



BOARD OF COUNTY COMMISSIONERS

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JUL 11 1994

DEPT. SOUTH DISTRICT

P.O. Box 398
Fort Myers, Florida 33902-0398
(813) 335-2111

(813) 338-3100

Writer's Direct Dial Number

John E. Manning
District One

July 7, 1994

Douglas R. St. Cemy
District Two

SI-94-310

Ray Judah
District Three

Franklin B. Mann
District Four

Mr. Phil Barbacia
Florida Department of
Environmental Protection
2295 Victoria Avenue
Suite 364
Fort Myers, FL 33901

John E. Albion
District Five

Donald D. Stilwell
County Administrator

James G. Yaeger
County Attorney

Diana M. Parker
County Hearing
Examiner

RE: Lee County Solid Waste Energy Recovery Facility
Power Plant Site Certification #PA 90-30.

Dear Mr. Barbacia:

In accordance with the subject certification, condition XIV. D.3. d and e, please find attached a copy of the quarterly groundwater sampling results. The test results for surface water sample #AA44132 is also included.

If you have any questions, please contact me at 338-3100.

Sincerely,

DEPARTMENT OF SOLID WASTE MANAGEMENT

Lindsey J. Sampson
Deputy Director

LJS/clr

Attachments

cc: D. Dee
S. Coughanour w/attachment
D. Markley w/attachment
P. Young w/attachment
K. Johnson w/attachment
II A418

Lee County Environmental Laboratory
60 Danley Drive # 2
Fort Myers, Florida 33907
(813) 278-7288
HRS ID 45031/E45049

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D.E.P. SOUTH DISTRICT

April 12, 1994

Mr. Lindsey Sampson
L.C. Dept. of Solid Waste
cc: Malcolm Pirnie, Inc.

Dear: Mr. Sampson:

Below are the results of analysis of 1 sample received for examination on April 1, 1994:

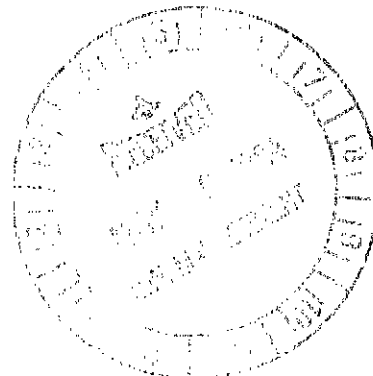
Sample I.D. AA44132 Location code: WTESW
Location Description: Waste to Energy Surface Water
Sample collector: VICKI
Sample collection date: 04/01/94 Time: 10:00
Lab submittal date: 04/01/94 Time: 13:03

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Alkalinity, Total	mg/L as CaCO ₃	92	1
Chemical Oxygen Demand	mg/L	23	1
Oxygen, Dissolved, Winkler	mg/L	8.0	0.1
pH (electrometric)	pH units	8.2	
Specific Conductance @ 25°C	umhos/cm	462	1
Total Organic Carbon	mg/L	16	1
Total Suspended Solids	mg/L	3	1
Turbidity (Nephelometric)	NTU	3.7	0.01

Please advise should you have questions concerning these data.

Respectfully submitted,

Keith A. Kibbey
Laboratory Director
Division of Natural Resources Management



Lee County Environmental Laboratory
 60 Danley Drive # 2
 Fort Myers, Florida 33907
 (813) 278-7288
 HRS ID 45031/E45049

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D.E.P. SOUTH DISTRICT

May 20, 1994

Mr. Lindsey Sampson
 L.C. Dept. of Solid Waste
 cc: Malcolm Pirnie, Inc.

Dear: Mr. Sampson:

Below are the results of analysis of 12 samples received for examination on April 14, 1994:

Sample I.D. AA44530 Location code: WTE-1S
 Location Description: Waste to Energy M.W. # 1-S
 Sample collector: VICKI
 Sample collection date: 04/14/94 Time: 10:00
 Lab submittal date: 04/14/94 Time: 14:44

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Arsenic, AA furnace technique	mg/L	0.012	0.001
Cadmium by flame AA	mg/L	Not detected	0.005
Chromium by flame AA	mg/L	Not detected	0.01
Iron by flame AA	mg/L	16.20	0.03
Lead, AA furnace technique	ug/L	6	1
Mercury, AA cold vapor technique	ug/L	Not detected	0.2
Nitrate	mg/L as N	Not detected	0.01
Nitrite	mg/L as N	Not detected	0.001
Nitrate + Nitrite	mg/L as N	Not detected	0.01
pH (electrometric)	pH units	6.7	
Total Dissolved Solids	mg/L	452	2
Selenium, AA furnace technique	mg/L	Not detected	0.002
Nitrogen, Kjeldahl, Total	mg/L as N	1.73	0.01
Specific Conductance @ 25oC	umhos/cm	724	1
Elevation, Water Table	Feet NGVD	17.80	0.01

Summary of specification violations or warnings:

Analyte: Cadmium by flame AA
 Upper specification value: 0.01 Result: Not detected

Sample I.D. AA44531 Location code: WTE-1D
 Location Description: Waste to Energy M.W. # 1-D
 Sample collector: VICKI
 Sample collection date: 04/14/94 Time: 10:00
 Lab submittal date: 04/14/94 Time: 14:44

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 May 20, 1994
 Mr. Lindsey Sampson Sample I.D. AA44531 (continued)

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D.E.P. SOUTH DISTRICT

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Arsenic, AA furnace technique	mg/L	Not detected	0.001
Cadmium by flame AA	mg/L	Not detected	0.005
Chromium by flame AA	mg/L	0.01	0.01
Iron by flame AA	mg/L	0.03	0.03
Lead, AA furnace technique	ug/L	2	1
Mercury, AA cold vapor technique	ug/L	Not detected	0.2
Nitrate	mg/L as N	Not detected	0.01
Nitrite	mg/L as N	Not detected	0.001
Nitrate + Nitrite	mg/L as N	Not detected	0.01
pH (electrometric)	pH units	7.1	
Total Dissolved Solids	mg/L	490	2
Selenium, AA furnace technique	mg/L	Not detected	0.002
Nitrogen, Kjeldahl, Total	mg/L as N	1.39	0.01
Specific Conductance @ 25oC	umhos/cm	893	1
Elevation, Water Table	Feet NGVD	16.07	0.01

Sample I.D. AA44532

Location code: WTE-2S

Location Description: Waste to Energy M.W. # 2-S

Sample collector: VICKI

Sample collection date: 04/14/94 Time: 10:00

Lab submittal date: 04/14/94 Time: 14:44

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Arsenic, AA furnace technique	mg/L	0.003	0.001
Cadmium by flame AA	mg/L	Not detected	0.005
Chromium by flame AA	mg/L	Not detected	0.01
Iron by flame AA	mg/L	2.48	0.03
Lead, AA furnace technique	ug/L	Not detected	1
Mercury, AA cold vapor technique	ug/L	Not detected	0.2
Nitrate	mg/L as N	Not detected	0.01
Nitrite	mg/L as N	Not detected	0.001
Nitrate + Nitrite	mg/L as N	Not detected	0.01
pH (electrometric)	pH units	6.7	
Total Dissolved Solids	mg/L	518	2
Selenium, AA furnace technique	mg/L	Not detected	0.002
Nitrogen, Kjeldahl, Total	mg/L as N	1.39	0.01
Specific Conductance @ 25oC	umhos/cm	858	1
Elevation, Water Table	Feet NGVD	17.50	0.01

Summary of specification violations or warnings:

Analyte: Cadmium by flame AA
 Upper specification value: 0.01

Result: Not detected

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Sample I.D. AA44533

Location code: WTE-2D

Location Description: Waste to Energy M.W. # 2-D

D.E.P. South District

Sample collector: VICKI

Sample collection date: 04/14/94 Time: 10:00

Lab submittal date: 04/14/94 Time: 14:44

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Arsenic, AA furnace technique	mg/L	Not detected	0.001
Cadmium by flame AA	mg/L	Not detected	0.005
Chromium by flame AA	mg/L	Not detected	0.01
Iron by flame AA	mg/L	0.15	0.03
Lead, AA furnace technique	ug/L	4	1
Mercury, AA cold vapor technique	ug/L	Not detected	0.2
Nitrate	mg/L as N	0.03	0.01
Nitrite	mg/L as N	Not detected	0.001
Nitrate + Nitrite	mg/L as N	0.03	0.01
pH (electrometric)	pH units	7.3	
Total Dissolved Solids	mg/L	622	2
Selenium, AA furnace technique	mg/L	Not detected	0.002
Nitrogen, Kjeldahl, Total	mg/L as N	1.46	0.01
Specific Conductance @ 25oC	umhos/cm	995	1
Elevation, Water Table	Feet NGVD	17.17	0.01

Sample I.D. AA44534

Location code: WTE-3S

Location Description: Waste to Energy M.W. # 3-S

Sample collector: VICKI

Sample collection date: 04/14/94 Time: 10:00

Lab submittal date: 04/14/94 Time: 14:44

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Arsenic, AA furnace technique	mg/L	0.002	0.001
Cadmium by flame AA	mg/L	Not detected	0.005
Chromium by flame AA	mg/L	Not detected	0.01
Iron by flame AA	mg/L	2.55	0.03
Lead, AA furnace technique	ug/L	Not detected	1
Mercury, AA cold vapor technique	ug/L	Not detected	0.2
Nitrate	mg/L as N	Not detected	0.01
Nitrite	mg/L as N	Not detected	0.001
Nitrate + Nitrite	mg/L as N	Not detected	0.01
pH (electrometric)	pH units	7.0	
Total Dissolved Solids	mg/L	556	2
Selenium, AA furnace technique	mg/L	Not detected	0.002
Nitrogen, Kjeldahl, Total	mg/L as N	0.50	0.01
Specific Conductance @ 25oC	umhos/cm	885	1
Elevation, Water Table	Feet NGVD	17.45	0.01

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Sample I.D. AA44535

Location code: WTE-3D

D.E.P. SOUTH DISTRICT

Location Description: Waste to Energy M.W. # 3-D

Sample collector: VICKI

Sample collection date: 04/14/94 Time: 10:00

Lab submittal date: 04/14/94 Time: 14:44

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Arsenic, AA furnace technique	mg/L	Not detected	0.001
Cadmium by flame AA	mg/L	Not detected	0.005
Chromium by flame AA	mg/L	0.01	0.01
Iron by flame AA	mg/L	0.05	0.03
Lead, AA furnace technique	ug/L	Not detected	1
Mercury, AA cold vapor technique	ug/L	Not detected	0.2
Nitrate	mg/L as N	Not detected	0.01
Nitrite	mg/L as N	Not detected	0.001
Nitrate + Nitrite	mg/L as N	Not detected	0.01
pH (electrometric)	pH units	7.6	
Total Dissolved Solids	mg/L	554	2
Selenium, AA furnace technique	mg/L	Not detected	0.002
Nitrogen, Kjeldahl, Total	mg/L as N	0.72	0.01
Specific Conductance @ 25oC	umhos/cm	1080	1
Elevation, Water Table	Feet NGVD	17.23	0.01

Sample I.D. AA44536

Location code: WTE-4S

Location Description: Waste to Energy M.W. # 4-S

Sample collector: VICKI

Sample collection date: 04/14/94 Time: 10:00

Lab submittal date: 04/14/94 Time: 14:44

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Arsenic, AA furnace technique	mg/L	Not detected	0.001
Cadmium by flame AA	mg/L	Not detected	0.005
Chromium by flame AA	mg/L	Not detected	0.01
Iron by flame AA	mg/L	1.84	0.03
Lead, AA furnace technique	ug/L	Not detected	1
Mercury, AA cold vapor technique	ug/L	Not detected	0.2
Nitrate	mg/L as N	Not detected	0.01
Nitrite	mg/L as N	Not detected	0.001
Nitrate + Nitrite	mg/L as N	Not detected	0.01
pH (electrometric)	pH units	6.9	
Total Dissolved Solids	mg/L	974	2
Selenium, AA furnace technique	mg/L	Not detected	0.002
Nitrogen, Kjeldahl, Total	mg/L as N	0.67	0.01
Specific Conductance @ 25oC	umhos/cm	1540	1
Elevation, Water Table	Feet NGVD	17.42	0.01

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Sample I.D. AA44537

Location code: WTE-4D

Location Description: Waste to Energy M.W. # 4-D

D.E.P. SOUTH DISTRICT

Sample collector: VICKI

Sample collection date: 04/14/94 Time: 10:00

Lab submittal date: 04/14/94 Time: 14:44

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Arsenic, AA furnace technique	mg/L	Not detected	0.001
Cadmium by flame AA	mg/L	Not detected	0.005
Chromium by flame AA	mg/L	Not detected	0.01
Iron by flame AA	mg/L	Not detected	0.03
Lead, AA furnace technique	ug/L	1	1
Mercury, AA cold vapor technique	ug/L	Not detected	0.2
Nitrate	mg/L as N	0.27	0.01
Nitrite	mg/L as N	Not detected	0.001
Nitrate + Nitrite	mg/L as N	0.27	0.01
pH (electrometric)	pH units	7.6	
Total Dissolved Solids	mg/L	544	2
Selenium, AA furnace technique	mg/L	Not detected	0.002
Nitrogen, Kjeldahl, Total	mg/L as N	0.54	0.01
Specific Conductance @ 25oC	umhos/cm	954	1
Elevation, Water Table	Feet NGVD	16.99	0.01

Sample I.D. AA44538

Location code: WTE-5S

Location Description: Waste to Energy M.W. # 5-S

Sample collector: VICKI

Sample collection date: 04/14/94 Time: 10:00

Lab submittal date: 04/14/94 Time: 14:44

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Arsenic, AA furnace technique	mg/L	Not detected	0.001
Cadmium by flame AA	mg/L	Not detected	0.005
Chromium by flame AA	mg/L	0.01	0.01
Iron by flame AA	mg/L	1.01	0.03
Lead, AA furnace technique	ug/L	2	1
Mercury, AA cold vapor technique	ug/L	Not detected	0.2
Nitrate	mg/L as N	Not detected	0.01
Nitrite	mg/L as N	Not detected	0.001
Nitrate + Nitrite	mg/L as N	Not detected	0.01
pH (electrometric)	pH units	7.0	
Total Dissolved Solids	mg/L	534	2
Selenium, AA furnace technique	mg/L	Not detected	0.002
Nitrogen, Kjeldahl, Total	mg/L as N	0.66	0.01
Specific Conductance @ 25oC	umhos/cm	795	1
Elevation, Water Table	Feet NGVD	17.18	0.01

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D.E.P. SOUTH DISTRICT

Sample I.D. AA44539 Location code: WTE-5D
Location Description: Waste to Energy M.W. # 5-D
Sample collector: VICKI
Sample collection date: 04/14/94 Time: 10:00
Lab submittal date: 04/14/94 Time: 14:44

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Arsenic, AA furnace technique	mg/L	Not detected	0.001
Cadmium by flame AA	mg/L	Not detected	0.005
Chromium by flame AA	mg/L	Not detected	0.01
Iron by flame AA	mg/L	0.09	0.03
Lead, AA furnace technique	ug/L	1	1
Mercury, AA cold vapor technique	ug/L	Not detected	0.2
Nitrate	mg/L as N	0.10	0.01
Nitrite	mg/L as N	Not detected	0.001
Nitrate + Nitrite	mg/L as N	0.10	0.01
pH (electrometric)	pH units	7.3	
Total Dissolved Solids	mg/L	706	2
Selenium, AA furnace technique	mg/L	Not detected	0.002
Nitrogen, Kjeldahl, Total	mg/L as N	0.55	0.01
Specific Conductance @ 25°C	umhos/cm	1160	1
Elevation, Water Table	Feet NGVD	16.91	0.01

Summary of specification violations or warnings:

Analyte: Cadmium by flame AA
Upper specification value: 0.01 Result: Not detected

Sample I.D. AA44540 Location code: WTE-6S
Location Description: Waste to Energy M.W. # 6-S
Sample collector: VICKI
Sample collection date: 04/14/94 Time: 10:00
Lab submittal date: 04/14/94 Time: 14:44

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Arsenic, AA furnace technique	mg/L	0.001	0.001
Cadmium by flame AA	mg/L	Not detected	0.005
Chromium by flame AA	mg/L	0.02	0.01
Iron by flame AA	mg/L	1.55	0.03
Lead, AA furnace technique	ug/L	3	1
Mercury, AA cold vapor technique	ug/L	Not detected	0.2
Nitrate	mg/L as N	Not detected	0.01
Nitrite	mg/L as N	Not detected	0.001
Nitrate + Nitrite	mg/L as N	Not detected	0.01
pH (electrometric)	pH units	7.3	
Total Dissolved Solids	mg/L	588	2
Selenium, AA furnace technique	mg/L	Not detected	0.002
Nitrogen, Kjeldahl, Total	mg/L as N	0.61	0.01

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Specific Conductance @ 25oC	umhos/cm	888	1
Elevation, Water Table	Feet NGVD	17.33	0.01

Summary of specification violations or warnings:

Analyte: Cadmium by flame AA
 Upper specification value: 0.01 Result: Not detected

Sample I.D. AA44541 Location code: WTE-6D
 Location Description: Waste to Energy M.W. # 6-D
 Sample collector: VICKI
 Sample collection date: 04/14/94 Time: 10:00
 Lab submittal date: 04/14/94 Time: 14:44

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
Arsenic, AA furnace technique	mg/L	0.002	0.001
Cadmium by flame AA	mg/L	Not detected	0.005
Chromium by flame AA	mg/L	Not detected	0.01
Iron by flame AA	mg/L	0.16	0.03
Lead, AA furnace technique	ug/L	2	1
Mercury, AA cold vapor technique	ug/L	Not detected	0.2
Nitrate	mg/L as N	0.14	0.01
Nitrite	mg/L as N	Not detected	0.001
Nitrate + Nitrite	mg/L as N	0.14	0.01
pH (electrometric)	pH units	7.2	
Total Dissolved Solids	mg/L	828	2
Selenium, AA furnace technique	mg/L	Not detected	0.002
Nitrogen, Kjeldahl, Total	mg/L as N	0.48	0.01
Specific Conductance @ 25oC	umhos/cm	1480	1
Elevation, Water Table	Feet NGVD	16.81	0.01

Please advise should you have questions concerning these data.

Respectfully submitted,

Keith A. Kibbey
 Keith A. Kibbey
 Laboratory Director
 Division of Natural Resources Management