

Health & Safety Training • Geo/Environmental Personnel • Engineering Geology Consultants • Environmental Management Consultants

February 27, 1993 Project C92020

Good Chevrolet 1630 Park Avenue Alameda, California 94501 Attn: Ms. JoAnn Stewart, General Manager

Subject: Work Plan for Supplemental Site Characterization and Site Remediation Assessment for Good Chevrolet, 1630 Park Avenue, Alameda, CA.

Dear Ms. Stewart:

In accordance with our agreement, Geo Plexus, Incorporated is please to submit this Work Plan to perform a Supplemental Site Characterization Investigation and to perform a Ground Water Containment/Site Remediation Assessment for the subject property.

BACKGROUND

A 300 gallon waste oil storage tank and a 500 gallon underground gasoline storage tank were reportedly removed from the property by Petroleum Engineering, Inc. in October, 1986. A subsurface investigation including installation of three ground water monitoring wells (see Figure 1) was performed by Groundwater Technology, Inc. in January, 1987 (Groundwater Technology, Inc. Report Dated April 29, 1987).

The three existing ground water monitoring wells located at the project site (see Figure 1) have been monitored by Geo Plexus personnel on a quarterly basis from July, 1992 through January, 1993 to evaluate the ground water conditions and to establish the directions of ground water flow at the project site. The quarterly monitoring has determined that Total Petroleum Hydrocarbons as gasoline and Volatile Aromatic Compounds exist at various concentrations in the ground water across the northern portion of the project site. The ground water samples obtained from Monitoring Wells MW-1, MW-2, and MW-3 in January, 1993 contained detectable concentrations of Total Petroleum Hydrocarbons as gasoline ranging from 3,000-11,000 ppb and Volatile Aromatic Compounds (Benzene, Toluene, Ethyl Benzene, and Xylenes) at various concentrations.

To date the "up-gradient" and "down-gradient" extent of the observed ground water contamination has not been determined.



GOOD CHEVROLET

1630 Park Street • Phone 415/522-9221 ALAMEDA, CA 94501

March 3, 1992

Ms. Juliet Shin Alameda County Health Care Services Department of Environmental Health 80 Swan Way, Room 200 Oakland, CA 94621

Dear Ms. Shin:

 $\,$ Enclosed are two copies of Work Plan for 1630 Park Street, Alameda, CA.

Should you have any questions, please call or write the undersigned.

Thank you,

JoAnn Stewart

JKS:js

Enclosures

cc: Mr. Greg Zentner

Regional Water Quality Control Board



Alameda County Department of Environmental Health personnel have requested Good Chevrolet to initiate a ground water migration containment/ground water remediation program and to further investigate the extent of the contaminant plume. The proposed Scope-of-Work includes the first phases of work to comply with these requirements.

SCOPE OF WORK

The scope of work for the current phase of investigation includes establishing the ground water conditions "up-gradient" of the former underground gasoline storage tanks and the existing ground water monitoring wells. This has been determined to be critical information which is required prior to initiating ground water extraction for plume migration and/or ground water remediation purposes. Determination of the "up-gradient" water quality will provide the first necessary information for design of a ground water extraction program and to assure that any ground water extraction performed at the project site (whether for plume migration control or remediation) will not result in accelerated migration of any ground water contaminants which could exist as a result of an off-site source and to effectively contain/remediate any on-site contribution to ground water contamination.

The current scope of work includes advancing two (2) exploratory/hydropunch borings in locations "up-gradient" from the former underground gasoline storage tanks to obtain ground water "grab" samples for analytical testing. Soil samples are not anticipated to be collected for analytical testing at this time. The exploration/hydropunch borings would be advanced by a State of California, C57 Licensed Drilling Contractor and the borings/ground water sampling are to be performed/directed by a State of California Certified Engineering Geologist. The borings would be grout filled (cement/bentonite slurry) upon completion of the investigation and the cuttings/rinsate generated during the investigation process would be contained on-site.

The ground water samples would be submitted to a State of California Certified Analytical Testing Laboratory and analyzed for Total Petroleum Hydrocarbons as gasoline (Method 5030/8015) and Volatile Aromatic Compounds (EPA 602 modified for Benzene, Toluene, Ethyl Benzene, Xylenes distinction).

The findings of the investigation, chain-of-custody documentation, and analytical testing results would be presented in a letter report format along with recommendations for the next phase of investigation, plume containment, and/or ground water remediation.

ANTICIPATED FOLLOW-UP WORK

Following receipt of the analytical data for the "up-gradient" grab water samples and verification of "up-gradient" water quality conditions, and provided that an "up-gradient" source is not identified, it is anticipated that one (1) exploratory boring/ground water monitoring well would be installed in the "down-gradient" direction of the former underground gasoline storage tanks (tentatively located in the northeast corner of property) to further define the "down-gradient" limits of the ground water contaminant plume.

Subsequent to installation of the additional ground water monitoring well, it is anticipated that a ground water pump test would be performed to evaluate the feasibility for ground water extraction using the existing 2-inch diameter monitoring well(s) and to obtain design parameters for a ground water migration control/remediation system.

Ground water migration/remediation controls would be recommended which would reduce the potential for further migration of the contaminant plume and facilitate remediation of the ground water conditions.

The requirements for supplemental site characterization investigations would be addressed based on the results of the current ground water assessment, pump test data, and review of the effectiveness of a proposed ground water extraction system.

Detailed Work Plans and Project Schedules would be submitted following the current phase of investigation to document the anticipated activities.

SCHEDULE

The current phase of investigation has been tentatively scheduled to begin on or about April 8, 1993, following review and acceptance of this Work Plan by Alameda County Department of Environmental Health personnel.

The current subsurface investigation is anticipated to be accomplished in one day. Standard analytical testing turnaround time of two (2) weeks is anticipated to be used unless directed otherwise. The final letter report including recommendations/guidelines for the next phase(s) of investigation/remediation would be submitted within two weeks following receipt of the analytical test data for the ground water samples (estimated May 5, 1993).

It has been a pleasure to be of service to you on this project. Should you have questions regarding the scope of work or estimated schedule presented herein, please contact us.

Copies of this Work Plan should be forwarded to:

Ms. Juliet Shin Alameda County Health Care Services Department of Environmental Health 80 Swan Way, Room 200 Oakland, CA 94621

Mr. Greg Zentner
Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Room 500
Oakland, CA 94612

Respectfully submitted,

Geo Plexus, Incorporated

David C. Glick, CEG 1338 Director, Geological and Environmental Services DAVID C. GLICK

No. 1038

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GEOLOGIST

OF CALIFORNIA

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