



# FERO ENGINEERING

ENVIRONMENTAL ENGINEERING & CONSULTING

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October 30, 2007

Ms Kattya Batres  
County Los Angeles  
Department of Public Works  
Environmental Programs Division  
Post Office Box 1460  
Alhambra, California 91802-1460

via e-mail

Modified Site Assessment Work Plan  
**Closure Permit Number: A397722, File No. EP-1 014533-037714**  
**Industry Pacific, Inc.**  
14710 Nelson Avenue, City of Industry, California 91744

Fero Environmental Engineering, Inc. (Fero) submits this work plan to conduct additional site assessment work at the subject site consistent with the County of Los Angeles Department of Public Works (LADPW) letter dated September 10, 2007 and with telephone conversations with LADPW related to the letter. The work is being conducted on behalf of the subject site owner; Industry Pacific, Inc., P.O. Box 92650, City of Industry, California 91715.

## BACKGROUND

On January 29, 2004, under Closure Permit Registration Number 397722 and in accordance with the County of Los Angeles Fire Department requirements, one 6,000 gallon fiberglass underground gasoline tank and one 6,000 gallon fiberglass underground diesel tank located at 14710 Nelson Avenue in the City of Industry were removed and properly disposed. Details regarding the underground storage tank removals were included in the previously submitted Tank Closure Report dated February 17, 2004.

On January 29, 2004, upon removal of the referenced tanks, one soil sample (2B) was collected from three feet below the invert elevation of the north end of the diesel tank, one soil sample (2A) was collected from three feet below the invert elevation of the south end of the diesel tank, one soil sample (1B) was collected from three feet below the invert elevation of the south end of the gasoline tank, one soil sample (1A) was collected from three feet below the invert elevation of the north end of the gasoline tank, one soil sample (2C) was collected from two feet below the invert elevation of the diesel dispenser and one soil sample (SP1) was collected from east end of the soil stock pile. The

gasoline dispenser was located over the south end of the diesel tank and formerly about four feet of lateral piping ran from the diesel tank south to the diesel dispenser location, therefore no additional samples were required or obtained. A scaled site plan, which shows the locations of the tanks, dispenser and the sampling points, is enclosed as Figure 1.

The soil samples collected from the ends of the diesel tank contained benzene, MTBE and TBA above acceptable soil screening levels. Copies of the laboratory reports and a discussion of the results were provided previously and are therefore contained herein by reference only.

Pursuant to a work plan approved by the LACDPW in their letter dated April 5, 2005, on May 27, 2005, Fero Environmental Engineering, Inc. (Fero) conducted five exploratory borings to 40 feet below grade (fbg) proximate to the former tank locations. One boring (FB5) was conducted through the former tank pit over the former gasoline dispenser location proximate to former sample location 2B which previously exhibited the highest concentrations of Benzene, MTBE and TBA. Four additional step-out borings were conducted around the former tank pit (Borings FB1-FB4) at locations specified in the work plan. Figure 1 indicates the boring locations.

Results of this subsequent investigation were provided in Fero's report dated June 28, 2005 and are therefore included herein by reference only. The soil samples indicated that the only organic that extended below 15 fbg was MTBE. All of the borings contained MTBE to at least 30 fbg. Only two of the borings contained extremely low levels of MTBE at their termini, FB3 and FB5, which contained MTBE at 0.005 and 0.006 mg/Kg, respectively. Based on the levels of MTBE in the site soils, the LACDPW requested additional site assessment to determine the vertical and lateral extent of the organics. This workplan provides the proposed assessment to address the LACDPW concerns.

## **REGIONAL & SITE GEOLOGY**

The project site is located in the Transverse Ranges Province. Most of the province is mountainous; many of the higher ridges and peaks rise above 5,000 feet, and the highest mountains rise to elevations of more than 10,000 feet. The backbone of the province, in its central and eastern parts, is formed by the San Gabriel and San Bernardino Mountains. The Province extends eastward about 275 miles from Point Arguello into the Mojave Desert. The site is more specifically located in the southeastern San Gabriel Valley. (1, 2) During the process of excavating soils to obtain the tank invert sample, native soils were observed to consist generally of silty fine to medium sands (SM).

## **GROUNDWATER**

To determine the depth to groundwater in the vicinity of the study site, Fero accessed the files of the Hydraulics Section of the Los Angeles County Department of Public Works (DPW). Well No. 3036

is located approximately 1/4 mile north of the study site. The most recent monitoring data from this well indicated a depth to water of 101 feet on November 17, 2003. (3)

## PROPOSED INVESTIGATIONS

Consistent with the referenced LADPW letter, dated September 10, 2007, which requires additional assessment of the vertical and lateral extent of the identified organics, Fero, Environmental Engineering, Inc. (Fero) will conduct five additional exploratory borings to 80 fbg or to groundwater, whichever is encountered first. One of the borings will be conducted proximate to former boring FB5, the former boring with the highest MTBE at depth, and the remaining four will be conducted 15 feet further from the pit than the previous borings as indicated on Figure 1.

Fero will retain an appropriately certified and licensed drilling contractor (BC2 Environmental Corp. or equivalent) to conduct the borings. A copy of Fero's standard soil sampling protocol is included as Attachment A. A copy of the Health and Safety Plan is included in Attachment B. The borings will be conducted using a CME75 drill rig fitted with 8" diameter hollow stem augers. Soil sampling for analysis and lithologic logging will begin at 5 fbg in the step out borings and will start at 45 fbg in the boring conducted proximate to former FB5. The sampling will continue every 5 feet to the terminus of each boring and soil samples will be collected for analytical testing using EPA Method 5035 sampling techniques. The borings will be logged by a Fero geologist or engineer and will be visually classified in the field in accordance with the Unified Soil Classification System (USCS) or American Society for Testing and Materials (ASTM) including; moisture, consistency, texture, and soil characteristics. In the event groundwater is encountered before 80 fbg, a groundwater sample will be collected from each boring using hydropunch technology.

Consistent with the directive, all soil and groundwater samples collected will be analyzed for TPHg and TPHd by EPA Method 8015m, BTEX, MTBE and fuel oxygenates by EPA Method 8260B. EPA Method 5035 soil sample collection and preservation guidelines will be utilized. Soil samples will be properly labeled, stored in a cooler at a temperature near 4° C, and delivered at the end of the day under proper chain of custody documentation to Enviro-Chem, Inc., a State of California certified laboratory. Soil cuttings from the boring operations will be retained onsite in properly labeled, DOT approved drums until laboratory results are available and proper treatment/disposal options for the soils are determined.

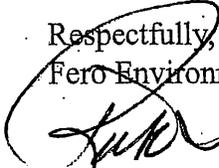
A report will be submitted to the LACDPW which describes the field operations and assessment techniques, presents the results, evaluates the potential risks associated with any gasoline constituents in the soil, and requests closure of the site as appropriate.

Ms Katty Batres  
LACDPW

October 30, 2007

Should you have any questions regarding the content of this site assessment work plan, please do not hesitate to call the undersigned at (714) 256-2737.

Respectfully,  
Fero Environmental Engineering, Inc.



Rick L. Fero,  
President



RLF: sif  
[443WkPlnStepOut]

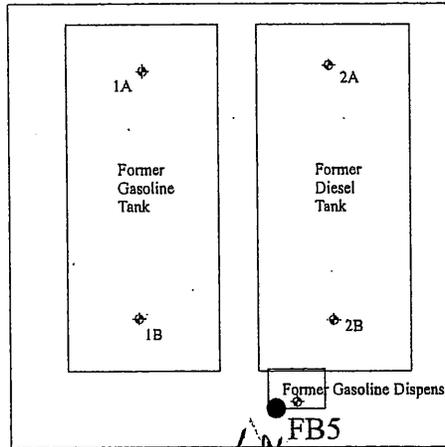
150' to NW corner  
of property

1" = 10'

318' to top of curb  
@ Nelson Avenue

● FB6

◆ FB1



◆ FB2

● FB7

● FB8

◆ FB3

◆ FB4

● FB9

Legend

- ◆ - Former Soil Sampling Locations
- - Proposed Soil Sampling Locations



**FERO ENGINEERING**  
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**Soil Sampling Locations**  
**Lane Stanton Vance**  
**Lumber Company**

14710 Nelson Avenue  
City of Industry, CA

## References

- 1) Geological Survey Professional Paper 420-A, 1965.
- 2) Geological Survey Professional Paper 1360, 1985.
- 3) Los Angeles County Department of Public Works, Hydrologic Records.

Attachment A

Standard Soil Sampling Protocol

## EXPLORATORY BORINGS & SOIL SAMPLING PROTOCOL

The following procedures are followed by Fero Engineering when performing exploratory borings and soil sampling utilizing a mobile drill rig equipped with hollow-stem augers, a direct push Geo-Probe rig or a three inch diameter hand operated stainless steel auger and drive sampler. The protocol directly follows or is excerpted from the California Regional Water Quality Control Board, Workplan Requirements for Initial Subsurface Engineering/Geologic Soil Investigation (Well Investigation Program), the State Water Resources Control Board, "LUFT" Field Manual, or the EPA document SW-846, Test Methods for Evaluating Solid Waste.

1. Borings shall be conducted to the desired sampling depth using either continuous flight, hollow-stem augers, direct push Geo-Probes or a three inch diameter hand operated stainless steel auger.
2. Discrete, relatively undisturbed soil samples shall be obtained using either a split spoon sampler which accommodates two to three sampling tubes or a hand operated drive sampler fitted with appropriate tubes:

Brass Tubes: 2 1/2 x 6 inches or 1 1/2 x 6 inches - for all organics, wet chemistry, physical, and metals analysis, excluding copper and zinc.

Stainless Steel Tubes: 2 1/2 x 6 inches or 1 1/2 x 6 inches - for all organics, wet chemistry, physical, and metals analysis, excluding chrome and nickel.

Plastic Tubes: 1 1/4 x 6 inches - for all organics, wet chemistry, physical, and metals analysis. Plastic tubes are for use with the Geo-Probe rig.

3. In loose soil, a sand trap is used with the hollow-stem auguring equipment to prevent soil from falling out of the sampler.
4. Upon termination, each boring shall be sealed from the bottom to grade with Bentonite grout using the tremie method as necessary.
5. The soil sampler is driven 12 to 18 inches at each sampling. Generally, the lowest sampling tube is retained for laboratory analysis. The other tubes are used either as back-up or for various analyses conducted in the field.
6. Each retained soil sample shall be secured with Teflon liners, tight fitting plastic caps, and black vinyl electrical tape. The samples shall be labeled, logged-in, and retained on-site in an ice chest containing Blue Ice or equivalent at or about 4 degrees Celsius until delivered to a State Department of Health Services certified laboratory for analysis. Samples shall be delivered to the laboratory on the same day or as soon after sampling as is practical. Undelivered samples shall be archived or stored in secure sample storage at or about 4 degrees Celsius.

7. Sample tube labels shall be marked in indelible ink with the following information:

Job Number  
Sample Number  
Boring Number and Depth  
Sampling Date & Time  
Sampler's Initials  
Tests to be Performed (if known in the field)

8. All samples shall be delivered to the laboratory in compliance with chain-of-custody procedures, accompanied by appropriate chain-of-custody documentation which indicates times, dates, and persons-in-charge from the point of sampling to release at the laboratory.
9. All auger flights and Geo-Probe rods shall be steam cleaned and all hand augers shall be cleaned with a brush and Alconox or similar surfactant, rinsed in tap water, and final rinsed with deionized water prior to use and between borings.
10. Soil sampling tubes shall be cleaned with a brush and Alconox or similar surfactant, rinsed in tap water, final rinsed with deionized water, and delivered to the site in a sealed container to preclude contamination prior to use. Soiled sampling tubes may be reused on-site by following the previous cleaning procedures in the field.
11. Following removal of sampling tubes from the sampler, the sampler shall be completely disassembled and cleaned with a brush and Alconox or similar surfactant, rinsed in tap water, final rinsed with deionized water (if necessary) and reassembled with the appropriate number of clean tubes.
12. All borings shall be logged to provide characteristics of unconsolidated material per Unified Soil Classification System as well as all other appropriate information.
13. A California registered geologist or engineer or a certified engineering geologist with five years soils or Hydrogeologic experience shall direct or conduct the investigations and properly sign off the final report.
14. Soil cuttings and non-reusable drilling wastes shall be temporarily impounded on-site (observing applicable regulations related to waste storage) either in sealable labeled 55 gallon drums or in bulk storage in properly prepared areas, depending on the status of the site, and secured from random access. Custody of the drums, cuttings, and wastes shall remain with the client at all times.
15. Should analytical testing indicate the wastes constitute a "hazardous waste"; the client shall be so notified and advised of the lawful means of disposal or treatment of the wastes.

Attachment B

Health and Safety Plan