Wheelabrator South Broward Inc.
A Waste Management Company
4400 South State Road 7
Ft. Lauderdale, FL 33314
(954) 581-6606
(954) 581-6705 Fax

July 14, 2009

Certified Mail 70072680000087713387

Florida Department of Environmental Protection
Bureau of Air Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
Attention: Trinia L. Vielhauer, Chief

Re: Wheelabrator South Broward
Application for Revised PSD and Title V Permits
Project No.: 0112119-013-AC
0112119-014-AV

Dear Ms. Vielhaur:

Please find enclosed four copies of Wheelabrator South Broward's application to revise the facility's PSD and Title V permits, primarily to remove or modify conditions referencing semi-annual mercury testing, which are no longer applicable with the recent installation of the facility's activated carbon system. Additional permit modification requests are also listed in Part B of the application.

I, the undersigned, am a responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this submittal. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements and information in this document are true, accurate and complete.

If there are any questions, or if further information is required, please contact this office at (954) 581-6606.

Sincerely,

Jairaj Gosine
Plant Manager

cc: Chuck Faller (with attachments)
Tim Porter (with attachments)
Rob French – MPI (without attachments)
Ram Tewari – BCWRS (without attachments)

WM
WASTE MANAGEMENT

AIR CONSTRUCTION PERMIT APPLICATION

WHEELABRATOR SOUTH BROWARD, INC.
BROWARD COUNTY, FLORIDA

Prepared For:

Wheelabrator South Broward, Inc.
4400 South State Road 7
Ft. Lauderdale, Florida 33314

Prepared By:

Golder Associates Inc.
6026 NW 1st Place
Gainesville, Florida 32607

July 2009

0938-7577

DISTRIBUTION:
4 Copies – FDEP
2 Copies – Wheelabrator South Broward, Inc.
1 Copy – Golder Associates Inc.

APPLICATION FOR AIR PERMIT

LONG FORM

Department of Environmental Protection

Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Air Construction Permit – Use this form to apply for an air construction permit:

- For any required purpose at a facility operating under a federally enforceable state air operation permit (FESOP) or Title V air operation permit;
- For a proposed project subject to prevention of significant deterioration (PSD) review, nonattainment new source review, or maximum achievable control technology (MACT);
- To assume a restriction on the potential emissions of one or more pollutants to escape a requirement such as PSD review, nonattainment new source review, MACT, or Title V; or
- To establish, revise, or renew a plantwide applicability limit (PAL).

Air Operation Permit – Use this form to apply for:

- An initial federally enforceable state air operation permit (FESOP); or
- An initial, revised, or renewal Title V air operation permit.

RECEIVED
JAN 20 2009
BUREAU OF AIR REGULATION

To ensure accuracy, please see form instructions.

Identification of Facility

1. Facility Owner/Company Name: **Wheelabrator South Broward, Inc.**	
2. Site Name: **Wheelabrator South Broward**	
3. Facility Identification Number: **0112119**	
4. Facility Location... Street Address or Other Locator: **4400 South State Road 7** City: **Ft. Lauderdale** County: **Broward** Zip Code: **33314**	
5. Relocatable Facility? ☐ Yes ☒ No	6. Existing Title V Permitted Facility? ☒ Yes ☐ No

Application Contact

1. Application Contact Name: **Jairaj Gosine, Plant Manager**
2. Application Contact Mailing Address... Organization/Firm: **Wheelabrator South Broward, Inc.** Street Address: **4400 South State Road 7** City: **Ft. Lauderdale** State: **FL** Zip Code: **33314**
3. Application Contact Telephone Numbers... Telephone: **(954) 581-6606** ext. Fax: **(954) 581-6705**
4. Application Contact E-mail Address: **jgosine@wm.com**

Application Processing Information (DEP Use)

1. Date of Receipt of Application: 1-20-09	3. PSD Number (if applicable):
2. Project Number(s): 0112119-013-AC 0112119-014-AV	4. Siting Number (if applicable):

APPLICATION INFORMATION

Purpose of Application

This application for air permit is being submitted to obtain: (Check one)

Air Construction Permit

☒ Air construction permit.

☐ Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL).

☐ Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL), and separate air construction permit to authorize construction or modification of one or more emissions units covered by the PAL.

Air Operation Permit

☐ Initial Title V air operation permit.

☐ Title V air operation permit revision.

☐ Title V air operation permit renewal.

☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.

☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)

☒ Air construction permit and Title V permit revision, incorporating the proposed project.

☐ Air construction permit and Title V permit renewal, incorporating the proposed project.

Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:

☐ I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

Application Comment

This application is to request a revision to the mercury emissions testing frequency of the municipal solid waste combustor units 1, 2, and 3 from semi-annual to annual based on the revised New Source Performance Standards (NSPS) for large municipal solid waste combustors (40 CFR 60 Subparts Cb and Eb). The current semiannual testing frequency is described in Specific Condition 1.d.(2)p of the construction permit PSD-FL-105(B) and Specific Condition B.56 of the final revised Title V air operating permit No. 0112119-011-AV. Additional changes to the permit conditions have been requested in Part B, which are based on recent regulatory changes and installation of the activated carbon mercury control system.

APPLICATION INFORMATION

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Processing Fee
001	863 TPD MSW Combustor & Auxiliary Burners – Unit 1	AC1F	N/A
002	863 TPD MSW Combustor & Auxiliary Burners – Unit 2	AC1F	N/A
003	863 TPD MSW Combustor & Auxiliary Burners – Unit 3	AC1F	N/A

Application Processing Fee

Check one: ☐ Attached - Amount: $_____ ☒ Not Applicable

APPLICATION INFORMATION

Owner/Authorized Representative Statement

Complete if applying for an air construction permit or an initial FESOP.

1. Owner/Authorized Representative Name :
2. Owner/Authorized Representative Mailing Address... Organization/Firm: Street Address: City: State: Zip Code:
3. Owner/Authorized Representative Telephone Numbers... Telephone: ( ) ext. Fax: ( )
4. Owner/Authorized Representative E-mail Address:
5. Owner/Authorized Representative Statement: *I, the undersigned, am the owner or authorized representative of the corporation, partnership, or other legal entity submitting this air permit application. To the best of my knowledge, the statements made in this application are true, accurate and complete, and any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department.* _____ _____ Signature Date

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:
   Jairaj Gosine, Plant Manager

2. Application Responsible Official Qualification (Check one or more of the following options, as applicable):

   ☒ 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.

   ☐ For a partnership or sole proprietorship, a general partner or the proprietor, respectively.

   ☐ For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.

   ☐ The designated representative at an Acid Rain source, CAIR source, or Hg Budget source.

3. Application Responsible Official Mailing Address...
   Organization/Firm: **Wheelabrator South Broward, Inc.**
   Street Address: **4400 South State Road 7**
   City: **Ft. Lauderdale** State: **FL** Zip Code: **33314**

4. Application Responsible Official Telephone Numbers...
   Telephone: **(954) 581-6606** ext. Fax: **(954) 581-6705**

5. Application Responsible Official E-mail Address: **jgosine@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 _____ Date 7/14/09

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, the undersigned, hereby certify, except as particularly noted herein, that:*

(1) 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

(2) 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.

(3) If the purpose of this application is to obtain a Title V air operation permit (check here ☐, 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.

(4) If the purpose of this application is to obtain an air construction permit (check here ☒, 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 ☐, 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.

(5) 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 ☐, 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.

Kennard F. Kosky — Signature

7/7/09 — Date

(seal)

* Attach any exception to certification statement.
** Board of Professional Engineers Certificate of Authorization #00001670.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates... Zone **17** East (km) **579.54** North (km) **2883.34**		2. Facility Latitude/Longitude... Latitude (DD/MM/SS) **26 / 04 / 08** Longitude (DD/MM/SS) **80 / 12 / 13**	
3. Governmental Facility Code: **0**	4. Facility Status Code: **A**	5. Facility Major Group SIC Code: **49**	6. Facility SIC(s): **4953**
7. Facility Comment :			

Facility Contact

1. Facility Contact Name: **Jairaj Gosine, Plant Manager**
2. Facility Contact Mailing Address... Organization/Firm: **Wheelabrator South Broward, Inc.** Street Address: **4400 South State Road 7** City: **Ft. Lauderdale** State: **FL** Zip Code: **33314**
3. Facility Contact Telephone Numbers: Telephone: **(954) 581-6606** ext. Fax: **(954) 581-6705**
4. Facility Contact E-mail Address: **jgosine@wm.com**

Facility Primary Responsible Official

Complete if an "application responsible official" is identified in Section I that is not the facility "primary responsible official."

1. Facility Primary Responsible Official Name:
2. Facility Primary Responsible Official Mailing Address... Organization/Firm: Street Address: City: State: Zip Code:
3. Facility Primary Responsible Official Telephone Numbers... Telephone: ( ) ext. Fax: ( )
4. Facility Primary Responsible Official E-mail Address:

Facility Regulatory Classifications

Check all that would apply *following* completion of all projects and implementation of all other changes proposed in this application for air permit. Refer to instructions to distinguish between a "major source" and a "synthetic minor source."

1. ☐ Small Business Stationary Source	☐ Unknown
2. ☐ Synthetic Non-Title V Source	
3. ☒ Title V Source	
4. ☒ Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)	
5. ☐ Synthetic Minor Source of Air Pollutants, Other than HAPs	
6. ☒ Major Source of Hazardous Air Pollutants (HAPs)	
7. ☐ Synthetic Minor Source of HAPs	
8. ☒ One or More Emissions Units Subject to NSPS (40 CFR Part 60)	
9. ☐ One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)	
10. ☐ One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)	
11. ☐ Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))	
12. Facility Regulatory Classifications Comment:	
40 CFR 60, Subpart Cb.	

List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
Particulate Matter Total – PM	A	N
Particulate Matter – PM10	A	N
Sulfur Dioxide – SO2	A	N
Nitrogen Oxides – NOx	A	N
Carbon Monoxide – CO	A	N
Fluoride – FL	A	N
Lead – Pb	B	N
Beryllium – H021	B	N
Cadmium – H027	B	N
Hydrogen Chloride – H106	A	N
Mercury – H114	B	N
Dioxin/Furan – DIOX	B	N

B. EMISSIONS CAPS

Facility-Wide or Multi-Unit Emissions Caps

1. Pollutant Subject to Emissions Cap	2. Facility-Wide Cap [Y or N]? (all units)	3. Emissions Unit ID's Under Cap (if not all units)	4. Hourly Cap (lb/hr)	5. Annual Cap (ton/yr)	6. Basis for Emissions Cap

7. Facility-Wide or Multi-Unit Emissions Cap Comment:

C. FACILITY ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Facility Plot Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID:_____ ☒ Previously Submitted, Date: **Sep. 2008**
2. Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID:_____ ☒ Previously Submitted, Date: **Sep. 2008**
3. Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____

Additional Requirements for Air Construction Permit Applications

1. Area Map Showing Facility Location:
   ☐ Attached, Document ID:_____ ☒ Not Applicable (existing permitted facility)
2. Description of Proposed Construction, Modification, or Plantwide Applicability Limit (PAL):
   ☒ Attached, Document ID: **Part B**
3. Rule Applicability Analysis:
   ☒ Attached, Document ID: **Part B**
4. List of Exempt Emissions Units:
   ☐ Attached, Document ID:_____ ☒ Not Applicable (no exempt units at facility)
5. Fugitive Emissions Identification:
   ☐ Attached, Document ID:_____ ☒ Not Applicable
6. Air Quality Analysis (Rule 62-212.400(7), F.A.C.):
   ☐ Attached, Document ID:_____ ☒ Not Applicable
7. Source Impact Analysis (Rule 62-212.400(5), F.A.C.):
   ☐ Attached, Document ID:_____ ☒ Not Applicable
8. Air Quality Impact since 1977 (Rule 62-212.400(4)(e), F.A.C.):
   ☐ Attached, Document ID:_____ ☒ Not Applicable
9. Additional Impact Analyses (Rules 62-212.400(8) and 62-212.500(4)(e), F.A.C.):
   ☐ Attached, Document ID:_____ ☒ Not Applicable
10. Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.):
    ☐ Attached, Document ID:_____ ☒ Not Applicable

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for FESOP Applications

1. List of Exempt Emissions Units:
   ☐ Attached, Document ID:_____ ☐ Not Applicable (no exempt units at facility)

Additional Requirements for Title V Air Operation Permit Applications

1. List of Insignificant Activities: (Required for initial/renewal applications only)
   ☐ Attached, Document ID:_____ ☐ Not Applicable (revision application)

2. Identification of Applicable Requirements: (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought)
   ☐ Attached, Document ID:_____
   ☐ Not Applicable (revision application with no change in applicable requirements)

3. Compliance Report and Plan: (Required for all initial/revision/renewal applications)
   ☐ Attached, Document ID:_____
   Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing.

4. List of Equipment/Activities Regulated under Title VI: (If applicable, required for initial/renewal applications only)
   ☐ Attached, Document ID:_____
   ☐ Equipment/Activities Onsite but Not Required to be Individually Listed
   ☐ Not Applicable

5. Verification of Risk Management Plan Submission to EPA: (If applicable, required for initial/renewal applications only)
   ☐ Attached, Document ID:_____ ☐ Not Applicable

6. Requested Changes to Current Title V Air Operation Permit:
   ☐ Attached, Document ID:_____ ☐ Not Applicable

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Facilities Subject to Acid Rain, CAIR, or Hg Budget Program

1. Acid Rain Program Forms:

   Acid Rain Part Application (DEP Form No. 62-210.900(1)(a)):
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☒ Not Applicable (not an Acid Rain source)

   Phase II NO_X Averaging Plan (DEP Form No. 62-210.900(1)(a)1.):
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☒ Not Applicable

   New Unit Exemption (DEP Form No. 62-210.900(1)(a)2.):
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☒ Not Applicable

2. CAIR Part (DEP Form No. 62-210.900(1)(b)):
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☒ Not Applicable (not a CAIR source)

3. Hg Budget Part (DEP Form No. 62-210.900(1)(c)):
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☒ Not Applicable (not a Hg Budget unit)

Additional Requirements Comment

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

EMISSIONS UNIT INFORMATION
Section [1]
MSW Combustor & Auxiliary Burners: Units 1, 2, and 3

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

☐ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

☒ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

☐ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

☐ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:

Three (3) 863-ton per day (TPD) Municipal Solid Waste (MSW) Combustors & Auxiliary Burners

3. Emissions Unit Identification Number: **001, 002, and 003**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:
A		**04/1991**	**49**

8. Federal Program Applicability: (Check all that apply)

☐ Acid Rain Unit

☐ CAIR Unit

☐ Hg Budget Unit

9. Package Unit:
Manufacturer: **Babcock and Wilcox** Model Number:

10. Generator Nameplate Rating: **66.086** MW

11. Emissions Unit Comment:

Generator nameplate rating of 66.086 MW is the facility total. All three units share a common stack containing one flue for each unit.

Emissions Unit Control Equipment/Method: Control 1 of 5

1. Control Equipment/Method Description: **Spray Dryer Absorber**
2. Control Device or Method Code: **202**

Emissions Unit Control Equipment/Method: Control 2 of 5

1. Control Equipment/Method Description: **Fabric Filter High Temperature [T > 250 degrees Fahrenheit (°F)]**
2. Control Device or Method Code: **016**

Emissions Unit Control Equipment/Method: Control 3 of 5

1. Control Equipment/Method Description: **Selective Non-Catalytic Reduction for NO_x control**
2. Control Device or Method Code: **107**

Emissions Unit Control Equipment/Method: Control 4 of 5

1. Control Equipment/Method Description: **Control of Percent Oxygen (O_2) in Combustion Air for CO control (Good Combustion Control)**
2. Control Device or Method Code: **033**

Emissions Unit Control Equipment/Method: Control 5 of 5

1. Control Equipment/Method Description: **Carbon Injection for Hg control**
2. Control Device or Method Code: **207**

B. EMISSIONS UNIT CAPACITY INFORMATION
(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **863 TPD MSW (Monthly Average)**	
2. Maximum Production Rate: **192,000 lb/hr steam (4-hour block average)**	
3. Maximum Heat Input Rate: **323.6** million Btu/hr	
4. Maximum Incineration Rate: pounds/hr **863** tons/day	
5. Requested Maximum Operating Schedule:	
24 hours/day	**7** days/week
52 weeks/year	**8,760** hours/year
6. Operating Capacity/Schedule Comment:	

All values are per MSW unit. MSW heat content is assumed to be 4,500 Btu/lb. See Condition B.11 in Permit No. 0112119-011-AV.

Maximum heat input rate and maximum incineration rates based on monthly average.

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **Boiler Nos. 1, 2, and 3**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code:	6. Stack Height: **195** feet	7. Exit Diameter: **7.5** Feet
8. Exit Temperature: **300**°F	9. Actual Volumetric Flow Rate: **169,000** acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: **80,000** dscfm	12. Nonstack Emission Point Height: Feet	
13. Emission Point UTM Coordinates... Zone: **17** East (km): **579.54** North (km): **2883.34**	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) **26 / 04 / 08** Longitude (DD/MM/SS) **80 / 12 / 13**	
15. Emission Point Comment: **There is one common stack containing one flue for each of the three MSW combustors. Stack parameters are average values for each flue. Stack parameters based on Title V permit application dated April 2005.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type): **Natural Gas Combustion**		
2. Source Classification Code (SCC): **1-01-006-01**	3. SCC Units: **Million Cubic Feet Natural Gas Burned**	
4. Maximum Hourly Rate: **0.93**	5. Maximum Annual Rate: **814.6**	6. Estimated Annual Activity Factor: **10%**
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: **1,044**
10. Segment Comment: **Fuel used for auxiliary burners. Used as fuel during warm-up, startup, shutdown, and malfunctions, as well as other times when necessary and consistent with good combustion practice. Maximum hourly firing rate based on 323.6 MMBtu/hr heat input per unit. Maximum annual firing rate based on annual activity factor of 10% operation during the year (876 hr/yr).**		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type): **MSW Combustion**		
2. Source Classification Code (SCC): **1-01-012-01**	3. SCC Units: **Tons Solid Waste Burned**	
4. Maximum Hourly Rate:	5. Maximum Annual Rate: **314,995**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.2**	8. Maximum % Ash: **30**	9. Million Btu per SCC Unit: **9**
10. Segment Comment: **MSW throughput limited to 863 TPD per unit (2,589 TPD total), and 323.6 MMBtu/hr as determined on a monthly average. Maximum annual rate based on one unit firing at 863 TPD and operating for 365 days/yr.**		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
CO	033		EL
DIOX	202	016	EL
FL	202	016	EL
H021 – Beryllium	202	016	EL
H027 – Cadmium	202	016	EL
H106 – Hydrogen Chloride	202		EL
H114 – Mercury	207	202, 016	EL
NOx	107		EL
Pb	202	016	EL
PM	202	016	EL
PM10	202	016	EL
SO2	202		EL

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **CO**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **33.9** lb/hour **148.5** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **100 ppmvd @ 7-percent O_2 (per MSW combustor unit)** Reference: **Permit No. 0112119-011-AV**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **Emissions per MSW combustor unit.**	
11. Potential, Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **100 ppmvd @ 7% O_2**	4. Equivalent Allowable Emissions: **33.9** lb/hour **148.5** tons/year
5. Method of Compliance: **CEMS – 4-hour Block Average**	
6. Allowable Emissions Comment (Description of Operating Method): **40 CFR 60.34b(a) and PSD-FL-105(B). Emissions per MSW combustor unit.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **DIOX**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **8.7×10^{-6}** lb/hour **3.8×10^{-5}** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **30 ng/dscm @ 7-percent O_2 (per MSW combustor unit)** Reference: **Permit No. 0112119-011-AV**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **Emissions per MSW combustor unit.**	
11. Potential, Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **30 ng/dscm @ 7-percent O_2**	4. Equivalent Allowable Emissions: **$8.7x10^{-6}$** lb/hour **$3.8x10^{-5}$** tons/year
5. Method of Compliance: **EPA Method 23. Test at least once annually [40 CFR 60.38b(b)]. Testing once every 3 years if test results < 15 ng/dscm.**	
6. Allowable Emissions Comment (Description of Operating Method): **40 CFR 60.33b(c)(1)(ii) and PSD-FL-105(B). Emissions per MSW combustor unit.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **FL**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **1.29** lb/hour **5.66** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.0040 lb/MMBtu (per MSW combustor unit)** Reference: **Permit No. 0112119-011-AV**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **Emissions per MSW combustor unit.**	
11. Potential, Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.0040 lb/MMBtu**	4. Equivalent Allowable Emissions: **1.29** lb/hour **5.66** tons/year
5. Method of Compliance: **EPA Method 13A, 13B, or modified Method 5 for fluorides. Every 5 years.**	
6. Allowable Emissions Comment (Description of Operating Method): **PSD-FL-105(B).** **Emissions per MSW combustor unit.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **Beryllium – H021**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.0003** lb/hour **0.0013** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.001 mg/dscm @ 7-percent O_2 (per MSW combustor unit)** Reference: **Permit No. 0112119-011-AV**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **Emissions per MSW combustor unit.**	
11. Potential, Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.001 mg/dscm @ 7-percent O_2**	4. Equivalent Allowable Emissions: **0.0003** lb/hour **0.0013** tons/year
5. Method of Compliance: **EPA Method 29, annually**	
6. Allowable Emissions Comment (Description of Operating Method): **PSD-FL-105(B).** **Emissions per MSW combustor unit.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **Cadmium – H027**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.011** lb/hour **0.046** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.035 mg/dscm @ 7-percent O_2 (per MSW combustor unit)** Reference: **40 CFR 60, Subpart Cb**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

Emissions per MSW combustor unit.

Hourly: **0.035 mg/dscm x 80,000 dscf/min x 60 min/hr x 1 m^3/35.3 ft^3 x 1 lb/453.6 g x 1 g/1000 mg = 0.0105 lb/hr**

Annual: **0.0105 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 0.046 TPY**

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.035 mg/dscm @ 7-percent O_2**	4. Equivalent Allowable Emissions: **0.011** lb/hour **0.046** tons/year
5. Method of Compliance: **EPA Method 29, annually**	
6. Allowable Emissions Comment (Description of Operating Method): **40 CFR 60, Subpart Cb. Emissions per MSW combustor unit.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **Hydrogen Chloride – H106**	2. Total Percent Efficiency of Control: **95**
3. Potential Emissions: **12.6** lb/hour **55** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **29 ppmvd @ 7-percent O_2 (per MSW combustor unit)** Reference: **Permit No. 0112119-011-AV**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

Emissions per MSW combustor unit.

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **29 ppmvd @ 7-percent O_2**	4. Equivalent Allowable Emissions: **12.6** lb/hour **55** tons/year
5. Method of Compliance: **EPA Method 26, 26A; annually**	
6. Allowable Emissions Comment (Description of Operating Method): **29 ppmvd @ 7-percent O_2 or 95-percent reduction by weight or volume, whichever is less stringent. Emissions per MSW combustor unit.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **Mercury – H114**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.015** lb/hour **0.066** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.050 mg/dscm @ 7-percent O_2 (per MSW combustor unit)** Reference: **40 CFR 60, Subpart Cb**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

Emissions per MSW combustor unit.

Hourly: **0.050 mg/dscm x 80,000 dscf/min x 60 min/hr x 1 m^3/35.3 ft^3 x 1 lb/453.6 g x 1 g/1000 mg = 0.015 lb/hr**

Annual: **0.015 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 0.066 TPY**

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.050 mg/dscm @ 7-percent O_2**	4. Equivalent Allowable Emissions: **0.015** lb/hour **0.066** tons/year
5. Method of Compliance: **EPA Method 29, annually**	
6. Allowable Emissions Comment (Description of Operating Method): **0.050 mg/dscm @ 7-percent O_2 or 85-percent reduction by weight or volume, whichever is less stringent. 40 CFR 60, Subpart Cb.** **Emissions per MSW combustor unit.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **NOx**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **114** lb/hour **499** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **205 ppmvd @ 7-percent O_2 (per MSW combustor unit)** Reference: **Permit No. 0112119-011-AV**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **Emissions per MSW combustion unit.**	
11. Potential, Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **205 ppmvd @ 7-percent O_2**	4. Equivalent Allowable Emissions: **114** lb/hour **499** tons/year
5. Method of Compliance: **CEMS 24-hour daily arithmetic average.**	
6. Allowable Emissions Comment (Description of Operating Method): **40 CFR 60.33b(d) and PSD-FL-105(B). Emissions per MSW combustor unit.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **Pb**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.120** lb/hour **0.53** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.40 mg/dscm @ 7-percent O_2 (per MSW combustor unit)** Reference: **40 CFR 60, Subpart Cb**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

Emissions per MSW combustor unit.

Hourly: **0.40 mg/dscm x 80,000 dscf/min x 60 min/hr x 1 m^3/35.3 ft^3 x 1 lb/453.6 g x 1 g/1000 mg = 0.120 lb/hr**

Annual: **0.120 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 0.525 TPY**

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.40 mg/dscm @ 7-percent O_2**	4. Equivalent Allowable Emissions: **0.120** lb/hour **0.53** tons/year
5. Method of Compliance: **EPA Method 29 or 12, annually**	
6. Allowable Emissions Comment (Description of Operating Method): **0.40 mg/dscm @ 7-percent O_2 or 85-percent reduction by weight or volume, whichever is less stringent. 40 CFR 60, Subpart Cb. Emissions per MSW combustor unit.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM/PM10**	2. Total Percent Efficiency of Control: **99+**
3. Potential Emissions: **7.49** lb/hour **32.8** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **25 mg/dscm @ 7-percent O_2 (per MSW combustor unit)** Reference: **40 CFR 60, Subpart Cb**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

Emissions per MSW combustor unit.

Hourly: **25 mg/dscm x 80,000 dscf/min x 60 min/hr x 1 m^3/35.3 ft^3 x 1 lb/453.6 g x 1 g/1000 mg = 7.49 lb/hr**

Annual: **7.49 lb/hr x 8,760 hr/yr x 1 ton/2,000 lb = 32.8 TPY**

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **25 mg/dscm @ 7-percent O_2**	4. Equivalent Allowable Emissions: **7.49** lb/hour **32.8** tons/year
5. Method of Compliance: **EPA Method 5; annually**	
6. Allowable Emissions Comment (Description of Operating Method): **40 CFR 60, Subpart Cb.** **Emissions per MSW combustor unit.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **SO2**	2. Total Percent Efficiency of Control: **75**
3. Potential Emissions: **35.1** lb/hour **153.7** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **29 ppmvd @ 7-percent O_2 (per MSW combustor unit)** Reference: **Permit No. 0112119-011-AV**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **Emissions per MSW combustor unit.**	
11. Potential, Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **29 ppmvd @ 7-percent O_2**	4. Equivalent Allowable Emissions: **35.1** lb/hour **153.7** tons/year
5. Method of Compliance: **CEMS 24-hour block daily geometric mean.**	
6. Allowable Emissions Comment (Description of Operating Method): **29 ppmvd @ 7-percent O_2 or 75-percent reduction by weight or volume, whichever is less stringent.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: **VE10**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **10 %** Exceptional Conditions: **100 %** Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment: **Exceptional Conditions: Periods of startup, shutdown, and malfunction. Duration of startup or shutdown periods are limited to 3 hours per occurrence, except as provided in 40 CFR 60.33b(a)(1)(iii).**	

Visible Emissions Limitation: Visible Emissions Limitation ____ of ____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor 1 of 7

1. Parameter Code: **O2 – Oxygen**	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☒ Other
4. Monitor Information... Manufacturer: **SICK** Model Number: **MCS-100EHW**	Serial Number: **278, 277, and 279**
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: **Used with SO_2, NO_x, and CO monitors** **MSW Combustor Unit 1 – Serial Number 278** **MSW Combustor Unit 2 – Serial Number 277** **MSW Combustor Unit 3 – Serial Number 279**	

Continuous Monitoring System: Continuous Monitor 2 of 7

1. Parameter Code: **EM – Emission**	2. Pollutant(s): **SO2**
3. CMS Requirement:	☐ Rule ☒ Other
4. Monitor Information... Manufacturer: **SICK** Model Number: **MCS-100EHW**	Serial Number: **278, 277, and 279**
5. Installation Date: **02/01/2001**	6. Performance Specification Test Date:
7. Continuous Monitor Comment: **Used with SO_2, NO_x, and CO monitors** **MSW Combustor Unit 1 – Serial Number 278** **MSW Combustor Unit 2 – Serial Number 277** **MSW Combustor Unit 3 – Serial Number 279**	

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Continuous Monitoring System: Continuous Monitor 3 of 7

1. Parameter Code: **EM – Emission**	2. Pollutant(s): **NOx**
3. CMS Requirement:	☐ Rule ☒ Other
4. Monitor Information... Manufacturer: **SICK** Model Number: **MCS-100E**	Serial Number: **278, 277, and 279**
5. Installation Date: **02/01/2001**	6. Performance Specification Test Date:
7. Continuous Monitor Comment: **Used with SO_2, NO_x, and CO monitors** **MSW Combustor Unit 1 – Serial Number 278** **MSW Combustor Unit 2 – Serial Number 277** **MSW Combustor Unit 3 – Serial Number 279**	

Continuous Monitoring System: Continuous Monitor 4 of 7

1. Parameter Code: **EM – Emission**	2. Pollutant(s): **CO**
3. CMS Requirement:	☐ Rule ☒ Other
4. Monitor Information... Manufacturer: **SICK** Model Number: **MCS-100E**	Serial Number: **278, 277, and 279**
5. Installation Date: **02/01/2001**	6. Performance Specification Test Date:
7. Continuous Monitor Comment: **Used with SO_2, NO_x, and CO monitors** **MSW Combustor Unit 1 – Serial Number 278** **MSW Combustor Unit 2 – Serial Number 277** **MSW Combustor Unit 3 – Serial Number 279**	

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor 5 of 7

1. Parameter Code: **VE – Visible Emissions (opacity)**	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☒ Other
4. Monitor Information... Manufacturer: **LAND INSTRUMENTAL INC.** Model Number: **4500 MKII**	Serial Number: **See Comment**
5. Installation Date: **07/21/2003**	6. Performance Specification Test Date:
7. Continuous Monitor Comment: **MSW Combustor Unit 1 – Serial Number 0295809** **MSW Combustor Unit 2 – Serial Number 0295813** **MSW Combustor Unit 3 – Serial Number 0295815**	

Continuous Monitoring System: Continuous Monitor 6 of 7

1. Parameter Code: **TEMP**	2. Pollutant(s):
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **See Comment** Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: **40 CFR 60, Subpart Cb, Monitor manufacturer and model number may vary for maintenance purposes.**	

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Continuous Monitoring System: Continuous Monitor 7 of 7

1. Parameter Code: **FLOW – Steam Flow**	2. Pollutant(s):
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **See Comment** Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: **40 CFR 60, Subpart Cb; Monitor manufacturer and model number may vary for maintenance purposes.**	

Continuous Monitoring System: Continuous Monitor ____ of ____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☒ Previously Submitted, Date **Sep. 2008**

2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID _____ ☒ Previously Submitted, Date **Sep. 2008**

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☒ Previously Submitted, Date **Sep. 2008**
   ☐ Not Applicable (construction application)

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☒ Previously Submitted, Date **Sep. 2008**
   ☐ Not Applicable

6. Compliance Demonstration Reports/Records:
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☒ Not Applicable
   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
   ☐ Attached, Document ID: _____ ☒ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☐ Attached, Document ID: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements: ☐ Attached, Document ID: _____
2. Compliance Assurance Monitoring: ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Alternative Methods of Operation: ☐ Attached, Document ID: _____ ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements Comment

PART B

PART B

APPLICATION FOR AIR CONSTRUCTION PERMIT FOR THE REVISION OF MERCURY EMISSION TEST FREQUENCY FOR MSW COMBUSTOR UNITS 1, 2, AND 3 (EU IDS 001, 002, AND 003)

Introduction

Wheelabrator South Broward, Inc. (Wheelabrator) is seeking authorization from the Florida Department of Environmental Protection (FDEP) to revise the current mercury emissions testing frequency in FDEP Permit Nos. PSD-FL-105(B) and 0112119-011-AV for the municipal solid waste (MSW) combustors, Unit Nos. 1, 2, and 3 at the South Broward Waste-to-Energy facility. Mercury emissions testing must be conducted semiannually based on specific condition 1.d.(2)p of Permit No. PSD-FL-105(B) and specific condition B.56 of Permit No. 0112119-011-AV. Wheelabrator is seeking authorization to revise the mercury testing frequency from semiannually to annually.

Emissions from the three MSW combustors are controlled by fabric filter baghouses and lime spray dryer absorbers. Mercury emissions are reduced by pre-combustion waste separation. Carbon monoxide (CO) emissions are controlled by good combustion practices. The three MSW combustors have been retrofitted with Selective Non-Catalytic Reduction (SNCR) nitrogen oxides (NO_x) controls in order to comply with the requirements in Title 40, Part 60 of the Code of Federal Regulations (40 CFR 60), Subpart Cb, *Emissions Guidelines and Compliance Times for Large Municipal Waste Combustors that are Constructed on or Before September 20, 1994.*

Wheelabrator has recently received a construction permit (Permit No. 0112119-010-AC/PSD-FL-105C) to equip each Unit with an activated carbon injection system to further control mercury emissions. The activated carbon injection systems and associated equipment have been installed and the first performance test was conducted on March 18, 2009. A final revised Title V air operating Permit No. 0112119-011-AV was issued on February 25, 2009 to operate the activated carbon injection systems.

According to specific condition B.56 of the final Title V Permit No. 0112119-011-AV, Wheelabrator is required to conduct mercury emissions testing semiannually. However, according to 40 CFR 60, Subparts Cb and Eb [40 CFR 60.58b(d)], mercury emissions testing is required to be conducted on a calendar year basis (no less than 9 calendar months and no more than 15 calendar months from the previous performance test; and must complete five performance tests in each 5-year calendar period). This requirement has also been presented in specific condition B.54.(2) (Test Methods and

Procedures for Cadmium, Lead and Mercury) of Permit No. 0112119-011-AV. Therefore, Wheelabrator requests removal of Specific Condition B.56 or revision to annual testing.

Golder Associates Inc. (Golder) was contracted to prepare the necessary air permit application to request revision of the mercury emissions testing frequency for Units 1, 2, and 3. The air permit application consists of the appropriate application forms [Part I; DEP Form 62-210.900(1)], a description of the project, and the initial mercury emissions test results. There are no changes to the application form submitted in September 2008 except the mercury emissions testing frequency.

Initial Performance Test of the Activated Carbon Injection System

Wheelabrator has completed installing the activated carbon injection systems per Construction Permit No. PSD-FL-105C and has conducted the initial performance test. The results of the performance test are summarized below:

	Inlet Mercury Concentration (µg/dscm @ 7% O_2)	Outlet Mercury Concentration (µg/dscm @ 7% O_2)	Mercury Removal Efficiency (%)	Mercury Emission Limit in Permit (µg/dscm @ 7% O_2)
Unit 1	68	2.3	97%	50
Unit 2	38	4.3	88%	50
Unit 3	52	4.1	92%	50

A summary of test results is presented in Appendix A.

Proposed Changes

Wheelabrator is proposing changes to the construction permit PSD-FL-105(B) and final revised Title V Permit No. 0112119-011-AV to authorize the annual mercury testing frequency. Specific Condition 1.d.(2)p of Permit No. PSD-FL-105(B) and Specific Condition B.56 of the final revised Title V Permit 0112119-011-AV currently say:

> *Mercury emissions testing shall be conducted semiannually. Mercury stack tests shall be performed downstream of control devices or upstream and downstream of the control devices when determining compliance with the alternative removal requirement. [PSD-FL-105(B)]*

Wheelabrator is proposing eliminating Condition B.56 from Permit No. 0112119-011-AV. Wheelabrator is also proposing revising the language in Specific Condition 1.d.(2)p of Permit No. PSD-FL-105(B) as follows:

> *Mercury emissions testing shall be conducted on a calendar year basis (no less than 9 calendar months and no more than 15 calendar months from the previous performance test; and must complete five performance tests in each 5-year calendar period). Mercury stack tests shall be performed downstream of control devices or upstream and downstream of the control devices when determining compliance with the alternative removal requirement.*

Wheelabrator is also proposing revisions/deletion of several permit conditions based on recent regulatory changes and installation of the carbon injection system for mercury control:

(1) Eliminate reference to Subpart E from the "permitting notes" in Subsection B of Title V permit No. 0112119-011-AV. According to 40 CFR 60.50, any facility covered by Subpart Cb is not subject to Subpart E.

(2) Eliminate reference to Subpart E from Specific Condition B.10 of Title V permit No. 0112119-011-AV.

(3) Eliminate references to Subpart E and Subpart Db from Specific Condition No. 1.a.(3) of permit No. PSD-FL-105(B).

(4) Eliminate Specific Condition No. 1.b of permit No. PSD-FL-105(B), which is a Subpart Db requirement.

(5) Eliminate Specific Condition No. 1.c.(2) of permit No. PSD-FL-105(B), which is a Subpart E requirement.

(6) Eliminate Specific Condition No. B.29, "Emissions Standards for Facilities Using Waste Separators", from Permit No. 0112119-011-AV. Wheelabrator has installed an activated carbon mercury control system.

(7) Remove "Mercury is controlled by source separation techniques pursuant to Rule 62-296.416, F.A.C." from Specific Condition No. B.7.d. of Title V permit No. 0112119-011-AV.

(8) Remove "Mercury is controlled by source separation techniques pursuant to Rule 62-296.416, F.A.C." from Specific Condition No. 8.d. of permit No. PSD-FL-105(B).

(9) Eliminate Specific Condition No. B.109, "Charging Rate Monitoring", from Permit No. 0112119-011-AV, which is a Subpart E requirement.

(10) Eliminate reference to Specific Condition B.109 from Specific Condition No. B.11 of Permit No. 0112119-011-AV.

APPENDIX A

RESULTS

Table 2-2:
Unit 1 SDA Inlet and FF Outlet – Mercury

Run No.		1	2	3	Average
Date (2009)		Mar 18	Mar 18	Mar 18	
Start Time (approx.)		06:41	09:19	12:12	
Stop Time (approx.)		08:52	11:30	14:22	
Process Conditions					
R_P	Steam Production Rate (Klbs/hr)	183.6	183.4	184.0	**183.7**
P_1	Fabric Filter Inlet Temperature (°F)	313	305	305	**308**
P_2	Carbon Feed rate (lb/hr)	7	6	5	**6**
SDA Inlet Gas Conditions					
O_2	Oxygen (dry volume %)	9.7	8.9	8.9	**9.2**
CO_2	Carbon dioxide (dry volume %)	10.0	10.8	10.9	**10.5**
T_s	Sample temperature (°F)	505	506	508	**506**
B_w	Actual water vapor in gas (% by volume)	16.0	16.9	17.5	**16.8**
SDA Inlet Gas Flow Rate					
Q_a	Volumetric flow rate, actual (acfm)	176,323	173,916	177,125	**175,788**
Q_{std}	Volumetric flow rate, dry standard (dscfm)	81,161	79,153	79,904	**80,073**
SDA Inlet Sampling Data					
V_{mstd}	Volume metered, standard (dscf)	69.41	69.31	69.73	**69.48**
%I	Isokinetic sampling (%)	104.0	106.4	106.1	**105.5**
SDA Inlet Mercury Laboratory Data					
m_n	Total matter corrected for allowable blanks (µg)	105.1263	116.8821	116.3232	
SDA Inlet Mercury Results - Total					
C_{sd}	Concentration (µg/dscm)	53	60	59	**57**
C_{sd7}	Concentration @7% O_2 (µg/dscm)	66	69	68	**68**
FF Outlet Gas Conditions					
O_2	Oxygen (dry volume %)	9.4	9.2	9.2	**9.3**
CO_2	Carbon dioxide (dry volume %)	10.2	10.6	10.5	**10.4**
T_s	Sample temperature (°F)	296	290	290	**292**
B_w	Actual water vapor in gas (% by volume)	21.9	22.4	22.5	**22.3**
FF Outlet Gas Flow Rate					
Q_a	Volumetric flow rate, actual (acfm)	168,899	165,781	164,975	**166,552**
Q_{std}	Volumetric flow rate, dry standard (dscfm)	89,921	88,392	87,831	**88,715**
FF Outlet Sampling Data					
V_{mstd}	Volume metered, standard (dscf)	68.76	67.60	67.88	**68.08**
%I	Isokinetic sampling (%)	100.0	100.0	101.1	**100.4**
FF Outlet Mercury Laboratory Data					
m_n	Total matter corrected for allowable blanks (µg)	4.4126	3.1426	3.4661	
FF Outlet Mercury Results - Total					
C_{sd}	Concentration (µg/dscm)	2.3	1.6	1.8	**1.9**
C_{sd7}	Concentration @7% O_2 (µg/dscm)	2.7	1.9	2.1	**2.3**
Removal Efficiency (µg/dscm @ 7% O_2 based)		96%	97%	97%	**97%**

RESULTS

Table 2-7:
Unit 2 SDA Inlet and FF Outlet – Mercury

Run No.		1	2	3	Average
Date (2009)		Mar 16	Mar 16	Mar 16	
Start Time (approx.)		06:58	09:58	12:45	
Stop Time (approx.)		09:20	12:09	14:59	
Process Conditions					
R_P	Steam Production Rate (Klbs/hr)	184.1	184.9	183.9	184.3
P_1	Fabric Filter Inlet Temperature (°F)	315	315	315	315
P_2	Carbon Feed Rate (lb/hr)	5	7	6	6
SDA Inlet Gas Conditions					
O_2	Oxygen (dry volume %)	8.8	9.2	9.0	9.0
CO_2	Carbon dioxide (dry volume %)	10.7	10.5	10.8	10.7
T_s	Sample temperature (°F)	513	514	514	514
B_w	Actual water vapor in gas (% by volume)	15.8	16.1	16.1	16.0
SDA Inlet Gas Flow Rate					
Q_a	Volumetric flow rate, actual (acfm)	188,570	187,625	186,789	187,661
Q_{std}	Volumetric flow rate, dry standard (dscfm)	86,559	85,767	85,339	85,889
SDA Inlet Sampling Data					
V_{mstd}	Volume metered, standard (dscf)	72.69	72.64	73.32	72.88
%I	Isokinetic sampling (%)	102.1	102.9	104.4	103.2
SDA Inlet Mercury Laboratory Data					
m_n	Total matter corrected for allowable blanks (µg)	62.3587	81.4920	57.0036	
SDA Inlet Mercury Results - Total					
C_{sd}	Concentration (µg/dscm)	30	40	27	32
C_{sd7}	Concentration @7% O_2 (µg/dscm)	35	47	32	38
FF Outlet Gas Conditions					
O_2	Oxygen (dry volume %)	9.9	9.9	9.8	9.9
CO_2	Carbon dioxide (dry volume %)	9.7	9.8	10.0	9.8
T_s	Sample temperature (°F)	298	297	298	298
B_w	Actual water vapor in gas (% by volume)	21.3	20.7	21.4	21.1
FF Outlet Gas Flow Rate					
Q_a	Volumetric flow rate, actual (acfm)	178,836	178,004	180,235	179,025
Q_{std}	Volumetric flow rate, dry standard (dscfm)	96,412	96,780	97,128	96,773
FF Outlet Sampling Data					
V_{mstd}	Volume metered, standard (dscf)	74.28	73.05	74.63	73.99
%I	Isokinetic sampling (%)	100.7	98.7	100.5	100.0
FF Outlet Mercury Laboratory Data					
m_n	Total matter corrected for allowable blanks (µg)	6.8700	6.5842	7.8493	
FF Outlet Mercury Results - Total					
C_{sd}	Concentration (µg/dscm)	3.3	3.2	3.7	3.4
C_{sd7}	Concentration @7% O_2 (µg/dscm)	4.1	4.0	4.7	4.3
RE	Reduction Efficiency (% Removal)	88%	91%	85%	88%

RESULTS

Table 2-11:
Unit 3 SDA Inlet and FF Outlet – Mercury

Run No.		1	2	3	Average
Date (2009)		Mar 17	Mar 17	Mar 17	
Start Time (approx.)		06:33	09:15	11:56	
Stop Time (approx.)		08:42	11:24	14:07	
Process Conditions					
R_P	Steam Production Rate (Klbs/hr)	184.0	184.0	184.1	184.0
P_1	Fabric Filter Inlet Temperature (°F)	315	315	315	315
P_2	Carbon Feed Rate (lb/hr)	6	6	5	6
SDA Inlet Gas Conditions					
O_2	Oxygen (dry volume %)	9.6	9.5	9.6	9.5
CO_2	Carbon dioxide (dry volume %)	10.2	10.1	10.0	10.1
T_s	Sample temperature (°F)	488	490	493	491
B_w	Actual water vapor in gas (% by volume)	16.3	16.0	15.8	16.0
SDA Inlet Gas Flow Rate					
Q_a	Volumetric flow rate, actual (acfm)	196,240	192,853	190,845	193,313
Q_{std}	Volumetric flow rate, dry standard (dscfm)	91,644	90,198	89,201	90,348
SDA Inlet Sampling Data					
V_{mstd}	Volume metered, standard (dscf)	74.14	71.87	72.15	72.72
%I	Isokinetic sampling (%)	98.3	96.9	98.3	97.8
SDA Inlet Mercury Laboratory Data					
m_n	Total matter corrected for allowable blanks (µg)	76.7234	89.6076	95.0869	
SDA Inlet Mercury Results - Total					
C_{sd}	Concentration (µg/dscm)	37	44	47	42
C_{sd7}	Concentration @7% O_2 (µg/dscm)	45	54	57	52
FF Outlet Gas Conditions					
O_2	Oxygen (dry volume %)	10.7	10.4	10.3	10.4
CO_2	Carbon dioxide (dry volume %)	9.1	9.2	9.4	9.2
T_s	Sample temperature (°F)	295	296	296	296
B_w	Actual water vapor in gas (% by volume)	19.8	20.0	19.9	19.9
FF Outlet Gas Flow Rate					
Q_a	Volumetric flow rate, actual (acfm)	186,547	183,521	178,024	182,697
Q_{std}	Volumetric flow rate, dry standard (dscfm)	102,140	100,105	97,228	99,824
FF Outlet Sampling Data					
V_{mstd}	Volume metered, standard (dscf)	79.35	77.16	75.17	77.23
%I	Isokinetic sampling (%)	101.6	100.8	101.1	101.2
FF Outlet Mercury Laboratory Data					
m_n	Total matter corrected for allowable blanks (µg)	6.6466	7.0201	6.5708	
FF Outlet Mercury Results - Total					
C_{sd}	Concentration (µg/dscm)	3.0	3.2	3.1	3.1
C_{sd7}	Concentration @7% O_2 (µg/dscm)	4.0	4.2	4.1	4.1
Removal Efficiency (µg/dscm @ 7% O_2 based)		91%	92%	93%	92%