



WZI INC.

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August 31, 1993

Mr. Brian P. Oliva, REHS
Alameda County Health Care Services
Department of Environmental Health
Hazardous Materials Division
80 Swan Way, Room 200
Oakland, California 94621

**Re: Interim Project Report and Request for Modification of Workplan
Schropp Ranch, Agriculture Industries
3880 Mountain House Road, Byron, California**

Dear Brian:

The purpose of this Interim Project Report is to request written permission from Alameda County to place hydrocarbon remediated soil back in the completed portion of the excavation for fill. The soil site assessment is still underway, but the soil contamination extends to the north off the Schropp property.

To date, WZI has removed over 10,000 cubic yards of gasoline-contaminated soil from the subsurface at the project. The majority of this contaminated soil was removed below the water table. WZI was unable to remove all hydrocarbon contaminated soil from the subsurface due to engineering limitations associated with the shallow groundwater. Maximum concentrations left in place were less than 0.010 ppm for BTEX and less than 1 ppm total petroleum hydrocarbons -gasoline. The presence of very low concentrations of BTEX and TPH-Gasoline in soil identified in some samples may be the result of statistical error or isolated occurrences of higher initial concentrations of hydrocarbons.

The local ground water has been contaminated by the gasoline-contaminated soil. Ground water at the site is estimated to be at a depth of 20 to 25 feet below ground surface depending on the time of year and amount of water agriculture uses in the area. Based on sampling required for the California Regional Water Quality Control Board-Central Valley Region (CRWQCB-CVR) Temporary Waste Discharge Permit, the local ground water concentrations of TPH-G range from 1 to 10 ppm.

Almost all results of the stockpiled soil are below detection limits for EPA Test Methods 8020 and 5030/8015M. Composite samples were taken from three points representing average remediated soil for a total volume of 150 cubic yards per sample (50 yards per individual sampling point) in accordance with both LUFT Manual and EPA Guidelines (SW-846) for representative sampling criteria which utilizes systematic sampling of a sampling grid using sampling points selected randomly.

On-site remediation of the low-level hydrocarbon contaminated soil by on-site aeration according to the approved workplan has been successful. Maximum and Average concentrations of the first two piles of remediated soil are indicated below:

	Remediated Soil Concentration in Parts Per Million				
	<u>Benzene</u>	<u>Toluene</u>	<u>Ethylbenzene</u>	<u>Xylene</u>	<u>TPH-Gasoline</u>
Pile 1					
Max.	ND	ND	ND	ND	ND
Average	ND	ND	ND	ND	ND
Pile 2					
Maximum	ND	.003	ND	.046	3.1
Average	ND	.001	ND	.001	1.0

The LUFT General Risk Appraisal criteria for cumulative acceptable levels of soil contamination, where annual rainfall is 14 inches are:

**Proposed Cumulative Remediated Soil Hydrocarbon Limits
For Placement as Excavation Backfill (Parts per million)**

<u>Distance above ground water</u>	<u>Limits (ppm)</u>				
	<u>B</u>	<u>T</u>	<u>E</u>	<u>X</u>	<u>TPH-G</u>
0-5'	ND	ND	ND	ND	ND
5-10'	ND	2	10	10	10
10-15'	ND	4	30	20	10
15-20'	ND	10	50	40	10

WZI has placed clean soil as backfill in the zone immediately above the groundwater table to approximately 8 feet above the water table throughout the excavation. Therefore, remediated soil is acceptable as backfill from the zone 8 feet above the groundwater table to ground surface when the cumulative contamination levels of the total thickness above ground water are less than the above limits using the LUFT General Risk Appraisal. Actual analytical results of stockpiled soil sampling, as summarized in this document, are an order of magnitude smaller, easily meeting the acceptability criteria.

Your written approval of the backfill plan is requested. It is our goal to finish the backfill of the excavation as soon as possible and proceed with the ground water investigation.

If you have any questions regarding this proposed amendment to the approved workplan please do not hesitate to contact me at (209) 339-8791 or (805) 326-1112. Thank you very much.

Very truly yours,


Stephen G. Muir
Manager, Geotechnical Services

SGM/er

cc: Dick Jones, Agriculture Industries