EXHIBIT "F"

LEVINE-FRICKE

94 JUL 12 PM 311 32793.00-02

May 23, 1994

WORK ORDER FOR SOIL EXCAVATION SERVICES
AND QUARTERLY GROUND-WATER MONITORING
ORO LOMA SANITARY DISTRICT TREATMENT PLANT
2600 GRANT AVENUE
SAN LORENZO, CALIFORNIA

#### INTRODUCTION

Levine-Fricke has prepared this work order at the request of Mr. Michael Cortez of Oro Loma Sanitary District ("Oro Loma"). It covers quarterly ground-water monitoring for two more quarters of 1994 at the Oro Loma Sanitary District Treatment Plant at 2600 Grant Avenue in San Lorenzo, California ("the Site").

#### GROUND-WATER MONITORING

The ground-water monitoring program was originally proposed in Levine-Fricke's "Report on a Soil and Ground-Water Quality Investigation in the Vicinity of Two Aboveground Diesel Fuel Storage Tanks at the Oro Loma Sanitary District Treatment Plant, 2600 Grant Avenue, San Lorenzo, California," dated March 23, 1993, and submitted to the Alameda County Health Care Services Agency (ACHCSA).

#### RATIONALE AND OBJECTIVES

In general, the California Regional Water Quality Control Board (RWQCB) and the ACHCSA require excavation of accessible fuel-affected soil to the extent feasible, and a minimum of one year of quarterly ground-water monitoring, before approving fuel-leak case closure. In cases where ground-water monitoring results indicate that ground water is significantly fuel affected, ground-water remediation and/or containment may also be necessary.

The objectives of the work described in this work order is to measure shallow ground-water levels and assess shallow ground-water quality.

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#### SCOPE OF WORK

### Ground-Water Monitoring Tasks

- Task 1: Ground-Water Elevation Measurement and Ground-Water Sample Collection and Analysis
- Task 2: Report Preparation for Quarterly Ground-Water Monitoring
- Task 3: Project Management for Ground-Water Monitoring

These tasks are described in detail below.

Task 1: Ground-Water Elevation Measurement and Ground-Water Sample Collection and Analysis

Ground-water elevation will be measured and a ground-water sample collected at well MW-1 on a quarterly basis (in June and September 1994). Depth to ground water will be measured before the sample is collected, using an electric water-level meter.

After the depth to ground water has been measured, 3 to 5 well volumes of water will be purged from the well. The water will be removed using a gasoline-powered centrifugal pump equipped with a clean suction hose, or by hand bailing using a clean Teflon bailer.

Ground-water parameters (pH, specific conductance, and temperature) will be monitored and recorded after each well volume is purged. The ground-water sample will be collected after these parameters have stabilized to within approximately 15 percent of the previous reading. This procedure is meant to generate a sample that is representative of the ground water in surrounding sediments.

If the well does not sustain a constant yield (i.e., goes dry), the well will be sampled after the water level has recovered to 80 percent of the water level before purging, or after two hours, whichever occurs first.

The ground-water sample will be collected using a clean Teflon bailer. A bailer field blank will be prepared and submitted for analysis. The purpose of this sample is to monitor laboratory and equipment decontamination quality assurance and quality control. All equipment used during ground-water sampling will be cleaned with Alconox (a laboratory grade detergent and/or steam cleaned prior to use. The samples will

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be placed in laboratory-supplied sample containers and will be cooled to 4 degrees Celsius. They will then be transported to Anametrix, Inc., a California-certified laboratory, for analysis under strict chain-of-custody protocol.

Water purged from the well during ground-water sampling will be pumped into the headworks of the sewage treatment plant.

Ground-water samples will be analyzed for total petroleum hydrocarbons as diesel (TPHd) using EPA Method 8015 and for benzene, toluene, ethylbenzene, and xylenes (BTEX) using modified EPA Method 8020. The bailer field blank will be analyzed for BTEX using modified EPA Method 8020.

## Task 2: Report Preparation for Quarterly Ground-Water Monitoring

Levine Fricke will prepare a letter report on the results of each of the two rounds of ground-water monitoring within approximately two weeks of receiving analytical results from the laboratory. Levine Fricke will forward each report to Oro Loma to be submitted to the ACHCSA. Each report will include a description of the field methods used to collect the sample, a table summarizing the depth to ground water, a table summarizing that quarter's and historical analytical results, and a comparison of these results to previous results. These reports will be prepared under the supervision of a California registered engineer or geologist.

#### Task 3: Project Management for Ground-Water Monitoring

This task includes scheduling and cost tracking, interfacing with Oro Loma, and subcontract management (for the laboratory). The project manager for ground-water monitoring will be Mr. Kenton Gee, Senior Staff Hydrogeologist. Mr. Donald Bradshaw, R.G., Senior Associate Hydrogeologist, will provide technical review and oversight.

#### SCHEDULE

Ground-water monitoring will be conducted in June and September 1994. Final quarterly letter reports will be submitted to Oro Loma in July and October 1994.

#### ESTIMATED BUDGET

Work will be performed on a time-and-materials basis in accordance with our current Schedule of Charges. A copy of our 1994 Schedule of Charges is enclosed. The budget includes a 15 percent administration charge to cover insurance and administrative costs for out-of-pocket expenses. This estimate is based on a level of effort deemed appropriate for the project. Levine-Fricke will not exceed the estimated total budget without prior authorization from Oro Loma.

## Task 1: Ground-Water Elevation Measurement and Ground-Water Sample Collection and Analysis

Levine Fricke Personnel	\$800
Equipment Rental	800
Chemical Analysis	940
(4 samples at \$160 each;	
4 samples at \$75 each)	

Subcontract Administration (15%) 141

Task Total \$2,681

# Task 2: Report Preparation for Quarterly Ground-Water Monitoring (two reports)

Levine-Fricke Personnel 1.000

Task Total 1,000

### Task 3: Project Management for Ground-Water Monitoring

Levine-Fricke Personnel 200

Task Total \_\_\_\_200

ESTIMATED TOTAL \$3,881

Communication Fee of 1.8% for photocopying, telephone and mailing expenses

ESTIMATED TOTAL FOR THIS SCOPE OF WORK

\$3,951

70

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May 23, 1994

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### APPROVAL AND ACCEPTANCE

Approval and acceptance of this work order are acknowledged by the signatures of duly authorized representatives of Oro Loma Sanitary District and Levine-Fricke, Inc.

#### ORO LOMA SANITARY DISTRICT

Signature	Title	Date
(Please print or ty	pe name)	
	LEVINE-FRICKE, INC.	
Teng	- Nie borles	5723194
Signature	Title	Date