

**KAISER
ENGINEERS**

KAISER ENGINEERS (CALIFORNIA) CORPORATION
C/O AC TRANSIT
508-16TH STREET
OAKLAND, CALIFORNIA 94612
(415) 891-4888

November 11, 1986

Alameda County Health Agency
Public Health Service
Division of Environmental Health
470-27th Street Room 322
Oakland, CA 94612

Attention: Mr. Rafat A. Shahid, P. E.

Re: AC Transit Emeryville Facility
Storage and Contaminated Soils Removal Plan

Dear Mr. Shahid:

Transmitted herewith is one copy of the contaminated soils and tank removal work plan for your information and use. As discussed with Ted Gerow on November 7, 1986, the removal of the contaminated material has begun today.

Should you have any questions on this work plan please feel free to call Dave Corn at 415-653-7240 or Mr. Hal Nahler at 415-891-4888. I may be reached at 415-632-0574.

Sincerely,



Steve Whitehead
Construction Manager

DC/cp
enc.

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ENVIRONMENTAL HEALTH
ADMINISTRATION

CONTRACTOR'S DATA LISTING

General Contractor:

Roebbelen Engineering, Inc.
1241 Hawks Flight Ct.
El Dorado Hills, CA 95630
Contractor's License #458230
Contact Person --
Office: Mark Present
Field: Ted Kemp
Phone Number --
Office: (916) 355-8500
Field: (415) 653-1429

Excavation Subcontractor:

Rios Grading, Inc.
2450 Stanwell Dr., Suite 240
Concord, CA 94520
Contractor's License #418823
Contact Person -- Joseph Sabad
Phone Number -- (415) 676-4112

Tank Removal & Contaminated
Soils Subcontractor:

Erickson, Inc.
255 Park Blvd.
Richmond, CA 94801
Contractor's License #A168067
EPA Number CAD009466392
Contact Person -- Richard Lodge
Phone Number -- (415) 235-1393

Material Transporter:

Rodgers Trucks & Equipment, Inc.
Post Office Box 5570
S. San Francisco, CA 94083
EPA Number CAD048624910
Contact Person -- Flip Minsky
Phone Number -- (415) 589-7015
24 Hour Phone -- (415) 589-7614

Disposal Site:

Chemical Waste Management, Inc.
35251 Old Skyline Blvd.
Kettleman Hills, CA 93239
EPA Number CAT00064617
Phone Number -- (209) 386-9711

Contractor Industrial
Safety Consultant:

J.H. Kleinfelder & Associates
1901 Olympic Blvd.
Walnut Creek, CA 94596
Contact Person -- John Boll, M.S., C.S.E.
Phone Number -- (415) 938-5610

WORK PLAN
FOR
REMOVAL OF UNDERGROUND STORAGE TANKS
AND CONTAMINATED SOILS
AT
AC TRANSIT YARD
EMERYVILLE, CA

BACKGROUND: Raymond Kaiser Engineers had directed Roebbelen Engineering to remove and dispose of the existing five underground storage tanks and the surrounding contaminated materials. RKE has retained overall construction management responsibilities, has reserved the rights to approve or reject all portions of the Work Plan, and have elected to retain directly the Environmental Consultant, who will be responsible for ensuring that all Class I material is removed from the project site. Roebbelen Engineering, Inc. has been tasked with obtaining all required permits and fees; excavation; removal, decontamination and disposal of the tanks; stockpiling, loading, transporting and disposal of contaminated soils; and development and enforcement of a Site Safety Plan.

ASSIGNMENT OF RESPONSIBILITIES: Roebbelen Engineering, as the General Contractor, will be directly accountable to RKE and AC Transit for project accomplishment and coordination of subcontractors retained by Roebbelen Engineering. Rios Grading will conduct all earth moving operations and will be responsible for loading of tanks onto flatbed trucks supplied by Erickson. Erickson shall decontaminate and dispose of the tanks as scrape. They shall likewise obtain all required permits, coordinate transportation of Class I material and handle disposal arrangements with the disposal site. Rodgers Trucks and Equipment Company shall transport the contaminated material from the source to the disposal site. Chemical Waste Management shall receive and store the contaminated material in an EPA approved disposal site. J.H. Kleinfelder shall perform an Air Monitoring Program for onsite worker safety. Should the need arise, they will stop work and develop and implement a Respiratory Protection Plan.

WORK SEQUENCE: Excavation of storage tanks shall commence on November 11, 1986. The environmental consultant will take soil samples and process the samples onsite in a mobile laboratory. The Industrial Safety Consultant will take air samples and report on his findings (see Air Monitoring Program). Worker protective measures will be implemented should the Industrial Hygienist so determine their need.

On the first day, work shall be limited to excavation, such that tanks may be prepared for removal and for determining the adequacy of work procedures. Soil stockpiling shall be conducted so as to minimize contamination of surrounding areas. Weather protection will be provided.

An initial truckload of contaminated soil will be sent to the disposal site to arrive not later than noon, on November 12, 1986. Upon arrival, the contents will be tested and disposal acceptance criteria confirmed. Upon receipt of disposal site acceptance, additional material will be transported from the source to this disposal site until all Class I material has been removed. Determination that removal has been successfully accomplished shall be by the Environmental Consultant.

Work Plan for Removal of
Underground Storage Tanks &
Contaminated Soils
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Storage tanks will be removed from the ground and rendered free of dirt and other debris that would dislodge in transit. All but one vent shall be plugged and the tank shall be inerted with dry ice at the rate of 15#/1,000 gallons of tank capacity. Tanks shall then be loaded onto flatbed trucks and transported to Erickson's yard in Richmond. Upon arrival they will be flushed with hot water, an access way shall be made by cold cutting and any solid material will be removed. After inspection and issuance of a gas free certification, the tank will be transported to Levins Metal Corporation for disposal as scrape. All materials removed from the tank and used in decontamination efforts will be transported to an EPA approved facility for disposal.

AIR MONITORING PROGRAM: A qualified Sampling Technician shall conduct a field safety surveillance and report all discrepancies directly to Roebbelen Engineering. As part of this surveillance, he will conduct an Air Monitoring Program.

An initial survey shall be conducted to establish background levels of organic vapors prior to commencing operations. During operations, a HNu Organic Vapor Analyzer will monitor air at the breathing zone for the worst case worker. Should vapor levels exceed the measured background levels by 0-5 ppm, an Air Purifying Respirator Program will be initiated that complies with the EPA guidelines for Personnel Protective Safety, volume 165.2. The lowest part of the excavation shall also be monitored for explosive gases using a combustible gas indicator. Emission mitigation measures, such as loading up wind and covering soil stockpiles will, be enforced.