Harding ESE
A MACTEC COMPANY

Harding ESE, Inc.
1320 Arnold Drive
Suite 263
Martinez, CA 94553-4189
Telephone: 925/313-0840
Fax: 925/313-0844
Home Page: www.mactec.com

September 4, 2001

SEP 06 2001

Mr. Don Hwang
Alameda County Health Care Services Agency
Environmental Health Services
Environmental Protection
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

SUBJECT: WORKPLAN FOR SOIL AND GROUNDWATER INVESTIGATION
AUTOPRO FACILITY
5200 TELEGRAPH AVENUE
OAKLAND, CALIFORNIA
HARDING ESE PROJECT #651016.0100

Mr. Hwang:

This Workplan has been prepared by Harding ESE, a MACTEC Company (Harding ESE) on behalf of the Tri Star Partnership (Tri Star) to determine the extent and impact of the suspected hydrocarbon release(s) to soil and groundwater at the Autopro Facility, located at 5200 Telegraph Avenue, Oakland, California (Site). This Workplan has been revised as requested by the Alameda County Health Care Services Agency (ACHCSA) in a letter to Tri Star dated August 13, 2001.

Five underground storage tanks (USTs) were removed from the three separate excavations at the Site in December 1990 prior to Harding ESE's involvement. The USTs previously contained gasoline, diesel, and waste oil. Soil and groundwater samples were collected from the UST excavations during the removal and the subsequent report indicated the presence of detectable concentrations of gasoline, waste oil, gasoline constituents, and lead.

In April 1993, Environmental Science & Engineering, Inc. (ESE, a former name of Harding ESE) performed a limited soil and groundwater investigation at the site. The investigation included drilling one soil boring through the backfill material of each of the former UST excavations at the site into native materials beneath and collecting groundwater samples. Analysis of the samples showed hydrocarbon constituents comparable to motor oil and gasoline.

In April 1994, ESE conducted a site assessment at the site which consisted of drilling four soil borings, converting the borings to groundwater monitoring wells (MW-1 through MW-4), and collecting soil and groundwater samples from these borings and wells. Analysis of the samples indicated the presence of hydrocarbon constituents in the gasoline, oil & grease and kerosene ranges.

ESE performed further site investigation activities in 1996. During this investigation seven direct push soil borings were completed off site (AP-1 through AP-7). Groundwater samples from borings AP-1,

AP-2, AP-3 and AP-6 showed hydrocarbon constituents comparable to gasoline, diesel, and motor oil. A soil sample from AP-2 at 10 feet below ground surface (bgs) detected low levels of hydrocarbon constituents in the gasoline range.

In March 1998, QST Environmental, Inc. (QST, a former name of Harding ESE) introduced oxygen releasing compounds (ORCs) to wells MW-3 and MW-4 during the first quarter groundwater monitoring event for 1998. Following the forth quarter monitoring event and the removal of the ORCs, analysis showed hydrocarbon constituents comparable to gasoline and diesel.

SCOPE OF WORK

Field Investigation

The ACHCSA requested that Tri Star delineate the lateral extent of the groundwater plume and demonstrate that the underground culverts and storm drains do not serve as pathways for the migration of contaminants to sensitive receptors. Proposed boring locations are presented on the attached Site Map. Prior to initiating the field program, Harding ESE will obtain the required boring permit from the ACHCSA.

Beginning in the fourth quarter of 2001, Harding ESE will begin quarterly sampling of the four on-site wells (MW-1 through MW-4) and the one off-site well (MW-5). Quarterly sampling will conclude during the third quarter of 2002. Each quarterly sampling event will consist of gauging the depth of water in four on site monitoring wells (Autopro MW-1 through MW-4) and four off site monitoring wells (Autopro MW-5, Chevron MW-1, C-3 and MW-5) during the last month of each of four calendar quarters. Depth to water will be measured to the nearest 0.01 foot relative to the top of the well casing using an electronic interface probe to detect any possible free product. Five wells (Autopro MW-1 through MW-5) will be purged and sampled during each of the four sampling events in accordance with standard practices and Harding ESE standard operating procedures. As required, specific conductance, pH, temperature and turbidity of ground water will be measured and recorded.

All samples will be analyzed for Total Petroleum Hydrocarbons (TPH) as gasoline, TPH as diesel, TPH as motor oil, benzene, toluene, ethylbenzene and xylenes (BTEX) and for methyl tertiary butyl ether (MTBE). All samples will be analyzed on a standard turnaround basis at McCampbell Analytical (McCampbell), Pacheco, California. McCampbell is state certified for the analysis requested.

During the second sampling event, (March 2002) Harding ESE will coordinate with Gettler-Ryan and accompany them while they sample the wells (MW-1, C-3 and MW-5) at a nearby site (former Chevron Station at 5101 Telegraph Avenue). Gettler-Ryan will be sampling for TPH as gasoline and BTEX and Harding ESE will take additional samples for TPH as diesel and TPH as motor oil.

During the first sampling event (December 2001) Harding ESE will conduct a utility survey in the immediate area to locate underground storm drains and culverts. Information from the utility survey will be used to determine if further investigation activities will be required to follow the migration of the hydrocarbon plume along storm drains and culverts. If the storm drains and culverts are located above

groundwater levels (highest annual level), then no further investigation into this concern will be necessary.

Report

Following each quarter of monitoring, Harding ESE will prepare a written letter report that summarizes field observations and the results of the chemical analyses. Chain of custody forms and laboratory reports will be included in each quarterly report. The reports will also include copies of the field sample collection logs and daily field logs.

The first quarterly monitoring report will include information obtained from the utility survey conducted in December 2001. The second quarterly monitoring report will include analytical data obtained from the joint sampling efforts of Harding ESE and Gettler-Ryan on the former Chevron wells.

Please feel free to contact our office if you have any questions.

Sincerely,
HARDING ESE, A MACTEC COMPANY

Jason T. House
Staff Environmental Scientist

cc: Mr. Ondrej Kojnok, Tri Star Partnership

Harding ESE
A MACTEC COMPANY

Jason T. House
Staff Environmental Scientist

1320 Arnold Drive
Suite 263
Martinez, CA 94553-6537

Phone: 925/313-0840
Fax: 925/313-0844
Cell: 925/260-8878
jthouse@mactec.com

www.mactec.com

n:\data\projects\2001\651016\0100\workplan2.doc