JAMES T. GRAEB
ATTORNEY AT LAW
400 OYSTER POINT BLVD., SUITE 415
SOUTH SAN FRANCISCO, CA 94080
(415) 266-8080

#568

February 5, 1996

Mr. Barney M. Chan
Hazardous Materials Specialist
Alameda County - Environmental Health
1131 Harbor Bay Pkwy., Suite 250
Alameda, CA 94502-6577

Re: **625 Hegenberger Road, Oakland, California**

Dear Mr. Chan:

Enclosed is a photocopy of Mr. Maniar's contract with All Environmental Services, Inc. for remediation of the above referenced site. Also enclosed is a photocopy of the contract for quarterly groundwater monitoring. We were not aware that you had not received quarterly ground water monitoring reports and have asked All Environmental, Inc. to get these reports to you as soon as possible.

Thank you for calling our attention to the recent changes in the remediation requirements for low-risk sites. We have asked All Environmental to look into this so as to ascertain whether or not Mr. Maniar's site qualifies. Should you need any additional information, please do not hesitate to call or write.

Very truly yours,

James T. Graeb

All Env has a contract to monitor wells only. Nothing else!

ALL ENVIRONMENTAL, INC.
Environmental Engineering & Construction

September 21, 1995

Mr. James Graeb
DIVERSIFIED INVESTMENT
400 Oyster Point Boulevard, Suite 415
South San Francisco, California 94080

RE: PROPOSAL FOR QUARTERLY MONITORING SERVICES
625 HEGENBERGER ROAD, OAKLAND, CALIFORNIA
PROPOSAL NO. 95-168

Dear Mr. Graeb:

All Environmental, Inc. (AEI) is pleased to submit this proposal for quarterly groundwater monitoring for the following four quarters.

In general, AEI proposes to purge and sample the six monitoring wells on the subject site, analyze the water samples along with one quality control sample, and prepare a report summarizing the sample data on a quarterly basis. AEI understands that two of the monitoring wells will be destroyed at the beginning of next year; thus, the prices for the last two quarters are base on only four wells.

SCOPE OF WORK:

1. Purge and sample the monitoring wells.

2. Analyze one sample form each well and one quality control sample for the following: TPH-Gasoline, TPH-Diesel, TPH-Oil and Grease, and Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX).

3. Prepare a summary report.

Purge water will transferred to 55 gallon drum and will be stored on-site until laboratory analyses indicates proper disposal procedures.

SITE BACKGROUND

AEI understands that the site is a former service station. Three underground storage tanks (USTs) were removed in October, 1993 and approximately 300 cubic yards of TPH-G affected soil was removed and stockpiled at the site. Shallow soil and groundwater investigations have been performed at the site with a quarterly groundwater monitoring

program currently active at the site. The results of the soil and groundwater investigation indicates that TPH-G, TPH-D, and TPH-O affected soil is present at the site.

PROJECT SCHEDULE AND COST ESTIMATE

AEI will produce a quarterly monitoring report for the month following each sampling event.

Sampling Event	Number of Wells	Price
September	Six	$2,790.00
December	Six	$2,490.00
March	Four	$1,960.00
June	Four	$1,960.00
TOTAL		**$9,200.00**

Note that the first sampling event involves the one time costs of drums and the third and forth sampling events reflect the cost savings from reducing the number of wells.

ASSUMPTIONS

This cost estimate is based on the following assumptions:

- AEI will be able to access the wells located on-site.
- AEI will have clear access to the subject site.
- Levine Fricke's boring logs are accurate.
- AEI will only need to perform monitoring on four wells after of January of 1996.
- AEI will only need to provide a total of 6 drums.
- Samples will be tested for the same analytes that Levine Fricke tested for on January 10, 1995.
- AEI will be awarded the contract for soil remediation and will be able to incorporate the quarterly monitoring in our site safety and health plan.
- Water disposal will be addressed in a future proposal.

All fees will be invoiced monthly and the client agrees to pay the invoices net 30 days. Interest at 1.5% per month will accrue on all unpaid balances. ' Client also agrees to pay court costs, attorney fees, and any expense incurred by All Environmental in the event the client does not pay the final invoice and litigation or collection procedures begin.

This proposal constitutes a firm offer to conduct business with AEI. A signed copy of the this proposal should be returned to AEI to initiate this proposal.

If this proposal meets with your approval, please sign where indicated below and return one intact copy to this office. AEI appreciates this opportunity to serve the environmental needs of Diversified Investments. If you have any questions regarding this proposal or any aspect of the project, please do not hesitate to call the undersigned.

Sincerely,

All Environmental, Inc.

Joseph P. Derhake
Vice President

AGREED TO THIS 25th DAY OF Sept, 1995

BY: _____
TITLE: President
FIRM: _____

PROPOSAL FOR SITE REMEDITION

625 Hegenberger Rd.
Oakland, California

On-Site Aeration
Proposal No. 95-159A

Prepared For:
Mr. James Graeb
Diversified Investment
400 Oyster Point Boulevard, Suite 415
South San Francisco, CA 94080

Prepared by:
All Environmental, Inc.
2641 Crow Canyon Rd. Suite 5
San Ramon, CA 94583

September 15, 1995

ALL ENVIRONMENTAL, INC.
Environmental Engineering & Construction

September 23, 1995

Mr. James Graeb
DIVERSIFIED INVESTMENT
400 Oyster Point Boulevard, Suite 415
South San Francisco, California 94080

RE: PROPOSAL FOR SITE REMEDIATION SERVICES
625 HEGENBERGER ROAD, OAKLAND, CALIFORNIA
PROPOSAL NO. 95-159A

Dear Mr. Graeb:

All Environmental, Inc. (AEI) is pleased to submit this proposal to conduct remediation services for the above-reference site. AEI proposes to remediate the above referenced site by excavating and aerating the contaminated soil at the subject site. When applicable AEI has estimated the costs in accordance with the scope of work identified in the Draft Levine Fricke (LF) Work Order referenced as 3015/3015REM. WO:FNC. In order to accomplish the cleanup goals for a more reasonable price, AEI has made some minor changes to LF's scope of work.

In order to provide a "turn-key" solution, AEI has integrated the contractor portion of this project in this proposal. If AEI is authorized to perform the project as proposed, costs associated with bid specifications and the bid service period will be saved.

The remediation program will include the following services.

1. Preparation of a Work Plan to delineate the remediation activities to be performed at the site. The Work Plan will be submitted to the ACHCSA for approval prior to implementation (LF Task 1).

2. Prepare a Site Specific Health and Safety Plan, abandon three groundwater monitoring wells, conduct a preconstruction meeting, and obtain permits (LF Task 4).

3. Manage the construction activities at the site including: confirmation of utility survey, site health and safety implementation, observation and monitoring of the soil excavations, confirmation soil sampling of the excavations, supervision of backfilling of the excavations, and documentation of all work conducted on site (LF Task 5).

4. Perform the construction services associated which include: excavation of up to 3,200 cubic yards of soil, stock piling of excavated soil, backfilling of the excavation with clean overburden soil.

5. Transport, treat, and dispose of 50 yards of soil contaminated with oil and grease.

6. Monitoring and oversight of aeration of the excavated total petroleum hydrocarbons as gasoline (TPH-G) affected soil and the monitoring and oversight of the transport and disposal of TPH as diesel (TPH-D) and TPH as oil (TPH-O) affected soil. This will include stockpile, baseline and confirmation soil sampling (LF Task 6).

7. Perform the aeration of the gasoline contaminated soil, including the following tasks: construction of an aeration cell, building a fence around the area of aeration, perform weekly tilling of the contaminated soil, stockpiling of clean soil, transport and disposal of TPH-D and TPH-O contaminated soil, backfill the excavation with treated soil, compact the soil to 90% maximum density, and returning site to its original condition with the exception of the pavement.

8. Analyze the excavation and aeration confirmation soil samples, as well as, stockpile soil samples at a State of California Department of Health and Safety Certified Laboratory (LF Task 7).

9. Preparation of a report summarizing the work completed, including recommendations on managing the TPH-G affected water through the Regional Water Quality Control Board's proposed Non-Attainment Zone Policy (LF Task 8).

10. Provide project management including: budget tracking, monthly written updates as well as weekly verbal updates; and regulatory liaison (LF Task 9).

SITE BACKGROUND

From the information obtained from the LF work order, AEI understands that the site is a former service station. Three underground storage tanks (USTs) were removed in October, 1993 and approximately 300 cubic yards of TPH-G affected soil was removed and stockpiled at the site. Shallow soil and groundwater investigations have been performed at the site with a quarterly groundwater monitoring program currently active at the site. The results of the soil and groundwater investigation indicates that TPH-G, TPH-D, and TPH-O affected soil is present at the site.

SCOPE OF WORK, PROJECT SCHEDULE AND COST ESTIMATE

AEI refers Diversified Investment to the LF Work Order for the Scope of Work and Project Schedule (Attachment 1) for this project. AEI has enclosed a copy of the

proposed fees to complete this project for your review (Attachment 2). To facilitate comparison of costs, AEI has based their costs on the number of hours, soil samples, tasks, limitations, and assumptions found in the LF Work Order with the following exceptions:

- AEI does not believe that 170 soil samples will be necessary to confirm the extent of contamination; therefore, our proposal is based on 85 confirmation samples be collected from the excavation.
- AEI believes that 208 hour for a technician to monitor the weekly tilling is excessive; therefore, AEI has proposed to perform the same work in 104 hours.
- AEI does recommend that a mobile laboratory be utilized during the final days of excavation to insure that costly re-mobilization of excavation equipment is not necessary. Standard turn-around for sample analyses is one week. With the utilization of a mobile laboratory on the final two days of excavation, analyses of all confirmation samples can be completed at the completion of excavation activities, as opposed to two weeks later. The additional cost for having the mobile laboratory on site is $600.00 per day.

AEI estimates that the above scope of work can be accomplished for approximately $164,206.00, as reflected in the attached cost estimate. This technical proposal and cost estimate are based on the following assumptions.

- AEI will have clear access to the site and the building immediately adjacent to the excavation will be demolished prior to excavating.
- AEI will not encounter any utility lines in the excavation area.
- The excavation will not extend into the public right of way.
- 90% compaction will be sufficient.
- AEI will be able to use 45,000 square feet of space behind the convience store for staging and aeration.
- Groundwater is at 9 feet below ground surface.
- AEI will excavate and aerate 3200 yards of contaminated soil.
- Soil will weigh 1.3 tons per in-place cubic yard.
- Alameda County Health Services Department will approve the work plan.
- Levine Fricke's reports provided to the AEI by the client are accurate.

All fees will be invoiced monthly and the client agrees to pay the invoices net 30 days. Interest at 1.5% per month will accrue on all unpaid balances. Client also agrees to pay court costs, attorney fees, and any expense incurred by All Environmental in the event the client does not pay the final invoice and litigation or collection procedures begin.

This proposal constitutes a firm offer to conduct business with AEI. A signed copy of the this proposal should be returned to AEI to initiate this proposal.

AEI appreciates this opportunity to serve the environmental needs of Diversified Investments. If you have any questions regarding this proposal or any aspect of the project, please do not hesitate to call the undersigned.

Sincerely,

All Environmental, Inc.

Joseph P. Derhake
Vice President

Attachments: Levine Fricke Work Order
Cost Estimate

AGREED TO THIS ____ DAY OF _____, 199__
BY: _____
TITLE: _____
FIRM: _____

ALL ENVIRONMENTAL, INC.
Environmental Engineering & Construction

Mr. James Graeb
DIVERSIFIED INVESTMENT
400 Oyster Point Boulevard, Suite 415
South San Francisco, California 94080

RE: PROPOSAL FOR SITE REMEDIATION SERVICES
625 HEGENBERGER ROAD, OAKLAND, CALIFORNIA
PROPOSAL NO. 95-159A

Dear Mr. Graeb:

All Environmental, Inc. (AEI) is pleased to submit this proposal to conduct remediation services for the above-reference site. AEI proposes to remediate the above referenced site by excavating and aerating the contaminated soil at the subject site. When applicable AEI has estimated the costs in accordance with the scope of work identified in the Draft Levine Fricke (LF) Work Order referenced as 3015/3015REM. WO:FNC. In order to accomplish the cleanup goals for a more reasonable price, AEI has made some minor changes to LF's scope of work.

In order to provide a "turn-key" solution, AEI has integrated the contractor portion of this project in this proposal. If AEI is authorized to perform the project as proposed, costs associated with bid specifications and the bid service period will be saved.

The remediation program will include the following services.

1. Preparation of a Work Plan to delineate the remediation activities to be performed at the site. The Work Plan will be submitted to the ACHCSA for approval prior to implementation (LF Task 1).

2. Prepare a Site Specific Health and Safety Plan, abandon three groundwater monitoring wells, conduct a preconstruction meeting, and obtain permits (LF Task 4).

3. Manage the construction activities at the site including: confirmation of utility survey, site health and safety implementation, observation and monitoring of the soil excavations, confirmation soil sampling of the excavations, supervision of backfilling of the excavations, and documentation of all work conducted on site (LF Task 5).

proposed fees to complete this project for your review (Attachment 2). To facilitate comparison of costs, AEI has based their costs on the number of hours, soil samples, tasks, limitations, and assumptions found in the LF Work Order with the following exceptions:

- AEI does not believe that 170 soil samples will be necessary to confirm the extent of contamination; therefore, our proposal is based on 85 confirmation samples be collected from the excavation.
- AEI believes that 208 hour for a technician to monitor the weekly tilling is excessive; therefore, AEI has proposed to perform the same work in 104 hours.
- AEI does recommend that a mobile laboratory be utilized during the final days of excavation to insure that costly re-mobilization of excavation equipment is not necessary. Standard turn-around for sample analyses is one week. With the utilization of a mobile laboratory on the final two days of excavation, analyses of all confirmation samples can be completed at the completion of excavation activities, as opposed to two weeks later. The additional cost for having the mobile laboratory on site is $600.00 per day.

AEI estimates that the above scope of work can be accomplished for approximately $168,706.00, as reflected in the attached cost estimate. This technical proposal and cost estimate are based on the following assumptions.

- AEI will have clear access to the site.
- AEI will not encounter any utility lines in the excavation area.
- The excavation will not extend into the public right of way.
- 90% compaction will be sufficient.
- AEI will be able to use 45,000 square feet of space behind the convince store for staging and aeration.
- Groundwater is at 9 feet below ground surface.
- AEI will excavate and aerate 3200 yards of contaminated soil.
- Soil will weigh 1.3 tons per in-place cubic yard.
- Alameda County Health Services Department will approve the work plan.
- Levine Fricke's reports provided to the AEI by the client are accurate.

All fees will be invoiced monthly and the client agrees to pay the invoices net 30 days. Interest at 1.5% per month will accrue on all unpaid balances. Client also agrees to pay court costs, attorney fees, and any expense incurred by All Environmental in the event the client does not pay the final invoice and litigation or collection procedures begin.

This proposal constitutes a firm offer to conduct business with AEI. A signed copy of the this proposal should be returned to AEI to initiate this proposal.

AEI appreciates this opportunity to serve the environmental needs of Diversified Investments. If you have any questions regarding this proposal or any aspect of the project, please do not hesitate to call the undersigned.

Sincerely,

All Environmental, Inc.

Joseph P. Derhake
Vice President

Attachments: Levine Fricke Work Order
Cost Estimate

AGREED TO THIS ____ DAY OF _____, 199__
BY: _____
TITLE: _____
FIRM: _____

ATTACHMENT 1

LEVINE FRICKE WORK ORDER

INTRODUCTION

This work order presents Levine-Fricke's proposed scope of work and estimated budget to provide consulting services related to the remediation of petroleum-affected soil at the former fuel station site located at 625 Hegenberger Road, Oakland, California ("the Site"; Figure 1). Levine-Fricke has prepared this work order in accordance with a request from Mr. James Graeb of Diversified Investment and Management Corp (DI). The work order is based upon Levine-Fricke's "Report on a Supplemental Site Investigation and a Conceptual Remediation Plan," which was submitted to Mr. Barney Chan of Alameda County Health Care Services Agency (ACHCSA) on April 5, 1995.

BACKGROUND

The Site, located at the corner of Hegenberger Road and Collins Drive in Oakland (Figure 1), is a former fuel service station. An active automobile tuneup shop and convenience store are currently adjacent to the former fuel service station location.

In October 1993, three underground storage tanks (USTs) and related structures were removed from the Site under the observation of Levine-Fricke (Levine-Fricke 1994a). Approximately 300 cubic yards (cy) of soil excavated during the UST removal is being stored on site until a treatment plan is implemented. Soil has been set on bermed plastic and covered completely with plastic, in accordance with the UST Closure Plan.

Levine-Fricke and Subsurface Consultants have performed shallow soil and ground-water investigations which included drilling soil borings, installing ground-water monitoring wells, and collecting and analyzing soil and ground-water samples. Six ground-water monitoring wells are located on the Site and a quarterly ground-water monitoring program has been implemented.

Results of shallow soil sampling and ground-water monitoring, as well as soil and ground-water sampling conducted during the UST removal, indicate that total petroleum hydrocarbons as gasoline (TPHg), the gasoline constituents benzene, toluene, ethylbenzene, and toluene (BTEX), total petroleum hydrocarbons as diesel (TPHd), and total petroleum hydrocarbons as oil (TPHo) are present at the Site above the approved cleanup criteria outlined below.

OBJECTIVES

The objective of the proposed scope of work is to remediate accessible petroleum-affected soil to the cleanup criteria approved by the ACHCSA. Excavated soil affected with TPHg and the BTEX compounds will be aerated on site as needed

to meet cleanup criteria and then used to backfill the excavation. Soil above the ground water affected with TPHd and/or TPHo above the cleanup criteria will be disposed of and/or treated.

APPROVED CLEANUP CRITERIA

The ACHCSA has approved the following cleanup criteria for unsaturated zone soils at the Site:

Compound	Level
Total BTEX Compounds	1 milligram per kilogram (mg/kg)
TPHg	100 mg/kg
TPHd	500 mg/kg
TPHo	1,000 mg/kg

PROPOSED SCOPE OF WORK

The scope of work consists of the following tasks.

Task 1: Preparation of Work Plan
Task 2: Preparation of Plans and Specifications
Task 3: Bid Period Services
Task 4: Preconstruction Activities
Task 5: Construction Management
Task 6: Management of Affected Soil
Task 6A: Aeration of Gasoline- and BTEX-Affected Soil
Task 6B: Stockpiling and Treatment of Oil and Grease-Affected Soil
Task 7: Laboratory Analyses
Task 8: Report Preparation
Task 9: Project Management and Regulatory Interface

These tasks are described below.

Task 1: Preparation of Work Plan

A work plan for remediation activities will be submitted to ACHCSA. The work plan will detail all activities related to excavation and treatment of petroleum-affected soil at the Site, as well as sampling protocol and backfill

requirements. This task includes preparation of the remedial work plan and response to agency comments (one letter).

Task 2: Preparation of Plans and Specifications

Levine•Fricke will prepare plans and specifications detailing field construction work for the project. We will prepare the necessary documents as one bid package for excavation, aeration of TPHg- or BTEX-affected soil, disposal or treatment of TPHd- and/or TPHo-affected soil, and backfilling of the excavation. The plans and specifications will include sufficient detail to allow competitive bidding of the project by qualified contractors.

The plans will include a site layout and two cross sections. Unit costs for loading, transportation, and disposal of TPHo-affected soil will be included in contractor bids.

The specifications will include contractual sections and technical specifications applicable to the construction. The contractual sections will include information for bidders, general conditions, special conditions, and the contract. The technical specifications will include sitework specifications such as aeration and backfilling specifications.

Task 3: Bid Period Services

Once the contract documents are approved by DI, Levine•Fricke will perform bid period services. These services include selecting and pre-qualifying bidders (with DI approval), issuing the construction contract for bid, conducting a site bid walk, answering bid questions, preparing an addendum to the plans and specifications (if needed), receiving and reviewing bids, and submitting a compiled bid value table to DI for selection of the contractor. Levine•Fricke will assist DI in the selection of a contractor based upon cost, experience, and understanding of the scope of work to be performed. It is anticipated that three to five contractors will be pre-qualified for bidding on the construction.

Task 4: Preconstruction Activities

Destroy Ground-Water Monitoring Wells. Because ground-water monitoring wells MW-11, MW-12, and MW-8 are in the proposed remediation area, these three monitoring wells will be properly destroyed and sealed before remediation begins under permit from the Alameda County Water Conservation District.

Conduct Preconstruction Meeting. Levine•Fricke will hold a preconstruction meeting with the excavation contractor to review the contractor's site use plan, work tasks for the project, contractual issues, and the proposed schedule. This task will

requirements. This task includes preparation of the remedial work plan and response to agency comments (one letter).

Task 2: Preparation of Plans and Specifications

Levine•Fricke will prepare plans and specifications detailing field construction work for the project. We will prepare the necessary documents as one bid package for excavation, aeration of TPHg- or BTEX-affected soil, disposal or treatment of TPHd- and/or TPHo-affected soil, and backfilling of the excavation. The plans and specifications will include sufficient detail to allow competitive bidding of the project by qualified contractors.

The plans will include a site layout and two cross sections. Unit costs for loading, transportation, and disposal of TPHo-affected soil will be included in contractor bids.

The specifications will include contractual sections and technical specifications applicable to the construction. The contractual sections will include information for bidders, general conditions, special conditions, and the contract. The technical specifications will include sitework specifications such as aeration and backfilling specifications.

Task 3: Bid Period Services

Once the contract documents are approved by DI, Levine•Fricke will perform bid period services. These services include selecting and pre-qualifying bidders (with DI approval), issuing the construction contract for bid, conducting a site bid walk, answering bid questions, preparing an addendum to the plans and specifications (if needed), receiving and reviewing bids, and submitting a compiled bid value table to DI for selection of the contractor. Levine•Fricke will assist DI in the selection of a contractor based upon cost, experience, and understanding of the scope of work to be performed. It is anticipated that three to five contractors will be pre-qualified for bidding on the construction.

Task 4: Preconstruction Activities

Destroy Ground-Water Monitoring Wells. Because ground-water monitoring wells MW-11, MW-12, and MW-8 are in the proposed remediation area, these three monitoring wells will be properly destroyed and sealed before remediation begins under permit from the Alameda County Water Conservation District.

Conduct Preconstruction Meeting. Levine•Fricke will hold a preconstruction meeting with the excavation contractor to review the contractor's site use plan, work tasks for the project, contractual issues, and the proposed schedule. This task will

also include reviewing contractor submittals before the meeting and contractor interaction before the meeting.

Permits. Levine-Fricke will notify the Bay Area Air Quality Management District (BAAQMD) of excavation activities. Levine-Fricke will verify that the contractor has obtained the appropriate excavation permits from the City of Oakland.

Prepare Site Health and Safety Plan. Levine-Fricke will prepare a Health and Safety Plan (HSP) for its personnel at the Site to cover field activities to be performed under this work order, in accordance with Occupational Safety and Health Administration (OSHA) guidelines.

Task 5: Construction Management

Soil above ground water that contains petroleum hydrocarbons above the approved cleanup criteria will be excavated and treated. Soil affected with TPHg and the BTEX compounds will be aerated on site, and after successful aeration to concentrations below cleanup criteria, will be used to backfill the excavation. Soil affected with TPHd or oil above cleanup criteria will be removed from the Site and treated or disposed of.

Confirm Underground Utility Survey. The Contractor will be responsible for contracting Underground Service Alert concerning the locations of public underground utilities entering the Site before soil excavation activities begin. A private utility locator will also be retained by the Contractor to survey within the Site for underground utilities. Levine-Fricke will confirm that the Contractor has performed the underground utility surveying.

Site Health and Safety Implementation. The contractor will be responsible for implementing its own HSP to protect its personnel. Levine-Fricke's field engineer will be our site safety officer (SSO), and will document compliance with the HSP prepared by the contractor and required by OSHA regulations. The estimated budget for this task assumes that Levine-Fricke's field engineer can provide these services in the course of other inspection duties, and no additional field personnel have been budgeted. Levine-Fricke will hold an initial health and safety meeting at the Site before construction begins, and will respond as needed to health and safety questions during construction; our estimated budget assumes that both functions will take no more than six hours total.

Observation of Soil Excavation. Soil containing concentrations of petroleum hydrocarbons above the approved cleanup goals will be excavated and aerated or treated off site. Clean overburden soils will be stockpiled on site for reuse as a backfill material. Affected soil will be excavated until analytical test results indicate that concentrations of petroleum hydrocarbons are below the approved cleanup criteria. Affected soil will be excavated vertically to within 0.5 foot of the first

encountered ground water, at approximately 7 to 10 feet below ground surface (bgs). For the purposes of this work order, we have assumed that the ground water will be encountered at approximately 8.5 feet bgs; thus, the excavation will be approximately 8 feet deep. While the excavation is not intended to extend into ground water, if ground water is encountered in the excavation, it will be pumped out of the excavation to the degree deemed appropriate by the Levine•Fricke field engineer, and recycled by a state-certified petroleum recycler. Unit costs for pumping and recycling ground water will be included in the contractor's bid.

Soil will be excavated laterally until confirmation sidewall samples indicate that soil does not contain concentrations of petroleum hydrocarbons above cleanup criteria or until excavation is limited by surface structures. Affected soil extending beneath the building and/or extending beneath Collins Drive will not be excavated. Based upon analytical test results and measured ground-water depth, we estimate that approximately 4,000 to 6,000 in-place cy of soil will be excavated.

Soil affected with gasoline and/or the BTEX compounds will be excavated and placed directly onto aeration beds constructed on the site. Soil affected with oil will be temporarily stockpiled on site pending off-site disposal or treatment. Based on analytical test results and observations made during previous investigations, we anticipate disposing of or treating approximately 50 to 150 in-place cy of oil-affected soil.

The excavation will be constructed and configured in accordance with California and federal OSHA regulations.

In estimating the budget for this task, we have assumed that the field engineer and a technician will be at the Site (including travel) for seven 12-hour days.

Excavation Confirmation Sampling. As excavation progresses, soil samples will be collected to document remaining TPH concentrations, if any, in the excavation sidewalls. We will collect one soil sample for every approximately 20 linear feet along the excavation walls. One soil sample will be collected for every 400 square feet of the excavation floor, unless ground water has entered the excavation. If ground water is encountered in the excavation, floor excavation samples will not be collected. If laboratory results indicate that chemical compounds are present above cleanup goals, the excavation will be extended and the sidewalls resampled. This process will be repeated until chemical analysis results indicate that residual petroleum concentrations are below cleanup goals. For the purposes of this work order, we have assumed that a total of 170 excavation confirmation soil samples will be collected and analyzed. If more than 170 samples are required to confirm that cleanup criteria have been met, the costs associated with analysis of the samples will be considered out of scope.

Soil samples will be collected in brass sleeves using a manual sample driver, or samples will be collected out of the backhoe bucket with the assistance of the contractor. Soil samples collected from the excavation will be analyzed by a state-certified analytical laboratory on a standard turnaround time basis. Strict chain-of-custody protocol will be observed during all sample handling activities.

Staff time for excavation confirmation sampling is included in the Soil Excavation subtask.

Observation and Testing of Excavation Backfilling and Repaving. As soon as the excavation confirmation sample test results indicate that affected soils above the cleanup criteria have been removed, the excavation will be partially backfilled using the stockpiled clean overburden soils and imported soil. After aeration is complete, the successfully aerated soil will be used to backfill the excavation. The asphalt parking lot will be repaved to match the existing surface.

An 8-foot-high chain-link fence outfitted with barbed wire and wood slats will be installed around the excavation. The fence will be removed upon completion of backfilling activities.

In estimating the budget for this subtask, we have assumed the field technician will be at the Site (including travel) for five 12-hour days.

Field Inspection. A Levine-Fricke field engineer or technician will be present during all field construction activities. The field engineer will monitor the contractor's progress, verify that excavated soil is being placed in the appropriate location, document the work performed, and answer field questions from ACHCSA concerning soil sampling and the limits of the excavation.

The field engineer will monitor the limits of excavation for the presence or absence of obviously affected soil. Soils will be screened in the field using an organic vapor meter (OVM). Additionally, we will use a PetroFLAG field test kit to screen soil samples in the field for the presence or absence of diesel-range petroleum hydrocarbons. This will provide on-site data during excavation, to assist in evaluating confirmation soil sampling locations, the final excavation limits, and the appropriate stockpile in which to place differing soils.

During backfilling operations, a Levine-Fricke engineer or technician will test the backfill to ensure that sufficient compaction has been attained by the contractor using a field nuclear density gauge. The engineer or technician will also measure dust levels in proximity to the active work zone with a portable dust meter.

Documentation of Work. The field engineer will document daily construction activities. Such documentation will include a daily construction report and

photographs. The project documents will be used to prepare the completion report to be submitted to the ACHCSA (see Task 7).

Task 6: Observation and Documentation of Soil Treatment

This task includes Levine-Fricke oversight of aeration of TPHg- and BTEX-affected soil and of stockpiling and treatment or disposal of TPHd- and oil and grease-affected soil at the selected treatment or disposal facility. Soil samples will be collected and analyzed before initiating aeration to establish baseline petroleum hydrocarbon concentrations. Soil samples will also be collected and analyzed after completion of aeration to confirm that petroleum hydrocarbon concentrations have been successfully reduced to below cleanup criteria.

Task 6A: Aeration of Gasoline- and BTEX-Affected Soil

Soil excavated and suspected of containing gasoline and BTEX compounds (based on OVM readings, field observations, and PetroFLAG results) will be placed onto on-site aeration beds and aerated.

Aeration. Aeration beds will be constructed on site directly on the existing pavement surface. The aeration beds will be bermed completely with hay bales to prevent movement of liquids onto or off soil being aerated.

It is anticipated that approximately 2,000 to 5,000 in-place cy of gasoline-affected soil may be aerated (including the 300 loose cy of soil stockpiled on site from the UST excavation). Soil will be placed onto aeration beds at a uniform depth and covered until ready for aeration. It will be the responsibility of the contractor to determine the number and size of aeration beds.

During aeration, soils will be exposed at a rate consistent with BAAQMD Regulation 8, Rule 40. After soils are exposed for aeration, they will remain uncovered until treatment is concluded. It is anticipated that additional soil will be exposed every day until treatment is nearly complete and that exposed soil will be turned over approximately seven to eight times a month to increase chemical removal rates. We anticipate that soil will aerate within six months. For the purposes of this work order, we have estimated that soil will be turned over a total of 45 times during the aeration process. We have budgeted a Levine-Fricke engineer or technician to visit the Site for one 8-hour day each week for six months to observe the contractor turning the soil and to collect confirmation samples from aerated soil.

If the time to successfully aerate soils exceeds six months, or if additional visits to observe the contractor are necessary, the costs associated with the additional work will be considered out of scope. In addition, if the concentrations of volatile organic compounds (VOCs) in the affected soil are such that all soil cannot be uncovered in

accordance with BAAQMD regulations within the six-month period, then costs associated with continuing aeration activities will be considered out of scope.

Baseline and Aeration Confirmation Sampling. Before aeration begins, four to six soil samples will be collected from each aeration bed and analyzed to assess baseline concentrations of TPHg and BTEX. Thereafter, soil samples will be collected and analyzed periodically to evaluate the degree of treatment achieved to date. Approximately one confirmatory sample per 50 in-place cy of treated soil will be collected to assess whether concentrations have been reduced to levels below cleanup criteria. Confirmatory sampling results will be evaluated using "EPA Methods for Evaluating the Attainment of Cleanup Standards" to assess whether additional sampling and analysis should be conducted.

Baseline and aeration confirmation samples will be collected in clean brass tubes from the aeration beds. The samples will be capped, labeled and placed in a chilled ice chest for transport to a state-certified analytical laboratory under strict chain-of-custody protocol. The baseline and confirmation soil samples will be analyzed on a standard turnaround time basis.

We have budgeted for the analysis of 10 baseline soil samples. In addition, we have assumed that 5,000 in-place cy of soil will be aerated and that one soil sample will be collected and analyzed for each 50 in-place cy of soil. Therefore, we have assumed that 100 aeration confirmation samples will be collected and analyzed. Costs associated with the collection and analysis of more than 110 baseline and aeration confirmation sampling will be considered out of scope.

Task 6B: Stockpiling and Treatment of Oil and Grease-Affected Soil

Soil excavated and suspected of containing TPHo or TPHd will be temporarily placed on plastic in stockpiles adjacent to the aeration beds. The stockpile will be placed on and covered by one layer of 6-milliliter visquine. Once the excavation is complete, the TPHo-affected soil will be sampled for treatment facility profiling. We estimate that approximately 50 to 150 in-place cy of TPHo-affected soil may be treated or disposed of off site. Costs for the loading, transporting, and disposing of or treating TPHo-affected soil will be included in the selected contractor's bid as a unit cost and is not included in this work order.

Stockpile Profile Sampling. The oil-affected stockpiled soil will be sampled and analyzed for petroleum hydrocarbons and other chemicals in accordance with the requirements of the selected disposal or treatment facility requirements. For the purposes of this work order, we have assumed that one sample will be sufficient to characterize the TPHo-affected soil for treatment or disposal. If additional samples are required by the selected treatment or disposal facility, the costs associated with collection and analysis of the additional samples will be considered out of scope.

Soil samples will be collected as described in Task 5.

Task 7: Laboratory Analyses

Excavation Confirmation Samples. Confirmation soil samples collected from the excavation floor and sidewalls will be analyzed for TPHg and for the BTEX compounds using EPA-approved methods. Twenty percent of the soil samples will also be analyzed for TPHd and TPHo.

Aerated Soil. Soil samples collected from aeration beds will be analyzed for TPHg and for the BTEX compounds using EPA-approved methods. Twenty percent of the samples collected will additionally be analyzed for TPHd and TPHo.

Stockpiled Soil. Soil samples collected from stockpiled oil-affected soils will be analyzed for petroleum hydrocarbons and other chemicals based upon the disposal or treatment facility requirements. For the purposes of this work order, we have assumed that the following analyses will be required: total extractable petroleum hydrocarbons (TPHe), the BTEX compounds, VOCs, semivolatile organic compounds (SVOCs), reactivity, corrosivity, and ignitability (RCI), and the 17 California Code of Regulations Metals (CCR 17) by TTLC.

Task 8: Report Preparation

A report summarizing the remediation activities conducted at the Site will be prepared and submitted to the ACHCSA. The report will describe field activities and present analytical results for final confirmation soil samples collected from the excavation and from aeration beds. The report will include three to four figures and two to three tables. The report will include recommendations for managing petroleum hydrocarbon-affected ground water though the Regional Water Quality Control Board's proposed Non-Attainment Zone Policy.

Task 9: Project Management and Regulatory Interface

Under this task, Levine-Fricke has estimated the cost of project and staff scheduling and coordination; budget tracking; and interaction with agencies, DI, and the selected contractor.

As part of project management, we will be monitoring the contractor's progress and budget and Levine-Fricke's budget, to ensure that the work is progressing within the project time schedule and within these budgets. DI will be updated concerning the project's status on a regular basis. Modifications to the scope of work and/or the estimated budget presented in this work order will not be made without prior approval from DI.

During remediation, Levine•Fricke will respond to telephone calls from ACHCSA staff, and may accompany ACHCSA staff on site visits. If site conditions change, negotiations with ACHCSA staff may be necessary, to modify existing site cleanup goals or establish new cleanup goals. Following completion of remedial activities, regulatory interactions will be aimed at gaining approval for the Completion Report.

ESTIMATED SCHEDULE

Levine•Fricke can begin work on this project within one week after authorization from DI. We expect that the bid package will be available for review by DI within four weeks of authorization. Preconstruction activities can begin within two weeks of authorization. We expect to solicit bids within two weeks of DI's approval of the bid package and to select a contractor within three weeks. Remediation activities should start within two weeks of acceptance of the bid. We expect excavation to take seven work days. Partial backfilling will be accomplished within one week after final excavation confirmation sample test results are received. Successful aeration of the affected soil is expected to take six months. Backfilling will take a total of approximately five days.

Barring unforeseen difficulties, Levine•Fricke anticipates that a remedial activities report can be prepared and submitted for review by DI within six weeks after the field portion is finished.

OUT-OF-SCOPE SERVICES

If out-of-scope services are required, these costs will be billed on a time-and-materials basis consistent with Levine•Fricke's standard Schedule of Charges. Out-of-scope work will be performed only with prior written approval from an appropriately authorized DI representative.

ATTACHMENT 2

COST ESTIMATE

Cost Estimate					
95-159A					
Consulting Tasks		**Hours**	**Units**	**Each**	**Total**
Preparation of Work Plan (LF Task 1)					
Senior Engineer/Geologist:		2	hours	$ 85.00	$ 170.00
Project Engineer/Geologist:		8	hours	$ 70.00	$ 560.00
Cartographer:		4	hours	$ 45.00	$ 180.00
Technical Assistant		2	hours	$ 40.00	$ 80.00
		Subtotal			**$ 990.00**
Preconstruction Activities (LF Task 4)					
Senior Engineer/Geologist:		2	hours	$ 85.00	$ 170.00
Project Engineer/Geologist:		10	hours	$ 70.00	$ 700.00
Senior Staff Engineer/Geologist:		12	hours	$ 60.00	$ 720.00
Driller (Abandonment of Wells)		1	lump	$ 950.00	$ 950.00
Field Equipment (OVA, Water)		1	lump	$ 50.00	$ 50.00
Truck		1	lump	$ 40.00	$ 40.00
		Subtotal			**$ 2,630.00**
Construction Management (LF Task 5)					
Project Engineer/Geologist:		8	hours	$ 70.00	$ 560.00
Senior Staff Engineer/Geologist:		90	hours	$ 60.00	$ 5,400.00
Technician:		140	hours	$ 40.00	$ 5,600.00
Field Equipment (OVA, PetroFLAG, Water)		1	lump	$ 1,200.00	$ 1,200.00
Rings		1	lump	$ 680.00	$ 680.00
Truck		1	lump	$ 480.00	$ 480.00
		Subtotal			**$ 13,920.00**
Observation and Documentation of Soil Treatment (LF Task 6)					
Project Engineer/Geologist:		4	hours	$ 70.00	$ 280.00
Technician:		104	hours	$ 40.00	$ 4,160.00
Rings		1	lump	$ 440.00	$ 440.00
		Subtotal			**$ 4,880.00**
Laboratory Analysis (LF Task 7)					
TPH-G/BTXE:		195	sample	$ 50.00	$ 9,750.00
TPH-D/TPH-O		40	sample	$ 110.00	$ 4,400.00
TRPH:		1	sample	$ 40.00	$ 40.00
EPA 8240:		1	sample	$ 175.00	$ 175.00
EPA 8270:		1	sample	$ 250.00	$ 250.00
EPA 6010 (Metals):		1	sample	$ 175.00	$ 175.00
RCI:		1	sample	$ 161.00	$ 161.00
		Subtotal			**$ 14,951.00**
Report Preparation (LF Task 8)					
Senior Engineer/Geologist:		4	hours	$ 85.00	$ 340.00

Project Engineer/Geologist:		20	hours	$	70.00	$ 1,400.00
Senior Staff Engineer/Geologist:		20	hours	$	60.00	$ 1,200.00
Technical Assistant:		8	hours	$	40.00	$ 320.00
Cartographer:		6	hours	$	45.00	$ 270.00
	Subtotal					**$ 3,530.00**
Project Management and Regulatory Interface (LF Task 9)						
Cartographer:		6	hours	$	45.00	$ 270.00
Senior Engineer/Geologist:		4	hours	$	85.00	$ 340.00
Project Engineer/Geologist:		35	hours	$	70.00	$ 2,450.00
Senior Staff Engineer/Geologist:		10	hours	$	60.00	$ 600.00
	Subtotal					**$ 3,390.00**
	Total Consulting					**$ 44,426.00**

Construction Tasks	Hours	Units	Each	Total
Excavation				
Building Eight Foot Fence with Wood Slots	1	lump	$ 3,600.00	$ 3,600.00
Excavation Permit	1	lump	$ 500.00	$ 500.00
Mobilization	1	lump	$ 2,000.00	$ 2,000.00
Excavation and Stockpiling @ 500 cubic yard per day	7	days	$ 3,300.00	$ 23,100.00
	Subtotal			**$ 29,200.00**
Aeration				
Bay Area Air Quality Management Permit	1	lump	$ 1,000.00	$ 1,000.00
Mobilization/Demobilization/Cleanup	1	lump	$ 900.00	$ 900.00
Building Aeration Cell	1	lump	$ 3,200.00	$ 3,200.00
Tilling, Stockpiling, and Soil Movements	1	lump	$47,000.00	$ 47,000.00
	Subtotal			**$ 50,200.00**
Remediation of Oil and Grease Contaminated Soil				
Trucking	75	ton	$8.00	$ 600.00
Treatment and Recyling	75	ton	$ 26.00	$ 1,950.00
	Subtotal			**$ 2,550.00**
Backfilling Compaction				
Backfilling and Compaction	1	lump	$34,000.00	$ 34,000.00
Compaction Engineering Technician & NDG	64	hour	$ 45.00	$ 2,880.00
	Subtotal			**$ 36,880.00**
	Total Construction Estimate			**$ 119,780.00**
	Total Project Estimate			**$ 164,206.00**

Notes: This Cost Estimate is based on 3200 cubic yards of contaminated soil.
See AEI proposal No. 95-159A for scope of work.