

BOARD OF COUNTY COMMISSIONERS

Brian Blair Kathy Castor Ken Hagan Jim Norman Thomas Scott Mark Sharpe Ronda Storms

Office of the County Administrator Patricia G. Bean

Deputy County Administrator Wally Hill

Assistant County Administrators Kenneth C. Griffin Carl S. Harness Manus J. O' Donnell

Dept. of Environmental Protection

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

OCT 11 2006

Southwest District

Re: Southeast County Landfill Leachate Treatment Plant

Effluent Analytical Data - Third Quarter (July - September, 2006)

Dear Ms. Pelz:

In accordance with Specific Condition No. 32(b) of the Operation Permit No. 35435-006-SO, the Hillsborough County Solid Waste Management Department (SWMD) is pleased to provide the analytical data for the third quarter effluent sampling of the leachate treatment plant at the Southeast County Landfill (SCLF). The referenced permit requires the SWMD to sample the leachate effluent and record the pH value on a weekly basis. Daily effluent pH readings from the leachate plant during these three months ranged from 8.19 – 8.81 pH units. The permit also requires that a monthly sample of the effluent be collected and analyzed for Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Total Suspended Solids (TSS), Total Dissolved Solids (TDS), and Nitrate.

On July 5, August 2, and September 5, 2006, the SWMD collected the required effluent samples from the dedicated effluent sampling port at the treatment plant. The monthly samples were analyzed by our contracted laboratory, Severn Trent Laboratories, Inc. for the parameters listed above. Analytical data sheets are provided within this report for your technical review.

Nitrate values observed during this monitoring period were 0.73 milligrams per liter (mg/l) in July, and below detection limits in August and September. TDS values were observed during these months at concentrations of 5,700 mg/l, 5,600 mg/l, and 5,900 mg/l, respectively.

Ms. Susan Pelz October 10, 2006 Page 2

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: Larry Ruiz, SWMD

David Adams, P.G., SWMD Daniel Orlosky, SWMD

Ron Cope, EPC

enviro/projects/self/leachate plant/ltp-effluent-3rdqtr2006.doc



Job Number: 660-9907-1

Client Sample ID: LEACHATE EFFLUENT Lab Sample ID: 660-9907-1

Date Sampled: 07/05/2006 1215

Date Received: 07/05/2006 1545

Percent Solids:

Analyte	Result/Qualifier	Unit	NONE	Dilution
Method: Field Sampling	Date Prepared:		Date Analyzed: 07/05/200	6 1215
Field pH	8.44	SU		1.0
Field Temperature	34.74	Degrees C		1.0
Oxygen, Dissolved	5.31	mg/L		1.0
Specific Conductance	19986	umhos/cm		1.0



Job Number: 660-9907-1

Client Sample ID: LEACHATE EFFLUENT Lab Sample ID: 660-9907-1

Date Sampled: 07/05/2006 1215

Date Received: 07/05/2006 1545

Analyte	Result/Qualifier	Unit	MDL	PQL	Dilution
Method: 353.2	Date Prepared:		Date Analyzed:	07/07 <i>/</i> 2006	0654
Nitrate Nitrogen	0.73	mg/L	0.10	0.50	1.0



Job Number: 660-9907-1

Client Sample ID: LEACHATE EFFLUENT Lab Sample ID: 660-9907-1

Date Sampled: 07/05/2006 1215 Date Received: 07/05/2006 1545

Analyte	Result/Qualifier	Unit	RL	PQL	Dilution
Method: 160.1	Date Prepared:		Date Analyz	ed: 07/11/2006	1101
Total Dissolved Solids	5700	mg/L	25	25	1.0
Method: 160.2	Date Prepared:		Date Analyz	ed: 07/10/2006	1521
Total Suspended Solids	27	mg/L	1.0	1.0	1.0
Method: 405.1	Date Prepared:		Date Analyz	ed: 07/06/2006	1416
Biochemical Oxygen Demand	5.1	mg/L	2.0	2.0	1.0
Method: 5220C	Date Prepared:		Date Analyz	ed: 07/13/2006	1800
Chemical Oxygen Demand	320	mg/L	20	20	1.0



Job Number: 660-9907-1

Client Sample ID: EQUIPMENT BLANK

Lab Sample ID: 660-9907-2

Date Sampled: 07/05/2006 1205

Date Received: 07/05/2006 1545

Analyte	Result/Qua	alifier	Unit	MDL	PQL	Dilution
Method: 353.2	Date Prepa	red:		Date Analyzed:	07/07/2006	0654
Nitrate Nitrogen	0.10	U	mg/L	0.10	0.50	1.0



Job Number: 660-9907-1

Client Sample ID: EQUIPMENT BLANK

Lab Sample ID: 660-9907-2

Date Sampled: 07/05/2006 1205

Date Received: 07/05/2006 1545

Analyte	Result/Qu	alifier	Unit	RL	PQL	Dilution
Method: 160.1	Date Prep	ared:		Date Analyze	ed: 07/10/2006	1404
Total Dissolved Solids	5.0	U	mg/L	5.0	5.0	1.0
Method: 160.2	Date Prep	ared:		Date Analyze	ed: 07/10/2006	1521
Total Suspended Solids	1.0	U	mg/L	1.0	1.0	1.0
Method: 405.1	Date Prep	ared:		Date Analyze	ed: 07/06/2006	1416
Biochemical Oxygen Demand	2.0	U	mg/L	2.0	2.0	1.0
Method: 5220C	Date Prep	ared:		Date Analyze	ed: 07/13/2006	1800
Chemical Oxygen Demand	20	U	mg/L	20	20	1.0



DATA REPORTING QUALIFIERS

Client: Hillsborough County

Job Number: 660-9907-1

Lab Section	Qualifier	Description
General Chemistry		
	U	Indicates that the compound was analyzed for but not detected.
	1	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.



Client Sample ID: Leachate Eff Lab Sample ID: 660-10482-1

Job Number: 660-10482-1

Date Sampled: 08/02/2006 1020 Date Received: 08/02/2006 1535

Client Matrix: Water

Percent Solids:

Analyte	Result/Qualifier	Unit	NONE	Dilution
Method: Field Sampling	Date Analyzed:	08/02/2006 1020		
Field pH	8.14	SU		1.0
Field Temperature	33.43	Degrees C		1.0
Specific Conductance	10608	umhos/cm		1.0



Client Sample ID: Leachate Eff Lab Sample ID: 660-10482-1

Job Number: 660-10482-1

Date Sampled: 08/02/2006 1020 Date Received: 08/02/2006 1535

Analyte	Result/Qualifier	Unit	MDL	PQL	Dilution
Method: 353.2	Date Analyzed:	08/04/2006 0722			
Nitrate Nitrogen	0.10 U	mg/L	0.10	0.50	1.0



Client Sample ID: Leachate Eff Lab Sample ID: 660-10482-1

Job Number: 660-10482-1

Date Sampled: 08/02/2006 1020 Date Received: 08/02/2006 1535

Analyte	Result/Qualifier	Unit	RL	PQL	Dilution
Method: 160.1	Date Analyzed:	08/08/2006 1718			
Total Dissolved Solids	5600	mg/L	25	25	1.0
Method: 160.2	Date Analyzed:	08/03/2006 1650			
Total Suspended Solids	58	mg/L	1.1	11	1.0
Method: 405.1	Date Analyzed:	08/04/2006 1000			
Biochemical Oxygen Demand	7.5	mg/L	2.0	2.0	1.0
Method: 5220C	Date Analyzed:	08/15/2006 1100			
Chemical Oxygen Demand	410	mg/L	20	20	1.0



Client Sample ID: Equipment Blank Lab Sample ID: 660-10482-2

Date Sampled: 08/02/2006 1015 Date Received: 08/02/2006 1535

Job Number: 660-10482-1

Analyte	Result/Qualifier	Unit	MDL	PQL	Dilution
Method: 353.2	Date Analyzed:	08/04/2006 0722			
Nitrate Nitrogen	0.10 U	mg/L	0.10	0.50	1.0



Client Sample ID: Equipment Blank Lab Sample ID: 660-10482-2 Job Number: 660-10482-1

Date Sampled: 08/02/2006 1015 Date Received: 08/02/2006 1535

Analyte	Result/Qual	ifier	Unit	RL	PQL	Dilution
Method: 160.1	Date Analyz	ed:	08/03/2006 1545			
Total Dissolved Solids	5.0	U	mg/L	5.0	5.0	1.0
Method: 160.2	Date Analyz	ed:	08/03/2006 1650			
Total Suspended Solids	1.0	U	mg/L	1.0	1.0	1.0
Method: 405.1	Date Analyz	ed:	08/04/2006 1000			
Biochemical Oxygen Demand	2.0	U	mg/L	2.0	2.0	1.0
Method: 5220C	Date Analyz	ed:	08/15/2006 1100			
Chemical Oxygen Demand	20	U	mg/L	20	20	1.0



DATA REPORTING QUALIFIERS

Client: Hillsborough County

Job Number: 660-10482-1

Lab Section	Qualifier	Description
General Chemistry		
	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.



Client Sample ID: LEACHATE EFF Lab Sample ID: 660-10989-1

Job Number: 660-10989-1

Date Sampled: 09/05/2006 1200 Date Received: 09/05/2006 1555

Client Matrix: Water

Percent Solids:

Analyte	Result/Qualifier	Unit	NONE	Dilution
Method: Field Sampling	Date Analyzed:	09/05/2006 1200		
Field pH	8.18	SU		1.0
Field Temperature	32.48	Degrees C		1.0
Oxygen, Dissolved	4.74	mg/L		1.0
Specific Conductance	10422	umhos/cm		1.0



Client Sample ID: LEACHATE EFF Lab Sample ID: 660-10989-1

Job Number: 660-10989-1

Date Sampled: 09/05/2006 1200

Date Received: 09/05/2006 1555

Analyte	Result/Qualifier	Unit	MDL	PQL	Dilution
Method: 353.2	Date Analyzed:	09/07/2006 0738			
Nitrate Nitrogen	0.10 U	mg/L	0.10	0.50	1.0



Client Sample ID: LEACHATE EFF Lab Sample ID: 660-10989-1

Job Number: 660-10989-1

Date Sampled: 09/05/2006 1200 Date Received: 09/05/2006 1555

Analyte	Result/Qualifier	Unit	PQL	PQL	Dilution
Method: 160.1	Date Analyzed:	09/07/2006 1911			
Total Dissolved Solids	5900	mg/L	25	25	1.0
Method: 160.2	Date Analyzed:	09/06/2006 1758			
Total Suspended Solids	42	mg/L	1.0	1.0	1.0
Method: 405.1	Date Analyzed:	09/06/2006 1740			
Biochemical Oxygen Demand	3.0	mg/L	2.0	2.0	1.0
Method: 5220C	Date Analyzed:	09/07/2006 1515			
Chemical Oxygen Demand	240	mg/L	20	20	1.0



Client Sample ID: EQUIPMENT BLANK

Lab Sample ID: 660-10989-2

Date Sampled: 09/05/2006 1155 Date Received: 09/05/2006 1555

Job Number: 660-10989-1

Analyte	Result/Qualifier	Unit	MDL	PQL	Dilution
Method: 353.2	Date Analyzed:	09/07/2006 0738			
Nitrate Nitrogen	0.10 U	mg/L	0.10	0.50	1.0



Client Sample ID: EQUIPMENT BLANK Lab Sample ID: 660-10989-2

Job Number: 660-10989-1

Date Sampled: 09/05/2006 1155 Date Received: 09/05/2006 1555

Analyte	Result/Qualifier	Unit	PQL	PQL	Dilution
Method: 160.1	Date Analyzed:	09/06/2006 1658			
Total Dissolved Solids	5.0 U	mg/L	5.0	5.0	1.0
Method: 160.2	Date Analyzed:	09/06/2006 1758			
Total Suspended Solids	1.0 U	mg/L	1.0	1.0	1.0
Method: 405.1	Date Analyzed:	09/06/2006 1740			
Biochemical Oxygen Demand	2.0 U	mg/L	2.0	2.0	1.0
Method: 5220C	Date Analyzed:	09/07/2006 1515			
Chemical Oxygen Demand	20 U	mg/L	20	20	1.0



DATA REPORTING QUALIFIERS

Client: Hillsborough County

Job Number: 660-10989-1

Lab Section	Qualifier	Description
General Chemistry		
	U	Indicates that the compound was analyzed for but not detected.
	1	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.