



March 7, 2002

ATC Project No. 75.75015.0001

Mr. Barney Chan Alameda County Environmental Health Agency 1131 Harbor Bay Parkway Alameda, CA 94502 # 2200/157

MARY 2 THE

Workplan for
Underground Storage Tank Removal
Hertz Service Center
1 Airport Drive
Oakland, CA

Dear Mr. Chan:

This workplan addresses the removal of one 12,000-gallon fiberglass gasoline underground storage tank (UST), one 500-gallon waste oil UST, two existing fuel dispensers and limited impacted soil and groundwater from the area around the fuel dispenser island (see attached site plan produced by Clearwater Group, Inc.).

#### SCOPE OF WORK

## TASK 1: Field Preparation and Coordination

Permits to remove the two USTs will be obtained from the Oakland Fire Department (OFD) and the Bay Area Air Quality Management District prior to conducting any site work. The UST removal work will be coordinated with these agencies, as well as the Alameda County Environmental Health Agency, and Port of Oakland officials. A notification to abandon one monitoring well (MW-4) currently located in the area scheduled for over-excavation, will be processed through the Alameda Public Works Department. An actual monitoring well abandonment permit is not required.

## TASK 2: Underground Storage Tank Removal

All of the product has been previously removed from the storage tanks. Any remaining sludge will be removed from the gasoline UST and the waste oil UST into 55-gallon drums for proper disposal.

ATC's removal contractor will obtain an Underground Services Alert (USA) utility clearance before excavating and removing the USTs and associated concrete from the site. The USTs will be screened for explosion hazards using a Lower Explosion Limit/Oxygen (LEL/O²) meter and ventilated as necessary. Dry ice will be used to purge remaining vapors within the tank. Additionally, approximately ninety (90) feet of associated piping, fuel dispensers and vent lines will be drained of residual product if any, and removed. An ATC representative will be on site to observe and document the tank removal procedures. At the request of Hertz, the resulting excavations will not be backfilled but left open pending limited remedial actions and future site renovation. A light-duty plastic construction fence will be installed along

the perimeter of excavations as an additional precaution along with the existing fencing around the facility.

## TASK 3: Sampling and Analysis

ATC will collect confirmation soil and/or grab groundwater samples from each UST excavation as necessary. The samples will be analyzed as directed by the OFD, however, the samples will likely be analyzed as follows:

## Gasoline UST:

- Total Petroleum Hydrocarbons as Gasoline (TPHg), Method 8015
- Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX compounds) and Methyl Tertiary Butyl Ether (MTBE), Method 8021

## Waste Oil UST:

- TPH, Method 8015
- Oil and Grease, Method 413.1
- Polynuclear Aromatic Hydrocarbons (PAHs), Method 8270
- Volatile Organic Compounds (VOCs), Method 8260
- Polychlorinated biphenyls, Method 8081
- LUFT Metals, Method 6010

All sample locations and analytical methods will be directed by the OFD.

## Pipe Trenches and Fuel Islands:

ATC will collect soil samples from the resulting excavation of piping from the gasoline UST to the dispensers and below the dispenser islands. The OFD may require that one sample be analyzed for every 20 linear feet of piping. ATC assumes approximately 90-feet of product line trenching. Therefore, ATC anticipates collecting four soil samples to be analyzed for the following:

- TPHg, Method 8015
- BTEX and MTBE, Method 8021

### TASK 4: UST Closure Report

ATC will prepare a UST removal report for submittal to the OFD, and other concerned agencies. The report will include a copy of the UST removal permit, UST disposal manifests and certificates of destruction, waste disposal manifests (if waste is generated), analytical laboratory results and recommendations for additional remediation and/or assessment if necessary.

# TASK 5: Limited Soil Excavation and Disposal

In addition to removing the gasoline UST, associated piping and dispenser island, ATC will also conduct limited soil excavation beneath and around the existing fuel dispenser island. An unauthorized gasoline release has been documented in this area, and based on historical groundwater quality data collected from on site monitor wells, the source area appears to be fuel piping associated with the fuel dispenser island.



ATC will remove impacted soil in the immediate area of the gasoline dispensers (see attached site map). The anticipated size of the excavation is approximately 20 feet x 40 feet x 5 to 8 feet deep, oriented in an approximately east-west direction (see attached site map). Excavated soil will be temporarily stockpiled on site pending disposal profiling. Stockpiled soil will be placed on, and covered with, plastic sheeting until removed from the site. If practical, ATC will segregate excavated soil to minimize disposal costs.

ATC does not anticipate that shoring of the excavation sidewalls will be necessary to complete this scope of work. We also assume that monitoring well MW-4 will be removed during excavation activities since field measurement indicates the well is only 12 feet deep. Actual well construction details for MW-4 are apparently not available. Complete removal of the well casing can be accomplished using the excavating equipment. The Alameda County Public Works Agency has been contacted regarding the proposed well abandonment methodology and they do not have any objections.

The resultant excavation will be enclosed with plastic orange fencing after remediation activities have been completed. The excavation will be backfilled according to local building code requirements by the Hertz Corporation at a later date.

#### TASK 6: Limited Groundwater Treatment

ATC will treat contaminated groundwater in the open excavation (beneath fuel dispenser island) using chemical oxidation (hydrogen peroxide).

The pH of the water in the tank pit will be adjusted using sulfuric acid to a range suitable for the reaction (3 to 5). An iron sulfate solution (approximately 100 parts per million) will be added to the water in the tank pit followed by a 3 to 10 percent hydrogen peroxide solution. Enough peroxide will be added to oxidize approximately 5 percent more petroleum mass than exists in the hole at the time of the addition. The total volume of peroxide to be added will depend upon the amount of water in the excavation and the concentration of petroleum in the water. However, at this time ATC estimates that approximately 100 gallons of iron sulfate and 300 gallons of hydrogen peroxide will be required to treat the impacted groundwater in the tank pit. Excess peroxide will create an oxygen source to aid in biological treatment.

One grab groundwater sample will be collected prior to groundwater treatment, and one grab groundwater sample will be collected after treatment to evaluate remediation effectiveness. The groundwater samples will be analyzed for TPHg, BTEX compounds and MTBE

#### TASK 7: Soil and Groundwater Remediation Report

ATC will complete a Soil and Groundwater Remediation Report for submittal to the Office of the Alameda County Environmental Health LOP. The report will include a description of work completed in the area of monitoring well MW-4, copies of waste manifests, photographic documentation, and analytical results and recommendations for additional remediation and/or assessment if necessary.

Respectfully submitted, ATC ASSOCIATES INC.

John Love, RG

Senior Project Manager

Attachments



## Attachments

Cc: Fred Weaver, Hertz Corporation

Mr. Dale Clettke, Port of Oakland

Mr. Kieth Mathews, Oakland Fire Department

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