US EPA RECORDS CENTER REGION 5
429507

I. 1
1/1/02

"White, Bradley" <Bradley.White@ttemi.com> on 01/21/2002 02:20:06 PM

To: ANITA BOSEMAN/R5/USEPA/US@EPA
cc:

Subject: Gary Development Landfill sample results

Anita-

Attached is a summary table of the preliminary sample analytical results for the drum and tank samples collected at the Gary Development Landfill site. The summary table includes only those compounds and metals that were detected at least; those that were not detected at all were excluded from the table. There were no PCBs detected in any of the samples; therefore PCBs were not included in the summary table.

The results appear to be consistent with those of oils; T-4 (presumably a diesel storage tank) results are consistent with diesel. The Ethylbenzene, toluene, and xylene concentrations may have originated from a fuel additive, but they appear in relatively low concentrations. There were no samples with a low flashpoint (<140 F) or extreme pH values.

Samples D-1, D-2, and D-15 were collected from the three drums that were overpacked. Sample D-9B was taken from a full, non-leaking drum containing an oil-like substance located outside one of the buildings. Samples D-12 came from a drum labeled 80 weight gear oil, sample D-13 came from a drum labeled transmission fluid, and sample T-4 came from an AST between 2 buildings.

Please contact me with any questions you may have.

<<data summary tables.wpd>>

Brad White
Tetra Tech EM Inc.
312.946.6464

data summary tables.

TABLE 1

SUMMARY OF SAMPLE ANALYTICAL RESULTS
GARY DEVELOPMENT LANDFILL SITE
GARY, LAKE COUNTY, INDIANA

Analytical Parameter	Sample No.						
	D-1	D-2	D-9B	D-12	D-13	D-15	T-4
Inorganics (mg/L)							
Aluminum	ND	ND	ND	ND	0.547	ND	ND
Antimony	0.135	0.101	ND	ND	ND	ND	ND
Arsenic	ND	ND	ND	0.114	ND	ND	ND
Cadmium	0.161	ND	ND	ND	ND	ND	ND
Calcium	31.0	750	10.5	3.66	1,420	32.7	ND
Chromium (total)	ND	ND	0.0491	0.0534	ND	ND	ND
Copper	ND	0.0853	0.481	0.616	0.343	ND	0.0745
Iron	ND	7.91	7.93	ND	ND	ND	ND
Lead	0.600	0.0963	6.33	ND	0.115	ND	ND
Magnesium	ND	2.44	19.4	ND	4.21	ND	ND
Manganese	ND	0.187	BDL	BDL	0.122	BDL	BDL
Mercury	0.000512	BDL	0.00104	BDL	BDL	BDL	BDL
Nickel	BDL	BDL	BDL	0.0660	BDL	BDL	BDL
Potassium	BDL	4.68	5.25	BDL	8.34	66.3	3.61
Selenium	BDL	BDL	0.0583	BDL	BDL	BDL	BDL
Sodium	1.91	7.46	9.46	3.95	18.0	BDL	0.731
Thallium	BDL	BDL	BDL	BDL	0.116	1.59	BDL
Zinc	300	461	45.8	5.80	593	56.3	1.39
VOCs (µg/kg)							
Benzene	1,860	BDL	2,510	BDL	BDL	BDL	BDL
Ethylbenzene	BDL	162	13,400	BDL	360	BDL	53,000
Toluene	BDL	4,690	19,600	66,700	10,900	BDL	47,200
Xylene (total)	384	892	53,000	4,450	1,930	BDL	348,000
SVOCs (µg/kg)							
Anthracene	BDL	BDL	BDL	BDL	BDL	BDL	67,400
Butyl benzyl phthalate	BDL	2,990,000	BDL	BDL	2,930,000	BDL	BDL
Flourene	BDL	BDL	BDL	BDL	BDL	BDL	227,000
2-Methylnaphthalene	BDL	BDL	202,000	BDL	BDL	BDL	6,020,000
Naphthalene	BDL	BDL	53,000	BDL	BDL	BDL	2,080,000
Phenanthrene	BDL	BDL	59,200	BDL	BDL	BDL	939,000
Pyrene	BDL	BDL	BDL	BDL	BDL	BDL	397,000
Physical Properties							
pH (standard units)	7.14	7.11	6.67	6.83	6.83	6.50	6.45
Ignitability (degrees F)	>220	>220	161	191	>220	171	181

DRAFT

TABLE 1 (Continued)

SUMMARY OF SAMPLE ANALYTICAL RESULTS
GARY DEVELOPMENT LANDFILL SITE
GARY, LAKE COUNTY, INDIANA

Notes:

BDL	=	Below laboratory detection limit
F	=	Fahrenheit
mg/L	=	Milligram per liter
No.	=	Number
SVOC	=	Semivolatile organic compound
VOC	=	Volatile organic compound
µg/kg	=	Microgram per kilogram
[a]	=	Although complete laboratory analysis of VOCs, SVOCs, polychlorinated biphenyls, and inorganics was performed, only analytes with at least one detection are shown.

DRAFT