

CROWN

CHEVROLET • CADILLAC • ISUZU

7544 Dublin Blvd.
P.O. Box 2010
Dublin, California 94568
(925) 828-6500
www.crowndublin.com



April 18, 2011

Mr. Paresh Khatri
Hazardous Materials Specialist
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94501-6577

RECEIVED

9:38 am, Apr 21, 2011

Alameda County
Environmental Health

Subject: Sump Remediation Work Plan
Crown Chevrolet Cadillac Isuzu
7544 Dublin Boulevard and 6707 Golden Gate Drive
Dublin, California
Fuel Leak Case No. RO0003014

Dear Mr. Khatri:

Enclosed please find the *Sump Remediation Work Plan* (work plan) for the Crown Chevrolet Cadillac Isuzu site at 7544 Dublin Boulevard and 6707 Golden Gate Drive, in Dublin, California (Fuel Leak Case No. RO0003014, GeoTracker Global ID T10000001616). This work plan was prepared by AMEC Geomatrix, Inc. (AMEC), on behalf of Crown Chevrolet Cadillac Isuzu.

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.

Please contact me at (925) 556-3201 or Andrew Lojo of AMEC at 510-663-4153 if you have any questions regarding this work plan.

Sincerely yours,

Patrick Costello
Owner
Crown Chevrolet Cadillac Isuzu

Attachment: Sump Remediation Work Plan

cc: Gregory Brandt, Wendel, Rosen, Black & Dean LLP
John Mullan, Zurich North American Insurance
Thomas L. Vormbrock, Rimkus Consulting Group, Inc.
Mark Cameron, Miller Starr Regalia
Ed Conti, AMEC Geomatrix, Inc.



"Where people
make the
difference."



April 18, 2011

Project OD10160070

Mr. Patrick Costello
Crown Chevrolet
P.O. Box 2010
Dublin, CA 94568

Subject: Sump Remediation Work Plan
Crown Chevrolet Cadillac Isuzu
7544 Dublin Boulevard and 6707 Golden Gate Drive
Dublin, California
Fuel Leak Case No. RO0003014

Dear Mr. Costello:

AMEC Geomatrix, Inc. (AMEC), has prepared this *Sump Remediation Work Plan* (work plan) on behalf of Crown Chevrolet for the property located at 7544 Dublin Boulevard and 6707 Golden Gate Drive in Dublin, California (the site; Figure 1). This work plan has been prepared to address concentrations of volatile organic compounds (VOCs) in the vicinity of the oil/water separator sump in Service Area 2 of Building B (the sump). An excavation was recommended by AMEC in the *Soil and Groundwater Investigation Report* that was submitted to the Alameda County Environmental Health Services Department (ACEH) on November 16, 2010 (and revised on April 4, 2011). AMEC also recommended that groundwater be removed during excavation activities as a further remedial measure to reduce the mass of VOCs detected within the sump excavation area. ACEH generally concurred with these recommendations in a letter addressed to Terri Costello of the Betty K. Woolverton Trust and Patrick Costello of Crown Chevrolet on April 6, 2011.¹

BACKGROUND

The site is located on the relatively flat floor of a valley that extends to the north-northwest, toward San Ramon and Danville. The closest surface water body is a creek that flows through a culvert; the creek flows from a gully west of the site, enters a culvert north of the site, and then bends to the south, passing approximately 1,000 feet east of the site. Groundwater has been encountered in the vicinity of the site at depths of 11 to 16 feet below ground surface (bgs), and flows regionally to the east, based on data from groundwater monitoring at the Montgomery Ward property across Dublin Boulevard to the north of the site.² A recent investigation at Quest Laboratory, immediately south of the site, identified groundwater flow to the north, toward the site.³ Later measurements indicated groundwater flow to the southeast.

¹ Alameda County Environmental Health, 2011, Site Investigation for Fuel Leak Case No. RO0003014 and GeoTracker Global ID T10000001616, Crown Chevrolet Cadillac Isuzu, 7544 Dublin Boulevard, Dublin, CA 94568, January 6.

² Environmental Audit, Inc., 1996, Ground Water Monitoring Report, Fourth Quarter 1996, Montgomery Ward Auto Service Center, 7575 Dublin Boulevard, Dublin, California, December 12.

³ Bureau Veritas, 2009, Additional Soil and Groundwater Investigation (Fuel Leak Case No. RO0002860), Former Quest Laboratory, 6511 Golden Gate Drive, Dublin, California, March 13.



In October 2008, Basics Environmental, Inc. (Basics), performed a Phase I environmental site assessment, which summarized the site's history and use.⁴ A second Phase I environmental site assessment was performed by AEI Consultants, and submitted in the same month.⁵ Based on the potential sources of contamination identified in the Phase I assessments, which documented similar information, Basics performed a limited soil and groundwater investigation in February 2009, advancing 10 borings for the collection of soil and grab groundwater samples near potential sources of contamination. The results were documented in a report titled *Limited Phase II Environmental Sampling Report* (Phase II report).⁶

Based on the results of the Basics Phase II investigation, ACEH requested in a letter dated March 24, 2010, that additional investigation be performed to delineate the lateral and vertical extent of impacts to soil and groundwater.⁷ AMEC submitted a work plan for soil and groundwater investigation to ACEH on June 15, 2010.⁸ The work plan was approved in a letter from ACEH dated August 20, 2010.⁹ In September 2010, AMEC performed an investigation on behalf of Crown Chevrolet to delineate the extent of certain constituents detected in soil and groundwater during the Basics investigation. The results are summarized in the April 4, 2011, *Revised Soil and Groundwater Investigation Report*.¹⁰ Following the AMEC investigation, Ninyo & Moore performed an additional Phase II investigation on behalf of the Chabot-Las Positas Community College District in December 2010. The results were reported in the *Limited Phase II Environmental Site Assessment*, dated January 7, 2011.¹¹ One of the soil borings installed by Ninyo & Moore (SB-03) confirmed the presence of VOCs in soil and groundwater adjacent to and beneath the sump.

The following sections describe the scope of work to perform soil excavation in the vicinity of the sump and to perform dewatering of the sump excavation area to reduce the mass of VOCs detected in this area.

EXCAVATION PLAN

The results of the investigations described above indicate that concentrations of VOCs in soil decline with depth beneath the sump, and show that VOCs are present in shallow groundwater beneath the sump. The results for Basics' boring B8, advanced approximately 10 feet south of the sump, indicate that VOC concentrations decline to non-detect levels within 10 feet of the sump. Basics' sample from boring B8 was collected at a depth of approximately 4 feet bgs; the highest VOC concentrations in borings closer to the sump were detected at a similar depth. Therefore, the approximate excavation boundary has been assumed to be 20 feet by 20 feet, centered at the sump (Figure 2). The depth of the excavation will be approximately 15 feet bgs, which is approximately 1 to 4 feet below the depth that groundwater was encountered in the previous borings located within the sump area.

⁴ Basics Environmental, Inc., 2008, Phase I Environmental Site Assessment, 7544 Dublin Boulevard and 6707 Golden Gate Drive, Dublin, California, October 14.

⁵ AEI Consultants, 2008, Phase I Environmental Site Assessment, 7544 Dublin Boulevard & 6707 Golden Gate Drive, Dublin, California, October 29.

⁶ Basics Environmental, Inc., 2009, Limited Phase II Environmental Site Sampling Report, 7544 Dublin Boulevard & 6707 Golden Gate Drive, Dublin, California, March 16.

⁷ Alameda County Environmental Health, 2010, Site Investigation for Fuel Leak Case No. RO0003014 and GeoTracker Global ID T10000001616, Crown Chevrolet Cadillac Isuzu, 7544 Dublin Boulevard, Dublin, CA 94568, March 24.

⁸ AMEC, 2010, Soil and Groundwater Investigation Work Plan, Crown Chevrolet Cadillac Isuzu, 7544 Dublin Boulevard and 6707 Golden Gate Drive, Dublin, California, June 15.

⁹ Alameda County Environmental Health, 2010, Site Investigation for Fuel Leak Case No. RO0003014 and GeoTracker Global ID T10000001616, Crown Chevrolet Cadillac Isuzu, 7544 Dublin Boulevard, Dublin, CA 94568, August 20.

¹⁰ AMEC, 2011, Revised Soil and Groundwater Investigation Report, Crown Chevrolet Cadillac Isuzu, 7544 Dublin Boulevard and 6707 Golden Gate Drive, Dublin, California, April 4.

¹¹ Ninyo & Moore, 2011, Limited Phase II Environmental Site Assessment, Crown Chevrolet, 7544 Dublin Boulevard, Dublin, California, January 7.



The sump and the sanitary sewer line located within the sump excavation area will be removed during the excavation. If necessary, they will be replaced following completion of excavation activities.

Permitting

Prior to the start of excavation work, a building permit will be obtained from the City of Dublin, if necessary. An excavation notification form will also be submitted in advance to the Bay Area Air Quality Management District. If necessary, a closure notification or permit will also be obtained from ACEH for removal of the sump and for the soil excavation activities. A permit will also be requested from the Dublin San Ramon Services District to discharge groundwater removed from the excavation to their wastewater treatment plant, a publicly owned treatment works (POTW).

Utility Clearance

Prior to beginning excavation, the anticipated boundaries of the excavation will be marked with white paint and Underground Services Alert (USA) will be contacted, as required by law, to identify public utilities, if any, that may be in the vicinity of the excavation. The existing site utility plans will also be reviewed, if available, and a private underground utility locator will mark below grade building utilities in the excavation area.

A temporary sewer connection to service the site car wash will be routed around the excavation area, if required by Crown Chevrolet.

Soil Excavation

Excavation and removal of soil will be performed by a California-licensed contractor. The estimated volume of soil to be removed is approximately 220 cubic yards (in place), minus soil that must remain in place in the side slopes to prevent destabilization of the excavation sidewalls and/or the building. The soil will be excavated using a backhoe or other suitable equipment.

Accessible soil within this area will be screened during soil removal activities for the presence of volatile organic compounds using a photoionization detector (PID), and visual observations for soil discoloration will be conducted. If PID readings show a likely reduction in VOC soil concentrations before the lateral excavation boundaries have been reached, the excavation will stop and soil confirmation samples will be collected.

Soil Handling and Stockpiling

Soil removed from the excavation will be placed on plastic sheeting on the building's concrete floor prior to being transferred to a suitable on-site storage area (either inside or outside of Building B). Stockpiles, if utilized, will be constructed on plastic sheeting and covered with plastic sheeting at the end of each work day.

Alternatively, the soil may be placed into soil bins for temporary on-site storage, pending waste characterization and approval, or loaded directly onto trucks for transport to the selected disposal facility.



Excavation Dewatering

As described above, shallow groundwater beneath the sump contains VOCs. Therefore, the excavation will extend to a depth of approximately 15 feet, which is 1 to 4 feet below the depth that groundwater was encountered in borings advanced in the vicinity of the sump. Dewatering will be conducted as an additional remedial measure to remove VOC-affected groundwater prior to backfilling.

A water storage tank will be staged at the site to contain water pumped out of the excavation. The water will be removed as necessary during excavation activities. In addition, the excavation will be left open for approximately three days so that groundwater can accumulate in the excavation overnight and be removed daily. Groundwater removal will continue for a maximum of three days, or until a maximum of 20,000 gallons of water has been removed.

Confirmation Sampling

Confirmation samples will be collected as excavation activities are completed. Confirmation samples will be collected from the base and sides of the excavation, except where data from nearby soil borings may already be available. One sidewall soil confirmation sample will be collected from each wall of the excavation. Additional sidewall soil samples will be collected if the sidewall exceeds 25 linear feet. The sidewall soil sample depth will be the approximate midpoint between the ground surface and the excavation bottom. Soil samples will be collected from the bucket of the backhoe and placed directly into sample containers.

One bottom confirmation soil sample will be collected per approximately 500 square feet unless water is present at the bottom of the excavation. If water is present, soil samples will not be collected from the bottom of the excavation; instead, a grab groundwater sample will be collected directly from the excavation using a clean, disposal bailer. The groundwater sample will be placed into laboratory-provided containers equipped with preservatives appropriate for the desired analyses. The grab groundwater sample will be collected after completion of excavation dewatering activities.

Soil samples collected for analysis of non-volatile or semi-volatile constituents will be placed into clean, laboratory-supplied glass jars or stainless steel tubes. Soil samples collected for analysis of volatile constituents will be collected using a field preservation method in accordance with U.S. Environmental Protection Agency (U.S. EPA) Method 5035.

Samples will be labeled with unique identifiers and the sample collection time, and then stored in an ice-chilled cooler pending transport to a California Department of Public Health-certified analytical laboratory under chain-of-custody procedures.

Laboratory Analytical Methods

The soil and grab groundwater samples will be analyzed for VOCs, total petroleum hydrocarbons (TPH) quantified as gasoline (TPHg), TPH quantified as diesel (TPHd), and TPH quantified as motor oil (TPHmo).

The samples will be analyzed using the following analytical methods:

- VOCs using U.S. EPA Method 8260B;
- TPHg using U.S. EPA Method 8260B; and



- TPHd and TPHmo using U.S. EPA Method 8015, following a silica gel preparation procedure in accordance with U.S. EPA Method 3630B. The TPHd and TPHmo grab groundwater samples will be filtered by the laboratory using a 0.7-micron glass-fiber filter prior to analysis, in order to provide an analysis that limits representation of TPH in the extractable range that may be adsorbed onto sediment present in the water due to excavation activities.

Additional composite soil samples will be collected from the stockpiles of excavated soil, if required by the disposal facilities for waste characterization purposes.

Soil Disposal

Soil removed from the sump excavation area is anticipated to qualify for disposal as Class II non-hazardous waste. Existing analytical data from the borings within the sump excavation area will be provided to several appropriately licensed Class II disposal facilities for review. As discussed above, additional samples and analytical data will be collected from the excavated soil if required by the facilities to complete waste characterization and obtain final landfill approval.

An appropriately licensed transportation company will be utilized to transport the soil to the selected landfill site.

Water Disposal

Water that is pumped from the excavation will be sampled from the storage tank. If necessary, the water will be treated, by filtering it to remove particulates and then passing it through activated carbon, before disposal to the POTW. Alternatively, water may be transported with or without treatment to an appropriately licensed treatment/disposal facility. Solids or sludge generated by the filtering or tank cleaning activities will be disposed at an appropriately licensed treatment/disposal facility.

Backfilling

Following completion of excavation and dewatering activities, the excavation area will be backfilled using imported soil, gravel, or self-compacting fill. If soil is used, it will be tested prior to import for VOCs, TPHg, TPHd, TPHmo, metals, and other constituents, if warranted, after reviewing the history of the borrow site. The excavation will be backfilled to approximately 6 to 12 inches below grade prior to site restoration. If soil is used to backfill the excavation, it will be placed in relatively loose lifts and compacted to achieve a minimum of 90% of its maximum dry density.

Site Restoration

Following the conclusion of the excavation and backfilling activities, the excavation will be restored by replacing the concrete slab to match existing conditions. If required by Crown Chevrolet, a new oil-water separator sump will be installed. The car wash sewer line will also be reconnected to the new oil-water separator sump or directly to the existing sewer line.

REPORTING

AMEC will prepare a report that documents the results of the sump excavation and dewatering activities to ACEH. The report will include copies of the analytical laboratory reports and sample chain-of-custody records. The report will also include tables and figures, as needed, showing the location and analytical laboratory results of the confirmation samples. The report will also include copies of the soil and water disposal manifests.


ANTICIPATED SCHEDULE

We anticipate that field work can commence within approximately 2 to 3 months of approval of this work plan by ACEH. This time will be required to prepare an excavation design, obtain the required permits, obtain subcontractor bids, and for the Crown Chevrolet to evaluate and select the appropriate waste disposal facilities. We anticipate that site preparation, excavation, dewatering, disposal and backfilling will take approximately 3 to 6 weeks to complete if continual, uninterrupted site access is available.

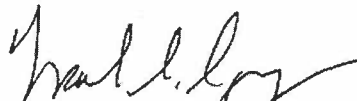
The report documenting the remedial activities will be submitted to ACEH approximately eight weeks following completion of site work.

Please contact either of the undersigned if you have any questions or require additional information regarding this work plan.

Sincerely yours,
AMEC Geomatrix, Inc


Andrew M. Lojo, P.G.
Senior Geologist




Frank Szerdy, Ph.D., P.E.
Principal Engineer

AMLFS/jd

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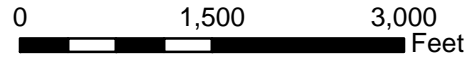
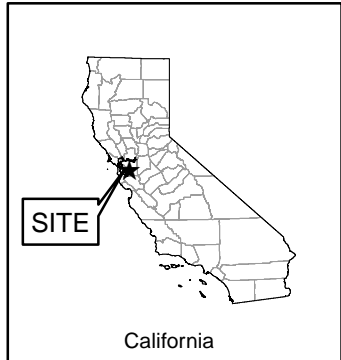
Attachments: Figure 1 – Site Location Map
Figure 2 – Sump Excavation Area

cc: Gregory Brandt, Wendel, Rosen, Black & Dean LLP
John Mullan, Zurich North American Insurance
Thomas L. Vormbrock, Rimkus Consulting Group, Inc.
Mark Cameron, Miller Starr Regalia

FIGURES



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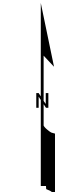
SITE LOCATION MAP Crown Chevrolet Cadillac Isuzu 7544 Dublin Boulevard and 6707 Golden Gate Drive Dublin, California		
By: AWP	Date: 04/04/2011	Project No. OD1016007
AMEC Geomatrix		Figure 1

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Explanation

- AMEC soil and/or grab groundwater sample location (September 27 through 29, 2010)
- Ninyo & Moore soil and/or grab groundwater sample location (December 16, 2010)
- ▲ Ninyo & Moore soil vapor sample location (December 15-16, 2010)
- Basics Environmental soil and/or grab groundwater sample location (February 24-25, 2009)
- Existing hydraulic lift
- Approximate excavation boundary
- - - Internal building wall
- Approximate sump location
- Approximate location of above-ground drain line
- - - Approximate location of below-ground drain line



0 20 40 Feet