# GRIBI Associates

Geological and Environmental Consulting Services

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# FACSIMILE TRANSMITTAL

Date:

JUNE 5, 2001

To:

**BARNEY CHAN** 

ALAMEDA COUNTY

ENVIRONMENTAL HEALTH

From:

JIM GRIBI

Phone:

(707)748-7743

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Number of pages, including this transmittal page

Barney,

Attached please find a workplan for the Miller Quality Meats site in Oakland. Evidently, there is a possible property transaction associated with this site, so there is apparently a need to implement this workplan quickly (isn't it always the case!). Accordingly, I have tentatively scheduled drilling with Vironex for next Friday, June 15, 2001.

Please give me a call if you have questions or comments.

Thanks!

## GRIBI Associates

Associates

Geological and Environmental Consulting Services

June 5, 2001

Alameda County Department of Environmental Health 1131 Harbor Bay Parkway, 2<sup>nd</sup> Floor Alameda, CA 94502

Attention:

Barney Chan

Subject:

Workplan to Conduct Soil and Groundwater Investigation

Miller Quality Meats UST Site

201 & 206 2nd Street, Oakland, California

GA Project No. 199-01-01

#### Ladies and Gentlemen:

Gribi Associates is pleased to submit this workplan on behalf of Miller Quality Meats for the underground storage tank (UST) site located at 201 and 206 2<sup>nd</sup> Street in Oakland, California (see Figure 1 and Figure 2). This workplan proposes the drilling and sampling of approximately eight soil borings at the site, to include four borings adjacent to each of the removed USTs. The goal of proposed soil boring activities will be to assess soil and groundwater conditions in an expected downgradient (southerly) groundwater flow direction from previously removed USTs in order to address regulatory site closure.

### SITE BACKGROUND

One 1,000-gallon bunker oil UST and one 500-gallon gasoline UST were removed by Scott Company on August 6, 1996. The bunker oil UST was located in the north 2<sup>nd</sup> Street sidewalk, adjacent to the Miller Quality Meats outlet store at 206 2<sup>nd</sup> Street. The 500-gallon gasoline UST was located in the west Jackson Street sidewalk, adjacent to the Miller Quality Meats offices and warehouse at 201 2<sup>nd</sup> Street. Groundwater was encountered in the excavation cavities at a depth of about 5.5 feet below ground surface.

One soil sample collected at about 5.0 feet in depth beneath the removed bunker oil UST contained 11,000 parts per million (ppm) of Total Petroleum Hydrocarbons as Diesel (TPH-D), with very low levels of some Polynuclear Aromatic Compounds (PNAs). One soil sample collected at about 5.5 feet in depth beneath the removed gasoline UST contained 1,700 ppm of Total Petroleum Hydrocarbons as Gasoline (TPH-G), 0.54 ppm of Benzene, and no detectable Methyl-t-butyl Ether (MTBE) or Total Lead.

On August 23, 1996, Scott Company conducted overexcavation and dewatering of the two UST excavation cavities. Approximately 25 cubic yards of soil was removed from the bunker oil UST cavity, and approximately 15 cubic yards of soil was removed from the gasoline UST cavity. This

soil was combined with soil excavated during UST removal activities, and a total of about 81 tons of soil was hauled to Bay Area Soils in Richmond, California for thermal desorption. Also, during overexcavation, approximately 750 gallons of groundwater was removed from the two UST cavities for offsite disposal. Following completion of overexcavation and sampling activities, the two excavation cavities were backfilled with clean imported sand and resurfaced to match existing surface grade.

Three sidewall soil samples were collected from the bunker UST overexcavation cavity. The easterly and northerly sidewall soil samples from this excavation cavity contained TPH-D concentrations of 5,700 ppm and 9,100 ppm, respectively. Four sidewall soil samples and one grab groundwater sample were collected from the gasoline UST overexcavation cavity. The westerly and southerly sidewall soil samples from this excavation cavity contained TPH-G concentrations of 310 ppm and 390 ppm, respectively. The grab groundwater sample from the gasoline UST overexcavation cavity contained 34 ppm of TPH-G and 0.071 ppm of Benzene.

#### PROJECT APPROACH

Even though elevated levels of TPH-D were encountered in soils adjacent to the former bunker oil UST, no significant concentrations of the PNAs were encountered in the soil samples. Similarly, while clevated levels of TPH-G were encountered in soil and grab groundwater samples from the former gasoline UST, concentrations of BTEX constituents in these samples were very low. These results suggest that releases associated with the two USTs are old and degraded, and that they do not pose a significant environmental or human health risk.

Alameda County Department of Environmental Health has requested a workplan to define the nature and extent of soil and groundwater hydrocarbon impacts at the site. Rather than installing permanent groundwater monitoring wells, which might be sited inappropriately given our lack of site definition, we accommend conducting a soil boring investigation using direct push coring quipment. This method allows for rapid assessment of soil and groundwater quality, with flexibility in the field to modify drilling locations based on field screening results. Using this method, we recommend drilling and sampling approximately four investigative soil borings at each of the tank locations for a sould of about eight borings.

#### WORKPLAN ELEMENTS

Based on the project approach summarized above, we propose to drill and sample approximately eight soil borings at the site using direct-push coring equipment. The proposed soil boring investigation will include the following workplan elements. All activities will be conducted in accordance with applicable local, State, and Federal guidelines and statutes.

### Prefield Activities

Prior to implementing this workplan, written approval will be obtained from the Alameda County Department of Environmental Health. Also, a soil boring installation permit will be obtained from

Alameda County Department of Public Works Zone, and an excavation permit will be obtained from the City of Oakland. In addition, 48-hour notification will be given to Alameda County Department of Environmental Health. Also, proposed boring locations will be marked with white paint, Underground Services Alert (USA) will be notified at least 48 hours prior to drilling, and a private underground utility locator will clear proposed boring locations. Prior to initiating drilling activities, a Site Safety Plan will be prepared, and a tailgate safety meeting will be conducted with all site workers.

Location of Borings

Proposed soil boring locations are shown on Figure 2. Based on the expected southerly groundwater flow beneath the site, the four borings for each UST location will be arrayed in a general southerly direction, with the first boring located near the former UST and subsequent borings located further southwest and southeast from the former UST. Note that while we have proposed a total of eight borings, we may wish to reduce the number of borings if field conditions warrant.

Drilling and Sampling of Investigative Soil Borings

The eight investigative soil borings will be drilled to a depth of about 12 feet below surface grade using direct-push hydraulically-driven soil coring equipment. This coring system allows for the retrieval of almost continuous soil cores, which are contained in a clear plastic acetate tube, nested inside a stainless steel core barrel. After the core barrel is brought to the surface and exposed, the core will be examined, logged, and field screened for hydrocarbons by a qualified Gribi Associates scientist using sight and smell. Following completion, the eight investigative borings will be grouted to match existing grade using a cement\sand slurry. Soil cuttings generated during this investigation will be stored onsite in sealed DOT-approved containers.



Subsurface soils will be sampled at approximately five-foot intervals starting at five feet in depth. After the sample and core barrel are raised to the surface, each sample was collected as follows: (1) The filled acetate tube will be exposed for visual examination; (2) The selected sample interval will be collected by cutting the sample and acetate plastic tubing to the desired length (typically about six inches); (3) The ends of the selected sample will be quickly wrapped with Teflon sheets or aluminum foil, capped with plastic end caps, labeled and wrapped tightly with tape; and (4) The sealed soil sample will be labeled and immediately placed in cold storage for transport to the analytical laboratory under formal chain-of-custody. All coring and sampling equipment will be thoroughly cleaned and decontaminated between each sample collection by triple rinsing first with water, then with dilute tri-sodium phosphate solution, and finally with distilled water. Cleaning rinseate will be contained onsite in a sealed drum pending laboratory results.

Following completion of soil sampling activities, 3/4 inch diameter Schedule 40 PVC well casing will be placed in each boring. Grab groundwater samples will then be collected from each of the borings using the clean stainless steel bailer as follows: (1) Laboratory-supplied containers will be completely filled directly from the bailer with a minimum of agitation; (2) After making sure that no air bubbles are present, each container will then be tightly sealed with a Teflon-lined septum; and

(3) Each container will then be labeled and placed in cold storage for transport to the analytical laboratory under formal chain-of-custody. All sampling equipment will be thoroughly cleaned and decontaminated between each sample collection by triple rinsing as described previously in this report.

Laboratory Analysis of Soil and Water Samples

Four soil samples and four grab groundwater samples from four the former gasoline UST borings will be analyzed for the following parameters:

> USEPA 8015M Total Petroleum Hydrocarbons as Gasoline (TPII-G) USEPA 8020 Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX) / +(8260 confirmation) USEPA 8020 Methyl-t-Butyl Ether (MTBE)

In addition, approximately four soil samples and four grab groundwater samples from four the former bunker oil UST borings will be analyzed for the following parameters:

USEPA 8015M Total Petroleum Hydrocarbons as Diesenviolor On China and sure in 3w mly

+ BTEX , run last and run in 3w mly

Also, two grab groundwater samples from the bunker oil UST borings will be analyzed for the following parameters:

### Pulsent in 3w

USEPA 8270/625 Polynuclear Aromatics (PNAs)

All analyses will be conducted by a California-certified analytical laboratory with five-day turn around on lab results.

Preparation of Summary Report

A report of findings will be prepared for submittal to Alameda County Department of Environmental Health. This report will describe all investigative methods and results, and will include tabulated laboratory analytical results, as well as laboratory reports and chain-of-custody records.

#### PROJECT SCHEDULE

Subject to your approval, Gribi Associates is prepared to begin the proposed workplan activities immediately. Based on our understanding of the project and subject to rig availability, we expect to complete the proposed investigation within two to three weeks following workplan approval.

We appreciate the opportunity to present this workplan for your review. Please contact us if you have questions or require additional information.

Very truly yours,

James E. Gribi Registered Geologist California No. 5843 No. 5843

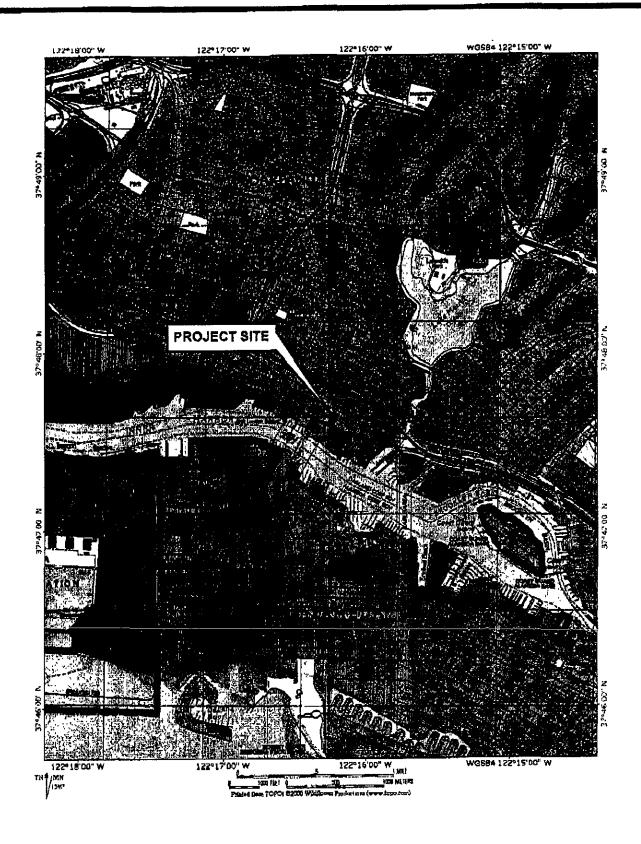
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c Mr. Bill McCarthy, Scott Company

### **FIGURES**



DESIGNED BY:	CHECKED BY:	
DRAWN BY: JG	SCALE;	
PROJECT NO: 199-	01-01	

### SITE VICINITY MAP

MILLER QUALITY MEATS 201 & 205 2ND STREET OAKLAND, CALIFORNIA DATE: 05/05/01

FIGURE: 1

**GRIBI** Associates

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