#### Memorandum

## Florida Department of Environmental Protection

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TO:

Trina Vielhauer, Bureau of Air Regulation

THROUGH:

Jon Holtom, Title V Section

FROM:

Teresa Heron

DATE:

October 16, 2009

SUBJECT:

Draft/Proposed Title V Air Operation Permit Revision No. 0112119-014-AV

Draft Air Construction Permit Modification No. 0112119-013-AC (PSD-FL-105D) Wheelabrator South Broward, Inc. - South Broward Waste-to-Energy Facility Title V Air Operation Permit Revision and Air Construction Permit Modification

Attached for your review are the following items:

- Written Notice of Intent to Issue Air Permits;
- Public Notice of Intent to Issue Air Permits;
- Statement of Basis;
- Draft/Proposed Title V Air Operation Permit Revision;
- Draft Air Construction Permit Modification;
- Technical Evaluation and Preliminary Determination; and,
- P.E. Certification.

The draft/proposed Title V air operation permit is a revised Title V air operation permit for the South Broward Waste-to-Energy Facility in Broward County, Florida. The Statement of Basis provides a summary of the project and the rationale for issuance. The permit modification revises certain specific conditions of air construction permit PSD-FL-105B and Title V Permit 0112119-011-AV related to the carbon injection system for mercury control and clarification of applicable NSPS Subparts. The P.E. certification briefly summarizes the proposed project.

The application was received on July 20, 2009. A RAI letter (e-mail) was sent on August 17, 2009. A response was received on August 31, 2009. Day 90 is December 30. There is no ongoing/open enforcement case for this facility, as advised by the Southeast District Office.

I recommend your approval of the attached draft/proposed Title V air operation permit revision and the draft air construction permit modification.

Attachments

#### P.E. CERTIFICATION STATEMENT

#### **PERMITTEE**

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

Permit No. 0112119-013-AC 0112119-014-AV Facility ID No. 0112119 South Broward Waste-to-Energy Facility PSD and Title V Revision Broward County, Florida

#### PROJECT DESCRIPTION

The applicant applied on July 20, 2009 to the Department for an air construction permit modification and a revision of the Title V air operation permit. The requested revisions are to change some specific conditions of both the PSD and the Title V permit to reflect updated rule applicability and the installation of the activated carbon injection system for mercury control. The proposed project revisions involve no changes in the previously permitted capacity limitations or emission limits.

I HEREBY CERTIFY that the air pollution control engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4 and 62-204 through 62-297. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including, but not limited to, the electrical, mechanical, structural, hydrological, geological, and meteorological features).

This review was conducted by Teresa Heron under my responsible supervision.

Inathan K. Holtom, P.E. Registration Number: 0052664



# Florida Department of Environmental Protection

Charlie Crist Governor Jeff Kottkamp Lt. Governor Michael W. Sole Secretary

Bob Martinez Center 2600 Blairstone Road Tallahassee, Florida 32399-2400

Electronic Mail - Received Receipt Requested

Jairaj Gosine, Plant Manager Wheelabrator South Broward, Inc. 4400 South State Road 7 Ft. Lauderdale, Florida, 33314

Re: DRAFT/PROPOSED Permit Nos. 0112119-014-AV and 0112119-013-AC (PSD-FL-105D)

Wheelabrator South Broward, Inc.

Air Construction Permit Modification and Title V Air Operation Permit Revision

#### Dear Mr.Gosine:

Enclosed is the draft permit package package for an air construction permit modification and a Title V air operation permit revision for the South Broward Waste-to-Energy. This facility is located in Broward County at 4400 South State Road 7, Ft. Lauderdale, Florida. The permit package includes the following documents:

- The draft air construction permit modification and supporting technical evaluation and preliminary determination document.
- The statement of basis, which summarizes the facility, the equipment and the primary rule applicability for the initial Title V air operation permit.
- The draft/proposed revised Title V air operation permit, which includes the specific permit conditions that regulate the emissions units covered by the proposed project.
- The Written Notice of Intent to Issue Air Permits provides important information regarding: the Permitting Authority's intent to issue air permits for the proposed project; the requirements for publishing a Public Notice of the Permitting Authority's intent to issue air permits; the procedures for submitting comments on the draft/proposed permits; the process for filing a petition for an administrative hearing; and the availability of mediation.
- The Public Notice of Intent to Issue Air Permits is the actual notice that you must have published in the legal advertisement section of a newspaper of general circulation in the area affected by this project. The Public Notice of Intent to Issue Title V Air Permits must be published as soon as possible and the proof of publication must be provided to the Department within seven days of the date of publication.

If you have any questions, please contact the Project Engineer, Teresa Heron, by telephone at (850) 921-9529 or by email at <a href="mailto:teresa.heron@dep.state.fl.us">teresa.heron@dep.state.fl.us</a>.

Sincerely,

Trina Vielhauer, Chief

Bureau of Air Regulation

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Date

TLV/jh//th

**Enclosures** 

In the Matter of an

Application for an Air Construction Permit Modification and a Title V Air Operation PermitRevision by:

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

Responsible Official::

Jairaj Gosine, Plant Manager

Draft/Proposed 0112119-014-AV

Draft 0112119-013-AC (PSD-FL-105D) Facility ID No. 0112119 - Permit Revisions South Broward Waste-to-Energy Facility

Broward County, Florida

**Facility Location**: Wheelabrator South Broward, Inc operates the South Broward Waste-to-Energy, which is located at 4400 South State Road 7 in Broward County, Florida.

**Project**: The purpose of this project is to issue an air construction permit modification and a revised Title V air operation permit for the facility. Details of the project are provided in the application and the enclosed Statement of Basis.

This air construction permit modification updates rule applicability citations and specific conditions related to the new installation of the activated carbon injection (ACI) system for mercury (Hg) control. The proposed project revisions involve no changes in the previously permitted capacity limitations or emission limits of Permit PSD-FL-105B. Other minor changes were made as described in the project's Technical Evaluation and Preliminary Determination document and the enclosed Statement of Basis.

**Permitting Authority**: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work.

Applications for Title V air operation permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-213 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and a Title V air operation permit is required to operate the facility. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

**Project File**: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at the address indicated above for the Permitting Authority. The complete project file includes the draft/proposed permits, the statement of basis, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may view the draft/proposed permits by visiting the following website: <a href="http://www.dep.state.fl.us/air/emission/apds/default.asp">http://www.dep.state.fl.us/air/emission/apds/default.asp</a> and entering the permit number shown above. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address or phone number listed above.

Notice of Intent to Issue Permits: The Permitting Authority gives notice of its intent to issue an air construction permit modification to the applicant for the project described above. The applicant has provided reasonable assurance that operation of the proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a final permit in accordance with the conditions of the draft air construction permit modification unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

The Permitting Authority gives notice of its intent to issue a revised Title V air operation permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of the proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a revised final permit in accordance with the conditions of the draft/proposed permit revision unless a response received in accordance with the following procedures results in a different decision or a significant change of terms or conditions.

**Public Notice**: Pursuant to Section 403.815, F.S. and Rules 62-110.106 and 62-210.350, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue Air Permits (Public Notice). The Public Notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected by this project. The newspaper used must meet the requirements of Sections 50.011 and 50.031, F.S. in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Permitting Authority at the above address or phone number. Pursuant to Rule 62-110.106(5) and (9), F.A.C., the applicant shall provide proof of publication to the Permitting Authority at the above address within 7 days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rule 62-110.106(11), F.A.C.

Comments: The Permitting Authority will accept written comments concerning the draft air construction permit modification for a period of 14 days from the date of publication of the Public Notice. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of this 14-day period. If written comments received result in a significant change to the draft air construction permit modification, the Permitting Authority shall revise the draft air construction permit modification and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

The Permitting Authority will accept written comments concerning the draft/proposed Title V air operation permit revision for a period of 30 days from the date of publication of the Public Notice. Written comments must be received by the close of business (5:00 p.m.), on or before the end of this 30-day period by the Permitting Authority at the above address. As part of his or her comments, any person may also request that the Permitting Authority hold a public meeting on this permitting action. If the Permitting Authority determines there is sufficient interest for a public meeting, it will publish notice of the time, date, and location in the Florida Administrative Weekly (FAW). If a public meeting is requested within the 30-day comment period and conducted by the Permitting Authority, any oral and written comments received during the public meeting will also be considered by the Permitting Authority. If timely received written comments or comments received at a public meeting result in a significant change to the draft/proposed permit revision, the Permitting Authority shall issue a revised draft/proposed permit revision and require, if applicable, another Public Notice. All comments filed will be made available for public inspection. For additional information, contact the Permitting Authority at the above address or phone number.

**Petitions**: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within 14 days of receipt of this Written Notice of Intent to Issue Air Permit. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the attached Public Notice or within 14 days of receipt of this Written Notice of Intent to Issue Air Permit, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the

address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of when and how each petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Written Notice of Intent to Issue Air Permits. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

**Mediation**: Mediation is not available in this proceeding.

EPA Review: EPA has agreed to treat the draft/proposed Title V air operation permit as a proposed Title V air operation permit and to perform its 45-day review provided by the law and regulations concurrently with the public comment period. Although EPA's 45-day review period will be performed concurrently with the public comment period, the deadline for submitting a citizen petition to object to the EPA Administrator will be determined as if EPA's 45-day review period is performed after the public comment period has ended. The final Title V air operation permit will be issued after the conclusion of the 45-day EPA review period so long as no adverse comments are received that result in a different decision or significant change of terms or conditions. The status regarding EPA's 45-day review of this project and the deadline for submitting a citizen petition can be found at the following website address: <a href="http://www.epa.gov/region4/air/permits/Florida.htm">http://www.epa.gov/region4/air/permits/Florida.htm</a>.

Objections: Finally, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 days of the expiration of the Administrator's 45-day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to the issuance of any Title V air operation permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30-day public comment period provided in the Public Notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at: U.S. EPA, 401 M Street, S.W.,

Washington, D.C. 20460. For more information regarding EPA review and objections, visit EPA's Region 4 web site at <a href="http://www.epa.gov/region4/air/permits/Florida.htm">http://www.epa.gov/region4/air/permits/Florida.htm</a>.

Executed in Tallahassee, Florida.

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Trina L. Vielhauer, Chief Bureau of Air Regulation

#### CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that either this Written Notice of Intent to Issue an Air Construction Permit Modification and a revised Title V Air Operation Permit (including the Public Notice, the Statement of Basis, the Draft/Proposed Permits and Technical Evaluation and Preliminary Determination), or a link to these documents available electronically on a publicly accessible server was sent by electronic mail with received receipt requested before the close of business on to the persons listed below.

Mr. Jairaj Gosine, Wheelabrator, South Broward: jgosine@wm.com

Mr. Kennard F. Kosky, P.E., Golder & Associates: kkosky@golder.com

Mr. Joe Lurix, DEP Southeast District Office: joe.lurix@dep.state.fl.us

Ms. Daniella Banu, Broward County Local Air Program: dbanu@broward.org

Ms. Gracy Danois, U.S. EPA Region 4: danois.gracy@epa.gov

Ms. Ana Oquendo, US EPA Region 4: oquendo.ana@epa.gov

Ms. Kathleen Forney, U.S. EPA Region 4: forney.katy@epa.gov

Ms. Barbara Friday, DEP BAR: <u>barbara.friday@dep.state.fl.us</u> (for posting with U.S. EPA, Region 4)

Ms. Victoria Gibson, DEP BAR: victoria.gibson@dep.state.fl.us (for read file)

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

#### PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION

Florida Department of Environmental Protection
Division of Air Resource Management, Bureau of Air Regulation
Draft/Proposed Air Title V Permit Revision No. 0112119-014-AV
Draft Air Construction Permit Modification No. 0112119-013-AC (PSD-FL-105D)
Wheelabrator South Broward, Inc., South Broward Waste-to-Energy
Broward County, Florida

**Applicant**: The applicant for this project is Wheelabrator South Broward, Inc. The applicant's authorized representative and mailing address is: Jairaj Gosine, Plant Manager, Wheelabrator South Broward, Inc., South Broward Waste-to-Energy, 4400 South State Road 7, Ft. Lauderdale, Florida, 33314.

**Facility Location**: Wheelabrator South Broward, Inc., operates the existing South Broward Waste-to-Energy, which is located in Broward County at 4400 South State Road 7 in Ft. Lauderdale, Florida.

Facility Information: This facility consists of three 67.6 MW (nominal) municipal solid waste combustors (Unit Nos. 1, 2 and 3) with auxiliary burners, lime storage and processing facilities, ash storage and processing facilities, a cooling tower, and ancillary support equipment. Electricity is sold to the local utility. Each unit has a maximum capacity of 863 tons per day (TPD) of waste input. Each unit includes an acid gas, air toxics, and particulate emissions control system consisting of a lime spray dryer and fabric filter baghouse (SDA/FF); and a urea injection system that operates under the principle of selective non-catalytic reduction (SNCR) for the control of nitrogen oxides. A powdered activated carbon injection (ACI) system located prior to the acid gas control device of each unit provides further control of mercury (Hg) emissions. The ACI system for Hg control would also enhance dioxin/furan (D/F) control. There is a metals recovery system which is a potential source of fugitive emissions.

**Project**: The applicant applied on July 20, 2009 to the Department for an air construction permit modification and a revision of the Title V air operation permit. The requested revisions are to change some specific conditions of both the PSD and the Title V permit to reflect updated rule applicability and the installation of the activated carbon injection system for mercury control. The proposed project revisions involve no changes in the previously permitted capacity limitations or emission limits.

**Permitting Authority**: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project.

Applications for Title V air operation permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-213 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and a Title V air operation permit is required to operate the facility. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

**Project File**: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at the address indicated above for the Permitting Authority. The complete project file includes the draft air construction permit modification, the draft/proposed Title V air operation permit revision, the Statement of Basis, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may view the draft/proposed permits by visiting the following website: <a href="http://www.dep.state.fl.us/air/emission/apds/default.asp">http://www.dep.state.fl.us/air/emission/apds/default.asp</a> and entering the permit number shown above. Interested persons may contact the Permitting Authority's project review engineer for additional information at

#### PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION

the address or phone number listed above.

Notice of Intent to Issue Air Permit: The Permitting Authority gives notice of its intent to issue an air construction permit modification to the applicant for the project described above. The applicant has provided reasonable assurance that operation of proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a final permit in accordance with the conditions of the proposed draft air construction permit modification unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

The Permitting Authority gives notice of its intent to issue a Title V air operation permit revision to the applicant for the project described above. The applicant has provided reasonable assurance that continued operation of existing equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a final Title V air operation permit revision in accordance with the conditions of the draft/proposed Title V air operation permit revision unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Comments: The Permitting Authority will accept written comments concerning the draft air construction permit modification for a period of 14 days from the date of publication of the Public Notice. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of this 14-day period. If written comments received result in a significant change to the draft air construction permit modification, the Permitting Authority shall revise the draft air construction permit modification and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

The Permitting Authority will accept written comments concerning the draft/proposed Title V air operation permit revision for a period of 30 days from the date of publication of the Public Notice. Written comments must be received by the close of business (5:00 p.m.), on or before the end of this 30-day period by the Permitting Authority at the above address. As part of his or her comments, any person may also request that the Permitting Authority hold a public meeting on this permitting action. If the Permitting Authority determines there is sufficient interest for a public meeting, it will publish notice of the time, date, and location in the Florida Administrative Weekly (FAW). If a public meeting is requested within the 30-day comment period and conducted by the Permitting Authority, any oral and written comments received during the public meeting will also be considered by the Permitting Authority. If timely received written comments or comments received at a public meeting result in a significant change to the draft/proposed Title V air operation permit revision, the Permitting Authority shall issue a revised draft/proposed Title V air operation permit revision and require, if applicable, another Public Notice. All comments filed will be made available for public inspection. For additional information, contact the Permitting Authority at the above address or phone number.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S. must be filed within 14 days of publication of the Public Notice or receipt of a written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any

#### PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION

subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address and telephone number of the petitioner; the name address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial rights will be affected by the agency determination; (c) A statement of when and how the petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petitioner uses so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Public Notice of Intent to Issue Air Permits. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available for this proceeding.

**EPA Review**: EPA has agreed to treat the draft/proposed Title V air operation permit as a proposed Title V air operation permit and to perform its 45-day review provided by the law and regulations concurrently with the public comment period. Although EPA's 45-day review period will be performed concurrently with the public comment period, the deadline for submitting a citizen petition to object to the EPA Administrator will be determined as if EPA's 45-day review period is performed after the public comment period has ended. The final Title V air operation permit will be issued after the conclusion of the 45-day EPA review period so long as no adverse comments are received that result in a different decision or significant change of terms or conditions. The status regarding EPA's 45-day review of this project and the deadline for submitting a citizen petition can be found at the following website address: <a href="http://www.epa.gov/region4/air/permits/Florida.htm">http://www.epa.gov/region4/air/permits/Florida.htm</a>.

Objections: Finally, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 days of the expiration of the Administrator's 45-day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to the issuance of any Title V air operation permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30-day public comment period provided in the Public Notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at: U.S. EPA, 401 M Street, S.W., Washington, D.C. 20460. For more information regarding EPA review and objections, visit EPA's Region 4 web site at http://www.epa.gov/region4/air/permits/Florida.htm.

#### STATEMENT OF BASIS

Wheelabrator South Broward, Inc.
South Broward Waste-to-Energy Facility
Facility ID No. 0112119
Broward County
Title V Air Operation Permit Revision
Permit No. 0112119-014-AV

#### **APPLICANT**

The applicant for this project is Wheelabrator South Broward, Inc. This facility is located at 4400 South State Road 7 in Broward County, Florida. The applicant's responsible official is Jairaj Gosine, Plant Manager.

#### **FACILITY DESCRIPTION**

This facility consists of three 67.6 MW (nominal) municipal solid waste combustors (Unit Nos. 1, 2 and 3) with auxiliary burners, lime storage and processing facilities, ash storage and processing facilities, a cooling tower, and ancillary support equipment. Electricity is sold to the local utility. Each unit has a maximum capacity of 863 tons per day (TPD) of waste input. Each unit includes an acid gas, air toxics, and particulate emissions control system consisting of a lime spray dryer and fabric filter baghouse (SDA/FF); and a urea injection system that operates under the principle of selective non-catalytic reduction (SNCR) for the control of nitrogen oxides. A powdered activated carbon injection (ACI) system located prior to the acid gas control device of each unit provides further control of mercury (Hg) emissions. The ACI system for Hg control would also enhance dioxin/furan (D/F) control. There is a metals recovery system which is a potential source of fugitive emissions.

These emissions units are regulated under 40 Code of Federal Regulations (CFR) 60, Subpart Cb, Emissions Guidelines and Compliance Times for Large Municipal Waste Combustors That Are Constructed on or Before September 20, 1994; 40 CFR 61 Subpart C, NESHAP for Beryllium; Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD) (PSD-FL-105(B)); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT); Rule 62-296.401(2), F.A.C., Incinerators; Rule 62-296.416, F.A.C., Waste-to-Energy Facilities; and, PA 85-21(B).

This facility is a major source of hazardous air pollutants. These units began commercial operation in April 1991.

#### PROJECT DESCRIPTION

Previous permit revision, 0112119-011-AV (2008), incorporated changes to the existing Title V permit that allowed the operation of the activated carbon injection (ACI) system and the revisions to 40 CFR 60 Subpart Cb that are effective after April 28, 2009. The ACI system has already been installed and tests have been performed.

The purpose of this permitting action is to revise specific conditions of the existing Title V permit 0112119-011-AV and underlying PSD-FL-105B permit by deleting non-applicable references to 40 CFR Subparts E and Db and to indicate an annual mercury emissions testing frequency instead of semi-annual as stated in the revised Subpart Eb. Also, specific conditions that refer to "mercury controlled by separation techniques" are removed due to the installation of the activated carbon mercury system.

#### PROJECT REVIEW

Changes that were made as part of this revision are listed below. This revision also includes a replacement of TV-4 with new Appendix TV-6.

The revisions to Subparts Cb, Db and Eb as currently stated in the Code of Federal Regulations (CFR) follows:

**Subpart Cb**: The updated 40 CFR 60.32 (n) Subpart Cb now reads: "Any affected facility meeting the applicability requirements under this section is not subject to subpart E of this part."

**Subpart Db**: The updated 40 CFR 60.40b (k) Subpart Db reads: "Any affected facility that meets the applicability requirements and is subject to an EPA approved State or Federal section 111(d)/129 plan implementing subpart Cb or subpart BBBB of this part is not covered by this subpart."

**Subpart Eb**: The updated 40 CFR 60.58b (d)(2)(ix), Subpart Eb now reads: "Following the date that the initial performance test for mercury is completed or is required to be completed under \$60.8 of subpart A of this part, the owner or operator of an affected facility shall conduct a performance test for mercury emissions 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)."

The following conditions in the current Title V permit and its equivalent conditions in the PSD-FL-105B permit are revised as follows (strikethrough for deletion and double underlined for additions).

Title V Subsection B of the Title V permit (Permitting Notes).

{Permitting Notes. These emissions units are regulated under NSPS - 40 CFR 60, Subpart Cb, Emissions Guidelines and Compliance Times for Large Municipal Waste Combustors That Are Constructed on or Before September 20, 1994, adopted and incorporated by reference, subject to provisions, in Rule 62-204.800(8)(b), F.A.C.; NSPS - 40 CFR 60, Subpart E, Standards of Performance for Incinerators, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.; 40 CFR 61 Subpart C, NESHAP for Beryllium; Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD) (PSD-FL-105(B)); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT); Rule 62-296.401(2), F.A.C., Incinerators; Rule 62-296.416, F.A.C., Waste-to-Energy Facilities; and, Power Plant Site Certification No. PA 85-21(B). Also, please note that conditions in 40 CFR 60, Subpart Cb, are contained in 40 CFR 60, Subpart Eb.}

Title V Specific Condition B.7.d and PSD-FL-105B Specific Condition 8.d.

- **B.7.** Air Pollution Control Equipment. The permittee shall have installed, shall continuously operate, and shall maintain the following air pollution controls to minimize emissions. Controls listed shall be fully operational upon startup of the equipment.
- a. Each boiler is equipped with a particulate emission control device for the control of particulates.
- b. Each boiler is equipped with an acid gas control device designed to remove at least 90% of the acid gases.

- c. Each boiler shall be equipped with a selective non-catalytic reduction system to control nitrogen oxides emissions.
- d. Each boiler shall be equipped with an activated carbon injection system to further control mercury and dioxin/furan emissions. Mercury is controlled by source separation techniques pursuant to Rule 62 296.416, F.A.C.

[PSD-FL-105(B) and (C) and (D) and Rule 62-4.070 (3)-296.416, F.A.C.]

Title V Specific Condition B.10 and PSD-FL-105B Specific Condition 1.a. (3).

**B.10.** These units are subject to all applicable requirements of 40 CFR 60 Subpart Cb, Emissions Control Guidelines and Compliance Schedules for Municipal Solid Waste Combustors; Subpart E, NSPS for Incinerators; Subpart Db NSPS for Industrial Commercial Institutional Steam Generating Units; 40 CFR 61, Subpart C NESHAP for Beryllium; and, Rule 62-296.416 F.A.C., Waste-to-Energy Facilities, except that where requirements in this permit are more restrictive, the requirements in this permit shall apply. [PSD-FL-105(B) and (D)]

Title V Specific Condition B.15.(6) a.

a. Auxiliary Burners Fuels. Only distillate fuel oil or natural gas shall be used in the startup burners. Natural gas may be used as fuel during warm-up, startup, shutdown, and malfunction periods, and at other times when necessary and consistent with good combustion practices. The annual capacity factor for use of natural gas and oil shall be less than 10%. The annual capacity factor for natural gas/distillate fuel oil is the ratio between the heat input to the unit from natural gas/distillate fuel oil during a calendar year and the potential heat input to the unit had it been operated for 8,760 hours during a calendar year at the maximum steady state design heat input eapacity. [Rules 62-4.160(2), 62-210.200, 62-4.070(3), and 62-213.440(1), F.A.C.; and, PSD-FL-105(B) and (D)]

Title V Specific Condition B. 29.

- B.29. Emissions Standards for Facilities Using Waste Separation. The Department recognizes that reduction of mercury emissions from waste to energy facilities may be achieved by implementation of mercury waste separation programs. Such programs would require removal of objects containing mercury from the waste stream before the waste is used as a fuel.

  1. Facilities with sulfur dioxide and hydrogen chloride control equipment in place or under construction as of July 1, 1993, and which choose to control mercury emissions exclusively through the use of a waste separation program, shall submit a program plan to the Department by March 1, 1994, and shall comply with the following emissions limiting schedule.
  - a. After July 1, 1995, mercury emissions shall not exceed 140 micrograms per dry standard cubic meter of flue gas, corrected to 7 percent O2.
  - b. After July 1, 1997, mercury emissions shall not exceed 70 micrograms per dry standard cubic meter of flue gas, corrected to 7 percent O<sub>2</sub>.
- 2. Beginning no later than July 1, 1994, facilities subject to Rule 62-296.416(3)(b)1., F.A.C., shall perform semiannual individual emissions unit mercury emissions tests. Facilities shall stagger the semiannual testing of individual emissions units such that at least one test is performed quarterly. All tests conducted after July 1, 1995, shall be used to demonstrate compliance with the mercury emissions limiting standards of Rule 62-296.416(3)(b)1., F.A.C. [Rule 62-296.416(3)(b), F.A.C.]

Title V Specific Condition **B.56** and PSD-FL-105B Specific Condition **1.d.(2)** p.

B.56. Mercury emissions testing shall be conducted semiannually 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.

[PSD-FL-105(B) and (D)]

Title V Specific Condition B.109 and PSD-FL-105B Specific Condition 1.c (2).

**B.109.** Charging Rate Monitoring. The daily solid waste charging rate and hours of operation shall be determined and recorded for each MWC unit. The daily charging rate shall be determined each month on an average daily basis for each MWC unit using the Facility's truck scale weight data, refuse pit inventory and MWC operating data for the preceding calendar month. Monthly truck scale weight records on the weight of solid waste received and processed at the Facility and refuse pit inventory shall be used to determine the amount of solid waste charged during the preceding calendar month on an average daily basis. The MWC load level measurements or other operating data shall be used to determine the number of operating hours per MWC unit for each day during the preceding calendar month.

[Rules 62-4.070 (3) and 62-213.440 F.A.C.; 40 CFR 60.53 (a) 58b(j); and, PSD-FL-105(B) and (D).

#### PRIMARY REGULATORY REQUIREMENTS

Title III: The facility is identified as a major source of hazardous air pollutants (HAP).

<u>Title IV</u>: The facility operates units (Units 1, 2 and 3) not subject to the acid rain provisions of the Clean Air Act.

<u>Title V</u>: The facility is a Title V major source of air pollution in accordance with Chapter 62-213, Florida Administrative Code (F.A.C.).

<u>PSD</u>: The facility is a Prevention of Significant Deterioration (PSD)-major source of air pollution in accordance with Rule 62-212.400, F.A.C.

NSPS: The facility operates units subject to the New Source Performance Standards (NSPS) of 40 Code of Federal Regulations (CFR) 60.

<u>NESHAP</u>: The facility operates units subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) of 40 CFR 63.

<u>CAM</u>: Compliance Assurance Monitoring (CAM) does not apply to any of the units at the facility. The emission limits for pollutants for the three municipal waste combustors and auxiliary burners are equal to the NSPS, 40 CFR Subpart Cb limits, except for beryllium and fluoride. Because emissions limits for the following pollutants were taken directly from Subpart Cb, CAM is not applicable for the control devices for: particulate matter, mercury, cadmium, lead, dioxins/furans, nitrogen oxides, sulfur dioxide and hydrogen chloride. As noted in the paragraph above, the PSD permit also contains beryllium and fluoride emission limits. However, the applicant provided justification that the maximum uncontrolled emissions of the respective pollutants (i.e., the pre-air pollution control device emissions) are significantly less than ten tons per year. Thus, CAM does not apply to the control devices for these pollutants. The PSD permit also contains a carbon monoxide emission limit. But, since there is no control device at the facility for this pollutant, CAM does not apply.

Siting: This facility is certified under the Florida Power Plant Siting Act (FPPSA), 403.501-518, F.S.

#### PROCESSING SCHEDULE AND RELATED DOCUMENTS

<u>1 h</u>	<u>ese c</u>	docui	<u>ments</u>	and	all	related	corres	spondence	are are	on	file	with	the	permitting	authority:
Tit	le V	App	licati	on re	cei	ved Jul	y 20, 2	2009							<u> </u>

E-mail requesting additional information sent August 17, August 19, and August 26, 2009 Additional Information received by e-mail August 17, August 19, and August 31, 2009 Draft/Proposed Title V permit sent out on \_\_\_\_\_\_
Publication of the Public Notice

Title V Permit Revision No. 0112119-014-AV. Effective date November XX, 2009

#### **CONCLUSION**

This project revises Title V air operation permit No. 0112119-011-AV, which has an effective day of February 14, 2006 and an expiration date of February 13, 2011. This Title V air operation permit revision is issued under the provisions of Chapter 403, Florida Statues (F.S.), and Chapters 62-4, 62-210 and 62-213, F.A.C.

#### TECHNICAL EVALUATION

#### **AND**

#### PRELIMINARY DETERMINATION

Wheelabrator South Broward, Inc.

Permit Modifications

South Broward Facility Units 1, 2 and 3

Standard Industrial Classification (SIC) Code No. 4953

Municipal Waste Combustors

Broward County

DEP File No. 0112119-013-AC PSD-FL-105D



Department of Environmental Protection Division of Air Resources Management Bureau of Air Regulation

October 30, 2009

#### 1. GENERAL PROJECT INFORMATION

#### **Facility Description and Location**

The applicant, Wheelabrator South Broward, Inc. (Wheelabrator) operates the existing South Broward Waste-to Energy (WTE) Facility, which is located in Broward County at 4400 South State Road 7 in Ft. Lauderdale. The UTM coordinates are Zone 17; 579.54 kilometers (km) East and 2,883.34 km North. This site is in an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to a national Ambient Air Quality Standard (AAQS).

This facility consists of three municipal waste combustors (MWC) with auxiliary burners, lime storage and processing facilities, ash storage and processing facilities, a cooling tower, and ancillary support equipment. Each unit has a maximum capacity of 863 tons per day (TPD) of waste input. There is a metals recovery system which is a potential source of fugitive emissions. The nominal (generator nameplate) electric generating capacity of the facility is 67.6 megawatts (MW), which is sold to the local utility.

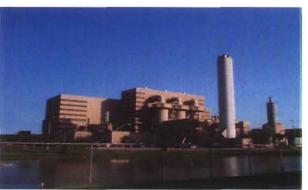
The following map indicates the location of the existing Wheelabrator South Broward WTE Facility.



Wheelabrator South Broward WTE Facility location in Fort Lauderdale.

Following is a photograph of the front of the Wheelabrator South Broward WTE Facility (Source Wheelabrator) and a photograph of the rear of the nearly identical Wheelabrator North Broward WTE (Linero 1999). The three exhaust gas ducts from the boilers are visible along with the exhaust stack containing the three flues.

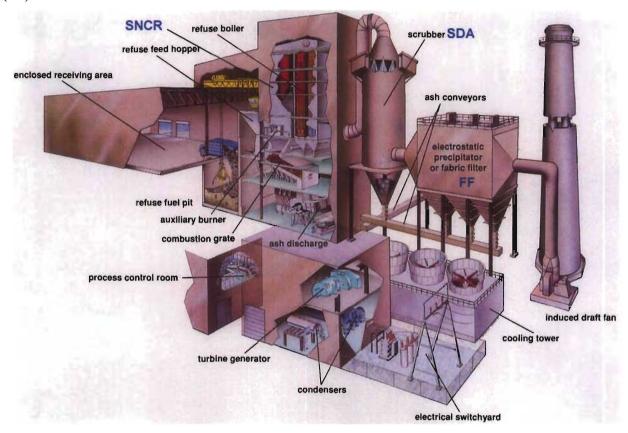




Photographs of Wheelabrator South and North WTE Facilities.

#### **Process Description**

The following diagram is of the basic waste-to-energy process and control equipment at a typical Wheelabrator facility. Each unit includes an acid gas, air toxics, and particulate emissions control system consisting of: a urea injection system that operates on the principle of selective non-catalytic reduction (SNCR); a lime spray dryer absorber (SDA); and a fabric filter baghouse (FF).



#### Wheelabrator Mass Burn Waste-to-Energy Process including Pollution Control System.

The three MWC are designated as Emissions Units (E.U.) Nos. 1, 2 and 3 and are listed in the following table from the most recent PSD Permit modification and Title V operation permits issued to Wheelabrator. These units are affected by this project.

E.U. ID No.	Brief Description
001	863 TPD (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 1
002	863 TPD (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 2
003	863 TPD (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 3

#### **Facility Regulatory Categories**

Title III: The facility is identified as a major source of hazardous air pollutants (HAP).

<u>Title IV</u>: The facility operates units (Units 1, 2 and 3) not subject to the acid rain provisions of the Clean Air Act.

<u>Title V</u>: The facility is a Title V major source of air pollution in accordance with Chapter 62-213, Florida Administrative Code (F.A.C.).

<u>PSD</u>: The facility is a Prevention of Significant Deterioration (PSD)-major source of air pollution in accordance with Rule 62-212.400, F.A.C.

NSPS: The facility operates units subject to the New Source Performance Standards (NSPS) of 40 Code of Federal Regulations (CFR) 60.

<u>NESHAP</u>: The facility operates units subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) of 40 CFR 63.

<u>CAM</u>: Compliance Assurance Monitoring (CAM) does not apply to any of the units at the facility.

Siting: This facility is certified under the Florida Power Plant Siting Act (FPPSA), 403.501-518, F.S.

#### **Project Description**

Wheelabrator submitted an application for modification of its prevention of significant deterioration of air quality (PSD permit) originally issued by the U.S. Environmental Protection Agency (EPA). The requested modification/revisions are to change some specific conditions of both the PSD and the Title V permits to reflect updated rule applicability and the installation of the activated carbon injection (ACI) system for mercury (Hg) control.

The proposed project modifications/revisions involve <u>no</u> changes in the previously permitted capacity limitations (charging rate monitoring, etc) compared with those in the Permit PSD-FL-105 and modifications thereto (PSD-105A, 105B, and 105C) and the facility Title V operation permit.

The original Permit PSD-FL-105 required the SDA and FF. Permit Modification PSD-105A authorized the use of Method 29 for the testing of metals. Permit Modification PSD-105B authorized the SNCR system. Permit Modification PSD-FL-105C authorized the installation of the ACI system for further Hg control. The ACI system for Hg control would also enhance dioxin/furan (D/F) control.

The facility's Title V operation permit will be updated concurrent with this PSD permit modification.

#### **Processing Schedule**

#### **Relevant Documents**

The following relevant documents and related correspondence are part of this permit modification:

• Air Construction and Title V Permit Application received on July 20, 2009.

• The Department's draft permit package including the Technical Evaluation and Preliminary Determination dated October 30, 2009 (PSD-FL-105D).

The following relevant documents and related correspondence are not a part of this permit modification, but helped form the basis for this permitting action or include important additional requirements applicable to the facility:

- Permit PSD-FL-105 issued by the Environmental Protection Agency (EPA) Region 4 office on May 17, 1987 that authorized construction of the facility.
- Amendment to Permit PSD-FL-105 issued by the Department on March 21, 1996 that allowed use of EPA Method 7E to measure emissions of nitrogen oxides (NO<sub>X</sub>) as an alternative to EPA Method 7.
- Permit Modification PSD-FL-105A issued by the Department on May 22, 1997 that allowed the use of EPA Method 29 to measure emissions of mercury (Hg).
- Permit Modification PSD-FL-105B issued by the Department on September 28, 1999 to install a selective non-catalytic reduction system, revise permit conditions consistent with 40 CFR 60, Subpart Cb, permit metals recovery operations, and define the fuel slate for the facility.
- Permit Modification PSD-FL-105C issued by the Department on October 25, 2008 authorized the installation of the activated carbon injection system (ACI) for further Hg control. The ACI system for Hg control also enhances dioxin/furan (D/F) control.

#### 2. APPLICABLE REGULATIONS

#### **State Regulations**

This facility emission units are subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The Florida Statutes authorize the Department of Environmental Protection to establish rules and regulations regarding air quality as part of the F.A.C. The facility is subject to the applicable rules and regulations defined in the following Chapters of the F.A.C.

<u>Chapter</u>	Description
62-4	Permits
62-17	Electric Power Plant Siting
62-204	Air Pollution Control – General Provisions
62-210	Stationary Sources - General Requirements
62-212	Stationary Sources Preconstruction Review
62-213	Operation Permits for Major Sources of Air Pollution
62-296	Stationary Sources – Emissions Standards
62-297	Stationary Sources – Emissions Monitoring

#### Federal Regulations

The facility was or is subject to the applicable federal provisions regarding air quality as established by the EPA in the following sections of the Code of Federal Regulations (CFR). Federal Regulations are adopted in Rule 62-204.800, F.A.C.

Title 40, CFR	Description
	Subpart A Standards of Performance for New Stationary Sources – General Provisions.
Part 60	Subpart Cb Emissions Guidelines and Compliance Times for Large Municipal Waste Combustors that are Constructed Before September 20, 1994. This Subpart was revised April 10, 2009.
Part 61	Subpart A Standards of Performance for National Emissions Standards Hazardous Air Pollutants (NESHAP) – General Provisions.
	Subpart C National Emission Standard for Beryllium.

#### General PSD Applicability

The Department regulates major air pollution sources in accordance with Florida's PSD program, as approved by the EPA in Florida's State Implementation Plan and defined in Rule 62-212.400, F.A.C. A PSD review is required in areas currently in attainment with the state and federal Ambient Air Quality Standards (AAQS) or areas designated as "unclassifiable" for a given pollutant. A new facility is considered "major" with respect to PSD if it emits or has the potential to emit:

- 250 tons per year or more of any regulated air pollutant, or
- 100 tons per year or more of any regulated air pollutant and the facility belongs to one of the 28 PSD Major Facility Categories as defined in 62-210.200, F.A.C., or
- 5 tons per year of lead.

PSD pollutants include: carbon monoxide (CO); nitrogen oxides (NOX); sulfur dioxide (SO2); particulate matter (PM); particulate matter with a mean particle diameter of 10 microns or less (PM10); volatile organic compounds (VOC); lead (Pb); Fluorides (Fl); sulfuric acid mist (SAM); hydrogen sulfide (H2S); total reduced sulfur (TRS), including H2S; reduced sulfur compounds, including H2S; municipal waste combustor organics measured as total tetra- through octachlorinated dibenzo-p-dioxins and dibenzofurans; municipal waste combustor metals measured as particulate matter; municipal waste combustor acid gases measured as SO2 and hydrogen chloride (HCl); municipal solid waste landfills emissions measured as nonmethane organic compounds (NMOC); and mercury (Hg).

For new projects at PSD-major sources, each regulated pollutant is reviewed for PSD applicability based on emissions thresholds known as the "Significant Emission Rates" listed in definitions at Rule 62-210.200, F.A.C. Pollutant emissions from the project exceeding these rates are considered "significant" and the applicant must employ the Best Available Control Technology (BACT) to minimize emissions of each such pollutant and evaluate the air quality impacts. Although a facility may be "major" with respect to PSD for only one regulated pollutant, it may be required to install BACT controls for several "significant" regulated pollutants.

#### Permitting Requirements and non-PSD Applicability for this Project

No changes in permitted emissions, production or fuel use limitations for the three units are requested in the present modification request.

A PSD permit with a BACT determination was issued in 1987 by EPA for the Wheelabrator South Broward WTE Facility. Subsequent modifications were made by the Department to that permit primarily to clarify the fuel slate; to reflect more stringent standards and controls required following promulgation by EPA of 40 CFR 60, Subpart Cb; and to add the ACI control system to provide additional control of mercury emissions from each boiler.

The project is subject to Rule 62-4.080, F.A.C (Modification of Permit Conditions), which states:

- (1) For good cause and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions and on application of the permittee the Department may grant additional time. For the purpose of this section, good cause shall include, but not be limited to, any of the following:
  - (a) A showing that an improvement in effluent or emission quality or quantity can be accomplished because of technological advances without unreasonable hardship.
  - (b) A showing that a higher degree of treatment is necessary to effect the intent and purpose of Chapter 403, F.S.
  - (c) A showing of any change in the environment or surrounding conditions that requires a modification to conform to applicable air or water quality standards.
  - (d) For discharges into State waters, a showing that new or changed classification of the water requires a modification of the discharge.
  - (e) Adoption or revision of Florida Statutes, rules, or standards which require the modification of a permit condition for compliance.
- (2) A permittee may request a modification of a permit by applying to the Department.
- (3) A permittee may request that a permit be extended as a modification of the permit. Such a request must be submitted to the Department in writing before the expiration of the permit. Upon timely submittal of a request for extension, unless the permit automatically expires by statute or rule, the permit will remain in effect until final agency action is taken on the request. For construction permits, an extension shall be granted if the applicant can demonstrate reasonable assurances that, upon completion, the extended permit will comply with the standards and conditions required by applicable regulation. For all other permits, an extension shall be granted if the applicant can demonstrate reasonable assurances that the extended permit will comply with the standards and conditions applicable to the original permit. A permit for which the permit application fee was prorated in accordance with paragraph 62-4.050(4)(l), F.A.C., shall not be shall not be extended. In no event shall a permit be extended or remain in effect longer than the time limits established by statute or rule.

Therefore, an air construction permit is required for the revision of the specific conditions and the Department will process the application as a modification to the original authority to construct, i.e. Permit PSD-FL-105 and the subsequent revision to it, PSD-FL-105B.

The key definition of "permit revision or permit modification" is given at Rule 62-210.200 (204), F.A.C. as follows:

"Any alteration to a permit term or condition except the Administrative Permit Correction described at Rule 62-210.360, F.A.C."

There will be no emission increases from Units 1, 2 and 3 caused by this project permit modification. Therefore, the project will not result in a significant net emission increase of a PSD pollutant and will not trigger a new PSD review and BACT determination.

#### 3. EMISSIONS STANDARDS

No change in permitted emissions limits.

#### 4. DRAFT PERMIT REQUIREMENTS

Wheelabrator has requested changes to the current Title V permit No. 0112119-011-AV and the air construction permit (AC) PSD-FL-105B. The changes to Subparts Cb, Db and Eb as currently stated in the Code of Federal Regulations (CFR) are listed below with the Department's responses. These changes are the basis for the requested permit modifications in the AC and the Title V revisions. These requests are being processed concurrently.

Wheelabrator's requests and the Department's responses are enumerated as follow:

The conditions in the PSD-FL-105B and its equivalent conditions in the current Title V permit, No. 0112119-011-AV, are revised (as applicable) as follows (strikethrough for deletion and double underlined for additions).

0. <u>Wheelabrator Request</u>: Revise PSD-Fl-105b Specific Condition **1.d.(2)p** and Title V permit No. 0112119-011-AV Specific Condition **B.56** to authorize the annual mercury testing frequency.

<u>Department Response</u>: The Department concurs with the applicant to change testing requirements from semi-annual to annual.

These requirements is now in 40 CFR 60.58b (d)(2)(ix), Subpart Eb and reads: "Following the date that the initial performance test for mercury is completed or is required to be completed under §60.8 of subpart A of this part, the owner or operator of an affected facility shall conduct a performance test for mercury emissions 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)."

PSD-Fl-105B Specific Condition 1.d. (2)p and Title V Permit B.56 are modified as follows:

Mercury Testing – Method 29, Determination of Metals Emissions from Stationary Sources (1) and (A): Mercury emissions testing shall be conducted semiannually 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. [Rule 62-4.070 (3) F.A.C. and 40 CFR 60.38 (40 CFR 60.58b)]

1. <u>Wheelabrator Request</u>: Eliminate reference to Subpart E from permitting notes in Subsection B of Title V permit No. 0112109-011-AV. According to 40 CFR 60.50, any facility covered by Subpart Cb is not subject to Subpart E.

<u>Department Response</u>: The Department concurs with the applicant since the 40 CFR 60.32 (n) Subpart Cb now reads: "Any affected facility meeting the applicability requirements under this section is not subject to subpart E of this part". In addition, the reference to Subpart C, NESHAP for Beryllium is added since it was in the original PSD permit and is still applicable to the units.

Subsection B of the Title V permit is revised as follows:

{Permitting notes. These emissions units are regulated under NSPS - 40 CFR 60, Subpart Cb, Emissions Guidelines and Compliance Times for Large Municipal Waste Combustors That Are Constructed on or Before September 20, 1994, adopted and incorporated by reference, subject to provisions, in Rule 62-204.800(8)(b), F.A.C.; NSPS - 40 CFR 60, Subpart E, Standards of Performance for Incinerators, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.; 40 CFR 61 Subpart C, NESHAP for Beryllium; Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD) (PSD-FL-105(B)); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT); Rule 62-296.401(2), F.A.C., Incinerators; Rule 62-296.416, F.A.C., Waste-to-Energy Facilities; and Power Plant Siting Certification No.: PA 85-21(B). Also, please note that conditions in 40 CFR 60, Subpart Cb, are contained in 40 CFR 60, Subpart Eb.}

2. <u>Wheelabrator Request</u>: Eliminate reference to Subpart E from specific condition **B.10** of Title V permit No. 0112109-011-AV.

<u>Department Response</u>: The Department concurs with the applicant as stated in Response 1 above. The Department will add the reference to 40 CFR 61, Subpart C, NESHAP for Beryllium that was inadvertely deleted in the Title V permit.

Title V Specific Condition B.10. is changed as follows:

<u>Applicable Requirements</u>: These units are subject to all applicable requirements of 40 CFR 60 Subpart Cb, Emissions Control Guidelines and Compliance Schedules for Municipal Solid Waste Combustors; <u>Subpart E, NSPS for Incinerators</u>; <u>40 CFR 61, Subpart C NESHAP for Beryllium</u>; and, Rule 62-296.416 F.A.C., Waste-to-Energy Facilities, except that where requirements in this permit are more restrictive, the requirements in this permit shall apply. [PSD-FL-105; 40 CFR 63 Subpart Cb and 40 CFR 61 Subpart C]

3. <u>Wheelabrator Request</u>: Eliminate reference to Subpart E and Subpart Db from specific condition **1.a.3** of PSD-FL-105B.

<u>Department Response</u>: The Department concurs with the applicant as stated in Response 1 above and Response 4 below.

PSD-FL-105B Specific Condition 1.a.(3) is changed as follows:

Applicable Requirements: These units are subject to all applicable requirements of 40 CFR 60 Subpart Cb, Emissions Control Guidelines and Compliance Schedules for Municipal Solid Waste Combustors; Subpart E, NSPS for Incinerators; Subpart Db NSPS for Industrial-Commercial Institutional Steam Generating Units; Subpart Db NSPD for Industrial-Commercial Institutional Steam Generating Units; 40 CFR 61 Subpart C NESHAP for Beryllium; and, Rule 62-296.416 F.A.C., Waste-to-Energy Facilities, except that where requirements in this permit are more restrictive, the requirements in this permit shall apply. [PSD-FL-105; 40 CFR 63 Subpart Cb and 40 CFR 61 Subpart C]

4. <u>Wheelabrator Request</u>: Eliminate Specific Condition **No. 1.b**. of PSD-FL-105B, which is a Subpart Db requirement.

<u>Department Response</u>: The Department concurs with the applicant regarding the elimination of references to Subpart Db. The applicability of 40 CFR 60, Subpart Db was revised as follows:

Section 40 CFR 60.40b (h) now reads: "Any affected facility that meets the applicability requirements and is subject to subpart Ea, subpart Eb, or subpart AAAA of this part is not covered by this subpart".

Section 40 CFR 60.40b (k) now reads: "Any affected facility that meets the applicability requirements and is subject to an EPA approved State or Federal section 111(d)/129 plan implementing subpart Cb or subpart BBBB of this part is not covered by this subpart."

Therefore, applicable specific conditions will be modified accordingly.

PSD-FL-105B Specific Condition 1.b. is partially deleted and the first sentence is moved to Specific Condition 7. e. as follows:

Only distillate fuel oil or natural gas shall be used in the startup burners. The annual capacity factor for use of natural gas and oil, as determined by 40 CFR 60 .43b shall be less than 10%. If the annual capacity factor of natural gas is greater that 10%, then the facility shall be subject to §60.44b.

PSD-FL-105B Specific Condition 7.e. is changed as follows:

<u>Auxiliary Burners Fuels</u>: <u>Only distillate fuel oil or natural gas shall be used in the startup burners</u>. Natural gas may be used as fuel during warm-up, startup, shutdown, and malfunction periods, and at other times when necessary and consistent with good combustion practices. [Rule 62-04.070 (3) F.A.C]

Title V Specific Condition **B.15.(6)** a. is changed as follows:

Auxiliary Burners Fuels. Only distillate fuel oil or natural gas shall be used in the startup burners. Natural gas may be used as fuel during warm-up, startup, shutdown, and malfunction periods, and at other times when necessary and consistent with good combustion practices. The annual capacity factor for use of natural gas and oil shall be less than 10%. The annual capacity factor for natural gas/distillate fuel oil is the ratio between the heat input to the unit from natural gas/distillate fuel oil during a calendar year and the potential heat input to the unit had it been operated for 8,760 hours during a calendar year at the maximum steady state design heat input capacity. [Rules 62-4.160(2), 62-210.200, 62-4.070(3), and 62-213.440(1), F.A.C.; and, PSD-FL-105(B) and (D)]

5. <u>Wheelabrator Request</u>: Eliminate Specific Condition No. 1.c (2) of PSD-FL-105B and Title V Permit Specific Condition B.109, which is a Subpart E requirement.

<u>Department Response</u>: The Department concurs with the applicant that Subpart E is not an applicable requirement as stated in Response 1 above. However, the Department will not delete this condition since it provides reasonable assurance that the charging rate is not exceeded. A reference to Subpart E is deleted. The applicant later withdrew this request, see comments and responses 9 and 10 below.

PSD-FL-105B Specific Condition 1.c (2) and Title V Permit Specific Condition B. 109 is changed as follows:

Continuous Charging Rate Monitoring. The daily solid waste charging rate and hours of operation shall be determined and recorded for each MWC unit. The daily charging rate shall be determined each month on an average daily basis for each MWC unit using the Facility's truck scale weight data, refuse pit inventory and MWC operating data for the preceding calendar month. Monthly truck scale weight records on the weight of solid waste received and processed at the Facility and refuse pit inventory shall be used to determine the amount of solid waste charged during the preceding calendar month on an average daily basis. The MWC load level measurements or other operating data shall be used to determine the number of operating hours per MWC unit for each day during the preceding calendar month. [Rules 62-4.070 (3) and 62-213.440 F.A.C; 40 CFR 60.53 (a) 58b(j); and, PSD-FL-105(B)]

6. Weelabrator Request: Eliminate Specific Condition No.**B.29** of Title V permit.

<u>Department Response</u>: The Department concurs with the applicant since Wheelabrator has installed an activated carbon mercury control system. This condition will be deleted from the Title V permit.

Emissions Standards for Facilities Using Waste Separation. The Department recognizes that reduction of mercury emissions from waste to energy facilities may be achieved by implementation of mercury waste separation programs. Such programs would require removal of objects containing mercury from the waste stream before the waste is used as a fuel.

1. Facilities with sulfur dioxide and hydrogen chloride control equipment in place or under construction as of July 1, 1993, and which choose to control mercury emissions exclusively through the use of a waste separation program, shall submit a program plan to the Department by March 1, 1994, and shall comply with the following emissions limiting schedule.

a. After July 1, 1995, mercury emissions shall not exceed 140 micrograms per dry standard cubic meter of flue gas, corrected to 7 percent O<sub>2</sub>.

b. After July 1, 1997, mercury emissions shall not exceed 70 micrograms per dry standard cubic meter of flue gas, corrected to 7 percent O<sub>2</sub>.

2. Beginning no later than July 1, 1994, facilities subject to Rule 62-296.416(3)(b)1., F.A.C., shall perform semiannual individual emissions unit mercury emissions tests. Facilities shall stagger the semiannual testing of individual emissions units such that at least one test is performed quarterly. All tests conducted after July 1, 1995, shall be used to demonstrate compliance with the mercury emissions limiting standards of Rule 62-296.416(3)(b)1., F.A.C.

Rule 62-296.416(3)(b), F.A.C.]

7. <u>Wheelabrator Request</u>: Remove references to "Mercury is controlled by source separation techniques pursuant to Rule 62-296.416, F.A.C." from Title V Specific Condition **B.7.d**.

<u>Department Response</u>: The Department concurs with the applicant. Wheelabrator has already installed an activated carbon mercury control system.

Title V Specific Condition **B.7.d.** is changed as follows:

<u>Air Pollution Control Equipment</u>. The permittee shall have installed, shall continuously operate, and shall maintain the following air pollution controls to minimize emissions. Controls listed shall be fully operational upon startup of the equipment.

a. Each boiler is equipped with a particulate emission control device for the control of particulates.

- b. Each boiler is equipped with an acid gas control device designed to remove at least 90% of the acid gases.
- c. Each boiler shall be equipped with a selective non-catalytic reduction system to control nitrogen oxides emissions.
- d. Each boiler shall be equipped with an activated carbon injection system to further control mercury and dioxin/furan emissions. Mercury is controlled by source separation techniques pursuant to Rule 62-296.416, F.A.C.

[PSD-FL-105(B), (C) and (D) and Rule 62-296.416, F.A.C.]

8. <u>Wheelabrator Request</u>: Remove references to "Mercury is controlled by source separation techniques pursuant to Rule 62-296.416, F.A.C." from Specific Condition **No. 8.d.** of PSD-FL-105 (B) permit.

<u>Department Response</u>: The Department concurs with the applicant. Wheelabrator has already installed an activated carbon mercury control system.

PSD-FL-105B Specific Condition 8.d. is changed as follows:

<u>Air Pollution Control Equipment</u>. The permittee shall have installed, shall continuously operate, and shall maintain the following air pollution controls to minimize emissions. Controls listed shall be fully operational upon startup of the equipment.

- a. Each boiler is equipped with a particulate emission control device for the control of particulates.
- b. Each boiler is equipped with an acid gas control device designed to remove at least 90% of the acid gases.
- c. Each boiler shall be equipped with a selective non-catalytic reduction system to control nitrogen oxides emissions.
- d. Mercury is controlled by source separation techniques pursuant to Rule 62-296.416,
   F.A.C. Each boiler shall be equipped with an activated carbon injection system to further control mercury and dioxin/furan emissions.

[PSD-FL-105 (C) and Rule 62-04.070 (3) F.A.C.]

9. <u>Wheelabrator Request</u>: Eliminate Specific Condition No. **B.109**, "Charging Rate Monitoring" from Permit No. 0112119-011-AV, which is a Subpart E requirements.

Department Response: On August 31, 2009, Wheelabrator withdrew this request.

10. <u>Wheelabrator Request</u>: Eliminate reference to Specific Condition No. **B.109** from Specific Condition **B.11** of Permit No. 01121019-011-AV.

Department Response: On August 31, 2009, Wheelabrator withdrew this request.

#### 5. PRELIMINARY DETERMINATION

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. No air quality modeling analysis is required because the project does not result in a significant increase in emissions. Teresa Heron is the project engineer responsible for reviewing the application and drafting the permit. Additional details of this analysis may be obtained by contacting the project

engineer at the Department's Bureau of Air Regulation at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.						

#### DRAFT PERMIT REVISIONS

#### **PERMITTEE**

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

Authorized Representative: Jairaj Gosine, Plant Manager DEP File No. PSD-FL-105D (0112119-013-AC)
South Broward Waste-to-Energy Facility
Municipal Waste Combustors, Units 1, 2 and 3
Modifications of Permit PSD-FL-105B
Expiration date: March 30, 2010
Broward County, Florida

#### PROJECT AND LOCATION

This is the final air construction permit, which revises Permit No. PSD-FL-105B. The project is to modify certain permit specific conditions to reflect updated rule applicability references to 40 CFR 60 Subparts Cb, Db and E for the three municipal waste combustors designated as Units 1, 2 and 3. Wheelabrator South Broward Waste-to-Energy Facility is categorized under Standard Industrial Classification No. 33314. The existing facility, Wheelabrator South Broward Waste-to-Energy Facility, is located in Broward County at 4400 South State Road 7 in Ft. Lauderdale. The UTM coordinates for this site are Zone 17; 579.54 kilometers (km) East and 2883.34 km North.

This final permit is organized into the following sections: Section 1 (General Information) and Section 2 (Permit Revisions).

#### STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality. A copy of this permit modification shall be filed with the referenced permit and shall become part of the permit.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florid	a
(DRAFT)	
Joseph Kahn, Director	(Date)

#### **DRAFT PERMIT REVISIONS**

#### **CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agenc (including the Final Determination and Final P these documents made available electronically	ermit Revision) was sent on a publicly accessible s	by electronic mail, of server, with received	or a link to I receipt
requested before the close of business on	(DKAFI)	to the persons l	listed below:
Mr. Jairaj Gosine, Wheelabrator, South Browa Mr. Kennard F. Kosky, P.E., Golder & Associa Mr. Joe Lurix, DEP Southeast District Office: Ms. Daniella Banu, Broward County Local Air Ms. Gracy Danois, U.S. EPA Region 4: danois Ms. Ana Oquendo, US EPA Region 4: oquend Ms. Kathleen Forney, U.S. EPA Region 4: form Ms. Barbara Friday, DEP BAR: barbara.friday Ms. Victoria Gibson, DEP BAR: victoria.gibso	ates: kkosky@golder.com joe.lurix@dep.state.fl.us Program: dbanu@browa .gracy@epa.gov o.ana@epa.gov ney.katy@epa.gov @dep.state.fl.us (for post	ing with U.S. EPA, 1	Region 4)
	Clerk Stamp		
	FILING AND ACKNOTHIS date, pursuant to So Statutes, with the design which is hereby acknow (DRAFT)	ection 120.52(7), Flo mated agency clerk,	orida
	(Cler	(k)	(Date)

#### **FACILITY DESCRIPTION**

This facility consists of three municipal solid waste combustors (MWC); Units 1, 2 and 3 with auxiliary burners, lime storage and processing facilities, ash storage and processing facilities, a cooling tower, and ancillary support equipment. Each unit has a maximum capacity of 863 tons per day (TPD) of waste input. There is a metals recovery system which is a potential source of fugitive emissions. The nominal (generator nameplate) electric generating capacity of the facility is 67.6 megawatts (MW), which is sold to the local utility. The Title V permit includes the facility miscellaneous insignificant emissions units and/or activities.

Each unit includes an acid gas, air toxics, and particulate emissions control system consisting of a lime spray dryer absorber and fabric filter baghouse (SDA and FF). Nitrogen oxides are controlled by a urea injection system that operates under the principle of selective non-catalytic reduction (SNCR).

#### **EMISSIONS UNITS**

This facility consists of the following emissions units (EU) listed below.

E.U. ID No.	Brief Description
001	863 TPD (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 1
002	863 TPD (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 2
003	863 TPD (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 3
004	236 Ton Lime Silo with a Baghouse
005	Ash Handling System

#### **PROJECT**

Wheelabrator submitted an application for modification of its prevention of significant deterioration of air quality (PSD permit) originally issued by the U.S. Environmental Protection Agency (EPA). The requested permit modifications are to change some specific conditions of the PSD to reflect updated rule applicability references to 40 CFR 60 Subparts Cb, Db and E.

The proposed project modifications involve no changes in the previously permitted capacity limitations (charging rate monitoring, etc) compared with those in the Permit PSD-FL-105 and modifications thereto (PSD-105A, 105B, and 105C).

The proposed project does not trigger the PSD rules as a Major Stationary Source Modification or a determination of best available control technology (BACT).

The original Permit PSD-FL-105 required the SDA and FF. Permit Modification PSD-105A authorized the use of Method 29 for the testing of metals. Permit Modification PSD-105B authorized the SNCR system. Permit Modification PSD-FL-105C authorized the installation of the ACI system for further Hg control. The ACI system for Hg control would also enhance dioxin/furan (D/F) control.

#### REGULATORY CLASSIFICATION

Title III: The facility is identified as a major source of hazardous air pollutants (HAP).

#### SECTION 1. GENERAL INFORMATION

Title IV: The facility operates units (Units 1, 2 and 3) not subject to the acid rain provisions of the Clean Air Act.

Title V: The facility is a Title V major source of air pollution in accordance with Chapter 62-213, Florida Administrative Code (F.A.C.).

PSD: The facility is a Prevention of Significant Deterioration (PSD)-major source of air pollution in accordance with Rule 62-212.400, F.A.C.

NSPS: The facility operates units subject to the New Source Performance Standards (NSPS) of 40 Code of Federal Regulations (CFR) 60.

NESHAP: The facility operates units subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) of 40 CFR 63.

CAM: Compliance Assurance Monitoring (CAM) does not apply to any of the units at the facility.

Siting: This facility is certified under the Florida Power Plant Siting Act (FPPSA), 403.501-518, F.S.

The proposed project affects the following existing units:

E.U. ID No.	Brief Description
001	863 TPD (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 1
002	863 TPD (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 2
003	863 TPD (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 3

#### ADMINISTRATIVE REQUIREMENTS

1. <u>Previous Permit Conditions</u>: This permit modification, PSD-FL-105D, authorizes changes in selected conditions in the PSD-FL-105B and its equivalent conditions in the current Title V permit (0112119-011-AV). The revised Title V Permit is 0112119-014-AV. The original permit numeration is retained. The following conditions are modified as follows (strikethrough for deletion and double underlined for additions).

#### SPECIFIC CONDITIONS OF PERMIT PSD-FL-105B

2. PSD-FL-105B Specific Condition 1.a.(3) is modified as follows:

Applicable Requirements: These units are subject to all applicable requirements of 40 CFR 60 Subpart Cb, Emissions Control Guidelines and Compliance Schedules for Municipal Solid Waste Combustors; Subpart E, NSPS for Incinerators; Subpart Db NSPS for Industrial Commercial Institutional Steam Generating Units; Subpart Db NSPD for Industrial Commercial Institutional Steam Generating Units; 40 CFR 61 Subpart C NESHAP for Beryllium; and, Rule 62-296.416 F.A.C., Waste-to-Energy Facilities, except that where requirements in this permit are more restrictive, the requirements in this permit shall apply. [PSD-FL-105; 40 CFR 63 Subpart Cb and 40 CFR 61 Subpart C]

3. PSD-FL-105B Specific Condition **1.b.** is partially deleted and the first sentence moved to Specific Condition **7.e** as follows:

Only distillate fuel oil or natural gas shall be used in the startup burners. The annual capacity factor for use of natural gas and oil, as determined by 40 CFR 60 .43b shall be less than 10%. If the annual capacity factor of natural gas is greater that 10%, then the facility shall be subject to §60.44b.

PSD-FL-105B Specific Condition 7.e. is modified as follows:

Auxiliary Burners Fuels: Only distillate fuel oil or natural gas shall be used in the startup burners. Natural gas may be used as fuel during warm-up, startup, shutdown, and malfunction periods, and at other times when necessary and consistent with good combustion practices. [Rule 62-04.070 (3) F.A.C and PSD-FL-105 (B)]

4. PSD-FL-105B Specific Condition 1.c.(2). is modified as follows:

Continuous Charging Rate Monitoring. The daily solid waste charging rate and hours of operation shall be determined and recorded for each MWC unit. The daily charging rate shall be determined each month on an average daily basis for each MWC unit using the Facility's truck scale weight data, refuse pit inventory and MWC operating data for the preceding calendar month. Monthly truck scale weight records on the weight of solid waste received and processed at the Facility and refuse pit inventory shall be used to determine the amount of solid waste charged during the preceding calendar month on an average daily basis. The MWC load level measurements or other operating data shall be used to determine the number of operating hours per MWC unit for each day during the preceding

#### **SECTION 2. PERMIT REVISIONS**

calendar month. [Rules 62-204.800 (8)(b); 62-4.070 (3); 62-213.440 F.A.C., 40 CFR 60.53 (a) 58b(j) and PSD-FL-105 (B)]]

5. PSD-Fl-105B Specific Condition 1.d.(2)p is modified as follows:

Mercury Testing – Method 29, Determination of Metals Emissions from Stationary Sources (1) and (A): Mercury emissions testing shall be conducted semiannually 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. [Rule 62-4.070 (3) F.A.C. and 40 CFR 60.38 (40 CFR 60.58b)]

6. PSD-FL-105B Specific Condition 8.d.

<u>Air Pollution Control Equipment</u>. The permittee shall have installed, shall continuously operate, and shall maintain the following air pollution controls to minimize emissions. Controls listed shall be fully operational upon startup of the equipment.

- a. Each boiler is equipped with a particulate emission control device for the control of particulates.
- b. Each boiler is equipped with an acid gas control device designed to remove at least 90% of the acid gases.
- c. Each boiler shall be equipped with a selective non-catalytic reduction system to control nitrogen oxides emissions.
- d. Mercury is controlled by source separation techniques pursuant to Rule 62 296.416, F.A.C. Each boiler shall be equipped with an activated carbon injection system to further control mercury and dioxin/furan emissions.

[PSD-FL-105 (B) and (C) and Rule 62-04.070 (3) 296.416, F.A.C.]

# Wheelabrator South Broward, Inc. South Broward Waste-To-Energy Facility Facility ID No. 0112119 Broward County

Draft/Proposed Title V Permit Revision No. 0112119-014-AV

#### **Permitting Authority**

State of Florida
Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
Title V Permitting Section

Mail Station #5505 2600 Blair Stone Road Tallahassee, Florida 32399-2400 Telephone: 850/488-0114 Fax: 850/921-9533

#### **Compliance Authority**

State of Florida
Department of Environmental Protection
Southeast District Office
400 North Congress Avenue
West Palm Beach, Florida 33416-5425
Telephone: 561/681-6600

Fax: 561/681-6755

## Title V Air Operation Permit Revision

## **Draft/Proposed Permit No.** 0112119-014-AV

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Permittee:

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

DRAFT/PROPOSED Permit No. 0112119-014-AV

Facility ID No.: 0112119 SIC Nos.: 49, 4953

**Project:** Title V Air Operation Permit Revision

This facility is located at 4400 South State Road 7, Ft. Lauderdale, Broward County. UTM Coordinates: Zone 17, 579.54 km East and 2883.34 km North; Latitude: 26° 04' 07" North and Longitude: 80° 12' 19" West.

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

#### Referenced attachments made a part of this permit:

Appendix A-1, 40 CFR 60 Subpart A

Appendix I-1, List of Insignificant Emissions Units and/or Activities

Appendix SS-1, Stack Sampling Facilities (version dated 10/7/96)

Appendix TV- 4 6, TITLE V CONDITIONS (version dated 3/28/05) 06/23/06)

Figure 1: Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance (40 CFR 60)

Table 297.310-1, Calibration SCHEDULE (version dated 10/07/96)

Effective Date: February 14, 2006 Revision Effective Date: Renewal Application Due Date: July 3, 2010 Expiration Date: February 13, 2011

DRAFT/PROPOSED

Joseph Kahn, Director Division of Air Resource Management

JK/tlv/jh/th

## Section I. Facility Information.

#### Subsection A. Facility Description.

This facility consists of three municipal solid waste combustors (Unit Nos. 1, 2 and 3) with auxiliary burners, lime storage and processing facilities, ash storage and processing facilities, a cooling tower, and ancillary support equipment. The nominal (generator nameplate) electric generating capacity of the facility is 67.6 megawatts (MW), which is sold to the local utility. Also included in this permit are miscellaneous insignificant emissions units and/or activities.

Each of the combustor units at the facility includes an acid gas, air toxics, and particulate emissions control system consisting of a lime spray dryer and baghouse. Nitrogen oxides are controlled by a urea injection system that operates under the principle of selective non-catalytic reduction (SNCR). There is a metals recovery system which is a potential source of fugitive emissions.

Prevention of Significant Deterioration (PSD) Permit No. PSD-FL-105C allows for the installation of a system to inject powdered activated carbon in the flue gas from Units 1, 2 and 3 at a location prior to the acid gas control device on each unit to provide further control of mercury emissions. The system will consist of:

- One powdered activated carbon storage silo sufficient for the three boilers and with a nominal storage capacity of 3,200 cubic feet;
- One vent dust baghouse collector used during pneumatic loading of the silo from tanker trucks; and
- Rotary feeders, loss-in-weight feeders, hoppers, screw feeders and blower assemblies.

Based on the Title V permit renewal application received on April 25, 2005, this facility is a major source of hazardous air pollutants (HAP). The facility is subject to requirements of 40 CFR 60, Subpart Cb – Emissions Guidelines and Compliance Times for Large Municipal Waste Combustors That are Constructed on or Before September 20, 1994. Revisions to 40 CFR 60 Subpart Cb are effective on April 28, 2009.

#### Subsection B. Summary of Emissions Unit ID Numbers and Brief Descriptions.

E.U. ID	Brief Description
No.	
-001	863 TPD (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 1
-002	863 TPD (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 2
-003	863 TPD (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 3
-004	236 Ton Lime Silo with a Baghouse
-005	Ash Handling System

Please reference the Permit Number, the Facility Identification Number, and the appropriate Emissions Unit(s) ID Number(s) on all correspondence, test report submittals, applications, etc.

#### Subsection C. Relevant Documents.

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action.

These documents are provided to the permittee for informational purposes:

Table 1-1, Summary of Air Pollutant Standards and Terms

Table 2-1, Summary of Compliance Requirements

Appendix A-1: Abbreviations, Acronyms, Citations, and Identification Numbers

Appendix H-1: Permit History

Appendix BW, Biological Waste Definitions

Statement of Basis

These documents are on file with the permitting authority:

Application for Title V Air Operation Permit Revision received on July 20, 2009.

Request for additional information letter sent on August 17, 2009.

Additional information received on August 31, 2009.

## Section II. Facility-wide Conditions.

#### The following conditions apply facility-wide:

- 1. APPENDIX TV-4 6. TITLE V CONDITIONS, (version dated 3/28/05 06/23/06) is a part of this permit. {Permitting note: APPENDIX TV-6, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided one copy when requested or otherwise appropriate.}
- **2. Not federally enforceable.** General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C.]
- 3. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. [Rule 62-296.320(4)(b)1. & 4., F.A.C.]
- 4. Prevention of Accidental Releases (Section 112(r) of CAA).
- a. The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center
Post Office Box 1515 10162
Lanham Seabrook, MD 20703 1515 Fairfax, VA 22038
Telephone: 301/429 5018 (703) 227-7650

and,

- **b.** The permittee shall submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C. [40 CFR 68]
- 5. <u>Insignificant Emissions Units and or Activities.</u> Appendix I List of insignificant emission units and/or activities, is a part of this permit. [Rules 62-213.440(1), 62-213.430 (6) and 62-4.040 (1)(b), F.A.C.]
- 6. Not federally enforceable. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.

{Permitting Note: No vapor emissions control devices or systems are deemed necessary nor ordered by the Department as of the issuance date of this permit.}

[Rule 62-296.320(1)(a), F.A.C.]

7. Emissions of Unconfined Particulate Matter. Pursuant to Rules 62-296.320(4)(c)1., 3. & 4., F.A.C., reasonable precautions to prevent emissions of unconfined particulate matter at this facility include the following requirements (see Condition 57. of APPENDIX TV-46, TITLE V CONDITIONS):

The following techniques will be used to prevent unconfined particulate matter emissions on as needed basis:

- a. Chemical or water application to:
  - Unpaved roads
  - Unpaved yard areas
- b. Paving and maintenance of roads, parking areas and yards.
- c. Landscaping or planting of vegetation.
- d. Confining abrasive blasting where possible.
- e. Water is applied to active areas of the monofill.
- f. Closed areas are watered until sufficient vegetation has been established.
- g. Water is applied to areas that are unvegitated because of construction/operation activities.
- h. All conveyor systems are enclosed and maintained to minimize leaks.
- i. The facility utilizes a dust abatement control plan to minimize emissions from the monofill. [Rule 62-296.320(4)(c)2., F.A.C.; and requested by Applicant in permit renewal application dated April 25, 2005.]
- **8.** <u>Timely Recording, Monitoring and Reporting</u>: When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.

[Rule 62-213.440, F.A.C.]

9. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted to the Department and EPA within 60 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C. [Rules 62-213.440(3) and 62-213.900, F.A.C.]

{Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2. & 3., F.A.C. (see Condition 51. of APPENDIX TV, TITLE V CONDITIONS)}

10. <u>State Compliance Authority</u>: The permittee shall submit all compliance related notifications and reports required of this permit to the Department's Southeast District office:

State of Florida
Department of Environmental Protection
Southeast District Office
400 North Congress Avenue
West Palm Beach, Florida 33416-5425
Telephone: 561/681-6600, Fax: 561/681-6755

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11. EPA Compliance Authority: Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

> United States Environmental Protection Agency Region 4 Air, Pesticides & Toxics Management Division Air and EPCRA Enforcement Branch Air Enforcement Section 61 Forsyth Street Atlanta, Georgia 30303

Telephone: 404/562-9155, Fax: 404/562-9164

12. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information. [Rule 62-213.420(4), F.A.C.]

# Section III. Emissions Units and Conditions.

Subsection A. This section addresses the following emissions units.

[Reserved.]

#### Subsection B. This section addresses the following emissions units.

E.U. ID No.	Brief Description			
-001	863 TPD (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 1			
-002	863 TPD (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 2			
-003	863 TPD (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 3			

{Note: Each of the three municipal waste combustors (MWCs) has a *nominal* design rate capacity of 750 tons MSW per day and 281 MMBtu per hour heat input (with MSW having a heating value of 4,500 Btu per pound). A maximum (short-term) capacity of 863 tons of waste per day and 323.6 mmBtu per hour heat input (115% rated capacity) is allowed. Short-term capacity is limited by limiting steam production, which effectively limits heat input. The maximum steam production rate is 192,000 lbs/hr, with a net steam energy of 5,600 Btu/lb of steam (the net steam energy may be calculated as the difference in enthalpy between the steam at the superheater outlet and the feedwater at the inlet).

Emissions units numbers -001, -002 and -003 are Babcock and Wilcox manufactured municipal solid waste (MSW) combustors designated as "Unit 1", "Unit 2" and "Unit 3", respectively. Each unit consists of an integrated mass-burn furnace and multi-pass waterwall type boiler with a rated (nominal) capacity of 750 tons MSW per day (TPD) and 281 million British thermal units per hour (MMBtu/hr) heat input when burning solid waste with a heat content of 4,500 British thermal units per pound (Btu/lb). Therefore, the facility has a nameplate (nominal) waste processing rate of 2,250 TPD (@4,500 Btu/lb). Two auxiliary distillate fuel oil or natural gas fired burners are associated with each MSW combustor. The burners are used to fire the MSW combustors during start-up, shutdown, and at other times when necessary and consistent with good combustion practices. The maximum permitted steam production rate of each unit is 192,000 lbs/hr when firing municipal solid waste. Steam flow is the main process throughput parameter to be monitored for these units.

Units 1, 2, and 3 began commercial operation April 5, April 20 and April 26, 1991, respectively. Particulate matter, some metals (Pb, Hg, Be), SO<sub>2</sub> and acid gas emissions from Units 1, 2 and 3 are controlled by separate baghouses and spray dry absorbers, while CO and NO<sub>X</sub> emissions are controlled by good combustion controls. Mercury emissions are reduced by pre combustion waste separation injection of activated carbon. Odor is controlled by drawing combustion air from the refuse tipping area. Units 1, 2 and 3 share a common stack and turbine containing one flue for each unit. Stack height = 195 feet, exit diameter = 7.5 feet, actual volumetric flow rate = 169,000 acfm. The particulate matter control device temperature requirement of 40 CFR 60, Subpart Cb will replace a maximum 300°F control equipment temperature requirement and an 1800°F final combustion chamber temperature requirement listed in the State Conditions of Certification (PA 85-21).

All three units are retrofitted with Selective Non-Catalytic Reduction (SNCR) NO<sub>X</sub> controls to comply with NSPS – 40 CFR 60, Subpart Cb requirements. The new limits imposed in Subpart Cb are more stringent than PSD-FL-105 limits for SO<sub>2</sub>, PM, VE, NO<sub>X</sub> and Pb emissions from each unit. Pollutants regulated by Subpart Cb that were not regulated in PSD-FL-105 for all three units are Cd, HCl, Hg, and dioxins/furans. Pollutants regulated in PSD-FL-105 that are not regulated by Subpart Cb are Be and Fl.

#### Compliance Assurance Monitoring (CAM) Applicability

The emission limits for pollutants for the three municipal waste combustors and auxiliary burners are equal to the NSPS, 40 CFR Subpart Cb limits, with the exception of beryllium, and fluoride. Because emissions limits for the following pollutants were taken directly from Subpart Cb, CAM is not applicable for the control devices for particulate matter, cadmium, lead, dioxins/furans, mercury, nitrogen oxides, sulfur dioxide, and hydrogen chloride.

As noted in the above paragraph, the PSD permit also contains beryllium, fluoride, and mercury emission limits. However, the Applicant provided justification that demonstrated that the uncontrolled potentials to emit the respective pollutants (PTE) are significantly less than ten (10) tons per year. Thus, CAM does not apply to the control devices for these pollutants.

The PSD permit also contains a carbon monoxide emission limit. But, since there is no control device at the facility for this pollutant, CAM does not apply.

{Permitting notes. These emissions units are regulated under NSPS - 40 CFR 60, Subpart Cb, Emissions Guidelines and Compliance Times for Large Municipal Waste Combustors That Are Constructed on or Before September 20, 1994, adopted and incorporated by reference, subject to provisions, in Rule 62-204.800(8)(b), F.A.C.; NSPS - 40 CFR 60, Subpart E, Standards of Performance for Incinerators, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.; 40 CFR 61 Subpart C, NESHAP for Beryllium; Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD) (PSD-FL-105(B)); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT); Rule 62-296.401(2), F.A.C., Incinerators; Rule 62-296.416, F.A.C., Waste-to-Energy Facilities; and Power Plant Siting Certification No.: PA 85-21(B). Also, please note that conditions in 40 CFR 60, Subpart Cb, are contained in 40 CFR 60, Subpart Eb.}

#### The following specific conditions apply to the emissions unit(s) listed above:

#### **Emission Guidelines Requirements**

B.0.a. NSPS General Provisions, 40 CFR 60 Subpart A. The affected emissions units shall comply with the following sections of 40 CFR 60, General Provisions, Subpart A.

[40 CFR 60.7, Notification and record keeping]

[40 CFR 60.8, Performance tests]

[40 CFR 60.11, Compliance with standards and maintenance requirements]

[40 CFR 60.12, Circumvention]

[40 CFR 60.13, Monitoring requirements]

[40 CFR 60.19, General notification and reporting requirements]

These emissions units shall comply with **Appendix 40 CFR 60 Subpart A** attached to this permit. [Rule 62-204.800(8) (c), (d) and (e), F.A.C.]

B.0.b. Compliance Deadline. The owner or operator shall comply with the May 10, 2006, federal amendments to 40 CFR 60, Subpart Cb as incorporated into this permit no later than April 28, 2009 {2 years from approval of state plan}. [Rule 62-204.800, F.A.C.]

B.0.c. Most of the current standards and limits contained in Permit No. 0112119-009-AV and from the PSD-FL-105C permit (BACT) remain more stringent than the 40 CFR 60 Subpart Cb, including the May 10, 2006 federal amendments. The more stringent requirement always applies. The May 10, 2006 amendments do change some of the emission standards and limitations currently in effect for Units 1, 2 and 3. Changes are made to the emission standards and limitations in this permit for Units 1, 2 and 3. Four pollutant limits are lowered under the amendments: Particulate Matter, Mercury (Hg), Cadmium (Cd) and Lead (Pb). This Title V permit revision contains each lower limit with the compliance deadline of April 28, 2009.

[Rules 62-204.800 and 62-213.440(1), F.A.C.]

## General

- **B.1.** The Standards of Performance for New Stationary Sources adopted by reference in Rule 62-204.800(7), F.A.C. and the Emission Guidelines for Existing Sources adopted by reference in Rule 62-204.800(8), F.A.C. shall be controlling over other standards in the air pollution rules of the Department, except that any emissions limiting standard contained in or determined pursuant to the air pollution rules of the Department which is more stringent than one contained in a Standard of Performance or an Emission Guideline, or which regulates emissions of pollutants or emissions units not regulated by an applicable Standard of Performance or Emission Guideline, shall apply. [Rules 62-204.800(7)(c) and (8)(a)1., F.A.C.]
- **B.2.** <u>Definitions</u>. For the purposes of Rules 62-204.800(7) and (8), F.A.C., the definitions contained in the various provisions of 40 CFR Part 60, adopted herein shall apply except that the term "Administrator" when used in 40 CFR Part 60, shall mean the Secretary or the Secretary's designee. [40 CFR 60.2; and, Rules 62-204.800(7)(a) and (8)(a)2., F.A.C.]
- **B.3.** Definitions Subpart Cb. For purposes of Rule 62-204.800(8)(b), F.A.C., the definitions in 40 CFR 60.51b shall apply except for the term "municipal waste combustor plant" which shall have the same meaning as defined in 40 CFR 60.31b. [Rule 62-204.800(8)(b)2., F.A.C.]
- **B.4.** Circumvention. No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

  [40 CFR 60.12]
- **B.5.** Notification and Reporting Requirements. For the purposes of this part, if an explicit postmark deadline is not specified in an applicable requirement for the submittal of a notification, application, report, or other written communication to the Administrator, the owner or operator shall postmark the submittal on or before the number of days specified in the applicable requirement. For example, if a notification must be submitted 15 days before a particular event is scheduled to take place, the notification shall be postmarked on or before 15 days preceding the event; likewise, if a notification must be submitted 15 days after a particular event takes place, the notification shall be delivered or postmarked on or before 15 days following the end of the event. The use of reliable non-Government mail carriers that provide indications of verifiable delivery of information required to be submitted to the Administrator, similar to the postmark provided by the U.S. Postal Service, or alternative means of delivery, including the use of electronic media, agreed to by the permitting authority, is acceptable. [40 CFR 60.19(b)]
- **B.6.** Each incinerator boiler shall have a metal name plate affixed in a conspicuous place on the shell showing manufacturer, model number, type waste, rated capacity and certification number. [PSD-FL-105]
- **B.7.** Air Pollution Control Equipment. The permittee shall have installed, shall continuously operate, and shall maintain the following air pollution controls to minimize emissions. Controls listed shall be fully operational upon startup of the equipment.
- a. Each boiler is equipped with a particulate emission control device for the control of particulates.

- b. Each boiler is equipped with an acid gas control device designed to remove at least 90% of the acid gases.
- c. Each boiler shall be equipped with a selective non-catalytic reduction system to control nitrogen oxides emissions.
- d. Each boiler shall be equipped with an activated carbon injection system to further control mercury and dioxin/furan emissions. Mercury is controlled by source separation techniques pursuant to Rule 62-296.416. F.A.C.

[PSD-FL-105(B), and (C) and (D) and Rule 62-4.070.(3) 296.416, F.A.C.]

- **B.8.** Reserved
- **B.9.** Reserved

**B.10.** These units are subject to all applicable requirements of 40 CFR 60 Subpart Cb, Emissions Control Guidelines and Compliance Schedules for Municipal Solid Waste Combustors; Subpart E, NSPS for Incinerators; 40 CFR 61, Subpart C NESHAP for Beryllium; and, Rule 62-296.416 F.A.C., Waste-to-Energy Facilities, except that where requirements in this permit are more restrictive, the requirements in this permit shall apply.

[PSD-FL-105(B) and (D)]

## **Essential Potential to Emit (PTE) Parameters**

#### B.11. Capacity.

- (a) Each municipal waste combustor (MWC) unit shall have a <u>maximum</u> capacity of 192,000 pounds of steam produced per hour based on a 4-hour block averaged measurement. The maximum individual MWC throughput shall not exceed 863 tons MSW per day (2,589 tons per day entire facility) and 323.6 MMBtu/hr (115% rated capacity), as determined monthly. (see specific condition **B.109.**).
- (b) The procedures specified in paragraphs (1) and (2) shall be used for calculating municipal waste combustor unit capacity as defined under 40 CFR 60.51b.
  - (1) For municipal waste combustor units capable of combusting municipal solid waste continuously for a 24-hour period, municipal waste combustor unit capacity shall be calculated based on 24 hours of operation at the maximum charging rate. The maximum charging rate shall be determined as specified in paragraphs (i) and (ii) as applicable.
    - (i) For combustors that are designed based on heat capacity, the maximum charging rate shall be calculated based on the maximum design heat input capacity of the unit and a heating value of 12,800 kilojoules per kilogram for combustors firing refuse-derived fuel and a heating value of 10,500 kilojoules per kilogram for combustors firing municipal solid waste that is not refuse-derived fuel.
    - (ii) For combustors that are not designed based on heat capacity, the maximum charging rate shall be the maximum design charging rate.
  - (2) For batch feed municipal waste combustor units, municipal waste combustor unit capacity shall be calculated as the maximum design amount of municipal solid waste that can be charged per batch multiplied by the maximum number of batches that could be processed in a 24-hour period. The maximum number of batches that could be processed in a 24-hour period is calculated as 24 hours divided by the design number of hours required to process one batch of municipal solid waste, and may include fractional batches (e.g., if one batch requires 16 hours, then 24/16, or 1.5 batches, could be combusted in a 24-hour period). For batch combustors that are designed based on heat capacity, the design heating value of 12,800 kilojoules per kilogram for combustors firing refuse-derived fuel

and a heating value of 10,500 kilojoules per kilogram for combustors firing municipal solid waste that is not refuse-derived fuel shall be used in calculating the municipal waste combustor unit capacity. [40 CFR 60.31b and 40 CFR 60.58b(j); Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, PSD-FL-105(B)]

{Permitting note: Nothing in the following two conditions shall be construed to imply that maximum capacity, as defined in specific condition **B.11**., can be exceeded.}

- **B.12.** Emissions Unit Operating Rate Limitation After Testing. See specific condition **B.69.** [Rule 62-297.310(2), F.A.C.]
- **B.13.** Unit Load. Unit load means the steam load of the municipal waste combustor (MWC) measured as specified in 40 CFR 60.58b(i)(6). Each MWC unit shall not operate at a load level greater than 110 percent of the unit's "maximum demonstrated unit load." The maximum demonstrated unit load is the highest 4-hour arithmetic averaged MWC unit load achieved during four consecutive hours during the most recent dioxin/furan performance stack test in which compliance with the dioxin/furan emission limit (see specific condition **B.34.**) was achieved. Higher loads are allowed for testing purposes as specified at 40 CFR 60.53b (b).

[40 CFR 60.34b (b) and 40 CFR 60.51b; and, PSD-FL-105(B)]

**B.14.** Maximum Demonstrated Particulate Matter Control Device Temperature. Maximum demonstrated particulate matter control device temperature means the highest 4-hour arithmetic average flue gas temperature measured at the particulate matter control device inlet during four consecutive hours during the most recent dioxin/furan performance test demonstrating compliance with the applicable limit for municipal waste combustor organics specified in specific condition **B.34.** [40 CFR 60.34b (b) and 40 CFR 60.51b]

#### **B.15.** Methods of Operation - Fuels.

- a. Municipal Solid Waste Combustors.
- (1) <u>Municipal Solid Waste</u>. The primary fuel for this facility is municipal solid waste (MSW), including the items and materials that fit within the definition of MSW contained in either 40 CFR 60.51b or Section 403.706(5), F.S.
- (2) <u>Unauthorized Fuel</u>. Subject to the limitations contained in this permit, the authorized fuels for the facility also include the other solid wastes that are not MSW which are described in (4), (5) and (6), below. However, the facility
  - (a) shall not burn:
    - (i) those materials that are prohibited by state or federal law;
    - (ii) those materials that are prohibited by this permit;
    - (iii) those materials that are not authorized by this permit;
    - (iv) lead acid batteries;
    - (v) hazardous waste;
    - (vi) nuclear waste;
    - (vii) radioactive waste;
    - (viii)sewage sludge;
    - (ix) explosives;
    - (x) asbestos containing materials;
    - (xi) beryllium-containing waste, as defined in 40 CFR 61, Subpart C.
  - (b) and shall not knowingly burn:
    - (i) nickel-cadmium batteries pursuant to Section 403.7192(3);
    - (ii) mercury containing devices and lamps pursuant to Sections 403.7186(2) & (3);

- (iii) untreated biomedical waste from biomedical waste generators regulated pursuant to Chapter 64E-16, F.A.C., and from other similar generators (or sources);
- (iv) segregated loads of biological waste.

{Permitting Note: See the attached Appendix BW, Biomedical Waste Definitions, for definitions of what constitutes biomedical waste.}

- (3) The fuel may be received either as a mixture or as a single-item stream (segregated load) of discarded materials. If the facility intends to use an authorized fuel that is segregated non-MSW material, the fuel shall be either:
  - (a) well mixed with MSW in the refuse pit; or
  - (b) alternately charged with MSW in the hopper.

The facility owner/operator shall prepare and maintain records concerning the description and quantities of all segregated loads of non-MSW material which are received and used as fuel at the facility, and subject to a percentage weight limitation, below [(5) and (6)]. For the purposes of this permit, a segregated load is defined to mean a container or truck that is almost completely or exclusively filled with a single item or homogeneous composition of waste material, as determined by visual inspection.

- (4) Other Solid Waste. Subject to the conditions and limitations contained in this permit, the following other solid waste may be used as fuel at the facility:
  - (a) Confidential, proprietary or special documents (including but not limited to business records, lottery tickets, event tickets, coupons, credit cards, magnetic tape and microfilm);
  - (b) Contraband which is being destroyed at the request of appropriately authorized local, state or federal governmental agencies, provided that such material is not an explosive, a propellant, a hazardous waste, or otherwise prohibited at the facility. For the purposes of this section, contraband includes but is not limited to drugs, narcotics, fruits, vegetables, plants, counterfeit money, and counterfeit consumer goods:
  - (c) Wood pallets, clean wood and land clearing debris;
  - (d) Packaging materials and containers;
  - (e) Clothing, natural and synthetic fibers, fabric remnants, and similar debris, including but not limited to aprons and gloves; and
  - (f) Rugs, carpets, and floor coverings but not asbestos-containing materials or polyethylene or polyurethane vinyl floor coverings.
  - (g) The predominantly combustible fraction of sorted construction and demolition debris. Sorting of mixed construction and demolition debris at the facility shall occur on the tipping floor or at another location approved by the Department.
- (5) <u>Waste Tires</u>. Subject to the conditions and limitations contained in this permit, waste tires may be used as fuel at the facility. The total quantity of waste tires received as <u>segregated loads</u> and burned at the facility shall not exceed 3%, by weight, of the facility's total fuel. Compliance with this limitation shall be determined by using a rolling 30 day average in accordance with specific condition **B.110**. below.
- (6) Other Solid Waste/Segregated Loads. Subject to the conditions and limitations contained in this permit, the following other solid waste materials may be used as fuel at the facility (i.e. the following are authorized fuels that are non-MSW material). The total quantity of the following non-MSW material received as segregated loads and burned at the facility shall not exceed 5%, by weight, of the facility's total fuel. Compliance with this limitation shall be determined by using a rolling 30 day average in accordance with specific condition **B.110.**, below.
  - (a) Construction and demolition debris.

- (b) Oil spill debris from aquatic, coastal, estuarine or river environments. Such items or materials include but are not limited to rags, wipes, and absorbents.
- (c) Items suitable for human, plant or domesticated animal use, consumption or application where the item's shelf-life has expired or the generator wishes to remove the items from the market. Such items or materials include but are not limited to off-specification or expired consumer products, pharmaceuticals, medications, health and personal care products, cosmetics, foodstuffs, nutritional supplements, returned goods, and controlled substances.
- (d) Consumer-packaged products intended for human or domesticated animal use or application but not consumption. Such items or materials include but are not limited to carpet cleaners, household or bathroom cleaners, polishes, waxes and detergents.
- (e) Waste materials that:
  - (i) are generated in the manufacture of items in categories (c) or (d), above and are functionally or commercially useless (expired, rejected or spent); or
  - (ii) are not yet formed or packaged for commercial distribution. Such items or materials must be substantially similar to other items or materials routinely found in MSW.
- (f) Waste materials that contain oil from:
  - (i) the routine cleanup of industrial or commercial establishments and machinery; or
  - (ii) spills of virgin or used petroleum products. Such items or materials include but are not limited to rags, wipes, and absorbents.
- (g) Used oil and used oil filters. Used oil containing a PCB concentration equal or greater than 50 ppm shall not be burned, pursuant to the limitations of 40 CFR 761.20(e).
- (h) Waste materials generated by manufacturing, industrial or agricultural activities, provided that these items or materials are substantially similar to items or materials that are found routinely in MSW, subject to prior approval of the Department.
- a. Auxiliary Burners Fuels. Only distillate fuel oil or natural gas shall be used in the startup burners. Natural gas may be used as fuel during warm-up, startup, shutdown, and malfunction periods, and at other times when necessary and consistent with good combustion practices. The annual capacity factor for use of natural gas and oil shall be less than 10%. The annual capacity factor for natural gas/distillate fuel oil is the ratio between the heat input to the unit from natural gas/distillate fuel oil during a calendar year and the potential heat input to the unit had it been operated for 8,760 hours during a calendar year at the maximum steady state design heat input capacity.
- b. Other fuels or wastes shall not be burned in the MSW combustors without prior specific written approval of the Secretary of the Department of Environmental Protection.

[Rules 62-4.160(2), 62-210.200, <u>62-4.070(3)</u>, and 62-213.440(1), F.A.C.; and, PSD-FL-105(B) <u>and (D)</u>]

- **B.16.** To ensure that the facility's fuel does not adversely affect the facility's combustion process or emissions, the facility operator shall:
- (1) comply with good combustion operating practices in accordance with 40 CFR 60.53b;
- (2) install, operate and maintain continuous emissions monitors (CEMS) for oxygen, carbon monoxide, sulfur dioxide, oxides of nitrogen and particulate control device inlet temperature in accordance with 40 CFR 60.58b; and
- (3) record and maintain the CEMS data in accordance with 40 CFR 60.59b.

These steps shall be used to ensure and verify continuous compliance with the emissions limitations in this permit.

[PSD-FL-105(B)]

**B.17.** Hours of Operation. MWC units 1, 2 and 3 are allowed to operate continuously, i.e., 8,760 hours/year, each.

[Rule 62-210.200(PTE), F.A.C.]

## **Operating Practices and Requirements**

- **B.18.** No owner or operator of an affected facility shall cause such facility to operate at a load level greater than 110 percent of the maximum demonstrated municipal waste combustor unit load as defined in specific condition **B.13.**, except as specified below. The averaging time is specified in specific condition **B.20.**
- (1) During the annual dioxin/furan performance test and the two weeks preceding the annual dioxin/furan performance test, no municipal waste combustor unit load limit is applicable if the provisions of paragraph (b)(2) of this section are met.
- (2) The municipal waste combustor unit load limit may be waived in accordance with permission granted by the Administrator or delegated State regulatory authority for the purpose of evaluating system performance, testing new technology or control technologies, diagnostic testing, or related activities for the purpose of improving facility performance or advancing the state-of-the-art for controlling facility emissions. The municipal waste combustor unit load limit continues to apply, and remains enforceable, until and unless the Administrator grants the waiver.

[40 CFR 60.34b(b) and 40 CFR 60.53b(b)]

- **B.19.** No owner or operator of an affected facility shall cause such facility to operate at a temperature, measured at the particulate matter control device inlet, exceeding 17°C above the maximum demonstrated particulate matter control device temperature as defined in specific condition **B.14.**, except as specified below. The averaging time is specified in specific condition **B.20.** These requirements apply to each particulate matter control device utilized at the affected facility.
- (1) During the annual dioxin/furan performance test and the two weeks preceding the annual dioxin/furan performance test, no particulate matter control device temperature limitations are applicable if the provisions of paragraph (b)(2) of this section are met.
- (2) The particulate matter control device temperature limits may be waived in accordance with permission granted by the Administrator or delegated State regulatory authority for the purpose of evaluating system performance, testing new technology or control technologies, diagnostic testing, or related activities for the purpose of improving facility performance or advancing the state-of-the-art for controlling facility emissions. The municipal waste combustor unit load limit continues to apply, and remains enforceable, until and unless the Administrator grants the waiver.

  [40 CFR 60.34b(b) and 40 CFR 60.53b(c)]
- **B.20.** Operating Requirements. The procedures specified in paragraphs (1) through (12) shall be used for determining compliance with the operating requirements under 40 CFR 60.53b.
- (1) Compliance with the carbon monoxide emission limits in 40 CFR 60.53b(a) shall be determined using a 4-hour block arithmetic average for all types of affected facilities except mass burn rotary waterwall municipal waste combustors and refuse-derived fuel stokers.
- (2) For affected mass burn rotary waterwall municipal waste combustors and refuse-derived fuel stokers, compliance with the carbon monoxide emission limits in 40 CFR 60.53b(a) shall be determined using a 24-hour daily arithmetic average.
- (3) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous emission monitoring system for measuring carbon monoxide at the combustor outlet and record the output of the system and shall follow the procedures and methods specified in paragraphs(i) through(iii).
  - (i) The continuous emission monitoring system shall be operated according to Performance Specification 4A in Appendix B of 40 CFR 60.
  - (ii) During each relative accuracy test run of the continuous emission monitoring system required by Performance Specification 4A in Appendix B of 40 CFR 60, carbon monoxide and oxygen (or carbon

dioxide) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and the test methods specified in paragraphs (A) and(B). For affected facilities subject to the 100 parts per million dry volume carbon monoxide standard, the relative accuracy criterion of 5 parts per million dry volume is calculated as the absolute value of the mean difference between the reference method and continuous emission monitoring systems.

- (A) For carbon monoxide, EPA Reference Method 10, 10A, or 10B shall be used.
- (B) For oxygen (or carbon dioxide), EPA Reference Method 3, 3A, or 3B, or ASME PTC-19-10-1981—Part 10 (incorporated by reference, see 40 CFR 60.17 of subpart A of this part), as applicable shall be used.
- (iii) The span value of the continuous emission monitoring system shall be 125 percent of the maximum estimated hourly potential carbon monoxide emissions of the municipal waste combustor unit.
- (4) The 4-hour block and 24-hour daily arithmetic averages specified in paragraphs (1) and (2) shall be calculated from 1-hour arithmetic averages expressed in parts per million by volume corrected to 7 percent oxygen (dry basis). The 1-hour arithmetic averages shall be calculated using the data points generated by the continuous emission monitoring system. At least two data points shall be used to calculate each 1-hour arithmetic average.
- (5) The owner or operator of an affected facility may request that compliance with the carbon monoxide emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in 40 CFR 60.58b (b)(6).
- (6) The procedures specified in paragraphs (i) through (v) shall be used to determine compliance with load level requirements under 40 CFR 60.53b (b).
  - (i) The owner or operator of an affected facility with steam generation capability shall install, calibrate, maintain, and operate a steam flow meter or a feedwater flow meter; measure steam (or feedwater) flow in kilograms per hour (or pounds per hour) on a continuous basis; and record the output of the monitor. Steam (or feedwater) flow shall be calculated in 4-hour block arithmetic averages.
  - (ii) The method included in the "American Society of Mechanical Engineers Power Test Codes: Test Code for Steam Generating Units, Power Test Code 4.1-1964 (R1991)" section 4 (incorporated by reference, see 40 CFR 60.17) shall be used for calculating the steam (or feedwater) flow required under paragraph (6)(i). The recommendations in "American Society of Mechanical Engineers Interim Supplement 19.5 on Instruments and Apparatus: Application, Part II of Fluid Meters, 6th edition (1971)," chapter 4 (incorporated by reference-see 40 CFR 60.17) shall be followed for design, construction, installation, calibration, and use of nozzles and orifices except as specified in (iii).
  - (iii) Measurement devices such as flow nozzles and orifices are not required to be recalibrated after they are installed.
  - (iv) All signal conversion elements associated with steam (or feedwater flow) measurements must be calibrated according to the manufacturer's instructions before each dioxin/furan performance test, and at least once per year.
- (7) To determine compliance with the maximum particulate matter control device temperature requirements under 40 CFR 60.53b(c), the owner or operator of an affected facility shall install, calibrate, maintain, and operate a device for measuring on a continuous basis the temperature of the flue gas stream at the inlet to each particulate matter control device utilized by the affected facility. Temperature shall be calculated in 4-hour block arithmetic averages.
- (8) The maximum demonstrated municipal waste combustor unit load shall be determined during the initial performance test for dioxins/furans and each subsequent performance test during which compliance with the dioxin/furan emission limit specified in 40 CFR 60.52b(c) is achieved. The maximum demonstrated municipal waste combustor unit load shall be the highest 4-hour arithmetic average load

achieved during four consecutive hours during the most recent test during which compliance with the dioxin/furan emission limit was achieved. If a subsequent dioxin/furan performance test is being performed on only one affected facility at the MWC plant, as provided in paragraph (g)(5)(iii) of this section, the owner or operator may elect to apply the same maximum municipal waste combustor unit load from the tested facility for all the similarly designed and operated affected facilities at the MWC plant.

- (9) For each particulate matter control device employed at the affected facility, the maximum demonstrated particulate matter control device temperature shall be determined during the initial performance test for dioxins/furans and each subsequent performance test during which compliance with the dioxin/furan emission limit specified in 40 CFR 60.52b(c) is achieved. The maximum demonstrated particulate matter control device temperature shall be the highest 4-hour arithmetic average temperature achieved at the particulate matter control device inlet during four consecutive hours during the most recent test during which compliance with the dioxin/furan limit was achieved. If a subsequent dioxin/furan performance test is being performed on only one affected facility at the MWC plant, as provided in paragraph (g)(5)(iii) of this section, the owner or operator may elect to apply the same maximum municipal waste combustor unit load from the tested facility for all the similarly designed and operated affected facilities at the MWC plant.
- (10) At a minimum, valid continuous emission monitoring system hourly averages shall be obtained as specified in paragraphs (i) and (ii) for at least 90 percent of the operating hours per calendar quarter and 95 percent of the operating hours per calendar year that the affected facility is combusting municipal solid waste.
  - (i) At least two data points per hour shall be used to calculate each 1-hour arithmetic average.
  - (ii) At a minimum, each carbon monoxide 1-hour arithmetic average shall be corrected to 7 percent oxygen on an hourly basis using the 1-hour arithmetic average of the oxygen (or carbon dioxide) continuous emission monitoring system data.
- (11) All valid continuous emission monitoring system data must be used in calculating the parameters specified under 40 CFR 60.58b (i) even if the minimum data requirements of paragraph (10) are not met. When carbon monoxide continuous emission data are not obtained because of continuous emission monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained using other monitoring systems as approved by the Administrator or EPA Reference Method 10 to provide, as necessary, the minimum valid emission data.
- (12) Quarterly accuracy determinations and daily calibration drift tests for the carbon monoxide continuous emission monitoring system shall be performed in accordance with procedure 1 in Appendix F of 40 CFR 60.

{Permitting Note: CO and  $O_2$  are monitored downstream of the combustor outlet at the fabric filter exit, as approved by EPA.}

[40 CFR 60.38b and 40 CFR 60.58b(i)]

## **Operator Training and Certification**

- **B.21.** Standards for municipal waste combustor operator training and certification.
- (a) No later than the date 6 months after the date of startup of an affected facility or 12 months after State plan approval [40 CFR 60.39b(c)(4)(ii)], whichever is later, each chief facility operator and shift supervisor shall obtain and maintain a current provisional operator certification from either the American Society of Mechanical Engineers [QRO-1-1994 (incorporated by reference see 40 CFR 60.17 of Subpart A)] or a State certification program.
- (b) No later than the date 6 months after the date of startup of an affected facility or 12 months after State plan approval [40 CFR 60.39b(c)(4)(ii)], whichever is later, each chief facility operator and shift supervisor shall have completed full certification or shall have scheduled a full certification exam with

either the American Society of Mechanical Engineers [QRO-1-1994 (incorporated by reference - see 40 CFR 60.17 of Subpart A)] or a State certification program.

- (c) No owner or operator of an affected facility shall allow the facility to be operated at any time unless one of the following persons is on duty and at the affected facility: A fully certified chief facility operator or a provisionally certified chief facility operator who is scheduled to take the full certification exam according to the schedule specified in paragraph (b), a fully certified shift supervisor or a provisionally certified shift supervisor who is scheduled to take the full certification exam according to the schedule specified in paragraph (b).
  - (1) The requirement specified in paragraph (c) shall take effect 6 month after the date of startup of the affected facility or 12 months after State plan approval [40 CFR 60.39b(c)(4)(ii)], whichever is later.
  - (2) If both the certified chief facility operator and certified shift supervisor are unavailable, a provisionally certified control room operator on site at the municipal waste combustion unit may fulfill the certified operator requirement. Depending on the length of time that a certified chief facility operator and certified shift supervisor are away, the owner or operator of the affected facility must meet one of three criteria:
    - (i) When the certified chief facility operator and certified shift supervisor are both off site for 12 hours or less, and no other certified operator is on site, the provisionally certified control room operator may perform the duties of the certified chief facility operator or certified shift supervisor.
    - (ii) When the certified chief facility operator and certified shift supervisor are off site for more than 12 hours, but for two weeks or less, and no other certified operator is on site, the provisionally certified control room operator may perform the duties of the certified chief facility operator or certified shift supervisor without notice to, or approval by, the Administrator. However, the owner or operator of the affected facility must record the period when the certified chief facility operator and certified shift supervisor are off site and include that information in the annual report as specified under 40 CFR 60.59b(g)(5).
    - (iii) When the certified chief facility operator and certified shift supervisor are off site for more than two weeks, and no other certified operator is on site, the provisionally certified control room operator may perform the duties of the certified chief facility operator or certified shift supervisor without approval by the Administrator. However, the owner or operator of the affected facility must take two actions:
      - (A) Notify the Administrator in writing. In the notice, state what caused the absence and what actions are being taken by the owner or operator of the facility to ensure that a certified chief facility operator or certified shift supervisor is on site as expeditiously as practicable.
      - (B) Submit a status report and corrective action summary to the Administrator every four weeks following the initial notification. If the Administrator provides notice that the status report or corrective action summary is disapproved, the municipal waste combustion unit may continue operation for 90 days, but then must cease operation. If corrective actions are taken in the 90-day period such that the Administrator withdraws the disapproval, municipal waste combustion unit operation may continue.
  - (3) A provisionally certified operator who is newly promoted or recently transferred to a shift supervisor position or a chief facility operator position at the municipal waste combustion unit may perform the duties of the certified chief facility operator or certified shift supervisor without notice to, or approval by, the Administrator for up to six months before taking the ASME QRO certification exam.
- (d) All chief facility operators, shift supervisors, and control room operators at affected facilities must complete the EPA or State municipal waste combustor operator training course no later than the date 6

months after the date of startup of the affected facility, or by 12 months after State plan approval [40 CFR 60.39b(c)(4)(iii)], whichever is later.

- (e) The owner or operator of an affected facility shall develop and update on a yearly basis a site-specific operating manual that shall, at a minimum, address the elements of municipal waste combustor unit operation specified in paragraph (e)(1) through (e)(11).
  - (1) A summary of the applicable standards;
  - (2) A description of basic combustion theory applicable to a municipal waste combustor unit;
  - (3) Procedures for receiving, handling, and feeding municipal solid waste;
  - (4) Municipal waste combustor unit startup, shutdown, and malfunction procedures;
  - (5) Procedures for maintaining proper combustion air supply levels;
  - (6) Procedures for operating the municipal waste combustor unit within the standards established;
  - (7) Procedures for responding to periodic upset or off-specification conditions;
  - (8) Procedures for minimizing particulate matter carryover;
  - (9) Procedures for handling ash;
  - (10) Procedures for monitoring municipal waste combustor unit emissions; and
  - (11) Reporting and recordkeeping procedures.
- (f) The owner or operator of an affected facility shall establish a training program to review the operating manual according to the schedule specified in paragraphs (f)(1) and (f)(2) with each person who has responsibilities affecting the operation of an affected facility including, but not limited to, chief facility operators, shift supervisors, control room operators, ash handlers, maintenance personnel, and crane/load handlers.
  - (1) Each person specified in paragraph (f) shall undergo initial training no later than the date specified in paragraph (f)(1)(i), (f)(1)(ii), or (f)(1)(iii), whichever is later.
    - (i) The date 6 months after the date of startup of the affected facility;
    - (ii) The date prior to the day the person assumes responsibilities affecting municipal waste combustor unit operation; or
    - (iii) 12 months after State plan approval [40 CFR 60.39b(c)(4)(iii)].
  - (2) Annually, following the initial review required by paragraph (f)(1).
- (g) The operating manual required by paragraph (e) shall be kept in a readily accessible location for all persons required to undergo training under paragraph (f). The operating manual and records of training shall be available for inspection by the EPA or its delegated enforcement agency upon request. [40 CFR 60.35b, 40 CFR 60.39b(c)(4)(ii) & (iii), and 40 CFR 60.54b]
- **B.22.** The requirement specified in 40 CFR 60.54b (d) does not apply to chief operators, shift supervisors, and control room operators who have obtained full certification from the American Society of Mechanical Engineers on or before the date of State plan approval.

  [40 CFR 60.39b(c)(4)(iii)(A)]
- **B.23.** The owner or operator of a designated facility may request that the EPA Administrator waive the requirement specified in 40 CFR 60.54b (d) for chief facility operators, shift supervisors, and control room operators who have obtained provisional certification from the American Society of Mechanical Engineers on or before the initial date of State plan approval.

  [40 CFR 60.39b(c) (4)(iii)(B)]
- **B.24.** The initial training requirements specified in 40 CFR 60.54b(f)(1) shall be completed no later than the date specified in (1), (2) or (3), whichever is later.
- (1) The date six (6) months after the date of startup of the affected facility;
- (2) Twelve (12) months after State plan approval; or

(3) The date prior to the day when the person assumes responsibilities affecting municipal waste combustor unit operation.

[40 CFR 60.39b(c) (4)(iii)(C)]

## **Emission Limitations and Standards**

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit. Also, Subpart Cb does not impose limits for Be and total fluorides, which are limited by PSD-FL-105(B)}

#### Particulate Matter

**B.25.a.** Before April 28, 2009, the emission limit for particulate matter contained in the gases discharged to the atmosphere is 27 milligrams per dry standard cubic meter, corrected to 7 percent oxygen. [40 CFR 60.33b (a)(1)(i) and PSD-FL-105(B)]

**B.25.b.** On and after April 28, 2009, the emission limit for particulate matter contained in the gases discharged to the atmosphere is 25 milligrams per dry standard cubic meter, corrected to 7 percent oxygen.

[40 CFR 60.33b (a)(1)(i)] and PSD-FL-105(C)

#### Visible Emissions

**B.26.** The emission limit for opacity exhibited by the gases discharged to the atmosphere is 10 percent (6-minute average).

[40 CFR 60.33b (a)(1)(iii) and PSD-FL-105(B)]

#### **Cadmium**

**B.27.a.** Before April 28, 2009, the emission limit for cadmium contained in the gases discharged to the atmosphere is 0.040 milligrams per dry standard cubic meter, corrected to 7 percent oxygen. [40 CFR 60.33b (a)(2)(i) and PSD-FL-105(B)]

**B.27.b.** On and after April 28, 2009, the emission limit for cadmium contained in the gases discharged to the atmosphere is 0.035 milligrams per dry standard cubic meter, corrected to 7 percent oxygen. [40 CFR 60.33b (a)(2)(i)]

#### Mercury

**B.28.** a. Before April 28, 2009, tThe emission limit for mercury contained in the gases discharged to the atmosphere is 0.070 milligrams per dry standard cubic meter or 15 percent of the potential mercury emission concentration (85-percent reduction by weight), corrected to 7 percent oxygen, whichever is less stringent.

[40 CFR 60.33b (a)(3) and Rule 62-296.416(3)(b)1.b., F.A.C.; and, PSD-FL-105(B)]

B.28.b. On and after April 28, 2009, the emission limit for mercury contained in the gases discharged to the atmosphere is 0.050 milligrams per dry standard cubic meter or 15 percent of the potential mercury emission concentration (85-percent reduction by weight), corrected to 7 percent oxygen, whichever is less stringent.

[40 CFR 60.33b (a)(3); and, Rule 62-296.416(3)(a)1., F.A.C.]

- **B.29.** Emissions Standards for Facilities Using Waste Separation. The Department recognizes that reduction of mercury emissions from waste to energy facilities may be achieved by implementation of mercury waste separation programs. Such programs would require removal of objects containing mercury from the waste stream before the waste is used as a fuel.
- 1. Facilities with sulfur dioxide and hydrogen chloride control equipment in place or under construction as of July 1, 1993, and which choose to control mercury emissions exclusively through the use of a waste separation program, shall submit a program plan to the Department by March 1, 1994, and shall comply with the following emissions limiting schedule.
  - a. After July 1, 1995, mercury emissions shall not exceed 140 micrograms per dry standard cubic meter of flue gas, corrected to 7 percent O<sub>2</sub>.
  - b. After July 1, 1997, mercury emissions shall not exceed 70 micrograms per dry standard cubic meter of flue gas, corrected to 7 percent O<sub>2</sub>.
- 2. Beginning no later than July 1, 1994, facilities subject to Rule 62-296.416(3)(b)1., F.A.C., shall perform semiannual individual emissions unit mercury emissions tests. Facilities shall stagger the semiannual testing of individual emissions units such that at least one test is performed quarterly. All tests conducted after July 1, 1995, shall be used to demonstrate compliance with the mercury emissions limiting standards of Rule 62-296.416(3)(b)1., F.A.C. [Rule 62-296.416(3)(b), F.A.C.]

#### Lead

- **B.30.** a. Before April 28, 2009, the emission limit for lead contained in the gases discharged to the atmosphere is 0.440 milligrams per dry standard cubic meter, corrected to 7 percent oxygen. [40 CFR 60.33b (a)(4) and PSD-FL-105(B)]
- **B.30.b.** On and after April 28, 2009, the emission limit for lead contained in the gases discharged to the atmosphere is 0.40 milligrams per dry standard cubic meter, corrected to 7 percent oxygen. [40 CFR 60.33b (a)(4)]

#### **Sulfur Dioxide**

- **B.31.** The emission limit for sulfur dioxide contained in the gases discharged to the atmosphere is 29 parts per million by volume or 25 percent of the potential sulfur dioxide emission concentration (75-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent. Compliance with this emission limit is based on a 24-hour daily geometric mean. [40 CFR 60.33b (b)(3)(i) and PSD-FL-105(B)]
- **B.32.** Not federally enforceable. Sulfur Content. The sulfur content of the distillate fuel oil or natural gas for the auxiliary burners shall not exceed 0.3%, by weight. [PA-85-21]

#### Hydrogen Chloride

**B.33.** The emission limit for hydrogen chloride contained in the gases discharged to the atmosphere is 29 parts per million by volume or 5 percent of the potential hydrogen chloride emission concentration (95-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent.

[40 CFR 60.33b (b)(3)(ii) and PSD-FL-105(B)]

#### Dioxins/Furans

**B.34.** The emission limit for dioxins/furans contained in the gases discharged to the atmosphere that do not employ an electrostatic precipitator-based emission control system is 30 nanograms per dry standard cubic meter (total mass of tetra- through octa chlorinated dibenzo-p-dioxins and dibenzo-furans), corrected to 7 percent oxygen.

[40 CFR 60.33b (c)(1)(ii) and PSD-FL-105(B)]

#### **Nitrogen Oxides**

**B.35.** The emission limit for nitrogen oxides contained in the gases discharged to the atmosphere is 205 parts per million by volume, corrected to 7 percent oxygen, dry basis. The permittee may request authorization from the Department to conduct nitrogen oxides emissions averaging pursuant to 40 CFR 60.33b.

[40 CFR 60.33b (d) and PSD-FL-105(B)]

#### Carbon Monoxide

**B.36.** The emission limit for carbon monoxide contained in the gases discharged to the atmosphere is 100 parts per million by volume, measured at the combustor outlet in conjunction with a measurement of oxygen concentration, corrected to 7 percent oxygen, dry basis. Calculated as an arithmetic average. Averaging time is a 4-hour block average.

[40 CFR 60.34b (a) and PSD-FL-105(B)]

#### **Fugitive Ash Emissions**

- **B.37.** (a) On and after the date on which the initial performance test is completed or is required to be completed under 40 CFR 60.8 of Subpart A (see specific condition **B.49.**), no owner or operator of an affected facility shall cause to be discharged to the atmosphere visible emissions of combustion ash from an ash conveying system (including conveyor transfer points) in excess of 5 percent of the observation period (i.e., 9 minutes per 3-hour period), as determined by EPA Reference Method 22 observations as specified in 40 CFR 60.58b(k), except as provided in paragraphs (b) and (c). See specific condition **B.63.** (b) The emission limit specified in paragraph (a) does not cover visible emissions discharged inside buildings or enclosures of ash conveying systems; however, the emission limit specified in paragraph (a) does cover visible emissions discharged to the atmosphere from buildings or enclosures of ash conveying systems (including conveyor transfer points).
- (c) The provisions of paragraph (a) do not apply during maintenance and repair of ash conveying systems.

[40 CFR 60.36b and 40 CFR 60.55b; and, PSD-FL-105(B)]

#### **Beryllium**

**B.38.** Stack emissions of beryllium from each unit shall not exceed 0.001 mg/dscm, corrected to  $7 \% O_2$ .

[PSD-FL-105(B)]

#### **Total Fluorides**

**B.39.** Stack emissions of total fluorides from each unit shall not exceed 0.0040 lb/MMBtu. [PSD-FL-105(B)]

### **B.40.** [Reserved.]

{Permitting Note: Listed below are equivalent emissions for the MWC units:

Pollutant	lbs/MMBtu/unit	lbs/hr/unit	tons/year/unit
Particulate Matter (PM/PM <sub>10</sub> )	0.0232	7.49	32.8
Cadmium (Cd)	$3.4 \times 10^{-5}$	0.011	0.046
Mercury (Hg)	4.7 x 10 <sup>-5</sup>	0.015	0.066
Lead (Pb)	$3.7 \times 10^{-4}$	0.120	0.53
Sulfur Dioxide (SO <sub>2</sub> )	0.11	35.1	153.7
Hydrogen Chloride (HCl)	0.04	12.6	55
Dioxins/Furans	2.7 x 10 <sup>-8</sup>	8.7 x 10 <sup>-6</sup>	$3.8 \times 10^{-5}$
Nitrogen Oxides (NO <sub>X</sub> )	0.352	114	499
Carbon Monoxide (CO)	0.105	33.9	148.5
Beryllium (Be)	$9.3 \times 10^{-7}$	0.0003	0.0013
Fluorides (F)	0.0040	1.29	5.66

These values are given in PSD-FL-105(B) and (C) and are determined using the F factor of 14,389 dscf @ 7% O<sub>2</sub> /MMBtu and a maximum heat input of 323.6 MMBtu/hr.}

## **Excess Emissions**

{Permitting Note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of an NSPS or NESHAP provision.}

- **B.41.** The opacity standards set forth in 40 CFR 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. [40 CFR 60.11(c)]
- **B.42.** At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

[40 CFR 60.11(d)]

- **B.43.a.** Startup, Shutdown and Malfunction. Except as provided by 40 CFR 60.56b, the standards under 40 CFR 60, Subpart Cb, as incorporated in Rule 62-204.800(8)(b), F.A.C., apply at all times except during periods of startup, shutdown, or malfunction. Duration of startup or shutdown periods are limited to 3 hours per occurrence, except as provided in 40 CFR 60.58b(a)(1)iii. During periods of startup, shutdown, or malfunction, monitoring data shall be dismissed or excluded from compliance calculations, but shall be recorded and reported in accordance with the provisions of 40 CFR 60.59b(d)(7).
- (i) The startup period commences when the affected facility begins the continuous burning of municipal solid waste and does not include any warm-up period when the affected facility is combusting fossil fuel or other nonmunicipal solid waste fuel, and no municipal solid waste is being fed to the combustor.

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(ii) Continuous burning is the continuous, semicontinuous, or batch feeding of municipal solid waste for purposes of waste disposal, energy production, or providing heat to the combustion system in preparation for waste disposal or energy production. The use of municipal solid waste solely to provide thermal protection of the grate or hearth during the startup period when municipal solid waste is not being fed to the grate is not considered to be continuous burning.

[40 CFR 60.38b and 40 CFR 60.58b(a)]

## B.43.b. Startup, Shutdown and Malfunction.

(iii) For the purpose of compliance with the carbon monoxide emission limits in 40 CFR 60.53b(a), if a loss of boiler water level control (e.g., boiler waterwall tube failure) or a loss of combustion air control (e.g., loss of combustion air fan, induced draft fan, combustion grate bar failure) is determined to be a malfunction, the duration of the malfunction period is limited to 15 hours per occurrence. During such periods of malfunction, monitoring data shall be dismissed or excluded from compliance calculations, but shall be recorded and reported in accordance with the provisions of 40 CFR 60.59b(d)(7).

[40 CFR 60.38b and 40 CFR 60.58b (a)(1)(iii)]

- **B.44.** Excess emissions indicated by the CEM systems shall be considered violations of the applicable opacity limit or operating emission limits (in ppm) for the purposes of this permit provided the data represents accurate emission levels and the CEMs do not exceed the calibration drift (as specified in the respective performance specification tests) on the day when initial and subsequent compliance is determined. The burden of proof to demonstrate that the data does not reflect accurate emission readings shall be the responsibility of the permittee.

  [PSD-FL-105]
- **B.45.** Excess emissions resulting from startup, shutdown, or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed three hours in any 24 hour period. [Rule 62-210.700(1), F.A.C.; and, authorized by Department on June 21, 2000]
- **B.46.** Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during start-up, shutdown, or malfunction shall be prohibited.

[Rule 62-210.700(4), F.A.C.; and, PSD-FL-105(B)]

## **Test Methods and Procedures**

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

- **B.47.** Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Administrator under section 114 of the Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s).

  [40 CFR 60.8(a)]
- **B.48.** Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, (3) approves the use of an alternative method the results of which he has

determined to be adequate for indicating whether a specific source is in compliance, (4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or (5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.

[40 CFR 60.8(b)]

- **B.49.** Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR 60.8(c)]
- **B.50.** The owner or operator of an affected facility shall provide the Administrator at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the Administrator the opportunity to have an observer present.

  [40 CFR 60.8(d)]
- **B.51.** The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:
- (1) Sampling ports adequate for test methods applicable to such facility. This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.
- (2) Safe sampling platform(s).
- (3) Safe access to sampling platform(s).
- (4) Utilities for sampling and testing equipment.
- {Permitting note: See specific condition **B.72.** and Appendix SS-1, Stack Sampling Facilities (version dated 10/7/96) for State of Florida Stack Sampling Requirements.} [40 CFR 60.8(e)]
- **B.52.** Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs.

[40 CFR 60.8(f)]

#### **Particulate Matter and Opacity**

- **B.53.** Except as provided in paragraph (c)(10) of this section, the procedures and test methods specified in paragraphs (1) through (11) shall be used to determine compliance with the emission limits for particulate matter and opacity.
- (1) The EPA Reference Method 1 shall be used to select sampling site and number of traverse points.
- (2) The EPA Reference Method 3, 3A, or 3B, or as an alternative ASME PTC-19-10-1981—Part 10, as applicable shall be used for gas analysis.
- (3) The EPA Reference Method 5 shall be used for determining compliance with the particulate matter emission limit. The minimum sample volume shall be 1.7 cubic meters. The probe and filter holder heating systems in the sample train shall be set to provide a gas temperature no greater than  $160 \pm 14$  °C. An oxygen or carbon dioxide measurement shall be obtained simultaneously with each Method 5 run.
- (4) The owner or operator of an affected facility may request that compliance with the particulate matter emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in paragraph 40 CFR 60.58b(b)(6).
- (5) As specified under 40 CFR 60.8, all performance tests shall consist of three test runs. The average of the particulate matter emission concentrations from the three test runs is used to determine compliance.
- (6) In accordance with paragraphs (7) and (11), EPA Reference Method 9 shall be used for determining compliance with the opacity limit except as provided under 40 CFR 60.11(e)
- (7) The owner or operator of an affected facility shall conduct an initial performance test for particulate matter emissions and opacity as required under 40 CFR 60.8.
- (8) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous opacity monitoring system for measuring opacity and shall follow the methods and procedures specified in paragraphs (8)(i) through (8)(iv).
  - (i) The output of the continuous opacity monitoring system shall be recorded on a 6-minute average basis.
  - (ii) The continuous opacity monitoring system shall be installed, evaluated, and operated in accordance with 40 CFR 60.13.
  - (iii) The continuous opacity monitoring system shall conform to Performance Specification 1 in Appendix B of 40 CFR 60.
  - (iv) The initial performance evaluation shall be completed no later than 180 days after the date of the initial startup of the municipal waste combustor unit, as specified under 40 CFR 60.8.
- (9) Following the date that the initial performance test for particulate matter is completed or is required to be completed under 40 CFR 60.8 for an affected facility, the owner or operator shall conduct a performance test for particulate matter on a calendar year basis (no less than 9 calendar months and no more than 15 calendar months following the previous performance test; and must complete five performance tests in each 5-year calendar period).
- (10) [reserved]
- (11) Following the date that the initial performance test for opacity is completed or is required to be completed under 40 CFR 60.8 for an affected facility, the owner or operator shall conduct a performance test for opacity on an annual basis (no less than 9 calendar months and no more than 15 calendar months following the previous performance test; and must complete five performance tests in each 5-year calendar period) using the test method specified in paragraph (c)(6) of this section).

  [40 CFR 60.38b and 40 CFR 60.58b (c)]

#### Cadmium, Lead and Mercury

**B.54.** The procedures and test methods specified in paragraphs (1) and (2) shall be used to determine compliance with the emission limits for cadmium, lead, and mercury.

- (1) The procedures and test methods specified in paragraphs (1)(i) through (1)(ix) shall be used to determine compliance with the emission limits for cadmium and lead.
  - (i) The EPA Reference Method 1 shall be used for determining the location and number of sampling points.
  - (ii) The EPA Reference Method 3, 3A, or 3B, or as an alternative ASME PTC-19-10-1981—Part 10, as applicable shall be used for gas analysis.
  - (iii) The EPA Reference Method 29 shall be used for determining compliance with the cadmium and lead emission limits.
  - (iv) An oxygen or carbon dioxide measurement shall be obtained simultaneously with each Method 29 test run for cadmium and lead required under paragraph (1)(iii).
  - (v) The owner or operator of an affected facility may request that compliance with the cadmium or lead emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in paragraph 40 CFR 60.58b(b)(6).
  - (vi) All performance tests shall consist of a minimum of three test runs conducted under representative full load operating conditions. The average of the cadmium or lead emission concentrations from three test runs or more shall be used to determine compliance.
  - (vii) Following the date of the initial performance test or the date on which the initial performance test is required to be completed under 40 CFR 60.8, the owner or operator of an affected facility shall conduct a performance test for compliance with the emission limits for cadmium and lead on a calendar year basis (no less than 9 calendar months and no more than 15 calendar months following the previous performance test; and must complete five performance tests in each 5-year calendar period).

(viii)[reserved]

- (ix) [reserved]
- (2) The procedures and test methods specified in paragraphs (2)(i) through (2)(xi) shall be used to determine compliance with the mercury emission limit.
  - (i) The EPA Reference Method 1 shall be used for determining the location and number of sampling points.
  - (ii) The EPA Reference Method 3, 3A, or 3B, or as an alternative ASME PTC-19-10-1981—Part 10, as applicable, shall be used for flue gas analysis.
  - (iii) The EPA Reference Method 29 or as an alternative ASTM D6784–02 shall be used to determine the mercury emission concentration. The minimum sample volume when using Method 29 for mercury shall be 1.7 cubic meters.
  - (iv) An oxygen (or carbon dioxide) measurement shall be obtained simultaneously with each Method 29 test run for mercury required under paragraph (2)(iii).
  - (v) The percent reduction in the potential mercury emissions (%P<sub>Hg</sub>) is computed using equation 1:

$$\left[\%P_{HG}\right] = \left[\frac{E_i - E_o}{E_i}\right] X \ 100 \qquad \text{(equation 1)}$$

where:

%PHG = percent reduction of the potential mercury emissions achieved.

E<sub>i</sub> = potential mercury emission concentration measured at the control device inlet, corrected to 7 percent oxygen (dry basis).

 $E_0$  = controlled mercury emission concentration measured at the mercury control device outlet, corrected to 7 percent oxygen (dry basis).

- (vi) All performance tests shall consist of a minimum of three test runs conducted under representative full load operating conditions. The average of the mercury emission concentrations or percent reductions from three test runs or more is used to determine compliance.
- (vii) The owner or operator of an affected facility may request that compliance with the mercury emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in paragraph 40 CFR 60.58b(b)(6).
- (viii) The owner or operator of an affected facility shall conduct an initial performance test for mercury emissions as required under 40 CFR 60.8.
- (ix) Following the date that the initial performance test for mercury is completed or is required to be completed under 40 CFR 60.8, the owner or operator of an affected facility shall conduct a performance test for mercury emissions 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).
- (x) [reserved]
- (xi) The owner or operator of an affected facility where activated carbon injection is used to comply with the mercury emission limit shall follow the procedures specified in 40 CFR 60.58b(m) for measuring and calculating carbon usage. See Specific Condition **B.115**.

[40 CFR 60.38b, and 40 CFR 60.58b (d) and PSD-FL-105, 105A, 105B and 105C]

- **B.55.** Mercury Emissions Test Method and Procedures. All mercury emissions tests performed pursuant to the requirements of this rule shall comply with the following provisions.
- 1. The test method for mercury shall be EPA Method 29 adopted in Rule 62-297, F.A.C.
- 2. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C. [Rule 62-296.416(3)(d), F.A.C.]
- B.56. Mercury emissions testing shall be conducted semiannually 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.

  [PSD-FL-105(B) and (D)]

#### **Sulfur Dioxide**

- **B.57.** The procedures and test methods specified in paragraphs (1) through (14) shall be used for determining compliance with the sulfur dioxide emission.
- (1) The EPA Reference Method 19, section 4.3, shall be used to calculate the daily geometric average sulfur dioxide emission concentration.
- (2) The EPA Reference Method 19, section 5.4, shall be used to determine the daily geometric average percent reduction in the potential sulfur dioxide emission concentration.
- (3) The owner or operator of an affected facility may request that compliance with the sulfur dioxide emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in 40 CFR 60.58b(b)(6).

- (4) The owner or operator of an affected facility shall conduct an initial performance test for sulfur dioxide emissions as required under 40 CFR 60.8. Compliance with the sulfur dioxide emission limit (concentration or percent reduction) shall be determined by using the continuous emission monitoring system specified in paragraph (5) to measure sulfur dioxide and calculating a 24-hour daily geometric average emission concentration or a 24-hour daily geometric average percent reduction using EPA Reference Method 19, sections 4.3 and 5.4, as applicable.
- (5) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous emission monitoring system for measuring sulfur dioxide emissions discharged to the atmosphere and record the output of the system.
- (6) Following the date that the initial performance test for sulfur dioxide is completed or is required to be completed under 40 CFR 60.8, compliance with the sulfur dioxide emission limit shall be determined based on the 24-hour daily geometric average of the hourly arithmetic average emission concentrations using continuous emission monitoring system outlet data if compliance is based on an emission concentration, or continuous emission monitoring system inlet and outlet data if compliance is based on a percent reduction.
- (7) At a minimum, valid continuous monitoring system hourly averages shall be obtained as specified in paragraphs (7)(i) and (7)(ii) for 90 percent of the operating hours per calendar quarter and 95 percent of the operating days per calendar year that the affected facility is combusting municipal solid waste.
  - (i) At least two data points per hour shall be used to calculate each 1-hour arithmetic average.
  - (ii) Each sulfur dioxide 1-hour arithmetic average shall be corrected to 7 percent oxygen on an hourly basis using the 1-hour arithmetic average of the oxygen (or carbon dioxide) continuous emission monitoring system data.
- (8) The 1-hour arithmetic averages required under paragraph (6) shall be expressed in parts per million corrected to 7 percent oxygen (dry basis) and used to calculate the 24-hour daily geometric average emission concentrations and daily geometric average emission percent reductions. The 1-hour arithmetic averages shall be calculated using the data points required under 40 CFR 60.13(e)(2).
- (9) All valid continuous emission monitoring system data shall be used in calculating average emission concentrations and percent reductions even if the minimum continuous emission monitoring system data requirements of paragraph (7) are not met.
- (10) The procedures under 40 CFR 60.13 shall be followed for installation, evaluation, and operation of the continuous emission monitoring system.
- (11) The initial performance evaluation shall be completed no later than 180 days after the date of initial startup of the municipal waste combustor as specified under 40 CFR 60.8.
- (12) The continuous emission monitoring system shall be operated according to Performance Specification 2 in 40 CFR 60 Appendix B. For sources that have actual inlet emissions less than 100 parts per million dry volume, the relative accuracy criterion for inlet sulfur dioxide continuous emission monitoring systems should be no greater than 20 percent of the mean value of the reference method test data in terms of the units of the emission standard, or 5 parts per million dry volume absolute value of the mean difference between the reference method and the continuous emission monitoring systems, whichever is greater.
  - (i) During each relative accuracy test run of the continuous emission monitoring system required by Performance Specification 2 in 40 CFR 60 Appendix B, sulfur dioxide and oxygen (or carbon dioxide) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and the test methods specified in paragraphs (A) and (B).
    - (A) For sulfur dioxide, EPA Reference Method 6, 6A, or 6C or as an alternative ASME PTC-19-10-1981—Part 10, shall be used.
    - (B) For oxygen (or carbon dioxide), EPA Reference Method 3, 3A, or 3B, or as an alternative ASME PTC-19-10-1981—Part 10, as applicable shall be used.

- (ii) The span value of the continuous emissions monitoring system at the inlet to the sulfur dioxide control device shall be 125 percent of the maximum estimated hourly potential sulfur dioxide emissions of the municipal waste combustor unit. The span value of the continuous emission monitoring system at the outlet of the sulfur dioxide control device shall be 50 percent of the maximum estimated hourly potential sulfur dioxide emissions of the municipal waste combustor unit.
- (13) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with procedure 1 in Appendix F of 40 CFR 60.
- (14) When sulfur dioxide emissions data are not obtained because of continuous emission monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained by using other monitoring systems as approved by the Administrator or EPA Reference Method 19 to provide, as necessary, valid emissions data for a minimum of 90 percent of the hours per calendar quarter and 95 percent of the hours per calendar year that the affected facility is operated and combusting municipal solid waste.

[40 CFR 60.38b and 40 CFR 60.58b (e)]

#### Hydrogen Chloride

- **B.58.** HCl stack tests upstream and downstream of the control device(s) shall be conducted to calculate percent control to demonstrate compliance with the alternate removal limit. [PSD-FL-105(B)]
- **B.59.** The procedures and test methods specified in paragraphs (1) through (8) shall be used for determining compliance with the hydrogen chloride emission limit.
- (1) The EPA Reference Method 26 or 26A, as applicable, shall be used to determine the hydrogen chloride emission concentration. The minimum sampling time for Method 26 shall be 1 hour.
- (2) An oxygen (or carbon dioxide) measurement shall be obtained simultaneously with each Method 26 test run for hydrogen chloride required by paragraph (1).
- (3) The percent reduction in potential hydrogen chloride emissions (% PHCl) is computed using equation 2:

$$\left[ \% P_{HCl} \right] = \left[ \frac{E_i - E_o}{E_i} \right] X 100$$
 (equation 2)

where:

%PHCI=percent reduction of the potential hydrogen chloride emissions achieved.

E<sub>i</sub>=potential hydrogen chloride emission concentration measured at the control device inlet, corrected to 7 percent oxygen (dry basis).

E<sub>0</sub>=controlled hydrogen chloride emission concentration measured at the control device outlet, corrected to 7 percent oxygen (dry basis).

(4) The owner or operator of an affected facility may request that compliance with the hydrogen chloride emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in 40 CFR 60.58b (b)(6).

- (5) As specified under 40 CFR 60.8, all performance tests shall consist of three test runs. The average of the hydrogen chloride emission concentrations or percent reductions from the three test runs is used to determine compliance.
- (6) The owner or operator of an affected facility shall conduct an initial performance test for hydrogen chloride as required under 40 CFR 60.8.
- (7) Following the date that the initial performance test for hydrogen chloride is completed or is required to be completed under 40 CFR 60.8, the owner or operator of an affected facility shall conduct a performance test for hydrogen chloride emissions on an annual basis (no more than 12 calendar months following the previous performance test).
- (8) [reserved]

[40 CFR 60.38b and 40 CFR 60.58b (f)]

#### Dioxin/Furan

- **B.60.** The procedures and test methods specified in paragraphs (1) through (9) shall be used to determine compliance with the limits for dioxin/furan emissions.
- (1) The EPA Reference Method 1 shall be used for determining the location and number of sampling points.
- (2) The EPA Reference Method 3, 3A, or 3B, or as an alternative ASME PTC-19-10-1981—Part 10, as applicable, shall be used for flue gas analysis.
- (3) The EPA Reference Method 23 shall be used for determining the dioxin/furan emission concentration.
  - (i) The minimum sample time shall be 4 hours per test run.
  - (ii) An oxygen (or carbon dioxide) measurement shall be obtained simultaneously with each Method 23 test run for dioxins/furans.
- (4) The owner or operator of an affected facility shall conduct an initial performance test for dioxin/furan emissions in accordance with paragraph (3), as required under 40 CFR 60.8.
- (5) Following the date that the initial performance test for dioxins/furans is completed or is required to be completed under 40 CFR 60.8, the owner or operator of an affected facility shall conduct performance tests for dioxin/furan emissions in accordance with paragraph (3), according to one of the schedules specified in paragraphs (i) through (iii).
  - (i) For affected facilities, performance tests shall be conducted on a calendar year basis (no less than 9 calendar months and no more than 15 calendar months following the previous performance test; and must complete five performance tests in each 5-year calendar period).
  - (ii) For the purpose of evaluating system performance to establish new operating parameter levels, testing new technology or control technologies, diagnostic testing, or related activities for the purpose of improving facility performance or advancing the state-of-the-art for controlling facility emissions, the owner or operator of an affected facility that qualifies for the performance testing schedule specified in paragraph (g)(5)(iii) of this section, may test one unit for dioxin/furan and apply the dioxin/furan operating parameters to similarly designed and equipped units on site by meeting the requirements specified in paragraphs (g)(5)(ii)(A) through (g)(5)(ii)(D) of this section.
    - (A) Follow the testing schedule established in paragraph (g)(5)(iii) of this section. For example, each year a different affected facility at the municipal waste combustor plant shall be tested, and the affected facilities at the plant shall be tested in sequence (e.g., unit 1, unit 2, unit 3, as applicable).
    - (B) Upon meeting the requirements in paragraph (g)(5)(iii) of this section for one affected facility, the owner or operator may elect to apply the average carbon mass feed rate and

- associated carbon injection system operating parameter levels for dioxin/furan as established in paragraph (m) of this section to similarly designed and equipped units on site.
- (C) Upon testing each subsequent unit in accordance with the testing schedule established in paragraph (g)(5)(iii) of this section, the dioxin/furan and mercury emissions of the subsequent unit shall not exceed the dioxin/furan and mercury emissions measured in the most recent test of that unit prior to the revised operating parameter levels.
- (D) The owner or operator of an affected facility that selects to follow the performance testing schedule specified in paragraph (g)(5)(iii) of this section and apply the carbon injection system operating parameters to similarly designed and equipped units on site shall follow the procedures specified in 40 CFR 60.59b(g)(4) for reporting.
- (iii) Where all performance tests over a 2-year period indicate that dioxin/furan emissions are less than or equal to 15 nanograms per dry standard cubic meter (total mass) for all affected facilities located within a municipal waste combustor plant, the owner or operator of the municipal waste combustor plant may elect to conduct annual performance tests for one affected facility (i.e., unit) per year at the municipal waste combustor plant. At a minimum, a performance test for dioxin/furan emissions shall be conducted on a calendar year basis (no less than 9 calendar months and no more than 15 months following the previous performance test; and must complete five performance tests in each 5-year calendar period) for one affected facility at the municipal waste combustor plant. Each year a different affected facility at the municipal waste combustor plant shall be tested, and the affected facilities at the plant shall be tested in sequence ( e.g., unit 1, unit 2, unit 3, as applicable). If each annual performance test continues to indicate a dioxin/furan emission level less than or equal to 15 nanograms per dry standard cubic meter (total mass), the owner or operator may continue conducting a performance test on only one affected facility per calendar year. If any annual performance test indicates either a dioxin/furan emission level greater than 15 nanograms per dry standard cubic meter (total mass), performance tests shall thereafter be conducted annually on all affected facilities at the plant until and unless all annual performance tests for all affected facilities at the plant over a 2-year period indicate a dioxin/furan emission level less than or equal to 15 nanograms per dry standard cubic meter (total mass). {Permitting Note: The 7 is changed to 15 ng/dscm per Rule 62-204.800(9)(b)7.b., F.A.C.}
- (6) The owner or operator of an affected facility that selects to follow the performance testing schedule specified in paragraph (5)(iii) shall follow the procedures specified in 40 CFR 60 60.59b(g)(4) for reporting the selection of this schedule.
- (7) The owner or operator of an affected facility where activated carbon is used to comply with the dioxin/furan emission limits specified in 40 CFR 60.52b(c) or the dioxin/furan emission level specified in paragraph (5)(iii) shall follow the procedures specified in 40 CFR 60.58b(m) for measuring and calculating the carbon usage rate.
- (8) The owner or operator of an affected facility may request that compliance with the dioxin/furan emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in 40 CFR 60.58b(b)(6).
- (9) As specified under 40 CFR 60.8, all performance tests shall consist of three test runs. The average of the dioxin/furan emission concentrations from the three test runs is used to determine compliance. [40 CFR 60.38b and 40 CFR 60.58b (g) and Rule 62-204.800(9)(b)7.b., F.A.C.]

#### Nitrogen Oxides

**B.61.** The procedures and test methods specified in paragraphs (1) through (12) shall be used to determine compliance with the nitrogen oxides emission limit for affected facilities under 40 CFR 60.52b (d).

- (1) The EPA Reference Method 19, section 4.1, shall be used for determining the daily arithmetic average nitrogen oxides emission concentration.
- (2) The owner or operator of an affected facility may request that compliance with the nitrogen oxides emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in 40 CFR 60.58b (b)(6).
- (3) The owner or operator of an affected facility subject to the nitrogen oxides limit shall conduct an initial performance test for nitrogen oxides as required under 40 CFR 60.8. Compliance with the nitrogen oxides emission limit shall be determined by using the continuous emission monitoring system specified in paragraph (4) for measuring nitrogen oxides and calculating a 24-hour daily arithmetic average emission concentration using EPA Reference Method 19, section 4.1.
- (4) The owner or operator of an affected facility subject to the nitrogen oxides emission shall install, calibrate, maintain, and operate a continuous emission monitoring system for measuring nitrogen oxides discharged to the atmosphere, and record the output of the system.
- (5) Following the date that the initial performance test for nitrogen oxides is completed or is required to be completed under 40 CFR 60.8, compliance with the emission limit for nitrogen oxides shall be determined based on the 24-hour daily arithmetic average of the hourly emission concentrations using continuous emission monitoring system outlet data.
- (6) At a minimum, valid continuous emission monitoring system hourly averages shall be obtained as specified in paragraphs (i) and (ii) for 90 percent of the operating hours per calendar quarter and for 95 percent of the operating hours per calendar year that the affected facility is combusting municipal solid waste.
  - (i) At least 2 data points per hour shall be used to calculate each 1-hour arithmetic average.
  - (ii) Each nitrogen oxides 1-hour arithmetic average shall be corrected to 7 percent oxygen on an hourly basis using the 1-hour arithmetic average of the oxygen (or carbon dioxide) continuous emission monitoring system data.
- (7) The 1-hour arithmetic averages required by paragraph (5) shall be expressed in parts per million by volume (dry basis) and used to calculate the 24-hour daily arithmetic average concentrations. The 1-hour arithmetic averages shall be calculated using the data points required under 40 CFR 60.13(e)(2).
- (8) All valid continuous emission monitoring system data must be used in calculating emission averages even if the minimum continuous emission monitoring system data requirements of paragraph (6) are not met.
- (9) The procedures under 40 CFR 60.13 shall be followed for installation, evaluation, and operation of the continuous emission monitoring system. The initial performance evaluation shall be completed no later than 180 days after the date of initial startup of the municipal waste combustor unit, as specified under 40 CFR 60.8.
- (10) The owner or operator of an affected facility shall operate the continuous emission monitoring system according to Performance Specification 2 in Appendix B of 40 CFR 60 and shall follow the procedures and methods specified in paragraphs(i) and (ii).
  - (i) During each relative accuracy test run of the continuous emission monitoring system required by Performance Specification 2 of Appendix B of 40 CFR 60, nitrogen oxides and oxygen (or carbon dioxide) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and the test methods specified in paragraphs(A) and (B).
    - (A) For nitrogen oxides, EPA Reference Method 7, 7A, 7C, 7D, or 7E shall be used.
    - (B) For oxygen (or carbon dioxide), EPA Reference Method 3, 3A, or 3B, or as an alternative ASME PTC-19-10-1981—Part 10, as applicable shall be used.
  - (ii) The span value of the continuous emission monitoring system shall be 125 percent of the maximum estimated hourly potential nitrogen oxide emissions of the municipal waste combustor unit.

- (11) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with procedure 1 in Appendix F of 40 CFR 60.
- (12) When nitrogen oxides continuous emissions data are not obtained because of continuous emission monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained using other monitoring systems as approved by the Administrator or EPA Reference Method 19 to provide, as necessary, valid emissions data for a minimum of 90 percent of the hours per calendar quarter and 95 percent of the hours per calendar year the unit is operated and combusting municipal solid waste.

[40 CFR 60.38b and 40 CFR 60.58b (h)]

#### Carbon Monoxide

**B.62.** See specific condition **B.20.** [Rule 62-213.440, F.A.C.]

#### **Fugitive Ash**

- **B.63.** The procedures specified in paragraphs (1) through (4) shall be used for determining compliance with the fugitive ash emission limit under 40 CFR 60.55b.
- (1) The EPA Reference Method 22 shall be used for determining compliance with the fugitive ash emission limit under 40 CFR 60.55b. The minimum observation time shall be a series of three 1-hour observations. The observation period shall include times when the facility is transferring ash from the municipal waste combustor unit to the area where ash is stored or loaded into containers or trucks.
- (2) The average duration of visible emissions per hour shall be calculated from the three 1-hour observations. The average shall be used to determine compliance with 40 CFR 60.55b.
- (3) The owner or operator of an affected facility shall conduct an initial performance test for fugitive ash emissions as required under 40 CFR 60.8.
- (4) Following the date that the initial performance test for fugitive ash emissions is completed or is required to be completed under 40 CFR 60.8 for an affected facility, the owner or operator shall conduct a performance test for fugitive ash emissions on an annual basis (no more than 12 calendar months following the previous performance test).

[40 CFR 60.38b and 40 CFR 60.58b (k)]

#### **Beryllium**

**B.64.** The test method for beryllium emissions shall be EPA Method 29, adopted and incorporated by reference in Rule 62-204.800, F.A.C. One sample shall constitute one test run. [PSD-FL-105(B)]

#### **Total Fluoride**

**B.65.** The test method for total fluoride emissions shall be EPA Method 13A, 13B, or modified Method 5 for fluorides, adopted and incorporated by reference in Rule 62-204.800, F.A.C. One sample shall constitute one test run.

[PSD-FL-105(B); and, PSD amendment 0112119-001-AC]

- **B.66.** Reserved
- **B.67.** Reserved

**B.68.** Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

[Rule 62-297.310(1), F.A.C.]

**B.69.** Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rules 62-297.310(2) & (2)(b), F.A.C.]

**B.70.** Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

#### **B.71.** Applicable Test Procedures.

#### (a) Required Sampling Time.

- 1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
- 2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
  - a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.
  - b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test

Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.

- c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- (b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet. (See specific conditions **B.53**. and **B.54**.)
- (c) <u>Required Flow Rate Range</u>. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) <u>Calibration of Sampling Equipment</u>. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, attached as part of this permit.
- (e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube. [Rule 62-297.310(4), F.A.C.]
- **B.72.** Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit.

[Rule 62-297.310(6), F.A.C.]

- **B.73.** Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.
- (a) General Compliance Testing.
  - 3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
    - a. Did not operate; or
    - b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours.
  - 4. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
    - a. Visible emissions, if there is an applicable standard;
    - b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
    - c. Each NESHAP pollutant, if there is an applicable emission standard.
  - 5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.

- 9. The owner or operator shall notify the DEP Southeast District Office, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
- (b) <u>Special Compliance Tests</u>. When the DEP Southeast District Office, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the DEP Southeast District Office.
- (c) <u>Waiver of Compliance Test Requirements</u>. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.; and, SIP approved]

# Compliance With Standards and Maintenance Requirements

- **B.74.** Compliance with standards in 40 CFR 60, other than opacity standards, shall be determined by performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard. [40 CFR 60.11(a)]
- **B.75.** Compliance with opacity standards in 40 CFR 60 shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60, any alternative method that is approved by the Administrator, or as provided in 40 CFR 60.11(e)(5). [40 CFR 60.11(b)]
- **B.76.** The owner or operator of an affected facility subject to an opacity standard may submit, for compliance purposes, continuous opacity monitoring system (COMS) data results produced during any performance test required under 40 CFR 60.8 in lieu of EPA Method 9 observation data. If an owner or operator elects to submit COMS data for compliance with the opacity standard, he or she shall notify the Administrator of that decision, in writing, at least 30 days before any performance test required under 40 CFR 60.8 is conducted. Once the owner or operator of an affected facility has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests required under 40 CFR 60.8 until the owner or operator notifies the Administrator, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a performance test required under 40 CFR 60.8 using COMS data, the minimum total time of COMS data collection shall be averages of all 6-minute continuous periods within the duration of the mass emission performance test. Results of the COMS opacity determinations shall be submitted along with the results of the performance test required under 60.8. The owner or operator of an affected facility using a COMS for compliance purposes is responsible for demonstrating that the COMS meets the requirements specified in 40 CFR 60.13(c), that the COMS has been properly maintained and operated, and that the resulting data have not been altered in any way. If COMS data results are submitted for compliance with the opacity standard for

a period of time during which EPA Method 9 data indicates noncompliance, the EPA Method 9 data will be used to determine opacity compliance.

[40 CFR 60.11(e)(5)]

- **B.77.** Compliance with the emission limit in lb/mmBtu (see specific condition **B.39.**) shall be determined by calculating an EPA F-Factor using 40 CFR 60 Appendix A, Method 19. [Rule 62-213.440, F.A.C.]
- **B.78.** Continuous compliance with the emission limits for opacity, carbon monoxide (CO), nitrogen oxides (NO<sub>X</sub>), sulfur dioxide (SO<sub>2</sub>) and the operational parameters steam production (lb/hr) or feedwater flow rate (lb/hr) and fabric filter inlet flue gas temperature shall be demonstrated by continuous emission monitoring systems (CEMS) operated in accordance with 40 CFR 60.58b and 60.59b(f). SO<sub>2</sub> monitors shall be located both upstream of the scrubber and downstream of the baghouse, in order to calculate percent removal efficiency. (See specific condition **B.57.**) [PSD-FL-105(B)]
- **B.79.** Each MWC unit is required to continuously monitor and record the flue gas temperature at the inlet to the PM control device in accordance with the requirements at 40 CFR 60.58b(i)(7). The PM control device inlet temperature and the steam (or feedwater) flow for each unit during the stack test shall be continuously monitored and recorded in accordance with 40 CFR 60, Subpart Cb. Higher temperatures are allowed for testing purposes, as specified at 40 CFR 60.53b(c). [PSD-FL-105(B)]

# **Monitoring Requirements**

**B.80.** For the purposes of 40 CFR 60.13, all continuous monitoring systems (CMS) required under applicable subparts shall be subject to the provisions of 40 CFR 60.13 upon promulgation of performance specifications for continuous monitoring systems under Appendix B of 40 CFR 60 and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, Appendix F of 40 CFR 60, unless otherwise specified in an applicable subpart or by the Administrator. Appendix F is applicable December 4, 1987.

[40 CFR 60.13(a)]

- **B.81.** If the owner or operator of an affected facility elects to submit continuous opacity monitoring system (COMS) data for compliance with the opacity standard as provided under 40 CFR 60.11(e)(5), he shall conduct a performance evaluation of the COMS as specified in Performance Specification 1, Appendix B, of 40 CFR 60 before the performance test required under 40 CFR 60.8 is conducted. Otherwise, the owner or operator of an affected facility shall conduct a performance evaluation of the COMS or continuous emission monitoring system (CEMS) during any performance test required under 40 CFR 60.8 or within 30 days thereafter in accordance with the applicable performance specification in Appendix B of 40 CFR 60. The owner or operator of an affected facility shall conduct COMS or CEMS performance evaluations at such other times as may be required by the Administrator under section 114 of the Act.
- (1) The owner or operator of an affected facility using a COMS to determine opacity compliance during any performance test required under 40 CFR 60.8, and as described in 40 CFR 60.11(e)(5), shall furnish the Administrator two or, upon request, more copies of a written report of the results of the COMS performance evaluation described in 40 CFR 60.13(c) at least 10 days before the performance test required under 40 CFR 60.8 is conducted.

  [40 CFR 60.13(c)(1)]
- **B.82.** (1) Owners and operators of all continuous emission monitoring systems (CEMS) installed in accordance with the provisions of this part shall check the zero (or low-level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span shall, as a minimum, be adjusted whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications in Appendix B. The system must allow the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified, whenever specified. For continuous monitoring systems measuring opacity of emissions, the optical surfaces exposed to the effluent gases shall be cleaned prior to performing the zero and span drift adjustments except that for systems using automatic zero adjustments. The optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.
- (2) Unless otherwise approved by the Administrator, the following procedures shall be followed for continuous monitoring systems measuring opacity of emissions. Minimum procedures shall include a method for producing a simulated zero opacity condition and an upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. Such procedures shall provide a system check of the analyzer internal optical surfaces and all electronic circuitry including the lamp and photo detector assembly.

  [40 CFR 60.13(d)(1) and (2)]
- **B.83.** Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d), all continuous monitoring systems (CMS) shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

- (1) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.
- (2) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

[40 CFR 60.13(e)(1) and (2)]

- **B.84.** All continuous monitoring systems (CMS) or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of Appendix B of 40 CFR 60 shall be used. [40 CFR 60.13(f)]
- **B.85.** When the effluents from a single affected facility or two or more affected facilities subject to the same emission standards are combined before being released to the atmosphere, the owner or operator may install applicable continuous monitoring systems (CMS) on each effluent or on the combined effluent. When the affected facilities are not subject to the same emission standards, separate continuous monitoring systems shall be installed on each effluent. When the effluent from one affected facility is released to the atmosphere through more than one point, the owner or operator shall install an applicable continuous monitoring system on each separate effluent unless the installation of fewer systems is approved by the Administrator. When more than one continuous monitoring system is used to measure the emissions from one affected facility (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required from each continuous monitoring system.

  [40 CFR 60.13(g)]
- **B.86.** Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to 6-minute averages and for continuous monitoring systems other than opacity to 1-hour averages for time periods as defined in 40 CFR 60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period. For continuous monitoring systems other than opacity, 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non reduced form (e.g., ppm pollutant and percent O<sub>2</sub> or ng/J of pollutant). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit (e.g., rounded to the nearest 1 percent opacity).

  [40 CFR 60.13(h)]

#### **B.87.** Determination of Process Variables.

- (a) <u>Required Equipment</u>. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- (b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be

calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value. [Rule 62-297.310(5), F.A.C.]

### **CEM for Oxygen or Carbon Dioxide**

- **B.88.** The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous emission monitoring system and record the output of the system for measuring the oxygen or carbon dioxide content of the flue gas at each location where carbon monoxide, sulfur dioxide, or nitrogen oxides emissions are monitored and record the output of the system and shall comply with the test procedures and test methods specified in paragraphs (1) through (8).
- (1) The span value of the oxygen (or carbon dioxide) monitor shall be 25 percent oxygen (or carbon dioxide).
- (2) The monitor shall be installed, evaluated, and operated in accordance with 40 CFR 60.13.
- (3) The initial performance evaluation shall be completed no later than 180 days after the date of initial startup of the affected facility, as specified under 40 CFR 60.8.
- (4) The monitor shall conform to Performance Specification 3 in Appendix B of 40 CFR 60, except for section 2.3 (relative accuracy requirement).
- (5) The quality assurance procedures of Appendix F of 40 CFR 60, except for section 5.1.1 (relative accuracy test audit) shall apply to the monitor.
- (6) If carbon dioxide is selected for use in diluent corrections, the relationship between oxygen and carbon dioxide levels shall be established during the initial performance test according to the procedures and methods specified in paragraphs(i) through(iv). This relationship may be reestablished during performance compliance tests.
  - (i) The fuel factor equation in Method 3B shall be used to determine the relationship between oxygen and carbon dioxide at a sampling location. Method 3, 3A, or 3B, or as an alternative ASME PTC-19-10-1981—Part 10, as applicable, shall be used to determine the oxygen concentration at the same location as the carbon dioxide monitor.
  - (ii) Samples shall be taken for at least 30 minutes in each hour.
  - (iii) Each sample shall represent a 1-hour average.
  - (iv) A minimum of three runs shall be performed.
- (7) The relationship between carbon dioxide and oxygen concentrations that is established in accordance with paragraph (6) shall be submitted to the EPA Administrator as part of the initial performance test report and, if applicable, as part of the annual test report if the relationship is reestablished during the annual performance test.
- (8) During a loss of boiler water level control or loss of combustion air control malfunction period as specified in paragraph (a)(1)(iii) of this section, a diluent cap of 14 percent for oxygen or 5 percent for carbon dioxide may be used in the emissions calculations for sulfur dioxide and nitrogen oxides. [40 CFR 60.38b and 40 CFR 60.58b (b)]

# Recordkeeping and Reporting Requirements

- **B.89.** The owner or operator subject to the provisions of 40 CFR 60 shall furnish the Administrator written notification as follows:
- (4) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.

  [40 CFR 60.7(a)(4)]
- **B.90.** The owner or operator subject to the provisions of 40 CFR 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or, any periods during which a continuous monitoring system or monitoring device is inoperative.

  [40 CFR 60.7(b)]
- **B.91.** Excess Emissions Report. An excess emissions report shall be submitted to EPA for every calendar quarter. The report shall include the following:
- (1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h) (see specific condition **B.86.**), any conversion factors used, and the date and time of commencement and completion of each period of excess emissions (40 CFR 60.7(c)(1)).
- (2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the furnace/boiler system. The nature and cause of any malfunction (if known) and the corrective action taken or preventative measures adopted shall also be reported (40 CFR 60.7(c)(2)).
- (3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks, and the nature of the system repairs or adjustments (40 CFR 60.7(c)(3)).
- (4) When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information shall be stated in the report (40 CFR 60.7(c)(4)).
- (5) Permittee shall maintain a file of all measurements, including continuous monitoring systems performance evaluations; all continuous monitoring systems or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this permit recorded in a permanent form suitable for inspection (40 CFR 60.7(d)).
- (6) Excess emissions shall be defined as any applicable period during which the average emissions of CO,  $NO_X$ , and/or  $SO_2$  as measured by the continuous monitoring system, exceeds the CO,  $NO_X$ , and/or  $SO_2$  maximum emission limit (in ppm) or percent removal efficiency, as applicable, set for each pollutant in specific conditions **B.31.**, **B.35.** and **B.36.** above.

[PSD-FL-105(B); Rule 62-213.440, F.A.C.]

- **B.92.** The summary report form shall contain the information and be in the format shown in Figure 1 (attached) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.
- (1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and

the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.

(2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

{See attached Figure 1: Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance}

[40 CFR 60.7(d)(1) and (2)]

- **B.93.** (1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:
  - (i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;
  - (ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and
  - (iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).
- (2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.
- (3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) and (e)(2).

[40 CFR 60.7(e)(1), (2), and (3)]

**B.94.** Any owner or operator subject to the provisions of 40 CFR 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form

suitable for inspection. The file shall be retained for at least 5 (five) years following the date of such measurements, maintenance, reports, and records.

[40 CFR 60.7(f); Rule 62-213.440(1)(b)2.b., F.A.C.]

- **B.95.** Notification of Construction or Reconstruction. The owner or operator of an affected facility with a capacity to combust greater than 250 tons per day shall submit a notification of construction, which includes the information specified in paragraphs (1) through (4).
- (1) Intent to construct.
- (2) Planned initial startup date.
- (3) The types of fuels that the owner or operator plans to combust in the affected facility.
- (4) The municipal waste combustor unit capacity and supporting capacity calculations prepared in accordance with 40 CFR 60.58b (j).

[40 CFR 60.39b and 40 CFR 60.59b (b)]

- **B.96.** The owner or operator of an affected facility subject to the standards under 40 CFR. 60.53b, 60.54b, and 60.55b shall maintain records of the information specified in paragraphs (1) through (15), as applicable, for each affected facility for a period of at least 5 years.
- (1) The calendar date of each record.
- (2) The emission concentrations and parameters measured using continuous monitoring systems as specified under paragraphs (i) and (ii).
  - (i) The measurements specified in paragraphs (A) through (D) shall be recorded and be available for submittal to the Administrator or review onsite by an EPA, State or County inspector.
    - (A) All 6-minute average opacity levels as specified under 40 CFR 60.58b (c).
    - (B) All 1-hour average sulfur dioxide emission concentrations as specified under 40 CFR 60.58b (e).
    - (C) All 1-hour average nitrogen oxides emission concentrations as specified under 40 CFR 60.58b (h).
    - (D) All 1-hour average carbon monoxide emission concentrations, municipal waste combustor unit load measurements, and particulate matter control device inlet temperatures as specified under 40 CFR 60.58b (i).
  - (ii) The average concentrations and percent reductions, as applicable, specified in paragraphs (2)(ii)(A) through (2)(ii)(D) shall be computed and recorded, and shall be available for submittal to the Administrator or review on-site by an EPA, State or County inspector.
    - (A) All 24-hour daily geometric average sulfur dioxide emission concentrations and all 24-hour daily geometric average percent reductions in sulfur dioxide emissions as specified under 40 CFR 60.58b(e).
    - (B) All 24-hour daily arithmetic average nitrogen oxides emission concentrations as specified under 40 CFR 60.58b (h).
    - (C) All 4-hour block or 24-hour daily arithmetic average carbon monoxide emission concentrations, as applicable, as specified under 40 CFR 60.58b (i).
    - (D) All 4-hour block arithmetic average municipal waste combustor unit load levels and particulate matter control device inlet temperatures as specified under 40 CFR 60.58b (i).
- (3) Identification of the calendar dates when any of the average emission concentrations, percent reductions, or operating parameters recorded under paragraphs (2)(ii)(A) through (2)(ii)(D), or the opacity levels recorded under paragraph (2)(i)(A) are above the applicable limits, with reasons for such exceedances and a description of corrective actions taken.
- (5) [Reserved]

- (6) Identification of the calendar dates and times (hours) for which valid hourly data specified in paragraphs (i) through (v) have not been obtained including reasons for not obtaining sufficient data and a description of corrective actions taken.
  - (i) Sulfur dioxide emissions data;
  - (ii) Nitrogen oxides emissions data;
  - (iii) Carbon monoxide emissions data;
  - (iv) Municipal waste combustor unit load data; and
  - (v) Particulate matter control device temperature data.
- (7) Identification of each occurrence that sulfur dioxide emissions data, nitrogen oxides emissions data (large municipal waste combustors only), or operational data (i.e., carbon monoxide emissions, unit load, and particulate matter control device temperature) have been excluded from the calculation of average emission concentrations or parameters, and the reasons for excluding the data.
- (8) The results of daily drift tests and quarterly accuracy determinations for sulfur dioxide, nitrogen oxides, and carbon monoxide continuous emission monitoring systems, as required under Appendix F of 40 CFR 60, procedure 1.
- (9) The test reports documenting the results of the initial performance test and all annual performance tests listed in paragraphs (i) and (ii) shall be recorded along with supporting calculations.
  - (i) The results of the initial performance test and all annual performance tests conducted to determine compliance with the particulate matter, opacity, cadmium, lead, mercury, dioxins/furans, hydrogen chloride, and fugitive ash emission limits.
  - (ii) For the initial dioxin/furan performance test and all subsequent dioxin/furan performance tests recorded under paragraph (9)(i), the maximum demonstrated municipal waste combustor unit load and maximum demonstrated particulate matter control device temperature (for each particulate matter control device).
- (10) [Reserved]
- (11) [Reserved]
- (12) The records specified in paragraphs (i) through (v).
  - (i) Records showing the names of the municipal waste combustor chief facility operator, shift supervisors, and control room operators who have been provisionally certified by the American Society of Mechanical Engineers or an equivalent State-approved certification program as required by 40 CFR 60.54b(a) including the dates of initial and renewal certifications and documentation of current certification.
  - (ii) Records showing the names of the municipal waste combustor chief facility operator, shift supervisors, and control room operators who have been fully certified by the American Society of Mechanical Engineers or an equivalent State-approved certification program as required by 40 CFR 60.54b(b) including the dates of initial and renewal certifications and documentation of current certification.
  - (iii)Records showing the names of the municipal waste combustor chief facility operator, shift supervisors, and control room operators who have completed the EPA municipal waste combustor operator training course or a State-approved equivalent course as required by 40 CFR 60.54b(d) including documentation of training completion.
  - (iv) Records of when a certified operator is temporarily off site. Include two main items:
  - (A) If the certified chief facility operator and certified shift supervisor are off site for more than 12 hours, but for 2 weeks or less, and no other certified operator is on site, record the dates that the certified chief facility operator and certified shift supervisor were off site.
  - (B) When all certified chief facility operators and certified shift supervisors are off site for more than 2 weeks and no other certified operator is on site, keep records of four items:
  - (1) Time of day that all certified persons are off site.
  - (2) The conditions that cause those people to be off site.

- (3) The corrective actions taken by the owner or operator of the affected facility to ensure a certified chief facility operator or certified shift supervisor is on site as soon as practicable.
- (4) Copies of the written reports submitted every 4 weeks that summarize the actions taken by the owner or operator of the affected facility to ensure that a certified chief facility operator or certified shift supervisor will be on site as soon as practicable.
- (13) Records showing the names of persons who have completed a review of the operating manual as required by 40 CFR 60.54b (f) including the date of the initial review and subsequent annual reviews.
- (14) For affected facilities that apply activated carbon, identification of the calendar dates when the average carbon mass feed rates recorded under paragraph (d)(4)(iii) of this section were less than either of the hourly carbon feed rates estimated during performance tests for mercury emissions and recorded under paragraphs (d)(4)(i) and (d)(4)(ii) of this section, respectively, with reasons for such feed rates and a description of corrective actions taken.

[40 CFR 60.39b and 40 CFR 60.59b (d)]

- **B.97.** The owner or operator of an affected facility shall submit the information specified in paragraphs (1) through (6) in the initial performance test report.
- (1) The initial performance test data as recorded under 40 CFR 60.59b (d)(2)(ii)(A) through (d)(2)(ii)(D) for the initial performance test for sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor unit load level, and particulate matter control device inlet temperature.
- (2) The test report documenting the initial performance test recorded under 40 CFR 60.59 b(d)(9) for particulate matter, opacity, cadmium, lead, mercury, dioxins/furans, hydrogen chloride, and fugitive ash emissions.
- (3) The performance evaluation of the continuous emission monitoring system using the applicable performance specifications in Appendix B of this part.
- (4) The maximum demonstrated municipal waste combustor unit load and maximum demonstrated particulate matter control device inlet temperature(s) established during the initial dioxin/furan performance test as recorded under 40 CFR 60.59b (d)(9). [40 CFR 60.39b and 40 CFR 60.59b (f)]
- **B.98.** Following the first year of municipal combustor operation, the owner or operator of an affected facility shall submit an annual report including the information specified in paragraphs (1) through (4), as applicable, no later than February 1 of each year following the calendar year in which the data were collected (once the unit is subject to permitting requirements under Title V of the Act, the owner or operator of an affected facility must submit these reports semiannually).
- (1) A summary of data collected for all pollutants and parameters regulated under this subpart, which includes the information specified in paragraphs (i) through (v).
  - (i) A list of the particulate matter, opacity, cadmium, lead, mercury, dioxins/furans, hydrogen chloride, and fugitive ash emission levels achieved during the performance tests recorded under 40 CFR 60.59b (d)(9).
  - (ii) A list of the highest emission level recorded for sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor unit load level, and particulate matter control device inlet temperature based on the data recorded under 40 CFR 60.59b(d)(2)(ii)(A) through (d)(2)(ii)(D).
  - (iii) List the highest opacity level measured, based on the data recorded under 40 CFR 60.59b (d)(2)(i)(A).
  - (iv) Periods when valid data were not obtained as described in paragraphs (g)(1)(iv)(A) of this section.
    - (A) The total number of hours per calendar quarter and hours per calendar year that valid data for sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor unit load, or

- particulate matter control device temperature data were not obtained based on the data recorded under paragraph (d)(6) of this section.
- (v) Periods when valid data were excluded from the calculation of average emission concentrations or parameters as described in paragraphs (g)(1)(v)(A) of this section.
  - (A)The total number of hours that data for sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor unit load, and particulate matter control device temperature were excluded from the calculation of average emission concentrations or parameters based on the data recorded under 40 CFR 60.59b (d)(7).
- (2) The summary of data reported under paragraph (1) shall also provide the types of data specified in paragraphs (1)(i) through (1)(vi) for the calendar year preceding the year being reported, in order to provide the Administrator with a summary of the performance of the affected facility over a 2-year period.
- (3) The summary of data including the information specified in paragraphs (1) and (2) shall highlight any emission or parameter levels that did not achieve the emission or parameter limits specified under this subpart.
- (4) A notification of intent to begin the reduced dioxin/furan performance testing schedule specified in 40 CFR 60.58b (g)(5)(iii) during the following calendar year and notification of intent to apply the average carbon mass feed rate and associated carbon injection system operating parameter levels as established in §60.58b (m) to similarly designed and equipped units on site.
- (5) Documentation of periods when all certified chief facility operators and certified shift supervisors are off site for more than 12 hours.

[40 CFR 60.39b and 40 CFR 60.59b (g)]

- **B.99.** The owner or operator of an affected facility shall submit a semiannual report that includes the information specified in paragraphs (1) through (5) for any recorded pollutant or parameter that does not comply with the pollutant or parameter limit specified under this subpart, according to the schedule specified under paragraph (6).
- (1) The semiannual report shall include information recorded under 40 CFR 60.59b(d)(3) for sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor unit load level, particulate matter control device inlet temperature, and opacity.
- (2) For each date recorded as required by 40 CFR 60.59b(d)(3) and reported as required by paragraph (1), the semiannual report shall include the sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor unit load level, particulate matter control device inlet temperature, or opacity data, as applicable, recorded under 40 CFR 60.59b(d)(2)(ii)(A) through (d)(2)(ii)(D) and (d)(2)(i)(A), as applicable.
- (3) If the test reports recorded under 40 CFR 56.59b(d)(9) document any particulate matter, opacity, cadmium, lead, mercury, dioxins/furans, hydrogen chloride, and fugitive ash emission levels that were above the applicable pollutant limits, the semiannual report shall include a copy of the test report documenting the emission levels and the corrective actions taken.
- (4) The semiannual report shall include the information recorded under 40 CFR 60.59b(d)(15) for the carbon injection system operating parameter(s) that are the primary indicator(s) of carbon mass feed rate.
- (5) For each operating date reported as required by paragraph (4), the semiannual report shall include the carbon feed rate data recorded under 40 CFR 60.59b (d)(4)(iii).
- (6) Semiannual reports required by this condition shall be submitted according to the schedule specified in paragraphs (i) and (ii).
  - (i) If the data reported in accordance with paragraphs (1) through (5) were collected during the first calendar half, then the report shall be submitted by August 1 following the first calendar half.

(ii) If the data reported in accordance with paragraphs (1) through (5) were collected during the second calendar half, then the report shall be submitted by February 1 following the second calendar half.

[40 CFR 60.39b and 40 CFR 60.59b (h)]

- **B.100.** All reports specified under 40 CFR 60.59b(a), (b), (c), (f), (g), (h), and (i) shall be submitted as a paper copy, postmarked on or before the submittal dates specified under these paragraphs, and maintained onsite as a paper copy for a period of 5 years.

  [40 CFR 60.39b and 40 CFR 60.59b (j)]
- **B.101.** All records specified under 40 CFR 60.59b (d) and (e) shall be maintained onsite in either paper copy or computer-readable format, unless an alternative format is approved by the Administrator. [40 CFR 60.39b and 40 CFR 60.59b (k)]
- **B.102.** If the owner or operator of an affected facility would prefer a different annual or semiannual date for submitting the periodic reports required by 40 CFR 60.59b(g), (h) and (i), then the dates may be changed by mutual agreement between the owner or operator and the Administrator according to the procedures specified in 40 CFR 60.19(c) of subpart A of this part.

  [40 CFR 60.39b and 40 CFR 60.59b (l)]
- **B.103.** In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the DEP Southeast District Office in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the DEP Southeast District Office. Rule 62-210.700(6), F.A.C.]
- **B.104.** Submit to the Department a written report of emissions in excess of emission limiting standard for each calendar quarter. The nature and cause of the excess emissions shall be explained. This report does not relieve the owner or operator of the legal liability for violations. All recorded data shall be maintained on file by the Source for a period of five years. [Rule 62-213.440, F.A.C.]

#### B.105. CEM Data

- (1) Continuous emission monitoring (CEM) systems shall measure stack gas opacity and SO<sub>2</sub>, NO<sub>x</sub>, CO, and O<sub>2</sub> concentrations for each unit. Continuous monitors for SO<sub>2</sub> shall be installed after the acid gas control device for each unit. The systems shall meet the EPA Monitoring performance specifications of 40 CFR 60.13 and 40 CFR 60, Appendix B, during initial compliance testing and annually thereafter. Additionally CEMS shall meet the quality control requirements of 40 CFR 60, Appendix F.
- (2) CEM data recorded during periods of startup, shutdown, and malfunction shall be reported but excluded from compliance averaging periods for CO, NO<sub>X</sub>, and opacity.
- (3) CEM data recorded during periods of startup and shutdown shall be excluded from compliance averaging periods for SO<sub>2</sub>.
- (4) CEM data recorded during periods of acid gas control device malfunctions shall be excluded from compliance averaging periods for  $SO_2$  provided that the preceding thirty day period which ends on the last day of the malfunction period meets an average  $SO_2$  emission limit equal to the  $SO_2$  limit specified in condition . CEM data must be available for 90% of the operating time for this exemption to apply. A malfunction as used in this permit means any sudden and unavoidable failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner. Failures that are

caused entirely or in part by poor maintenance, careless operation, or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

[PSD-FL-105(B)]

**B.106.** Continuous emissions monitoring data shall be reported to the DEP Southeast District Office and EPA Region 4 on a quarterly basis in accordance with Rule 62-204.800(8), F.A.C. and 40 CFR 60.7 (see specific condition **B.91.**). [PSD-FL-105]

#### B.107. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the DEP Southeast District Office on the results of each such test.
- (b) The required test report shall be filed with the DEP Southeast District Office as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the DEP Southeast District Office to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
  - 1. The type, location, and designation of the emissions unit tested.
  - 2. The facility at which the emissions unit is located.
  - 3. The owner or operator of the emissions unit.
  - 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
  - 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
  - 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
  - 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
  - 8. The date, starting time and duration of each sampling run.
  - 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
  - 10. The number of points sampled and configuration and location of the sampling plane.
  - 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
  - 12. The type, manufacturer and configuration of the sampling equipment used.
  - 13. Data related to the required calibration of the test equipment.
  - 14. Data on the identification, processing and weights of all filters used.
  - 15. Data on the types and amounts of any chemical solutions used.
  - 16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
  - 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
  - 18. All measured and calculated data required to be determined by each applicable test procedure for each run
  - 19. The detailed calculations for one run that relate the collected data to the calculated emission rate.

- 20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
- 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rule 62-297.310(8), F.A.C.]

- **B.103.** Monthly records shall be maintained of the amount of natural gas and distillate fuel oil used by the auxiliary burners of each MSW unit, the equivalent heat input from natural gas and distillate fuel oil (calculated using the heat value for natural gas/fuel oil provided by the natural gas/fuel oil supplier), and the distillate fuel oil sulfur content (provided by fuel oil supplier). On an annual basis (no later than 30 days after the end of the calendar year), a demonstration must be performed based on the monthly records showing that the capacity factor for natural gas and distillate fuel oil for each unit was 10% or less. [Rule 62-213.440, F.A.C.]
- **B.109.** Charging Rate Monitoring. The daily solid waste charging rate and hours of operation shall be determined and recorded for each MWC unit. The daily charging rate shall be determined each month on an average daily basis for each MWC unit using the Facility's truck scale weight data, refuse pit inventory and MWC operating data for the preceding calendar month. Monthly truck scale weight records on the weight of solid waste received and processed at the Facility and refuse pit inventory shall be used to determine the amount of solid waste charged during the preceding calendar month on an average daily basis. The MWC load level measurements or other operating data shall be used to determine the number of operating hours per MWC unit for each day during the preceding calendar month. Rules 62-4.070 (3) and 62-213.440 F.A.C.: 40 CFR 60.53 (a) 58b(j): and, PSD-FL-105(B) and (D)]
- **B.110.** <u>Segregated Solid Waste Record Keeping</u>. The following records shall be made and kept to demonstrate compliance with the segregated non-MSW percentage limitations of specific condition **B.15**.
- (1) Each segregated load of non-MSW materials, that is subject to the percentage weight limitations of specific condition **B.15.**, which is received for processing shall be documented as to waste description and weight. The weight of all waste materials received for processing shall be measured using the facility truck scale and recorded.
- (2) Each day the total weight of segregated tires received shall be computed, and the daily total shall be added to the sum of the daily totals from the previous 29 days. The resultant 30 day total weight of tires shall be divided by the total weight of all waste materials received in the same 30 day period, and the resultant number shall be multiplied by 100 to express the ratio in percentage terms. The percentage computed shall be compared to the 3% limitation.
- (3) Each day the total weight of segregated non-MSW materials received that are subject to the 5% restriction shall be computed, and the daily total shall be added to the sum of the daily totals from the previous 29 days. The resultant 30 day total weight of segregated non-MSW materials shall be divided by the total weight of all waste materials received in the same 30 day period, and the resultant number shall be multiplied by 100 to express the ratio in percentage terms. The percentage computed shall be compared to the 5% limitation.

[PSD-FL-105(B)]

**B.111.** Acid Rain Part Application. For any unit which was a solid waste incinerator, burning less than 20 percent fossil fuel as described in 40 CFR 72.6(b)(7), adopted and incorporated by reference at Rule

March 1 of the year following the three calendar year period in which the incinerator consumed 20 percent or more fossil fuel on a British thermal unit (BTU) basis. [Rule 62-214.320(1)(h), F.A.C.]

#### **Mercury Control Requirements**

**B.112.** The permittee must operate the pollution control equipment at the facility under procedures designed to minimize emissions of mercury and maximize the removal of mercury from the flue gas of the facility. An activated carbon injection system for mercury control approved by the Department shall be operated continuously whenever MSW is burned at the facility. The emissions of mercury from the facility shall not exceed the standard established in the conditions of this permit. [Rule 62-210.650, F.A.C.]

B.113. Reserved

B.114. Reserved

### Miscellaneous Requirements

#### **Activated Carbon Injection**

- **B.115.** The owner or operator of an affected facility where activated carbon injection is used to comply with the mercury emission limit, or the dioxin/furan emission limits, or the dioxin/furan emission level specified in 40 CFR 60.58b(g)(5)(iii) shall follow the procedures specified in paragraphs (1) through (4).
- (1) During the performance tests for dioxins/furans and mercury, as applicable, the owner or operator shall estimate an average carbon mass feed rate based on carbon injection system operating parameters such as the screw feeder speed, hopper volume, hopper refill frequency, or other parameters appropriate to the feed system being employed, as specified in paragraphs (i) and (ii).
  - (i) An average carbon mass feed rate in kilograms per hour or pounds per hour shall be estimated during the initial performance test for mercury emissions and each subsequent performance test for mercury emissions.
  - (ii) An average carbon mass feed rate in kilograms per hour or pounds per hour shall be estimated during the initial performance test for dioxin/furan emissions and each subsequent performance test for dioxin/furan emissions. If a subsequent dioxin/furan performance test is being performed on only one affected facility at the MWC plant, as provided in paragraph (g)(5)(iii) of this section, the owner or operator may elect to apply the same estimated average carbon mass feed rate from the tested facility for all the similarly designed and operated affected facilities at the MWC plant.
- (2) During operation of the affected facility, the carbon injection system operating parameter(s) that are the primary indicator(s) of the carbon mass feed rate (e.g., screw feeder setting) shall be averaged over a block 8-hour period, and the 8-hour block average must equal or exceed the level(s) documented during the performance tests specified under paragraphs (m)(1)(i) and (m)(1)(ii) of this section, except as specified in paragraphs (m)(2)(i) and (m)(2)(ii) of this section.
  - (i) During the annual dioxin/furan or mercury performance test and the 2 weeks preceding the annual dioxin/furan or mercury performance test, no limit is applicable for average mass carbon feed rate if the provisions of paragraph (m)(2)(ii) of this section are met.
  - (ii) The limit for average mass carbon feed rate may be waived in accordance with permission granted by the Administrator for the purpose of evaluating system performance, testing new technology or control technologies, diagnostic testing, or related activities for the purpose of improving facility performance or advancing the state-of-the-art for controlling facility emissions.

- (3) The owner or operator of an affected facility shall estimate the total carbon usage of the plant (kilograms or pounds) for each calendar quarter by two independent methods, according to the procedures in paragraphs (i) and (ii).
  - (i) The weight of carbon delivered to the plant.
  - (ii) Estimate the average carbon mass feed rate in kilograms per hour or pounds per hour for each hour of operation for each affected facility based on the parameters specified under paragraph (1), and sum the results for all affected facilities at the plant for the total number of hours of operation during the calendar quarter.
- (4) Pneumatic injection pressure or other carbon injection system operational indicator shall be used to provide additional verification of proper carbon injection system operation. The operational indicator shall provide an instantaneous visual and/or audible alarm to alert the operator of a potential interruption in the carbon feed that would not normally be indicated by direct monitoring of carbon mass feed rate (e.g., continuous weight loss feeder) or monitoring of the carbon system operating parameter(s) that are the indicator(s) of carbon mass feed rate (e.g., screw feeder speed). The carbon injection system operational indicator used to provide additional verification of carbon injection system operation, including basis for selecting the indicator and operator response to the indicator alarm, shall be included in section (e)(6) of the site-specific operating manual required under §60.54b(e) of this subpart. [40 CFR 60.38b and 40 CFR 60.58b (m)]

### Subsection C. This section addresses the following emissions units.

E.U. ID	Brief Description:
No.	Material Handling Systems and Treatment Operations
-004	236 Ton Lime Silo with Baghouse
-005	Ash Handling System

Emissions unit -004 is a 236 ton capacity silo for storage of pebble lime. It is part of the spray dry absorber (SDA) system used for control of acid gases and sulfur dioxide emissions from the municipal waste combustion units. A supply truck pneumatically transfers pebble lime to the silo through a fill line. A Wheelabrator Air Pollution Control Jet III baghouse (Model No. 1016, BA-108) is used to control particulate matter emissions during silo filling. The baghouse parameters are as follows: stack height = 102 feet; exit dimensions (rectangular vent) =  $2.67 \times 1$  feet; exit temperature = 40-100 °F, actual volumetric flow rate = 1,500 acfm. The initial startup date of the silo was February, 1992.

Emissions unit -005 is the Ash Handling System. It receives fly ash and spray dryer reaction products (calcium sulfate, calcium chloride, calcium hydroxide, calcium fluoride). Particulate matter and visible emissions from the ash handling system are controlled by wet processing in an enclosed building. The initial startup date of the ash handling system was April 5, 1991.

#### Compliance Assurance Monitoring (CAM) Applicability

Specific Condition C.4. contains a particulate matter (PM) emission limit for the lime silo baghouse. The Applicant has provided justification demonstrating that the uncontrolled potential to emit PM is less than 100 tons per year for this emissions unit. Therefore, CAM does not apply.

{Permitting note(s): Emissions units -004 and -005 are minor sources that were permitted under AC06-187000, AC06-187001 (March 12, 1991) and AO06-208864 and are regulated under Rule 62-210.300, F.A.C., Permits Required. Emissions unit -005 is also permitted under 0112120-002-AC.}

{Note: Emissions unit -005 is also subject to requirements of PSD-FL-112(B) and 40 CFR 60, Subpart Cb. The requirements of 40 CFR 60, Subpart Cb are stated in Subsection **B.** and referenced in this subsection.}

The following specific conditions apply to the emissions unit(s) listed above:

# **Essential Potential to Emit (PTE) Parameters**

C.1. Permitted Capacity. The lime storage silo filling rate shall not exceed 50,000 lbs/hr of pebble lime. [Rule 62-4.070(3) F.A.C., and Permit No. 0112120-007-AC (revision of Permit No. AC 06-187000)]

## C.2. [Reserved]

**C.3.** Hours of Operation. Each unit may operate continuously, i.e., 8,760 hrs/yr. [Rules 62-213.440 and 62-210.200(PTE), F.A.C.; and, AC06-187000 & AC06-187001]

## **Emission Limitations and Standards**

{Permitting Note: The attached Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

- C.4. <u>Particulate Matter Emissions</u>. Particulate matter emissions from the lime silo baghouse shall not exceed 0.010 gr./dscf, nor 0.021 tons/year. [AC06-187000 & AC06-187001]
- C.5. <u>Visible Emissions</u>. Visible emissions from lime silo shall not exceed 5% opacity for this minor sources equipped with a baghouse (see specific condition C.15.) [Rule 62-297.620(4), F.A.C., and AC06-187000 & AC06-187001]
- C.6. Ash Handling Emission Points and Ash Processing Equipment. All conveyor loading points, transfer points and all ash processing equipment shall be properly enclosed. The facility shall be operated by personnel properly trained for the equipment herein. The Department shall have been notified in writing on how the facility staff would be staffed and trained.

  [AC06-187000 & AC06-187001]
- **C.7.** Fugitive Ash Emissions. See specific condition **B.37.** [Rule 62-213.440, F.A.C.]
- C.8. Ash Handling Facilities. The potential for dust generation by ash handling activities will be mitigated by quenching or conditioning the ash prior to loading in ash transport trucks. Ash handling facilities shall be enclosed (including the proposed future metal recovery area). Unprocessed refuse storage areas which must be open for operational purposes (e.g., tipping floor of the refuse bunker while trucks are entering and leaving) will be under negative air pressure. Residue from the grates, and grate siftings shall be discharged into the bottom ash quenching system, and ash from the combustor/boiler and fabric filter hoppers shall be discharged into the fly ash conditioning system during normal operations to minimize visible dust generation. The ash/residue in the Ash Handling Building shall remain sufficiently moist to minimize dust during storage and handling operations. Compliance with this condition shall be determined in accordance with specific condition B.37.

  [PSD-FL-105(B)]

# **Excess Emissions**

- C.9. Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.

  [Rule 62-210.700(1). F.A.C.]
- **C.10.** Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

# **Monitoring of Operations**

### C.11. Determination of Process Variables.

- (a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- (b) <u>Accuracy of Equipment</u>. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value. [Rule 62-297.310(5), F.A.C.]

## **Test Methods and Procedures**

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

C.12. Annual Tests Required. Annual visible emissions compliance tests shall be performed for each emissions unit.

[Rule 62-297.310(7), F.A.C.]

**C.13.** <u>Visible Emissions</u>. The test method for visible emissions shall be EPA Method 9, adopted and incorporated in Rule 62-204.800, F.A.C. The visible emissions tests for the lime silo shall be conducted for the entire truck unloading operation.

[AC06-187000 & AC06-187001]

- **C.14.** Particulate Matter Emissions. The test method for particulate matter emissions for all units shall be EPA Method 5, adopted and incorporated in Rule 62-204.800, F.A.C. [AC06-187000 & AC06-187001]
- C.15. <u>Particulate Matter Emissions</u>. In the case of an emissions unit which has the potential to emit less than 100 tons per year of particulate matter and is equipped with a baghouse, the Department waives any particulate matter compliance test requirements for such emissions unit specified in any otherwise applicable rule, and specifies an alternative standard of 5% opacity.

If the Department has reason to believe that the particulate weight emission standard applicable to such an emissions unit (see specific condition C.4.) is not being met, it shall require that compliance be demonstrated by the test method specified in the applicable rule (see specific condition C.4). [Rule 62-297.620(4), F.A.C]

**C.16.** Fugitive Ash. See specific condition **B.63.** [Rule 62-213.440, F.A.C.]

C.17. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process

variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

[Rule 62-297.310(1), F.A.C.]

- C.18. Operating Rate During Testing. Testing of emissions shall be conducted with each emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rules 62-297.310(2) & (2)(b), F.A.C.]
- **C.19.** Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

#### C.20. Applicable Test Procedures.

#### (a) Required Sampling Time.

- 1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
- 2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
  - a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.
  - b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.
  - c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- (b) <u>Minimum Sample Volume</u>. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.

- (c) <u>Required Flow Rate Range</u>. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) <u>Calibration of Sampling Equipment</u>. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, attached to this permit.
- (e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube. [Rule 62-297.310(4), F.A.C.]
- C.21. <u>Required Stack Sampling Facilities</u>. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit.

[Rule 62-297.310(6), F.A.C.]

- **C.22.** Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.
- (a) General Compliance Testing.
  - 3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
    - a. Did not operate; or
    - b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours.
  - 4. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
    - a. Visible emissions, if there is an applicable standard;
    - b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
    - c. Each NESHAP pollutant, if there is an applicable emission standard.
  - 5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.
  - 9. The owner or operator shall notify the DEP Southeast District Office, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
- (b) <u>Special Compliance Tests</u>. When the DEP Southeast District Office, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the DEP Southeast District Office.

(c) <u>Waiver of Compliance Test Requirements</u>. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.; and, SIP approved]

# **Recordkeeping and Reporting**

**C.23.** Fugitive Ash. See specific conditions **B.96.-B.99.** [Rule 62-213.440, F.A.C.]

C.24. Excess Emissions form Malfunctions. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the DEP Southeast District Office in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the DEP Southeast District Office.

[Rule 62-210.700(6), F.A.C.]

### C.25. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the DEP Southeast District Office on the results of each such test.
- (b) The required test report shall be filed with the DEP Southeast District Office as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the DEP Southeast District Office to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
  - 1. The type, location, and designation of the emissions unit tested.
  - 2. The facility at which the emissions unit is located.
  - 3. The owner or operator of the emissions unit.
  - 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
  - 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
  - 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
  - 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
  - 8. The date, starting time and duration of each sampling run.
  - 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
  - 10. The number of points sampled and configuration and location of the sampling plane.

- 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
- 12. The type, manufacturer and configuration of the sampling equipment used.
- 13. Data related to the required calibration of the test equipment.
- 14. Data on the identification, processing and weights of all filters used.
- 15. Data on the types and amounts of any chemical solutions used.
- 16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
- 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
- 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
- 19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
- 20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
- 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rules 62-213.440 and 62-297.310(8), F.A.C.]

C.26 Compliance Plan: The Professional Engineer's statement/certification on DEP Form No. 62-210.900(1) that the modification of the emissions unit was completed according to the permit application and associated documents must be submitted to the Department within 105 days after achieving the maximum production rate at which the emissions unit will be operated, but no later than 180 days after initial start-up of the emissions unit.

Operation of the emissions unit beyond the time frames established by the AC permit is allowed, provided the Department has received and verified a properly signed and sealed certification from the permittee's Professional Engineer stating that 1) the modification of the emissions unit was completed in accordance with the AC permit and 2) the emissions unit has been tested and compliance with the terms and conditions contained within the AC permit has properly been demonstrated. [Rules 62-212.400(7)(b), 62-213.440(2), and 62-213.420(1)(a)5., F.A.C.]

### Appendix I-1, List of Insignificant Emissions Units and/or Activities.

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, or that meet the criteria specified in Rule 62-210.300(3)(b)1., F.A.C., Generic Emissions Unit Exemption, are exempt from the permitting requirements of Chapters 62-210, 62-212 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rules 62-210.300(3)(a) and (b)1., F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rules 62-210.300(3)(a) and (b)1., F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

The below listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

#### Brief Description of Emissions Units and/or Activities:

- 1. Slaker A
- 2. Slaker B
- 3. 3 Chemical Feed Tanks (for Boiler Nos 1-3)
- 4. Diesel Fuel Oil Tank (Ash Unloading)
- 5. Monofill Diesel Tank
- 6. Non-Halogenated Solvent Degreaser
- 7. Monofill
- 8. Plant Roads
- 9. Storage silo for powdered Activated Carbon
- 10. Pneumatic Activated Carbon tank truck unloading
- 11. Activated Carbon rotary feeders, loss-in-weight feeders, hoppers, screw feeders and blower assemblies

# **Appendix H-1: Permit History**

Wheelabrator South Broward, Inc. Wheelabrator South Broward

**DRAFT Permit Revision No.:** 0112119-014-AV

Facility ID No.: 0112119

E.U. ID No.	Description	Permit No.	Effective Date	Expiration Date	Project Type <sup>1</sup>
-001; -002; and, -003	Municipal Solid Waste Combustors	PSD-FL-105 PA 85-21	05/15/87 05/22/97 09/28/99 06/03/86		Construction (new) Construction (mod.) Construction (mod.) Construction (new)
		0112119-001-AC	04/17/91 03/25/96	03/25/01	Construction (mod.) Construction (new)
-004	Lime Silo	AC06-187000 AO06-208864 0112119-007-AC	03/12/91 05/04/92	02/28/92 04/30/97	Construction (new) Operation Construction (mod.)
-005	Ash Handling System	AC06-187001 AO06-208864 0112119-003-AC	03/12/91 05/04/92 10/24/00	02/28/92 04/30/97 10/24/05	Construction (new) Operation Construction (mod.)
All	Municipal Solid Waste Facility	0112119-001-AC 0112119-002-AV 0112119-003-AC 0112119-004-AV 0112119-005-AV 0112119-006-AV 0112119-007-AC 0112119-008-AV	03/25/96 10/22/00 10/24/00 withdrawn 05/15/01 10/16/02	03/25/01 10/21/05 10/24/05 withdrawn 10/21/05 10/21/05	To allow alternate Nitrogen 7E Test Method Initial Title V To remove baghouse from ash handling system To install wet scrubbers To remove obsolete conditions in the Title V permit To allow 15 hours excess CO emissions To increase the pebble lime filling rate to 50,000 lb/hr To increase the pebble lime filling rate to 50,000 lb/hr
All	Municipal Solid Waste Facility	0112119-009-AV	2/23/2006	2/23/2011	Title V Renewal
All	Municipal Solid Waste Facility	0112119-010-AC	10/30/2008	06/30/2009	Installation of Carbon Activated System
A11	Municipal Solid Waste Facility	0112119-011-AV	5/18/2009	2/23/2011	Revision of 0112119-009-AV
A11	Municipal Solid Waste Facility	0112119-012-AC			Case by Case exemption
All	Municipal Solid Waste Facility	0112119-013-AC	Pending		Modification of Specific Conditions of PSD-FL-105B
All	Municipal Solid Waste Facility	0112119-014-AV	Pending	2/23/2011	Revision of Title V Permit 0112119-011-AV

<sup>1</sup> Project Type (select one): Title V: Initial, Revision, Renewal, or Admin. Correction; Construction (new or mod.); or, Extension (AC only). of State Oak our research that come has a

# Table 1-1, Summary of Air Pollutant Standards and Terms

Wheelabrator South Broward, Inc. South Broward Waste-to-Energy Facility Permit No. 0112119-014-AV Facility ID No. 0112119

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of the permit.

E. Ų.	Brief	Pollutant		Hours/	Allowable Emissions Equivalent Emissions		Regulatory	See Permit			
ID No	Description	Name	Fuel(s)	Year	Standard(s)	lbs./hour	TPY	lbs./hour	TPY	Citation(s)	Condition(s)
-001	UNIT 1 - Municipal Solid	VE	MSW	8760	10%			N/A	N/A	40 CFR 60.33b(a)(1)(iii)	B.26.
	Waste (MSW) Combustor	VE - Fugitive Ash		8760	5%			N/A	N/A	40 CFR 60.36b	B.37.
	(192,000 lbs/hr - steam)	PM <sup>1</sup>	MSW	8760	27 mg/dscm			7.85		40 CFR 60.33b(a)(1)(i)	B.25.
	(863 TPD - MSW)	PM <sub>10</sub> <sup>1</sup>	MSW	8760	27 mg/dscm			7.85		40 CFR 60.33b(a)(1)(i)	B.25.
	(323.6 MMBtu/hour-MSW)	CO1	MSW	8760	100 ppmdv			33.9	149	40 CFR 60.34b(a)	B.36.
		NO <sub>x</sub> 1	MSW	8760	205 ppmdv			114	499	40 CFR 60.33b(d)	B.35.
		SO <sub>2</sub> 1, 2	MSW	8760	29 ppmdv or 75% reduction			35	154	40 CFR 60.33b(b)(3)(i)	B.31,
		HCl 1, 2	MSW	8760	29 ppmdv or 95% reduction			13	55	40 CFR 60.33b(b)(3)(ii)	B.33.
		dioxin/furan 1	MSW	8760	30 ng/dscm (total mass)			8.7E-06	3.8E-05	40 CFR 60.33b(c)(1)(ii)	B.34.
		Cd <sup>1</sup>	MSW	8760	0.040 mg/dscm			0.012	0.051	40 CFR 60.33b(a)(2)(i)	B.27,
		Hg <sup>1, 2</sup>	MSW	8760	0.070 mg/dscm or 85% reduction			0.020	0.090	Rule 62-296.416(3)(b)1.b., F.A.C.	B.28.
		Pb <sup>1</sup>	MSW	8760	0.44 mg/dscm			0.14	0.62	40 CFR 60.33b(a)(4)	B.30.
		Be <sup>1</sup>	MSW	8760	0.001 mg/dscm			3.00E-04	1.30E-03	PSD-FL-105(B)	B.38.
		FI	MSW	8760	.0040 lb/mmbtu			1.3	5.7	PSD-FL-105	B.39.
		SAM	MSW	8760	0.013 lb/mmbtu			4.21	18.4	PA 85-21	B.40.
		voc	MSW	8760	.047 lb/mmbtu			15.2	66.6	PA 85-21	B.40.
-002	UNIT 2 - Municipal Solid	VE	MSW	8760	10%			N/A	N/A	40 CFR 60.33b(a)(1)(iii)	B.26.
	Waste (MSW) Combustor	VE - Fugitive Ash	`	8760	5%			N/A	N/A	40 CFR 60.36b	B.37.
	(192,000 lbs/hr - steam)	PM <sup>1</sup>	MSW	8760	27 mg/dscm			7.85		40 CFR 60.33b(a)(1)(i)	B.25.
	(863 TPD - MSW)	PM <sub>10</sub> <sup>1</sup>	MSW	8760	27 mg/dscm			7.85	34.4	40 CFR 60.33b(a)(1)(i)	B.25,
	(323.6 MMBtu/hour-MSW)	CO <sup>1</sup>	MSW	8760	100 ppmdv			33.9	149	40 CFR 60.34b(a)	B.36.
		NO <sub>x</sub> <sup>1</sup>	MSW	8760	205 ppmdv			114	499	40 CFR 60.33b(d)	B.35.
		SO <sub>2</sub> <sup>1, 2</sup>	MSW	8760	29 ppmdv or 75% reduction			35	154	40 CFR 60.33b(b)(3)(i)	B.31.
		HCl 1,2	MSW	8760	29 ppmdv or 95% reduction			13	55	40 CFR 60.33b(b)(3)(ii)	B.33.
		dioxin/furan 1	MSW	8760	30 ng/dscm (total mass)			8.7E-06	3.8E-05	40 CFR 60.33b(c)(1)(ii)	B.34.
		Cd <sup>1</sup>	MSW	8760	0.040 mg/dscm			0.012	0.051	40 CFR 60.33b(a)(2)(i)	B.27.
		Hg <sup>1, 2</sup>	MSW	8760	0.070 mg/dscm or 85% reduction			0.020	0.090	Rule 62-296.416(3)(b)1.b., F.A.C.	B.28.
		Pb <sup>1</sup>	MSW	8760	0.44 mg/dscm			0.14	0.62	40 CFR 60.33b(a)(4)	B.30.
		Be <sup>1</sup>	MSW	8760	0.001 mg/dscm			3.00E-04	1.30E-03	PSD-FL-105(B)	B.38.
		FI	MSW	8760	.0040 lb/mmbtu			1.3	5.7	PSD-FL-105	B.39.
		SAM	MSW	8760	0.013 lb/mmbtu			4.21		PA 85-21	B.40.
		VOC	MSW	8760	.047 lb/mmbtu			15.2	66.6	PA 85-21	B.40.

# Table 1-1, Summary of Air Pollutant Standards and Terms

Wheelabrator South Broward, Inc.
South Broward Waste-to-Energy Facility

Permit No. 0112119-014-AV Facility ID No. 0112119

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of the permit.

E. U.	Brief	Pollutant		Hours/	Allowable Emissions Equivalent Emi		Emissions'	Regulatory	See Permit		
ID No	Description	Name	Fuel(s)	Year	Standard(s)_	lbs./hour	TPY	lbs./hour	TPY	Citation(s)	Condition(s)
-003	UNIT 3 - Municipal Solid	VE	MSW	8760	10%			N/A	N/A	40 CFR 60.33b(a)(1)(iii)	B.26.
	Waste (MSW) Combustor	VE - Fugitive Ash	)	8760	5%			N/A	N/A	40 CFR 60.36b	B.37.
	(192,000 lbs/hr - steam)	PM <sup>1</sup>	MSW	8760	27 mg/dscm			7.85		40 CFR 60.33b(a)(1)(i)	B.25.
	(863 TPD - MSW)	PM <sub>10</sub> <sup>1</sup>	MSW	8760	27 mg/dscm			7.85	34.4	40 CFR 60.33b(a)(1)(i)	B.25.
	(323.6 MMBtu/hour-MSW)	CO1	MSW	8760	100 ppmdv			33.9	149	40 CFR 60.34b(a)	B.36.
		NO <sub>X</sub> <sup>1</sup>	MSW	8760	205 ppmdv			114	499	40 CFR 60.33b(d)	B.35.
		SO <sub>2</sub> <sup>1, 2</sup>	MSW	8760	29 ppmdv or 75% reduction			35	154	40 CFR 60.33b(b)(3)(i)	B.31.
		HCI 1,2	MSW	8760	29 ppmdv or 95% reduction			13	55	40 CFR 60.33b(b)(3)(ii)	B.33.
		dioxin/furan 1	MSW	8760	30 ng/dscm (total mass)			8.7E-06	3.8E-05	40 CFR 60.33b(c)(1)(ii)	B.34.
		Cd <sup>1</sup>	MŚW	8760	0.040 mg/dscm			0.012	0.051	40 CFR 60.33b(a)(2)(i)	B.27.
		Hg <sup>1, 2</sup>	MSW	8760	0.070 mg/dscm or 85% reduction			0.020	0.090	Rule 62-296.416(3)(b)1.b., F.A.C.	B.28.
		Pb <sup>1</sup>	MSW	8760	0.44 mg/dscm			0.14	0.62	40 CFR 60.33b(a)(4)	B.30.
		Be <sup>1</sup>	MSW	8760	0.001 mg/dscm			3.00E-04	1.30E-03	PSD-FL-105(B)	B.38.
		FI	MSW	8760	.0040 lb/mmbtu			1.3	5.7	PSD-FL-105	B.39.
		SAM	MSW	8760	0.013 lb/mmbtu			4.21	18.4	PA 85-21	B.40.
		VOC	MSW	8760	.047 lb/mmbtu			15.2	66.6	PA 85-21	B.40.
-004	Lime Silo	VE		8760	shall not exceed 5%			N/A	N/A	Rule 62-297.620(4), F.A.C.	C.5.
	Line Silo	PM		8760	0.010 gr/dscf		0.021	0.13		AC 187000	C.4.
-005	Ash Handling System	VE		8760	shall not exceed 5%		,	N/A	N/A	40 CFR 60.36b	B.37.

#### Notes:

<sup>\*</sup> The "Equivalent Emissions" listed are for informational purposes.

<sup>1.</sup> Corrected to 7% O<sub>2</sub>

<sup>2.</sup> Whichever is least stringent.

# Table 2-1, Summary of Compliance Requirements

Wheelabrator South Broward, Inc.

# South Broward Waste-to-Energy Facility

Permit No. **0112119-014-AV** Facility ID No. 0112119

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

					Testing	Frequency	Min. Compliance		
E. U.	Brief	Pollutant Name		Compliance	Time	Base	Test		See Permit
ID No.	Description	or Parameter	Fuel(s)	Method	Frequency	Date	Duration	CMS <sup>1</sup>	Condition(s)
-001	Municipal Solid Waste (MSW)	VE	MSW	EPA Method 9	Annually		30 minutes	Yes	B.53.
-002	Combustors	VE- Fugitive Ash		EPA Method 22	Annually		1 hour	No	B.63.
-003	(192,000 lbs/hr - steam)	РМ							
	(863 TPD - MSW)	PM <sub>10</sub>	MSW	EPA Method 5	Annually		1 hour	No	B.53.
	(323.6 MMBtu/hour - MSW)	со	MSW	EPA Method 10, 10A, 10B	Daily		1 hour	Yes	B.20.
		NO <sub>X</sub>	MSW	EPA Method 19	Daily		1 hour	Yes	B.61.
		SO <sub>2</sub>	MSW	EPA Method 19	Daily		1 hour	Yes	B.57.
		HCI	MSW	EPA Method 26, 26A	Annually		1 hour	No	B.59.
		dioxin/furarı	MSW	EPA Method 23	Annually <sup>2</sup>		N/A	No	B.60.
		Cd	MSW	EPA Method 29	Annually		1 hour	No	B.54.
		Hg	MSW	EPA Method 29 or 101A	Quarterly		1 hour	b.57.	B.54.
		Pb	MSW	EPA Method 29 or 12	Annually		1 hour	No	B.54.
		Ве	MSW	EPA Method 29	Annually		N/A	Ю	B.64.
		FI	MSW	EPA Method 13A, 13B	Every 5 years		1 hour	No	B.65.
		SAM	MSW	EPA Method 8	Every 5 years		1 hour	No	B.66.
	•	VOC	MSW	EPA Method 18 or 25A	Every 5 years		1 hour	No	B.66.
-004	1. 0.	VE		EPA Method 9	Annually		30 minutes	No	C.13.
	Lime Silo	РМ		EPA Method 5	Every 5 years <sup>3</sup>		1 hour	No	C.14.
-005	Ash Handling	VΕ		EPA Method 22	Annually		1 hour	No	B.63.

#### Notes:

- 1. CMS [=] continuous monitoring system used for monitoring requirement in lieu of fuel sampling and analysis if marked 'yes'.

  (Acceptable as long as CMS is maintained and calibrated as required.)
- 2. Test at least one unit annually, subject to 40 CFR 60.38b(b) and 40 CFR 60.58b(g) requirements.
- 3. Particulate matter tests are not required unless visible emissions tests indicate standards have been violated.

To:

jgosine@wm.com

Cc:

'KKosky@Golder.com'; Lurix, Joe; 'dbanu@co.broward.fl.us'; 'Gracy Danois';

Oquendo.Ana@epamail.epa.gov; Forney.Kathleen@epamail.epa.gov; Gibson, Victoria;

Heron, Teresa, Holtom, Jonathan

Subject:

WHEELABRATOR SOUTH BROWARD, INC. - SOUTH BROWARD WASTE-TO-ENERGY

FACILITY: 0112119-014-AV

Attachments:

0112119013014SignedCombineWrittenNoticeRenewal.pdf

#### Dear Sir/ Madam:

Attached is the official **Written Notice of Intent to Issue Air Permit** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Click on the following link to access the permit project documents: <a href="http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf">http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf</a> permit zip files/0112119.014.AV.D pdf.zip

Click on the following link to access the permit project documents: <a href="http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf">http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf</a> permit zip files/0112119.013.AC.D pdf.zip

Attention: Teresa Heron

Owner/Company Name: WHEELABRATOR SOUTH BROWARD, INC

Facility Name: WHEELABRATOR SOUTH BROWARD

Project Number: 0112119-014-AV Permit Status: DRAFT/PROPOSED Permit Activity: PERMIT REVISION

Facility County: BROWARD

"The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other project documents using the "Air Permit Documents Search" website at <a href="http://www.dep.state.fl.us/air/emission/apds/default:asp">http://www.dep.state.fl.us/air/emission/apds/default:asp</a>. "

Permit project documents that are addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Bureau of Air Regulation.

Barbara Friday Bureau of Air Regulation

From:

Gosine, Jairaj [jgosine@WM.com]

To:

Sent:

Subject:

Friday, Barbara
Thursday, October 29, 2009 11:16 AM
Read: WHEELABRATOR SOUTH BROWARD, INC. - SOUTH BROWARD WASTE-TO-

ENERGY FACILITY; 0112119-014-AV

Your message

jgosine@WM.com

Subject:

was read on 10/29/2009 11:16 AM.

From:

Gosine, Jairaj [jgosine@WM.com]

Sent:

Monday, November 02, 2009 1:02 PM

To: Cc: Friday, Barbara Faller, Chuck

Subject:

RE: WHEELABRATOR SOUTH BROWARD, INC. - SOUTH BROWARD WASTE-TO-

ENERGY FACILITY; 0112119-014-AV

Ms. Friday,

Documents received and accessed.

Thank you, Jairaj Gosine

**From:** Friday, Barbara [mailto:Barbara.Friday@dep.state.fl.us]

Sent: Thursday, October 29, 2009 10:55 AM

To: Gosine, Jairaj

Cc: KKosky@Golder.com; Lurix, Joe; dbanu@co.broward.fl.us; Gracy Danois; Oquendo.Ana@epamail.epa.gov;

Forney.Kathleen@epamail.epa.gov; Gibson, Victoria; Heron, Teresa; Holtom, Jonathan

Subject: WHEELABRATOR SOUTH BROWARD, INC. - SOUTH BROWARD WASTE-TO-ENERGY FACILITY; 0112119-014-AV

#### Dear Sir/ Madam:

Attached is the official **Written Notice of Intent to Issue Air Permit** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Click on the following link to access the permit project documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf permit zip files/0112119.014.AV.D pdf.zip

Click on the following link to access the permit project documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf permit zip files/0112119.013.AC.D pdf.zip

Attention: Teresa Heron

Owner/Company Name: WHEELABRATOR SOUTH BROWARD, INC

Facility Name: WHEELABRATOR SOUTH BROWARD

Project Number: 0112119-014-AV Permit Status: DRAFT/PROPOSED Permit Activity: PERMIT REVISION

Facility County: BROWARD

"The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the

engineering community. Access these documents by clicking on the link provided above, or search for other project documents using the "Air Permit Documents Search" website at http://www.dep/state.fl.us/air/emission/apds/default.asp . "

Permit project documents that are addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Bureau of Air Regulation.

Barbara Friday Bureau of Air Regulation Division of Air Resource Management (DARM) (850)921-9524

The Department of Environmental Protection values your feedback as a customer. DEP Secretary Michael W. Sole is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on this link to the DEP Customer Survey. Thank you in advance for completing the survey.

Waste Management recycles enough paper every year to save 41 million trees. By not printing this email, you can help save even more.

From:

Mail Delivery System [MAILER-DAEMON@mx3.golder.com]

Sent:

Thursday, October 29, 2009 10:57 AM

To:

Friday, Barbara

Subject: Attachments:

Successful Mail Delivery Report Delivery report; Message Headers

This is the mail system at host mx3.golder.com.

Your message was successfully delivered to the destination(s) listed below. If the message was delivered to mailbox you will receive no further notifications. Otherwise you may still receive notifications of mail delivery errors from other systems.

The mail system

<<u>KKosky@Golder.com</u>>: delivery via 127.0.0.1[127.0.0.1]:10025: 250 OK, sent 4AE9AD19\_5361\_41697\_2 907271798087

From:

Exchange Administrator

Sent:

Thursday, October 29, 2009 10:55 AM

To:

Friday, Barbara

Subject:

Delivery Status Notification (Relay)

Attachments:

ATT308946.txt; WHEELABRATOR SOUTH BROWARD, INC. - SOUTH BROWARD WASTE-

TO-ENERGY FACILITY; 0112119-014-AV

This is an automatically generated Delivery Status Notification.

Your message has been successfully relayed to the following recipients, but the requested delivery status notifications may not be generated by the destination.

dbanu@co.broward.fl.us

From:

System Administrator

To:

Lurix, Joe; Holtom, Jonathan

Sent:

Thursday, October 29, 2009 10:55 AM

Subject:

Delivered: WHEELABRATOR SOUTH BROWARD, INC. - SOUTH BROWARD WASTE-TO-

ENERGY FACILITY; 0112119-014-AV

### Your message

To:

jgosine@wm.com

Cc:

'KKosky@Golder.com'; Lurix, Joe; 'dbanu@co.broward.fl.us'; Gracy Danois;

Oquendo.Ana@epamail.epa.gov; Forney.Kathleen@epamail.epa.gov; Gibson, Victoria;

Heron, Teresa; Holtom, Jonathan

Subject:

WHEELABRATOR SOUTH BROWARD, INC. - SOUTH BROWARD WASTE-TO-ENERGY FACILITY;

0112119-014-AV

Sent: 10/29/2009 10:55 AM

was delivered to the following recipient(s):

Lurix, Joe on 10/29/2009 10:55 AM

Holtom, Jonathan on 10/29/2009 10:55 AM

From:

Holtom, Jonathan Friday, Barbara

To: Sent:

Monday, November 09, 2009 1:11 PM

Subject:

Read: WHEELABRATOR SOUTH BROWARD, INC. - SOUTH BROWARD WASTE-TO-

ENERGY FACILITY; 0112119-014-AV

### Your message

To: jgosine@wm.com

Cc:

'KKosky@Golder.com'; Lurix, Joe; 'dbanu@co.broward.fl.us'; Gracy Danois;

Oquendo.Ana@epamail.epa.gov; Forney.Kathleen@epamail.epa.gov; Gibson, Victoria;

Heron, Teresa; Holtom, Jonathan

Subject:

WHEELABRATOR SOUTH BROWARD, INC. - SOUTH BROWARD WASTE-TO-ENERGY FACILITY;

0112119-014-AV

Sent: 10/29/2009 10:55 AM

was read on 11/9/2009 1:11 PM.

From:

Mail Delivery System [MAILER-DAEMON@mseive02.rtp.epa.gov]

Sent:

Thursday, October 29, 2009 10:55 AM

To:

Friday, Barbara

Subject: Attachments:

Successful Mail Delivery Report Delivery report; Message Headers

This is the mail system at host mseive02.rtp.epa.gov.

Your message was successfully delivered to the destination(s) listed below. If the message was delivered to mailbox you will receive no further notifications. Otherwise you may still receive notifications of mail delivery errors from other systems.

The mail system

<danois.gracy@epa.gov>: delivery via 127.0.0.1[127.0.0.1]:10025: 250 OK, sent
 4AE9ACCC\_28169\_69572\_1 7129F25400A

From:

Mail Delivery System [MAILER-DAEMON@mseive02.rtp.epa.gov]

Sent:

Thursday, October 29, 2009 10:55 AM

To:

Friday, Barbara

Subject: Attachments:

Successful Mail Delivery Report Delivery report; Message Headers

This is the mail system at host mseive02.rtp.epa.gov.

Your message was successfully delivered to the destination(s) listed below. If the message was delivered to mailbox you will receive no further notifications. Otherwise you may still receive notifications of mail delivery errors from other systems.

The mail system

<Forney.Kathleen@epamail.epa.gov>: delivery via 127.0.0.1[127.0.0.1]:10025: 250
 OK, sent 4AE9ACCC\_24922\_18013\_1 5E91825400D

<Quendo.Ana@epamail.epa.gov>: delivery via 127.0.0.1[127.0.0.1]:10025: 250 OK,
sent 4AE9ACCC\_24922\_18013\_1 5E91825400D

From:

System Administrator

To:

Gibson, Victoria; Heron, Teresa

Sent:

Thursday, October 29, 2009 10:55 AM

Subject:

Delivered: WHEELABRATOR SOUTH BROWARD, INC. - SOUTH BROWARD WASTE-TO-

ENERGY FACILITY; 0112119-014-AV

#### Your message

To:

jgosine@wm.com

Cc:

'KKosky@Golder.com'; Lurix, Joe; 'dbanu@co.broward.fl.us'; Gracy Danois;

Oquendo.Ana@epamail.epa.gov; Forney.Kathleen@epamail.epa.gov; Gibson, Victoria;

Heron, Teresa; Holtom, Jonathan

Subject:

WHEELABRATOR SOUTH BROWARD, INC. - SOUTH BROWARD WASTE-TO-ENERGY FACILITY;

0112119-014-AV

Sent: 10/29/2009 10:55 AM

was delivered to the following recipient(s):

Gibson, Victoria on 10/29/2009 10:55 AM Heron, Teresa on 10/29/2009 10:55 AM

From: To:

Gibson, Victoria

Sent:

Friday, Barbara

Thursday, October 29, 2009 10:56 AM

Subject:

Read: WHEELABRATOR SOUTH BROWARD, INC. - SOUTH BROWARD WASTE-TO-

ENERGY FACILITY; 0112119-014-AV

#### Your message

To:

jgosine@wm.com

Cc:

'KKosky@Golder.com'; Lurix, Joe; 'dbanu@co.broward.fl.us'; Gracy Danois;

Oquendo.Ana@epamail.epa.gov; Forney.Kathleen@epamail.epa.gov; Gibson, Victoria;

Heron, Teresa; Holtom, Jonathan

Subject:

WHEELABRATOR SOUTH BROWARD, INC. - SOUTH BROWARD WASTE-TO-ENERGY FACILITY;

0112119-014-AV

Sent: 10/29/2009 10:55 AM

was read on 10/29/2009 10:56 AM.

From:

Heron, Teresa

To: Sent: Friday, Barbara

Friday, October 30, 2009 8:30 AM

Subject:

Read: WHEELABRATOR SOUTH BROWARD, INC. - SOUTH BROWARD WASTE-TO-

ENERGY FACILITY; 0112119-014-AV

### Your message

To:

jgosine@wm.com

Cc:

'KKosky@Golder.com'; Lurix, Joe; 'dbanu@co.broward.fl.us'; Gracy Danois;

Oquendo.Ana@epamail.epa.gov; Forney.Kathleen@epamail.epa.gov; Gibson, Victoria;

Heron, Teresa; Holtom, Jonathan

Subject:

WHEELABRATOR SOUTH BROWARD, INC. - SOUTH BROWARD WASTE-TO-ENERGY FACILITY;

0112119-014-AV

Sent: 10/29/2009 10:55 AM

was read on 10/30/2009 8:30 AM.