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December 18, 2006

ICES 6438

Mr. Jerry Wickham
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Alameda County Health Care Services Agency
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Subject: Work Plan

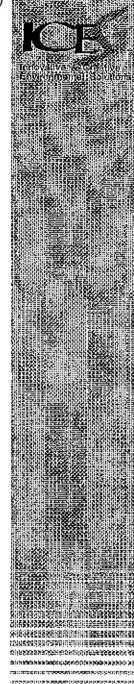
Meader's Dry Cleaning 800 West Grand Avenue Oakland, California

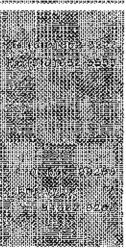
Dear Jerry:

Enclosed is the Work Plan for the proposed soil remedial activities at the former Meader's Dry Cleaning located at 800 West Grand Avenue in Oakland, California ("the Site").

This Work Plan focuses on overexcavation of the existing underground storage tank (UST) pit and covers the excavation and offsite disposal of petroleum-affected soil that was encountered during the removal of the USTs in 1989 and November 2006. Groundwater entering the excavation will also be removed.

The ultimate goal of the soil remedial activities is to obtain a No-Further-Action status for the known petroleum issues associated with the former USTs. The proposed remedial activities will be implemented in Spring 2007 after the winter rains.







Work Plan Meader's Dry Cleaning 800 West Grand Avenue Oakland, California December 18, 2006 Page 2

If you have any questions or comments concerning this Work Plan, please do not hesitate to contact Derek Wong or me.

Sincerely,

Principal king

Enclosure

cc: Mr. Greg Kelisky, ICG Mortgage Consulting Group, Inc

WORK PLAN

MEADER'S DRY CLEANING 800 WEST GRAND AVENUE OAKLAND, CALIFORNIA

December 18, 2006 ICES 6438

Prepared for

Mr. Greg Kelisky ICG Mortgage Consulting Group, Inc. 2627 Lombard Street San Francisco, California 94123





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December 18, 2006

ICES 6438

WORK PLAN

MEADER'S DRY CLEANING 800 WEST GRAND AVENUE OAKLAND, CALIFORNIA

1.0 INTRODUCTION

At the request of ICG Mortgage Consulting Group ("the Client"), Innovative and Creative Environmental Solutions (ICES) has prepared this Work Plan for the proposed soil remedial activities at the former Meader's Dry Cleaning located at 800 West Grand Avenue in Oakland, California ("the Site"; Figure 1).

This Work Plan focuses on overexcavation of the existing underground storage tank (UST) pit and covers the excavation and offsite disposal of petroleum-affected soil that was encountered during the removal of the USTs in 1989 and November 2006. Groundwater entering the excavation will also be removed.

The ultimate goal of the soil remedial activities is to obtain a No-Further-Action (NFA) status for the known petroleum issues associated with the former USTs. The proposed remedial activities will be implemented in Spring 2007 after the winter rains.

The cleanup levels for soil that were developed by the San Francisco Regional Water Quality Control Board for residential applications were adopted as the remedial goals for the Site (Table 1). Alameda County Health Care Services Agency (AC-HCSA) will be providing oversight for the remedial activities.

2.0 SITE DESCRIPTION

The Site consists of an approximately triangular shaped parcel located at the northwest corner of West Grand Avenue and West Street in Oakland, California. The Site is currently vacant.



3.0 BACKGROUND

A Phase I Environmental Site Assessment was performed by John Carver Consulting (JCC) of Oakland, California in February 2006. According to JCC's assessment, the Site had been occupied by a variety of dry cleaners, dyers, and rug cleaners until 2004. In 2004, the Site was vacant.

JCC's assessment also reported that three USTs (one 250-gailon and two 500-gallon USTs) removed in 1989 had leaked. Soil tests confirmed that the soil near the USTs had been contaminated primarily by total petroleum hydrocarbons (TPH) as gasoline (TPHg). Further investigations were required by local and state agencies but were not carried out.

In September 2006, an excavation was initiated to remove the petroleum-affected soil encountered within the area of the three former USTs. During the excavation activities, one 3,500-gallon Stoddard solvent UST was discovered beneath the sidewalk of West Street at the eastern portion of the Site.

The 3,500-gallon Stoddard solvent UST was removed from the Site in November 2006. During the removal of the UST, stained soil was observed and Stoddard solvent odors were detected in the surrounding soils. Two soil samples were collected at the east and west sides of the UST at two feet below the bottom of the UST. The soil samples were analyzed for TPH as diesel (TPHd) and Stoddard solvent (TPHss); benzene, toluene, ethylbenzene, and xylenes (BTEX); oxygenates; and total lead. Laboratory analytical results of the soil samples indicated non-detectable to low concentrations of TPHd, BTEX, oxygenates, and lead; and detectable concentrations of TPHss ranging from 1,100 mg/kg to 5,550 mg/kg.

Based on the collective results of the site investigations, it appears that the soil containing petroleum constituents above the remedial goals are limited to the immediate vicinity of the former USTs at the eastern portion of the Site. The approximate extent of the impacted area is shown in Figure 3.

4.0 REMEDIAL ACTIVITIES

The remedial activities are focused on the removal and disposal of the petroleum-affected soil; and removal and recycling of the groundwater entering the bottom of the excavation. The scope of work for the proposed remedial activities at the Site will consist of the following tasks:



Task 1: Site Health and Safety Plan

Task 2: Dust Control Measures

Task 3: Site Preparation
Task 4: Soil Removal
Task 5: Soil Disposal

Task 6: Groundwater Extraction Task 7: Groundwater Disposal

Task 8: Backfill and Compact Excavation

Task 9: Laboratory Analyses

Task 10: Remedial Action Implementation Report

These tasks are described in detail below:

4.1 Site Health and Safety Plan (HSP)

In accordance with Occupational Safety and Health Administration guidelines, the ICES Health and Safety Officer will develop a HSP. The HSP will include an analysis of potential hazards encountered by onsite workers conducting the proposed work, precautions to mitigate the identified hazards, and procedures to reduce the potential for offsite migration of contaminants during remedial activities.

The health and safety measures presented in the HSP will be implemented during soil and groundwater removal activities.

4.2 Dust Control Measures

The area to be excavated will initially be moisture-conditioned. The work area will also be lightly sprinkled during excavation activities (If required) to minimize airborne dust. A water hose with a spray nozzle will be used for water application in areas where access is limited.

Dust control measures will be increased (more frequent wetting and sprinkling) during the movement of dry materials and/or observation of visible dust. Equipment speed at the Site will be reduced in the event wetting with water is not effective in minimizing airborne dust. The remedial activities at the Site will be temporarily halted in the event reduction of equipment speed and soil wetting are not effective in minimizing airborne dust.

4.3 Site Preparation

Site preparation will include marking the approximate limits of the petroleum-affected soil (Figure 3), constructing a polyethylene-lined pad, and prewetting the



excavation area.

The petroleum-affected soil will be profiled with appropriate licensed disposal facilities using laboratory results of the previous soil samples. Profiling and acceptance of the petroleum-affected soil prior to excavation activities are necessary to expedite soil removal.

4.4 Soil Removal

Soil removal will be performed using a combination of excavators and front loaders. Petroleum-affected soil surrounding the former USTs will be removed and temporarily stockpiled on a polyethylene-lined pad or loaded directly onto dump trucks for offsite disposal. Clean overburden soil will be temporarily stockpiled adjacent to the excavation for use as backfill.

When the excavation approaches the marked limits, excavation sidewall and floor samples will be collected. One sidewall sample will be collected at approximately every 20-linear foot interval and every 10-vertical foot interval of excavation sidewall. Additionally, sidewall samples will be collected at any visually stained and/or odor impacted areas. One floor sample will be collected at approximately every 400 square feet of excavation floor area (equivalent to a square measuring approximately 20 feet by 20 feet). Soil sampling procedures presented in Appendix A will be followed.

Excavation activities will cease when soil samples collected from the sidewall and floor of the excavation contain residual petroleum constituent concentrations below the remedial goals. Additional excavation and resampling will be performed at locations where petroleum constituent concentrations exceed the remedial goals.

4.5 Soil Disposal

The petroleum-affected soil will be loaded onto dump trucks and tarped to isolate the petroleum-affected soil from the public and environment during transportation to the disposal facility. The wheels of the trucks will also be brushed prior to the trucks leaving the Site to minimize tracking of dirt onto public roadways. A waste manifest will be prepared for each truckload of petroleum-affected soil.

4.6 Groundwater Extraction

Groundwater entering the excavation will be removed using a sump pump and temporarily stored in the covered water tank. Groundwater samples will be collected from the water tank to be profiled with an appropriate licensed recycling/disposal facility. Groundwater sampling procedures presented in Appendix



A will be followed.

4.7 Groundwater Disposal

The extracted groundwater that is temporarily stored in the water tank will be transferred to vacuum trucks for transportation to the recycling/disposal facility. A waste manifest will be prepared for each truckload of groundwater.

4.8 Backfill and Compaction

When laboratory analytical results indicate that the excavation sidewall and floor samples contain residual petroleum constituent concentrations that are below the remedial goals, the excavation will be backfilled and compacted with the overburden and import fill soil.

4.9 Laboratory Analyses

The soil and groundwater samples will be sent to state-certified laboratory and selectively analyzed for:

- <> TPHg using EPA Method 5030/GCFID,
- <> TPHd and TPHss using EPA Method 8015M, and
- <> BTEX and MTBE using EPA Method 8020/604.

The samples will be analyzed on a 24-hour rush to normal one-week turnaround basis.

4.10 Remedial Action Implementation Report (RAIP)

This task will include evaluating the field and laboratory analytical data. A written report will be prepared following completion of soil remedial activities. The RAIP will present:

- field activities associated with excavation and disposal of the petroleum-affected soil, and extraction and disposal of the groundwater;
- sample collection;
- soil and groundwater sample results;
- documentation of sample transfer under chain-of-custody protocol, and groundwater transportation and disposal; and
- 5. conclusions regarding the remedial activities.

This report will be submitted to AC-HCSA approximately one to two weeks following



completion of the field activities and receipt of laboratory analytical results.

5.0 IMPLEMENTATION SCHEDULE

The approximate estimated duration and tentative schedule for the pending remedial activities is presented below. The estimated durations and tentative schedule do not include work delays due to unfavorable weather conditions, acts of God, labor strikes, and other events beyond the control of ICES and the Client.

5.1 Estimated Durations

ACTIVITY	ESTIMATED DURATION (working days)
Task 1: Implementation of the Site Health and Safety Plan	Concurrent with Tasks 2 through 7
Task 2: Dust Control Measures	Concurrent with Tasks 3, 4, and 6
Task 3; Site Preparation	5 - 7
Task 4: Soil Removal/Disposal	5 - 10
Task 5: Groundwater Extraction	Concurrent with Task 4
Task 6 Groundwater Disposal	Concurrent with Task 5
Task 7 Backfill and Compact Excavation	2 - 4
Task 8: Laboratory Analyses	Concurrent with Tasks 4 and 5
Task 9: Preparation and Submittal of RAIP	8 - 10



5.2 Tentative Schedule

The tentative schedule is based on approval of this Work Plan no later than February 2007.

Health and Safety Plan 2: Dust Control Measures Concurrent with Tasks 3 and 4 3; Site Preparation Apr 10 4: Soil Removal/Disposal Apr 24 5: Groundwater Extraction Concurrent with Task 4	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	ESTIMATED		
1: Implementation of the Site	ACTIVITY			
1: Implementation of the Site Health and Safety Plan 2: Dust Control Measures Concurrent with Tasks 2 through 7 Concurrent with Tasks 3 and 4 3: Site Preparation Apr 10 4: Soil Removal/Disposal Apr 24 5: Groundwater Extraction Concurrent with Task 4 6: Groundwater Disposal Concurrent with		DATE		
Health and Safety Plan 2: Dust Control Measures Concurrent with Tasks 3 and 4 3; Site Preparation Apr 10 4: Soil Removal/Disposal Apr 24 5: Groundwater Extraction Concurrent with Task 4 6: Groundwater Disposal Concurrent with		(2007)		
Health and Safety Plan 2: Dust Control Measures Concurrent with Tasks 3 and 4 3: Site Preparation Apr 10 4: Soil Removal/Disposal Apr 24 5: Groundwater Extraction Concurrent with Task 4 6: Groundwater Disposal Concurrent with	ask 1: Implementation of the Site	Concurrent with		
Tasks 3 and 4 3; Site Preparation Apr 10 4; Soil Removal/Disposal Apr 24 5; Groundwater Extraction Concurrent with Task 4 6; Groundwater Disposal Concurrent with	·	Tasks 2 through 7		
3; Site Preparation Apr 10 4; Soil Removal/Disposal Apr 24 5; Groundwater Extraction Concurrent with Task 4 6; Groundwater Disposal Concurrent with	ask 2: Dust Control Measures	Concurrent with		
4: Soil Removal/Disposal 5: Groundwater Extraction Concurrent with Task 4 6: Groundwater Disposal Concurrent with		Tasks 3 and 4		
5: Groundwater Extraction Concurrent with Task 4 6: Groundwater Disposal Concurrent with	ask 3; Site Preparation	Apr 10		
6: Groundwater Disposal Concurrent with	ask 4: Soil Removal/Disposal	Apr 24		
6: Groundwater Disposal Concurrent with	ask 5: Groundwater Extraction	Extraction Concurrent with		
O. O		Task 4		
	ask 6: Groundwater Disposal	Concurrent with		
		Task 5		
7: Backfill and Compact Excavation Apr 27	ask 7: Backfill and Compact Excavation	Apr 27		
8: Laboratory Analyses Concurrent with	ask 8: Laboratory Analyses	Concurrent with		
Tasks 4 and 5	asic of Easts actify Triangood			
9: Preparation and Submittal of May 11	ask 9: Preparation and Submittal of	May 11		
DAID	RAIP			

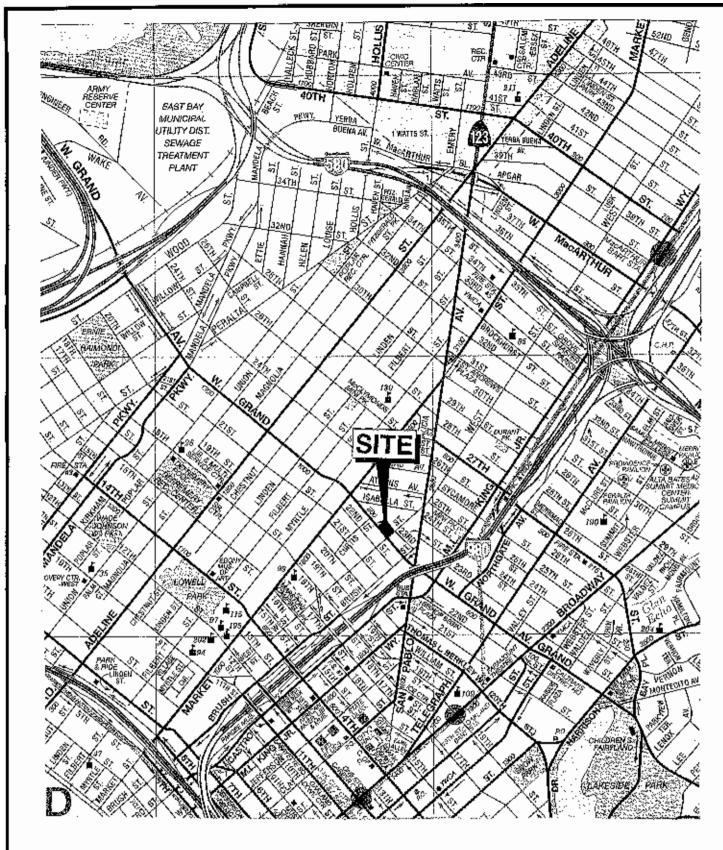


TABLE 1

REMEDIAL GOALS Meader's Dry Cleaning 800 West Grand Avenue Oakland, California

Analyte	Soil	
	(mg/kg)	
Gasoline	100 (1)	
Diesel	100 (1)	
Stoddard Solvent	100 (1)	
Benzene	0.044 (1)	
Toluene	2.9 (1)	
Ethylbenzene	3.3 (1)	
Xylenes	2.3 (1)	
MTBE	0.023 (1)	

^{1.} Remedial goal based on residential ESL (where groundwater is a current or potential source of drinking water).





MAP SOURCE : CSAA

Scale: 1": ± 1100"

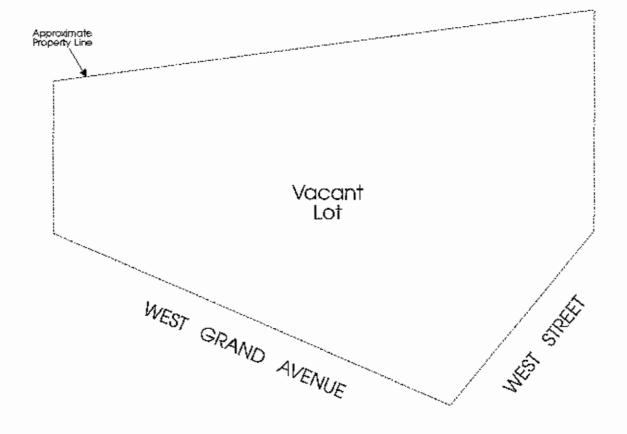
December 2006



SITE LOCATION

800 West Grand Avenue Oakland, California Figure

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Not-to-Scale

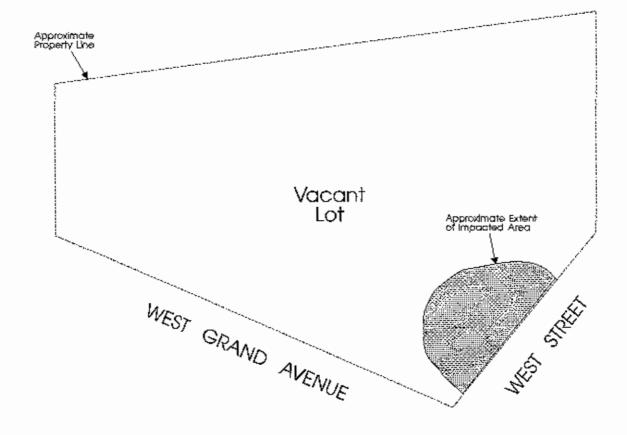
December 2006



SITE PLAN

800 West Grand Avenue Oakland, California Figure 2

Project 6438





EXPLANATION:



Proposed Excavation

Not-to-scale

December 2006



PROPOSED EXCAVATION

800 West Grand Avenue Oakland, California Figure 3

Project 6438



APPENDIX A

SAMPLING PROCEDURES



SAMPLING PROCEDURES

MEADER'S DRY CLEANING 800 WEST GRAND AVENUE OAKLAND, CALIFORNIA

Soil and groundwater sampling will be conducted to provide data to evaluate the extent of chemicals in the soil and groundwater at the Site. Soil and groundwater samples will be used for chemical analysis. The methodology used for this sampling purpose is discussed in the following sections.

Soil Sampling

Soil may be collected for chemical analysis by directly driving precleaned brass or stainless steel tubes into the soil to assess surface/subsurface level conditions. The samples must completely fill the tubes to minimize headspace and consequent loss of volatile contaminants, if present. These tubes shall be lined with aluminum foil or Teflon, capped with air-tight plastic lids, and taped around the caps to prevent possible moisture and chemical loss. Disturbed soil samples will be collected in 250-ml jars with taped, airtight lids. Each jar will be completely filled with soil to minimize headspace and consequent loss of volatile contaminants, if present.

After being sealed and labeled, soil samples will be maintained at a temperature of 4°C or lower using crushed ice during delivery to the laboratory and prior to analysis by the laboratory. Samples will be analyzed at the laboratory within specific holding times.

<u>Groundwater Sampling</u>

Groundwater samples will be collected manually (hand-balled) using Teflon bailers. The samples will be transferred into 40-ml VOA vials using a Teflon septa. After being sealed and labeled, the groundwater samples will be stored in a chilled cooler containing crushed ice to maintain the sample at 4°C for delivery to the laboratory. A field blank sample and duplicate will also be collected for quality control purposes. Strict chain-of-custody protocols will be followed in all phases of sample handling. Samples will be analyzed at the laboratory within specific holding times.

Documentation

The following information will be entered on the sample collection data form at the time of sampling:



- project name and number.
- sampler's name.
- time and date of sampling
- sampling location
- sampling method
- sample number
- sample condition (disturbed/undisturbed)
- laboratory analyses requested

Each sample will be packaged and transported appropriately, as described in the following protocol.

- Collect samples in appropriately-sized and prepared containers
- o Properly seal and package sample containers.
- o Fill out field sample log and COC and analyses request forms.
- Separate and place samples into coolers according to laboratory destination.
 Samples will be packaged so that the potential for shipping damage is minimized.
- o Chill samples to approximately 4°C. Crushed ice used in the coolers will be sealed in a plastic bag other than the one in which it was purchased.
- Seal a copy of the COC form inside a zip-lock bag. Use strapping tape to hold the packet on the inside of the cooler.
- Seal cooler with several strips of strapping tape.

DECONTAMINATION PROCEDURES

Equipment Decontamination

All equipment used for collecting samples during this investigation which might come into contact with contaminated material will be properly decontaminated before and after each use, and before initial use at the Site. This will be accomplished by washing with Alconox (a laboratory-grade detergent) and triple rinsing with deionized, distilled, or fresh water. Decontamination procedures will allow for disposal of cleaning fluids in the manner described below.



<u>Disposal Procedures</u>

The cleaning fluids will be collected and placed into appropriate containers to be analyzed and disposed by a licensed recycling facility. The non-hazardous waste, such as cardboard boxes, scrap paper, etc., will be disposed at a Class III landfill.

Sample Custody

In order to check and link each reported datum with its associated sample, sample custody and documentation procedures were established. Three separate, interlinking documentation and custody procedures--for field, office, and laboratory-can be described. The COC forms, which are central to these procedures, are attached to all samples and their associated data throughout the tracking process.

FIELD CUSTODY PROCEDURES

Field documentation will include sample labels, daily field activities logbook, and COC and analyses request forms. These documents will be filled out in indelible ink. Any corrections to the document will be made by drawing a line through the error and entering the correct value without obliterating the original entry. Persons correcting the original document will be expected to initial any changes made. The documents are as follows:

Sample Labels

Labels will be used to identify samples. The label is made of a waterproof material with a water-resistant adhesive. The sample label, to be filled out using waterproof ink, will contain at least the following information: sampler's name, sample number, date, time, location, and preservative used.

Field Log of Daily Activities

A field log will be used to record daily field activities. The project manager is responsible for making sure that a copy of the field log is sent to the project file as soon as each sampling round is completed. Field log entries will include the following:

- o field worker's name:
- date and time data is entered;
- location of activity;
- personnel present on-site;
- sampling and measurement methods;
- total number of samples collected;



- sample numbers;
- sample distribution (laboratory);
- field observations, comments;
- sample preservation methods used, if any.

Chain-of-Custody (and Analysis Request) Form

The COC form is filled out for groups of samples collected at a given location on a given day. The COC will be filled out in duplicate form, and will accompany, every shipment of samples to the respective analytical laboratories.

One copy will accompany the samples to the analytical laboratory. The second copy is kept in the ICES QA/QC file. The COC makes provision for documenting sample integrity and the identity of any persons involved in sample transfer. Other information entered on the COC includes:

- project name and number;
- project location;
- sample number;
- sampler's/recorder's signature;
- o date and time of collection;
- collection location;
- sample type;
- number of sample containers for each sample;
- analyses requested;
- o results of laboratory's inspection of the condition of each sample and the presence of headspace, upon receipt by the laboratory;
- inclusive dates of possession;
- name of person receiving the sample;
- laboratory sample number;
- date of sample receipt; and
- address of analytical laboratory,