

September 23, 2013

133-87604A/B

Mr. Syed Arif, P.E., Permitting Section
Office of Permitting and Compliance
Division of Air Resource Management
Florida Department of Environmental Protection
2600 Blair Stone Road, Mail Station #5505
Tallahassee, Florida 32399-2400

**RE: REQUEST FOR ADDITIONAL INFORMATION #1
PROJECT NO. 0112120-015-AC, NORTH BROWARD WASTE-TO-ENERGY FACILITY
PROJECT NO. 0112119-017-AC, SOUTH BROWARD WASTE-TO-ENERGY FACILITY
AIR CONSTRUCTION (AC) PERMIT APPLICATIONS**

Dear Mr. Arif:

This correspondence presents revised technical information to address the Request for Information (RAI) for the air construction permit applications to increase segregated loads from 5 to 20 percent at the North and South Broward Waste-to-Energy Facilities. The RAI for both applications requested a re-evaluation of the "Projected Actual Emissions" based on its definition in Rule 62-210.200(252), Florida Administrative Code (F.A.C.). Please find attached a re-evaluation and supporting calculations as Attachment A and Attachment B for the North Broward and South Broward facilities, respectively. Presented in the following paragraphs is a discussion of the specific changes made during the re-evaluation.

Project Actual Emissions – As highlighted in the Department's RAI and as provided in Rule 62-210.200(252)(a), F.A.C., the determination of Project Actual Emissions can consider historical operational data and expected business activity. As shown in Table 1 previously submitted for each facility, the actual heat input over the last 5 years has remained relatively constant. The percent difference in the maximum heat input and minimum heat inputs over the 5-year periods from 2008 through 2012 were only 1.23 percent for the North Broward facility and 3.24 percent difference for the South Broward facility. The increase in the percentage authorized for segregated loads is not expected to change the annual input rates for the facilities. Therefore, both the heat input will remain relatively constant for both facilities over the next 5 years. Also, as stated in the applications, the incorporation of a higher percentage of segregated loads in the fuel mix for the facilities is not expected to change the emission characteristics since the material making up segregated loads is fundamentally not different than current waste and the air pollution control equipment limit emissions to very low levels.

In order to provide a conservative estimate of Project Actual Emissions, the maximum annual heat input over the period 2008 through 2012 was used as a future projection of heat input with the maximum emission rate over the period 2008 through 2012 as a projection of maximum future emissions. Table 6 (Rev. 1) in Attachments A and B for the North Broward and South Broward facilities, respectively show the calculations of the Project Actual Emissions for each regulated air pollutant using the maximum annual heat input and maximum emission rates over the period 2008 through 2012. As shown in Table 6 (Rev. 1) for both facilities, the net emission increase, based on the difference in Project Actual Emissions and Baseline Actual Emissions, are less than the Prevention of Significant Deterioration (PSD) significant emission rate for each regulated air pollutant including GHGs. Therefore, the authorization of increasing the percentage of waste from 5 to 20 percent as segregated loads will not require PSD review.

Included in Attachment A for the North Broward facility are updated Tables 2 (Rev. 1), 3 (Rev. 1), and 5 (Rev. 1) that reflect minor updated emissions for 2012 that was submitted to the Department on August 29, 2013 as revision to the 2012 Annual Operating Report. Tables 1 and 4 for the North Broward facility

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and Tables 1 through 5 for the South Broward remain the same as originally submitted with the applications.

Attachments A and B contain updated Professional Engineer certifications to support the new calculations and Responsible Official statements.

If you have any questions, please call me at (352) 336-5600 or email (kkosky@golder.com), at your earliest convenience.

Sincerely,

GOLDER ASSOCIATES INC.



Kennard F. Kosky, P.E.
Principal

Attachments

KFK/edk

cc: Chuck Faller, WNB
Nicole Turnbull, WSB
Jim Epsilantis, WNB
Scott McIlvaine, WSB
Scott M. Sheplak, P.E., FDEP

ATTACHMENT A
WHEELABRATOR NORTH BROWARD

Table 2 (Rev. 1). Wheelabrator North Broward Annual Emissions Reported in 2008-2012 Annual Operating Reports

Year	Pollutant	MWC Unit No. 1 (tons)	MWC Unit No. 2 (tons)	MWC Unit No. 3 (tons)	Total (tons)
2008	NO _x	455.4	453.8	463.9	1,373.2
	CO	20.1	20.0	20.5	60.5
	SO ₂	44.5	44.3	45.3	134.2
	VOC	3.9	3.8	3.9	11.7
	PM	2.2	2.1	2.2	6.5
	PM ₁₀	2.2	2.1	2.2	6.5
	SAM ^a	0.0	0.0	0.0	0.0
	D/F	6.00E-06	6.00E-06	6.00E-06	1.80E-05
	Hyd. Chloride	21.9	21.8	22.3	66.0
	Fluorides	0.103	0.102	0.105	0.310
	Lead	0.007	0.007	0.007	0.020
	Mercury	0.014	0.014	0.014	0.041
	CO ₂	246,645	245,742	251,237	743,624
	2009	NO _x	440.6	458.0	445.4
CO		23.2	23.4	23.3	70
SO ₂		46.6	48.6	47.1	142
VOC		3.7	3.8	3.8	11
PM		1.9	1.9	1.9	6
PM ₁₀		1.9	1.9	1.9	6
SAM ^a		0.0	0.0	0.0	0
D/F		4.00E-06	4.00E-06	4.00E-06	1.20E-05
Hyd. Chloride		20.2	21.1	20.5	61.8
Fluorides		0.104	0.108	0.105	0.317
Lead		0.004	0.004	0.004	0.012
Mercury		0.012	0.012	0.012	0.037
CO ₂		241,048	250,168	243,575	734,791
2010		NO _x	463.9	454.6	456.8
	CO	32.6	31.9	32.2	97
	SO ₂	60.7	59.5	59.8	180
	VOC	3.8	3.7	3.7	11
	PM	2.0	1.9	1.9	6
	PM ₁₀	2.0	1.9	1.9	6
	SAM ^a	0.0	0.0	0.0	0
	D/F	4.00E-06	3.00E-06	3.00E-06	1.00E-05
	Hyd. Chloride	24.6	24.1	24.2	72.8
	Fluorides	0.112	0.110	0.110	0.331
	Lead	0.004	0.004	0.036	0.044
	Mercury	0.011	0.011	0.011	0.034
	CO ₂	248,801	243,779	245,021	737,601
	2011	NO _x	453.2	453.9	458.1
CO		29.9	30.0	30.3	90
SO ₂		42.5	42.6	43.0	128
VOC		3.9	3.9	3.9	12
PM		1.2	1.2	1.2	4
PM ₁₀		1.2	1.2	1.2	4
SAM ^a		0.0	0.0	0.0	0
D/F		2.00E-06	2.00E-06	2.00E-06	6.00E-06
Hyd. Chloride		26.6	26.6	26.9	80.1
Fluorides		0.116	0.116	0.117	0.349
Lead		0.001	0.001	0.001	0.002
Mercury		0.009	0.009	0.009	0.027
CO ₂		245,665	246,069	248,382	740,117
2012		NO _x	447.6	436.2	461.3
	CO	22.9	22.0	23.3	68
	SO ₂	38.6	37.7	39.8	116
	VOC	3.8	3.6	3.9	11
	PM	1.7	1.7	1.8	5
	PM ₁₀	1.7	1.7	1.8	5
	SAM ^a	0.0	0.0	0.0	0
	D/F	1.00E-06	1.00E-06	1.00E-06	3.00E-06
	Hyd. Chloride	23.6	23.0	24.3	70.8
	Fluorides	0.035	0.034	0.036	0.106
	Lead	0.001	0.001	0.001	0.004
	Mercury	0.015	0.014	0.015	0.044
	CO ₂	244,420	237,993	251,707	734,120

Source: Annual Operating Report (AOR) for Wheelabrator North Broward, Inc., 2008 - 2012. Note: 2012 AOR Updated 8-29-13.

Table 3 (Rev. 1). Wheelabrator North Broward Actual Emissions as a Function of Heat Input, 2008 - 2012

BURNER 1

Year	Actual Annual Heat Input (MMBtu/yr) ^a	MWC Unit 1 Actual Emissions (TPY) ^b												Emissions per Unit Heat Input ^c (lb/MMBtu)													
		NO _x	CO	VOC	SO ₂	PM	PM ₁₀	SAM	D/F	Hyd. Chloride	Fluorides	Lead	Mercury	CO ₂	NO _x	CO	VOC	SO ₂	PM	PM ₁₀	SAM	D/F	Hyd. Chloride	Fluorides	Lead	Mercury	CO ₂
2008	2,470,341	455.4	20.1	3.9	44.5	2.2	2.2	6.8	6.00E-06	21.9	0.10	6.57E-03	0.01	246,644.9	0.3687	0.0163	0.0031	0.0360	0.0017	0.0017	0.0055	4.86E-09	0.0177	8.31E-05	5.32E-06	1.10E-05	199.7
2009	2,423,383	440.6	23.2	3.7	46.6	1.9	1.9	7.1	4.00E-06	20.2	0.10	3.87E-03	0.01	241,047.9	0.3636	0.0192	0.0031	0.0384	0.0015	0.0015	0.0059	3.30E-09	0.0167	8.57E-05	3.19E-06	9.89E-06	198.9
2010	2,492,672	463.9	32.6	3.8	60.7	2.0	2.0	9.3	4.00E-06	24.6	0.11	3.73E-03	0.01	248,800.5	0.3722	0.0262	0.0030	0.0487	0.0016	0.0016	0.0075	3.21E-09	0.0197	8.97E-05	2.99E-06	9.08E-06	199.6
2011	2,461,065	453.2	29.9	3.9	42.5	1.2	1.2	6.5	2.00E-06	26.6	0.12	6.83E-04	0.01	245,665.3	0.3683	0.0243	0.0032	0.0346	0.0010	0.0010	0.0053	1.63E-09	0.0216	9.41E-05	5.55E-07	7.31E-06	199.6
2012	2,451,696	447.6	22.9	3.8	38.6	1.7	1.7	5.9	1.00E-06	23.6	0.04	1.22E-03	0.01	244,420.1	0.3651	0.0187	0.0031	0.0315	0.0014	0.0014	0.0048	8.16E-10	0.0192	2.87E-05	9.97E-07	1.20E-05	199.4
														Maximum =	0.3722	0.0262	0.0032	0.0487	0.0017	0.0017	0.0075	4.86E-09	0.0216	9.41E-05	5.32E-06	1.20E-05	199.7

BURNER 2

Year	Actual Annual Heat Input (MMBtu/yr) ^a	MWC Unit 2 Actual Emissions (TPY) ^b												Emissions per Unit Heat Input ^c (lb/MMBtu)													
		NO _x	CO	VOC	SO ₂	PM	PM ₁₀	SAM	D/F	Hyd. Chloride	Fluorides	Lead	Mercury	CO ₂	NO _x	CO	VOC	SO ₂	PM	PM ₁₀	SAM	D/F	Hyd. Chloride	Fluorides	Lead	Mercury	CO ₂
2008	2,460,443	453.8	20.0	3.8	44.3	2.1	2.1	6.8	6.00E-06	21.8	0.10	6.55E-03	0.01	245,741.8	0.3689	0.0162	0.0031	0.0360	0.0017	0.0017	0.0055	4.88E-09	0.0177	8.32E-05	5.32E-06	1.10E-05	199.8
2009	2,507,133	458.0	23.4	3.8	48.6	1.9	1.9	7.4	4.00E-06	21.1	0.11	4.03E-03	0.01	250,167.9	0.3654	0.0187	0.0031	0.0387	0.0015	0.0015	0.0059	3.19E-09	0.0168	8.63E-05	3.21E-06	9.96E-06	199.6
2010	2,441,331	454.6	31.9	3.7	59.5	1.9	1.9	9.1	3.00E-06	24.1	0.11	3.65E-03	0.01	243,778.7	0.3724	0.0261	0.0030	0.0488	0.0016	0.0016	0.0075	2.46E-09	0.0197	8.98E-05	2.99E-06	9.09E-06	199.7
2011	2,465,402	453.9	30.0	3.9	42.6	1.2	1.2	6.5	2.00E-06	26.6	0.12	6.84E-04	0.01	246,069.3	0.3682	0.0243	0.0032	0.0345	0.0010	0.0010	0.0053	1.62E-09	0.0216	9.41E-05	5.55E-07	7.31E-06	199.6
2012	2,383,294	436.2	22.0	3.6	37.7	1.7	1.7	5.8	1.00E-06	23.0	0.03	1.19E-03	0.01	237,992.9	0.3660	0.0185	0.0031	0.0316	0.0014	0.0014	0.0048	8.39E-10	0.0193	2.88E-05	9.99E-07	1.21E-05	199.7
														Maximum =	0.3724	0.0261	0.0032	0.0488	0.0017	0.0017	0.0075	4.88E-09	0.0216	9.41E-05	5.32E-06	1.21E-05	199.8

BURNER 3

Year	Actual Annual Heat Input (MMBtu/yr) ^a	MWC Unit 3 Actual Emissions (TPY) ^b												Emissions per Unit Heat Input ^c (lb/MMBtu)													
		NO _x	CO	VOC	SO ₂	PM	PM ₁₀	SAM	D/F	Hyd. Chloride	Fluorides	Lead	Mercury	CO ₂	NO _x	CO	VOC	SO ₂	PM	PM ₁₀	SAM	D/F	Hyd. Chloride	Fluorides	Lead	Mercury	CO ₂
2008	2,516,258	463.9	20.5	3.9	45.3	2.2	2.2	6.9	6.00E-06	22.3	0.10	6.70E-03	0.01	251,237.4	0.3687	0.0163	0.0031	0.0360	0.0017	0.0017	0.0055	4.77E-09	0.0177	8.31E-05	5.32E-06	1.10E-05	199.7
2009	2,446,966	445.4	23.3	3.8	47.1	1.9	1.9	7.2	4.00E-06	20.5	0.10	3.91E-03	0.01	243,575.0	0.3640	0.0191	0.0031	0.0385	0.0015	0.0015	0.0059	3.27E-09	0.0167	8.58E-05	3.19E-06	9.90E-06	199.1
2010	2,455,132	456.8	32.2	3.7	59.8	1.9	1.9	9.2	3.00E-06	24.2	0.11	3.63E-02	0.01	245,021.5	0.3721	0.0262	0.0030	0.0487	0.0016	0.0016	0.0075	2.44E-09	0.0197	8.97E-05	2.96E-06	9.08E-06	199.6
2011	2,488,689	458.1	30.3	3.9	43.0	1.2	1.2	6.6	2.00E-06	26.9	0.12	6.91E-04	0.01	248,382.1	0.3682	0.0243	0.0032	0.0345	0.0010	0.0010	0.0053	1.61E-09	0.0216	9.41E-05	5.55E-07	7.31E-06	199.6
2012	2,521,183	461.3	23.3	3.9	39.8	1.8	1.8	6.1	1.00E-06	24.3	0.04	1.26E-03	0.02	251,707.5	0.3659	0.0185	0.0031	0.0316	0.0014	0.0014	0.0048	7.93E-10	0.0193	2.88E-05	9.99E-07	1.21E-05	199.7
														Maximum =	0.3721	0.0262	0.0032	0.0487	0.0017	0.0017	0.0075	4.77E-09	0.0216	9.41E-05	2.96E-06	1.21E-05	199.7

BURNERS 1, 2 & 3

Year	Actual Annual Heat Input (MMBtu/yr) ^a	MWC Units 1, 2 & 3 Total Actual Emissions (TPY) ^b												Emissions per Unit Heat Input ^c (lb/MMBtu)													
		NO _x	CO	VOC	SO ₂	PM	PM ₁₀	SAM	D/F	Hyd. Chloride	Fluorides	Lead	Mercury	CO ₂	NO _x	CO	VOC	SO ₂	PM	PM ₁₀	SAM	D/F	Hyd. Chloride	Fluorides	Lead	Mercury	CO ₂
2008	7,447,042	1,373.2	60.5	11.7	134.2	6.5	6.5	20.5	1.80E-05	66.0	0.31	1.98E-02	0.04	743,624.0	0.3688	0.0163	0.0031	0.0360	0.0017	0.0017	0.0055	4.83E-09	0.0177	8.31E-05	5.32E-06	1.10E-05	199.7
2009	7,377,482	1,344.0	70.0	11.3	142.3	5.6	5.6	21.8	1.20E-05	61.8	0.32	1.18E-02	0.04	734,790.8	0.3644	0.0190	0.0031	0.0386	0.0015	0.0015	0.0059	3.25E-09	0.0167	8.59E-05	3.20E-06	9.92E-06	199.2
2010	7,389,135	1,375.3	96.7	11.2	180.1	5.8	5.8	27.6	1.00E-05	72.8	0.33	4.37E-02	0.03	737,600.7	0.3723	0.0262	0.0030	0.0487	0.0016	0.0016	0.0075	2.71E-09	0.0197	8.97E-05	1.18E-05	9.08E-06	199.6
2011	7,415,157	1,365.2	90.1	11.8	128.1	3.5	3.5	19.6	6.00E-06	80.1	0.35	2.06E-03	0.03	740,116.7	0.3682	0.0243	0.0032	0.0346	0.0010	0.0010	0.0053	1.62E-09	0.0216	9.41E-05	5.55E-07	7.31E-06	199.6
2012	7,356,172	1,345.0	68.3	11.3	116.0	5.2	5.2	17.8	3.00E-06	70.8	0.11	3.67E-03	0.04	734,120.5	0.3657	0.0186	0.0031	0.0316	0.0014	0.0014	0.0048	8.16E-10	0.0193	2.88E-05	9.98E-07	1.21E-05	199.6
														Maximum =	0.3723	0.0262	0.0032	0.0487	0.0017	0.0017	0.0075	4.83E-09	0.0216	9.41E-05	1.18E-05	1.21E-05	199.7

^a Based on AOR data; see Table 1.

^b Based on AOR data; see Table 2.

^c Total actual emissions divided by total heat input.

Table 5 (Rev. 1). Wheelabrator North Broward Annual Average Emissions for Burners 1, 2 & 3 for Each Consecutive Two-Year Period, 2008-2012

Pollutant	Annual Emissions for MWC Units 1, 2 & 3					Two-Year Average Emissions			
	2008 (tons)	2009 (tons)	2010 (tons)	2011 (tons)	2012 (tons)	2008-2009 (tons)	2009-2010 (tons)	2010-2011 (tons)	2011-2012 (tons)
NO _x	1,373.2	1,344.0	1,375.3	1,365.2	1,345.0	1,358.6	1,359.7	1,370.2	1,355.1
CO	60.5	70.0	96.7	90.1	68.3	65.3	83.3	93.4	79.2
SO ₂	134.2	142.3	180.1	128.1	116.0	138.2	161.2	154.1	122.1
VOC	11.7	11.3	11.2	11.8	11.3	11.5	11.2	11.5	11.5
PM	6.5	5.6	5.8	3.5	5.2	6.0	5.7	4.7	4.4
PM ₁₀	6.5	5.6	5.8	3.5	5.2	6.0	5.7	4.7	4.4
PM _{2.5} ^a	6.5	5.6	5.8	3.5	5.2	6.0	5.7	4.7	4.4
SAM ^b	20.5	21.8	27.6	19.6	17.8	21.2	24.7	23.6	18.7
D/F	1.80E-05	1.20E-05	1.00E-05	6.00E-06	3.00E-06	1.50E-05	1.10E-05	8.00E-06	4.50E-06
Hyd. Chloride	66.0	61.8	72.8	80.1	70.8	63.9	67.3	76.5	75.5
Fluorides	0.31	0.32	0.33	0.35	0.11	0.31	0.32	0.34	0.23
Lead	1.98E-02	1.18E-02	4.37E-02	2.06E-03	3.67E-03	1.58E-02	2.77E-02	2.29E-02	2.86E-03
Mercury	0.04	0.04	0.03	0.03	0.04	3.87E-02	3.51E-02	3.03E-02	3.57E-02
CO ₂	743,624.0	734,790.8	737,600.7	740,116.7	734,120.5	739,207.4	736,195.7	738,858.7	737,118.6
N ₂ O ^c (CO ₂ e)	4,061.6	4,000.4	4,027.1	4,040.2	4,006.8	4,031.0	4,013.7	4,033.7	4,023.5
CH ₄ ^c (CO ₂ e)	1,891.7	1,863.5	1,875.7	1,881.8	1,866.3	1,877.6	1,869.6	1,878.8	1,874.0

^a Assuming equal to PM₁₀ emissions.

^b Not reported in AORs - based on assuming 10% of SO₂ converts to SO₃, all of which converts to SAM.

^c Calculated based on actual annual heat input - see Table 3.

Source: Annual Operating Report (AOR) for 2008 - 2012

Table 6 (Rev. 1). Wheelabrator North Broward PSD Applicability for Increase in Segregated Loads

Pollutant	Baseline (Maximum 2-Year Average Actual) Emissions ^a (TPY)	Projected Actual Heat Input ^b (MMBtu/yr)	Maximum Emission Rates ^c (lb/MMBtu)	Projected Actual Emissions ^d (TPY)	Increase/Decrease in Annual Emissions ^e (TPY)	PSD Significant Emission Rates (TPY)
NO _x	1,370.24	7,447,042	0.3723	1,386.11	16	40
CO	93.39	7,447,042	0.0262	97.44	4	100
SO ₂	161.16	7,447,042	0.0487	181.48	20	40
VOC	11.52	7,447,042	0.0032	11.81	0.290	40
PM	6.05	7,447,042	0.0017	6.50	0.455	25
PM ₁₀	6.05	7,447,042	0.0017	6.50	0.455	15
PM _{2.5}	6.05	7,447,042	0.0017	6.50	0.455	10
SAM	24.68	7,447,042	0.0075	27.79	3.111	7
MWC Organics ^f	1.50E-05	7,447,042	4.83E-09	1.80E-05	3.00E-06	3.50E-06
MWC Acid Gases ^f	237.61	7,447,042	0.0703	261.88	24.272	40
Fluorides	0.34	7,447,042	9.41E-05	0.35	0.010	3
Lead	0.03	7,447,042	1.18E-05	0.04	0.016	0.6
Mercury	0.04	7,447,042	1.21E-05	0.04	0.006	0.1
GHGs						
CO ₂	739,207.37	7,447,042	199.71	743,624.0	4,416.6	
N ₂ O (CO ₂ e)	4,033.66	7,447,042	1.091	4,061.63	28.0	
CH ₄ (CO ₂ e)	1,878.75	7,447,042	0.508	1,891.73	13.0	
Total GHGs (CO ₂ e)	745,119.8			749,577.3	4,457.5	75,000

^a Maximum 2-Year average emissions - see Table 5 (Rev. 1).

^b Maximum one year average heat Input - see Table 1 (Rev. 1).

^c Maximum emission rates in lb/MMBtu - see Table 3 (Rev. 1). Emission factors for N₂O and CH₄ based on maximum lb/MMBtu calculated from Tab

^d Projected actual annual emissions are the maximum heat input times maximum emission rates.

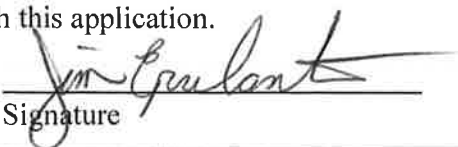
^e Projected actual emissions minus baseline actual emissions.

^f MWC Organics are D/F emissions and MWC Acid Gases are HCl and SO₂. See Tables 2 (Rev. 1), 3 (Rev. 1) and 5 (Rev. 1).

APPLICATION INFORMATION

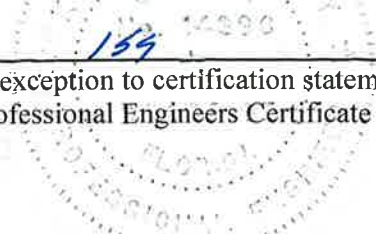
Application Responsible Official Certification

Complete if applying for an initial, revised, or renewal Title V air operation permit or concurrent processing of an air construction permit and revised or renewal Title V air operation permit. If there are multiple responsible officials, the "application responsible official" need not be the "primary responsible official."

1. Application Responsible Official Name: Jim Epsilantis, Plant Manager
2. Application Responsible Official Qualification (Check one or more of the following options, as applicable): <input checked="" type="checkbox"/> For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C. <input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively. <input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. <input type="checkbox"/> The designated representative at an Acid Rain source or CAIR source.
3. Application Responsible Official Mailing Address... Organization/Firm: Wheelabrator North Broward, Inc. Street Address: 2600 Wiles Road City: Pompano Beach State: FL Zip Code: 33073
4. Application Responsible Official Telephone Numbers... Telephone: (954) 971-8701 ext. 212 Fax: (954) 971-8703
5. Application Responsible Official E-mail Address: jepsilantis@wm.com
6. Application Responsible Official Certification: I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.  Signature <u>9-23-13</u> Date

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: Kennard F. Kosky Registration Number: 14996
2. Professional Engineer Mailing Address... Organization/Firm: Golder Associates Inc.** Street Address: 6026 NW 1st Place City: Gainesville State: FL Zip Code: 32607
3. Professional Engineer Telephone Numbers... Telephone: (352) 336-5600 ext. 21156 Fax: (352) 336-6603
4. Professional Engineer E-mail Address: kkosky@golder.com
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> <p>(1) <i>To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and</i></p> <p>(2) <i>To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.</i></p> <p>(3) <i>If the purpose of this application is to obtain a Title V air operation permit (check here <input type="checkbox"/> , if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.</i></p> <p>(4) <i>If the purpose of this application is to obtain an air construction permit (check here <input type="checkbox"/> , if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here <input checked="" type="checkbox"/> , if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.</i></p> <p>(5) <i>If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here <input type="checkbox"/> , if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.</i></p> <p><i>Kennard F. Kosky</i> _____ Signature (seal)  159</p> <p><u>9/24/13</u> _____ Date</p>

* Attach any exception to certification statement.

**Board of Professional Engineers Certificate of Authorization #00001670.

ATTACHMENT B
WHEELABRATOR SOUTH BROWARD

Table 6 (Rev. 1). Wheelabrator South Broward PSD Applicability for Increase in Segregated Loads

Pollutant	Baseline (Maximum 2-Year Average Actual) Emissions ^a (TPY)	Projected Actual Heat Input ^b (MMBtu/yr)	Maximum Emission Rates ^c (lb/MMBtu)	Projected Actual Emissions ^d (TPY)	Increase/Decrease in Annual Emissions ^e (TPY)	PSD Significant Emission Rates (TPY)
NO _x	1,356.61	7,349,252	0.3769	1,384.93	28	40
CO	64.96	7,349,252	0.0194	71.36	6	100
SO ₂	125.18	7,349,252	0.0407	149.38	24	40
VOC	9.85	7,349,252	0.0028	10.11	0.26	40
PM	9.73	7,349,252	0.0028	10.33	0.59	25
PM ₁₀	9.73	7,349,252	0.0028	10.33	0.59	15
PM _{2.5}	9.73	7,349,252	0.0028	10.33	0.59	10
SAM	19.17	7,349,252	0.0062	22.87	4	7
MWC Organics ^f	2.10E-05	7,349,252	5.88E-09	2.16E-05	6.06E-07	3.50E-06
MWC Acid Gases ^f	182.04	7,349,252	0.0573	210.60	29	40
Fluorides	0.82	7,349,252	2.58E-04	0.95	0.13	3
Lead	0.02	7,349,252	6.43E-06	0.02	0.0006	0.6
Mercury	0.07	7,349,252	1.93E-05	0.07	0.0018	0.1
<u>GHGs</u>						
CO ₂	722,894.67	7,349,252	199.74	733,951.55	11,056.9	
N ₂ O (CO ₂ e)	3,943.82	7,349,252	1.091	4,009.43	65.6	
CH ₄ (CO ₂ e)	1,836.97	7,349,252	0.508	1,867.40	30.4	
Total GHGs (CO ₂ e)	728,675.5			739,828.4	11,152.9	75,000

^a Maximum 2-Year average emissions - see Table 5.

^b Maximum one year average heat Input - see Table 1.

^c Maximum emission rates in lb/MMBtu - see Table 3. Emission factors for N₂O and CH₄ based on maximum lb/MMBtu calculated from Table 4.

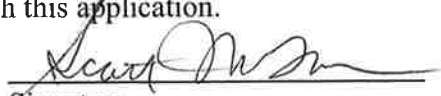
^d Projected actual annual emissions are the maximum heat input times maximum emission rates.

^e Projected actual emissions minus baseline actual emissions.

APPLICATION INFORMATION


Application Responsible Official Certification

Complete if applying for an initial, revised, or renewal Title V air operation permit or concurrent processing of an air construction permit and revised or renewal Title V air operation permit. If there are multiple responsible officials, the “application responsible official” need not be the “primary responsible official.”

1. Application Responsible Official Name: Scott McIlvaine, Plant Manager
2. Application Responsible Official Qualification (Check one or more of the following options, as applicable): <input checked="" type="checkbox"/> For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C. <input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively. <input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. <input type="checkbox"/> The designated representative at an Acid Rain source or CAIR source.
3. Application Responsible Official Mailing Address... Organization/Firm: Wheelabrator South Broward, Inc. Street Address: 4400 South State Road 7 City: Fort Lauderdale State: FL Zip Code: 33314
4. Application Responsible Official Telephone Numbers... Telephone: (954) 581-6606 ext. 212 Fax: (954) 581-6705
5. Application Responsible Official E-mail Address: smcilvai@wm.com
6. Application Responsible Official Certification: I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.  Signature <u>9/23/13</u> Date

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: Kennard F. Kosky Registration Number: 14996
2. Professional Engineer Mailing Address... Organization/Firm: Golder Associates Inc.** Street Address: 6026 NW 1st Place City: Gainesville State: FL Zip Code: 32607
3. Professional Engineer Telephone Numbers... Telephone: (352) 336-5600 ext. 21156 Fax: (352) 336-6603
4. Professional Engineer E-mail Address: kkosky@golder.com
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> <p>(1) <i>To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and</i></p> <p>(2) <i>To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.</i></p> <p>(3) <i>If the purpose of this application is to obtain a Title V air operation permit (check here <input type="checkbox"/> , if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.</i></p> <p>(4) <i>If the purpose of this application is to obtain an air construction permit (check here <input checked="" type="checkbox"/> , if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here <input type="checkbox"/> , if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.</i></p> <p>(5) <i>If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here <input type="checkbox"/> , if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.</i></p> <p><i>Kennard F. Kosky</i> _____ Signature</p> <p><u>9/24/13</u> _____ Date</p> <p>(seal) </p>

* Attach any exception to certification statement.

**Board of Professional Engineers Certificate of Authorization #00001670.