottom of the water layer.
4. Use the bucket to mix the slurry into the soil.
5. Water in the vicinity of the ORC slurry will often turn white and milky, since some of the ORC is dispersed within the standing water. This provides additional dispersion within the standing water and back-fill material as it is added to the excavation.

- **Injection method**

If available, a pump and root feeder may be used to inject an ORC slurry into the soil in an excavation. This may require a more dilute slurry mix, and care should be taken to assure that the solids do not settle out of the slurry prior to injection.

MIXING ORC SLURRY:

ORC powder is shipped to you in pre-measured batches. Each batch is contained in a plastic bag which is shipped in a 5-gallon bucket.

Remove the pre-measured ORC bag from the 5-gallon bucket and open
Measure and pour the appropriate amount of water from the following table into the 5 gallon bucket

Slurry Solids Content (%)	Pounds of ORC	Gallons of Water
63%	30 lbs.	2.1 gal. (2 gal. + 2 cups)
50%	30 lbs.	3.6 gal. (3 gal + 2 1/2 qts.)

Add the entire ORC pre-measured bag to the water (30 pounds). If the slurry solids contents of less than 50% are desired, the quantity of ORC per batch mixed in the bucket must be reduced. For example, a bucket containing four gallons of water would require 22.4 pounds of ORC to make a 40% solids slurry, and 16.6 pounds of ORC to make a 33% slurry.

Use an appropriate mixing device to thoroughly mix ORC and water. Regensis

recommends use of a 0.5 Horsepower (minimum) hand held drill with a "jiffy mixer" or stucco mixer. A common paint paddle can be used to scrape the bottom and sides of the container to ensure thorough mixing. Standard environmental slurry mixers may also be used.

After mixing, small amounts of water can be added to adjust the consistency of the slurry.

When slurries are used, the early batches should be observed in the process of mixing with the soil. Each site can vary, due to soil type and moisture content. Based on professional judgment, additional water can be added to subsequent slurry batches.

ORC slurry should be used ASAP; if the ORC slurry has been standing more than 15 minutes, it should be remixed immediately before using. Do not let stand more than 30 minutes without stirring. Otherwise, the slurry will begin to harden into a weak cement.

For direct assistance or answers to any questions you may have regarding these instructions, contact Regenesi s Technical Services at 949-366-8000.

**REGENESIS, 2002
www.regenesis.com**

Oxygen Release Compound – Advanced (ORC *Advanced*TM)
MATERIAL SAFETY DATA SHEET (MSDS)

Last Revised: March 13, 2007

Section 1 - Material Identification

Supplier:



REGENESIS

1011 Calle Sombra
San Clemente, CA 92673

Phone: 949.366.8000

Fax: 949.366.8090

E-mail: info@regenesis.com

Chemical Description: A mixture of Calcium OxyHydroxide [CaO(OH)₂] and Calcium Hydroxide [Ca(OH)₂].

Chemical Family: Inorganic Chemical

Trade Name: Advanced Formula Oxygen Release Compound
(ORC *Advanced*TM)

Chemical Synonyms Calcium Hydroxide Oxide; Calcium Oxide Peroxide

Product Use: Used to remediate contaminated soil and groundwater (environmental applications)

Section 2 – Composition

<u>CAS No.</u>	<u>Chemical</u>
682334-66-3	Calcium Hydroxide Oxide [CaO(OH) ₂]
1305-62-0	Calcium Hydroxide [Ca(OH) ₂]
7758-11-4	Dipotassium Phosphate (HK ₂ O ₄ P)
7778-77-0	Monopotassium Phosphate (H ₂ KO ₄ P)

Section 3 – Physical Data

Form:	Powder
Color:	White to Pale Yellow
Odor:	Odorless
Melting Point:	527 °F (275 °C) – Decomposes
Boiling Point:	Not Applicable (NA)
Flammability/Flash Point:	NA
Auto- Flammability:	NA
Vapor Pressure:	NA
Self-Ignition Temperature:	NA
Thermal Decomposition:	527 °F (275 °C) – Decomposes
Bulk Density:	0.5 – 0.65 g/ml (Loose Method)
Solubility:	1.65 g/L @ 68° F (20° C) for calcium hydroxide.
Viscosity:	NA
pH:	11-13 (saturated solution)
Explosion Limits % by Volume:	Non-explosive
Hazardous Decomposition Products:	Oxygen, Hydrogen Peroxide, Steam, and Heat
Hazardous Reactions:	None

Regenesis - ORC Advanced MSDS

Section 4 – Reactivity Data

Stability:	Stable under certain conditions (see below).
Conditions to Avoid:	Heat and moisture.
Incompatibility:	Acids, bases, salts of heavy metals, reducing agents, and flammable substances.
Hazardous Polymerization:	Does not occur.

Section 5 – Regulations

TSCA Inventory List: Listed

CERCLA Hazardous Substance (40 CFR Part 302)

Listed Substance: No

Unlisted Substance: Yes

Reportable Quantity (RQ): 100 pounds

Characteristic(s): Ignitibility

RCRA Waste Number: D001

SARA, Title III, Sections 302/303 (40 CFR Part 355 – Emergency Planning and Notification)

Extremely Hazardous Substance: No

SARA, Title III, Sections 311/312 (40 CFR Part 370 – Hazardous Chemical Reporting: Community Right-To-Know)

Hazard Category: Immediate Health Hazard
Fire Hazard

Threshold Planning Quantity: 10,000 pounds

Section 5 – Regulations (cont)

SARA, Title III, Section 313 (40 CFR Part 372 – Toxic Chemical Release Reporting: Community Right-To-Know

Extremely Hazardous Substance:

No

WHMIS Classification:

C

Oxidizing Material
Poisonous and Infectious Material
Material Causing Other Toxic Effects –
Eye and Skin Irritant

Canadian Domestic Substance List:

Not Listed

Section 6 – Protective Measures, Storage and Handling

Technical Protective Measures

Storage:

Keep in tightly closed container. Store in dry area, protected from heat sources and direct sunlight.

Handling:

Clean and dry processing pipes and equipment before operation. Never return unused product to the storage container. Keep away from incompatible products. Containers and equipment used to handle this product should be used exclusively for this material. Avoid contact with water or humidity.

Section 6 – Protective Measures, Storage and Handling (cont)

Personal Protective Equipment (PPE)

Calcium Hydroxide

ACGIH® TLV® (2000)

5 mg/m³ TWA

OSHA PEL

Engineering Controls:

Total dust–15 mg/m³ TWA

Respirable fraction–

5 mg/m³ TWA

NIOSH REL (1994)

5 mg/m³

Respiratory Protection:

For many conditions, no respiratory protection may be needed; however, in dusty or unknown atmospheres use a NIOSH approved dust respirator.

Hand Protection:

Impervious protective gloves made of nitrile, natural rubber or neoprene.

Eye Protection:

Use chemical safety goggles (dust proof).

Skin Protection:

For brief contact, few precautions other than clean clothing are needed. Full body clothing impervious to this material should be used during prolonged exposure.

Other:

Safety shower and eyewash stations should be present. Consultation with an industrial hygienist or safety manager for the selection of PPE suitable for working conditions is suggested.

Industrial Hygiene:

Avoid contact with skin and eyes.

Protection Against Fire & Explosion:

NA

Section 7 – Hazards Identification

Emergency Overview:

Oxidizer – Contact with combustibles may cause a fire. This material decomposes and releases oxygen in a fire. The additional oxygen may intensify the fire.

Potential Effects:

Health

Irritating to the mucous membrane and eyes. If the product splashes in ones face and eyes, treat the eyes first. Do not dry soiled clothing close to an open flame or heat source. Any

Regenesis - ORC Advanced MSDS

clothing that has been contaminated with this product should be submerged in water prior to drying.

Inhalation:	High concentrations may cause slight nose and throat irritation with a cough. There is risk of sore throat and nose bleeds if one is exposed to this material for an extended period of time.
Eye Contact:	Severe eye irritation with watering and redness. There is also the risk of serious and/or permanent eye lesions.
Skin Contact:	Irritation may occur if one is exposed to this material for extended periods.
Ingestion:	Irritation of the mouth and throat with nausea and vomiting.

Section 8 – Measures in Case of Accidents and Fire

After Spillage/Leakage/Gas Leakage:	Collect in suitable containers. Wash remainder with copious quantities of water.
Extinguishing Media:	See next.
Suitable:	Large quantities of water or water spray. In case of fire in close proximity, all means of extinguishing are acceptable.
Further Information:	Self contained breathing apparatus or approved gas mask should be worn due to small particle size. Use extinguishing media appropriate for surrounding fire. Apply cooling water to sides of transport or storage vessels that are exposed to flames until the fire is extinguished. Do not approach hot vessels that contain this product.
First Aid:	After contact with skin, wash immediately with plenty of water and soap. In case of contact with eyes, rinse immediately with plenty of water and seek medical attention. Consult an ophthalmologist in all cases.

Section 8 – Measures in Case of Accidents and Fire

Eye Contact:	Flush eyes with running water for 15 minutes, while keeping the eyelids wide open. Consult with an ophthalmologist in all cases.
Inhalation:	Remove subject from dusty environment. Consult with a physician in case of respiratory symptoms.

Regenesis - ORC Advanced MSDS

Ingestion:	If the victim is conscious, rinse mouth and administer fresh water. DO NOT induce vomiting. Consult a physician in all cases.
Skin Contact:	Wash affected skin with running water. Remove and clean clothing. Consult with a physician in case of persistent pain or redness.
Special Precautions:	Evacuate all non-essential personnel. Intervention should only be done by capable personnel that are trained and aware of the hazards associated with this product. When it is safe, unaffected product should be moved to safe area.
Specific Hazards:	<u>Oxidizing substance.</u> Oxygen released on exothermic decomposition may support combustion. Confined spaces and/or containers may be subject to increased pressure. If product comes into contact with flammables, fire or explosion may occur.

Section 9 – Accidental Release Measures

Precautions:	Observe the protection methods cited in Section 3. Avoid materials and products that are incompatible with product. Immediately notify the appropriate authorities in case of reportable discharge (> 100 lbs).
Cleanup Methods:	Collect the product with a suitable means of avoiding dust formation. All receiving equipment should be clean, vented, dry, labeled and made of material that this product is compatible with. Because of the contamination risk, the collected material should be kept in a safe isolated place. Use large quantities of water to clean the impacted area. See Section 12 for disposal methods.

Section 10 – Information on Toxicology

Toxicity Data

	Oral Route, LD ₅₀ , rat, > 2,000 mg/kg (powder 50%)
Acute Toxicity:	Dermal Route, LD ₅₀ , rat, > 2,000 mg/kg (powder 50%) Inhalation, LD ₅₀ , rat, > 5,000 mg/m ³ (powder 35%)
Irritation:	Rabbit (eyes), severe irritant

Regenesis - ORC Advanced MSDS

Sensitization:	No data
Chronic Toxicity:	In vitro, no mutagenic effect (Powder 50%)
Target Effects:	Organ Eyes and respiratory passages.

Section 11 – Information on Ecology

Ecology Data

	10 mg Ca(OH) ₂ /L: pH = 9.0
	100 mg Ca(OH) ₂ /L: pH = 10.6
Acute Exotoxicity:	Fishes, Cyprinus carpio, LC ₅₀ , 48 hrs, 160 mg/L Crustaceans, Daphnia sp., EC ₅₀ , 24 hours, 25.6 mg/L (Powder 16%)
Mobility:	Low Solubility and Mobility Water – Slow Hydrolysis. Degradation Products: Calcium Hydroxide
Abiotic Degradation:	Water/soil – complexation/precipitation. Carbonates/sulfates present at environmental concentrations. Degradation products: carbonates/sulfates sparingly soluble
Biotic Degradation:	NA (inorganic compound)
Potential for Bioaccumulation:	NA (ionizable inorganic compound)

Section 11 – Information on Ecology (cont)

	Observed effects are related to alkaline properties of the product. Hazard for the environment is limited due to the product properties of:
Comments:	<ul style="list-style-type: none">• No bioaccumulation• Weak solubility and precipitation as carbonate or sulfate in an aquatic environment. Diluted product is rapidly neutralized at environmental pH.
Further Information:	NA

Section 12 – Disposal Considerations

Waste Disposal Method: Consult current federal, state and local regulations regarding the proper disposal of this material and its emptied containers.

Section 13 – Shipping/Transport Information

D.O.T Name: **Shipping** Oxidizing Solid, N.O.S [A mixture of Calcium OxyHydroxide [CaO(OH)₂] and Calcium Hydroxide [Ca(OH)₂].

UN Number: 1479

Hazard Class: 5.1

Label(s): 5.1 (Oxidizer)

Packaging Group: II

STCC Number: 4918717

Section 14 – Other Information

HMIS® Rating Health – 2 Reactivity – 1
Flammability – 0 PPE - Required

HMIS® is a registered trademark of the National Painting and Coating Association.

NFPA® Rating Health – 2 Reactivity – 1
Flammability – 0 OX

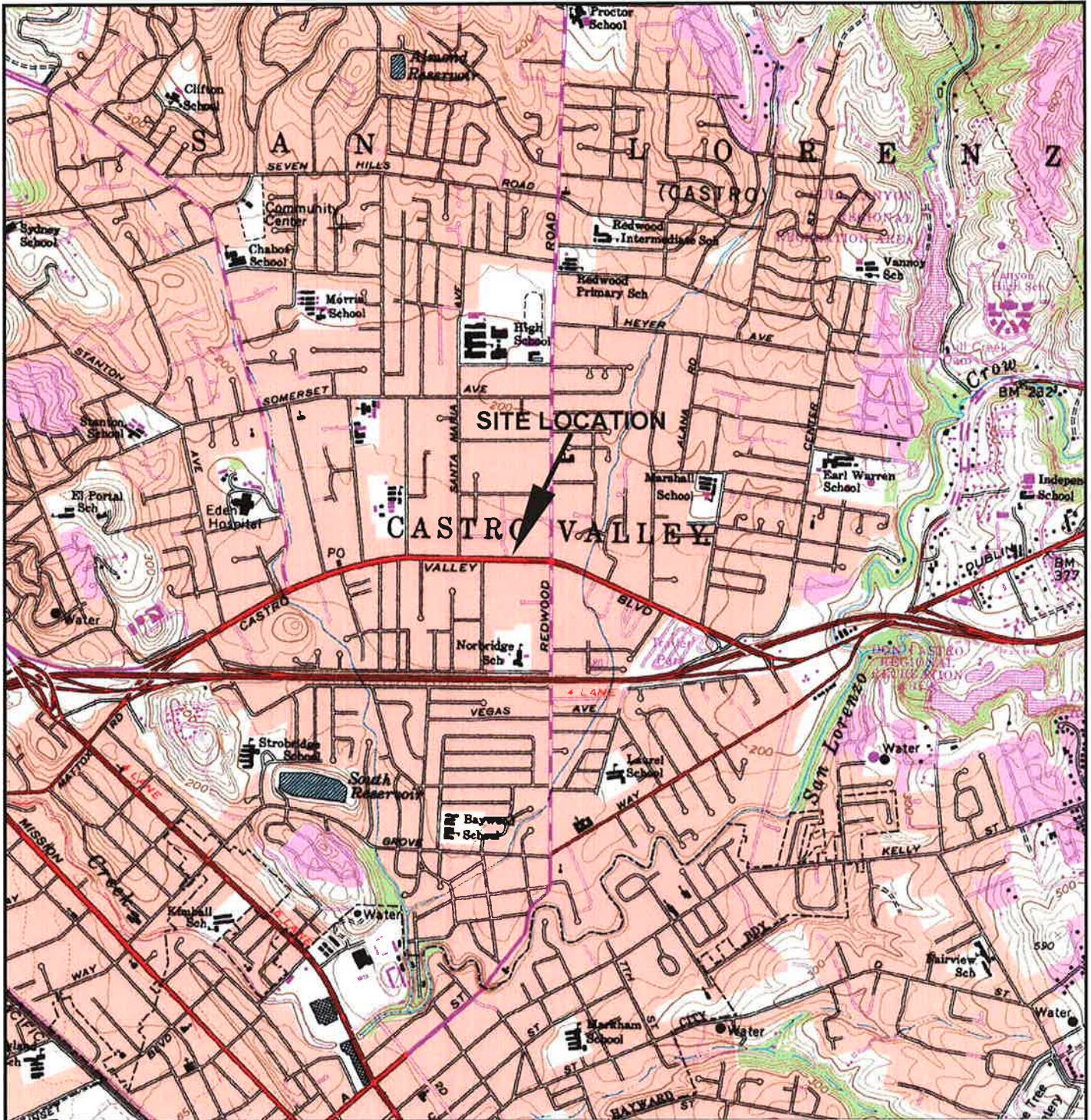
NFPA® is a registered trademark of the National Fire Protection Association.

Reason for Issue: Update toxicological and ecological data

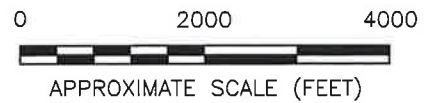
Section 15 – Further Information


The information contained in this document is the best available to the supplier at the time of writing, but is provided without warranty of any kind. Some possible hazards have been determined by analogy to similar classes of material. The items in this document are subject to change and clarification as more information become available.

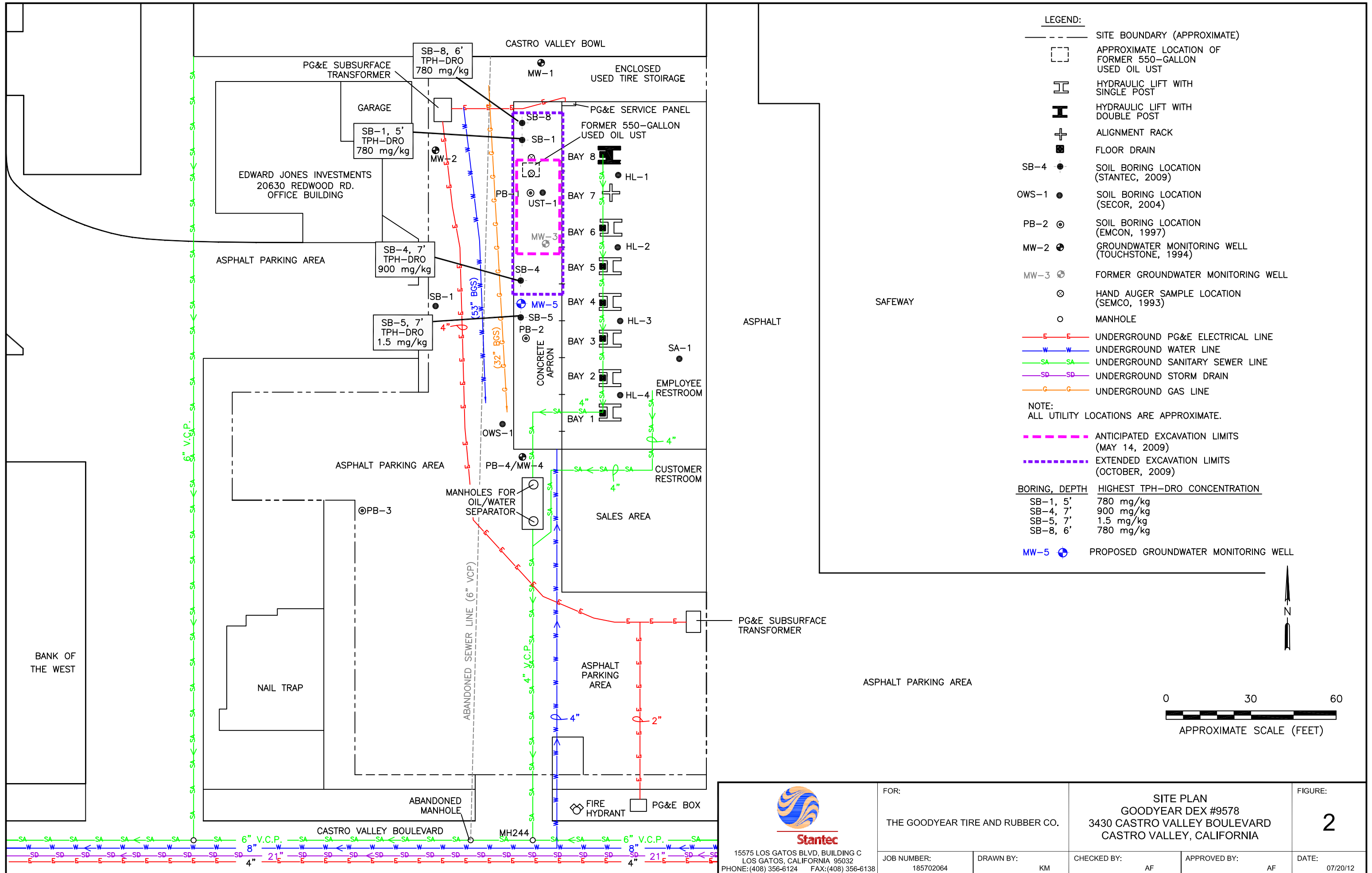
FIGURES



SOURCE:
USGS 7.5 MINUTE
TOPOGRAPHIC MAP—
HAYWARD, CALIFORNIA
QUADRANGLE



 15575 LOS GATOS BLVD, BUILDING C LOS GATOS, CALIFORNIA 95032 PHONE: (408) 356-6124 FAX: (408) 356-6138	FOR: THE GOODYEAR TIRE AND RUBBER CO.	SITE LOCATION MAP GOODYEAR DEX #9578 3430 CASTRO VALLEY BOULEVARD CASTRO VALLEY, CALIFORNIA	FIGURE: 1
	JOB NUMBER: 06GY.66050.	DRAWN BY: KM	CHECKED BY: AF
			DATE: 01/15/09



<p>15575 LOS GATOS BLVD, BUILDING C LOS GATOS, CALIFORNIA 95032 PHONE: (408) 356-6124 FAX: (408) 356-6138</p>	FOR:	SITE PLAN		FIGURE:
	THE GOODYEAR TIRE AND RUBBER CO.	GOODYEAR DEX #9578 3430 CASTRO VALLEY BOULEVARD CASTRO VALLEY, CALIFORNIA		2
JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185702064	KM	AF	AF	07/20/12