



**Weber, Hayes & Associates**  
Hydrogeology and Environmental Engineering  
120 Westgate Dr., Watsonville, CA 95076  
(831) 722-3580 (831) 662-3100  
Fax: (831) 722-1159

*Reviews 12/13/01*  
*Amir*

## FAX TRANSMISSION

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Alameda County Environmental Health Services  
**c/o: Mr. Amir Gholami, REHS**  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California  
94502 - 6577

**FAXED December 7, 2001**

FAX #: (510) 337-9335

**RE: Addendum to Interim Remedial Action at 19984 Meekland Ave., Hayward, Ca.**

Mr. Gholami,

*Since your approval (June 26, 2001) of our workplan (June 18, 2001), to conduct an Interim Remedial Action on the property at 19984 Meekland Avenue., Hayward, new site information has been obtained. Due to lithology and contamination encountered in the landfill acceptance borings (DP-1, DP-2) and delineation boring (DP-1), the depth of contamination is greater than originally anticipated, and therefore source removal for the Interim Remedial Action should go deeper than what was proposed in the initial workplan.*

*The initial workplan states excavation operations should go to 25 feet bgs. However upon drilling the landfill acceptance borings and reviewing the delineation investigation borings, it appears that a significant pod of contamination exist in a sand unit at a depth of 34 to 39 feet bgs. Upon drilling the landfill acceptance borings in October, it was discovered that this was the zone that was transporting and smearing the contamination and creating the large groundwater plume that the site is experiencing. WHA proposes to remove the pod of contamination which was not originally identified especially since this deeper sand zone appears to be the remaining source of contamination.*

*WHA proposes to remove source materials by excavating to 40 feet with large diameter augers (6-foot diameter, Case Pacific Drillers) instead of using a excavator. Backhoe-style excavation operations would have been adequate if the excavation was shallow, however due to the depth of contamination encountered (40 feet) excavation operations would require substantial benching, and shoring. Benching and shoring would be difficult, expensive, and generate additional days required to perform the work.*

*By using large diameter augers WHA will be able to remove the contaminated materials initially identified to a depth of 25 feet, as well as remove the contamination which lies at 34-39 feet bgs which appears to the most significant portion of contamination.*

*WHA still plans to add Oxygen Releasing Compound (ORC) into the saturated zone directly after source removal as proposed in our initial workplan. This compound helps*

bioremediation by releasing oxygen into the groundwater and lasts approximately six months.

Our intent remains the same - **excavation removal of the source material**. What has changed is the depth of the contamination, amount of volume to be removed, the techniques used to remove it. Other parts of the workplan are not changed.

Because large diameter augers holes must have a few feet of spacing between them to prevent collapse, some soil will not be excavated. This will result in leaving some contaminated soil in place, in the gaps between vertical auger holes (see attached diagram). However, the installation of ORC into the subsurface will help degrade any remaining hydrocarbon contamination. Proposed auger spacing and a cross-section showing depth of auger shafts are presented on the attached Figure - Large Diameter Auger Source Removal Footprint Map.

We do not need to increase the budget for the scope of work. However the costs for the work will be in different categories (more cost for excavation, less for soil disposal) and therefore this addendum should be reviewed by the State UST fund for their approval as well.

Please review the new scope of work for the Interim Remedial Action at 19984 Meekland Avenue, Hayward and reply with a letter of approval.

We will begin work after receiving Alameda County, and State UST Fund approval of this addendum and cost breakdown. Work is tentatively scheduled for late December, 2001.

The UST Fund Claim No. is 3377, and claimant is Jerry Harbert.

Thank you for your patience and cooperation on this job

Sincerely,

Aaron Bierman  
Weber, Hayes and Associates  
Staff Geologist  
cell: (831) 334-2237  
office:(831) 722-3580

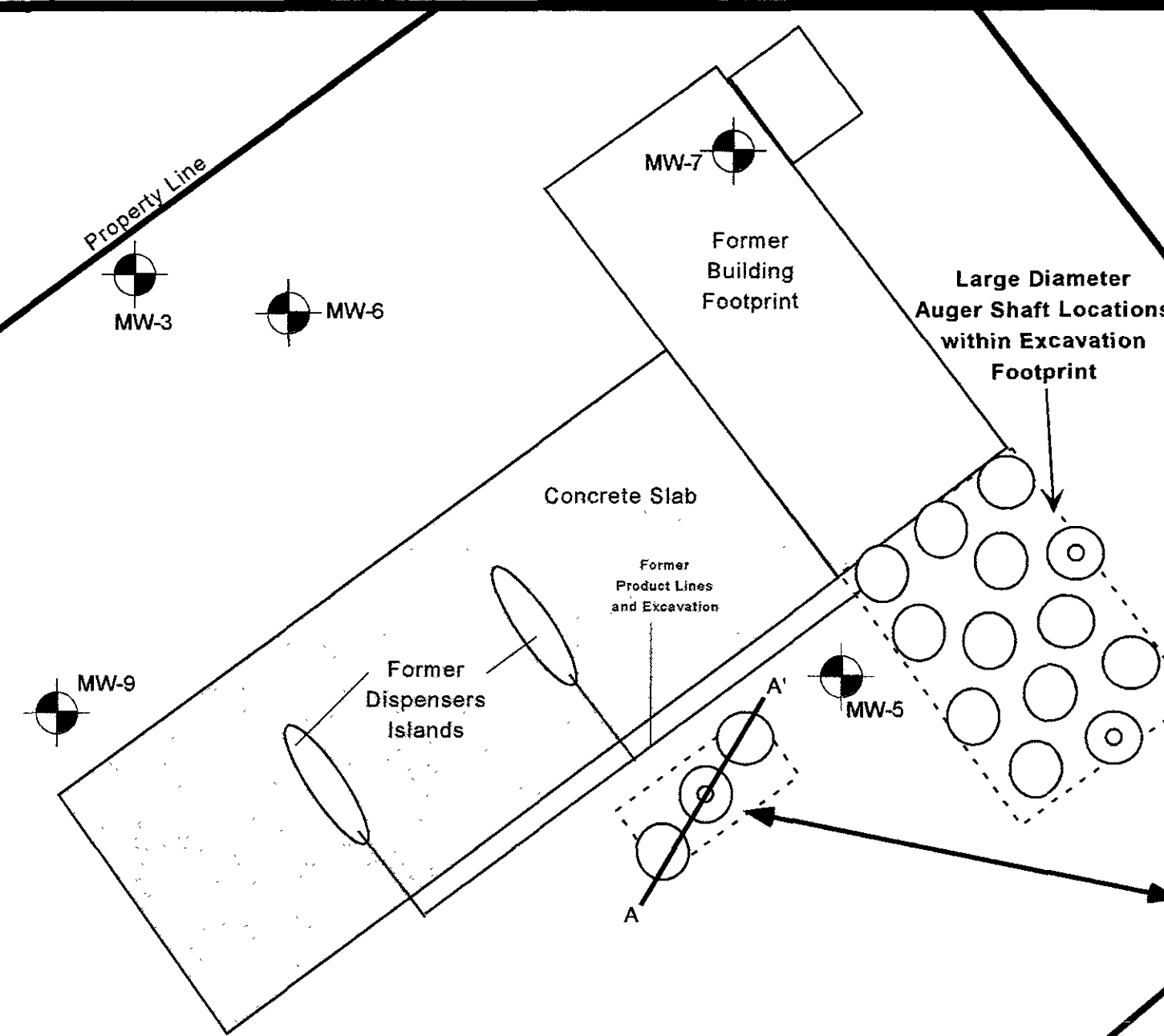
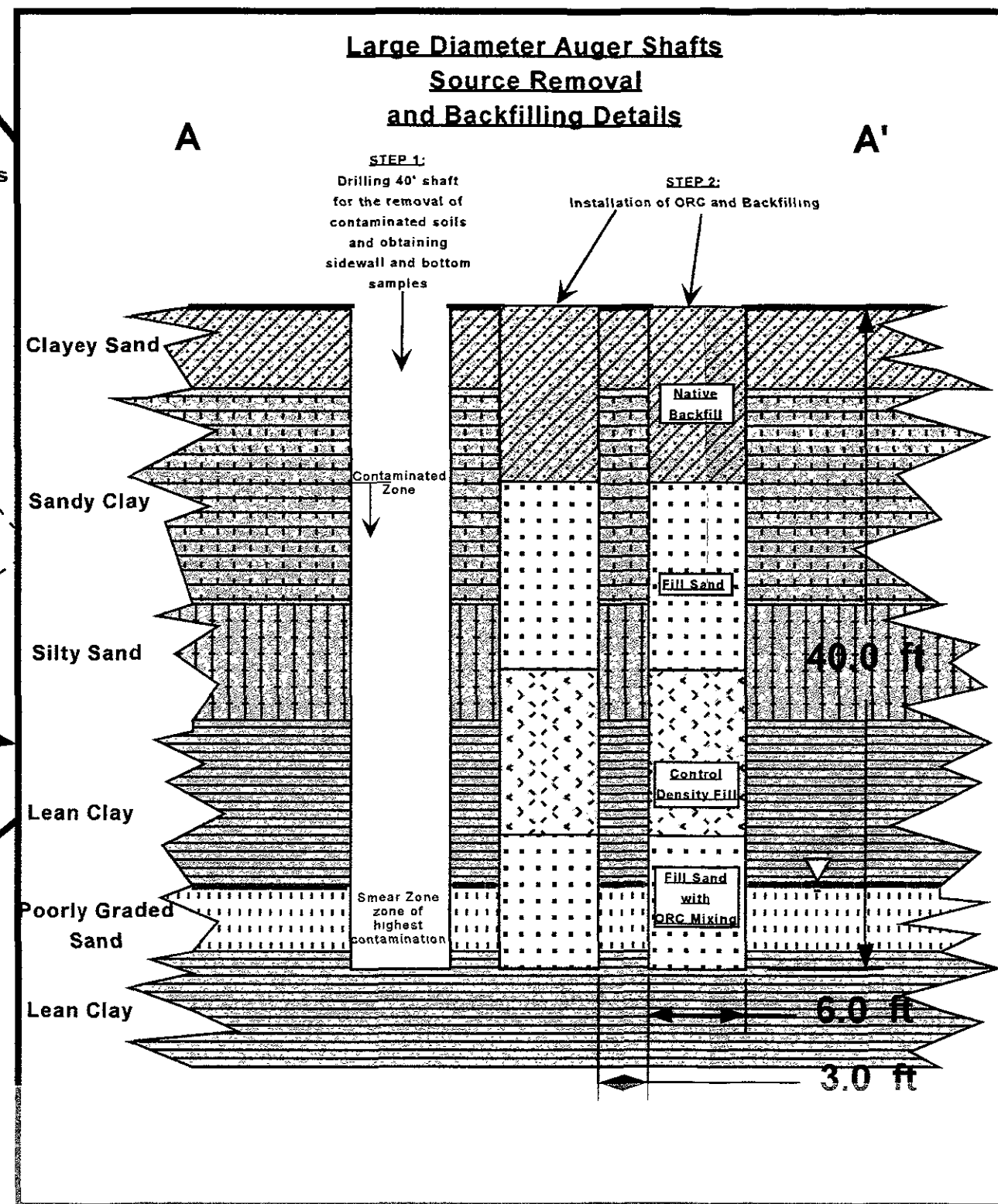
Attachments:

- 1) Large Diameter Auger Footprint and Source Removal Map
- 2) Cost Breakdown (Laurie Berger and State UST Fund only)

cc:	Mr. Jerry Harbert 46765 Mountain Cove Road, Indian Wells, CA 92210	(760) 564-3799
	Ms. Laurie Berger - Law Offices of Laurie Berger	(650) 368-8401
	Mr. Jeff Lawson - Silicon Valley Law Group	(408) 286-1400
	Mr. Sunil Ramdass - State Water Resources Control Board UST Cleanup Fund	(916) 341-5806

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### EXPLANATION

- MW-8 Groundwater Monitoring Well
- LD-1 Large Diameter Hole (6' dia.)- Source Removal
- OIW Optional Oxygen Diffusion Injection Well

Soil Sample Analytical Results: All soil samples were analyzed for Total Petroleum Hydrocarbons as gasoline (TPH-g), Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX), Methyl Tert Butyl Ether (MTBE). Results are shown for detected analytes only, all others Not Detected (ND), including MTBE in all locations.

0' 18'

Horizontal Scale = 1-inch = 18-feet  
Vertical Scale = 1-inch = 9-feet  
vertical exaggeration = 2x

First Encountered Groundwater elevation from Hydraulic Driven Probe Investigation: February 14, 2001

NOTES  
Lithology compiled from: Geologic Logs DP-1, drilled October 18, 2001