BASELINE

ENVIRONMENTAL CONSULTING

11 November 1986
S-593B

KAISER ENGINEERS, Inc.
AC Transit Project Office
508 16th Street
Oakland, CA 94621

Attn: Mr. Steve Whitehead

Subject: Corrective Action Plan for AC Transit Facility, Emeryville

Dear Steve:

Enclosed please find a Corrective Action Plan for tank removal and soil excavation at the AC Transit Facility in Emeryville.

If you should have any questions please do not hesitate to contact us.

Sincerely,

Yane Nordhav
Principal

YN/ae
Enclosure

BASELINE

CORRECTIVE ACTION PLAN FOR UNDERGROUND TANK AND SOIL REMOVAL AC TRANSIT FACILITY

EMERYVILLE, CALIFORNIA

BACKGROUND

Kaiser Engineers, Inc. is acting as construction managers for construction activities at the AC Transit maintenance facility in Emeryville at the intersection of San Pablo Avenue and 45th Street. The contractor for the construction is Roebbelen Engineering. BASELINE has been retained by Kaiser Engineers to collect soil samples at the facility and to coordinate the preparation of this Corrective Action Plan.

The AC Transit facility contains five underground fuel storage tanks, proposed for abandonment as part of the remodeling of the facility. Prior to removal of the tanks, BASELINE collected soil samples immediately upgradient and downgradient of the tank locations, as well as between the tanks. In the upgradient direction, no fuels were identified above detection limits; and in the downgradient direction, total hydrocarbons in concentrations up to 82,000 mg/kg, were detected at a depth of 7.5 feet, in the unsaturated zone. The fill material between the tanks was tested at a depth of 5.5 feet for total hydrocarbons, and the results showed a concentration of 71,000 mg/kg of total hydrocarbons (the sampling methods and results were submitted in reports to Kaiser Engineers, Inc., dated 1 and 22 October 1986).

In response to these analytical results, BASELINE collected additional samples at several locations to further define the extent of contamination downgradient from the tanks. The samples were collected immediately above the saturated zone. Of the seven samples analyzed for total hydrocarbons, the concentrations ranged from 14 mg/kg to 390 mg/kg (Figure 1 shows all sampling locations).

On the basis of the soil sampling activities at the site, BASELINE recommended that the underground tanks be removed and that soil materials containing in excess of 1,000 mg/kg of total hydrocarbons be removed, handled, and disposed of as hazardous waste. All work will be conducted in conformance with the requirements of Alameda County, Regional Water Quality Control Board, Department of Health Services, and the Bay Area Air Quality Management District.

CORRECTIVE MEASURES

Tank Removal

The underground fuel storage tanks will be removed by Erickson, Inc. of Richmond, California. The tanks will be transported to Erickson's Richmond facility where they will be cleaned in accordance with applicable regulations for handling of hazardous materials.

Soil Excavation

Soils containing in excess of 1,000 mg/kg of total hydrocarbons will be excavated and transpoted to a Class I Waste Management Unit. The soil will be manifested and transported by hazardous waste haulers (Appendix A contains a list of all contractors involved in the excavation, hauling, and disposal of tanks and soils from the site).

Determination of excavation cessation will be based on the analytical results from soil samples collected from the excavation and analyzed for total hydrocarbon. A mobile laboratory, supplied by Anatec Laboratories and equipped with a gas chromatograph, will be on-site during excavation activities for immediate analysis of soil sampales. When the concentration of hydrocarbons are below 1,000 mg/kg in the soil samples, hauling of materials to a Class I Waste Management Unit will be discontinued. The vertical limit of excavation will be the saturated zone.

From the final excavation, five soil samples will be collected and analyzed for diesel, gasoline, benzene, toluene, xylene, and lead.

Groundwater Monitoring

After excavation has been completed, one groundwater monitoring well will be installed downgradient from the former tank locations, as close to the tank locations as possible, considering on-site maintenance operations and structures. The well will be installed in accordance with

the recommendations of the Regional Water Quality Control Board, San Francisco Bay Region Guidelines for Addressing Fuel Leaks (September 1985). The well will be checked for floating product and then the groundwater will be sampled. Sampling will occur after five well volumes of water have been evacuated. The water sample will be analyzed for high and low boiling point hydrocarbons, BTX, and lead. Pending results of the initial sampling event, routine sampling of the well will occur and/or additional wells will be installed.

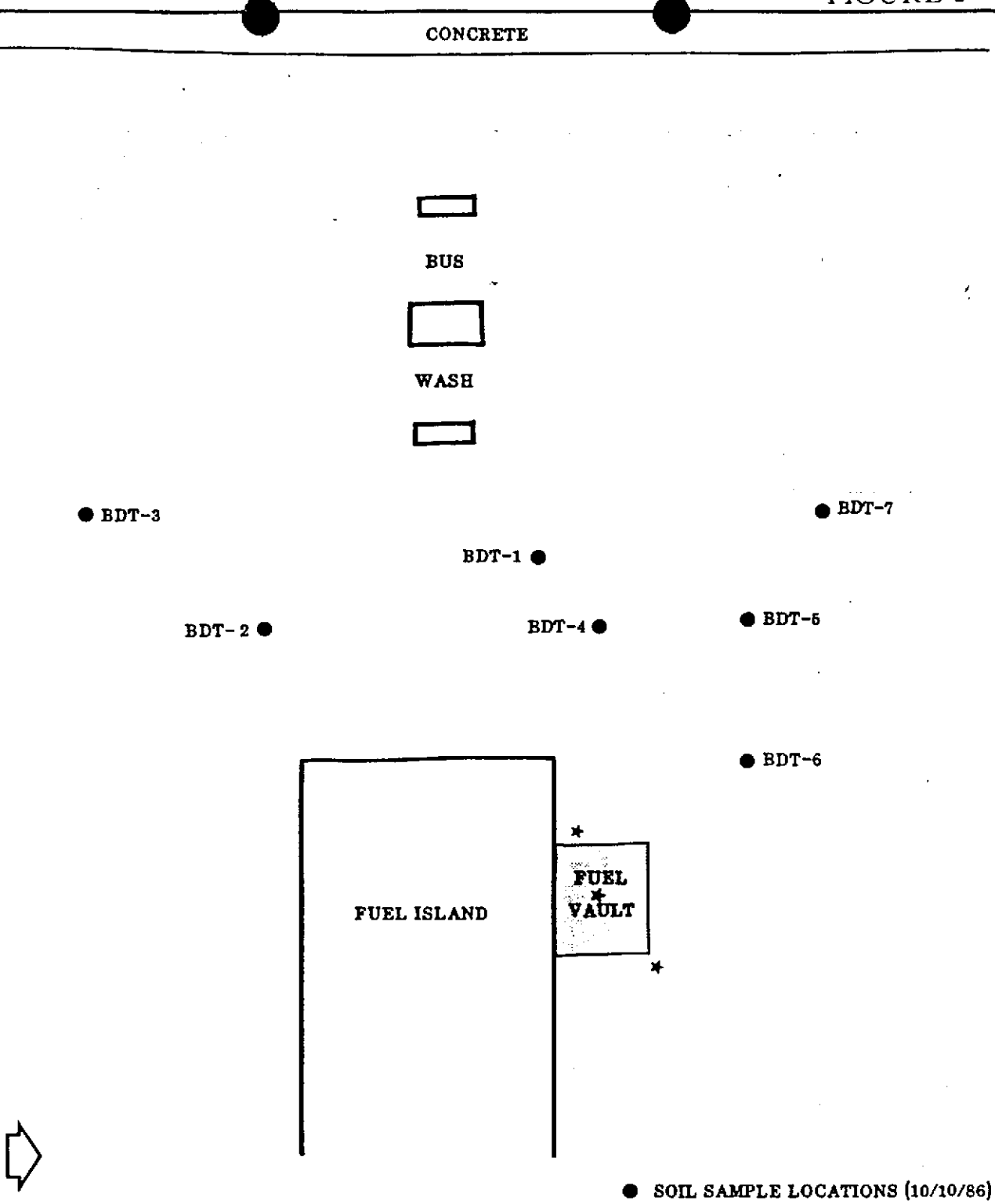
Site Safety

Workers safety on the site during soil excavation activities will be monitored by the general contractor's consultant in accordance with the procedures outlined in the attachment to this plan.

Regulatory Agency Notification

Kaiser Engineers, Inc. has contacted the Alameda County Department of Environmental Health, the Emeryville Fire Department, the California Department of Health Services, the Regional Water Quality Control Board, San Francisco Bay Region, and the Bay Area Air Quality Management District regarding the results of previous soil sampling activities on the site and the intended corrective measures.

FIGURE 1



AC TRANSIT FACILITY
Emeryville, California

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