

Paulson, Usha

From: paulson_u@dep3.dep.state.fl.us
Sent: Friday, January 05, 2001 8:00 AM
To: Paulson, Usha
Subject: 0570261 Temporary Emission Data

Page: 1 FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
 FACILITY / EMISSION UNIT DATA 05-JAN-01
 TEMPORARY EMISSION DATA

EMISSION POINT

AIRS ID: 0570261 Type: 1
Stack #: 103 Discharge Type: V Height: 220 ft
Exit Diam: 5.1 ft Exit Temp: 480 F Exit Velocity: ft/s
Ident: Emission Point #1
Flow rate: 92929 (acfm) Water Vapor %: 13.8 Dry Std Flow: 45291 dscfm

	UTM	GEP Stack Ht (ft):	
Zone	North (km)	East (km)	Non-Stack Ht (ft):
17	3092.70	368.20	

Comment

The stack flow parameters listed were derived from the 1995 compliance test, and are not absolute.

EMISSION UNIT

ID Status Description

1 A Municipal Waste Combustor & Auxiliary burners - Unit #1

Type - AIRS Description

9.12 - MWC w/ Aux Burner-Unit 1

EU Classification: Regulated Emissions Unit

Acid Rain Unit: N

EU Major Group SIC: 49

Comment:

Generator
Rating(MW) Model Number Manufacturer

29

Dwell temp (F): 1800 Dwell time (sec): 1
Afterburner temp (F): Heat input rate: 174 mmBTU/hr
Incin. Rate (lb/hr): 36666 Incin. Rate (ton/day): 440
Throughput: 104000 Unit: lb Steam/hr
Production: Unit:

Capacity Comment

Generator nameplate rating is for entire facility. Demonstration of compliance

with maximum throughput capacity shall be measured by steam flow. Maximum incinerator rate is 110% of rated design capacity

Startup: 18-DEC-1986 Long-term Reserve Shutdown:

Emission Point Description

NA

Page: 2 FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FACILITY / EMISSION UNIT DATA 05-JAN-01
TEMPORARY EMISSION DATA

Similar Emission Unit:

T_EU D_EU Description

Emission Units with this Emission Point in common:

Emission Unit Schedule

24 Hours per Day
7 Days per Week
52 Weeks per Year
8760 Hours per Year

CONTINUOUS MONITOR

CM ID	Par	Req	Manufacturer	Model Number	Serial Number	Installed
1	VE	Lear Siegler	RM 41	15603802	01-OCT-1986	

PST
PST Date Stat Cert Date
10-MAR-1987

Comment

Monitored
Pollutants

CONTINUOUS MONITOR

CM ID	Par	Req	Manufacturer	Model Number	Serial Number	Installed
2	O2	Ametek Corp	Thermox WDG	CO36232-3	18-DEC-1986	

PST
PST Date Stat Cert Date

Comment

Monitored
Pollutants

Page: 3
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FACILITY / EMISSION UNIT DATA 05-JAN-01
TEMPORARY EMISSION DATA

PSD

Ice Code (PM): C Ice Code (SO2): C Ice Code (NO2): C
PM Lb/Hr: SO2 Lb/Hr:
PM Ton/Yr: SO2 Ton/Yr: NO2 Ton/Yr:

Comment

EU Regulation	Type
40 CFR 60, Subpart Cb	Federal
40 CFR 60, Subpart E	Federal
40 CFR 60, Subpart Eb	Federal
40 CFR 60.33b(a)(1)(i)	Federal
40 CFR 60.33b(a)(1)(iii)	Federal
40 CFR 60.33b(a)(2)(i)	Federal
40 CFR 60.33b(a)(3)	Federal
40 CFR 60.33b(a)(4)	Federal
40 CFR 60.33b(b)(3)(i)	Federal
40 CFR 60.33b(b)(3)(iii)	Federal
40 CFR 60.33b(c)(1)(ii)	Federal
40 CFR 60.33b(d)	Federal
40 CFR 60.34b(a)	Federal
62-212.400(2)(g)	State

POLLUTANT

Pollutant: CO Control Eff:
Primary Ctrl: 99
Secondary Ctl:
Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
17.4000	76.2600	0		

Syn. Limited: N

EMIS Factor Unit EMIS Factor Ref
100.000000 PPMVD @ 7% O2 PA 83-19

EMIS Calc

Comment

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FACILITY / EMISSION UNIT DATA
TEMPORARY EMISSION DATA

05-JAN-01

Allowable Emission: 100.000000
Unit: PARTS PER MILLION DRY GAS VOLUME @ 7% O2
Future Effective Date:

Compliance Regulation: 40 CFR 60.34b(a)
Method Code: 3 - STACK TEST & CMS

EMIS Basis COMPL Method

RULE Stack test

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
17.400000	76.260000	ANNUALLY	28-JUL-2000

Comment

4 hr block average.

Test Method: 10

Test Method: 10A

Test Method: 10B

POLLUTANT

Pollutant: DIOX Control Eff:
Primary Ctrl: 41
Secondary Ctl: 16
Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
0.0000	0.0000	0		

Syn. Limited: N

EMIS Factor	Unit	EMIS Factor Ref
30.000000	OTHER (SPECIFY IN COMMENT)	

EMIS Calc

Comment

30 nanograms per DSCM@7%O2.

Allowable Emission: 30.000000
Unit: NANOGRAMS PER DRY STANDARD CUBIC METER @ 7% O2
Future Effective Date:

Compliance Regulation: 40 CFR 60.33b(c)(1)(ii)
Method Code: 1 - STACK TEST

EMIS Basis COMPL Method

RULE

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
0.000005	0.000019	ANNUALLY	28-JUL-2000

Comment

Test Method: 23

POLLUTANT

Pollutant: FL Control Eff:
Primary Ctrl: 42
Secondary Ctl:
Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
1.0000	4.4300	0		

Syn. Limited:

EMIS Factor Unit	EMIS Factor Ref
6.740000 MILLIGRAMS/DSCM	

EMIS Calc

Comment

6.74 milligrams per DSCM@7%O2.
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Page: 6 FACILITY / EMISSION UNIT DATA 05-JAN-01
TEMPORARY EMISSION DATA

Allowable Emission: 6.740000
Unit: MILLIGRAMS PER CUBIC METER (AMBIENT)
Future Effective Date:

Compliance Regulation:
Method Code: 1 - STACK TEST

EMIS Basis COMPL Method

OTHER

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
1.000000	4.430000	ANNUALLY	28-JUL-2000

Comment

PSD-FL-121(C). 6.74 milligrams per DSCM@7%O2.

Test Method: 13A

Test Method: 13B

POLLUTANT

Pollutant: H021 Control Eff:
 Primary Ctrl: 16
 Secondary Ctl:
 Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
0.0002	0.0010	0		

Syn. Limited: N

EMIS Factor Unit	EMIS Factor Ref
1.480000 MICROGRAMS/DSCM @ 7% O2	

EMIS Calc

Comment

Page: 7 FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
 FACILITY / EMISSION UNIT DATA 05-JAN-01
 TEMPORARY EMISSION DATA

Allowable Emission: 1.480000
 Unit: MICROGRAMS PER DRY STANDARD CUBIC METER @ 7% O2
 Future Effective Date:

Compliance Regulation: 62-212.400(2)(g)
 Method Code: 1 - STACK TEST

EMIS Basis COMPL Method

RULE Stack test

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
0.000218	0.000960	ANNUALLY	28-JUL-2000

Comment

Test Method: 29

POLLUTANT

Pollutant: H027 Control Eff:
Primary Ctrl:
Secondary Ctl:
Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
0.0060	0.0260	0		

Syn. Limited: N

EMIS Factor Unit	EMIS Factor Ref
0.040000 MILLIGRAMS/DSCM	

EMIS Calc

Comment

0.04 milligrams / DSCM@7% O2.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FACILITY / EMISSION UNIT DATA 05-JAN-01
TEMPORARY EMISSION DATA

Page: 8

Allowable Emission: 0.040000
Unit: MILLIGRAMS PER CUBIC METER (AMBIENT)
Future Effective Date:

Compliance Regulation: 40 CFR 60.33b(a)(2)(i)
Method Code: 1 - STACK TEST

EMIS Basis COMPL Method

RULE

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
0.006000	0.026000	ANNUALLY	28-JUL-2000

Comment

mg/dscm @7% O2

Test Method: 29

POLLUTANT

Pollutant: H106 Control Eff: 95.0
Primary Ctrl: 41
Secondary Ctl: 16
Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
17.0000	74.4300	0		

Syn. Limited: N

EMIS Factor	Unit	EMIS Factor Ref
29.000000	PPMVD @ 7% O2	

EMIS Calc

Comment

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FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FACILITY / EMISSION UNIT DATA 05-JAN-01
TEMPORARY EMISSION DATA

Allowable Emission: 29.000000
Unit: PARTS PER MILLION DRY GAS VOLUME @ 7% O2
Future Effective Date:

Compliance Regulation: 40 CFR 60.33b(b)(3)(ii)
Method Code: 1 - STACK TEST

EMIS Basis COMPL Method

RULE

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
17.000000	74.430000	ANNUALLY	28-JUL-2000

Comment

Test Method: 26

Test Method: 26A

POLLUTANT

Pollutant: H114 Control Eff: 85.0
Primary Ctrl: 48
Secondary Ctl: 16
Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
0.0200	0.0870	0		

Syn. Limited: N

EMIS Factor	Unit	EMIS Factor Ref

0.070000 MILLIGRAMS/DSCM

EMIS Calc

Comment

0.07 mg/dscm @7% O2

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FACILITY / EMISSION UNIT DATA 05-JAN-01
TEMPORARY EMISSION DATA

Page: 10

Allowable Emission: 0.070000
Unit: MILLIGRAMS PER CUBIC METER (AMBIENT)
Future Effective Date:

Compliance Regulation: 40CFR60.33b(a)(3)
Method Code: 1 - STACK TEST

EMIS Basis COMPL Method

RULE Annual stack test

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
0.020000	0.087000	ANNUALLY	28-JUL-2000

Comment

mg/dscm @7% O2

Test Method: 29

POLLUTANT

Pollutant: NOX Control Eff: 107
Primary Ctrl:
Secondary Ctl:
Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
58.6300	256.0000	0		

Syn. Limited: N

EMIS Factor Unit EMIS Factor Ref
205.000000 PPMVD @ 7% O2

EMIS Calc

Comment

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Allowable Emission: 205.000000
Unit: PARTS PER MILLION DRY GAS VOLUME
Future Effective Date:

Compliance Regulation: 40 CFR 60.33b(d)
Method Code: 3 - STACK TEST & CMS

EMIS Basis COMPL Method

RULE Stack test

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
58.630000	256.000000	ANNUALLY	28-JUL-2000

Comment

NOx emissions from auxiliary burners are 3.45 lb/hr and 15.1 TPY per unit. These emissions are part of combustor emissions.

Test Method: 19

POLLUTANT

Pollutant: PB Control Eff: 16
Primary Ctrl: 16
Secondary Ctl:
Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
0.0650	0.2880	0		

Syn. Limited: Y

EMIS Factor Unit	EMIS Factor Ref
0.440000 MICROGRAMS/DSCM @ 7% O2	

EMIS Calc

Comment

0.44 mg/dscm @7% O2
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Page: 12 FACILITY / EMISSION UNIT DATA 05-JAN-01
TEMPORARY EMISSION DATA

Allowable Emission: 0.440000
Unit: MILLIGRAMS PER CUBIC METER (AMBIENT)
Future Effective Date:

Compliance Regulation: 40 CFR 60.33b(a)(4)
Method Code: 1 - STACK TEST

EMIS Basis COMPL Method

RULE

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
0.065000	0.288000	ANNUALLY	28-JUL-2000

Comment

Test Method: 29

POLLUTANT

Pollutant: PM Control Eff: 99.0
Primary Ctrl: 16
Secondary Ctl:
Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
4.1000	17.9600	0		

Syn. Limited: N

EMIS Factor Unit	EMIS Factor Ref
0.012000 GRAINS/DSCF @ 7% O2	PA 83-19

EMIS Calc

4.1lb PM/hr * 8760 hr/yr * 1 ton/2000 lb = 17.96 ton PM/yr

Comment

Page: 13 FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FACILITY / EMISSION UNIT DATA 05-JAN-01
TEMPORARY EMISSION DATA

Allowable Emission: 0.012000
Unit: GRAINS PER DRY STANDARD CUBIC FOOT @ 7% O2
Future Effective Date:

Compliance Regulation: 40 CFR 60.33b(a)(1)(i)
Method Code: 1 - STACK TEST

EMIS Basis COMPL Method

RULE Annual stack test

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
4.100000	107.960000	ANNUALLY	28-JUL-2000

Comment

The permit specifies the emission limitation as the above (0.021 gr/dscf-12%)
or 7 lb/hr, whichever is more restrictive.

Test Method: 5

POLLUTANT

Pollutant: SAM Control Eff:
Primary Ctrl:
Secondary Ctl:
Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
24.6000	107.7000	0		

Syn. Limited:

EMIS Factor	Unit	EMIS Factor Ref
0.072000	OTHER (SPECIFY IN COMMENT)	

EMIS Calc

Comment

0.072 grains per DSCF @12% CO2.
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Page: 14 FACILITY / EMISSION UNIT DATA 05-JAN-01
TEMPORARY EMISSION DATA

Allowable Emission: 0.072000
Unit: GRAINS PER DRY STANDARD CUBIC FOOT @ 12% CO2
Future Effective Date:

Compliance Regulation:
Method Code: 1 - STACK TEST

EMIS Basis COMPL Method

OTHER

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
24.600000	107.700000	NONE REQUIRED	

Comment

PSD-FL-121(C). Intial test only.

Test Method: 8

POLLUTANT

Pollutant: SO2 Control Eff: 75.0
 Primary Ctrl: 41
 Secondary Ctl: 16
 Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
32.8600	143.9000	0		

Syn. Limited: N

EMIS Factor	Unit	EMIS Factor Ref
29.000000	PPMVD @ 7% O2	

EMIS Calc

Comment

Page: 15 FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
 FACILITY / EMISSION UNIT DATA 05-JAN-01
 TEMPORARY EMISSION DATA

Allowable Emission: 29.000000
 Unit: PARTS PER MILLION DRY GAS VOLUME @ 7% O2
 Future Effective Date:

Compliance Regulation: 40 CFR 60.33b(b)(3)(i)
 Method Code: 3 - STACK TEST & CMS

EMIS Basis COMPL Method

RULE Stack test

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
32.860000	143.900000	ANNUALLY	28-JUL-2000

Comment

Compliance with the emission limit is based on 24 hr daily geometric mean.

Test Method: 19

POLLUTANT

Pollutant: VOC Control Eff:
 Primary Ctrl:
 Secondary Ctl:
 Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
3.6700	16.0000	0		

Syn. Limited: N

EMIS Factor Unit EMIS Factor Ref

0.200000 LB/TON

EMIS Calc

0.2 lb VOC/ton refuse * 440 ton refuse/24 hr = 3.67 lb VOC/hr 3.67 lb VOC/hr
* 8760 hr/yr * 1 ton/2000 lb = 16 ton VOC/yr

Comment

Page: 16 FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
 FACILITY / EMISSION UNIT DATA 05-JAN-01
 TEMPORARY EMISSION DATA

Allowable Emission: 0.200000
Unit: POUNDS PER TON OF PRODUCT
Future Effective Date:

Compliance Regulation:
Method Code: 1 - STACK TEST

EMIS Basis COMPL Method

OTHER Stack test

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
3.670000	16.000000	NONE REQUIRED	

Comment

Initial test only.

Test Method: 18

Test Method: 25

Test Method: 25A

Control Equipment Description	Control Device or
	Method Code

fabric filter	16
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Control Equipment Description	Control Device or
	Method Code

spray dryer absorber	41
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Control Equipment Description	Control Device or
	Method Code

activated carbon injection	48
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Control Equipment Description	Control Device or
	Method Code

selective noncatalytic reduction (SNCR) code 107	65
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Control Equipment Description	Control Device or
	Method Code

SEGMENT

SCC: 10100602 UNIT: Million Cubic Feet Burned
Segment Description:

MMBTU/ SCC Unit	Max Hr Rate	Hr Rate Limit	Max Annual Rate	Annual Rate Limit	Estimated Annual Activity Factor
			104.94		

Max % S	%S Limit	Max % ASH

Comment

Fuel for auxiliary burner.

SEGMENT

SCC: 10101202 UNIT: Tons Burned
Segment Description:
Mass burn

MMBTU/ SCC Unit	Max Hr Rate	Hr Rate Limit	Max Annual Rate	Annual Rate Limit	Estimated Annual Activity Factor
9	19.170		167899.40		

Max % S	%S Limit	Max % ASH

Comment

Maximum hourly rate is based upon boiler loading capacity of 36,666 lb/hr as stated in PSD-FL-121.

VISIBLE EMISSIONS

SubType: VE10
Basis: RULE
COM Required: Y
Test Frequency: ANNUALLY
Freq. Base Date: 21-JAN-30

Allow Opacity
Exceptional Period
Cond(%) (min/hr)

Regulation

40 CFR 60.33b(a)(1)(iii)

Comment

6 minute block average

EMISSION POINT

AIRS ID: 0570261 Type: 1
 Stack #: 104 Discharge Type: V Height: 220 ft
 Exit Diam: 5.1 ft Exit Temp: 480 F Exit Velocity: ft/s
 Ident: Emission Point #1
 Flow rate: 92929 (acfm) Water Vapor %: 13.8 Dry Std Flow: 45291 dscfm

Zone	UTM		GEP Stack Ht (ft):	
	North (km)	East (km)	Non-Stack Ht (ft):	
17	3092.70	368.20		

Comment

The stack flow parameters listed were derived from the 1995 compliance test, and are not absolute.

EMISSION UNIT

ID Status Description

2 A Municipal Waste Combustor & Auxiliary burners-Unit #2

Type - AIRS Description

9.12 - MWC w/ Aux Burner-Unit 2

EU Classification: Regulated Emissions Unit
 Acid Rain Unit: N
 EU Major Group SIC: 49
 Comment:

Generator Rating(MW)	Model Number	Manufacturer
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29

Dwell temp (F): 1800 Dwell time (sec): 1
 Afterburner temp (F): Heat input rate: 174 mmBTU/hr
 Incin. Rate (lb/hr): 36666 Incin. Rate (ton/day) : 440
 Throughput: 104000 Unit: lb Steam/hr
 Production: Unit:

Capacity Comment

Generator nameplate rating is for entire facility. Demonstration of compliance with maximum throughput capacity shall be measured by steam flow. Maximum incinerator rate is 110% of rated design capacity

Startup: 18-DEC-1986 Long-term Reserve Shutdown:

Emis Pnt Desc

NA

TEMPORARY EMISSION DATA

Similar EU:
T_EU D_EU Description

EUs with this Emission Point in common:

EU Schedule

24 Hours per Day
7 Days per Week
52 Weeks per Year
8760 Hours per Year

CONTINUOUS MONITOR

CM ID	Par	Req Manufacturer	Model Number	Serial Number	Installed
1	VE	Lear Siegler	RM 41	15603802	01-OCT-1986

PST
PST Date Stat Cert Date

10-MAR-1987

Comment

Monitored
Pollutants

CONTINUOUS MONITOR

CM ID	Par	Req Manufacturer	Model Number	Serial Number	Installed
2	O2	Ametek Corp	Thermox WDG	CO36232-3	18-DEC-1986

PST
PST Date Stat Cert Date

Comment

Monitored
Pollutants

PSD

Ice Code (PM): C Ice Code (SO2): C Ice Code (NO2): C
PM Lb/Hr: SO2 Lb/Hr:
PM Ton/Yr: SO2 Ton/Yr: NO2 Ton/Yr:

Comment

EU Regulation	Type
40 CFR 60, Subpart Cb	Federal
40 CFR 60, Subpart E	Federal
40 CFR 60, Subpart Eb	Federal
40 CFR 60.33b(a)(1)(i)	Federal
40 CFR 60.33b(a)(1)(iii)	Federal
40 CFR 60.33b(a)(2)(i)	Federal
40 CFR 60.33b(a)(3)	Federal
40 CFR 60.33b(a)(4)	Federal
40 CFR 60.33b(b)(3)(i)	Federal
40 CFR 60.33b(b)(3)(iii)	Federal
40 CFR 60.33b(c)(1)(ii)	Federal
40 CFR 60.33b(d)	Federal
40 CFR 60.34b(a)	Federal
62-212.400(2)(g)	State

POLLUTANT

Pollutant: CO Control Eff:
Primary Ctrl: 99
Secondary Ctl:
Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Estimated Method	Fugitive LL(tpy)	Fugitive UL(tpy)
17.4000	76.2600	0		

Syn. Limited: N

EMIS Factor	Unit	EMIS Factor Ref
100.000000	PPMVD @ 7% O2	PA 83-19

EMIS Calc

Comment

Allowable Emission: 100.000000
Unit: PARTS PER MILLION DRY GAS VOLUME @ 7% O2
Future Effective Date:

Compliance Regulation: 40 CFR 60.34b(a)
Method Code: 3 - STACK TEST & CMS

EMIS Basis COMPL Method

RULE Stack test

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
17.400000	76.260000	ANNUALLY	28-JUL-2000

Comment

4 hr block average.

Test Method: 10

Test Method: 10A

Test Method: 10B

POLLUTANT

Pollutant: DIOX Control Eff:
Primary Ctrl: 41
Secondary Ctl: 16
Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
0.0000	0.0000	0		

Syn. Limited: N

EMIS Factor Unit	EMIS Factor Ref
30.000000 OTHER (SPECIFY IN COMMENT)	

EMIS Calc

Comment

30 nanograms per DSCM@7%O2.

Page: 22 FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FACILITY / EMISSION UNIT DATA 05-JAN-01
TEMPORARY EMISSION DATA

Allowable Emission: 30.000000
Unit: NANOGRAMS PER DRY STANDARD CUBIC METER @ 7% O2
Future Effective Date:

Compliance Regulation: 40 CFR 60.33b(c)(1)(ii)
Method Code: 1 - STACK TEST

EMIS Basis COMPL Method

RULE

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
0.000005	0.000019	ANNUALLY	28-JUL-2000

Comment

Test Method: 23

POLLUTANT

Pollutant: FL Control Eff:
 Primary Ctrl: 42
 Secondary Ctl:
 Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
1.0000	4.4300	0		

Syn. Limited:

EMIS Factor Unit	EMIS Factor Ref
6.740000 MILLIGRAMS/DSCM	

EMIS Calc

Comment

6.74 milligrams per DSCM@7%O2.
 FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
 Page: 23 FACILITY / EMISSION UNIT DATA 05-JAN-01
 TEMPORARY EMISSION DATA

Allowable Emission: 6.740000
 Unit: MILLIGRAMS PER CUBIC METER (AMBIENT)
 Future Effective Date:

Compliance Regulation:
 Method Code: 1 - STACK TEST

EMIS Basis COMPL Method

OTHER

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
1.000000	4.430000	ANNUALLY	28-JUL-2000

Comment

PSD-FL-121(C). 6.74 milligrams per DSCM@7%O2.

Test Method: 13A

Test Method: 13B

POLLUTANT

Pollutant: H021 Control Eff:
Primary Ctrl: 16
Secondary Ctl:
Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
0.0002	0.0010	0		

Syn. Limited: N

EMIS Factor	Unit	EMIS Factor Ref
1.480000	MICROGRAMS/DSCM @ 7% O2	

EMIS Calc

Comment

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FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FACILITY / EMISSION UNIT DATA 05-JAN-01
TEMPORARY EMISSION DATA

Allowable Emission: 1.480000
Unit: MICROGRAMS PER DRY STANDARD CUBIC METER @ 7% O2
Future Effective Date:

Compliance Regulation: 62-212.400(2)(g)
Method Code: 1 - STACK TEST

EMIS Basis COMPL Method

RULE Stack test

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
0.000218	0.000960	ANNUALLY	28-JUL-2000

Comment

Test Method: 29

POLLUTANT

Pollutant: H027 Control Eff:
Primary Ctrl:
Secondary Ctl:
Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
0.0060	0.0260	0		

Syn. Limited: N

EMIS Factor	Unit	EMIS Factor Ref
0.040000	MILLIGRAMS/DSCM	

EMIS Calc

Comment

0.04 milligrams / DSCM@7% O2.
 FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
 Page: 25 FACILITY / EMISSION UNIT DATA 05-JAN-01
 TEMPORARY EMISSION DATA

Allowable Emission: 0.040000
 Unit: MILLIGRAMS PER CUBIC METER (AMBIENT)
 Future Effective Date:

Compliance Regulation: 40 CFR 60.33b(a)(2)(i)
 Method Code: 1 - STACK TEST

EMIS Basis COMPL Method

RULE

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
0.006000	0.026000	ANNUALLY	28-JUL-2000

Comment

mg/dscm @7% O2

Test Method: 29

POLLUTANT

Pollutant: H106 Control Eff: 95.0
 Primary Ctrl: 41
 Secondary Ctl: 16
 Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
17.0000	74.4300	0		

Syn. Limited: N

EMIS Factor	Unit	EMIS Factor Ref

29.000000 PPMVD @ 7% O2

EMIS Calc

Comment

Page: 26
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FACILITY / EMISSION UNIT DATA 05-JAN-01
TEMPORARY EMISSION DATA

Allowable Emission: 29.000000
Unit: PARTS PER MILLION DRY GAS VOLUME @ 7% O2
Future Effective Date:

Compliance Regulation: 40 CFR 60.33b(b)(3)(ii)
Method Code: 1 - STACK TEST

EMIS Basis COMPL Method

RULE

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
17.000000	74.430000	ANNUALLY	28-JUL-2000

Comment

Test Method: 26

Test Method: 26A

POLLUTANT

Pollutant: H114 Control Eff: 85.0
Primary Ctrl: 48
Secondary Ctl: 16
Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
0.0200	0.0870	0		

Syn. Limited: N

EMIS Factor Unit	EMIS Factor Ref
0.070000 MILLIGRAMS/DSCM	

EMIS Calc

Comment

0.07 mg/dscm @7% O2

Allowable Emission: 0.070000
 Unit: MILLIGRAMS PER CUBIC METER (AMBIENT)
 Future Effective Date:

Compliance Regulation: 40CFR60.33b(a)(3)
 Method Code: 1 - STACK TEST

EMIS Basis COMPL Method

RULE Annual stack test

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
0.020000	0.087000	ANNUALLY	28-JUL-2000

Comment

mg/dscm @7% O2

Test Method: 29

POLLUTANT

Pollutant: NOX Control Eff:
 Primary Ctrl: 107
 Secondary Ctl:
 Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
58.6300	256.0000	0		

Syn. Limited: N

EMIS Factor Unit EMIS Factor Ref
 205.000000 PPMVD @ 7% O2

EMIS Calc

Comment

Allowable Emission: 205.000000
 Unit: PARTS PER MILLION DRY GAS VOLUME
 Future Effective Date:

Compliance Regulation: 40 CFR 60.33b(d)

Method Code: 3 - STACK TEST & CMS

EMIS Basis COMPL Method

RULE Stack test

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
58.630000	256.000000	ANNUALLY	28-JUL-2000

Comment

NOx emissions from auxiliary burners are 3.45 lb/hr and 15.1 TPY per unit. These emissions are part of combustor emissions.

Test Method: 19

POLLUTANT

Pollutant: PB Control Eff: 16
 Primary Ctrl: 16
 Secondary Ctl:
 Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
0.0650	0.2880	0		

Syn. Limited: Y

EMIS Factor Unit	EMIS Factor Ref
0.440000 MICROGRAMS/DSCM @ 7% O2	

EMIS Calc

Comment

0.44 mg/dscm @7% O2

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
 Page: 29 FACILITY / EMISSION UNIT DATA 05-JAN-01
 TEMPORARY EMISSION DATA

Allowable Emission: 0.440000
 Unit: MILLIGRAMS PER CUBIC METER (AMBIENT)
 Future Effective Date:

Compliance Regulation: 40 CFR 60.33b(a)(4)
 Method Code: 1 - STACK TEST

EMIS Basis COMPL Method

RULE

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
------------------------	-----------	----------------	-----------

0.065000 0.288000 ANNUALLY 28-JUL-2000

Comment

Test Method: 29

POLLUTANT

Pollutant: PM Control Eff: 99.0
Primary Ctrl: 16
Secondary Ctl:
Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
4.1000	17.9600	0		

Syn. Limited: N

EMIS Factor	Unit	EMIS Factor Ref
0.012000	GRAINS/DSCF @ 7% O2	PA 83-19

EMIS Calc

4.1lb PM/hr * 8760 hr/yr * 1 ton/2000 lb =17.96 ton PM/yr

Comment

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FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FACILITY / EMISSION UNIT DATA 05-JAN-01
TEMPORARY EMISSION DATA

Allowable Emission: 0.012000
Unit: GRAINS PER DRY STANDARD CUBIC FOOT @ 7% O2
Future Effective Date:

Compliance Regulation: 40 CFR 60.33b(a)(1)(i)
Method Code: 1 - STACK TEST

EMIS Basis COMPL Method

RULE Annual stack test

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
4.100000	107.960000	ANNUALLY	28-JUL-2000

Comment

The permit specifies the emission limitation as the above (0.021 gr/dscf-12%) or 7 lb/hr, whichever is more restrictive.

Test Method: 5

POLLUTANT

Pollutant: SAM Control Eff:
Primary Ctrl:
Secondary Ctl:
Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
24.6000	107.7000	0		

Syn. Limited:

EMIS Factor	Unit	EMIS Factor Ref
0.072000	OTHER (SPECIFY IN COMMENT)	

EMIS Calc

Comment

0.072 grains per DSCF @12% CO2.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Page: 31 FACILITY / EMISSION UNIT DATA 05-JAN-01
TEMPORARY EMISSION DATA

Allowable Emission: 0.072000
Unit: GRAINS PER DRY STANDARD CUBIC FOOT @ 12% CO2
Future Effective Date:

Compliance Regulation:
Method Code: 1 - STACK TEST

EMIS Basis COMPL Method

OTHER

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
24.600000	107.700000	NONE REQUIRED	

Comment

PSD-FL-121(C). Intial test only.

Test Method: 8

POLLUTANT

Pollutant: SO2 Control Eff: 75.0
Primary Ctrl: 41
Secondary Ctl: 16
Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
32.8600	143.9000	0		

Syn. Limited: N

EMIS Factor Unit	EMIS Factor Ref

29.000000 PPMVD @ 7% O2	

EMIS Calc

Comment

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FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FACILITY / EMISSION UNIT DATA 05-JAN-01
TEMPORARY EMISSION DATA

Allowable Emission: 29.000000
Unit: PARTS PER MILLION DRY GAS VOLUME @ 7% O2
Future Effective Date:

Compliance Regulation: 40 CFR 60.33b(b)(3)(i)
Method Code: 3 - STACK TEST & CMS

EMIS Basis COMPL Method

RULE Stack test

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
32.860000	143.900000	ANNUALLY	28-JUL-2000

Comment

Compliance with the emission limit is based on 24 hr daily geometric mean.

Test Method: 19

POLLUTANT

Pollutant: VOC Control Eff:
Primary Ctrl:
Secondary Ctl:
Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
3.6700	16.0000	0		

Syn. Limited: N

EMIS Factor Unit	EMIS Factor Ref

0.200000 LB/TON	

EMIS Calc

0.2 lb VOC/ton refuse * 440 ton refuse/24 hr = 3.67 lb VOC/hr 3.67 lb VOC/hr
* 8760 hr/yr * 1 ton/2000 lb = 16 ton VOC/yr

Comment

Allowable Emission: 0.200000
 Unit: POUNDS PER TON OF PRODUCT
 Future Effective Date:

Compliance Regulation:
 Method Code: 1 - STACK TEST

EMIS Basis COMPL Method

 OTHER Stack test

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
3.670000	16.000000	NONE REQUIRED	

Comment

 Initial test only.

Test Method: 18

Test Method: 25

Test Method: 25A

Control Equipment Description	Control Device or Method Code
fabric filter	16
Control Equipment Description	Control Device or Method Code
spray dryer absorber	41
Control Equipment Description	Control Device or Method Code
activated carbon injection	48
Control Equipment Description	Control Device or Method Code
selective noncatalytic reduction (SNCR) code 107	65
Control Equipment Description	Control Device or Method Code
Gas burners	24

SEGMENT

SCC: 10100602 UNIT: Million Cubic Feet Burned
 Segment Description:

MMBTU/ SCC Unit	Max Hr Rate	Hr Rate Limit	Max Annual Rate	Annual Rate Limit	Estimated Annual Activity Factor
			104.94		

Max % %S Max %
S Limit ASH

Comment

Fuel for auxiliary burner.

SEGMENT

SCC: 10101202 UNIT: Tons Burned
Segment Description:
Mass burn

MMBTU/ SCC Unit	Max Hr Rate	Hr Rate Limit	Max Annual Rate	Annual Rate Limit	Estimated Annual Activity Factor
9	19.170		167899.40		

Max % %S Max %
S Limit ASH

Comment

Maximum hourly rate is based upon boiler loading capacity of 36,666 lb/hr as stated in PSD-FL-121.

VISIBLE EMISSIONS

SubType: VE10
Basis: RULE
COM Required: Y
Test Frequency: ANNUALLY
Freq. Base Date: 01-JAN-29

Allow Opacity
Exceptional Period
Cond(%) (min/hr)

Regulation

40 CFR 60.33b(a)(1)(iii)

Comment

6 minute block average.

Page: 35 FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FACILITY / EMISSION UNIT DATA 05-JAN-01
TEMPORARY EMISSION DATA

EMISSION POINT

AIRS ID: 0570261 Type: 1
Stack #: 105 Discharge Type: V Height: 220 ft
Exit Diam: 5.1 ft Exit Temp: 480 F Exit Velocity: ft/s
Ident: Emission Point #1

Flow rate: 92929 (acfm) Water Vapor %: 13.8 Dry Std Flow: 45291 dscfm

UTM	GEP Stack Ht (ft):	
Zone North (km)	East (km)	Non-Stack Ht (ft):
17	3092.70	368.20

Comment

The stack flow parameters listed were derived from the 1995 compliance test, and are not absolute.

EMISSION UNIT

ID Status Description

3 A Municipal Waste Combustor & Auxiliary burners-Unit #3

Type - AIRS Description

9.12 - MWC w/ Aux Burner-Unit 3

EU Classification: Regulated Emissions Unit

Acid Rain Unit: N

EU Major Group SIC: 49

Comment:

Generator

Rating(MW)	Model Number	Manufacturer
29		

Dwell temp (F): 1800 Dwell time (sec): 1

Afterburner temp (F): Heat input rate: 174 mmBTU/hr

Incin. Rate (lb/hr): 36666 Incin. Rate (ton/day): 440

Throughput: 104000 Unit: lb Steam/hr

Production: Unit:

Capacity Comment

Generator nameplate rating is for entire facility. Demonstration of compliance with maximum throughput capacity shall be measured by steam flow. Maximum incinerator rate is 110% of rated design capacity

Startup: 18-DEC-1986 Long-term Reserve Shutdown:

Emis Pnt Desc

NA

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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FACILITY / EMISSION UNIT DATA

05-JAN-01

TEMPORARY EMISSION DATA

Similar EU:

T_EU D_EU Description

EUs with this Emission Point in common:

EU Schedule

24 Hours per Day
7 Days per Week
52 Weeks per Year
8760 Hours per Year

CONTINUOUS MONITOR

CM ID	Par	Req Manufacturer	Model Number	Serial Number	Installed
1	VE	Lear Siegler	RM 41	15603802	01-OCT-1986

PST
PST Date Stat Cert Date

10-MAR-1987

Comment

Monitored
Pollutants

CONTINUOUS MONITOR

CM ID	Par	Req Manufacturer	Model Number	Serial Number	Installed
2	O2	Ametek Corp	Thermox WDG	CO36232-3	18-DEC-1986

PST
PST Date Stat Cert Date

Comment

Monitored
Pollutants

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FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FACILITY / EMISSION UNIT DATA 05-JAN-01
TEMPORARY EMISSION DATA

PSD

Ice Code (PM): C	Ice Code (SO2): C	Ice Code (NO2): C
PM Lb/Hr:	SO2 Lb/Hr:	
PM Ton/Yr:	SO2 Ton/Yr:	NO2 Ton/Yr:

Comment

EU Regulation	Type
40 CFR 60, Subpart Cb	Federal
40 CFR 60, Subpart E	Federal
40 CFR 60, Subpart Eb	Federal
40 CFR 60.33b(a)(1)(i)	Federal
40 CFR 60.33b(a)(1)(iii)	Federal
40 CFR 60.33b(a)(2)(i)	Federal
40 CFR 60.33b(a)(3)	Federal
40 CFR 60.33b(a)(4)	Federal
40 CFR 60.33b(b)(3)(i)	Federal
40 CFR 60.33b(b)(3)(iii)	Federal
40 CFR 60.33b(c)(1)(ii)	Federal
40 CFR 60.33b(d)	Federal
40 CFR 60.34b(a)	Federal
62-212.400(2)(g)	State

POLLUTANT

Pollutant: CO Control Eff:
 Primary Ctrl: 99
 Secondary Ctl:
 Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
17.4000	76.2600	0		

Syn. Limited: N

EMIS Factor	Unit	EMIS Factor Ref
100.000000	PPMVD @ 7% O2	PA 83-19

EMIS Calc

Comment

Page: 38 FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
 FACILITY / EMISSION UNIT DATA 05-JAN-01
 TEMPORARY EMISSION DATA

Allowable Emission: 100.000000
 Unit: PARTS PER MILLION DRY GAS VOLUME @ 7% O2
 Future Effective Date:

Compliance Regulation: 40 CFR 60.34b(a)
 Method Code: 3 - STACK TEST & CMS

EMIS Basis COMPL Method

RULE Stack test

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date

17.400000 76.260000 ANNUALLY

28-JUL-2000

Comment

4 hr block average.

Test Method: 10

Test Method: 10A

Test Method: 10B

POLLUTANT

Pollutant: DIOX Control Eff:
Primary Ctrl: 41
Secondary Ctl: 16
Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
0.0000	0.0000	0		

Syn. Limited: N

EMIS Factor	Unit	EMIS Factor Ref
30.000000	OTHER (SPECIFY IN COMMENT)	

EMIS Calc

Comment

30 nanograms per DSCM@7%O2.
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Page: 39 FACILITY / EMISSION UNIT DATA 05-JAN-01
TEMPORARY EMISSION DATA

Allowable Emission: 30.000000
Unit: NANOGRAMS PER DRY STANDARD CUBIC METER @ 7% O2
Future Effective Date:

Compliance Regulation: 40 CFR 60.33b(c)(1)(ii)
Method Code: 1 - STACK TEST

EMIS Basis COMPL Method

RULE

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
0.000005	0.000019	ANNUALLY	28-JUL-2000

Comment

Test Method: 23

POLLUTANT

Pollutant: FL Control Eff:
Primary Ctrl: 42
Secondary Ctl:
Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
1.0000	4.4300	0		

Syn. Limited:

EMIS Factor	Unit	EMIS Factor Ref
6.740000	MILLIGRAMS/DSCM	

EMIS Calc

Comment

6.74 milligrams per DSCM@7%O2.
 FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
 Page: 40 FACILITY / EMISSION UNIT DATA 05-JAN-01
 TEMPORARY EMISSION DATA

Allowable Emission: 6.740000
Unit: MILLIGRAMS PER CUBIC METER (AMBIENT)
Future Effective Date:

Compliance Regulation:
Method Code: 1 - STACK TEST

EMIS Basis COMPL Method

OTHER

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
1.000000	4.430000	ANNUALLY	28-JUL-2000

Comment

PSD-FL-121(C). 6.74 milligrams per DSCM@7%O2.

Test Method: 13A

Test Method: 13B

POLLUTANT

Pollutant: H021 Control Eff:
Primary Ctrl: 16
Secondary Ctl:
Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
0.0002	0.0010	0		

Syn. Limited: N

EMIS Factor	Unit	EMIS Factor Ref
1.480000	MICROGRAMS/DSCM @ 7% O2	

EMIS Calc

Comment

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FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FACILITY / EMISSION UNIT DATA 05-JAN-01
TEMPORARY EMISSION DATA

Allowable Emission: 1.480000
Unit: MICROGRAMS PER DRY STANDARD CUBIC METER @ 7% O2
Future Effective Date:

Compliance Regulation: 62-212.400(2)(g)
Method Code: 1 - STACK TEST

EMIS Basis COMPL Method

RULE Stack test

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
0.000218	0.000960	ANNUALLY	28-JUL-2000

Comment

Test Method: 29

POLLUTANT

Pollutant: H027 Control Eff:
Primary Ctrl:
Secondary Ctl:
Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
0.0060	0.0260	0		

Syn. Limited: N

EMIS Factor	Unit	EMIS Factor Ref

0.040000 MILLIGRAMS/DSCM

EMIS Calc

Comment

0.04 milligrams / DSCM@7% O2.

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FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FACILITY / EMISSION UNIT DATA 05-JAN-01
TEMPORARY EMISSION DATA

Allowable Emission: 0.040000
Unit: MILLIGRAMS PER CUBIC METER (AMBIENT)
Future Effective Date:

Compliance Regulation: 40 CFR 60.33b(a)(2)(i)
Method Code: 1 - STACK TEST

EMIS Basis COMPL Method

RULE

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
0.006000	0.026000	ANNUALLY	28-JUL-2000

Comment

mg/dscm @7% O2

Test Method: 29

POLLUTANT

Pollutant: H106 Control Eff: 95.0
Primary Ctrl: 41
Secondary Ctl: 16
Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Estimated Method	Fugitive LL(tpy)	Fugitive UL(tpy)
17.0000	74.4300	0		

Syn. Limited: N

EMIS Factor Unit EMIS Factor Ref

29.000000 PPMVD @ 7% O2

EMIS Calc

Comment

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FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FACILITY / EMISSION UNIT DATA 05-JAN-01

TEMPORARY EMISSION DATA

Allowable Emission: 29.000000
Unit: PARTS PER MILLION DRY GAS VOLUME @ 7% O2
Future Effective Date:

Compliance Regulation: 40 CFR 60.33b(b)(3)(ii)
Method Code: 1 - STACK TEST

EMIS Basis COMPL Method

RULE

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
17.000000	74.430000	ANNUALLY	28-JUL-2000

Comment

Test Method: 26

Test Method: 26A

POLLUTANT

Pollutant: H114 Control Eff: 85.0
Primary Ctrl: 48
Secondary Ctl: 16
Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
0.0200	0.0870	0		

Syn. Limited: N

EMIS Factor	Unit	EMIS Factor Ref
0.070000	MILLIGRAMS/DSCM	

EMIS Calc

Comment

0.07 mg/dscm @7% O2
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Page: 44 FACILITY / EMISSION UNIT DATA 05-JAN-01
TEMPORARY EMISSION DATA

Allowable Emission: 0.070000
Unit: MILLIGRAMS PER CUBIC METER (AMBIENT)
Future Effective Date:

Compliance Regulation: 40CFR60.33b(a)(3)
Method Code: 1 - STACK TEST

EMIS Basis COMPL Method

RULE Annual stack test

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
0.020000	0.087000	ANNUALLY	28-JUL-2000

Comment

mg/dscm @7% O2

Test Method: 29

POLLUTANT

Pollutant: NOX Control Eff:
Primary Ctrl: 107
Secondary Ctl:
Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
58.6300	256.0000	0		

Syn. Limited: N

EMIS Factor	Unit	EMIS Factor Ref
205.000000	PPMVD @ 7% O2	

EMIS Calc

Comment

Page: 45 FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FACILITY / EMISSION UNIT DATA 05-JAN-01
TEMPORARY EMISSION DATA

Allowable Emission: 205.000000
Unit: PARTS PER MILLION DRY GAS VOLUME
Future Effective Date:

Compliance Regulation: 40 CFR 60.33b(d)
Method Code: 3 - STACK TEST & CMS

EMIS Basis COMPL Method

RULE Stack test

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
58.630000	256.000000	ANNUALLY	28-JUL-2000

Comment

NOx emissions from auxiliary burners are 3.45 lb/hr and 15.1 TPY per unit. These emissions are part of combustor emissions.

Test Method: 19

POLLUTANT

Pollutant: PB Control Eff:
Primary Ctrl: 16
Secondary Ctl:
Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
0.0650	0.2880	0		

Syn. Limited: Y

EMIS Factor Unit EMIS Factor Ref

0.440000 MICROGRAMS/DSCM @ 7% O2

EMIS Calc

Comment

0.44 mg/dscm @7% O2

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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FACILITY / EMISSION UNIT DATA

05-JAN-01

TEMPORARY EMISSION DATA

Allowable Emission: 0.440000

Unit: MILLIGRAMS PER CUBIC METER (AMBIENT)

Future Effective Date:

Compliance Regulation: 40 CFR 60.33b(a)(4)

Method Code: 1 - STACK TEST

EMIS Basis COMPL Method

RULE

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
0.065000	0.288000	ANNUALLY	28-JUL-2000

Comment

Test Method: 29

POLLUTANT

Pollutant: PM Control Eff: 99.0
 Primary Ctrl: 16
 Secondary Ctl:
 Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
4.1000	17.9600	0		

Syn. Limited: N

EMIS Factor	Unit	EMIS Factor Ref
0.012000	GRAINS/DSCF @ 7% O2	PA 83-19

EMIS Calc

4.1lb PM/hr * 8760 hr/yr * 1 ton/2000 lb =17.96 ton PM/yr

Comment

Page: 47 FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
 FACILITY / EMISSION UNIT DATA 05-JAN-01
 TEMPORARY EMISSION DATA

Allowable Emission: 0.012000
 Unit: GRAINS PER DRY STANDARD CUBIC FOOT @ 7% O2
 Future Effective Date:

Compliance Regulation: 40 CFR 60.33b(a)(1)(i)
 Method Code: 1 - STACK TEST

EMIS Basis COMPL Method

RULE Annual stack test

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
4.100000	107.960000	ANNUALLY	28-JUL-2000

Comment

The permit specifies the emission limitation as the above (0.021 gr/dscf-12%) or 7 lb/hr, whichever is more restrictive.

Test Method: 5

POLLUTANT

Pollutant: SAM Control Eff:
 Primary Ctrl:
 Secondary Ctl:
 Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
24.6000	107.7000	0		

Syn. Limited:

EMIS Factor Unit	EMIS Factor Ref

0.072000 OTHER (SPECIFY IN COMMENT)	

EMIS Calc

Comment

0.072 grains per DSCF @12% CO2.
 FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
 Page: 48 FACILITY / EMISSION UNIT DATA 05-JAN-01
 TEMPORARY EMISSION DATA

Allowable Emission: 0.072000
 Unit: GRAINS PER DRY STANDARD CUBIC FOOT @ 12% CO2
 Future Effective Date:

Compliance Regulation:
 Method Code: 1 - STACK TEST

EMIS Basis COMPL Method

OTHER

Equivalent			
Pounds / Hr	Tons / Yr	Test Frequency	Base Date

24.600000	107.700000	NONE REQUIRED	

Comment

PSD-FL-121(C). Intial test only.

Test Method: 8

POLLUTANT

Pollutant: SO2 Control Eff: 75.0
 Primary Ctrl: 41
 Secondary Ctl: 16
 Pollutant Regulatory Code: EL

Potential	Emission	Estimated
Pounds/Hr	Tons/Yr	Method Fugitive LL(tpy) Fugitive UL(tpy)

32.8600	143.9000	0

Syn. Limited: N

EMIS Factor Unit	EMIS Factor Ref

29.000000 PPMVD @ 7% O2	

EMIS Calc

Comment

Allowable Emission: 29.000000
Unit: PARTS PER MILLION DRY GAS VOLUME @ 7% O2
Future Effective Date:

Compliance Regulation: 40 CFR 60.33b(b)(3)(i)
Method Code: 3 - STACK TEST & CMS

EMIS Basis COMPL Method

RULE Stack test

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
32.860000	143.900000	ANNUALLY	28-JUL-2000

Comment

Compliance with the emission limit is based on 24 hr daily geometric mean.

Test Method: 19

POLLUTANT

Pollutant: VOC Control Eff:
Primary Ctrl:
Secondary Ctl:
Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
3.6700	16.0000	0		

Syn. Limited: N

EMIS Factor Unit	EMIS Factor Ref
0.200000 LB/TON	

EMIS Calc

0.2 lb VOC/ton refuse * 440 ton refuse/24 hr = 3.67 lb VOC/hr 3.67 lb VOC/hr
* 8760 hr/yr * 1 ton/2000 lb = 16 ton VOC/yr

Comment

Allowable Emission: 0.200000
Unit: POUNDS PER TON OF PRODUCT

Future Effective Date:

Compliance Regulation:
Method Code: 1 - STACK TEST

EMIS Basis COMPL Method

OTHER Stack test

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
3.670000	16.000000	NONE REQUIRED	

Comment

Initial test only.

Test Method: 18

Test Method: 25

Test Method: 25A

Control Equipment Description	Control Device or Method Code
fabric filter	16
Control Equipment Description	Control Device or Method Code
spray dryer absorber	41
Control Equipment Description	Control Device or Method Code
activated carbon injection	48
Control Equipment Description	Control Device or Method Code
selective noncatalytic reduction (SNCR) code 107	65
Control Equipment Description	Control Device or Method Code
Gas burners	24

Page: 51 FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
 FACILITY / EMISSION UNIT DATA 05-JAN-01
 TEMPORARY EMISSION DATA

SEGMENT

SCC: 10100602 UNIT: Million Cubic Feet Burned
Segment Description:

MMBTU/ SCC Unit	Max Hr Rate	Hr Rate Limit	Max Annual Rate	Annual Rate Limit	Estimated Annual Activity Factor
			104.94		

Max % %S Max %
S Limit ASH

Comment

Fuel for auxiliary burner.

SEGMENT

SCC: 10101202 UNIT: Tons Burned

Segment Description:

Mass burn

MMBTU/ SCC Unit	Max Hr Rate	Hr Rate Limit	Max Annual Rate	Annual Rate Limit	Estimated Annual Activity Factor
9	19.170		167899.40		

Max % S	%S Limit	Max % ASH

Comment

Maximum hourly rate is based upon boiler loading capacity of 36,666 lb/hr as stated in PSD-FL-121.

VISIBLE EMISSIONS

SubType: VE10	Allow Opacity
Basis: RULE	Exceptional Period
COM Required: Y	Cond(%) (min/hr)
Test Frequency: ANNUALLY	
Freq. Base Date: 01-JAN-29	

Regulation

40 CFR 60.33b(a)(1)(iii)

Comment

6 minute block average

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Page: 52	FACILITY / EMISSION UNIT DATA	05-JAN-01
	TEMPORARY EMISSION DATA	

EMISSION POINT

AIRS ID: 0570261	Type: 4		
Stack #: 106	Discharge Type: F	Height: ft	
Exit Diam: ft	Exit Temp: 77 F	Exit Velocity: ft/s	
Ident: App. C, Sec. 1			
Flow rate: (acfm)	Water Vapor %:	Dry Std Flow: dscfm	

UTM	GEP Stack Ht (ft):		
Zone North (km)	East (km)	Non-Stack Ht (ft):	0

Comment

EMISSION UNIT

ID Status Description

100 A Ash Handling

Type - AIRS Description

- Ash Handling

EU Classification: Regulated Emissions Unit

Acid Rain Unit: N

EU Major Group SIC: 49

Comment:

Generator

Rating(MW) Model Number Manufacturer

Dwell temp (F): Dwell time (sec):
Afterburner temp (F): Heat input rate: mmBTU/hr
Incin. Rate (lb/hr): Incin. Rate (ton/day) :
Throughput: 100800 Unit: wet tons
Production: Unit:

Capacity Comment

Ozone SIP Base Year Unit:

Startup: 01-MAY-1987 Long-term Reserve Shutdown:

Emis Pnt Desc

Baghouse vent on the ash handling building. Doorways for trucks to enter.
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Page: 53 FACILITY / EMISSION UNIT DATA 05-JAN-01
TEMPORARY EMISSION DATA

Similar EU:

T_EU D_EU Description

EUs with this Emission Point in common:

EU Schedule

24 Hours per Day
7 Days per Week
52 Weeks per Year
8760 Hours per Year

PSD

Ice Code (PM): C Ice Code (SO2): Ice Code (NO2):
PM Lb/Hr: 0.0000 SO2 Lb/Hr:
PM Ton/Yr: 0.0000 SO2 Ton/Yr: NO2 Ton/Yr:

Comment

EU Regulation Type

POLLUTANT

Pollutant: PM Control Eff:
Primary Ctrl: 18
Secondary Ctl: 61
Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
1.6300	7.1400	0	1.0000	5.0000

Syn. Limited: N

EMIS Factor Unit	EMIS Factor Ref
1.630000 LB/HR	PSD-FL-121

EMIS Calc

1.63 lb PM/hr * 8760 hr/yr * 1 ton/2000 lb = 7.14 ton PM/yr

Comment

Page: 54 FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FACILITY / EMISSION UNIT DATA 05-JAN-01
TEMPORARY EMISSION DATA

Allowable Emission: 1.630000
Unit: POUNDS/HOUR
Future Effective Date:

Compliance Regulation:
Method Code: 1 - STACK TEST

EMIS Basis COMPL Method

OTHER Compliance through 5%opacity test.

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date
1.630000	7.140000	NONE REQUIRED	

Comment

Basis for allowable emission: PSD-FL-121

Test Method: 5

POLLUTANT

Pollutant: PM10. Control Eff:
Primary Ctrl:
Secondary Ctl:
Pollutant Regulatory Code: NS

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)
------------------------	---------------------	--------	-------------------------------	------------------

Syn. Limited:

EMIS Factor Unit	EMIS Factor Ref
------------------	-----------------

EMIS Calc

Comment

Control Equipment Description	Control Device or Method Code
-------------------------------	----------------------------------

The ash is quenched and wetted before being temporarily stored in the ash handling facility and loaded onto a truck.

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FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FACILITY / EMISSION UNIT DATA 05-JAN-01
TEMPORARY EMISSION DATA

Control Equipment Description	Control Device or Method Code
-------------------------------	----------------------------------

A baghouse is located on the ash handling building as an added precaution for fugitive emissions. It keeps the facility under negative pressure. Baghouse information is included in App. C, Sec. 3.

Control Equipment Description	Control Device or Method Code
-------------------------------	----------------------------------

The ash handling system is completely enclosed to decrease potential fugitive emissions.

SEGMENT

SCC: 30510599 UNIT: Tons Processed
Segment Description:
Ash handling and temporary storage

MMBTU/ SCC Unit	Max Hr Rate	Hr Rate Limit	Max Annual Rate	Annual Rate Limit	Estimated Annual Activity Factor
0.000		100800.00			

Max % %S Max %
S Limit ASH

Comment

Quenched ash

VISIBLE EMISSIONS

SubType: VE05
Basis: RULE
COM Required: N
Test Frequency: ANNUALLY
Freq. Base Date: 31-MAR-00

Allow Opacity
Exceptional Period
Cond(%) (min/hr)

Regulation

PSD-FL-121

Comment

Page: 56 FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FACILITY / EMISSION UNIT DATA 05-JAN-01
TEMPORARY EMISSION DATA

EMISSION POINT

AIRS ID: 0570261 Type: 1
Stack #: 107 Discharge Type: Height: ft
Exit Diam: ft Exit Temp: F Exit Velocity: ft/s
Ident:
Flow rate: (acfm) Water Vapor %: Dry Std Flow: dscfm
UTM GEP Stack Ht (ft):
Zone North (km) East (km) Non-Stack Ht (ft):

Comment

EMISSION UNIT

ID Status Description

101 A Lime Storage Silo

Type - AIRS Description

- Lime Storage Silo

EU Classification: Regulated Emissions Unit
Acid Rain Unit: N
EU Major Group SIC: 49
Comment:

Generator
Rating(MW) Model Number Manufacturer

Dwell temp (F): Dwell time (sec):
Afterburner temp (F): Heat input rate: mmBTU/hr
Incin. Rate (lb/hr): Incin. Rate (ton/day):
Throughput: Unit:
Production: Unit:

Capacity Comment

Ozone SIP Base Year Unit:

Startup: Long-term Reserve Shutdown:

Emis Pnt Desc

Page: 57 FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FACILITY / EMISSION UNIT DATA 05-JAN-01
TEMPORARY EMISSION DATA

Similar EU:
T_EU D_EU Description

EUs with this Emission Point in common:

EU Schedule

24 Hours per Day
7 Days per Week
52 Weeks per Year

PSD

Ice Code (PM): U Ice Code (SO2): U Ice Code (NO2): U
PM Lb/Hr: SO2 Lb/Hr:
PM Ton/Yr: SO2 Ton/Yr: NO2 Ton/Yr:

Comment

EU Regulation	Type
62-212.400(5)	State
62-212.400(6)	State

POLLUTANT

Pollutant: PM Control Eff:
Primary Ctrl: 18
Secondary Ctl:

Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)

0				

Syn. Limited:

EMIS Factor	Unit	EMIS Factor Ref

0.015000	GRAINS/DSCF	

EMIS Calc

Comment

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FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FACILITY / EMISSION UNIT DATA 05-JAN-01
TEMPORARY EMISSION DATA

Allowable Emission: 0.015000
Unit: GRAINS PER DRY STANDARD CUBIC FOOT
Future Effective Date:

Compliance Regulation:
Method Code: 1 - STACK TEST

EMIS Basis COMPL Method

OTHER Compliance shown through 5% opacity test.

Equivalent Pounds / Hr	Tons / Yr	Test Frequency	Base Date

NONE REQUIRED			

Comment

Basis for allowable emission: PSD-FL-121(B). Limit is for front- half catch.

Test Method: 5

POLLUTANT

Pollutant: PM10 Control Eff:
Primary Ctrl:
Secondary Ctl:
Pollutant Regulatory Code: NS

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)

Syn. Limited:

EMIS Factor	Unit	EMIS Factor Ref
-------------	------	-----------------

EMIS Calc

Comment

Control Equipment Description	Control Device or Method Code
baghouse	18

Page: 59 FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
 FACILITY / EMISSION UNIT DATA 05-JAN-01
 TEMPORARY EMISSION DATA

SEGMENT

SCC: 30510105 UNIT: Tons Processed
Segment Description:
lime storage for dry scrubber

MMBTU/ SCC Unit	Max Hr Rate	Hr Rate Limit	Max Annual Rate	Annual Rate Limit	Estimated Annual Activity Factor
			4380.00		

Max % S Limit	%S Limit	Max % ASH

Comment

VISIBLE EMISSIONS

SubType: VE05	Allow Opacity
Basis: RULE	Exceptional Period
COM Required: N	Cond(%) (min/hr)
Test Frequency: ANNUALLY	-----
Freq. Base Date: 28-JUL-00	

Regulation

PSD-FL-121(B)

Comment

Page: 60 FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
 FACILITY / EMISSION UNIT DATA 05-JAN-01
 TEMPORARY EMISSION DATA

EMISSION POINT

AIRS ID: 0570261 Type: 1

Stack #: 108 Discharge Type: Height: ft
 Exit Diam: ft Exit Temp: F Exit Velocity: ft/s
 Ident:
 Flow rate: (acfm) Water Vapor %: Dry Std Flow: dscfm
 UTM GEP Stack Ht (ft):
 Zone North (km) East (km) Non-Stack Ht (ft):

Comment

EMISSION UNIT

ID Status Description

102 A Activated Carbon Storage Silo

Type - AIRS Description

EU Classification: Regulated Emissions Unit
 Acid Rain Unit: N
 EU Major Group SIC: 49
 Comment:

Generator
 Rating(MW) Model Number Manufacturer

Dwell temp (F): Dwell time (sec):
 Afterburner temp (F): Heat input rate: mmBTU/hr
 Incin. Rate (lb/hr): Incin. Rate (ton/day) :
 Throughput: Unit:
 Production: Unit:

Capacity Comment

Ozone SIP Base Year Unit:

Startup: Long-term Reserve Shutdown:

Emis Pnt Desc

Page: 61 FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
 FACILITY / EMISSION UNIT DATA 05-JAN-01
 TEMPORARY EMISSION DATA

Similar EU:
 T_EU D_EU Description

EUs with this Emission Point in common:

 EU Schedule

24 Hours per Day
 7 Days per Week
 52 Weeks per Year

PSD

Ice Code (PM): U Ice Code (SO2): U Ice Code (NO2): U
 PM Lb/Hr: SO2 Lb/Hr:
 PM Ton/Yr: SO2 Ton/Yr: NO2 Ton/Yr:

Comment

EU Regulation Type

 62-212.400(6), FAC State

POLLUTANT

Pollutant: PM Control Eff:
 Primary Ctrl: 18
 Secondary Ctl:
 Pollutant Regulatory Code: EL

Potential Pounds/Hr	Emission Tons/Yr	Method	Estimated Fugitive LL(tpy)	Fugitive UL(tpy)

0				

Syn. Limited: N

EMIS Factor	Unit	EMIS Factor Ref

0.015000	GRAINS/DSCF	

EMIS Calc

Comment

Page: 62 FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
 FACILITY / EMISSION UNIT DATA 05-JAN-01
 TEMPORARY EMISSION DATA

Allowable Emission: 0.015000
 Unit: GRAINS PER DRY STANDARD CUBIC FOOT
 Future Effective Date:

Compliance Regulation:
 Method Code: 1 - STACK TEST

EMIS Basis COMPL Method

OTHER Compliance shown through 5% opacity test

Equivalent
Pounds / Hr Tons / Yr Test Frequency Base Date

NONE REQUIRED

Comment

Basis for allowable emission: PSD-FL-121(B). Limit is for front- half catch.

Test Method: 5

POLLUTANT

Pollutant: PM10 Control Eff:
Primary Ctrl:
Secondary Ctl:
Pollutant Regulatory Code: NS

Potential Emission Estimated
Pounds/Hr Tons/Yr Method Fugitive LL(tpy) Fugitive UL(tpy)

Syn. Limited:

EMIS Factor Unit EMIS Factor Ref

EMIS Calc

Comment

Control Equipment Description Control Device or
Method Code

baghouse 18
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Page: 63 FACILITY / EMISSION UNIT DATA 05-JAN-01
TEMPORARY EMISSION DATA

SEGMENT

SCC: 30510299 UNIT: Tons Processed
Segment Description:
activated carbon storage for carbon injection control system

MMBTU/ Max Hr Hr Rate Max Annual Annual Rate Estimated Annual
SCC Unit Rate Limit Rate Limit Activity Factor

Max % %S Max %
S Limit ASH

Comment

VISIBLE EMISSIONS

SubType: VE05
Basis: RULE
COM Required: N
Test Frequency: ANNUALLY
Freq. Base Date: 28-JUL-00

Allow Opacity
Exceptional Period
Cond(%) (min/hr)

Regulation

PSD-FL-121(B)

Comment

STATEMENT OF BASIS

Hillsborough County
Hillsborough County Resource Recovery Facility
Facility ID No.: 0570261
Hillsborough County

Initial Title V Air Operation Permit
FINAL Permit No.: 0570261-001-AV

This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-213. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

This facility is subject to the requirements of 40 CFR 60, Subpart Cb and has obtained a permit [PSD-FL-121(B) which was amended by permit PSD-FL-212(C) to identify certain emission limits as equivalents, requiring this revision to the DRAFT Title V permit] which will bring the facility into compliance with the subpart. The existing facility consists of three municipal waste combustors controlled by electrostatic precipitators each with a maximum charging rate of 440 tons per day and a flyash handling building controlled with a fabric filter. After construction to come into compliance with the requirements of 40 CFR 60, Subpart Cb, the facility will consist of three municipal waste combustors (MWCs) having a nominal design rate capacity of 400 tons MSW per day, 150 MMBtu per hour (excluding 9.9 MMBtu/hr from the combustion air preheaters) and 94,270 pounds steam per hour with MSW having a heating value of 4,500 Btu per pound. The "operating window" of 115 percent (%) over the nominal design rate of 150 MMBtu heat input corresponds to 172.5 MMBtu/hr heat input and 102,000 lbs steam/hour per each boiler. By letter dated March 17, 1998, D.B Riley, Inc. (boilers' manufacturer) indicated that it performed an evaluation of each boiler's ability to operate at the proposed increase steam flow of 102,000 lbs steam/hr and concluded that each boiler can safely operate at an increased continuous steam generation rate of 103,700 lbs steam/hr. Short-term capacity is limited by limiting steam production (102,000 lbs/hr), which effectively limits heat input. The net steam energy of 1,158 Btu/lb of steam shall not be exceeded. Natural gas fired auxiliary burners and combustion control systems with continuous monitoring devices for combustion and process parameters and SO₂, NO_x and CO will be installed to improve combustion efficiency and control. The air pollution control equipment consists of a spray dryer absorber, a fabric filter, and activated carbon injection system. A selective non-catalytic reduction system (SNCR) and auxiliary gas burners are installed in the furnaces. The facility will also have an ash building and handling system and a new lime storage silo and activated carbon storage silo.

Existing Units 1, 2 and 3 are 440 tons per day municipal waste incinerators. The three municipal waste incinerators produce steam to drive a 29 megawatts electric generator. Each incinerator is equipped with an American Air Filter Model AAF Code No. 697, three field, electrostatic precipitator and a proprietary grate and combustion control system to control emissions. Units 1, 2 and 3 exhaust through a 220 feet high multi-flue stack with each unit having its own flue. Each stack exhaust is equipped with a certified opacity and oxygen monitor. These emissions units are regulated under NSPS - 40 CFR 60, Subpart E, Standards of Performance for Incinerators, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.; Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT); Rule 62-212.500, F.A.C., Preconstruction Review for Nonattainment Areas; Rule 62-296.401(2), F.A.C., Incinerators; Rule 62-296.416, F.A.C., Waste-to-Energy Facilities; and NESHAP - 40 CFR 61, Subpart C, NESHAP for Beryllium, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C. These emissions units will be subject to the requirements of NSPS - 40 CFR 60, Subpart Cb, Emissions Guidelines and Compliance Times for Large Municipal Waste Combustors That Are Constructed on or Before September 20, 1994, adopted and incorporated by reference, subject to provisions, in Rule 62-204.800(8)(b), F.A.C., no later than December 10, 2000, applicable to Units 1, 2 and 3.

Flyash collected by the electrostatic precipitators is conveyed to the flyash handling building. The ash handling system is completely enclosed or covered to decrease the potential for fugitive emissions. The ash is quenched and wetted before being temporarily stored in the ash handling facility and loaded onto a truck. A baghouse is located on the ash handling building as an added precaution for fugitive emissions. The emissions unit is regulated under Preconstruction Review for Nonattainment Areas; and, Rule 62-296.711, F.A.C., Reasonably Available Control Technology (RACT) – Materials Handling, Sizing, Screening, Crushing and Grinding Operations.

Once the facility becomes compliant with the requirements of 40 CFR 60, Subpart Cb, the facility will consist of the following emissions units:

Each of the three municipal waste combustor (MWCs) shall have a nominal design rate capacity of 400 tons MSW per day, 150 MMBtu per hour (excluding 9.9 MMBtu/hr from the combustion air preheaters) and 94,270 pounds steam per hour with MSW having a heating value of 4,500 Btu per pound. The “operating window” of 115 percent (%) over the nominal design rate of 150 MMBtu heat input corresponds to 172.5 MMBtu/hr heat input and 102,000 lbs steam/hour per each boiler. By letter dated March 17, 1998, D.B Riley, Inc. (boilers’ manufacturer) indicated that it performed an evaluation of each boiler’s ability to operate at the proposed increase steam flow of 102,000 lbs steam/hr and concluded that each boiler can safely operate at an increased continuous steam generation rate of 103,700 lb steam/hr. Short-term capacity is limited by limiting steam production (102,000 lb/hr), which effectively limits heat input. The units have a designed net steam energy of 1,158 Btu/lb (1378.86 Btu/lb steam enthalpy – 220 Btu/lb feedwater enthalpy). Natural gas fired auxiliary burners and combustion control systems with continuous monitoring devices for combustion and process parameters and SO₂, NO_x and CO will be installed to improve combustion efficiency and control. The air pollution control equipment consists of a spray dryer absorber, a fabric filter, and activated carbon injection

system. A selective non-catalytic reduction system (SNCR) and auxiliary gas burners are installed in the furnaces. Emissions exhaust through a 220 feet tall stack. These emissions units are regulated under NSPS - 40 CFR 60, Subpart Cb, Emissions Guidelines and Compliance Times for Large Municipal Waste Combustors That Are Constructed on or Before September 20, 1994, adopted and incorporated by reference, subject to provisions, in Rule 62-204.800(8)(b), F.A.C.; NSPS - 40 CFR 60, Subpart E, Standards of Performance for Incinerators, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.; Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT); Rule 62-212.500, F.A.C., Rule 62-296.401(2), F.A.C., Incinerators; Rule 62-296.416, F.A.C., Waste-to-Energy Facilities; and NESHAP - 40 CFR 61, Subpart C, NESHAP for Beryllium, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.

Flyash and bottom ash is collected and conveyed to the flyash handling building. The ash handling system is completely enclosed to decrease the potential for fugitive emissions. The ash is quenched and wetted before being temporarily stored in the ash handling facility and loaded onto a truck. A baghouse is located on the ash handling building as an added precaution for fugitive emissions. This emissions unit is regulated under NSPS - 40 CFR 60, Subpart Cb, Emissions Guidelines and Compliance Times for Large Municipal Waste Combustors That Are Constructed on or Before September 20, 1994, adopted and incorporated by reference, subject to provisions, in Rule 62-204.800(8)(b), F.A.C.; Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); and, Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT); Rule 62-212.500, F.A.C.

Lime used in the spray dryer absorbers for each municipal waste combustor is stored in a silo. Emissions from the silo are controlled by a baghouse. This emissions unit is regulated under Rule 62-296.711, F.A.C., Reasonably Available Control Technology (RACT) – Materials Handling, Sizing, Screening, Crushing and Grinding Operations.

The carbon injection system utilizes an activated carbon storage silo. The activated carbon will be utilized for the control of mercury and dioxin/furans. Emissions from the silo are controlled by a baghouse. This emissions unit is regulated under F.A.C.; Rule 62-296.711, F.A.C., Reasonably Available Control Technology (RACT) – Materials Handling, Sizing, Screening, Crushing and Grinding Operations.

Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

Based on the initial Title V permit application received June 17, 1996, this facility is a major source of hazardous air pollutants (HAPs).

Date: 9/19/97 9:43:51 AM
From: Cindy Phillips TAL
Subject: FWD: Re: City of Tampa McKay Bay Refuse to Energy Facility
To: Lennon Anderson TAL

Date: 9/19/97 9:27:10 AM
From: Michael Hewett TAL
Subject: Re: City of Tampa McKay Bay Refuse to Energy Facility

-> Mike Hewett. Please look at applicability issues in view of
-> recent court decisions and our rule adoption schedule. Provide any
-> other comments. Please share copy of application with Cindy Phillips.
-> Cindy. Does MACT look O.K?

I have been told by Region 4 that our Subpart Cb implementation plan is in DC now and approval should come very soon. We have had many discussions with Tampa concerning the applicability of Subpart Cb and all parties have agreed that the four Tampa units are large (maximum design capacity greater than 250 tons per day) and therefore subject to the MACT standards. Tampa has a compliance schedule in the implementation plan. The schedule, which includes a closure agreement if any unit is not in full compliance within three years, should be included in the permit. The compliance clock will begin to tick once EPA approves our state plan.

I will provide Teresa with a copy of Tampa's compliance schedule and any other part of the implementation plan that she might need. If you have any questions, please let me know.

Michael

Date: 9/16/97 5:17:41 PM
From: Alvaro Linero TAL
Subject: Hillsborough RRF
To: See Below

Now we have Hillsborough RRF to look at as well. It's another pollution control project with issues like MACT, RACT, definition of solid waste, operating windows, etc. Tampa MacKay has been reassigned to John Reynolds. Teresa will handle Hillsborough RRF.

Kim. Send copies to SWD and EPA. Jerry Campbell - let Kim know if you already have a copy.

This one is site certification so any work on it should be logged against the Hillsborough RRF module.

Mike Harley, Mike Hewett, and Cindy Phillips - please help as already requested in previous request. I'll leave a copy of the Hillsborough RRF application with Cindy. Mike Hewett you can look at Cindy's copy and just swap the Tampa and Hillsborough applications back and forth. Mike Harley - I'll send you a copy like I did with the Tampa MacKay project. Again, we would like to send them a completeness (or incompleteness request) within a couple of weeks.

Comments go to Teresa. Thanks. Al Linero.

To: Teresa Heron TAL
To: Kim Tober TAL
To: Mike Harley TAL
To: Michael Hewett TAL
To: Cindy Phillips TAL
To: John Reynolds TAL
To: Gerald Kissel TPA
To: Jerry N. Campbell TPA
CC: Dotty Diltz TAL
CC: Larry George TAL
CC: Clair Fancy TAL
CC: Scott Sheplak TAL
CC: Patricia Comer TAL
CC: Doug Beason TAL

Date: 9/16/97 10:25:25 AM
From: Alvaro Linero TAL
Subject: City of Tampa McKay Bay Refuse to Energy Facility
To: See Below

We received an application for an Air Pollution and Facility Improvement Project at Tampa McKay Bay. The project involves major improvements in the 4 x 250 TPD mass burn units and addition of air pollution control equipment including replacement of ESP's, carbon injection, SNCR, spray dryer absorber and fabric filters. CEMS will be added and the stacks will be replaced.

Based on previous meetings, the issues are (were): processing the application quickly, if it is only an air pollution control project; defining operating windows; definition of waste; basis of throughput (trash or steam); RACT for particulate; MACT for MWCs.

John Reynolds
~~Teresa Heron~~ will verify the fee and handle the permitting, which is actually a request to modify the operation permit. We may consider doing a construction permit instead. Kim. Log into ARMS. Copy SWD and EPA requesting comments. Hillsborough has a copy.

Mike Hewett. Please look at applicability issues in view of recent court decisions and our rule adoption schedule. Provide any other comments. Please share copy of application with Cindy Phillips. Cindy. Does MACT look O.K?

Mike Harley. Please have a look at monitoring and compliance plans and comment. I left a copy on your desk. Let me have it back when you are done.

Pat. There is a very long legal and rules section. It would be worth looking at. I see a lot of stuff related to what is municipal solid waste. Please have a look at it sometime. Kim or Teresa can provide copy.

John Reynolds
Send all comments directly to ~~Teresa~~. I would like to send the City comments within two weeks if possible. An application to upgrade the larger Hillsborough County facility is expected shortly. Thanks. Al Linero.

To: Kim Tober TAL
To: Teresa Heron TAL
To: Gerald Kissel TPA
To: Michael Hewett TAL
To: Jerry N. Campbell TPA
To: Cindy Phillips TAL
To: Mike Harley TAL
CC: Scott Sheplak TAL
CC: Larry George TAL
CC: Craig Diltz TAL
CC: Clair Fancy TAL
CC: Patricia Comer TAL

contained in an Emission Guideline, or which regulates emissions of pollutants or emissions units not regulated by an applicable Emission Guideline, shall apply.

2. For the purposes of Rule 62-204.800(8), F.A.C., the definitions contained in the various provisions of 40 CFR Part 60, adopted herein shall apply except that the term "Administrator" when used in 40 CFR Part 60, shall mean the Secretary or the Secretary's designee.

(b) Municipal Waste Combustors. 40 CFR 60, Subpart Cb, Emission Guidelines and Compliance Schedules for Municipal Waste Combustors, is hereby adopted and incorporated by reference, subject to the following provisions.

1. Applicability. The applicability of Rule 62-204.800(8)(b), F.A.C., shall be the same as set forth in 40 CFR 60.32b.

2. Definitions. For purposes of Rule 62-204.800(8)(b), F.A.C., the definitions in 40 CFR 60.51b shall apply except for the terms "municipal waste combustor plant" and "municipal waste combustor plant capacity" which shall have the same meaning as defined in 40 CFR 60.31b.

3. Emission Limiting Standards.

a. The emission limit for particulate matter shall be the same as set forth in 40 CFR 60.33b(a)(1)(i) and (ii).

b. The opacity limit shall be the same as set forth in 40 CFR 60.33b(a)(1)(iii).

c. The emission limits for cadmium and lead shall be the same as set forth in 40 CFR 60.33b(a)(2)(i) through (iv).

d. The emission limit for mercury shall be the same as set forth in 40 CFR 60.33b(a)(3) except that, where applicable, the emission limiting standards of Rule 62-296.416, F.A.C., also shall apply.

e. The emission limit for sulfur dioxide shall be the same as set forth in 40 CFR 60.33b(b)(1)(i) and (ii).

f. The emission limit for hydrogen chloride shall be the same as set forth in 40 CFR 60.33b(b)(2)(i) and (ii).

g. The emission limit for total mass dioxin/furans (tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans) shall be the same as set forth in 40 CFR 60.33b(c)(1)(i) through 60.33b(c)(2).

h. The emission limit for nitrogen oxides shall be the same as set forth in 40 CFR 60.33b(d), except that 60.33b(d)(2) shall not apply. *TRADING-60.33b(d)(2)*

i. The emission limit for carbon monoxide shall be the same as set forth in 40 CFR 60.34b(a).

4. Operating Practices. The operating practices applicable to each municipal waste combustor unit subject to Rule 62-204.800(8)(b), F.A.C., shall be the same as forth in 40 CFR 60.53b(b) and (c).

5. Operator Training. The operator training and certification requirements of 40 CFR 60.54b shall apply to all municipal waste combustor units subject to Rule 62-204.800(8)(b), F.A.C. Compliance with these requirements shall be conducted according to the schedule specified in 40 CFR 60.39b(c)(4).

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6. Fugitive Ash Emissions. The fugitive ash emissions requirements applicable to each municipal waste combustor unit subject to Rule 62-204.800(8)(b), F.A.C., shall be the same as forth in 40 CFR 60.55b.

7. Compliance and Performance Testing. The compliance and performance testing requirements applicable to each municipal waste combustor unit subject to Rule 62-204.800(8)(b), F.A.C., shall be the same as set forth in 40 CFR 60.58b, except as provided for under 40 CFR 60.24(b)(2) and Rule 62-204.800(8)(b)7., F.A.C.

a. The alternative performance testing schedule for dioxins/furans specified in 40 CFR 60.58b(g)(5)(iii) shall apply to large municipal waste combustor plants that achieve a dioxin/furan emission level less than or equal to 15 nanograms per dry standard cubic meter, corrected to 7 percent oxygen.

b. The alternative performance testing schedule for dioxins/furans specified in 40 CFR 60.58b(g)(5)(iii) shall apply to small municipal waste combustor plants that achieve a dioxin/furan emission level less than or equal to 30 nanograms per dry standard cubic meter, corrected to 7 percent oxygen.

8. Reporting and Recordkeeping. The reporting and recordkeeping requirements applicable to each municipal waste combustor unit subject to Rule 62-204.800(8)(b), F.A.C., shall be the same as set forth in 40 CFR 60.59b, except for the siting requirements under 40 CFR 60.59b(a), (b)(5) and (d)(11).

9. Compliance Schedules.

a. All small municipal waste combustor plants subject to Rule 62-204.800(8)(b), F.A.C., shall comply with the compliance schedule specified in 40 CFR 60.39b(c)(3).

b. All large municipal waste combustor plants subject to Rule 62-204.800(8)(b), F.A.C., shall comply with the compliance schedule specified in 40 CFR 60.39b(c)(1) and, where applicable, the compliance schedule specified in 40 CFR 60.39b(c)(5). The owners or operators of those facilities for which 40 CFR 60.39b(c)(1)(i) or (ii) applies shall, no later than September 16, 1996, submit to the Department either a closure agreement or a schedule for compliance with all applicable standards and conditions of Rule 62-204.800(8)(b), F.A.C. The schedule shall include dates of achievement for each of the increments of progress specified in 40 CFR 60.21(h)(1) through (5), hereby adopted and incorporated by reference.

10. Permit Application Deadline. Any municipal waste combustor plant which contains a municipal waste combustor unit subject to 40 CFR 60, Subpart Cb, is subject to the permitting requirements of Chapter 62-213, F.A.C. Any municipal waste combustor plant subject to the permitting requirements of Chapter 62-213, F.A.C., solely because it is subject to 40 CFR 60, Subpart Cb, shall file an application for an operation permit under the requirements of Chapter 62-213, F.A.C., no later than July 15, 1997.

(c) Municipal Solid Waste Landfills. 40 CFR 60, Subpart Cc, Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills, is hereby adopted and incorporated by reference, subject to the following provisions.

1. Applicability.