

9:51 am, Nov 21, 2008

Alameda County Environmental Health

November 19, 2008

Mr. Paresh Khatri Alameda County Health Care Services Environmental Health Services 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502

Bureau Veritas Project No. 33108-08647.00

Subject: Workplan for Additional Environmental Investigation for Former Quest Laboratory, 6511 Golden Gate Drive Dublin, Alameda County, California Fuel Leak Case No. RO0002860 and Geotracker Global ID T06019799610,

Dear Mr. Khatri:

Bureau Veritas North America, Inc. (Bureau Veritas) has prepared this *Workplan for Additional Environmental Investigation* ("Workplan") on behalf of Safeway, Inc. regarding the property located at 6511 Golden Gate Drive, Dublin, Alameda County, California (the "Site", Figure 1 – Attachment 1). The Site is currently under regulatory oversight by the Alameda County Environmental Health Service Department, and per a letter from ACEHS dated September 16, 2008, has been assigned the Fuel Leak Case No. RO0002860.

BACKGROUND

In 2003, prior to purchasing the subject property, Safeway retained Clayton Group Services, Inc. (now Bureau Veritas) to conduct Phase I and II Environmental Site Assessments. Clayton's *Phase II Environmental Investigation at the Former Quest Laboratory 6511 Golden Gate Drive, Dublin, California*, dated April 26, 2004 reports the finding of petroleum hydrocarbons in groundwater in a limited number of samples collected below and downgradient of a former UST that was removed from the property in 1989. Based on the analytical results of a limited sampling conducted as part of the UST removal, the case was closed by ACEHS in 1990. On October 7, 2004, Clayton submitted a copy of its 2004 Phase II report to ACEHS requesting to know if the UST case would be re-opened.

ACEHS notified Safeway that the subject property had been re-opened as a Fuel Leak Case (Geotracker Global ID: T06019799610) in a letter dated July 3, 2008. On September 16, 2008, ACEHS requested that technical comments be provided to address soil and groundwater characterization for the petroleum hydrocarbons found in groundwater and a preferential pathway study.

OBJECTIVE

To further characterize the subject property per ACEHS' request, Bureau Veritas recommends advancing additional soil borings and installing groundwater monitoring wells. We also recommend conducting a receptor survey of the subject property and vicinity to better evaluate potential preferential pathways.

Bureau Veritas North America, Inc.

6920 Koll Center Parkway, Suite 216 Pleasanton, CA 94566





SCOPE OF WORK

To achieve the objectives listed above, Bureau Veritas proposes the following scope of work:

- Conduct pre-field activities: request a quarter mile radius search well records from Zone 7 Water Agency (Zone 7) and obtain required drilling permits.
- Advance three (3) soil borings at the subject property using direct-push technology to collect soil samples and install groundwater monitoring wells. Bureau Veritas proposes to submit up to 3 soil and 3 groundwater samples for laboratory analysis to characterize site conditions. The wells will also be surveyed and monitored to determine a site specific groundwater gradient.
- Conduct a subsurface utility survey of the northern portion of the subject property in the area of and downgradient of the former UST where petroleum hydrocarbons have previously been detected in groundwater. Previous site investigations indicate minimal subsurface utilities in this area; however, a storm drain system is located in the parking lot in this area.
- Analyze collected soil and groundwater samples for petroleum hydrocarbons.
- Prepare a technical report that documents field activities, and presents findings, conclusions, and recommendations.
- Conduct three additional groundwater sampling events and submit a report of the findings following each quarterly event to ACEHS and the state Geotracker database program.

TASK 1: ADDITIONAL ENVIRONMENTAL INVESTIGATION - PRE-FIELD ACTIVITIES

Prior to conducting any fieldwork, Bureau Veritas will obtain a drilling permit from the Zone 7 Water Agency, as required by law.

Bureau Veritas will request a copy of well records within a one-quarter mile radius of the subject property from Zone 7 Water Agency and or the state Department of Water Resources (DWR) to assess if there are domestic or municipal water supply wells in the vicinity that could potentially be impacted from the petroleum hydrocarbons found at the subject property. Should records indicate an onsite or nearby well, a site visit will be conducted to verify its presence.

Bureau Veritas will prepare a Site Health and Safety Plan (SHSP) for the work proposed at the Site in accordance with the requirements of the State of California General Industry Safety Order (GISO) 5192 and Title 29 of the Code of Federal Regulations, Section 1910.120 (29 CFR 1910.120). A copy of the SHSP will be kept onsite during field activities. The SHSP will detail the work to be performed, safety precautions, emergency response procedures, nearest hospital information, and onsite personnel responsible for managing emergency situations.

Bureau Veritas will mark each proposed boring location in white paint and contact Underground Service Alert (USA) at least 48 hours prior to drilling, as required by law. Prior to any drilling activities, Bureau Veritas will contract and oversee a professional utility locating service to locate and clear the work area of underground utilities and also sweep for other subsurface utilities that could potentially provide preferential pathways.

TASK 2: FIELD ACTIVITIES

Bureau Veritas will conduct the scope of work in a phased approach. The following sections discuss the methodologies and approach proposed. The prior site investigation data indicates that the petroleum hydrocarbon release is quite limited in extent and aged. Therefore, Bureau Veritas will contract with a licensed C-57 drilling firm to advance up to three soil borings using standard truck-mounted direct-push (Geoprobe) equipment to collect soil samples and to install monitoring wells. The proposed boring locations are depicted on the attached Figure 1. Bureau Veritas proposes installing 'prepacked'



monitoring wells as a cost saving technique. Boring MW-1 will be located immediately adjacent to the former UST pit, MW-2 will be located downgradient at the northeast corner of the subject property, and MW-3 will be located near the east subject property boundary, southeast and downgradient of the former UST. The locations of the three wells will be used to determine the site specific groundwater gradient and confirm the extent and degree of petroleum hydrocarbons found in groundwater during the prior site investigations.

Soil Sampling

Each soil boring will be continuously cored using dual-walled Geoprobe equipment to a total depth of 20 to 25 feet below the ground surface (bgs). The total depth drilled will be determined by the field geologist during drilling based on the encountered depth of groundwater. The borings will be advanced approximately 6 to 10 feet into saturated soils and or beyond any indications of contamination in soil. Soil samples will be collected using a core barrel sampler with a plastic liner that retains a relatively undisturbed soil core. The core barrel sampler is advanced through the secondary 'dual-wall tube' that maintains the integrity of the borehole and is only removed after the total depth of the boring is attained. Discrete soil samples will be retained at intervals of approximately 4 to 5 feet during coring and the retrieved soil cores will be field screened to log soil lithology and indications of contamination, both visually and with a photoionization detector (PID) that measures ionizable organic compounds in parts per million vapor.

Soil samples retained for possible chemical analysis will be cut from the core barrel plastic liners, sealed with Teflon tape and plastic end caps, labeled with identifying information, and stored in a pre-chilled icechest awaiting transportation to the laboratory. Soil samples selected for chemical analysis will be based on field screening results or from the depth of the likely release. Selected samples for analysis will be indicated on the chain-of-custody document. Samples selected for analysis and the analytical program will be indicated on the chain of custody and the remaining soil samples will be held pending a review of the results of the analyzed samples.

Monitoring Well Installation

Upon completion of drilling to the desired depths, monitoring wells will be installed in each of the three borings. Bureau Veritas proposes to install the wells to a total depth of between 20 and 25 feet below the ground surface (bgs). The wells will be constructed of GeoProbe® Prepacked Well Screen sections. Prepacked well construction was selected as this method results in a reduction of generated waste materials consisting of drill cuttings and purged waste water during the life of the site investigation. Bureau Veritas proposes using 1.0-inch inner diameter (ID) PVC slotted well screen that is surrounded by prepacked sand (20/40 grade) contained in stainless steel mesh with an outer diameter of 2.5 inches. The screened well casing is inserted through the center of the outer dual tube (still in place in the borehole) extending from the bottom of the boring to two or more feet above the groundwater level. Blank PVC casing is connected to the well screen section that rises to the ground surface. Clean sand is placed through the drilling tube into the annular space in the boring to about one to two feet above the screened section of the well. Approximately two feet of granular bentonite will be placed in the annular space and hydrated to seal the well pack and the remainder of the borehole annular space will be sealed with cement grout to the surface. A flush traffic-rated well box will be secured in concrete to cover the top of the well casing. A lockable expanding well cap will be used to secure and seal the wellhead. A notch will be placed on the north side of the well casing top edge for use as a surveying and depth to water measurement reference point. The well construction details will be recorded onto a well construction field log for incorporation in the final report.

Well Development and Sampling

Well development will be performed to help stabilize the aquifer materials surrounding the well screen and to remove sediment that has accumulated in the well casing and filter pack sand during well construction. The annular grout seals for the new wells will be allowed to set for at least two days prior to



development. The depths to groundwater and total length of the monitoring well casing will then be measured to determine the quantity of water within each well casing. Monitoring well development will be conducted using a surge block to agitate water and or by repeated bailing. An inertial pump, peristaltic pump or bailer will be used to purge groundwater and sediment from within the well casing. Well development will be continued until water quality parameters (pH, temperature, specific conductivity, and turbidity) have stabilized or a minimum of 10 well casing volumes of water have been purged from each monitoring well during development. Groundwater quality parameters will be recorded onto well development field logs.

The first sampling will be conducted by first measuring the depth to water and the total depth of the water column to determine the volume of the water column in each well. The well casings will then be purged of three or more well casing volumes of water or until the water quality parameters have stabilized. A submersible pump or bailer will be used to purge ground water from each monitoring well. Water quality parameters (pH, specific conductivity, temperature and visual turbidity) will be recorded onto groundwater sampling field logs prior to purging and after each well casing volume of water is removed.

Upon purging sufficient water from the monitoring wells, groundwater for laboratory analysis will be retrieved using a disposable bailer or peristaltic pump with new tubing and transferred into laboratory supplied sample containers. The sample container size, type, and sample preservative will correspond to the requested analytical method. Sample containers will be sealed, labeled with identifying information, logged onto the chain-of custody, and temporarily stored in a chilled ice-chest for transportation to the laboratory. Groundwater purged from monitoring wells during development and sampling will be stored onsite in sealed and labeled drums pending proper disposal.

Land Survey of Monitoring Well Locations

A State of California Licensed Land Surveyor will be retained to survey the location and elevation of each monitoring well. The survey will include the top of well casing elevation (north face) and top of Christy box rim elevation. The elevation data will be surveyed to an accuracy of 0.01 foot. The northing and easting coordinates will be surveyed to 0.1-foot accuracy and referenced to a recognized survey monument. The survey data will be submitted to the GeoTracker database program established by the California Water Resource Control Board.

TASK 3: LABORATORY ANALYSIS

Bureau Veritas will submit three groundwater samples and three soil samples to a State of California certified laboratory for analyses. Prior soil and grab-groundwater samples in the area of the former UST locations were found to contain only typical fuel ranged petroleum hydrocarbon compounds (gasoline, diesel, and motor oil ranged compounds) with no aromatic hydrocarbons (BTEX, fuel oxygenates, or 1,2-dichloroethane); therefore, samples will be submitted for the following USEPA approved methods:

 USEPA Method 8015C – Modified for Total Petroleum Hydrocarbons as a Multi Fuel Scan for gasoline, diesel, and motor oil (TPH-g, -d, & -mo). TPH-d and TPH-mo will be extracted use silica gel cleanup (SGCU).

Samples will be submitted for laboratory analyses on a standard, 5 to 10 day turnaround time (TAT) basis. Laboratory data will also be presented in the Electronic Data Reporting (EDR) format for submittal to the GeoTracker database.

TASK 4: REPORTING

Bureau Veritas will prepare an additional environmental investigation report summarizing the work performed, results of a preferential pathway survey, well radius survey, figures with key site features, data tables, permits, well records, boring logs and a summary of the analytical results. Figures will be prepared showing the groundwater elevations with gradient contours and a summary of petroleum hydrocarbons concentrations in groundwater.



The final report and required supporting documentation will be submitted to the Alameda County Environmental Cleanup Oversight Program FTP web site in the required electronic format and to the state Geotracker database.

TASK 5: QUARTERLY GROUNDWATER MONITORING AND SAMPLING - 3 EVENTS

Bureau Veritas will contact Safeway prior to each sampling event to coordinate monitoring activities with on-site personnel. On the day of sampling, each well will be opened and allowed to equilibrate before measuring the depth to groundwater and assessing the groundwater interface for separate phase petroleum hydrocarbons. The depth to groundwater will be recorded onto a field log sheet and the height of the water column in each well will be calculated. The wells then will be purged at a low flow rate (approximately 0.1- 0.2 gallons per minute) from mid-water column using the 'micro purge' methodology by using a peristaltic pump and new disposal polyethylene tubing. During purging, the purged water is passed though a flow cell and groundwater quality data (pH, specific conductivity, temperature, dissolved oxygen [DO], oxidation-reduction potential [ORP], and turbidity) are recorded until stabilized indicating that the groundwater has reached equilibrium and is representative of the environment.

Upon purging sufficient water from the monitoring wells, groundwater for laboratory analysis will be retrieved and transferred into laboratory supplied sample containers. The sample container size, type, and sample preservative will correspond to the requested analytical method. Sample containers will be sealed, labeled with identifying information, logged onto the chain-of custody, and temporarily stored in a chilled ice-chest for transportation to the laboratory. Groundwater purged from monitoring wells during development and sampling will be stored onsite in a sealed, labeled, drum pending proper disposal.

Laboratory Analysis

Bureau Veritas has budgeted for a total of three groundwater samples for each event to be submitted to a state certified laboratory for chemical analyses. The collected samples will be labeled with identifying information, recorded onto a chain-of-custody document and stored in a pre-chilled ice-chest awaiting transportation to the laboratory. The samples will be analyzed on a standard analytical basis for the following parameters:

• Total petroleum hydrocarbons quantified as gasoline (TPH-g), diesel (TPH-d), and motor oil (TPH-mo) using USEPA Method 8015C. Extractable fractions will be prepared using silica gel cleanup.

All samples will be placed into laboratory supplied containers, appropriate for each analytical method, when practical, labeled, sealed, placed into a cooler with ice, and entered onto a chain of custody document that will accompany the samples to the laboratory. Analytical data will be prepared for submittal to the state Geotracker database in EDD format.

Reporting

Upon completion of the tasks described above, a Quarterly Groundwater Monitoring Report will be prepared following each sampling event. The report will include a narrative of the work performed, figures with sample locations and other key site features, a summary of the analytical results, data tables, laboratory analytical results, and make recommendations, as appropriate. The final report with supporting documentation will be submitted to the ACEHS and to the state Geotracker database in an electronic format, as required.



TASK 6: DECONTAMINATION AND WASTE DISPOSAL

Drilling equipment and down-hole sampling equipment will be steam cleaned or washed in a solution of non-phosphate detergent, double rinsed with tap water after each use, and allowed to dry. Rinse water and soil drilling cuttings will be containerized in 5-gallon buckets or Department of Transportation (DOT) approved 55-gallon drums and temporarily stored on site pending a review of the analytical data and profiling for waste disposal acceptance.

SCHEDULE

Bureau Veritas will begin this project upon approval of this workplan and written authorization by ACEHS to proceed. Once approved and or modified, Bureau Veritas will begin scheduling the field portion of the project. Assuming that the workplan is approved, it will take approximately two weeks to obtain permits and schedule subcontractors. Drilling, well installation, and development and sampling will require an additional one to two weeks to complete. Laboratory results should be available within another one to two weeks. Upon receipt of the analytical data, Bureau Veritas will prepare a final report. The final report with a 'perjury cover letter' will then be uploaded into the ACEHS and Geotracker databases. In summary, we anticipate that the initial final report will be submitted to ACEHS within approximately 7 to 8 weeks.

Fuel leak sites typically require follow-up quarterly monitoring, totaling four quarterly events. Therefore, three additional quarterly monitoring events will be scheduled approximately three months apart. The schedule for each event will require approximately three to four weeks to complete from the time the samples are collected. Each quarterly event will result in the submittal of a monitoring report to ACEHS and Geotracker as previously described.

CLOSING

If you have any questions or comments regarding the information provided herein, please do not hesitate to contact me at 925.426.2679.

Sincerely,

Donald A. Ashton, P.G., REA Senior Geologist Environmental Services Don.Ashton@us.bureauveritas.com



DAA/aca

- cc: Mr. Kevin Thompson, Randall's Food & Drugs LP, c/o Safeway Inc.
- cc: Mr. Jeffrey Brown, Randall's Food & Drugs LP, c/o Safeway Inc.

Attachment 1 – Figure 1



ATTACHMENT 1 FIGURE 1

