VORELCO

Vorelco, Inc.
888 West Big Beaver
P.O. Box 7050
Troy, MI 48007-7050
Tel (313) 362-7272

November 20, 1990

Mr. Paul M. Smith
Hazardous Materials Specialist
Alameda County Health Care Services
Department of Environmental Health
Hazardous Materials Program
80 Swan Way, Room 200
Oakland, CA 94621

Re: Broadway Volkswagen
2740 Broadway Ave.

Dear Mr. Smith:

In accordance with your letter of October 22, 1990 please find a proposal from Environmental Science & Engineering, Inc. (formerly Hunter/Gregg, Inc.). Please review and approve the attached proposal so that I may issue a contract to ESE to begin the work.

If I can be of any further assistance please feel free to contact me at (313) 362-7296.

Sincerely,

Tom Moffatt

Tom Moffatt
Construction Engineer

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Environmental
Science &
Engineering, Inc.
A CILCORP Company

November 14, 1990

Proposal No. 90-M-198

Mr. Tom Moffatt, Construction Engineer
Vorelco, Inc.
888 West Big Beaver Road
P.O. Box 7050
Troy, Michigan 48007-7050

SUBJECT: Proposal for Site Assessment and Quarterly Monitoring at Broadway Volkswagen, 2740 Broadway Ave. Oakland, Alameda County,CA 94612

Dear Mr. Moffatt:

Environmental Science & Engineering, Inc. (ESE) is pleased to present this proposal for site assessment and quarterly monitoring at the Broadway Volkswagen facility located at 2740 Broadway Ave. Oakland, California. The scope of work for this proposal was developed through discussions with you November 9, 1990 and concerns outlined in a letter to Vorelco from the Alameda County Department of Environmental Health (County) regarding the subject site, dated October 22, 1990.

Background

Three underground fuel storage tanks were removed from the subject facility in 1988 by an underground tank removal contractor, SEMCO, of Modesto, California. It is reported that the underground tank removal was witnessed by the County. However, based on recent correspondence to Vorelco from the County, it appears that documentation of the tank removal and removal of any soil from the underground tank area either was not submitted to the County or has been submitted and misplaced by the County.

ESE, formerly known as Hunter/Gregg, Inc., was retained by SEMCO subsequent to the tank removal, in December 1988, to drill three ground-water monitoring wells at the site per the request of the County. The purpose of the three monitoring wells was to characterize the ground-water downgradient from the former underground tanks and identify the ground-water flow direction at the site. A workplan with the proposed monitoring well locations was submitted to the County by Hunter/Gregg on November 28, 1988. The plan clearly stated that the wells could not be placed directly down-gradient from the former underground tank locations because of site constraints (building and utility line locations). The County responded with an approval of the workplan on December 30, 1988 and noted that it may be necessary in the future to construct additional wells at the site due to the inability of the wells to be placed downgradient from the former tanks.

Three monitoring wells were installed by Hunter/Gregg Inc. at the site in January 1989 as per the approved workplan. One well was installed in an adjacent position from each of the former tank areas #1 and #2 and a third well #3 was installed in a presumed upgradient position. A report of findings was prepared by Hunter/Gregg in February 1989 (Results of Monitoring Well Installation Letter Report by Hunter/Gregg, Inc. dated February 10, 1989) and submitted to the County and the Regional Water Quality Control Board (Regional Board). The report documented detectable petroleum hydrocarbons in the ground water in Well #1, adjacent to the former underground waste oil and gasoline tank, and in the "upgradient" well #3. Soil samples collected during drilling of Well #3 also reported detectable petroleum hydrocarbons. Soil and ground-water samples for Well #2, near the former waste oil tank, reported nondetectable results. (See Figure 1). The site ground-water flow direction, as calculated from ground-water level measurements in the three wells, varied from assumed regional ground-water gradient by 90 degrees. Conclusions in the report were that site water levels may be skewed by perched water zones in the Bay Mud clays.

On March 9, 1989, Mr. Tom Peacock of the County stated in a verbal conversation with Hunter/Gregg staff that additional verification of the ground-water levels in the three monitoring wells was needed. He also stated that once ground-water level confirmation was received, site closure would be granted by the County. Ground-water levels were verified by Hunter/Gregg and documented to the County in a letter dated Mach 14, 1989.

Vorelco has received correspondence from the County (July 25, 1990 and October 22, 1990) since the February 1989 report was completed. This proposal is in response to the County's concerns outlined in the October 22, 1990 correspondence.

Scope of Work

Three phases of work are proposed. Phase I is the preliminary work gathering existing site information and researching potential off site contamination documented in agency files. Phase II is the workplan, permitting, site investigation, first quarter monitoring and report of findings. Phase III is the remaining three quarters of monitoring. A discussion of each Phase follows:

Phase I Obtain and Evaluate Existing and Surrounding Site Data

- **Obtain and Evaluate Existing Data**

  ESE will obtain and evaluate any existing data concerning the soil from the former tank area. ESE believes that proper documentation of soil removed from the former underground tank areas may be in possession of the contractor (SEMCO). To date, none of ESE's phone calls have been answered by SEMCO. We suggest that a letter to SEMCO from Vorelco authorizing release of data will be required. The data likely to be required includes: manifests for stockpiled soil showing final destination (landfill, asphalt plant, etc.) and cubic yardage, imported fill receipts, documentation

of the former tank sizes and condition (tank disposal certificates), tank removal permit and sign-off by the County, soil sample analysis from the former tank excavation taken after overexcavation, and a location map and field notes documenting exactly where the soil samples were collected. ESE will also evaluate, if necessary, any tank data available from Broadway Volkswagen concerning the former tanks such as tank testing and inventory data.

- **Data from Surrounding Sites**

  ESE will obtain information from local and state agency files concerning hazardous materials storage and release in sites within 2000 feet of the subject facility. The purpose of this information is to identify any reported soil and/or ground-water contamination upgradient from the subject facility and obtain geologic and ground-water gradient data from the immediate vicinity. The agencies that will be contacted include the California Regional Water Quality Control Board, Oakland Fire Department, and the Alameda County Department of Environmental Health.

Phase II - Workplan, Permitting, Site Investigation, First Quarter Monitoring, and Report of Findings

- **Workplan, Permitting, Soil Sampling and Monitoring Well Installation**

  Based on the results of Phase I, ESE will identify further work required for site closure. The tasks proposed are preparation of a workplan to the County for the site investigation, preparation of permits for the subsurface activities (borings and wells), and installation of borings and wells. An assumption made for this proposal, based on existing data, is that only one of the former tank areas (#1 near the service drive on the north end of the site) requires further site assessment. Tank area #2 had nondetectable soil and ground-water results from the February 1989 report. The 1,000 gallon waste oil tank area on the south side of the property had nondetectable soil sample results from the tank removal sampling.

  Workplan for soil sampling and wells. If existing documentation concerning the underground tank removals at the site is not sufficient to show the lateral and vertical extent of contamination in the unsaturated soil zone, ESE will perform a site investigation to address these issues. The first step in the site assessment will be to propose soil borings or other methods (i.e. further excavation) to delineate the soil contamination in a workplan to the County. ESE will prepare this workplan for Vorelco's review prior to submittal to the County for approval.

  The County has requested that the workplan include a plan for remediation of potential contamination. ESE proposes that several options be listed and an actual plan be deferred until the contamination is actually found and delineated.

Soil Borings. For the purpose of this proposal, ESE proposes three soil borings around tank area #1. Two of the soil borings will be outside the building and one inside the building. Also for the purpose of this proposal, ESE recommends analysis of two soil samples from each boring for Total Petroleum Hydrocarbons (TPH) as gasoline and oil and grease, volatile organics (BTEX), and certain CAM Metals (Cadmium, Chromium, Nickel, Lead, and Zinc).

Monitoring Wells. Based on the February 1989 data, ESE proposes that at least three more ground-water monitoring wells, installed to a depth of 25 feet, will be required to delineate a plume of hydrocarbon contamination at the site. ESE suggests that if sufficient data cannot be found from a records search of adjacent sites, then two upgradient wells ,in the adjacent alley-way to the north, would be sufficient to determine any off-site contamination migrating onto the site. ESE will probably propose a third well for a down-gradient well; however, the location of this well is not specified at this time due to site constraints. The three new wells would be installed, developed, purged, and sampled. ESE proposes to verify the well elevation data for the three on-site wells along with surveying relative elevations of the three new wells during this initial site investigation.

As a cost-effective measure, ESE proposes to measure, purge and sample the three existing ground-water monitoring wells at the time of the initial site investigation. These data will fulfill the requirement for first quarter monitoring.

Analysis of a total of six ground-water samples from six on-site wells for TPH as gasoline and oil and grease, BTEX, and CAM Metals (Cadmium, Chromium, Nickel, Lead, and Zinc). Testing for solvents might be an option to verify potential off site sources or solvents used in degreasing that may have been in the former waste oil tank or adjacent site, as identified in Phase I.

All soil cuttings from drilling and purge water from wells will be drummed. An estimated 18 drums will be required. The drums will be sealed and labeled and stored at the site until analysis is complete and proper disposal is identified.

- **Report of Findings.**

ESE will prepare a report of findings of the site investigation. The report will include background information, information concerning adjacent sites, tank removal information from SEMCO, site investigation results, first quarter monitoring results for the three existing wells, and data interpretation. Recommendations for further work and alternatives for remediation will be given in this report. ESE will submit the report to Vorelco for review and approval prior to submittal to the County and Regional Board.

Phase III -Quarterly Monitoring of Three Ground-water Monitoring Wells at the site for three quarters.

- **Quarterly monitoring.** ESE will measure ground-water levels, purge a minimum of three well volumes and sample the three existing ground-water monitoring wells. Ground-water samples will be analyzed for TPH and BTEX on a normal turn around basis. A report will be prepared documenting the procedures and results of the quarterly monitoring and submitted to Vorelco for review and approval prior to submittal to the County. Purge water will be drummed and retained on site until proper disposal is identified.

  This task assumes that after the first quarter, the required number of wells to be sampled for quarterly monitoring will be three and the analytical requirements are as stated. Purge water will be drummed and retained on site until proper disposal is identified.

Estimated Costs

Estimated costs for the above scope of work are shown on Attachment No. 1 - Estimated Costs. The costs are based on time and materials with the total shown to be the estimated maximum. Hourly rates are shown on the attached fee schedule. Additional costs will be incurred for disposal of soil from drilling or excavation and purge water from sampling wells.

Your acceptance of all or a portion of this proposal can be indicated by your signature on the enclosed terms and conditions statement or a contract from you.

Please contact Sue Wickham at (415) 685-4053 with any questions or comments regarding this proposal. ESE looks forward to working with you on this project. We can complete Phase I and preparation of the workplan for the site investigation within one month of authorization by Vorelco. We will proceed with the site investigation within two weeks of authorization by the County.

Sincerely,

ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

Michael E. Quillin FOR

Susan S. Wickham, RG 3851
Staff Hydrogeologist

Erik C. Schroeder
Business Development Manager

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