

**ECOLOGY TOXICS CLEANUP PROGRAM  
MARALCO SITE  
Kent, Washington**

**Notes For 55% Completion Meeting: December 12, 1994  
Task 1: Workplan Development  
Prepared: December 9, 1994**

**DATA DEFICIENCIES**

**Drums**

Need characterization data for drum contents or characterization of the stormwater collection pond and the storm drains.

**Baghouse Wastes**

What evidence is there that baghouse wastes failed bioassay due to acidity? Do they mean high "acidity" or low pH?

**Black Dross**

Was TCLP or bioassay performed on black dross wastes (appears that only book designation was done)?

**REAL ESTATE ISSUES**

Toured site with CB Commercial (Milt Reimers and Gary Volchak). Milt Reimers (a VP with the company) and Gary Volchak (a structural engineer turned real estate broker who has sold numerous properties in the area, including 2 sites directly adjacent to the north of Maralco). Gary was very familiar with the Maralco site and knew the history of the contamination, wetlands issues, and the environmental conditions on surrounding properties. In fact, he had copies of all the environmental and wetlands reports for properties in the area (including Maralco).

Their impression of the site is that it is very marketable. The size of the site (13.5 acres) is an asset as there are few available sites in the area that are that large. The property value would be greatly enhanced by rerouting the drainage to the edge of the property. We also need to check on how much of the property is designated wetlands.

**Structural**

Both men were very positive about the value of the building. Although the building is condemned because the back wall is not intact, they thought the structure was solid and that the wall could be repaired or replaced. CB Commercial will perform limited inquiries for costing wall replacement. Nace Halpin and Phil Stansfeld (IAI) recalled that they received a high estimate of about \$200K for structural repairs.

Positive features about the building are that the columns are widely spaced, the ceiling is high enough not to require a sprinkler system, and it is built dock-high already. Negatives were the back wall issue and the floor will require resurfacing prior to use, and whether the building meets current structural and fire codes.

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CB Commercial strongly suggested having a structural engineer do an inspection and identify the cost and scope of getting the structure up to code. This would be required before putting it on the market as any prospective buyer needs to know what they would have to do to the building ahead of time. They estimated the size of the structure at 40,000 to 50,000 sf. Whether the structure is worth \$10 or \$30 per sf is totally dependent on the results of the structural report. A structural report will cost \$5,000 to \$10,000; however, Gary was going to talk to some structural engineers to see if he could negotiate some spec time with them.

### Equipment

Gary and Milt had great suggestions for the materials inside the building. First of all, it will be important to have most of the material removed before starting to show the building as buyers often don't have good imaginations. As far as the furnaces and baghouse, they should be removed and recycled for scrap. It sounded like it would be easy to find someone to dismantle the metal for the price of the scrap. There is a small container inside the building that could be sold and there are two containers outside the building. Also, the concrete ecology blocks inside the building could be given away and they knew of people who would come and pick them up.

### Rail Spur

The rail spur is a key selling point for the property as it costs approximately \$125,000 to bring in a new spur. In fact, Gary is involved with a property north of the site that is assessing the feasibility of installing a new spur but if they could get an easement to attach to the one on Maralco, they might pay \$35K to \$50K to Maralco for that privilege. Burlington Northern may have closed the rail line connected to the spur. Gary Schulze, VP, Rabanco has informed that the Maralco spur rail line cannot be accessed without a new switch. Rabanco will truck the waste to their transfer station in Renton for \$3.50 per ton with additional transport and tipping fees of \$30 per ton. Dale Zuck of Insamet has informed us that he would transport the waste to Wendover, Utah for recycling via Union Pacific Railroad.

### Real Estate Appraisal

At this point CB Commercial recommended against a formal appraisal because: 1) it would cost \$5000; 2) they could give an estimate which is probably as accurate for no cost; and 3) a formal appraisal is not necessary until we near the actual time of financing (and another appraisal would be required at that future time to reflect any changes in market conditions).

Their suggestions for the next steps are as follows:

- Outline a scope and schedule for the cleanup (to the extent possible);
- Schedule a meeting with Ecology, Enviros, City of Kent, bankruptcy examiner, CB Commercial and structural engineer to identify questions and information that each person needs to gather to assist in getting this property moving. Milt suggested that since the City of Kent is undoubtedly interested in seeing this site returned to use, they might allow us to meet at their offices. Gary and Milt are good friends with Don Wickstrom in the Public Works Department at the City of Kent. They think Mr. Wickstrom would be very helpful in assisting us to the maximum extent possible.

**enviros®****SOURCES OF FUNDING**

City of Kent (Mr. Don Wickstrom) and Ecology (David South) are not aware of potential sources of redevelopment funds. Likewise, EPA contacts are not aware of available funding; although we still have to contact the EPA Sustainable Developments Department. EPA also referred us to HUD for possible Community Development Block Grant Assistance.

**POTENTIALLY SALEABLE/SCRAPPABLE EQUIPMENT**

- "Salt Saver" system -- corroded; contains about 18 inches of waste material. May be able to scrap (likely for no revenue).
- Bag houses -- Reportedly, Pulse-Air baghouses, 144 Nomex bags per baghouse; 20 ft bags and cages. Likely that cages need to be replaced if structures have any value. May be able to scrap (likely for no revenue).
- Storage/shipping containers -- 1 - 8 ft x 20 ft and 2 - 8 ft x 40 ft. In good condition. Need to be cleaned. Prices quoted: \$800 to 1,000 for the 20 ft containers and \$1,200 to \$1,700 for the 40 ft containers.
- Concrete blocks -- value is probably worth the cost of removal. CB Commercial believes they know a firm that will take the blocks.

Reportedly, all accessible copper piping associated with the furnaces has been removed by vandals. Seafirst Bank has apparently directed the sale of all industrial equipment of value on the property, including the rotary drum furnaces, readily removable fire brick in the reverberatory furnaces, and the motors on the baghouse stacks. Enviros will contact Seafirst Bank to discuss earlier marketability evaluations for remaining equipment.

**FURNACES**

Only the reverberatory furnaces and some associated piping remain on the site. The furnaces need to be cleaned prior to scrapping. Enviros will investigate the potential and logistics for scrapping the furnaces and remaining piping.



## UNDERGROUND STORAGE TANK

An underground storage tank (UST), reported to have a 35,000-gallon capacity is located in the northwest corner of the parking lot. The UST was apparently installed at the time of construction of the Maralco facility and was used for storage of diesel fuel.

Enviros surveyed options for removal of the UST. The following table summarizes costs for a phased approach to removal of the UST and potential diesel-affected soils.

Option	Unit Cost <sup>a</sup>	Units	Unit Total	Comments
<b>1. Pre-assessment</b>				
Engineering	\$2,030	lump sum	\$2,030	
Driller	\$495	4 borings	\$1,980	
Analytical	\$85	20 samples	\$1,700	
20% Contingency			\$1,142	
<b>Subtotal</b>			<b>\$6,862</b>	
<b>2. UST Removal</b>				
Engineering	\$2,110	lump sum	\$2,110	
Contractor	\$15,370	lump sum	\$15,370	
Analytical	\$85	5 samples	\$425	
20% Contingency			\$3,581	
<b>Subtotal</b>			<b>\$21,486</b>	
<b>3. Over-Excavation Options</b>				
Option A: Hauling soil to Rabanbo	\$99	200 cy	\$19,875	This is the most expedient option. However, soils are not treated.
Option B: Thermal Desorption	\$116	200 cy	\$23,280	This option is fairly expedient, and cost effective for volumes greater than 1,000 cubic yards.
	\$88	1,000cy	\$88,320	
Option C: On-site Thin Spread	\$89	200 cy	\$17,760	This option is the most cost effective, although soils will remain on-site for up to 6 months.
	\$50	1,000cy	\$49,920	

<sup>a</sup> All options include excavation, analytical, and reporting.

<sup>b</sup> Likely that disposal cost can be substantially reduced if TPH contaminated soil to same facility and at about the same time as black dross disposal.

**enviros.****OPTIONS FOR DISPOSAL OF BLACK DROSS****Recycling and Disposal Options for Black Dross**

<b>Facility/Contact</b>	<b>Process Description</b>	<b>Estimated Cost</b>
Roosevelt Landfill Klickitat County, WA  Rabanco Gary Schultz (206) 646-2532	Rail shipment to lined, permitted landfill site. No state DW are accepted. An exemption from DW status would be required.	\$33.50/ton hauling and disposal plus \$1.50/ton for loading
SALTS Wendover, UT  IMSAMET Dale Zuck (802) 935-6330	Rail shipment to the SALTS saltcake recycling facility, where salts, aluminum oxides, and metals are recovered and sold (recycled) to recover processing costs.	\$53/ton hauling and disposal
Arlington Treatment and Disposal Center Arlington, OR  Chemical Waste Mgmt. Carol Kralik (206) 820-1816	Rail shipment to RCRA permitted landfill. No exemption from DW status required.	\$200/ton est. based on per trip costs -- hauling and disposal
Arlington Class D Facility Arlington, OR  Waste Management, Inc. Carol Kralik (206) 820-1816	Rail shipment to lined, permitted landfill. An exemption from DW status would be required for Class D disposal.	About \$200/ton est. based on per trip costs -- hauling and disposal
Envirosafe HW Landfill Grandview, ID  Envirosafe Services Dan Keitges (206) 827-2732	Rail shipment to RCRA permitted landfill. No exemption from DW status required.	\$130/ton -- hauling and disposal
On-site treatment IAI Phil Stansfeld Nace Halpin	The feasibility of on-site recovery of aluminum oxides has been demonstrated in a pilot study at the Maralco site. A discharge permit from Metro is required for the brines generated by this process.	\$60-\$100/ton -- hauling and disposal

Disposal firms indicated that costs would be essentially the same as proposed even if the waste is delivered piecemeal over the course of one year; assuming that the facility would be assured of the entire waste volume.

Vertical characterization of the black dross piles is limited, but the samples collected from various shallow depths indicate the makeup of the black dross is relatively uniform. Based on these data, it does not appear that additional characterization is warranted.

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Enviros contacted Polly Zehm of Ecology's Central Regional Office to discuss the Maralco site. Ms. Zehm outlined the DW exemption process that CRO recently went through with similar wastes at the RAMCO site in Klickitat County. CRO recommended that a Static Acute Fish Toxicity bioassay be performed to determine if the DW designation is appropriate for the black dross.

The black dross was book designated on the basis of oral rat toxicity bioassay data for sodium chloride and potassium chloride. Other primary and secondary aluminum plants report that dross typically designates due to the presence of ammonia and sampling after 3 or more days generally results in a nondesignation. The January 1994 revisions to the Dangerous Waste Regulations, Chapter 173-303 WAC state that the bioassay designation takes precedence over the book designation procedure. A bioassay might show that the black dross is not DW, and eliminate the need to apply for a DW exemption, and reduce paperwork associated with DW manifesting.

The exemption process might take 4-5 months, according to Ms. Zehm. She referred us to Mr. Vern Mainz at Ecology Headquarters who generally oversees DW exemption petitions.

Aluminum oxide and KBI dross has potential value for sale to cement industry (probably worth the cost of removing from site). However, at this point, we have not contacted regional cement manufacturers to define the costs for recycling that waste via those facilities.

### **BAGHOUSE WASTES**

The baghouse dust was designated an extremely hazardous waste due to results of the fish toxicity bioassay. Enviros recommends sampling of the baghouse waste, inspection of the baghouse interiors, and estimation of waste volumes. Simple treatability evaluations could be performed to determine the possible cause of the EHW designation. If the designation is due to the presence of ammonia, one solution to achieve sub-DW levels might simply entail wetting the dust and allowing the ammonia to vent. Alternatively, if the designation is due to acidity, then neutralization may be effective in achieving nondesignation of the baghouse wastes.

**enviros®****TASKS REMAINING**

- Further discussions with brokers and structural engineers.
- Steps required for SEPA review.
- Cost/Benefit issues for UST.
- Run bioassay to determine if DW designation is appropriate?
- Locate characterization data for sediment pond/ drum contents/ develop plan for characterization.
- Characterization of contents of furnaces and salt saver?
- Characterization of bag house wastes?
- Investigate options for removal of bag house wastes.
- Scope of work for treatability evaluation of bag house wastes.
- Inspection of chlorine lines.
- Investigate potential scrap value of equipment. Discuss with Seafirst.
- Forecast tentative schedule for site remediation.
- Report.

**enviros.****CONTACTS**

<b>Contact/Affiliation</b>	<b>Project Role</b>	<b>Phone</b>
Polly Zehm, Ecology, CRO	Involved in exemption of RAMCO dross.	
Geoff Yeates, Yeates Custom Backhoe	UST removal estimate.	206/641-6659
John Dumas, EPA Region X	Solid Waste Grants Program	206/553-6522
Gary O'Neill, EPA Region X	Sustainable Development	206/553-1792
Ken Marcey, EPA Region X	Hazardous Waste Division	206/553-6501
HUD	Comm. Dev. Block Grant Assistance	206/220-5153
George Scott, Intalco Aluminum	White Dross disposal practices	206/384-7537
Randy Miller, Intalco Aluminum	White Dross disposal practices	206/384-7061
Paul Schmeil, Kaiser Aluminum	White Dross disposal practices	206/591-0476
Hank Peterson, Kaiser Aluminum	White Dross disposal practices	206/591-0422
Reynolds Aluminum	Aluminum recycling practices	206/872-6700
Don Wickstrom, City of Kent	Public Works Dept. - Engineering	206/859-3383
Bill Willinski, City of Kent	Public Works Dept. - Wetlands	206/859-3383
Gary Shulze, Rabanco	Disposal at Roosevelt Landfill	206/646-5232
Dale Zuck, SALT'S	Recycling in Utah	602/935-6330
Carol Kralik, Chemical Waste Mgmt.	Disposal at Arlington Landfill	206/820-1816
Dan Keitges, Envirosafe Services	Disposal at HW landfill, Idaho	206/827-2732
Nace Halpin, IAI	On-site treatment	206/878-7003
Phil Stansfeld, IAI	On-site treatment	206/872-7242
Jerry Mishler	Non-ferrous scrap recycler	503/223-3745
Warren Rosenfeld	CalBag Metals	503/226-3441
Milt Reimer, CB Commercial	Real Estate Issues	206/292-6315
Gary Volchak, CB Commercial	Real Estate Issues	206/292-6315