



## Tetra Tech EM Inc.

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March 10, 1999

Mr. Barney M. Chan  
Alameda County Health Care Services Agency  
Environmental Health Services  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577

**Subject: Work Plans for Additional Site Characterization at 2301 East 12<sup>th</sup> Street,  
744 East 12<sup>th</sup> Street, and 1200 20<sup>th</sup> Avenue, Oakland, California**

Dear Mr. Chan:

Tetra Tech EM Inc. (TtEMI) is pleased to submit the work plans for additional site characterization at three of J.W. Silveira Company's properties at 2301 East 12<sup>th</sup> Street, 744 East 12<sup>th</sup> Street, and 1200 20<sup>th</sup> Avenue, in Oakland, California. These work plans follow the previously approved work plans submitted by Epigene International that were dated October 16, 1998. After discussions with you, changes to the previously approved work plans have been made and are incorporated into the enclosed work plans.

After you have reviewed the work plans, TtEMI would like to meet with you at your convenience to discuss the projects. TtEMI would also like to review any previous reports that you may have for the 3 sites.

If you have any questions or wish to discuss this further, please feel free to contact me at (415) 222-8316 or Roy Glenn at (415) 222-8283.

Sincerely,

Hal Dawson  
Project Manager

Enclosures

cc: Virginia Tracey, J.W. Silveira  
Roy Glenn, TtEMI  
file

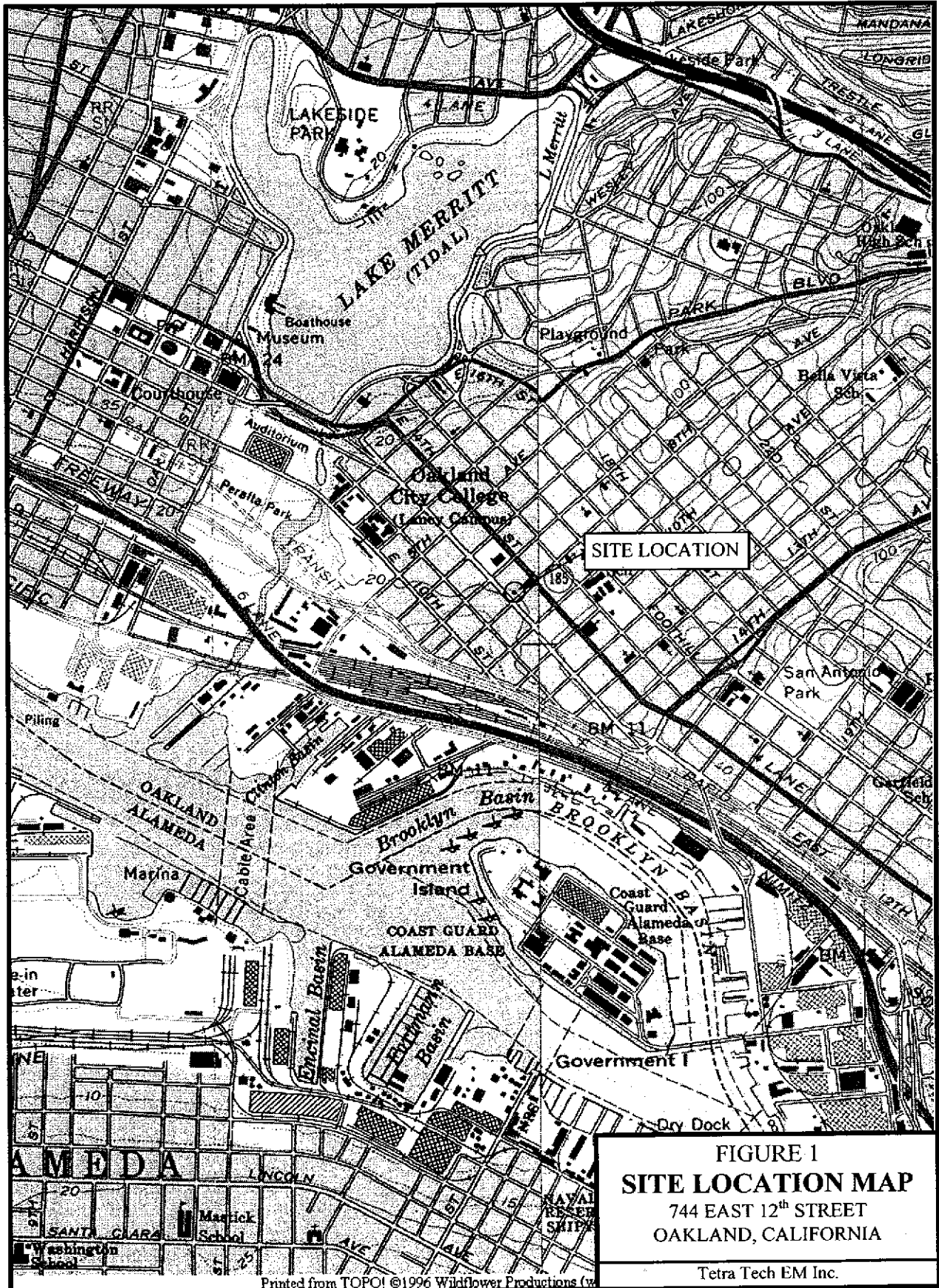
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**WORK PLAN FOR ADDITIONAL SITE CHARACTERIZATION  
FOR SITE LOCATED AT  
744 EAST 12<sup>th</sup> STREET, OAKLAND**

This work plan discusses the additional site characterization which includes soil and groundwater sampling at the site. The site is located at the northeast corner of the intersection of East 12<sup>th</sup> Street and 8<sup>th</sup> Avenue in Oakland, California. A location map is presented in Figure 1.

A site plan which shows the proposed subsurface investigations is presented in Figure 2. The work plan consists of the following tasks:

- 1) Installation of three monitoring wells at the locations shown on Figure 1. The wells will be 2-inches in diameter. The depth of each well will extend at least 10 feet into the saturated zone. Construction of the wells will follow Country of Alameda County Public Works Agency requirements. Soil samples will be collected from the vadose zone of each well and analyzed for total petroleum hydrocarbons as gasoline (TPH-g), benzene, toluene, ethyl-benzene, and xylene (BTEX), and methyl tertiary-butyl ether (MTBE). All chemical compounds will be shipped off-site for analysis at a State-certified laboratory.
- 2) A hydropunch boring will be placed on the old piping and a soil sample will be collected from just below the pipe during the drilling. The boring will extend at least 5 feet into the saturated zone. A soil sample from the vadose zone and a groundwater sample will be collected and analyzed for TPH-g, BTEX, and MTBE.
- 3) A shallow soil boring will be drilled in the location of the former gas pump as shown on Figure 2. The depth of the soil boring will be approximately 10 feet below ground surface. A soil sample will be collected in native soil from just below the piping to the pump. The soil sample will be analyzed for TPH-g, BTEX, and MTBE.
- 4) At least 72 hours after the installation of the wells are completed, each well will be developed, purged, then sampled. The groundwater samples from each well will be analyzed for TPH-g, BTEX, and MTBE.
- 5) The elevations to the top of the casing for each well will be established. Depth to water measurements will be made to allow for calculation of the groundwater gradient at the site.
- 6) A summary report will be prepared to document the results of the soil and groundwater investigation. The results of the investigation will also be discussed with the ACHCSA. Based on that meeting, recommendations will be prepared to address any future requirements for the site.



**FIGURE 1**  
**SITE LOCATION MAP**

744 EAST 12<sup>th</sup> STREET  
OAKLAND, CALIFORNIA

Tetra Tech EM Inc.

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