

**Grauvogel & Associates**

SBI-017

MEMORANDUM**DATE:** 5/15/03**FROM:** Larry Grauvogel**TO:** Andy Laurent/South Bend**SUBJECT:** Building 39 Paint Tanks (Sample 422-1)

Reference my email of 5/7 concerning classification of this waste material. The earlier TCLP results showed this material to be non-hazardous, except for xylenes and ethylbenzene. The VOC analysis results just received report the following, shown with the IDEM RISC limits:

VOC	Actual (mg/kg)	RISC Closure Limit (mg/kg)	
		Residential Default	Industrial Default
ethylbenzene	48	13	200 ¹
mixed xylenes	390	190	410 ²

¹ limited by migration to groundwater

² limited by soil saturation

No other VOC's were detected in the sample. According to the IDEM "Contained-In" Policy guidance this material is classified as non-hazardous soil containing F003 waste (used non-chlorinated solvents). It can be disposed at any landfill licensed for municipal waste, such as Prairie View. It cannot be used as fill off-site or disposed on-site as if it were not contaminated according to this guidance, however, because the results are above the residential default values. Using a previously quoted Prairie View price of \$15 per ton plus hauling disposal at Prairie View would run about \$45.00 per ton x 25 T = \$1,125.00. If hauled by the City the cost would be only about \$375.00

On the other hand, the IDEM "Contained-In" Policy guidance is not the final determining factor for a Brownfield site like Oliver Plow. It has already been established that lead content up to 970 mg/kg, equal to the Industrial-Construction RISC limit, will be left on-site, far above the residential default RISC limit. With these results for xylenes and ethylbenzene compared to their Industrial Default RISC limits in the above table, we anticipate that this material can be left on-site as well. The bases for the Industrial defaults are given in the table footnotes. For comparison with the lead industrial construction limit, the industrial construction limits for ethylbenzene and xylenes are capped at 6,000 mg/kg each.

Give this information to Hull & Associates for their review and concurrence.

Sincerely,

Grauvogel & Associates

Lawrence W. Grauvogel PE, CIH, CSP