



**CERTIFIED
ENVIRONMENTAL
CONSULTING INC.** 007/11/92 0111: 2/3

July 13, 1992

REF: 157-808.195

Ms. Susan Hugo
Alameda County Health Agency
Department of Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621
(510) 271-4320
(510) 569-4757 FAX

SUBJECT: Revisions to Work Plan for Monitoring Well Installation and Remediation at Hill Lumber Company, 1259 Brighton Avenue, Albany, CA 94706

Dear Ms. Hugo:

Certified Environmental Consulting Inc. (CEC) is pleased to submit the following revisions to our Work Plan for the above site dated June 17, 1992. The changes in this revision essentially consist of aerating hydrocarbon-contaminated soils on site rather than hauling to a Class III landfill. The revised pages, comprising pages 5 and 6 of the Work Plan, are enclosed. Also enclosed is a copy of our notification to the Bay Area Air Quality Management District.

We are looking forward to working with you on this project.

Sincerely,

Tom Suggs
Hydrogeologist

for Stanley L. Klemetson, Ph.D., P.E.
Vice President

Enclosures

cc: Ralph Hill, Hill Lumber Company
Tom Callaghan, RWQCB

SITE REMEDIATION

Site remediation will consist essentially of removing shallow, hydrocarbon-contaminated soil which may be a continuing source of groundwater contamination and extracting a small amount (approximately 4,000 gallons) of groundwater from the new excavation. Remediation will be conducted in a step-wise fashion to allow for changes in the scope of work as additional information is gathered. The overall project is outlined below.

Notifications

The following notifications will take place before beginning work.

1. Work Plan will be submitted to Alameda County Health Agency (ACHA). Drilling permits also will be obtained from ACHA.
2. Area to be excavated will be marked with white paint and Underground Service Alert, (800) 227-2600, will be notified at least one week prior to commencement of work.
3. Susan Hugo, Alameda County Health Agency, (510) 271-4530, will be notified at least 72 hours prior to commencement of site work.
5. The Bay Area Air Quality Management District (BAAQMD) will be notified in writing no less than five days before excavation is to begin. The BAAMQD will be notified by telephone at least 24 hours prior to spreading contaminated soil.
4. Hill Lumber, (510) 589-3030, will be notified at least 48 hours prior to commencement of site work.

Task 1 - Soil Excavation

Approximately 111 cubic yards of soil will be removed from the excavations located in the sidewalk in front of the shop and in the loading dock area. CEC will oversee excavation and will field-test contamination levels at the limits of the excavation using a photoionizing organic vapor meter (OVM). Discrete soil samples will also be collected at the limits of the excavation and analyzed on site in a mobile lab.

We expect that pea gravel from Sunol will be used for backfill material up to 0.5 ft. below grade. Construction mix will be used placed from about 0.5 ft. below grade to the surface as directed by the City of Albany. In the sidewalk, backfill will be compacted to at least 90 % optimum density, with verification testing performed by an independent geotechnical firm.

Soil treatment. Excavation spoils will aerated on site in accordance with Regulation 8, Rule 40 of the Bay Area Air Quality Management District Rules and Regulations dated

December 11, 1990. Although one soil sample containing 3,700 mg/Kg TPH-G was collected immediately below the 1000-gallon gasoline tank in 1991, we suspect that this represents an isolated "hot spot" and that less than 10 cubic yards of soil with this degree of contamination will be excavated. The average concentration of total hydrocarbons in excavated soils will most likely be much less than 100 mg/Kg.

Soils will be spread to a thickness of about 0.3 ft. and aerated in the paved parking lot on the northwest corner of the property. This will require approximately 10,000 sq. ft. of aerating surface or about 7% of the open lot owned by Hill Lumber. Aerating soils will be resampled after about 90 days. If, after 90 days, concentrations have not been reduced to nearly nondetectible levels, soils will be inoculated with hydrocarbon-consuming bacteria and nutrients. Because precipitation is very unlikely during the months of July through October while soil is aerating, runoff into creeks or stormdrains is unlikely to occur.

Laboratory analysis. Because the contamination is fuel leakage from a gasoline tank, samples will be analyzed for TPH-G/BTEX (CGFID 5030 and EPA SW-846 Method 8015/8020 Modified) and total lead by ICP.

Verification soil sampling. Because groundwater is expected in the excavations, soil samples will be collected in the capillary fringe in each of the excavation sidewalls, or as directed by the county regulator, to confirm that all contaminated soil has been removed. In the event water is not encountered, samples will be collected about 2.0 ft. below the respective tank inverts in each of the excavation sidewalls. Samples will be analyzed for TPH-G/BTEX and total lead.

Task 2 - Groundwater Extraction

The excavation will be dewatered during construction to facilitate work. We expect that the total volume of water pumped will not exceed 4000 gallons. When excavation is completed, the pit will be allowed to recharge once and a pit water sample will be collected using a Teflon bailer. The sample will be analyzed for TPH-G/BTEX and total lead.

Wastewater treatment and disposal. Water pumped from the pit will be stored in a Baker tank. An initial sample of tank water will be collected and analyzed for TPH-G/BTEX, total lead, and flash point ignitability. Approval will be requested from the East Bay Municipal Utilities District (EBMUD) wastewater treatment works for a one-time discharge of wastewater. If treatment is required, a microbial/nutrient mixture will be added to the tank to consume hydrocarbons biologically. Wastewater will be resampled and analyzed after one week to verify that hydrocarbon levels are acceptable to EBMUD. If further treatment is required to meet EBMUD standards, water may be passed through a carbon adsorption canister.