C

LEE COUNTY
SOUTHWEST FLORIDA

(239) 338-3302

BOARD OF COUNTY COMMISSIONERS

Writer's Direct Dial Number:_____

September 12, 2005

Mr. Philip Barbaccia
Florida Department of Environmental Protection, South District
P.O. Box 2549
Fort Myers, Florida 33902-2549

Re: Lee County Resource Recovery Facility, PA 90-30
Third Quarter 2005 Ground Water Monitoring Results

Dear Mr. Barbaccia:

Enclosed please find the laboratory results for the ground water samples collected from wells MW-1S, MW-1D, MW-2S, MW-2D, and MW-4S and MW-4D on July 21, 2005. The ground water was analyzed in accordance with the approved ground water monitoring plan. Ground water from all wells sampled with the exception of MW-1D exceeded the Florida Secondary Drinking Water Standard (FSDWS) for Iron established in Rule 62-550, F.A.C. Ground water from wells MW-1S, MW-2D, MW-4S, and MW-4D exceeded the FSDWS for total dissolved solids (TDS). The levels of iron and TDS are consistent with the levels found historically in the aquifers.

Please call me if you have any questions or comments regarding this report.

Sincerely,

Laura A. Gray, P.E.
Engineering Manager
Solid Waste Division

Enclosure

Cc: Mr. Lindsey Sampson, P.E., LCSW
Mr. Jody Howard, Covanta
File II E107

Laboratory Results

Lee County Environmental Laboratory

60-2 Danley Drive
Fort Myers, FL 33907
239-278-7070

To: Laura Gray
Lee County Solid Waste

Report Date: 8/17/2005

Below are the results of samples submitted to this laboratory on: 7/21/2005

Laboratory ID	AB76521	Collection date and time	7/21/2005 10:10 AM
Location Code	WTE-1S	Sample Collector	JAMES PEET
Sample Description	Waste to Energy M.W. # 1-S		

Analysis Code	Analyte Name	Result	Qualifier	Units	MDL	Analysis Date	Analysis Time	Analysis Method
ASUGL	*Arsenic, AA furnace technique*	7.3		µg/L	1.0	7/28/2005	12:21 PM	SM20 3113 B
CL	Chloride titrimetric Argentometric	45.2		mg/L	1.2	8/3/2005	8:30 AM	SM20 4500-Cl-B
CONDF	Specific Conductance, 25oC, Field	793		µmhos/cm	1	7/21/2005	10:10 AM	EPA 120.1
DIGESTW	Metals digest w/HNO3, water samples	Completed				7/26/2005	10:33 AM	SM 3030 D, E
ELEV	Elevation, Water Table	21.76		Feet NGVD		7/21/2005	10:10 AM	FDEP-SOP-001/01
FE	Iron by flame AA	4.5		mg/L	0.04	7/29/2005	9:23 AM	SM3111B
HG	Mercury, AA cold vapor technique	0.2	U	µg/L	0.2	7/27/2005	3:06 PM	EPA 245.1
MN	Manganese by flame AA	0.01	U	mg/L	0.01	8/5/2005	9:07 AM	SM20 3111 B
NH3	Ammonia, Automated Phenate	0.290		mg/L as N	0.013	7/26/2005	3:00 PM	EPA 350.1
PHF	pH, Field (electrometric)	6.64		units		7/21/2005	10:10 AM	EPA 150.1
SAMPLE	Sample Collection	Completed				7/21/2005	10:10 AM	FDEP-SOP-001/01
SEUGL	Selenium, AA furnace technique	1.0	I	µg/L	1.0	7/27/2005	10:50 AM	SM20 3113 B
SO4_IC	Sulfate	26.6		mg/L	0.1	7/31/2005	10:46 AM	EPA 300.0
TDS	Total Dissolved Solids/filterable	512		mg/L	5.5	7/26/2005	4:11 PM	SM20 2540 C
TKN	Nitrogen, Kjeldahl, Total	1.01		mg/L as N	0.1	8/15/2005	9:30 AM	EPA 351.2
TOC	Total Organic Carbon	12	ELAB	mg/L	0.080	8/2/2005	12:00 AM	SM20 5310 B
ZN	Zinc by flame AA	0.01	U	mg/L	0.01	7/28/2005	2:57 PM	SM20 3111 B

Report Format: NELAC
DOH #E45049

Laboratory ID	AB76522	Collection date and time	7/21/2005 10:52 AM
Location Code	WTE-1D	Sample Collector	JAMES PEET
Sample Description	Waste to Energy M.W. # 1-D		

Analysis Code	Analyte Name	Result	Qualifier	Units	MDL	Analysis Date	Analysis Time	Analysis Method
ASUGL	Arsenic, AA furnace technique	1.0	U	µg/L	1.0	7/28/2005	12:21 PM	SM20 3113 B
CL	Chloride titrimetric Argentometric	104		mg/L	1.2	8/3/2005	8:30 AM	SM20 4500-Cl-B
CONDF	Specific Conductance, 25oC, Field	885		µmhos/cm	1	7/21/2005	10:52 AM	EPA 120.1
DIGESTW	Metals digest w/HNO3, water samples	Completed				7/26/2005	10:33 AM	SM 3030 D, E
ELEV	Elevation, Water Table	16.62		Feet NGVD		7/21/2005	10:52 AM	FDEP-SOP-001/01
FE	Iron by flame AA	0.04	U	mg/L	0.04	7/29/2005	9:23 AM	SM3111B
HG	Mercury, AA cold vapor technique	0.2	U	µg/L	0.2	7/27/2005	3:06 PM	EPA 245.1
MN	Manganese by flame AA	0.01	U	mg/L	0.01	8/5/2005	9:07 AM	SM20 3111 B
NH3	Ammonia, Automated Phenate	0.353		mg/L as N	0.013	7/26/2005	3:00 PM	EPA 350.1
PHF	pH, Field (electrometric)	7.19		units		7/21/2005	10:52 AM	EPA 150.1
SAMPLE	Sample Collection	Completed				7/21/2005	10:52 AM	FDEP-SOP-001/01
SEUGL	Selenium, AA furnace technique	3.8	I	µg/L	1.0	7/27/2005	10:50 AM	SM20 3113 B
SO4_IC	Sulfate	41.2		mg/L	0.1	7/31/2005	10:46 AM	EPA 300.0
TDS	Total Dissolved Solids/filterable	532		mg/L	5.5	7/26/2005	4:11 PM	SM20 2540 C
TKN	Nitrogen, Kjeldahl, Total	0.75		mg/L as N	0.1	8/15/2005	9:30 AM	EPA 351.2
TOC	Total Organic Carbon	5.4	ELAB	mg/L	0.080	8/2/2005	12:00 AM	SM20 5310 B
ZN	Zinc by flame AA	0.01	U	mg/L	0.01	7/28/2005	2:57 PM	SM20 3111 B

Laboratory ID	AB76523	Collection date and time	7/21/2005 11:54 AM
Location Code	WTE-2S	Sample Collector	JAMES PEET
Sample Description	Waste to Energy M.W. # 2-S		

Analysis Code	Analyte Name	Result	Qualifier	Units	MDL	Analysis Date	Analysis Time	Analysis Method
ASUGL	Arsenic, AA furnace technique	5.3		µg/L	1.0	7/28/2005	12:21 PM	SM20 3113 B
CL	Chloride titrimetric Argentometric	22.9		mg/L	1.2	8/3/2005	8:30 AM	SM20 4500-Cl-B
CONDF	Specific Conductance, 25oC, Field	601		µmhos/cm	1	7/21/2005	11:54 AM	EPA 120.1
DIGESTW	Metals digest w/HNO3, water samples	Completed				7/26/2005	10:33 AM	SM 3030 D, E
ELEV	Elevation, Water Table	19.53		Feet NGVD		7/21/2005	11:54 AM	FDEP-SOP-001/01
FE	Iron by flame AA	1.2		mg/L	0.04	7/29/2005	9:23 AM	SM3111B
HG	Mercury, AA cold vapor technique	0.2	U	µg/L	0.2	7/27/2005	3:06 PM	EPA 245.1
MN	Manganese by flame AA	0.01	U	mg/L	0.01	8/5/2005	9:07 AM	SM20 3111 B
NH3	Ammonia, Automated Phenate	0.998		mg/L as N	0.013	7/26/2005	3:00 PM	EPA 350.1
PHF	pH, Field (electrometric)	7.13		units		7/21/2005	11:54 AM	EPA 150.1
SAMPLE	Sample Collection	Completed				7/21/2005	11:54 AM	FDEP-SOP-001/01
SEUGL	Selenium, AA furnace technique	1.0	U	µg/L	1.0	7/27/2005	10:50 AM	SM20 3113 B
SO4_IC	Sulfate	76.1		mg/L	0.1	7/31/2005	10:46 AM	EPA 300.0

Report Format: NELAC

DOH #E45049

Laboratory ID	AB76523	Collection date and time	7/21/2005 11:54 AM
Location Code	WTE-2S	Sample Collector	JAMES PEET
Sample Description	Waste to Energy M.W. # 2-S		

Analysis Code	Analyte Name	Result	Qualifier	Units	MDL	Analysis Date	Analysis Time	Analysis Method
TDS	Total Dissolved Solids/filterable	436		mg/L	5.5	7/26/2005	4:11 PM	SM20 2540 C
TKN	Nitrogen, Kjeldahl, Total	1.56		mg/L as N	0.1	8/15/2005	9:30 AM	EPA 351.2
TOC	Total Organic Carbon	7.6	ELAB	mg/L	0.080	8/2/2005	12:00 AM	SM20 5310 B
ZN	Zinc by flame AA	0.01	U	mg/L	0.01	7/28/2005	2:57 PM	SM20 3111 B

Laboratory ID	AB76524	Collection date and time	7/21/2005 12:27 PM
Location Code	WTE-2D	Sample Collector	JAMES PEET
Sample Description	Waste to Energy M.W. # 2-D		

Analysis Code	Analyte Name	Result	Qualifier	Units	MDL	Analysis Date	Analysis Time	Analysis Method
ASUGL	Arsenic, AA furnace technique	4.7		µg/L	1.0	7/28/2005	12:21 PM	SM20 3113 B
CL	Chloride titrimetric Argentometric	164		mg/L	1.2	8/3/2005	8:30 AM	SM20 4500-Cl-B
CONDF	Specific Conductance, 25oC, Field	852		µmhos/cm	1	7/21/2005	12:27 PM	EPA 120.1
DIGESTW	Metals digest w/HNO3, water samples	Completed				7/26/2005	10:33 AM	SM 3030 D, E
ELEV	Elevation, Water Table	18.80		Feet NGVD		7/21/2005	12:27 PM	FDEP-SOP-001/01
FE	Iron by flame AA	0.65		mg/L	0.04	7/29/2005	9:23 AM	SM3111B
HG	Mercury, AA cold vapor technique	0.2	U	µg/L	0.2	7/27/2005	3:06 PM	EPA 245.1
MN	Manganese by flame AA	0.01	U	mg/L	0.01	8/5/2005	9:07 AM	SM20 3111 B
NH3	Ammonia, Automated Phenate	0.244		mg/L as N	0.013	7/26/2005	3:00 PM	EPA 350.1
PHF	pH, Field (electrometric)	7.21		units		7/21/2005	12:27 PM	EPA 150.1
SAMPLE	Sample Collection	Completed				7/21/2005	12:27 PM	FDEP-SOP-001/01
SEUGL	Selenium, AA furnace technique	1.0	U	µg/L	1.0	7/27/2005	10:50 AM	SM20 3113 B
SO4_IC	Sulfate	75.8		mg/L	0.1	7/31/2005	10:46 AM	EPA 300.0
TDS	Total Dissolved Solids/filterable	608		mg/L	5.5	7/26/2005	4:11 PM	SM20 2540 C
TKN	Nitrogen, Kjeldahl, Total	0.71		mg/L as N	0.1	8/15/2005	9:30 AM	EPA 351.2
TOC	Total Organic Carbon	4.3	ELAB	mg/L	0.080	8/2/2005	12:00 AM	SM20 5310 B
ZN	Zinc by flame AA	0.01	U	mg/L	0.01	7/28/2005	2:57 PM	SM20 3111 B

Laboratory ID	AB76525	Collection date and time	7/21/2005 1:20 PM
Location Code	WTE-4S	Sample Collector	JAMES PEET
Sample Description	Waste to Energy M.W. # 4-S		

Analysis Code	Analyte Name	Result	Qualifier	Units	MDL	Analysis Date	Analysis Time	Analysis Method
ASUGL	Arsenic, AA furnace technique	1.0	U	µg/L	1.0	7/28/2005	12:21 PM	SM20 3113 B
CL	Chloride titrimetric Argentometric	41.0		mg/L	1.2	8/3/2005	8:30 AM	SM20 4500-Cl-B

Laboratory ID	AB76525	Collection date and time	7/21/2005 1:20 PM
Location Code	WTE-4S	Sample Collector	JAMES PEET
Sample Description	Waste to Energy M.W. # 4-S		

Analysis Code	Analyte Name	Result	Qualifier	Units	MDL	Analysis Date	Analysis Time	Analysis Method
CONDF	Specific Conductance, 25oC, Field	810		µmhos/cm	1	7/21/2005	1:20 PM	EPA 120.1
DIGESTW	Metals digest w/HNO3, water samples	Completed				7/26/2005	10:33 AM	SM 3030 D, E
ELEV	Elevation, Water Table	19.65		Feet NGVD		7/21/2005	1:20 PM	FDEP-SOP-001/01
FE	Iron by flame AA	2.6		mg/L	0.04	7/29/2005	9:23 AM	SM3111B
HG	Mercury, AA cold vapor technique	0.2	U	µg/L	0.2	7/27/2005	3:06 PM	EPA 245.1
MN	Manganese by flame AA	0.01	U	mg/L	0.01	8/5/2005	9:07 AM	SM20 3111 B
NH3	Ammonia, Automated Phenate	0.226		mg/L as N	0.013	7/26/2005	3:00 PM	EPA 350.1
PHF	pH, Field (electrometric)	6.95		units		7/21/2005	1:20 PM	EPA 150.1
SAMPLE	Sample Collection	Completed				7/21/2005	1:20 PM	FDEP-SOP-001/01
SEUGL	Selenium, AA furnace technique	1.0	U	µg/L	1.0	7/27/2005	10:50 AM	SM20 3113 B
SO4_IC	Sulfate	173		mg/L	0.1	7/31/2005	10:46 AM	EPA 300.0
TDS	Total Dissolved Solids/filterable	668		mg/L	5.5	7/26/2005	4:11 PM	SM20 2540 C
TKN	Nitrogen, Kjeldahl, Total	0.88		mg/L as N	0.1	8/15/2005	9:30 AM	EPA 351.2
TOC	Total Organic Carbon	9.0	ELAB	mg/L	0.080	8/2/2005	12:00 AM	SM20 5310 B
ZN	Zinc by flame AA	0.01	U	mg/L	0.01	7/28/2005	2:57 PM	SM20 3111 B

Laboratory ID	AB76526	Collection date and time	7/21/2005 2:22 PM
Location Code	WTE-4D	Sample Collector	JAMES PEET
Sample Description	Waste to Energy M.W. # 4-D		

Analysis Code	Analyte Name	Result	Qualifier	Units	MDL	Analysis Date	Analysis Time	Analysis Method
ASUGL	Arsenic, AA furnace technique	1.0	U	µg/L	1.0	7/28/2005	12:21 PM	SM20 3113 B
CL	Chloride titrimetric Argentometric	160		mg/L	1.2	8/3/2005	8:30 AM	SM20 4500-Cl-B
CONDF	Specific Conductance, 25oC, Field	1005		µmhos/cm	1	7/21/2005	2:22 PM	EPA 120.1
DIGESTW	Metals digest w/HNO3, water samples	Completed				7/26/2005	10:33 AM	SM 3030 D, E
ELEV	Elevation, Water Table	20.13		Feet NGVD		7/21/2005	2:22 PM	FDEP-SOP-001/01
FE	Iron by flame AA	1.02		mg/L	0.04	7/29/2005	9:23 AM	SM3111B
HG	Mercury, AA cold vapor technique	0.2	U	µg/L	0.2	7/27/2005	3:06 PM	EPA 245.1
MN	Manganese by flame AA	0.01	U	mg/L	0.01	8/5/2005	9:07 AM	SM20 3111 B
NH3	Ammonia, Automated Phenate	0.362		mg/L as N	0.013	7/26/2005	3:00 PM	EPA 350.1
PHF	pH, Field (electrometric)	6.92		units		7/21/2005	2:22 PM	EPA 150.1
SAMPLE	Sample Collection	Completed				7/21/2005	2:22 PM	FDEP-SOP-001/01
SEUGL	Selenium, AA furnace technique	1.0	U	µg/L	1.0	7/27/2005	10:50 AM	SM20 3113 B
SO4_IC	Sulfate	48.7		mg/L	0.1	7/31/2005	10:46 AM	EPA 300.0
TDS	Total Dissolved Solids/filterable	656		mg/L	5.5	7/26/2005	4:11 PM	SM20 2540 C
TKN	Nitrogen, Kjeldahl, Total	1.05		mg/L as N	0.1	8/15/2005	9:30 AM	EPA 351.2

Report Format: NELAC

DOH #E45049

Laboratory ID	AB76526	Collection date and time	7/21/2005 2:22 PM
Location Code	WTE-4D	Sample Collector	JAMES PEET
Sample Description	Waste to Energy M.W. # 4-D		

Analysis Code	Analyte Name	Result	Qualifier	Units	MDL	Analysis Date	Analysis Time	Analysis Method
TOC	Total Organic Carbon	8.0	ELAB	mg/L	0.080	8/2/2005	12:00 AM	SM20 5310 B
ZN	Zinc by flame AA	0.01	U	mg/L	0.01	7/28/2005	2:57 PM	SM20 3111 B

Unless noted otherwise, these test results meet all the requirements of the 2003 NELAC Standards.
All questions regarding this report should be directed to Keith A. Kibbey, Laboratory Manager.

Keith A. Kibbey
Laboratory Manager

LCEL

Lab Certification: E45049

Lee County Environmental Laboratory
60-2 Danely Dr Ft Myers, FL 33907
Phone: (239) 278-7070
Fax: (239) 939-4850

Analysis Request & Chain of Custody Record

Report/Result Information	Billing/Invoice Information
Name: LAURA GRAY / LEE COUNTY SOLID WASTE	Name: LAURA GRAY / LEE COUNTY SOLID WASTE
Address:	Address:
Phone/Fax/Cell: ( )	Phone/Fax/Cell: ( )
Sample Collector(s) (please print): JAMES PEET	Sample Collector Signature: [signature]

Matrix Codes: DW-Drinking water; GW- Ground water; WW-Waste water; SW-Surface water; WWS-Wastewater Sludge; S-Sediment; O-Other

Perservative Codes: NP-No Preservative; N-Nitric Acid; S-Sulfuric Acid; H-Hydrochloric Acid; SH-Sodium Hydroxide; ST-Sodium Thiosulfate; O-Other

Relinquished By: (signature)	Date	Time	Received By: (signature)
[signature]	7/21/05	1520	[signature]

Sample(s) on ice ☒ Yes or ☐ No?

Analyses Required

Collection Date	Time	AM	PM	Sample Description & Location	Matrix (see codes)	SAMPLE GW pH F COND F ELEV	TDS CL SO4 FL	AS, Fe, Hg, Zn MN SE	TKN NH3	TOC				Shipping	LCE Lab #
Preservatives (see codes)						FP	NP	N	S	S				X	
7/21/05	1010	(AM)		WTE-1S	GW	X	1	1	1	1				X	AB76521
	1051	(AM)		WTE-1D		X	1	1	1	1				X	AB76522
	1153	(AM)		WTE-2S		X	1	1	1	1				X	AB76523
	1227		(PM)	WTE-2D		X	1	1	1	1				X	AB76524
	1320		(PM)	WTE-4S		X	1	1	1	1				X	AB76525
	1421		(PM)	WTE-4D		X	1	1	1	1				X	AB76526
		AM	PM												