

Hillsborough County
Florida

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Patricia G. Bean

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April 28, 2010

Ms. Susan Pelz, P.E.
Florida Department of Environmental Protection
Solid Waste Section
13051 Telecom Parkway
Temple Terrace, FL 33637

Dept. of Environmental Protection
APR 30 2010
Southwest District

Re: **Southeast County Landfill
Leachate Treatment Plant
Annual Sludge Testing Analytical Data**

Dear Ms. Pelz:

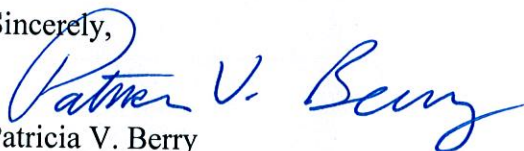
In accordance with Specific Condition, Part E, No. 9(c) of the Operation Permit No. 35435-014-SO/01, the Hillsborough County Solid Waste Management Department (SWMD) is pleased to provide the analytical data for the annual sampling of the sludge at the Southeast County Leachate Treatment Facility. The referenced permit requires the SWMD to sample and analyze the waste sludge for Toxicity Characteristic Leaching Procedure (TCLP) listed in 40 CFR Part 261.24, Table 1. In addition to the analysis from the referenced table, copper, molybdenum, nickel, zinc, pH, percent solids, total nitrogen, total potassium, and total phosphorous were collected.

On February 19, 2010, the SWMD collected the annual sludge sample from the rolloff container that is located inside the leachate treatment facility. A transcription error occurred on the Chain of Custody form and analysis of the sludge sample was not characterized in accordance with the above-referenced permit. Therefore, a second sludge sample was collected on April 1, 2010 for the compounds that were originally missed.

The laboratory analytical results indicated all parameters were within applicable standards in the above-referenced Table 1. These samples were analyzed by our contracted laboratory, Test America, Inc. and the data sheets are attached.

Should you have any questions or comments concerning the information provided in this submittal, please feel free to contact me at (813) 276-2908 or David Adams at (813) 276-2944.

Sincerely,



Patricia V. Berry
Landfill Services Section Manager
Solid Waste Management Department

PVB/mdt
Enclosures

xc: Ron Cope, EPC
Larry Ruiz, SWMD
David Adams, P.G., SWMD

enviro/projects/self/leachate plant/ltp-sludgesampling2010.doc

Mr. David S Adams
Hillsborough County
Solid Waste Management Department
601 East Kennedy Blvd
24th Floor County Center
Tampa, FL 33601

Job Number: 660-33930-1

Client Sample ID: Southeast Leachate Plant
Lab Sample ID: 660-33930-1

Date Sampled: 02/19/2010 1225
Date Received: 02/19/2010 1430
Client Matrix: Solid

Analyte	Result/Qualifier	Unit	MDL	PQL	Dilution
Method: TCLP-8260B			Date Analyzed: 02/24/2010 1425		
Prep Method: 5030B			Date Prepared: 02/24/2010 1425		
Benzene	0.50 U	ug/L	0.50	1.0	1.0
Carbon tetrachloride	0.42 U	ug/L	0.42	1.0	1.0
Chlorobenzene	0.63 U	ug/L	0.63	1.0	1.0
Chloroform	0.90 U	ug/L	0.90	1.0	1.0
1,4-Dichlorobenzene	0.52 U	ug/L	0.52	1.0	1.0
1,2-Dichloroethane	0.57 U	ug/L	0.57	1.0	1.0
1,1-Dichloroethene	0.45 U	ug/L	0.45	1.0	1.0
2-Butanone (MEK)	8.4 U	ug/L	8.4	10	1.0
Trichloroethene	0.50 U	ug/L	0.50	1.0	1.0
Tetrachloroethene	0.50 U	ug/L	0.50	1.0	1.0
Vinyl chloride	0.50 U	ug/L	0.50	1.0	1.0
Surrogate			Acceptance Limits		
4-Bromofluorobenzene	96	%	70 - 130		
Dibromofluoromethane	100	%	70 - 130		
Toluene-d8 (Surr)	100	%	70 - 130		
Method: TCLP-8270C			Date Analyzed: 02/25/2010 1846		
Prep Method: 3520C			Date Prepared: 02/24/2010 1039		
Pyridine	8.6 U	ug/L	8.6	250	1.0
Pentachlorophenol	5.8 U J3	ug/L	5.8	250	1.0
Nitrobenzene	6.1 U	ug/L	6.1	50	1.0
Hexachloroethane	8.9 U	ug/L	8.9	50	1.0
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	9.7 U	ug/L	9.7	50	1.0
Hexachlorobenzene	4.8 U	ug/L	4.8	50	1.0
2-Methylphenol	6.8 U J3	ug/L	6.8	50	1.0
m & p - Cresol	66	ug/L	6.6	50	1.0
1,4-Dichlorobenzene	7.7 U	ug/L	7.7	50	1.0
2,4-Dinitrotoluene	5.4 U	ug/L	5.4	50	1.0
2,4,5-Trichlorophenol	6.8 U	ug/L	6.8	50	1.0
2,4,6-Trichlorophenol	4.8 U J3	ug/L	4.8	50	1.0
Surrogate			Acceptance Limits		
2,4,6-Tribromophenol	49	%	29 - 143		
2-Fluorophenol	42	%	29 - 121		
Phenol-d5	41	%	25 - 128		
Nitrobenzene-d5	58	%	34 - 130		
2-Fluorobiphenyl	56	%	36 - 124		
Terphenyl-d14	28	%	14 - 148		

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Date Sampled: 02/19/2010 1225
 Date Received: 02/19/2010 1430
 Client Matrix: Solid

Analyte	Result/Qualifier	Unit	MDL	PQL	Dilution
Method: TCLP-8081A			Date Analyzed: 02/25/2010 0001		
Prep Method: 3510C			Date Prepared: 02/24/2010 1244		
Chlordane (technical)	3.4 U	ug/L	3.4	25	1.0
Endrin	0.61 U	ug/L	0.61	5.0	1.0
gamma-BHC (Lindane)	0.21 U	ug/L	0.21	2.5	1.0
Heptachlor	0.36 U	ug/L	0.36	2.5	1.0
Heptachlor epoxide	0.22 U	ug/L	0.22	2.5	1.0
Methoxychlor	0.44 U	ug/L	0.44	25	1.0
Toxaphene	19 U	ug/L	19	250	1.0
Surrogate			Acceptance Limits		
DCB Decachlorobiphenyl	52	%	30 - 150		
Tetrachloro-m-xylene	67	%	30 - 150		
Method: TCLP-8151A			Date Analyzed: 03/03/2010 0541		
Prep Method: 8151A			Date Prepared: 02/25/2010 1032		
2,4-D	7.5 U	ug/L	7.5	25	1.0
Silvex (2,4,5-TP)	1.6 U	ug/L	1.6	25	1.0
Surrogate			Acceptance Limits		
2,4-Dichlorophenylacetic acid	68	%	33 - 120		
Method: TCLP-6010B			Date Analyzed: 03/02/2010 1023		
Prep Method: 3010A			Date Prepared: 02/23/2010 1400		
Silver	50 U	ug/L	50	500	5.0
Arsenic	120 U	ug/L	120	1000	5.0
Barium	39 I	ug/L	30	500	5.0
Cadmium	18 U	ug/L	18	500	5.0
Chromium	50 U	ug/L	50	1000	5.0
Lead	40 U	ug/L	40	1000	5.0
Selenium	150 U	ug/L	150	500	5.0
Method: TCLP-7470A			Date Analyzed: 03/02/2010 1341		
Prep Method: 7470A			Date Prepared: 03/02/2010 0900		
Mercury	0.36 U	ug/L	0.36	0.50	1.0

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Lab Sample ID: 660-33930-1

Date Sampled: 02/19/2010 1225
 Date Received: 02/19/2010 1430
 Client Matrix: Solid

Analyte	Result/Qualifier	Unit	NONE	NONE	Dilution
Method: Field Sampling		Date Analyzed:	02/19/2010 1225		
Field pH	8.05	SU			1.0
Field Temperature	17.80	Degrees C			1.0
Oxygen, Dissolved	8.88	mg/L			1.0
Specific Conductance	10616	umhos/cm			1.0

DATA REPORTING QUALIFIERS

Client: Hillsborough County

Job Number: 660-33930-1

Lab Section	Qualifier	Description
GC/MS VOA	U	Indicates that the compound was analyzed for but not detected.
GC/MS Semi VOA	J3	Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.
	U	Indicates that the compound was analyzed for but not detected.
GC Semi VOA	U	Indicates that the compound was analyzed for but not detected.
Metals	U	Indicates that the compound was analyzed for but not detected.
	I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

660-33930

HILLSBOROUGH COUNTY DEPT. OF SOLID WASTE COC SHEET
FEBUARY SELF LEACHATE PLANT ANNUAL SLUDGE SAMPLING EVENT
SLUDGE

PRECLEANED SAMPLE CONTAINERS:

RELINQUISHED BY:

ACCEPTED BY:

REP. OF CONTRACT LAB.

REP. OF SOLID WASTE DEPT.

DATE | TIME

2-18-10 | 2:25

LOCATION: SOUTHEAST LEACHATE PLANT

SAMPLE MATRIX: OTHER MATRIX: SLUDGE

PERSONAL ENGAGED IN SAMPLE COLLECTION: A. Adger A. Balloon W. Bannon

D. Parnell

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AA	12:25	N/A	N/A	N/A	N/A	N/A
		17.80	10616	8.05	8.88	

SAMPLE CONTAINERS

QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
3	40 ml VIAL	10	40 ml VIAL	
	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
	250 ml. PLASTIC	2	250 ml. PLASTIC	
	250 ml. GLASS	2	250 ml. GLASS	
1	500 ml. PLASTIC	2	500 ml. PLASTIC	
	500 ml. GLASS	1	500 ml. GLASS	
2	LITER PLASTIC		LITER PLASTIC	
	LITER GLASS	6	LITER GLASS	
	BACTERIAL		BACTERIAL	

29 TOTAL No. OF SAMPLES COLLECTED:

COLORS & SHEENS: YES

N/A

NO SHEENS

LITE YELLOW

COLLECTED

DATE | TIME

2-19-10 | 12:25

ANALYSIS REQUESTED:

TOXICITY CHARACTERISTIC LEACHING POTENTIAL TEST FOR THE ORGANICS, METALS AND PESTICIDES LISTED IN 40 CFR PART 261.24, TABLE 1

PRESERVED SAMPLES PH < 2.0

YES

SAMPLE STORAGE: COOLER & ICE TO 4.0 c

ABOVE LISTED SAMPLES:

RELINQUISHED BY:

ACCEPTED BY:

REP. OF SOLID WASTE DEPT.

REP. OF CONTRACT LAB.

DATE | TIME

2-19-10 | 2:30

2-19-10 | 2:30

COMMENT'S:

SLUDGE 5 PLASTIC 2 GLASS

110#0023

5.3 °C U-07

Mr. David S Adams
Hillsborough County
Solid Waste Management Department
601 East Kennedy Blvd
24th Floor County Center
Tampa, FL 33601

Job Number: 660-34585-1

Client Sample ID: Leachate Sludge Annual (February)
Lab Sample ID: 660-34585-1

Date Sampled: 04/01/2010 1230
Date Received: 04/01/2010 1442
Client Matrix: Solid
Percent Solids: 20

Analyte	Result/Qualifier	Unit	MDL	PQL	Dilution
Method: 6010B			Date Analyzed:	04/14/2010 1217	
Prep Method: 3050B			Date Prepared:	04/08/2010 1017	
Arsenic	12	mg/Kg	2.4	5.1	2.0
Cadmium	2.2 I	mg/Kg	0.89	5.1	2.0
Copper	77	mg/Kg	5.1	20	2.0
Potassium	0.68	Percent	0.016	0.10	2.0
Molybdenum	3.9 I	mg/Kg	1.6	10	2.0
Nickel	14 I	mg/Kg	4.4	41	2.0
Lead	1.8 I	mg/Kg	1.5	5.1	2.0
Selenium	8.2 I	mg/Kg	3.8	10	2.0
Zinc	260	mg/Kg	5.1	20	2.0
Method: 7471A			Date Analyzed:	04/09/2010 1323	
Prep Method: 7471A			Date Prepared:	04/09/2010 1000	
Mercury	0.037 U	mg/Kg	0.037	0.099	1.0
Method: 365.4			Date Analyzed:	04/08/2010 1010	
Prep Method: 365.2/365.3/365			Date Prepared:	04/06/2010 1700	
Phosphorus, Total	6.3 J3	Percent	2.0	2.6	20
Method: Total Nitrogen			Date Analyzed:	04/06/2010 1654	
Nitrogen, Total	1.4	Percent	0.0000036	0.000020	1.0

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Lab Sample ID: 660-34585-1

Date Sampled: 04/01/2010 1230
Date Received: 04/01/2010 1442
Client Matrix: Solid

Analyte	Result/Qualifier	Unit	PQL	PQL	Dilution
Method: 9045C pH	7.71 Q	SU	1.00	1.00	1.0

Date Analyzed: 04/01/2010 1600

DATA REPORTING QUALIFIERS

Client: Hillsborough County

Job Number: 660-34585-1

Lab Section	Qualifier	Description
Metals		
	U	Indicates that the compound was analyzed for but not detected.
	I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
General Chemistry		
	J3	Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.
	U	Indicates that the compound was analyzed for but not detected.
	Q	Sample held beyond the accepted holding time.

660-34585

NEW

HILLSBOROUGH COUNTY DEPT. OF SOLID WASTE COC SHEET
LEACHATE TRUCKS AND TANKS MONITORING PROGRAM
LEACHATE PLANT

PRECLEANED SAMPLE CONTAINERS:

RELINQUISHED BY:

REP. OF CONTRACT LAB.

DATE | TIME

ACCEPTED BY:

[Signature]

REP. OF SOLID WASTE DEPT.

4-1-10 | 12:00

LOCATION: LEACHATE Sludge Annual (February)

SAMPLE MATRIX: WATER OTHER MATRIX:

PERSONAL ENGAGED IN SAMPLE COLLECTION: A. Adger A. Balloon D. Pannell

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AA	12:30					N/A =

SAMPLE CONTAINERS

QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
	40 ml VIAL		40 ml VIAL	
	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
	250 ml. PLASTIC		250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
	500 ml. PLASTIC		500 ml. PLASTIC	
	500 ml. GLASS		500 ml. GLASS	
	LITER PLASTIC		LITER PLASTIC	
	LITER GLASS		LITER GLASS	
	BACTERIAL		BACTERIAL	

TOTAL No. OF SAMPLES COLLECTED:

COLORS & SHEENS: YES N/A NO

COLLECTED DATE | TIME

4-1-10 | 12:30

ANALYSIS REQUESTED:

Total Nitrogen% by weight Total Phosphorous% by weight Total Potassium% by weight

Cadmium mg/kg dry weight Lead mg/kg dry weight Molybdenum mg/kg dry weight

Selenium mg/kg dry weight pH Arsenic mg/kg dry weight Copper mg/kg dry weight

Mercury mg/kg dry weight Nickel mg/kg dry weight Zinc mg/kg dry weight Solids

PRESERVED SAMPLES PH < 2.0 YES SAMPLE STORAGE: COOLER & ICE TO 4.0 c

ABOVE LISTED SAMPLES:

RELINQUISHED BY:

REP. OF SOLID WASTE DEPT.

DATE | TIME

ACCEPTED BY:

[Signature]

REP. OF CONTRACT LAB.

4-1-10 | 2:42

COMMENTS: 4 PLASTIC JARS 802

3.9°C CW 27
04/22/2010