Encl-9

DR Ellgas

ENVIRON

August 10, 1990

Mr. Ron Mayo
President
Curoco Steel Systems
536 Cleveland Avenue
Albany, CA 94710

Re: Soil Remediation Cost Estimates
Contract No. 03-1332D

Dear Ron:

At your request, I am preparing this summary of estimated costs for soil remediation at your facility in Albany. These estimates are based on our understanding of the only option currently available for disposal of hazardous soils. We recommend that other options for onsite soil treatment and disposal should be considered.

REQUIREMENT FOR SOIL REMEDIATION

Soils have been sampled to 4 feet depth throughout the unpaved areas on the southwest, west and northwest portions of your property. Samples have also been taken outside the western property boundary toward the railroad tracks. Analytical results indicate the following:

- Hazardous levels of chromium and zinc, as defined by the California Department of health Services (DHS), are in the top 6 inches to 1 foot of soil in portions of the southern 50 feet of the unpaved area (south of the concrete pad);

- Levels of lead are in your soils that can leach into ground water at concentrations that are unacceptable to DHS without remediation. These levels exist throughout all unpaved areas to a depth of 4-feet, but especially in those areas south of the end of the pavement on the west side of your building.

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- Leaving these soils in place without satisfying regulatory agency requirements will be unacceptable in a property transfer. Also, because of previous written cleanup requirements of the Regional Water Quality Control Board (RWQCB), Curoco will be subjected to enforcement action at some time unless soil cleanup is carried out.

CURRENT OPTION FOR SOIL DISPOSAL

The only available option for soil remediation without onsite treatment is excavating soils and disposing them at a Class I landfill.

VOLUME OF SOIL REQUIRING REMEDIATION

The maximum quantity of soil that will need to be remediated is 550 cubic yards. This includes a maximum of 90 cubic yards of hazardous soils and 460 cubic yards of soil with unacceptable soluble levels of lead. This volume was calculated by considering all unpaved soils to a depth of 4-feet, extending 10-feet beyond your western property boundary and between the north and south property boundaries. This is a maximum volume because it is very likely that ground water will be encountered before 4-feet depth in the western portion of the excavation. We propose not to have saturated soils excavated, although increasingly moist soils will be excavated. By sizing the hazardous soils area more precisely, a probable volume estimate would be 25 cubic yards of hazardous soils and 380 cubic yards of soils with unacceptable soluble levels of lead (total soil volume: 405 cubic yards).

COST ESTIMATES FOR CURRENT OPTION

For excavating soils and disposing them at a Class I landfill, the soils would currently have to be treated at the Class I facility before disposal. The transportation and disposal costs are $498 per ton of soil. Assuming approximately 1.5 tons per cubic yard (wet density) for excavated soil, the total probable disposal cost would be about $303,000. Excavation, clean imported backfill and compaction total about $100 per cubic yard; thus, the total probable cost for this option would be around $345,000. The maximum cost for this option, based on 550 cubic yards of soil needing to be remediated, would be $466,000.

As you can see, other soil remediation options will need to be considered to minimize costs. I would be glad to discuss these options with you in more detail; please call at your convenience.

Sincerely,

Robert A. Ellgas

Robert A. Ellgas, Ph.D.
Project Manager

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