



Stantec

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October 1, 2010

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

(Sent Via Electronic Upload to Alameda County ftp)

RE: Response to August 12, 2010 ACEH Letter and Groundwater Sampling Work Plan
Former Penske Truck Leasing Facility
725 Julie Ann Way, Oakland, California
Alameda County Site ID RO0000354
PN: 185702145.200.0002

Dear Mr. Khatri:

Stantec Consulting Corporation (Stantec), on behalf of Penske Truck Leasing Company (Penske), has prepared this letter in response to the August 12, 2010, Alameda County Environmental Health (ACEH) department letter issued regarding the Former Penske Truck Leasing Facility (site) located at 725 Julie Ann Way in Oakland, California.

In the August 12, 2010, letter ACEH expressed concern that 'the newly installed groundwater monitoring wells may not be yielding analytical results representative of site conditions' based on review of historical hydrogeologic data from the Site. Specifically, ACEH is concerned that newly-installed wells MW-1R and MW-7R may be screened across two water-bearing zones, possibly resulting in sample results being biased low due to dilution and/or vertical migration of contaminants between the shallow and deep zones.

This letter addresses the ACEH's concerns and proposes depth-discrete groundwater sampling to determine if the wells are screened across distinct water-bearing zones.

Well Construction

Wells MW-1R and MW-7R were installed in January 2010 to replace wells MW-1 and MW-7, which were abandoned due to concerns that the tops of the well screens were fully submerged beneath the static groundwater level, rendering them inaccurate monitoring points for the presence of free-phase petroleum hydrocarbons on the groundwater surface. The boreholes for wells MW-1R and MW-7R were logged continuously from the ground surface to 20.5 feet below grade (ft-bg). During drilling, first groundwater was encountered at approximately 17 ft-bg in saturated silty sand. The following day, static groundwater was measured at approximately 4.5 to 5 ft-bg, indicating confined conditions. The wells were subsequently screened between 20 and 3.5 ft-bg in order to maintain unsaturated well screen above the static groundwater level. The six other monitoring wells at the site are similarly constructed with total depths ranging from 25 to 35 ft-bg.

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Alameda County
Environmental Health

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During an April 2009 subsurface investigation, soil borings SB-2 and SB-5 were advanced to 12 ft-bg directly adjacent to wells MW-1 and MW-7, respectively. Soil boring SB-2 encountered moist clay between 9.5 and 12 ft-bg, and static groundwater was measured in the borehole at 9 ft-bg (the depth to first-encountered groundwater was not recorded). Soil boring SB-5 encountered moist clay between 5 and 12 ft-bg, and first-encountered groundwater was measured at 8 ft-bg. Despite the presence of fine-grained soils and the marginal degree of saturation, both boreholes produced water sufficient for sampling.

Similar soil types were encountered during installation of wells MW-1R and MW-7R in January 2010, with the exception of increased gravel/sand components in the upper 7 feet in the borehole for MW-1R. Several intervals were logged as 'moist', but groundwater was not encountered. The construction of wells MW-1R and MW-7R was based on the initial water level of 17 feet and the objective of installing well screen to the top of the static groundwater level observed in the previous and existing wells. As presented in the document entitled, "*Monitoring Well Installation and 2010 Semi-Annual Groundwater Monitoring Report*," dated March 25, 2010, concentrations of petroleum hydrocarbons in samples from wells MW-1R and MW-7R were consistent with historical data from the predecessor wells, with the exception of a lower diesel concentration in well MW-7R. However, well MW-7 was only sampled once (in 2009) between 2002 and when it was abandoned in 2010, making a comparison of groundwater chemical data to recent, ambient conditions problematic.

On balance, Stantec believes that the potential for any significant dilution effect is low, and that confined conditions observed in the water-bearing zone at 17 ft-bg prevents downward migration of fuel constituents in groundwater.

To address the potential issue of dilution, Penske is proposing to collect two depth-specific groundwater samples from wells MW-1R and MW-7R and compare the results with samples collected using the standard three-well volume purging method.

Groundwater Sampling Work Plan

In order to assess the potential presence of two distinct water-bearing zones, Stantec proposes collecting depth-discrete groundwater samples from wells MW-1R and MW-7R during the next semi-annual sampling event (1st quarter 2011). Samples will be collected at depths of 9 and 18 ft-bg in each of the wells. The samples will be collected using low-flow purging and sampling methods based on United States Environmental Protection Agency (US EPA) Publication EPA/540/S-95/504 published in April 1996. Following collection of the low-flow depth specific samples, a third, non-depth specific sample will be collected from each well following the purging of the well of three well volumes.

Low-Flow Purging Procedures

A static-water level will be measured in the well prior to purging and collection of any samples. Water level measurements will be made using an electronic interface probe (EIP).

A low-flow, electric driven pump (e.g., bladder or Grundfos pump) will be used to purge and sample the well water. The inlet of the pump tubing will be lowered into the well slowly to the pre-determined depth (9 ft-bg and 18 ft-bg). The EIP will be lowered into the well to monitor drawdown. The pump will be turned on at a flow rate of approximately 0.1 liter per minute (L/min). The flow rate will be adjusted up or down to maximize flow with minimum drawdown. The water level in the well will be monitored to ensure that the draw down does not increase during pumping, ensuring that groundwater is being pulled from the formation adjacent to the pump intake.

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Groundwater will be pumped from the well into a sealed, flow-through chamber containing probes to measure the water temperature, pH, turbidity, conductivity, oxygen reduction potential (ORP), and dissolved oxygen (DO) using a water quality meter. Field parameter values will be recorded on the groundwater sampling data sheet along with the corresponding purge volume. After passing through the flow-through chamber, the water will be discarded into a container of known volume where the pumping rate will be measured with a watch. When the container is full, the water will be properly disposed of following site protocol.

Groundwater samples will be collected for laboratory analysis when the groundwater has stabilized; the change between successive readings for temperature, pH, and conductivity are less than 10 percent, and turbidity is reduced to 10 Nephelometric Turbidity Units (NTUs) or less. Stabilization of groundwater measurements is considered indicative of sampling fresh formation water.

Low-Flow Sampling Procedures

After stabilization of field parameters has been determined, groundwater samples will be collected by low-flow pumping of the groundwater into the laboratory supplied sample containers. The pumping rate during sample collection will not exceed the maximum pump rate established during the low-flow purging.

Standard Purging and Sampling

Following collection of the two depth-specific samples in wells MW-1R and MW-7R, the wells will be purged by the three-volume method used previously at the site and a third non-depth specific groundwater sample collected for comparison purposes. The results of the depth-specific low-flow samples and the standard purging sample for each well will be compared to evaluate the extent to which dilution of diesel may be occurring, if at all.

The six other wells at the site, MW-2 through MW-6 and MW-8, will be sampled using the standard three-well volume method.

Laboratory Analysis

All groundwater samples will be analyzed for the following:

- Total petroleum hydrocarbons as gasoline (TPHg) by modified EPA Method 8015M;
- TPHd by modified EPA Method 8015M with silica gel treatment,
- Benzene, toluene, ethylbenzene and xylenes (BTEX) by EPA Method 8260;
- Methyl tertiary-butyl ether (MTBE) by EPA Method 8260;
- EDC/EDB by EPA Method 8260; and,
- Naphthalene by EPA Method 8260.

Update to Groundwater Sampling Analytical Suite

As directed in the August 12, 2010 ACEH letter, Penske will include the analysis of naphthalene in all future groundwater sampling events.

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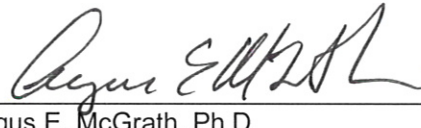
If you have any questions regarding this document or the work scope herein presented, please contact the undersigned at (925) 299-9300.

Sincerely,

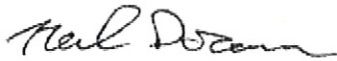
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