

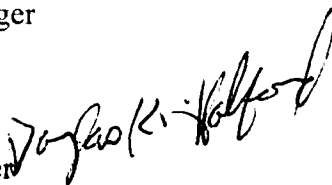
## TECHNICAL MEMORANDUM

Date: September 22, 2000

To: Andre Zownir, Work Assignment Manager

From: Robert Evangelista, Task Leader

Through: Doug Halford, Operations Manager



**Subject: Results of Paint Filter Tests for Solid Matrices from Barker Chemical, WA 0-153**

### Scope and Objective

Per the Work Assignment Manager's (WAM) request, the Task Leader (TL) performed paint filter tests per Method 9095A (SW-846) on the samples from the Barker Chemical site consisting of two types of solid Barker Chemical materials: soil/waste and sediment. This test was used to determine the presence of free liquids in a representative sample of waste to determine compliance with 40 CFR 264.314 and 265.314 for off-site disposal of Barker Chemical materials. The following is the results of the paint filter tests.

### Summary of Results and Recommendation

The following samples failed the paint filter test:

Sediment from the Railroad Creek, downstream of the confluence with the East Boundary Creek, sample no. 22262.

Sediment from the Drainage Ditch, sample no. 22270.

Sediment from the South Lagoon, sample no. 22251.

Sediment from the North Lagoon, sample no. 22252.

It should be noted that the paint filter test was performed twice on the sediments from the North and South Lagoons. For each of these sediments, they did not release water on one of the tests (past the paint filter tests) and released only drops of water on a second test. Since these sediments barely failed the tests, it may be possible for some of the lagoons' sediments to pass the paint filter test by the separation and removal of the topmost layer of sediment, the layer closest to the lagoon water and presumably the wettest sediment, from the lower layer of sediment. Then on site, before removal, perform a paint filter test again with the lower layer of sediment from each lagoon. This segregation of the upper layer from the lower layer of sediment from each lagoon may preclude the necessity of amending the lower, and possibly less moist, layer of sediment before off-site disposal.

### Methodology

Approximately 100 g of material was placed into a conical paint filter comprised of 60 +/- 5% mesh. The paint filter was supported inside a plastic funnel with the mouth of the funnel placed

into a 250 ml Erlenmeyer flask. The material was weighed on a digital balance accurate to one decimal point. If any portion of the material passed through and dropped from the filter and into the Erlenmeyer flask within the 5 minute minimum test period, the material was deemed to contain free liquids.

Barker Chemical archival samples, which were at 4 deg. Centigrade since packaging these samples at the site, were used. Since temperature can affect the test results if the test is performed below 0 deg. Centigrade, the freezing point of water, the test was performed at ambient room temperature.

## Results

Sample No.	Sample Type	Sample Weight (g)	Test Time (min)	Liquid Released (ml)
22267	Horizontal (fuel) Tank	82.2	7	0.0
22253	WP-13 Layer 2	104.0	7	0.0
22268	Chip Area	99.4	9	0.0
22254	WP-13 Layer 2	101.2	6	0.0
22256	WP-6 Layer 1	104.0	10	0.0
22252	North Lagoon	104.4	6	0.0
		100.4	14	<1.0
22251	South Lagoon	101.0	9	0.0
		99.8	12	<1.0
22262	RR Creek, downstream	102.4	6	<1.0
22265	Process Building	99.6	8	0.0
22269	Trough	102.4	7	0.0
		100.2	11	0.0
22255	WP-13 Layer 4	103.3	16	0.0
22264	EB Creek downstream	100.3	15	0.0
22270	Drainage Ditch	99.8	11	1.0
22263	Lead Arsenate Area	100.5	13	0.0

22261	Waste Pile	100.8	14	0.0
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## **Appendix**

Copy of the lab book attached