



# Department of Environmental Protection

Jeb Bush  
Governor

Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Colleen M. Castille  
Secretary

May 5, 2006

Mr. John D. Booth  
Executive Director  
Solid Waste Authority of Palm Beach County  
7501 North Jog Road  
West Palm Beach, Florida 33412

Re: PROPOSED Title V Permit Renewal No. 0990234-010-AV  
Draft Air Construction Permit No. 0990234-009-AC  
North County Regional Resource Recovery Facility

One copy of the "PROPOSED Determination" for the renewal of a Title V Air Operation Permit for the North County Regional Resource Recovery Facility located at 6501 North Jog Road, West Palm Beach, Palm Beach County, is enclosed. This letter is only a courtesy to inform you that the DRAFT Permit has become a PROPOSED Permit.

An electronic version of this determination has been posted on the Division of Air Resources Management's world wide web site for the United States Environmental Protection Agency (USEPA) Region 4 office's review. The web site address is:

["http://www.dep.state.fl.us/air/eproducts/ards/default.asp"](http://www.dep.state.fl.us/air/eproducts/ards/default.asp)

Pursuant to Section 403.0872(6), Florida Statutes, if no objection to the PROPOSED Permit is made by the USEPA within 45 days, the PROPOSED Permit will become a FINAL Permit no later than 55 days after the date on which the PROPOSED Permit was mailed (posted) to USEPA. If USEPA has an objection to the PROPOSED Permit, the FINAL Permit will not be issued until the permitting authority receives written notice that the objection is resolved or withdrawn.

If you should have any questions, please contact Scott M. Sheplak, P.E. at 850/921-9532.

Sincerely,

Trina L. Vielhauer, Chief  
Bureau of Air Regulation

TLV/aal/sms

Enclosures

copy furnished to:

Kevin C. Leo, P.E., CDM, via e-mail ([leokc@cdm.com](mailto:leokc@cdm.com))

Mary Beth Morrison, SWA, via e-mail ([mmorrison@swa.org](mailto:mmorrison@swa.org))

Darrel J. Graziani, P.E., SED, via e-mail ([Darrel.Graziani@dep.state.fl.us](mailto:Darrel.Graziani@dep.state.fl.us))

Barbara Friday, BAR, via e-mail ([Barbara.Friday@dep.state.fl.us](mailto:Barbara.Friday@dep.state.fl.us)) for posting with Region 4, U.S. EPA

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## PROPOSED Determination

Title V Air Operation Permit Renewal  
PROPOSED Permit Project No.: 0990234-010-AV

### **I. Public Notice.**

An "INTENT TO ISSUE A TITLE V AIR OPERATION PERMIT RENEWAL AND AN AIR CONSTRUCTION PERMIT" to Solid Waste Authority of Palm Beach County for the North County Regional Resource Recovery Facility located at 6501 North Jog Road, West Palm Beach, Palm Beach County was clerked on January 4, 2006. The "PUBLIC NOTICE OF INTENT TO ISSUE A TITLE V AIR OPERATION PERMIT RENEWAL AND AN AIR CONSTRUCTION PERMIT" was published in the Palm Beach Post on January 13, 2006. The DRAFT Permit was available for public inspection at the Southeast District Office in West Palm Beach and the permitting authority's office in Tallahassee. Proof of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE A TITLE V AIR OPERATION PERMIT RENEWAL AND AN AIR CONSTRUCTION PERMIT" was received on January 20, 2006.

### **II. Public Comment(s).**

Comments were received and the DRAFT Permit was changed. The comments were not considered significant enough to reissue the DRAFT Permit and require another Public Notice. Comments were received from two respondents during the 30 (thirty) day public comment period. The majority of the comments were submitted in the form of a "mark up" of the DRAFT permitting documents (see "mark up" documents submitted under the cover letter from Mr. John Booth dated February 7, 2006). Because the comments were submitted in the form of "mark up" documents, the comments can not be restated. A summary was prepared below, numbering the comments.

A. Letter from Mr. John Booth dated February 7, 2006, and received on February 9, 2006. An e-mailed version was received on February 9, 2006. These comments were submitted in the form of a "mark up" of the DRAFT permitting documents.

The applicant's comments are summarized in *italics* and the Department's response to each comment follows.

1. *Comment: Flare Descriptions. The emission unit designations and descriptions need to be updated. The EU -003 for the Class I flare was replaced with another Class I flare renumbered as EU -008. The Class I landfill has 1 flare.*

Response: The DRAFT permit included an emission unit for the Class I flare. The description in section B. included both the 1800 and 3500 scfm flares. The emission unit descriptions have been updated to reflect that the 1,800 scfm flare at the Class I landfill has been replaced with the 3500 scfm flare. Emissions Unit -008 is established as the new 3500 scfm flare. Emissions Unit -003 is described as the 1,800 scfm flare that has been shutdown. According to the AORs, the landfill emissions are being reported under EU -008. The description for this emissions unit is better clarified to include emissions from the flare and landfill.

2. *Comment: Cooling Tower Description. The description for the cooling tower needs to be changed. There is only 1 cooling tower at the site.*

Response: The comment field in the emissions unit section of the renewal application originally had described 3 cooling towers. The description is changed to indicate only 1 cooling tower. This unit is also added to the list of units in Appendix U-1. The unit had been included in the summary of units only. This emissions unit has been assigned an E.U. ID No. of -017.

3. *Comment: Documents on File. Add the PSD permit to the list of documents on file.*

Response: This section was intended to list miscellaneous reference documents only. Appendix H-1 contains the previously issued PSD and PA permits. No change is made.

4. *Comment: Documents on File. Add the "Order Granting Variance dated August 25, 1997" to the list of documents on file.*

Response: The "Order Granting Variance dated August 25, 1997" is already specifically listed as an attachment to the permit. The citation to this order is appropriately added to Condition A.12.

5. *Comment: Documents on File. Add the approved increase in interior wellhead temperature dated October 25, 2005 to the list of documents on file.*

Response: The approved increase in interior wellhead temperature dated October 25, 2005, is included in the list of documents on file and Condition B.7.

6. *Comment: Add EPA Method 29 in lieu of EPA Method 104 per the DEP Order approval dated January 25, 2006.*

Response: The request to add EPA Method 29 in lieu of EPA Method 104 is added per the DEP Order approval dated January 25, 2006. This test method for beryllium is added to Condition T.16.2. The request and approval is included in the list of documents on file.

7. *Comment: Test Methods. Add language after test methods, "or other methods approved by DEP"*

Response: The request to add language after test methods, "or other methods approved by DEP" is not granted. Test methods are specified with emission limiting standards and/or limitations. Any alternatives or deviations must be submitted to the Emissions Monitoring Section of DEP for review and prior written approval.

8. *Comment: Test Methods. Add test methods from the PSD-FL-108 permit.*

Response: The request is to add test methods from the PSD-FL-108 permit which was issued in 1986. The federal standards were subsequently effective. The additional test methods requested are not included. Requests for alternative or additional test methods must be submitted to the Emissions Monitoring Section of DEP for review and prior written approval.

9. *Comment: Mercury Test Frequency. Include the mercury testing frequency variance dated 08/25/97 in Condition T.5.*

Response: This variance was included in the initial Title V permit. Condition T.4.(4)(ix), which is based on a federal requirement, requires annual testing. The variance allows the facility to test

annually instead of quarterly under the state rule. A new Condition **T.16.3.** is added under testing frequency to clarify this authorized testing frequency.

*10. Comment: Include the approved change to Method 26 (HCl) Testing in Condition T.7.*

Response: The Department approved the change in the test method on March 26, 2006. The change is noted in the condition.

*11. Comment: Landfill Collection System Add the reference to the amended collection plan to Condition B.6.*

Response: The change is made.

*12. Comment: Add additional flare requirements from 40 CFR 60.18.*

Response: The additional flare requirements from 40 CFR 60.18 are added to Condition **B.48.**

*13. Comment: On Page 68 include "Condition B.6." from Permit No. 0990234-008-AC.*

Response: The text from this rule is included.

*14. Comment: Condition AAAA.5. Establish 6-month reporting due dates as March 1<sup>st</sup> and September 1<sup>st</sup>.*

Response: The 6-month reporting due dates are established as March 1<sup>st</sup> and September 1<sup>st</sup>. There shall be no gaps in the periods covered to convert to this reporting period.

*15. Comment: Delete the Figure 1 Excess Emissions Monitoring Report in Condition G.3(c)*

Response: Under the specific 40 CFR 63, AAAA NESHAP, the landfills are required to submit a semi-annual monitoring report for parameters being monitored. Table 3. contains the specific reporting requirements for landfills. The monitoring report required is the specific report under the NESHAP therefore, the Figure 1 is removed. Additionally, Conditions **G.3., 4. and 6.** are marked as "**<reserved>**" as the specific NESHAP 40 CFR 63 contains the specific applicable requirements to landfills. Condition **AAAA.0.** is added due to the cross references within the new NESHAP to the NSPS 40 CFR 60.

*16. Comment: Test Notifications, Test Facilities and Report in Conditions T.2., G.4. The request is to delete the federal test facilities, notifications and reports.*

Response: The testing requirements from the state rules are equivalent or are more stringent than the federal requirements. The state requirements are kept. In the landfill section of the permit, Condition **G.4.** subparagraphs (d), (e) and (f) are deleted. The language from Conditions **T.16.1., T.15. and R.17.** are copied into this section as they apply. These new conditions are added as Conditions **LT.1., 2. and 3.**

This change also affects the MWCs. In the MWCs section of the permit, Condition **T.2.** subparagraphs (d), (e) and (f) are deleted. Condition **T.16.1.** contains the test notification provision.

Condition **T.15.** contains the requirement for testing facilities. Condition **R.17.** contains the test report requirement.

*17. Comment: Establish 6-month reporting due dates as March 1<sup>st</sup> and September 1<sup>st</sup> in Condition G.10.(d)(5).*

Response: The 6-month reporting due dates are established as March 1<sup>st</sup> and September 1<sup>st</sup>. There shall be no gaps in the periods covered to convert to this reporting period.

*18. Comment: Tables. Miscellaneous administrative changes to the summary tables were requested.*

Response: Administrative changes to the summary tables were made.

*19. Comment: Landfill Table 3. The footnote is note noted.*

Response: See Table 1. for the explanation of the "a" footnote.

*20. Comment: APPENDIX CAM. Include a definition of an excursion in Condition 8. in APPENDIX CAM.*

Response: The definitions for CAM purposes are located in 40 CFR 64.1. The permitting office does not typically include all definitions with air permits. No change is made.

*21. Comment: APPENDIX CAM – Excursion and Monitor Malfunction. Add examples of excursions.*

Response: The definition of an excursion is "... a departure from an indicator range established for monitoring under this part, consistent with any averaging period specified for averaging the results of the monitoring." A monitor malfunction could result in an excursion. An excursion takes place when a measurement is outside of the established indicator range. The indicator ranges are specified in the approved CAM Plan. This document is standard boiler plate language previously approved by EPA, therefore, no change is made.

*22. Comment: APPENDIX CAM - QIP Threshold. Clarify that the QIP Threshold is a 24-hour daily geometric mean. There is conflict between the requested QIP Threshold and Condition 10.*

Response: The QIP Threshold is further defined to be based on a 24-hour daily geometric mean. Each specific QIP Threshold is defined in the approved CAM Plan as the basis for which a QIP is triggered. The 5% threshold in Condition 10. is only a guideline. Six (6) daily excursions within a 6 month period is equivalent to 6 events in a 180 day period or roughly 3% of the period. The following statement is added to the CAM Plan to clarify that the proposed QIP threshold is adequate in this initial CAM Plan, "This specific QIP threshold adequately implements Condition 10. of the CAM Requirements."

**B.** E-mail from Ms. Mary Beth Morrison dated February 9, 2006, and received on February 9, 2006.

23. *Comment: Documents on File. Add "Request for an Alternative Timeline to Correct an Exceedance When Bringing Online New Landfill Gas System received on June 27, 2005. DEP Approval of Request dated August 11, 2005."*

Response: The following reference documents were added: "*Request for an Alternative Timeline to Correct an Exceedance When Bringing Online New Landfill Gas System received on June 27, 2005. DEP Approval of Request dated August 11, 2005.*" Condition **B.20.** was updated to allow the additional time for this project.

### **III. Department Changes.**

The following additional Department initiated changes were made.

#### **Appendix H-1**

24. The effective date for the recently issued PSD-FL-108F was added.

#### **B. Document(s) on file with the permitting authority:**

-Letter received February 9, 2006 from Mr. John Booth.

-E-mail received February 9, 2006 from Ms. Mary Beth Morrison.

### **III. Conclusion.**

The permitting authority hereby issues the PROPOSED Permit, with any changes noted above.

## STATEMENT OF BASIS

Solid Waste Authority of Palm Beach  
North County Regional Resource Recovery Facility

Title V Air Operation Permit Renewal  
**PROPOSED Permit No.:** 0990234-010-AV  
**Air Construction Permit No.:** 0990234-009-AC

This project is for a permit to renew the Title V air operation permit and for an air construction permit, No. 0990234-009-AC. The permit renewal is for the operation of the Solid Waste Authority of Palm Beach County, North County Regional Resource Recovery Facility. This project is for a permit to renew the Title V air operation permit and for an after-the-fact air construction permit, No. 0990234-009-AC. The permit renewal is for the operation of the Solid Waste Authority of Palm Beach County, North County Regional Resource Recovery Facility. The after-the-fact air construction permit is for a woody waste facility diesel engine. The engine is an unregulated emissions unit.

This existing facility is located at 6501 North Jog Road, West Palm Beach, Palm Beach County; UTM Coordinates: Zone 17, 585.82 km East and 2960.474 km North; Latitude: 26° 45' 53" North and Longitude: 80° 08' 12" West.

This Title V air operation permit renewal 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.

This facility consists of a *very large MWC plant* designed to process 2000 TPD of municipal solid waste (MSW). The facility burns processed MSW which is called "refuse derived fuel" (RDF). The RDF plant is equipped with three MSW processing lines, any two of which can handle the 2000 TPD of incoming MSW. The boiler plant includes two B&W boilers, each designed to operate up to a maximum heat input of 412.5 MMBtu/hr with a steam flow rating of 324,000 lbs/hr. At a reference heating value of 5500 Btu/lb, this is equivalent to 900 TPD of RDF per boiler. Emissions from each boiler are controlled by a B&W spray dryer followed by a B&W/BSH Krefield 4-field ESP. Each precipitator has a gas flow rating of 198,000 ACFM and is designed to operate with three of the four fields in service. The turbine-generator rating of 62 MW matches the full output of the boilers.

These emission units are solid waste combustors and are designated as Boiler Nos. 1 and 2. They are B&W Sterling Boilers and each designed to operate up to a maximum heat input of 412.5 MMBtu/hr with a steam flow rating of 324,000 lbs/hr. At a reference heating value of 5500 Btu/lb, this is equivalent to 75,000 pounds per hour (900 TPD of RDF or 816 megagrams per day) of RDF from mixed solid waste per boiler. Emissions from the boilers are controlled by spray dryers and electrostatic precipitators. The boilers have individual flues contained in a single stack casing. The facility began commercial operation in 1989. These emissions units are in substantial compliance with the new NSPS - 40 CFR 60, Subpart Cb standards.

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

## STATEMENT OF BASIS

### Solid Waste Authority of Palm Beach North County Regional Resource Recovery Facility

Rule 62-204.800(8)(b), F.A.C.; Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT). Also, please note that conditions in 40 CFR 60, Subpart Cb, are contained in 40 CFR 60, Subpart Eb. These emissions units are also subject to Compliance Assurance Monitoring (CAM), adopted and incorporated by reference in Rule 62-204.800, F.A.C.

The heat input limitations have been placed in the permit to identify the capacity of each emissions unit for purposes of confirming that emissions testing is conducted within 90-100 percent of the emissions unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate limits and to aid in determining future rule applicability.

Two landfills are on this property: a Class I Landfill and a Class III Landfill, each with its own gas collection system. Emissions from each landfill are controlled by flares. Additional facilities include: storage and handling facilities for RDF (waste) as well as storage and handling facilities for ash and ash treatment. Also, included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

Based on the Title V air operation permit renewal application received on May 2, 2005, this facility is a major source of hazardous air pollutants (HAPs).

**Below is a brief overview of the changes made in this permit renewal compared to the most recently issued/posted Title V permit on the web site, FINAL Permit Revision No. 0990234-004-AV.**

- Miscellaneous format changes, primarily affecting the facility-wide conditions.
- Included new federal regulations, 40 CFR 60.58b(a), which allow excess emissions for 15 hours per occurrence for certain malfunctions; see Condition E.3.a.
- Included USEPA's approval of alternative testing under the General Flare Provisions of 40 CFR 60.18; see Condition B.48.
- Added to Appendix U-1, Unregulated Emissions Units:
  - Cooling tower and the woody waste facility diesel engine.
- Added to Appendix I-I, Insignificant Emission Units:
  - Woody waste recycling facility.
- Included permits issued subsequent to the latest Title V permit on the web site; see Appendix H-1, Permit History.
- Updated the landfill and flare descriptions; see Section B. of the permit for the landfills.
- Added the new NESHAP, also referred to as MACT, requirements from 40 CFR 63, Subparts AAAA and A; see Section B. of the permit for the landfills.



## STATEMENT OF BASIS

### Solid Waste Authority of Palm Beach North County Regional Resource Recovery Facility

- Added the Class I and Class III Landfill Gas Well Inactivation Plan. This is an amendment to the gas collection and control design plan; see Condition **B.2**.
- Added CAM requirements for Boiler Nos. 1 & 2; see Condition **CAM.1**.

These units are regulated by the federal emission guidelines of 40 CFR 60, Subpart Cb, which were promulgated post-1990, and a PSD permit. Presumably, all post-1990 federal standards contain CAM. According to the permit, the more stringent emissions limit applies to each pollutant. Several of the PSD emission limits {specifically, PM and Pb} are less stringent than the federal emissions guidelines. The PSD emission limits for SO<sub>2</sub>, HF and HCl are more stringent than the federal emissions guidelines. In a CAM applicability analysis, it is difficult to reconcile the differences between the PSD emission limits and the federal emission guideline limits.

SO<sub>2</sub>, PM, Pb, Fluorides (as hydrogen fluoride, or HF) and HCl have pre-control emission rates greater than the major source thresholds, are controlled by an air pollution control device and are also subject to an emission standard. A CEMs is used for compliance with the SO<sub>2</sub> emission limits, therefore, this pollutant is exempt from CAM. The federal emission guidelines were considered to provide the minimum basis for a CAM Plan for these units. The applicant proposed a CAM plan for the following pollutants: PM, Pb, HF and HCl.

Solid Waste Authority of Palm Beach County  
North County Regional Resource Recovery Facility  
**Facility ID No.:** 0990234  
Palm Beach County

Title V Air Operation Permit Renewal

**PROPOSED Permit No.:** 0990234-010-AV

Permitting Authority:

State of Florida  
Department of Environmental Protection  
Division of Air Resource Management  
Bureau of Air Regulation  
Air Permitting South Section  
Mail Station #5505  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400  
Telephone: 850/488-0114  
Fax: 850/922-6979

Compliance Authority:

Southeast District Office  
400 North Congress Avenue  
West Palm Beach, FL 33401  
Telephone: 561/681-6600  
Fax: 561/681-6755

**Permittee:**

Solid Waste Authority of Palm Beach County  
North County Resource Recovery Facility  
West Palm Beach, Florida 33412

**PROPOSED Permit No.:** 0990234-010-AV**Permit No.:** 0990234-009-AC**Facility ID No.:** 0990234**SIC Nos.:** 49; 4953**Project:** Title V Air Operation Permit Renewal  
& Air Construction Permit

This project is for a permit to renew the Title V air operation permit and for an after-the-fact air construction permit, No. 0990234-009-AC. The permit renewal is for the operation of the Solid Waste Authority of Palm Beach County, North County Regional Resource Recovery Facility. The after-the-fact air construction permit is for a woody waste facility diesel engine. The engine is an unregulated emissions unit. This existing facility is located at 6501 North Jog Road, West Palm Beach, Palm Beach County; UTM Coordinates: Zone 17, 585.82 km East and 2960.474 km North; Latitude: 26° 45' 53" North and Longitude: 80° 08' 12" West.

This Title V air operation permit renewal 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 U-1, List of Unregulated Emissions Units and/or Activities

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

Appendix WWW, Definitions for Subpart WWW - MSW Landfills

Appendix 40 CFR 60 Subpart A-General Provisions (version dated 7/1/97)

APPENDIX TV-5, TITLE V CONDITIONS version dated 03/28/05

APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96)

TABLE 297.310-1, CALIBRATION SCHEDULE

FIGURE 1 - SUMMARY REPORT-GASEOUS AND OPACITY EXCESS EMISSION AND  
MONITORING SYSTEM PERFORMANCE REPORT (version dated 7/96)

Order Granting Variance dated August 25, 1997

Appendix CAM

**Effective Date:** [ARMS Day 55]**Renewal Application Due Date:** May 2, 2010**Expiration Date:** October 29, 2010

---

Michael G. Cooke, Director  
Division of Air Resource  
Management

MGC/sms



Jeb Bush  
Governor

# Department of Environmental Protection

Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Colleen M. Castille  
Secretary

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Title V Air Operation Permit Renewal  
**PROPOSED Permit No.:** 0990234-010-AV

**TABLE OF CONTENTS**

<u>Section</u> <u>Number</u>	<u>Page</u>
Placard Page .....	1
I. Facility Information.....	2
A. Facility Description.	
B. Summary of Emissions Unit ID No(s). and Brief Description(s).	
C. Relevant Documents.	
II. Facility-wide Conditions.....	4
III. Emissions Unit(s) and Conditions	
A. Emission Unit 001, Municipal Solid Waste Boiler No. 1 .....	7
Emission Unit 002, Municipal Solid Waste Boiler No. 2	
B. Emission Unit 003, Class I Landfill (1800 scfm Flare Removed).....	45
Emission Unit 004, Class III Landfill (1800 scfm Flare)	
Emission Unit 008, Class I Landfill and 3500 scfm Flare	

**Section I. Facility Information.**

**Subsection A. Facility Description.**

This facility consists of a *very large* municipal waste combustor plant designed to process 2,000 tons per day (TPD) of municipal solid waste (MSW). The facility burns processed MSW that is called "refuse derived fuel" (RDF). The RDF plant is equipped with three MSW processing lines, any two of which can handle the 2,000 TPD of incoming MSW. The boiler plant includes two B&W boilers, each designed to operate up to a maximum heat input of 412.5 MMBtu/hr with a steam flow rating of 324,000 lbs./hr. At a reference heating value of 5,500 Btu/lb., this is equivalent to 900 TPD of RDF per boiler. Emissions from each boiler are controlled by a B&W spray dryer followed by a B&W/BSH Krefield 4-field electrostatic precipitator (ESP). Each precipitator has a gas flow rating of 198,000 acfm and is designed to operate with three of the four fields in service. The turbine-generator rating of 62 MW matches the full output of the boilers.

Two landfills are on this property: a Class I Landfill and a Class III Landfill, each with its own gas collection system. Additional facilities include: storage and handling facilities for RDF (waste) as well as storage and handling facilities for ash and ash treatment. Also, included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

Based on the Title V air operation permit renewal application received on May 2, 2005, this facility is a major source of hazardous air pollutants (HAPs).

**Subsection B. Summary of Emissions Unit ID Nos. and Brief Descriptions.**

<b>E.U. ID Nos.</b>	<b>Brief Description</b>
001	Municipal Solid Waste Boiler No. 1
002	Municipal Solid Waste Boiler No. 2
003	Class I Landfill (1800 scfm Flare Removed)
004	Class III Landfill and 3500 scfm Flare
008	Class I Landfill and 3500 scfm Flare

**Unregulated Emissions Units and/or Activities**

<b>E.U. ID Nos.</b>	<b>Brief Description</b>
005	RDF Storage
006	RDF Processing Lines
007	Oversized Bulk Waste Processing Line
017	Woody Waste Facility Diesel Engine
018	Cooling Tower

*Please reference the Permit No., Facility ID No., and Appropriate Emissions Unit(s) ID No(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 information purposes only:

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

Table 1-2, Summary of Compliance Requirements.

Table 1. Summary of Monitoring Requirements for MSW Landfills.

Table 2. Summary of Recordkeeping Requirements for MSW Landfills.

Table 3. Summary of Compliance Reporting Requirements for MSW Landfills.

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers (version dated 2/05/97).

Appendix H-1, Permit History/ID Number Changes.

Appendix BW, Biomedical Waste Definitions.

Statement of Basis

These documents are on file with the permitting authority:

DRAFT Permit clerked on January 4, 2006.

Application for a Title V Air Operation Permit Renewal and After-the-fact Air Construction Permit received May 2, 2005 via EPSAP.

Additional Information Request dated June 29, 2005.

Additional Information Response received September 16, 2005

Additional Information Request dated October 5, 2005.

Additional Information Response received December 5, 2005.

Request for Use of EPA Method 29 in lieu of EPA Method 104 received January 4, 2006.

DEP Order Approving Request dated January 25, 2006.

Request for Changes to Testing Methodology of EPA Method 26.

DEP Order Approving Request dated March 10, 2006.

Landfill documents on file:

Request for Alternative Testing under General Flare Provisions of 40 CFR 60.18 received May 2, 2005.

Transmittal of Request for Alternative Testing under General Flare Provisions of 40 CFR 60.18 to USEPA dated July 12, 2005.

USEPA Approval of Request for Alternative Testing under General Flare Provisions of 40 CFR 60.18 dated August 10, 2005.

Class I and Class III Landfill Gas Well Inactivation Plan received September 19, 2005.

DEP Approval of Request dated December 13, 2005.

Request for an Alternative Timeline to Correct an Exceedance When Bringing Online New Landfill Gas System received on June 27, 2005.

DEP Approval of Request dated August 11, 2005.

Requests for Higher Wellhead Operating Temperature dated September 1 & October 20, 2005.

DEP Approval of Request dated October 25, 2005.

**Section II. Facility-wide Specific Conditions:**

**The following Specific Conditions apply facility-wide:**

1. APPENDIX TV-5, TITLE V CONDITIONS, is a part of this permit.  
{Permitting note: APPENDIX TV-5, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}
  
2. **Not federally enforceable. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited.** No person shall 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.  
[Rules 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  
Lanham-Seabrook, MD 20703-1515  
Telephone: 301/429-5018
  
  - 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. **Unregulated Emissions Units and/or Activities.** Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit.  
[Rule 62-213.440(1), F.A.C.]



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

7. General Pollutant Emission Limiting Standards. Volatile Organic Compounds Emissions or Organic Solvents Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. Nothing was deemed necessary and ordered at this time.  
[Rule 62-296.320(1)(a), F.A.C.]

8. 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-5, TITLE V CONDITIONS):

- a. Chemical or water application to unpaved road and unpaved yard and landfill areas;
- b. Paving and maintenance of roads, parking areas and yards;
- c. Landscaping or planting of vegetation;
- d. Confining abrasive blasting where possible and appropriate;
- e.(1) Unpaved roads and active unpaved areas are sprayed with a water truck;
- e.(2) Landfill areas that are closed are promptly re-vegetated;
- f. Ash is quenched with water prior to landfilling; and,
- g. Waste transfer trucks are tarped.

[Rule 62-296.320(4)(c)2., F.A.C.; and, items a., e., f., and g. proposed by the applicant in the initial and renewal Title V permit applications.]

9. 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.]

10. 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.  
{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-5, TITLE V CONDITIONS)}  
[Rules 62-213.440(3) and 62-213.900, F.A.C.]

11. The permittee shall submit all compliance related notifications and reports required of this permit to the Department's Southeast District office:

Department of Environmental Protection  
Southeast District Office  
400 North Congress Avenue  
West Palm Beach, FL 33401  
Telephone: 561/681-6600  
Fax: 561/681-6755

12. 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 30303-8960  
Telephone: 404/562-9155; Fax: 404/562-9163

13. 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 Unit(s) and Specific Conditions.**

**Subsection A. This section addresses the following emissions units.**

<b>E.U. ID No.</b>	<b>Brief Description</b>
001	Municipal Solid Waste Boiler No. 1
002	Municipal Solid Waste Boiler No. 2

These emission units are solid waste combustors and are designated as Boiler Nos. 1 and 2. The boilers are B&W Sterling Power Boilers, and each is rated at a heat input of 412.5 MMBtu./hr. at a steam flow rating of 324,000 lbs./hr. At a reference heating value of 5500 Btu/lb., this is equivalent to 900 TPD of RDF (75,000 lbs./hr. or 816 megagrams/day) per boiler. The facility is designed to process 2,000 TPD of mixed municipal solid waste with an annual throughput of 624,000 tons. Emissions from the boilers are controlled by spray dryer absorbers and electrostatic precipitators. The boilers have individual flues contained in a single stack casing. The facility began commercial operation in 1989.

{Permitting note(s). 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.; Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT). Also, please note that conditions in 40 CFR 60, Subpart Cb, are contained in 40 CFR 60, Subpart Eb. These emissions units are also subject to Compliance Assurance Monitoring (CAM), adopted and incorporated by reference in Rule 62-204.800, F.A.C.}

**The following Specific Conditions apply to the emissions units listed above:**

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

**A.1.0. Permitted Capacity.** The maximum heat input rates (operation rates) are as follows:

<b>E.U. ID No.</b>	<b>Steam Flow Rate <sup>a</sup></b>	<b>Heat Input Rate <sup>b</sup></b>	<b>Fuel Type</b>
001	324,000 lb/hour	412.5 MMBtu/hour	RDF
002	324,000 lb/hour	412.5 MMBtu/hour	RDF

**Notes:**

<sup>a</sup> 4 hour block average {See Specific Condition R.19.}

<sup>b</sup> Maximum heat input rate is based upon a reference heating value of 5500 BTU/lb. of RDF. Actual heating values range from 4500 to 6200 BTU/lb.

{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each emissions unit for purposes of confirming that emissions testing is conducted within 90-100 percent of the emissions unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate limits and to aid in determining future rule applicability.}

[Rules 62-4.160(2) and 62-210.228(PTE), F.A.C. and PSD-FL-108A]

**A.1.1. Capacity.** The procedures specified below 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 paragraph (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.

[40 CFR 60.31b and 40 CFR 60.58b(j)]

**A.1.2. Emissions Unit Operating Rate Limitation After Testing.** See Specific Condition T.12.  
[Rule 62-297.310(2), F.A.C.]

**A.2. Maximum Demonstrated Municipal Waste Combustor Unit Load.** Maximum demonstrated municipal waste combustor unit load means the highest 4-hour arithmetic average municipal waste combustor unit load achieved 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 A.17.

[40 CFR 60.34b(b) and 40 CFR 60.51b]

**A.3. 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 A.17.

[40 CFR 60.34b(b) and 40 CFR 60.51b]

**A.4.0. Methods of Operation - Fuels.** Only refuse derived fuel (RDF) from mixed municipal solid waste (MSW) shall be fired in the combustors. No suspected or known hazardous, toxic or infectious wastes as defined by federal, state or local statutes, rules, regulations or ordinances shall be burned or landfilled at the site. No sludge from sewage treatment plants shall be used as fuel. Use of alternate fuels would necessitate application for a modification to this permit. Auxiliary burners firing gas fuel are to be used during periods of start-up and shut-down, and their annual capacity factor as determined by 40 CFR 60.43b(d) shall be less than 10%.

[Rule 62-213.410(1), F.A.C.; PSD-FL-108A; and PA 84-20]

**A.4.1. Methods of Operation - Fuels** The only fuel allowed to be burned in the MWCs is refuse derived fuel (RDF) from mixed municipal solid waste. Other wastes shall not be burned without written prior approval from the Department. **The primary fuel for the 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.**

[Rules 62-4.070(3), 62-213.410, and 62-213.440, F.A.C.]

**A.4.2.** 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 below. However, the facility **shall not knowingly burn:** (a) those materials that are prohibited by state or federal law;

- (b) those materials that are prohibited by this permit;
- (c) lead acid batteries;
- (d) hazardous waste;
- (e) nuclear waste;
- (f) radioactive waste;
- (g) sewage sludge;
- (h) explosives;
- (i) beryllium-containing waste, as defined in 40 CFR 61, Subpart C\*;
- (j) untreated biomedical waste from biomedical waste generators regulated pursuant to Chapter 64E-16, F.A.C., and from other similar generators (or sources); and,
- (k) segregated loads of biological waste.

{\*See EPA letter dated April 6, 2000 on 40 CFR 61, Subpart C applicability.}

[Rules 62-4.070(3), 62-213.410, and 62-213.440, F.A.C.]

**A.4.3.** 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 well mixed with MSW.

[Rules 62-4.070(3), 62-213.410, and 62-213.440; F.A.C.]

**A.4.4.** The facility 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 (Specific Conditions A.4.7. and A.4.8.). 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 observation.

[Rules 62-4.070(3), 62-213.410, and 62-213.440, F.A.C.]

**A.4.5.** To ensure that the facility's fuel does not adversely affect the facility's combustion process or emissions, the facility operator shall:

- (a) comply with good combustion operating practices in accordance with 40 CFR 60.53b;
- (b) install, operate and maintain continuous emissions monitors (CEMS) for oxygen (or carbon dioxide), carbon monoxide, sulfur dioxide, oxides of nitrogen and temperature in accordance with 40 CFR 60.58b; and
- (c) 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.

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.

[Rules 62-4.070(3), 62-213.410, and 62-213.440, F.A.C.]

**A.4.6.** 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 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; or
- (f) Rugs, carpets, and floor coverings, but not asbestos-containing materials or polyethylene or polyurethane vinyl floor coverings.

[Rules 62-4.070(3), 62-213.410, and 62-213.440, F.A.C.]

**A.4.7.** 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 segregated loads 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.

[Rules 62-4.070(3), 62-213.410, and 62-213.440, F.A.C.]

{Permitting Note: At RDF plants, the 3% (or 5%) restriction applies to the municipal solid waste received. On-site processing of material at the facility is not included in this restriction. Exceedance of this percentage requires prior department approval. }

**A.4.8.** 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.

- (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.

[Rules 62-4.070(3) and 62-213.440, F.A.C.]

{Permitting Note: At RDF plants, the 3% (or 5%) restriction applies to the municipal solid waste received. On-site processing of material at the facility is not included in this restriction. Exceedance of this percentage requires prior department approval.}

A.5. Hours of Operation. These emission units may operate continuously, i.e., 8,760 hours/year.  
 [PSD-FL-108A]

**Emission Limitations and Standards**

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

A.6. Stack Emissions. Emissions from each unit shall not exceed the following limits:

Pollutant	PSD-FL-108A Permit Limit <sup>a</sup>	Federal Emission Guidelines <sup>a</sup>
Particulate Matter <sup>b</sup>	0.015 grains/dscf	27 mg/dscm
NOx <sup>b</sup>	0.48 lb/MMBtu (24 hr block avg)	250 ppmvd (24 hr block avg)
Carbon Monoxide <sup>b</sup>	400 ppmvd (1 hr block avg)/ 200 ppmvd (24 hr block avg)	200 ppmvd (24 hr block avg)
Lead <sup>b</sup>	4.0 x 10 <sup>-4</sup> lb/MMBtu	0.440 mg/dscm
Mercury <sup>b</sup>	2.4 x 10 <sup>-4</sup> lb/MMBtu	0.070 mg/dscm
Beryllium	7.3 x 10 <sup>-7</sup> lb/MMBtu	
Fluoride	3.2 x 10 <sup>-3</sup> lb/MMBtu	
VOC	1.6 x 10 <sup>-2</sup> lb/MMBtu	
SO <sub>2</sub> <sup>b</sup>	70% removal or 30 ppmvd	75% removal or 29 ppmvd
Hydrogen Chloride <sup>b</sup>	90% removal or 25 ppmvd	95% removal or 29 ppmvd
Dioxins/Furans <sup>b</sup>	60 ng/dscm	60 ng/dscm
Opacity	10% (6 minute avg)	10% (6 minute avg)
Cadmium <sup>b</sup>		0.040 mg/dscm

Notes: <sup>a</sup> the more stringent limit/guideline applies.

<sup>b</sup> corrected to 7% O<sub>2</sub>.

[40 CFR 60, Subpart Cb; Rule 62-296.416(3)(b)1.b., F.A.C.; and PSD-FL-108A]

**Particulate Matter**

A.7. 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)]

{Permitting note: Unless otherwise specified, the averaging time for this condition is based on the specified averaging time of the applicable test method.}

**Visible Emissions**

A.8. The emission limit for opacity exhibited by the gases discharged to the atmosphere is 10 percent (6-minute average). CEM readings when the process is not operating shall be excluded from averaging calculations.

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

### Cadmium

A.9. 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)]

{Permitting note: Unless otherwise specified, the averaging time for this condition is based on the specified averaging time of the applicable test method.}

### Mercury

A.10. The 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)(a)1., F.A.C.]

{Permitting note: Unless otherwise specified, the averaging time for this condition is based on the specified averaging time of the applicable test method.}

A.11. Facilities subject to the mercury emissions limiting standard of Rule 62-296.416(3)(a)1., F.A.C., shall demonstrate individual emissions unit compliance by the compliance date specified in Rule 62-296.416(3)(a)2., F.A.C., and annually thereafter.

[Rule 62-296.416(3)(a)3., F.A.C.; and **Order Granting Variance dated August 25, 1997.**]

A.12. 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.

3. Facilities which do not have 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 comply with a mercury emission limitation of 70 micrograms per dry standard cubic meter of flue gas, corrected to 7 percent O<sub>2</sub>, by the later of July 1, 1997, or the date that the facility is required to demonstrate compliance with sulfur dioxide and hydrogen



chloride emission limits, which limits are established after July 1, 1993. If the facility is required to demonstrate compliance with sulfur dioxide and hydrogen chloride emission limits by a date prior to July 1, 1997, it shall comply with a mercury emission limitation of 140 micrograms per dry standard cubic meter of flue gas, corrected to 7 percent O<sub>2</sub>, by that date and until July 1, 1997.

4. Facilities subject to Rule 62-296.416(3)(b)3., F.A.C., shall demonstrate individual emissions unit compliance with the mercury emission limiting standard by the date specified therein and semiannually thereafter. Facilities shall stagger the semiannual testing of individual emissions units such that at least one test is performed quarterly.

[Rule 62-296.416(3)(b), F.A.C.; and, **Order Granting Variance dated August 25, 1997.**]

**A.13. Mercury Emissions Inventory.** For emissions inventory purposes, all waste-to-energy facilities with charging rates of 40 tons or more per day shall perform annual individual emissions unit mercury emissions tests and report the results to the Department. This testing shall begin during calendar year 1993 and end upon initiation of mercury testing pursuant to Rule 62-296.416(3)(a) or (b), F.A.C.

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

### **Lead**

**A.14.** The emission limit for lead contained in the gases discharged to the atmosphere is 0.44 milligrams per dry standard cubic meter, corrected to 7 percent oxygen.

[40 CFR 60.33b(a)(4)]

{Permitting note: Unless otherwise specified, the averaging time for this condition is based on the specified averaging time of the applicable test method.}

### **Sulfur Dioxide**

**A.15.** 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)]

### **Hydrogen Chloride**

**A.16.** 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)]

{Permitting note: Unless otherwise specified, the averaging time for this condition is based on the specified averaging time of the applicable test method.}

### **Dioxins/Furans**

**A.17.** The emission limit for dioxins/furans contained in the gases discharged to the atmosphere that employ an electrostatic precipitator-based emission control system is 60 nanograms per dry standard cubic meter (total mass), corrected to 7 percent oxygen.

[40 CFR 60.33b(c)(1)(i)]

{Permitting note: Unless otherwise specified, the averaging time for this condition is based on the specified averaging time of the applicable test method.}

### Nitrogen Oxides

A.18. The emission limit for nitrogen oxides contained in the gases discharged to the atmosphere is 250 parts per million by volume, corrected to 7 percent oxygen, dry basis calculated as an arithmetic average. The averaging time is a 24-hour block average.

[40 CFR 60.33b(d); and PSD-FL-108A]

### Carbon Monoxide

A.19. The emission limit for carbon monoxide contained in the gases discharged to the atmosphere is 200 parts per million by volume (24-hour block average) and 400 ppmv (1-hour block average), measured at the combustor outlet in conjunction with a measurement or calculation of oxygen concentration, corrected to 7 percent oxygen, dry basis. Calculated as an arithmetic average.

[40 CFR 60.34b(a); and PSD-FL-108A]

### Volatile Organic Compounds

A.20. Volatile organic compound (VOC) emissions shall not exceed  $1.6 \times 10^{-2}$  lb/MMBTU.

[PSD-FL-108A]

{Permitting note: Unless otherwise specified, the averaging time for this condition is based on the specified averaging time of the applicable test method.}

### Beryllium

A.21. Beryllium emissions shall not exceed  $7.3 \times 10^{-7}$  lb/MMBTU.

[PSD-FL-108A]

{Permitting note: Unless otherwise specified, the averaging time for this condition is based on the specified averaging time of the applicable test method.}

### Fluoride

A.22. Fluoride emissions shall not exceed  $3.2 \times 10^{-3}$  lb/MMBTU.

[PSD-FL-108A]

{Permitting note: Unless otherwise specified, the averaging time for this condition is based on the specified averaging time of the applicable test method.}

### Fugitive Ash Emissions

A.23. Fugitive Ash Emissions

(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, 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 T.10.

(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.

(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]

### Excess Emissions

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

**E.1.** 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)]

**E.2.** 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)]

**E.3.a. Startup, Shutdown and Malfunction Provisions.** The provisions from the applicable federal new source performance standards for startup, shutdown, and malfunction are provided in paragraph (1).

(1) Except as provided by 40 CFR 60.56b, the standards under 40 CFR 60, Subpart Cb, as incorporated in Rule 62-204.800, F.A.C., and this permit shall apply at all times except during periods of startup, shutdown, or malfunction. Duration of startup, shutdown, or malfunction periods are limited to **3 (three)** hours per occurrence, except as provided in CFR 60.58b(a)(1)(iii).

(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 and no municipal solid waste is being fed to the combustor.

(ii) Continuous burning is the continuous, semi-continuous, 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.

(iii) For the purposes of compliance with the carbon monoxide emission limits in 40 CFR 60.53b(a), if a loss of a 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 (fifteen)** hours per occurrence.

(2) For the purposes of this condition, a malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions. [40 CFR 60.2, Definitions]

[40 CFR 60.38b and 40 CFR 60.58b(a); 40 CFR 60.2, Definitions; and, PSD-FL-108A]

**E.3.b. Startup, Shutdown and Malfunction.** Excess emissions resulting from malfunction, startup or shutdown shall be permitted providing:

(1) during boiler startup, the auxiliary gas burners shall be operating at their maximum capacity prior to the introduction of RDF to the boilers, and shall remain in operation until the lime spray dryer and particulate control device are fully operational.

(2) during normal, non-emergency boiler shutdown, the auxiliary gas burners shall be operated at their maximum capacity until all RDF has been combusted.

[Rule 62-210.700(1), F.A.C.; and PSD-FL-108A]

**E.4.** Excess emissions resulting from 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 3 (three) hours per occurrence unless specifically authorized by the Department for longer duration.

For the purposes of this condition, a malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions. [40 CFR 60.2, Definitions]

[Rule 62-210.700(1), F.A.C.; 40 CFR 60.2, Definitions; and, PSD-FL-108A]

**E.5.** 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.]

### **Operating Practices and Requirements**

**O.1.** 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 A.2., except as specified below. The averaging time is specified in Specific Condition O.3.

(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.

(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.

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

**O.2.** 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 A.3., except as specified

below. The averaging time is specified in Specific Condition **O.3**. 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.
- (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.

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

**O.3. 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).
    - (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, 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.

(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.

(10) At a minimum, valid continuous emission monitoring system hourly averages shall be obtained as specified in paragraphs(i) and(ii) for 75 percent of the operating hours per day for 90 percent of the operating days per calendar quarter 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.

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

### **Operator Training and Certification**

#### **OT.1. 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, 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, 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 months 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 one of the persons listed in paragraph (c) must leave the affected facility during their operating shift, a provisionally certified control room operator who is onsite at the affected facility may fulfill the requirement in paragraph (c).

(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 paragraphs (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]

**OT.2.** 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)]

**OT.3.** 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 operators, shift supervisors, and control room operators who have obtained provisional certification from the American Society of Mechanical Engineers on or before the date of State plan approval.

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

**OT.4.** 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)]

### **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. }

**T.1.** These combustors are regulated individually and must be tested individually.

[Rules 62-4.070(3) and 62-213.440(1), F.A.C.]

**T.2.** Performance Tests.

(a) 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).

(b) 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.

(c) 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]

### **Particulate Matter and Opacity**

**T.3.** 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, 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 (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 an annual basis (no more than 12 calendar months following the previous performance test).
- (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 more than 12 calendar months following the previous performance test) using the test method specified in paragraph (6).  
[40 CFR 60.38b and 40 CFR 60.58b(c)]

### **Cadmium, Lead and Mercury**

**T.4.** 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, as applicable, shall be used for flue 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 an annual basis (no more than 12 calendar months following the previous performance test).
  - (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, as applicable, shall be used for flue gas analysis.
  - (iii) The EPA Reference Method 29 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:

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

where:

%P<sub>HG</sub> = 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<sub>o</sub> = 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 an annual basis (no more than 12 calendar months from the previous performance test).

(x) [reserved]

(xi) [not applicable]

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

**T.5. 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 Chapter 62-297, F.A.C.

2. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.

(4) Flue Gas Temperature Standard. Waste-to-energy facilities choosing to control mercury emissions through the use of post-combustion control equipment designed to remove mercury from flue gases shall comply with the flue gas temperature standard of Rule 62-296.416(4)(a), F.A.C.

(a) Temperature Standard. The flue gas temperature standard set forth in 40 CFR 60.53b(c), incorporated by reference in Rule 62-04.800, F.A.C., shall apply.

(b) Temperature Monitoring. The temperature monitoring requirements set forth in 40 CFR 60.58b(i), incorporated by reference in Rule 62-204.800, F.A.C., shall apply.

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

### **Sulfur Dioxide**

**T.6.** 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 75 percent of the operating hours per day for 90 percent of the operating days per calendar quarter 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.
  - (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 shall be used.
    - (B) For oxygen (or carbon dioxide), EPA Reference Method 3, 3A, or 3B, 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 75 percent of the hours per day that the affected facility is operated and combusting municipal solid waste for 90 percent of the days per calendar quarter that the affected facility is operated and combusting municipal solid waste.  
[40 CFR 60.38b and 40 CFR 60.58b(e)]

### Hydrogen Chloride

T.7. 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<sup>1</sup> 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 (% P<sub>HCl</sub>) is computed using equation 2:

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

where:

%P<sub>HCl</sub>=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>o</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]
- <sup>1</sup> **On March 10, 2006, the Department approved changes in the EPA Method 26 testing methodology in an Order. The Order expires March 17, 2011.**  
[40 CFR 60.38b and 40 CFR 60.58b(f)]

### Dioxin/Furan

**T.8.** 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, 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 an annual basis (no more than 12 calendar months following the previous performance test.)
- (ii) [reserved]
- (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), corrected to 7 percent oxygen 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 annually (no more than 12 months following the previous performance test) 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 year. If any annual performance test indicates a dioxin/furan emission level greater than 15 nanograms per dry standard cubic meter (total mass), performance tests thereafter shall 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).

- (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 60.59b(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)]

### Nitrogen Oxides

- T.9.** 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 Sec. 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 75 percent of the operating hours per day for 90 percent of the operating days per calendar quarter 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, 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 75 percent of the hours per day for 90 percent of the days per calendar quarter the unit is operated and combusting municipal solid waste. [40 CFR 60.38b and 40 CFR 60.58b(h)]

### **Fugitive Ash**

- T.10.** 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 Sec. 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)]

**T.11. 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.]

**T.12. 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.]

**T.13. 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.]

**T.14. 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.

(c) Required Flow Rate Range. 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) Calibration of Sampling Equipment. 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.]

**T.15. 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.]

**T.16.1. 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.

2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid and/or solid fuel for more than 400 hours other than during startup.

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 Department, 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) Special Compliance Tests. When the Department, 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 Department.

(c) Waiver of Compliance Test Requirements. 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.

**T.16.2.** Beryllium and fluoride emissions shall be tested every 5 years. The test method for beryllium is EPA Method 104 and for fluoride is EPA Method 13A or 13B. The test method for VOC is EPA Method 25 or 25A. **In lieu of EPA Method 104, EPA Method 29 shall be used in accordance with the DEP Order approval dated January 25, 2006. This request expires on January 19, 2011**  
[Rule 62-297.310(7), F.A.C.; and, SIP approved]

**T.16.3.** Mercury Test Frequency. The Department's Order Granting Variance dated August 25, 1997, is a part of this permit. The variance allows the facility to test mercury emissions annually provided each future annual test demonstrates compliance. The order contains additional terms. If compliance is not demonstrated by each annual test, the Department retains the right to reinstate quarterly testing. The variance does not apply to any other new or existing state or federal rule which may require more frequent mercury testing.

{Permitting Note: Condition T.4.(4)(ix), which is based on a federal requirement, requires annual testing.}

[Rule 62-296.416(3)(a)3., F.A.C ; Rule 62-296.416(3)(b)2., F.A.C.; and, Order Granting Variance dated August 25, 1997.]

### Compliance With Standards and Maintenance Requirements

**T.17.** Compliance with standards in 40 CFR 60, other than opacity standards, shall be determined in accordance with performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard.

[40 CFR 60.11(a)]

**T.18.** 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)]

**T.19.** 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)]

### **Monitoring Requirements**

**T.20.** 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)]

**T.21.** 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 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 60.8 is conducted.

[40 CFR 60.13(c)(1)]

**T.22.** (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)]

**T.23.** 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)]

**T.24.** 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)]

**T.25.** 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)]

T.26. 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)]

**T.27. 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) 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**

C.1. 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 shall comply with the test procedures and test methods specified in paragraphs (1) through (7).

(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, 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.

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

### **Compliance Assurance Monitoring (CAM) Requirements**

**CAM.1.** These emissions units are subject to the CAM requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C.

[40 CFR 64; and, Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

### **Recordkeeping and Reporting Requirements**

**R.1.** 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)]

**R.2.** 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)]

**R.3.** Each owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form [see 40 CFR 60.7(d)] to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or, the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or, the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:

- (1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
  - (2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
  - (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.
  - (4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.
- [40 CFR 60.7(c)(1), (2), (3), and (4)]

**R.4.** 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.

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

*{See attached Figure 1: Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance} (electronic file name: figure1.doc)*

**R.5.** (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)]

**R.6.** 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); and, Rule 62-213.440(1)(b)2.b., F.A.C.]

**R.7. 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)]

**R.8.** 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 (14), 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 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 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.
- (4) For affected facilities that apply activated carbon for mercury or dioxin/furan control, the records specified in paragraphs (i) through (v).
  - (i) The average carbon mass feed rate (in kilograms per hour or pounds per hour) estimated as required under 40 CFR 60.58b(m)(1)(i) during the initial mercury performance test and all subsequent annual performance tests, with supporting calculations.
  - (ii) The average carbon mass feed rate (in kilograms per hour or pounds per hour) estimated as required under 40 CFR 60.58b(m)(1)(ii) during the initial dioxin/furan performance test and all subsequent annual performance tests, with supporting calculations.
  - (iii) The average carbon mass feed rate (in kilograms per hour or pounds per hour) estimated for each hour of operation as required under 40 CFR 60.58b(m)(3)(ii), with supporting calculations.
  - (iv) The total carbon usage for each calendar quarter estimated as specified by 40 CFR 60.58b(m)(3), with supporting calculations.
  - (v) Carbon injection system operating parameter data for the parameter(s) that are the primary indicator(s) of carbon feed rate (e.g., screw feeder speed).
- (5) [Reserved]
- (6) Identification of the calendar dates for which the minimum number of hours of any of the 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 this part, 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) The records specified in paragraphs (i) through (iii).
- (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.
- (12) 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.
- (13) For affected facilities that apply activated carbon for mercury or dioxin/furan control, identification of the calendar dates when the average carbon mass feed rates recorded under (4)(iii) were less than either of the hourly carbon feed rates estimated during performance tests for mercury or dioxin/furan emissions and recorded under paragraphs (4)(i) and (4)(ii), respectively, with reasons for such feed rates and a description of corrective actions taken.
- (14) For affected facilities that apply activated carbon for mercury or dioxin/furan control, identification of the calendar dates when the carbon injection system operating parameter(s) that are the primary indicator(s) of carbon mass feed rate (e.g., screw feeder speed) recorded under paragraph (4)(v) are below the level(s) estimated during the performance tests as specified in 40 CFR 60.58b(m)(1)(i) and 40 CFR 60.58b(m)(1)(ii), with reasons for such occurrences and a description of corrective actions taken.  
[40 CFR 60.39b and 40 CFR 60.59b(d)]

**R.9.** 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 60.59b(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).

(5) For affected facilities that apply activated carbon injection for mercury control, the owner or operator shall submit the average carbon mass feed rate recorded under 40 CFR 60.59b(d)(4)(i).

(6) For those affected facilities that apply activated carbon injection for dioxin/furan control, the owner or operator shall submit the average carbon mass feed rate recorded under 40 CFR 60.59b(d)(4)(ii).

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

**R.10.** 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) The total number of days that the minimum number of hours of data for sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor unit load, and particulate matter control device temperature data were not obtained based on the data recorded under 40 CFR 60.59b(d)(6).

(v) 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.

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

**R.11.** 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)]

**R.12.** 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)]

**R.13.** 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)]

**R.14.** 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)]

**R.15.** In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department 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 Department.

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

**R.16.** Submit to the Department a written report of emissions in excess of emission limiting 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 5 (five) years.

[Rules 62-210.700(6) and 62-213.440, F.A.C.]

**R.17. Test Reports.**

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- (b) The required test report shall be filed with the Department 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 Department 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.]

**R.18. Flue Gas Temperature Recording.** The temperature at the exit of the dry scrubber shall not exceed 300°F (4 hour block average). Appropriate instrumentation shall remain installed at the proper location to continuously monitor and record these operating temperatures.  
[PSD-FL-108A]

**R.19. Steam Flow Recording.** The lb/hr of steam produced, corrected for pressure and temperature, shall be continuously monitored and recorded on a 4 hour block average. This monitor and data record shall be properly calibrated and maintained at all times.  
[PSD-FL-108A]

**R.20. Daily Waste Logs Required.** The permittee shall maintain a daily log of the municipal solid waste received. Such a log must record, at a minimum, the amount of waste, the time, and the type of waste received. The permittee shall also retain records of all information resulting from monitoring activities and indicating operating parameters as specified in this permit for a minimum of five years from the date of recording.  
[PSD-FL-108A and Rule 62-213.440(1)(b)2.b., F.A.C.]

**R.21. Continuous Monitoring Program.** The owner or operator of this source shall install (if not already installed), maintain, operate and submit reports of excessive emissions for the SO<sub>2</sub>, NO<sub>x</sub>, CO, oxygen (or carbon dioxide) and opacity. All averaging periods for emissions monitors shall be based on a midnight to midnight averaging period. The facility shall be operated by personnel properly trained for the operation herein. Continuous monitoring data shall be collected and recorded during periods of startup, shutdown and malfunction. Emissions during periods of startup, shutdown and malfunction shall be excluded from averaging calculations, and from determinations of compliance with emission limits of this permit provided, however, that the duration of startups, shutdowns or malfunctions shall not exceed three hours per occurrence. The start-up period as stated in this condition shall mean the period when the boilers begin continuous burning of RDF, and does not include any warm-up period when only the auxiliary gas burners are utilized, and no RDF is being combusted. Malfunction shall be as defined in Specific Conditions E.3.a. and b.  
[PSD-FL-108A]

### **Miscellaneous Requirements.**

**M.1. Definitions.** For the purposes of Rules 62-204.800(7), (8), and (9), F.A.C., the definitions contained in the various provisions of 40 CFR Parts 60 and 61, adopted herein shall apply except that the term "Administrator" when used in 40 CFR Parts 60 and 61, shall mean the Secretary or the Secretary's designee except as noted in 40 CFR 61.157.  
[40 CFR 60.2; and, Rules 62-204.800(7)(a), (8)(a)2., and, (9)(a), F.A.C.]

**M.2. 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]

**M.3. General Applicability and Definitions.** The Standards of Performance for New Stationary Sources adopted by reference in Rule 62-204.800(7), F.A.C., the Emission Guidelines for Existing Sources adopted

by reference in Rule 62-204.800(8), F.A.C., and the National Emissions Standards for Hazardous Air Pollutants adopted by reference in Rule 62-204.800(9), 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, an Emission Guideline, or a National Emission Standard, or which regulates emissions of pollutants or emissions units not regulated by an applicable Standard of Performance, Emission Guideline, or National Emission Standard, shall apply.

[Rules 62-204.800(7)(c), (8)(a)1., and (9)(c), F.A.C.]

**M.4. Acid Rain Program 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 62-204.800, F.A.C., the designated representative of the source containing the unit shall submit a complete Acid Rain Program application governing such unit to the Department before the later of January 1, 1998, or 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.

[Chapter 62-214.320(1)(h), F.A.C.]



**Subsection B. This section addresses the following emissions unit.**

E.U. ID No.	Brief Description
003	Class I Landfill (1800 scfm Flare Removed)
004	Class III Landfill (1800 scfm Flare)
008	Class I Landfill and 3500 scfm Flare

Two landfills are on this property: a Class I Landfill and a Class III Landfill, each with its own gas collection system. Emissions from each landfill are controlled by flares. The Class I Landfill Flare was manufactured by LFG Specialties and has a rating of 3,500 scfm, based on a maximum heat content of 550 BTU/scfm. The original 1800 scfm Flare at the Class I Landfill was shutdown on June 9, 2004 and replaced with a new 3500 scfm Flare. The new 3,500 scfm Flare began operations on June 9, 2004. The Class III Landfill Flare has a rating of 1,800 scfm, based on a maximum heat content of 550 BTU/scfm.

Both landfills have a design capacity greater than 2.5 million megagrams by mass or 2.5 million cubic meters by volume. The design capacity of the Class I Landfill is 33,212,516 megagrams by mass and the Class III Landfill is 5,723,708 megagrams by mass. The landfills commenced construction in August 1988. A minor modification was requested and approved in 1994; expanding the landfills and changing the slopes. The Class I Landfill started receiving waste in August 1989 and the Class III Landfill started receiving waste in April 1990. The yearly waste acceptance at the Class I and Class III Landfills in FY2004 was 643,501 and 203,470 Mg/yr, respectively. The NMOC emissions are calculated to be greater than 50 megagrams per year. The landfills are collocated with a major source of HAPs; individually they are not major sources of HAPs. The landfills do not contain bioreactors. The Class I Landfill received asbestos from 1989-1993. In 1993, asbestos disposal was transferred to the Class III landfill, which continues to receive the material. Collection and control of landfill gas emissions began in February 1996 for both landfills. The Class III Landfill is expected to close by 2016 and the Class I Landfill between 2023 and 2026.

{Permitting note(s): The landfills are subject to NSPS 40 CFR 60 Subparts WWW and A, NESHAP 40 CFR 63 Subparts AAAA and A, and Rule 62-212.400(5), F.A.C.}

**The following Specific Conditions apply to the emissions units listed above:**

**B.0. Hours of Operation:** These emissions units may operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200, F.A.C., Definitions-potential to emit (PTE) and PSD-FL-108(D)]

**Sections 60.752(a)-(d) Standards for air emissions from municipal solid waste landfills.**

**B.1. Reporting of design capacity.**

(a) Each owner or operator of an MSW landfill having a design capacity less than 2.5 million megagrams by mass or 2.5 million cubic meters by volume shall submit an initial design capacity report to the Administrator as provided in 40 CFR 60.757(a). The landfill may calculate design capacity in either megagrams or cubic meters for comparison with the exemption values. Any density conversions shall be documented and submitted with the report. Submittal of the initial design capacity report shall fulfill the requirements of 40 CFR 60, Subpart WWW except as provided for in paragraphs (a)(1) and (a)(2) of this section.

(1) The owner or operator shall submit to the Administrator an amended design capacity report, as provided for in 40 CFR 60.757(a)(3).

(2) When an increase in the maximum design capacity of a landfill exempted from the provisions of 40 CFR 60.752(b) through 40 CFR 60.759 on the basis of the design capacity exemption in paragraph(a) of this section results in a revised maximum design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters, the owner or operator shall comply with the provision of 40 CFR 60.752(b).

[Rule 62-204.800, F.A.C.; and 40 CFR 60.752(a)]

**B.2. Determination of non-methane organic compounds.**

(b) Each owner or operator of an MSW landfill having a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters, shall either comply with paragraph (b)(2) of this section or calculate an NMOC emission rate for the landfill using the procedures specified in 40 CFR 60.754. The NMOC emission rate shall be recalculated annually, except as provided in 40 CFR 60.757(b)(1)(ii). The owner or operator of an MSW landfill subject to 40 CFR 60, Subpart WWW with a design capacity greater than or equal to 2.5 million megagrams and 2.5 million cubic meters is subject to 40 CFR 70 or 71 permitting requirements.

(1) If the calculated NMOC emission rate is less than 50 megagrams per year, the owner or operator shall:

(i) Submit an annual emission report to the Administrator, except as provided for in 40 CFR 60.757(b)(1)(ii); and

(ii) Recalculate the NMOC emission rate annually using the procedures specified in 40 CFR 60.754(a)(1) until such time as the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, or the landfill is closed.

(A) If the NMOC emission rate, upon recalculation required in paragraph (b)(1)(ii) of this section, is equal to or greater than 50 megagrams per year, the owner or operator shall install a collection and control system in compliance with paragraph (b)(2) of this section.

(B) If the landfill is permanently closed, a closure notification shall be submitted to the Administrator as provided for in 40 CFR 60.757(d).

(2) If the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, the owner or operator shall:

(i) Submit a collection and control system design plan<sup>1</sup> prepared by a professional engineer to the Administrator within 1 year:

(A) The collection and control system as described in the plan shall meet the design requirements of paragraph (b)(2)(ii) of this section.

(B) The collection and control system design plan shall include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions of 40 CFR 60.753 through 60.758 proposed by the owner or operator.

(C) The collection and control system design plan shall either conform with specifications for active collection systems in 40 CFR 60.759 or include a demonstration to the Administrator's satisfaction of the sufficiency of the alternative provisions to 40 CFR 60.759.

(D) The Administrator shall review the information submitted under paragraphs (b)(2)(i) (A),(B) and (C) of this section and either approve it, disapprove it, or request that additional information be submitted. Because of the many site-specific factors involved with landfill gas system design, alternative systems may be necessary. A wide variety of system designs are possible, such as vertical

wells, combination horizontal and vertical collection systems, or horizontal trenches only, leachate collection components, and passive systems.

<sup>1</sup>As an amendment to the gas collection and control plan, the owner requested and received approval for alternative provisions to inactivate gas wells. The owner or operator shall inactivate gas wells in accordance with the approved plan\*.

(ii) Install a collection and control system that captures the gas generated within the landfill as required by paragraphs (b)(2)(ii)(A) or (B) and (b)(2)(iii) of this section within 30 months after the first annual report in which the emission rate equals or exceeds 50 megagrams per year, unless Tier 2 or Tier 3 sampling demonstrates that the emission rate is less than 50 megagrams per year, as specified in 40 CFR 60.757(c)(1) or (2).

(A) An active collection system shall:

- (1) Be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment;
- (2) Collect gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for a period of:
  - (i) 5 years or more if active; or
  - (ii) 2 years or more if closed or at final grade;
- (3) Collect gas at a sufficient extraction rate;
- (4) Be designed to minimize off-site migration of subsurface gas.

(B) A passive collection system shall:

- (1) Comply with the provisions specified in paragraphs (b)(2)(ii), (A) (1), (2), and (4) of this section.
- (2) Be installed with liners on the bottom and all sides in all areas in which gas is to be collected. The liners shall be installed as required under 40 CFR 258.40.

(iii) Route all the collected gas to a control system that complies with the requirements in either paragraph (b)(2)(iii) (A), (B) or (C) of this section.

(A) An open flare designed and operated in accordance with 40 CFR 60.18;

(B) A control system designed and operated to reduce NMOC by 98 weight-percent, or, when an enclosed combustion device is used for control, to either reduce NMOC by 98 weight percent or reduce the outlet NMOC concentration to less than 20 parts per million by volume, dry basis as hexane at 3 percent oxygen. The reduction efficiency or parts per million by volume shall be established by an initial performance test to be completed no later than 180 days after the initial startup of the approved control system using the test methods specified in 40 CFR 60.754(d).

- (1) If a boiler or process heater is used as the control device, the landfill gas stream shall be introduced into the flame zone.
- (2) The control device shall be operated within the parameter ranges established during the initial or most recent performance test. The operating parameters to be monitored are specified in 40 CFR 60.756;

(C) Route the collected gas to a treatment system that processes the collected gas for subsequent sale or use. All emissions from any atmospheric vent from the gas treatment system shall be subject to the requirements of paragraph (b)(2)(iii) (A) or (B) of this section.

- (iv) Operate the collection and control device installed to comply with 40 CFR 60, Subpart WWW in accordance with the provisions of 40 CFR 60.753, 60.755 and 60.756.
- (v) The collection and control system may be capped or removed provided that all the conditions of paragraphs (b)(2)(v) (A), (B), and (C) of this section are met:
  - (A) The landfill shall be a closed landfill as defined in 40 CFR 60.751. A closure report shall be submitted to the Administrator as provided in 40 CFR 60.757(d);
  - (B) The collection and control system shall have been in operation a minimum of 15 years; and
  - (C) Following the procedures specified in 40 CFR 60.754(b), the calculated NMOC gas produced by the landfill shall be less than 50 megagrams per year on three successive test dates. The test dates shall be no less than 90 days apart, and no more than 180 days apart.

**{Permitting Note: \*Class I and Class III Landfill Gas Well Inactivation Plan received September 19, 2005. DEP Approval of Request dated December 13, 2005.}**  
[Rule 62-204.800, F.A.C.; 40 CFR 60.752(b)]

**B.3. Requirement to obtain a Title V Permit.**

(c) For purposes of obtaining an operating permit under title V of the Act, the owner or operator of a MSW landfill subject to 40 CFR 60, Subpart WWW with a design capacity less than 2.5 million megagrams or 2.5 million cubic meters is not subject to the requirement to obtain an operating permit for the landfill under 40 CFR 70 or 71, unless the landfill is otherwise subject to either 40 CFR 70 or 71. For purposes of submitting a timely application for an operating permit under 40 CFR 70 or 71, the owner or operator of a MSW landfill subject to 40 CFR 60, Subpart WWW with a design capacity greater than or equal to 2.5 million megagrams and 2.5 million cubic meters, and not otherwise subject to either 40 CFR 70 or 71, becomes subject to the requirements of 40 CFR 70.5(a)(1)(i) or 71.5(a)(1)(i), regardless of when the design capacity report is actually submitted, no later than:

- (1) June 10, 1996 for MSW landfills that commenced construction, modification, or reconstruction on or after May 30, 1991 but before March 12, 1996;
- (2) Ninety days after the date of commenced construction, modification, or reconstruction for MSW landfills that commence construction, modification, or reconstruction on or after March 12, 1996.

[Rule 62-204.800, F.A.C.; 40 CFR 60.752(c)]

**B.4. Closure of landfill.**

(d) When a MSW landfill subject to 40 CFR 60, Subpart WWW is closed, the owner or operator is no longer subject to the requirement to maintain an operating permit under 40 CFR 70 or 71 for the landfill if the landfill is not otherwise subject to the requirements of either 40 CFR 70 or 71 and if either of the following conditions are met:

- (1) The landfill was never subject to the requirement for a control system under 40 CFR 60.752(b)(2); or
- (2) The owner or operator meets the conditions for control system removal specified in 40 CFR 60.752(b)(2)(v).

[Rule 62-204.800, F.A.C.; 40 CFR 60.752(d)]

**Section 60.753 Operational standards for collection and control systems.**

**B.5. Length of time required to operate control system.**

Each owner or operator of an MSW landfill with a gas collection and control system used to comply with the provisions of 40 CFR 60.752(b)(2)(ii) shall:

(a) Operate the collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which solid waste has been in place for:

- (1) 5 years or more if active; or
- (2) 2 years or more if closed or at final grade.

[Rule 62-204.800, F.A.C.; 40 CFR 60.753(a)]

**B.6. Collection system pressure requirements.**

(b) Operate the collection system<sup>1</sup>

with negative pressure at each wellhead except under the following conditions:

- (1) A fire or increased well temperature. The owner or operator shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in 40 CFR 60.757(f)(1);
- (2) Use of a geomembrane or synthetic cover. The owner or operator shall develop acceptable pressure limits in the design plan;
- (3) A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the Administrator.

<sup>1</sup>As an amendment to the gas collection and control plan, the owner requested and received approval for alternative provisions to inactivate gas wells. The owner or operator shall inactivate gas wells in accordance with the approved plan\*.

{Permitting Note: \*Class I and Class III Landfill Gas Well Inactivation Plan received September 19, 2005. DEP Approval of Request dated December 13, 2005.}

[Rule 62-204.800, F.A.C.; 40 CFR 60.753(b)]

**B.7. Collection system temperature, oxygen and nitrogen requirements.**

(c) Operate each interior wellhead in the collection system with a landfill gas temperature less than 82.2°C\* and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The owner or operator may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens.

- (1) The nitrogen level shall be determined using Method 3C, unless an alternative test method is established as allowed by 40 CFR 60.752(b)(2)(i).
- (2) Unless an alternative test method is established as allowed by 40 CFR 60.752(b)(2)(i), the oxygen shall be determined by an oxygen meter using Method 3A except that:
  - (i) The span shall be set so that the regulatory limit is between 20 and 50 percent of the span;
  - (ii) A data recorder is not required;
  - (iii) Only two calibration gases are required, a zero and span, and ambient air may be used as the span;
  - (iv) A calibration error check is not required;
  - (v) The allowable sample bias, zero drift, and calibration drift are ±10 percent.

{Permitting note: \*The permittee established a higher landfill gas temperature of 82.2°C for the interior wellhead in the gas collection system; see DEP Approval of Request dated October 25, 2005.}

[Rule 62-204.800, F.A.C.; 40 CFR 60.753(c)]

**B.8. Collection system background methane requirements.**

(d) Operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. To determine if this level is exceeded, the owner or operator shall conduct surface testing around the perimeter of the collection area and along a pattern that traverses the

landfill at 30 meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The owner or operator may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing.

[Rule 62-204.800, F.A.C.; 40 CFR 60.753(d)]

**B.9. Collection system venting requirements.**

(e) Operate the system such that all collected gases are vented to a control system designed and operated in compliance with 40 CFR 60.752(b)(2)(iii). In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour; and

[Rule 62-204.800, F.A.C.; 40 CFR 60.753(e)]

**B.10. Requirement for continuous operation.**

(f) Operate the control or treatment system at all times when the collected gas is routed to the system.

[Rule 62-204.800, F.A.C.; 40 CFR 60.753(f)]

**B.11. Requirement to take corrective action.**

(g) If monitoring demonstrates that the operational requirement in 40 CFR 60.753(b), (c), or (d) are not met, corrective action shall be taken as specified in 40 CFR 60.755(a) (3) through (5) or 40 CFR 60.755(c). If corrective actions are taken as specified in 40 CFR 60.755, the monitored exceedance is not a violation of the operational requirements in this section.

[Rule 62-204.800, F.A.C.; 40 CFR 60.753(g)]

**Section 60.754 Test methods and procedures.**

**B.12. Method of calculation of NMOC emissions when actual solid waste acceptance rates are unknown.**

(a)(1) The landfill owner or operator shall calculate the NMOC emission rate using either the equation provided in paragraph (a)(1)(i) of this section or the equation provided in paragraph (a)(1)(ii) of this section. Both equations may be used if the actual year-to-year solid waste acceptance rate is known, as specified in paragraph (a)(1)(i), for part of the life of the landfill and the actual year-to-year solid waste acceptance rate is unknown, as specified in paragraph (a)(1)(ii), for part of the life of the landfill. The values to be used in both equations are 0.05 per year for  $k$ , 170 cubic meters per megagram for  $L_o$ , and 4,000 parts per million by volume as hexane for the  $C_{NMOC}$ . For landfills located in geographical areas with a thirty year annual average precipitation of less than 25 inches, as measured at the nearest representative official meteorologic site, the  $k$  value to be used is 0.02 per year.

(i) The following equation shall be used if the actual year-to-year solid waste acceptance rate is known.

$$M_{NMOC} = \sum_{i=1}^n 2kL_oM_i(e^{-kt}i)(C_{NMOC})(3.6 \times 10^{-9})$$

where,

$M_{NMOC}$  = Total NMOC emission rate from the landfill, megagrams per year

$k$  = methane generation rate constant, year<sup>-1</sup>

$L_o$  = methane generation potential, cubic meters per megagram solid waste

$M_i$  = mass of solid waste in the  $i^{\text{th}}$  section, megagrams  
 $t_i$  = age of the  $i^{\text{th}}$  section, years  
 $C_{\text{NMOC}}$  = concentration of NMOC, parts per million by volume as hexane  
 $3.6 \times 10^{-9}$  = conversion factor

The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value for  $M_i$  if documentation of the nature and amount of such wastes is maintained.

(ii) The following equation shall be used if the actual year-to-year solid waste acceptance rate is unknown.

$$M_{\text{NMOC}} = 2L_o R (e^{-kc} - e^{-kt}) (C_{\text{NMOC}}) (3.6 \times 10^{-9})$$

where,

$M_{\text{NMOC}}$  = mass emission rate of NMOC, megagrams per year  
 $L_o$  = methane generation potential, cubic meters per megagram solid waste  
 $R$  = average annual acceptance rate, megagrams per year  
 $k$  = methane generation rate constant, year<sup>-1</sup>  
 $t$  = age of landfill, years  
 $C_{\text{NMOC}}$  = concentration of NMOC, parts per million by volume as hexane  
 $c$  = time since closure, years. For active landfill  $c = 0$  and  $e^{-kc} = 1$   
 $3.6 \times 10^{-9}$  = conversion factor

The mass of nondegradable solid waste may be subtracted from the average annual acceptance rate when calculating a value for  $R$ , if documentation of the nature and amount of such wastes is maintained.

[Rule 62-204.800, F.A.C.; 40 CFR 60.754(a)(1)]

**B.13. Requirements if calculated NMOC emissions are less than 50 megagrams per year.**

(a)(2) Tier 1. The owner or operator shall compare the calculated NMOC mass emission rate to the standard of 50 megagrams per year.

(i) If the NMOC emission rate calculated in 40 CFR 60.754(a)(1) is less than 50 megagrams per year, then the landfill owner shall submit an emission rate report as provided in 40 CFR 60.757(b)(1), and shall recalculate the NMOC mass emission rate annually as required under 40 CFR 60.752(b)(1).

(ii) If the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, then the landfill owner shall either comply with 40 CFR 60.752(b)(2), or determine a site-specific NMOC concentration and recalculate the NMOC emission rate using the procedures provided in 40 CFR 60.754(a)(3).

[Rule 62-204.800, F.A.C.; 40 CFR 60.754(a)(2)]

**B.14. Method for determining site-specific NMOC emissions.**

(a)(3) Tier 2. The landfill owner or operator shall determine the NMOC concentration using the following sampling procedure. The landfill owner or operator shall install at least two sample probes per hectare of landfill surface that has retained waste for at least 2 years. If the landfill is larger than 25 hectares in area, only 50 samples are required. The sample probes should be located to avoid known areas of nondegradable solid waste. The owner or operator shall collect and analyze one sample of landfill gas from each probe to determine the NMOC concentration using Method 25C of 40 CFR 60, Appendix A or Method 18 of 40

CFR 60, Appendix A. If using Method 18 of 40 CFR 60, Appendix A, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). If composite sampling is used, equal volumes shall be taken from each sample probe. If more than the required number of samples are taken, all samples shall be used in the analysis. The landfill owner or operator shall divide the NMOC concentration from Method 25C of 40 CFR 60, Appendix A by six to convert from  $C_{\text{NMOC}}$  as carbon to  $C_{\text{NMOC}}$  as hexane.

(i) The landfill owner or operator shall recalculate the NMOC mass emission rate using the equations provided in 40 CFR 60.754(a)(1)(i) or (a)(1)(ii) and using the average NMOC concentration from the collected samples instead of the default value in the equation provided in 40 CFR 60.754(a)(1).

(ii) If the resulting mass emission rate calculated using the site-specific NMOC concentration is equal to or greater than 50 megagrams per year, then the landfill owner or operator shall either comply with 40 CFR 60.752(b)(2), or determine the site-specific methane generation rate constant and recalculate the NMOC emission rate using the site-specific methane generation rate using the procedure specified in 40 CFR 60.754(a)(4).

(iii) If the resulting NMOC mass emission rate is less than 50 megagrams per year, the owner or operator shall submit a periodic estimate of the emission rate report as provided in 40 CFR 60.757(b)(1) and retest the site-specific NMOC concentration every 5 years using the methods specified in 40 CFR 60.754(a)(3).

[Rule 62-204.800, F.A.C.; 40 CFR 60.754(a)(3)]

**B.15. Method for determining site-specific methane emissions.**

(a)(4) Tier 3. The site-specific methane generation rate constant shall be determined using the procedures provided in Method 2E of 40 CFR 60, Appendix A. The landfill owner or operator shall estimate the NMOC mass emission rate using equations in 40 CFR 60.754(a)(1)(i) or (a)(1)(ii) and using a site-specific methane generation rate constant  $k$ , and the site-specific NMOC concentration as determined in 40 CFR 60.754(a)(3) instead of the default values provided in 40 CFR 60.754(a)(1). The landfill owner or operator shall compare the resulting NMOC mass emission rate to the standard of 50 megagrams per year.

(i) If the NMOC mass emission rate as calculated using the site-specific methane generation rate and concentration of NMOC is equal to or greater than 50 megagrams per year, the owner or operator shall comply with 40 CFR 60.752(b)(2).

(ii) If the NMOC mass emission rate is less than 50 megagrams per year, then the owner or operator shall submit a periodic emission rate report as provided in 40 CFR 60.757(b)(1) and shall recalculate the NMOC mass emission rate annually, as provided in 40 CFR 60.757(b)(1) using the equations in 40 CFR 60.754(a)(1) and using the site-specific methane generation rate constant and NMOC concentration obtained in 40 CFR 60.754(a)(3). The calculation of the methane generation rate constant is performed only once, and the value obtained from this test shall be used in all subsequent annual NMOC emission rate calculations.

[Rule 62-204.800, F.A.C.; 40 CFR 60.754(a)(4)]

**B.16. Alternative methods.**

(a)(5) The owner or operator may use other methods to determine the NMOC concentration or a site-specific  $k$  as an alternative to the methods required in 40 CFR 60.754(a)(3) and (a)(4) if the method has been approved by the Administrator.

[Rule 62-204.800, F.A.C.; 40 CFR 60.754(a)(5)]

**B.17. Calculating NMOC rate to determine when a collection and control system may be removed.**



(b) After the installation of a collection and control system in compliance with 40 CFR 60.755, the owner or operator shall calculate the NMOC emission rate for purposes of determining when the system can be removed as provided in 40 CFR 60.752(b)(2)(v), using the following equation:

$$M_{\text{NMOC}} = 1.89 \times 10^{-3} Q_{\text{LFG}} C_{\text{NMOC}}$$

where,

$M_{\text{NMOC}}$  = mass emission rate of NMOC, megagrams per year

$Q_{\text{LFG}}$  = flow rate of landfill gas, cubic meters per minute

$C_{\text{NMOC}}$  = NMOC concentration, parts per million by volume as hexane

(1) The flow rate of landfill gas,  $Q_{\text{LFG}}$ , shall be determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control device using a gas flow measuring device calibrated according to the provisions of section 4 of Method 2E of 40 CFR 60, Appendix A.

(2) The average NMOC concentration,  $C_{\text{NMOC}}$ , shall be determined by collecting and analyzing landfill gas sampled from the common header pipe before the gas moving or condensate removal equipment using the procedures in Method 25C or Method 18 of 40 CFR 60, Appendix A. If using Method 18 of 40 CFR 60, Appendix A, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The sample location on the common header pipe shall be before any condensate removal or other gas refining units. The landfill owner or operator shall divide the NMOC concentration from Method 25C of 40 CFR 60, Appendix A by six to convert from  $C_{\text{NMOC}}$  as carbon to  $C_{\text{NMOC}}$  as hexane.

(3) The owner or operator may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by the Administrator.

[Rule 62-204.800, F.A.C.; 40 CFR 60.754(b)]

**B.18. Calculating emissions for PSD purposes.**

(c) When calculating emissions for PSD purposes, the owner or operator of each MSW landfill subject to the provisions of 40 CFR 60, Subpart WWW shall estimate the NMOC emission rate for comparison to the PSD major source and significance levels in 40 CFR 51.166 or 52.21 using AP-42 or other approved measurement procedures.

[Rule 62-204.800, F.A.C.; 40 CFR 60.754(c)]

**B.19. Performance test methods.**

(d) For the performance test required in 40 CFR 60.752(b)(2)(iii)(B), Method 25C or Method 18 of 40 CFR 60, Appendix A shall be used to determine compliance with 98 weight-percent efficiency or the 20 ppmv outlet concentration level, unless another method to demonstrate compliance has been approved by the Administrator as provided by 40 CFR 60.752(b)(2)(i)(B). If using Method 18 of 40 CFR 60, Appendix A, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The following equation shall be used to calculate efficiency:

$$\text{Control Efficiency} = (\text{NMOC}_{\text{in}} - \text{NMOC}_{\text{out}}) / (\text{NMOC}_{\text{in}})$$

where,

$\text{NMOC}_{\text{in}}$  = mass of NMOC entering control device

$\text{NMOC}_{\text{out}}$  = mass of NMOC exiting control device

[Rule 62-204.800, F.A.C.; 40 CFR 60.754(d)]

**Section 60.755 Compliance provisions.**

**B.20. Methods for ensuring collection system accuracy.**

(a) Except as provided in 40 CFR 60.752(b)(2)(i)(B), the specified methods in paragraphs (a)(1) through (a)(6) of this section shall be used to determine whether the gas collection system is in compliance with 40 CFR 60.752(b)(2)(ii).

(1) For the purposes of calculating the maximum expected gas generation flow rate from the landfill to determine compliance with 40 CFR 60.752(b)(2)(ii)(A)(1), one of the following equations shall be used. The  $k$  and  $L_o$  kinetic factors should be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42) or other site specific values demonstrated to be appropriate and approved by the Administrator. If  $k$  has been determined as specified in 40 CFR 60.754(a)(4), the value of  $k$  determined from the test shall be used. A value of no more than 15 years shall be used for the intended use period of the gas mover equipment. The active life of the landfill is the age of the landfill plus the estimated number of years until closure.

(i) For sites with unknown year-to-year solid waste acceptance rate:

$$Q_m = 2L_o R (e^{-kc} - e^{-kt})$$

where,

$Q_m$  = maximum expected gas generation flow rate, cubic meters per year

$L_o$  = methane generation potential, cubic meters per megagram solid waste

$R$  = average annual acceptance rate, megagrams per year

$k$  = methane generation rate constant, year<sup>-1</sup>

$t$  = age of the landfill at equipment installation plus the time the owner or operator intends to use the gas mover equipment or active life of the landfill, whichever is less. If the equipment is installed after closure,  $t$  is the age of the landfill at installation, years

$c$  = time since closure, years (for an active landfill  $c = 0$  and  $e^{-kc} = 1$ )

(ii) For sites with known year-to-year solid waste acceptance rate:

$$Q_M = \sum_{i=1}^n 2kL_o M_i (e^{-kt_i})$$

where,

$Q_M$  = maximum expected gas generation flow rate, cubic meters per year

$k$  = methane generation rate constant, year<sup>-1</sup>

$L_o$  = methane generation potential, cubic meters per megagram solid waste

$M_i$  = mass of solid waste in the  $i^{\text{th}}$  section, megagrams

$t_i$  = age of the  $i^{\text{th}}$  section, years

(iii) If a collection and control system has been installed, actual flow data may be used to project the maximum expected gas generation flow rate instead of, or in conjunction with, the equations in 40 CFR 60.755(a)(1) (i) and (ii). If the landfill is still accepting waste, the actual measured flow data will not equal the maximum expected gas generation rate, so calculations using the equations in 40 CFR 60.755(a)(1) (i) or (ii) or other methods shall

be used to predict the maximum expected gas generation rate over the intended period of use of the gas control system equipment.

(2) For the purposes of determining sufficient density of gas collectors for compliance with 40 CFR 60.752(b)(2)(ii)(A)(2), the owner or operator shall design a system of vertical wells, horizontal collectors, or other collection devices, satisfactory to the Administrator, capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards.

(3) For the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with 40 CFR 60.752(b)(2)(ii)(A)(3), the owner or operator shall measure gauge pressure in the gas collection header at each individual well, monthly. If a positive pressure exists, action shall be initiated to correct the exceedance within 5 calendar days, except for the three conditions allowed under 40 CFR 60.753(b). If negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial measurement of positive pressure. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval.

(4) Owners or operators are not required to expand the system as required in 40 CFR 60.755(a)(3) during the first 180 days after gas collection system startup.

(5) For the purpose of identifying whether excess air infiltration into the landfill is occurring, the owner or operator shall monitor each well monthly for temperature and nitrogen or oxygen as provided in 40 CFR 60.753(c). If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120\* days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval.

{Permitting note: \*An additional 60 (sixty) days beyond the 120 days allowed under 40 CFR 60.755(a)(5), for a total of 180 days was approved for the expansion project; see DEP Approval of Request dated August 11, 2005.}

(6) An owner or operator seeking to demonstrate compliance with 40 CFR 60.752(b)(2)(ii)(A)(4) through the use of a collection system not conforming to the specifications provided in 40 CFR 60.759 shall provide information satisfactory to the Administrator as specified in 40 CFR 60.752(b)(2)(i)(C) demonstrating that off-site migration is being controlled.

[Rule 62-204.800, F.A.C.; 40 CFR 60.755(a)]

**B.21. Installation according to design plan.**

(b) For purposes of compliance with 40 CFR 60.753(a), each owner or operator of a controlled landfill shall place each well or design component as specified in the approved design plan as provided in 40 CFR 60.752(b)(2)(i). Each well shall be installed no later than 60 days after the date on which the initial solid waste has been in place for a period of:

- (1) 5 years or more if active; or
- (2) 2 years or more if closed or at final grade.

[Rule 62-204.800, F.A.C.; 40 CFR 60.755(b)]

**B.22. Surface methane requirements.**

(c) The following procedures shall be used for compliance with the surface methane operational standard as provided in 40 CFR 60.753(d).

- (1) After installation of the collection system, the owner or operator shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals (or a site-specific established spacing) for each collection area on (A) an annual\* basis for the Class III Landfill, and (B) a quarterly basis for the Class I Landfill, using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in 40 CFR 60.755(d).

**\*The frequency of surface monitoring of methane gas emissions shall be *annual* for the Class III Landfill, provided that the methane concentration level remains below 250 parts per million (ppm). If the methane concentration equals or exceeds 250 ppm, then the surface monitoring shall revert back to a quarterly monitoring frequency. If no readings of 250 ppm or greater are detected in three consecutive subsequent quarterly samples, the frequency shall again become annual.**

**Note that although quarterly monitoring shall be required if the methane concentration equals or exceeds 250 ppm, corrective action measures, as required by Specific Condition B.22(c)(4), shall only be required when the concentration level equals or exceeds 500 ppm or more above background at any location.**

[Rule 62-204.800(7)(b), F.A.C.; 40 CFR 60 Subpart WWW; 40 CFR 60.13(i); USEPA approval letter to the Department dated June 7, 2002; and 0990234-005-AC, Specific Condition 2.]

(2) The background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells.

(3) Surface emission monitoring shall be performed in accordance with section 4.3.1 of Method 21 of 40 CFR 60, Appendix A, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.

(4) Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the actions specified in 40 CFR 60.755(c)(4) (i) through (v) shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of 40 CFR 60.753(d).

(i) The location of each monitored exceedance shall be marked and the location recorded.

(ii) Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be re-monitored within 10 calendar days of detecting the exceedance.

(iii) If the re-monitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the same location, the action specified in 40 CFR 60.755(c)(4)(v) shall be taken, and no further monitoring of that location is required until the action specified in 40 CFR 60.755(c)(4)(v) has been taken.

(iv) Any location that initially showed an exceedance but has a methane concentration less than 500 ppm methane above background at the 10-day re-monitoring specified in 40 CFR 60.755(c)(4) (ii) or (iii) shall be re-monitored 1 month from the initial exceedance. If the 1-month re-monitoring shows a concentration less than 500 parts per million above

background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1-month remonitoring shows an exceedance, the actions specified in 40 CFR 60.755(c)(4) (iii) or (v) shall be taken.

(v) For any location where monitored methane concentration equals or exceeds 500 parts per million above background three times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the Administrator for approval.

(5) The owner or operator shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.

[Rule 62-204.800, F.A.C.; 40 CFR 60.755(c)]

**B.23. Method for ensuring accuracy of surface methane measurements.**

(d) Each owner or operator seeking to comply with the provisions in 40 CFR 60.755(c) shall comply with the following instrumentation specifications and procedures for surface emission monitoring devices:

(1) The portable analyzer shall meet the instrument specifications provided in section 3 of Method 21 of 40 CFR 60, Appendix A, except that "methane" shall replace all references to VOC.

(2) The calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air.

(3) To meet the performance evaluation requirements in section 3.1.3 of Method 21 of 40 CFR 60, Appendix A, the instrument evaluation procedures of section 4.4 of Method 21 of 40 CFR 60, Appendix A shall be used.

(4) The calibration procedures provided in section 4.2 of Method 21 of 40 CFR 60, Appendix A shall be followed immediately before commencing a surface monitoring survey.

[Rule 62-204.800, F.A.C.; 40 CFR 60.755(d)]

**B.24. Applicability of permit provisions.**

(e) The provisions of 40 CFR 60, Subpart WWW apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed 5 days for collection systems and shall not exceed 1 hour for treatment or control devices.

[Rule 62-204.800, F.A.C.; 40 CFR 60.755(e)]

**Section 60.756 Monitoring of operations.**

**B.25. Active gas collection system.**

Except as provided in 40 CFR 60.752(b)(2)(i)(B),

(a) Each owner or operator seeking to comply with 40 CFR 60.752(b)(2)(ii)(A) for an active gas collection system shall install a sampling port and a thermometer other temperature measuring device, or an access port for temperature measurements at each wellhead and:

(1) Measure the gauge pressure in the gas collection header on a monthly basis as provided in 40 CFR 60.755(a)(3); and

(2) Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as provided in 40 CFR 60.755(a)(5); and

(3) Monitor temperature of the landfill gas on a monthly basis as provided in 40 CFR 60.755(a)(5).

[Rule 62-204.800, F.A.C.; 40 CFR 60.756(a)]

**B.26. Enclosed combustor.**

(b) Each owner or operator seeking to comply with 40 CFR 60.752(b)(2)(iii) using an enclosed combustor shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment.

- (1) A temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of  $\pm 1$  percent of the temperature being measured expressed in degrees Celsius or  $\pm 0.5^\circ$  C, whichever is greater. A temperature monitoring device is not required for boilers or process heaters with design heat input capacity greater than 44 megawatts.
- (2) A device that records flow to or bypass of the control device. The owner or operator shall either:
  - (i) Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or
  - (ii) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

[Rule 62-204.800, F.A.C.; 40 CFR 60.756(b)]

**B.27. Open flare.**

(c) Each owner or operator seeking to comply with 40 CFR 60.752(b)(2)(iii) using an open flare shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:

- (1) A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame.
- (2) A device that records flow to or bypass of the flare. The owner or operator shall either:
  - (i) Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or
  - (ii) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

[Rule 62-204.800, F.A.C.; 40 CFR 60.756(c)]

**B.28. Other control devices.**

(d) Each owner or operator seeking to demonstrate compliance with 40 CFR 60.752(b)(2)(iii) using a device other than an open flare or an enclosed combustor shall provide information satisfactory to the Administrator as provided in 40 CFR 60.752(b)(2)(i)(B) describing the operation of the control device, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The Administrator shall review the information and either approve it, or request that additional information be submitted. The Administrator may specify additional appropriate monitoring procedures.

[Rule 62-204.800, F.A.C.; 40 CFR 60.756(d)]

**B.29. Alternate methods of compliance.**

(e) Each owner or operator seeking to install a collection system that does not meet the specifications in 40 CFR 60.759 or seeking to monitor alternative parameters to those required by 40 CFR 60.753 through 40 CFR 60.756 shall provide information satisfactory to the Administrator as provided in 40 CFR 60.752(b)(2)(i)(B) and (C) describing the design and operation of the collection system, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The Administrator may specify additional appropriate monitoring procedures.

[Rule 62-204.800, F.A.C.; 40 CFR 60.756(e)]

**B.30. Surface methane operational standard.**

(f) Each owner or operator seeking to demonstrate compliance with 40 CFR 60.755(c), shall monitor surface concentrations of methane according to the instrument specifications and procedures provided in 40 CFR 60.755(d). Any closed landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may skip to annual monitoring. Any methane reading of 500 ppm or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring.

[Rule 62-204.800, F.A.C.; 40 CFR 60.756(f)]

**Section 60.757 Reporting requirements.**

**B.31. Notification of any increase in design capacity.**

Except as provided in 40 CFR 60.752(b)(2)(i)(B),

(a) Each owner or operator subject to the requirements of 40 CFR 60, Subpart WWW shall submit an initial design capacity report to the Administrator.

(1) The initial design capacity report shall fulfill the requirements of the notification of the date construction is commenced as required by 40 CFR 60.7(a)(1) and shall be submitted no later than:

- (i) June 10, 1996, for landfills that commenced construction, modification, or reconstruction on or after May 30, 1991 but before March 12, 1996 or
- (ii) Ninety days after the date of commenced construction, modification, or reconstruction for landfills that commence construction, modification, or reconstruction on or after March 12, 1996.

(2) The initial design capacity report shall contain the following information:

- (i) A map or plot of the landfill, providing the size and location of the landfill, and identifying all areas where solid waste may be landfilled according to the permit issued by the State, local, or tribal agency responsible for regulating the landfill.
- (ii) The maximum design capacity of the landfill. Where the maximum design capacity is specified in the permit issued by the State, local, or tribal agency responsible for regulating the landfill, a copy of the permit specifying the maximum design capacity may be submitted as part of the report. If the maximum design capacity of the landfill is not specified in the permit, the maximum design capacity shall be calculated using good engineering practices. The calculations shall be provided, along with the relevant parameters as part of the report. The State, Tribal, local agency or Administrator may request other reasonable information as may be necessary to verify the maximum design capacity of the landfill.

(3) An amended design capacity report shall be submitted to the Administrator providing notification of an increase in the design capacity of the landfill, within 90 days of an increase in the maximum design capacity of the landfill to or above 2.5 million megagrams and 2.5 million cubic meters. This increase in design capacity may result from an increase in the permitted volume of the landfill or an increase in the density as documented in the annual recalculation required in 40 CFR 60.758(f).

[Rule 62-204.800, F.A.C.; 40 CFR 60.757(a)]

**B.32. Annual NMOC emission rate.**

(b) Each owner or operator subject to the requirements of 40 CFR 60, Subpart WWW, shall submit an NMOC emission rate report to the Administrator initially and annually thereafter, except as provided for in

40 CFR 60.757(b)(1)(ii) or (b)(3). The Administrator may request such additional information as may be necessary to verify the reported NMOC emission rate.

(1) The NMOC emission rate report shall contain an annual or 5-year estimate of the NMOC emission rate calculated using the formula and procedures provided in 40 CFR 60.754(a) or (b), as applicable.

(i) The initial NMOC emission rate report may be combined with the initial design capacity report required in 40 CFR 60.757(a) and shall be submitted no later than indicated in 40 CFR 60.757(b)(1)(i)(A) and (B). Subsequent NMOC emission rate reports shall be submitted annually thereafter, except as provided for in 40 CFR 60.757(b)(1)(ii) and (b)(3).

(A) June 10, 1996, for landfills that commenced construction, modification, or reconstruction on or after May 30, 1991, but before March 12, 1996, or

(B) Ninety days after the date of commenced construction, modification, or reconstruction for landfills that commence construction, modification, or reconstruction on or after March 12, 1996.

(ii) If the estimated NMOC emission rate as reported in the annual report to the Administrator is less than 50 megagrams per year in each of the next 5 consecutive years, the owner or operator may elect to submit an estimate of the NMOC emission rate for the next 5-year period in lieu of the annual report. This estimate shall include the current amount of solid waste-in-place and the estimated waste acceptance rate for each year of the 5 years for which an NMOC emission rate is estimated. All data and calculations upon which this estimate is based shall be provided to the Administrator. This estimate shall be revised at least once every 5 years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the 5-year estimate, a revised 5-year estimate shall be submitted to the Administrator. The revised estimate shall cover the 5-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate.

(2) The NMOC emission rate report shall include all the data, calculations, sample reports and measurements used to estimate the annual or 5-year emissions.

(3) Each owner or operator subject to the requirements of 40 CFR 60, Subpart WWW, is exempted from the requirements of 40 CFR 60.757(b)(1) and (2), after the installation of a collection and control system in compliance with 40 CFR 60.752(b)(2), during such time as the collection and control system is in operation and in compliance with 40 CFR 60.753 and 60.755.

[Rule 62-204.800, F.A.C.; 40 CFR 60.757(b)]

**B.33. Collection and control system design plan.**

(c) Each owner or operator subject to the provisions of 40 CFR 60.752(b)(2)(i) shall submit a collection and control system design plan to the Administrator within 1 year of the first report, required under 40 CFR 60.757(b), in which the emission rate exceeds 50 megagrams per year, except as follows:

(1) If the owner or operator elects to recalculate the NMOC emission rate after Tier 2 NMOC sampling and analysis as provided in 40 CFR 60.754(a)(3) and the resulting rate is less than 50 megagrams per year, annual periodic reporting shall be resumed, using the Tier 2 determined site-specific NMOC concentration, until the calculated emission rate is equal to or greater than 50 megagrams per year or the landfill is closed. The revised NMOC emission rate report, with the recalculated emission rate based on NMOC sampling and analysis, shall be submitted within 180 days of the first calculated exceedance of 50 megagrams per year.

(2) If the owner or operator elects to recalculate the NMOC emission rate after determining a site-specific methane generation rate constant (k), as provided in Tier 3 in 40 CFR 60.754(a)(4), and the resulting NMOC emission rate is less than 50 Mg/yr, annual periodic reporting shall be



resumed. The resulting site-specific methane generation rate constant (k) shall be used in the emission rate calculation until such time as the emissions rate calculation results in an exceedance. The revised NMOC emission rate report based on the provisions of 40 CFR 60.754(a)(4) and the resulting site-specific methane generation rate constant (k) shall be submitted to the Administrator within 1 year of the first calculated emission rate exceeding 50 megagrams per year.

[Rule 62-204.800, F.A.C.; 40 CFR 60.757(c)]

**B.34. Closure report.**

(d) Each owner or operator of a controlled landfill shall submit a closure report to the Administrator within 30 days of waste acceptance cessation. The Administrator may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR 258.60. If a closure report has been submitted to the Administrator, no additional wastes may be placed into the landfill without filing a notification of modification as described under 40 CFR 60.7(a)(4).

[Rule 62-204.800, F.A.C.; 40 CFR 60.757(d)]

**B.35. Equipment removal report.**

(e) Each owner or operator of a controlled landfill shall submit an equipment removal report to the Administrator 30 days prior to removal or cessation of operation of the control equipment.

(1) The equipment removal report shall contain all of the following items:

- (i) A copy of the closure report submitted in accordance with 40 CFR 60.757(d);
- (ii) A copy of the initial performance test report demonstrating that the 15 year minimum control period has expired; and
- (iii) Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 megagrams or greater of NMOC per year.

(2) The Administrator may request such additional information as may be necessary to verify that all of the conditions for removal in 40 CFR 60.752(b)(2)(v) have been met.

[Rule 62-204.800, F.A.C.; 40 CFR 60.757(e)]

**B.36. Active collection system annual reports.**

(f) Each owner or operator of a landfill seeking to comply with 40 CFR 60.752(b)(2) using an active collection system designed in accordance with 40 CFR 60.752(b)(2)(ii) shall submit to the Administrator annual reports of the recorded information in (f)(1) through (f)(6) of this paragraph. The initial annual report shall be submitted within 180 days of installation and start-up of the collection and control system, and shall include the initial performance test report required under 40 CFR 60.8. For enclosed combustion devices and flares, reportable exceedances are defined under 40 CFR 60.758(c).

(1) Value and length of time for exceedance of applicable parameters monitored under 40 CFR 60.756(a), (b), (c), and (d).

(2) Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under 40 CFR 60.756.

(3) Description and duration of all periods when the control device was not operating for a period exceeding 1 hour and length of time the control device was not operating.

(4) All periods when the collection system was not operating in excess of 5 days.

(5) The location of each exceedance of the 500 parts per million methane concentration as provided in 40 CFR 60.753(d) and the concentration recorded at each location for which an exceedance was recorded in the previous month.

(6) The date of installation and the location of each well or collection system expansion added pursuant to 40 CFR 60.755(a)(3), (b), and (c)(4).

[Rule 62-204.800, F.A.C.; 40 CFR 60.757(f)]

**B.37. Passive collection system reporting.**

(g) Each owner or operator seeking to comply with 40 CFR 60.752(b)(2)(iii) shall include the following information with the initial performance test report required under 40 CFR 60.8:

- (1) A diagram of the collection system showing collection system positioning including all wells, horizontal collectors, surface collectors, or other gas extraction devices, including the locations of any areas excluded from collection and the proposed sites for the future collection system expansion;
- (2) The data upon which the sufficient density of wells, horizontal collectors, surface collectors, or other gas extraction devices and the gas mover equipment sizing are based;
- (3) The documentation of the presence of asbestos or nondegradable material for each area from which collection wells have been excluded based on the presence of asbestos or nondegradable material;
- (4) The sum of the gas generation flow rates for all areas from which collection wells have been excluded based on nonproductivity and the calculations of gas generation flow rate for each excluded area; and
- (5) The provisions for increasing gas mover equipment capacity with increased gas generation flow rate, if the present gas mover equipment is inadequate to move the maximum flow rate expected over the life of the landfill; and
- (6) The provisions for the control of off-site migration.

[Rule 62-204.800, F.A.C.; 40 CFR 60.757(g)]

**Section 60.758 Recordkeeping requirements.**

**B.38. Capacity and acceptance reports.**

(a) Except as provided in 40 CFR 60.752(b)(2)(i)(B), each owner or operator of an MSW landfill subject to the provisions of 40 CFR 60.752(b) shall keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report which triggered 40 CFR 60.752(b), the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.

[Rule 62-204.800, F.A.C.; 40 CFR 60.758(a)]

**B.39. Control equipment test results.**

(b) Except as provided in 40 CFR 60.752(b)(2)(i)(B), each owner or operator of a controlled landfill shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed in paragraphs (b)(1) through (b)(4) below as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removal.

- (1) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with 40 CFR 60.752(b)(2)(ii):
  - (i) The maximum expected gas generation flow rate as calculated in 40 CFR 60.755(a)(1). The owner or operator may use another method to determine the maximum gas generation flow rate, if the method has been approved by the Administrator.
  - (ii) The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in 40 CFR 60.759(a)(1).
- (2) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with 40 CFR 60.752(b)(2)(iii) through use of an enclosed combustion device other than a boiler or process heater with a design heat input capacity greater than 44 megawatts:

- (i) The average combustion temperature measured at least every 15 minutes and averaged over the same time period of the performance test.
  - (ii) The percent reduction of NMOC determined as specified in 40 CFR 60.752(b)(2)(iii)(B) achieved by the control device.
- (3) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with 40 CFR 60.752(b)(2)(iii)(B)(1) through use of a boiler or process heater of any size: a description of the location at which the collected gas vent stream is introduced into the boiler or process heater over the same time period of the performance testing.
- (4) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with 40 CFR 60.752(b)(2)(iii)(A) through use of an open flare, the flare type (i.e., steam-assisted, air-assisted, or nonassisted), all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in 40 CFR 60.18; continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent.

[Rule 62-204.800, F.A.C.; 40 CFR 60.758(b)]

**B.40. Equipment operating parameters.**

(c) Except as provided in 40 CFR 60.752(b)(2)(i)(B), each owner or operator of a controlled landfill subject to the provisions of this subpart shall keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in 40 CFR 60.756 as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.

(1) The following constitute exceedances that shall be recorded and reported under 40 CFR 60.757(f):

- (i) For enclosed combustors except for boilers and process heaters with design heat input capacity of 44 megawatts (150 million British thermal unit per hour) or greater, all 3-hour periods of operation during which the average combustion temperature was more than 28 °C below the average combustion temperature during the most recent performance test at which compliance with 40 CFR 60.752(b)(2)(iii) was determined.
  - (ii) For boilers or process heaters, whenever there is a change in the location at which the vent stream is introduced into the flame zone as required under 40 CFR 60.758(b)(3)(i).
- (2) Each owner or operator subject to the provisions of this subpart shall keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under 40 CFR 60.756.
- (3) Each owner or operator subject to the provisions of this subpart who uses a boiler or process heater with a design heat input capacity of 44 megawatts or greater to comply with 40 CFR 60.752(b)(2)(iii) shall keep an up-to-date, readily accessible record of all periods of operation of the boiler or process heater.  
(Examples of such records could include records of steam use, fuel use, or monitoring data collected pursuant to other State, local, Tribal, or Federal regulatory requirements.)
- (4) Each owner or operator seeking to comply with the provisions of this subpart by use of an open flare shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under 40 CFR 60.756(c), and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent.

[Rule 62-204.800, F.A.C.; 40 CFR 60.758(c)]

**B.41. Plot map.**

(d) Except as provided in 40 CFR 60.752(b)(2)(i)(B), each owner or operator subject to the provisions of 40 CFR 60, Subpart WWW shall keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.

(1) Each owner or operator subject to the provisions of 40 CFR 60, Subpart WWW shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under 40 CFR 60.755(b).

(2) Each owner or operator subject to the provisions of 40 CFR 60, Subpart WWW shall keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection as provided in 40 CFR 60.759(a)(3)(i) as well as any nonproductive areas excluded from collection as provided in 40 CFR 60.759(a)(3)(ii).

[Rule 62-204.800, F.A.C.; 40 CFR 60.758(d)]

**B.42. Exceedances.**

(e) Except as provided in 40 CFR 60.752(b)(2)(i)(B), each owner or operator subject to the provisions of 40 CFR 60, Subpart WWW shall keep for at least 5 years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in 40 CFR 60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.

[Rule 62-204.800, F.A.C.; 40 CFR 60.758(e)]

**B.43. Design capacity calculations.**

(f) Landfill owners or operators who convert design capacity from volume to mass or mass to volume to demonstrate that landfill design capacity is less than 2.5 million megagrams or 2.5 million cubic meters, as provided in the definition of "design capacity", shall keep readily accessible, on-site records of the annual recalculation of site-specific density, design capacity, and the supporting documentation. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.

[Rule 62-204.800, F.A.C.; 40 CFR 60.758(f)]

**Section 60.759 Specifications for active collection systems.**

**B.44. Placement of collection devices.**

(a) Each owner or operator seeking to comply with 40 CFR 60.752(b)(2)(i) shall site active collection wells, horizontal collectors, surface collectors, or other extraction devices at a sufficient density throughout all gas producing areas using the following procedures unless alternative procedures have been approved by the Administrator as provided in 40 CFR 60.752(b)(2)(i)(C) and (D):

(1) The collection devices within the interior and along the perimeter areas shall be certified to achieve comprehensive control of surface gas emissions by a professional engineer. The following issues shall be addressed in the design: depths of refuse, refuse gas generation rates and flow characteristics, cover properties, gas system expandability, leachate and condensate management, accessibility, compatibility with filling operations, integration with closure end use, air intrusion control, corrosion resistance, fill settlement, and resistance to the refuse decomposition heat.

(2) The sufficient density of gas collection devices determined in 40 CFR 60.759(a)(1) shall address landfill gas migration issues and augmentation of the collection system through the use of active or passive systems at the landfill perimeter or exterior.

(3) The placement of gas collection devices determined in 40 CFR 60.759(a)(1) shall control all gas producing areas, except as provided by paragraphs (a)(3)(i) and (a)(3)(ii) below.

(i) Any segregated area of asbestos or nondegradable material may be excluded from collection if documented as provided under 40 CFR 60.758(d). The documentation shall provide the nature, date of deposition, location and amount of asbestos or nondegradable material deposited in the area, and shall be provided to the Administrator upon request.

(ii) Any nonproductive area of the landfill may be excluded from control, provided that the total of all excluded areas can be shown to contribute less than 1 percent of the total amount of NMOC emissions from the landfill. The amount, location, and age of the material shall be documented and provided to the Administrator upon request. A separate NMOC emissions estimate shall be made for each section proposed for exclusion, and the sum of all such sections shall be compared to the NMOC emissions estimate for the entire landfill. Emissions from each section shall be computed using the following equation:

$$Q_i = 2 k L_o M_i (e^{-kt_i}) (C_{NMOC}) (3.6 \times 10^{-9})$$

where,

$Q_i$  = NMOC emission rate from the  $i$ th section, megagrams per year

$k$  = methane generation rate constant, year<sup>-1</sup>

$L_o$  = methane generation potential, cubic meters per megagram solid waste

$M_i$  = mass of the degradable solid waste in the  $i$ <sup>th</sup> section, megagram

$t_i$  = age of the solid waste in the  $i$ <sup>th</sup> section, years

$C_{NMOC}$  = concentration of nonmethane organic compounds, parts per million by volume

$3.6 \times 10^{-9}$  = conversion factor

(iii) The values for  $k$  and  $C_{NMOC}$  determined in field testing shall be used, if field testing has been performed in determining the NMOC emission rate or the radii of influence (the distance from the well center to a point in the landfill where the pressure gradient applied by the blower or compressor approaches zero). If field testing has not been performed, the default values for  $k$ ,  $L_o$  and  $C_{NMOC}$  provided in 40 CFR 60.754(a)(1) or the alternative values from 40 CFR 60.754(a)(5) shall be used. The mass of nondegradable solid waste contained within the given section may be subtracted from the total mass of the section when estimating emissions provided the nature, location, age, and amount of the nondegradable material is documented as provided in 40 CFR 60.759(a)(3)(i).

[Rule 62-204.800, F.A.C.; 40 CFR 60.759(a)]

**B.45. Design of collection devices.**

(b) Each owner or operator seeking to comply with 40 CFR 60.752(b)(2)(i)(A) shall construct the gas collection devices using the following equipment or procedures:

(1) The landfill gas extraction components shall be constructed of polyvinyl chloride (PVC), high density polyethylene (HDPE) pipe, fiberglass, stainless steel, or other nonporous corrosion resistant material of suitable dimensions to: convey projected amounts of gases; withstand installation, static, and settlement forces; and withstand planned overburden or traffic loads. The collection system shall extend as necessary to comply with emission and migration standards. Collection devices such as wells and horizontal collectors shall be perforated to allow gas entry without head loss sufficient to impair performance across the intended extent of control. Perforations shall be situated with regard to the need to prevent excessive air infiltration.

(2) Vertical wells shall be placed so as not to endanger underlying liners and shall address the occurrence of water within the landfill. Holes and trenches constructed for piped wells and horizontal collectors shall be of sufficient cross-section so as to allow for their proper construction and completion including, for example, centering of pipes and placement of gravel backfill. Collection devices shall be designed so as not to allow indirect short circuiting of air into the cover or refuse into the collection system or gas into the air. Any gravel used around pipe perforations should be of a dimension so as not to penetrate or block perforations.

(3) Collection devices may be connected to the collection header pipes below or above the landfill surface. The connector assembly shall include a positive closing throttle valve, any necessary seals and couplings, access couplings and at least one sampling port. The collection devices shall be constructed of PVC, HDPE, fiberglass, stainless steel, or other nonporous material of suitable thickness.

[Rule 62-204.800, F.A.C.; 40 CFR 60.759(b)]

**B.46. Capacity of collection system.**

(c) Each owner or operator seeking to comply with 40 CFR 60.752(b)(2)(i)(A) shall convey the landfill gas to a control system in compliance with 40 CFR 60.752(b)(2)(iii) through the collection header pipe(s). The gas mover equipment shall be sized to handle the maximum gas generation flow rate expected over the intended use period of the gas moving equipment using the following procedures:

(1) For existing collection systems, the flow data shall be used to project the maximum flow rate. If no flow data exists, the procedures in paragraph (c)(2) below shall be used.

(2) For new collection systems, the maximum flow rate shall be in accordance with 40 CFR 60.755(a)(1).

[Rule 62-204.800, F.A.C.; 40 CFR 60.759(c)]

**B.47. Landfill Gas Flow Rate:** The owner or operator shall not allow more than 3500 scfm of landfill gas to be directed to the Class I flare and 1800 scfm of landfill gas to be directed to the Class III flare. The actual flow rate shall be determined for each flare on a monthly average basis by dividing the measured flow by the hours that each flare was operated each month. Compliance with this limitation shall be by measuring landfill gas flows to each flare and recording flows with a totalizing meter. Records of the totalizing meter values shall be recorded in an operators log monthly, or whenever the meter is reset for any purpose, whichever is more frequent. The owner or operator shall maintain a strip chart recorder to record the flow rate to each flare as a backup device in the event that the totalizer meter is not functioning; the strip chart recorder shall also be used in conjunction with an operators log to document the hours each month that each flare was operated.

[Rule 62-4.070(3), F.A.C., and PSD-FL-108(D) as amended]

**B.48. Pursuant to 40 CFR 60.18 General Control Device Requirements:** The owner or operator shall comply with the following requirements for flares.

- (c) (1) Flares shall be designed for and operated with no visible emissions as determined by the methods specified in paragraph (f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
- (2) Flares shall be operated with a flame present at all times, as determined by the methods specified in paragraph (f).
- (3) Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the

flare is non-assisted. The net heating value of the gas being combusted shall be determined by the methods specified in 40 CFR 60.18(f).

- (4) (i) Steam-assisted and non assisted flares shall be designed for and operated with an exit velocity, as determined by the methods specified in 40 CFR 60.18(f)(4), less than 18.3 m/sec (60 ft/sec), except as provided in 40 CFR 60.18(c)(4)(ii) and 40 CFR 60.18(c)(4)(iii).
- (ii) Steam-assisted and non assisted flares designed for and operated with an exit velocity, as determined by the methods specified in 40 CFR 60.18(f)(4), equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec) are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).
- (iii) Steam-assisted and non assisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), less than the velocity,  $V_{max}$ , as determined by the method specified in paragraph (f)(5), and less than 122 m/sec (400 ft/sec) are allowed.
- (d) Owners or operators of flares used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how owners or operators of flares shall monitor these control devices.
- (e) Flares used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.
- (f) (1) Reference Method 22 shall be used to determine the compliance of flares with the visible emission provisions of this subpart. The observation period is 2 hours and shall be used according to Method 22.
- (2) The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.
- (3) The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_T = K \sum_{i=1}^n C_i H_i$$

where:

$H_T$  = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25°C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20°C;

$K$  = Constant,  $1.740 \times 10^{-7}$  (1/ppm) (g mole/scm) (MJ/kcal) where the standard temperature for (g mole/scm) is 20°C;

$C_i$  = Concentration of sample component  $i$  in ppm on a wet basis, as measured for organics by Reference Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946-77 (Incorporated by reference as specified in 40 CFR 60.17); and

$H_i$  = Net heat of combustion of sample component  $i$ , kcal/ g mole at 25°C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 (incorporated by

reference as specified in 40 CFR 60.17) if published values are not available or cannot be calculated.

**The owner or operator requested and received approval for an alternative method of determining the net heating value. ASTM D1945-03 shall be used in place of Method 18. A minimum collection of 3 - 30 minute samples is required. The requirement to test for hydrogen with ASTM D1946 is waived due to the low levels of hydrogen in the landfill gas. {see USEPA Approval of Request dated August 10, 2005}**

- (4) The actual exit velocity of a flare shall be determined by dividing the volumetric flow rate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip.

**The owner or operator requested and received approval for an alternative method of determining the flare gas exit velocity. The in-place calibrated flow meter shall be used in place of Methods 2, 2A, 2C, or 2D. {see USEPA Approval of Request dated August 10, 2005}**

- (5) The maximum permitted velocity,  $V_{max}$ , for flares complying with paragraph (c)(4)(iii) shall be determined by the following equation.

$$\text{Log}_{10}(V_{max}) = (H_T + 28.8)/31.7$$

$V_{max}$  = Maximum permitted velocity, M/sec

28.8 = Constant

31.7 = Constant

$H_T$  = The net heating value as determined in paragraph (f)(3).

- (6) Flares used to comply with this section shall be steam-assisted, air-assisted, or nonassisted. [Rule 62-204.800(7)(b), F.A.C., 40 CFR 60.18, & USEPA Approval of Request dated August 10, 2005]

**B.49. Reporting Requirements.** The owner or operator shall annually determine and report the actual exit velocity of each flare using the methods specified in 40 CFR 60.18. The owner or operator shall annually analyze and report the sulfur content of the landfill gas directed to each flare using ASTM Method D1072-90, or later method. The actual exit velocity and sulfur content shall be reported to the Department as an attachment to the facility's annual operating report. [Rule 62-4.070(3), F.A.C., and PSD FL-108(D)]

**B.50. Title V Applicability.** Any municipal solid waste landfill subject to 40 CFR 60, Subpart WWW, and which has a design capacity equal to or greater than 2.5 million Megagrams and 2.5 million cubic meters is subject to the permitting requirements of Chapter 62-213, F.A.C. Any municipal solid waste landfill subject to the permitting requirements of Chapter 62-213, F.A.C., solely because it is subject to 40 CFR 60, Subpart WWW, shall file an application for an operation permit under Chapter 62-213, F.A.C., by the later of March 12, 1997, or 180 days after the issuance of the solid waste permit that modifies the design capacity of the facility to be equal to or greater than 2.5 million Megagrams and 2.5 million cubic meters. In addition to the initial design capacity report and nonmethane organic compound (NMOC) emission rate report, as applicable, submitted earlier to the U.S. Environmental Protection Agency, any municipal solid waste landfill subject to 40 CFR 60, Subpart WWW, shall submit to the Department a design capacity and NMOC emission rate report as outlined in 40 CFR 60.757 no later than December 31, 1996.

[Rule 62-204.800(7)(b)72., F.A.C.]





E.U. ID No.	Brief Description
003	Class I Landfill (1800 scfm Flare Removed)
004	Class III Landfill and 1800 scfm Flare
008	Class I Landfill and 3500 scfm Flare

{Permitting note(s): This section of the permit includes the new requirements from 40 CFR 63 Subparts AAAA & A -- National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills for facilities without a Bioreactor. This subpart establishes national emission standards for hazardous air pollutants for existing and new municipal solid waste (MSW) landfills. This subpart requires such landfills to meet the startup, shutdown, and malfunction (SSM) requirements of the general provisions of this part and provides that compliance with the operating conditions shall be demonstrated by parameter monitoring results that are within the specified ranges. It also includes additional reporting requirements.}

The following new Specific Conditions from NESHAP 40 CFR 63 - Subpart AAAA also apply to the emissions units listed above:

**AAAA.0.** The permittee shall comply with the provisions of: NSPS 40 CFR 60 Subparts WWW and A; and, NESHAP 40 CFR 63 Subparts AAAA and A.  
 [Rule 62-204.800, F.A.C.]

**AAAA.1. New requirements.**

(a) You must fulfill one of the requirements in paragraph (a)(1) or (2) of this section, whichever is applicable:

(1) Comply with the requirements of 40 CFR part 60, subpart WWW.

(2) Comply with the requirements of the Federal plan or EPA approved and effective State plan or tribal plan that implements 40 CFR part 60, subpart Cc.

(b) If you are required by 40 CFR 60.752(b)(2) of subpart WWW, the Federal plan, or an EPA approved and effective State or tribal plan to install a collection and control system, you must comply with the requirements in Sec. Sec. 63.1960 through 63.1985 and with the general provisions of this part specified in table 1 of this subpart (AAAA).

(c) For approval of collection and control systems that include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions, you must follow the procedures in 40 CFR 60.752(b)(2). If alternatives have already been approved under 40 CFR part 60 subpart WWW or the Federal plan, or EPA approved and effective State or tribal plan, these alternatives can be used to comply with this subpart (AAAA), except that all affected sources must comply with the SSM requirements in Subpart A of this part as specified in Table 1 of this subpart (AAAA) and all affected sources must submit compliance reports every 6 months as specified in Sec. 63.1980(a) and (b), including information on all deviations that occurred during the 6-month reporting period. Deviations for continuous emission monitors or numerical continuous parameter monitors must be determined using a 3 hour monitoring block average.

(d) Reserved

[Rule 62-204.800, F.A.C.; 40 CFR 63.1955]

**AAAA.2. Compliance determination.** Compliance is determined in the same way it is determined for 40 CFR part 60, subpart WWW, including performance testing, monitoring of the collection system, continuous parameter monitoring, and other credible evidence. In addition, continuous parameter monitoring data, collected under 40 CFR 60.756(b)(1), (c)(1), and (d) of subpart WWW, are used to demonstrate compliance with the operating conditions for control systems. If a deviation occurs, you have failed to meet the control device operating conditions described in this subpart (AAAA) and have deviated from the requirements of this subpart (AAAA). Finally, you must develop and implement a written SSM plan according to the provisions in 40 CFR 63.6(e)(3). A copy of the SSM plan must be maintained on site. Failure to write, implement, or maintain a copy of the SSM plan is a deviation from the requirements of this subpart.

[Rule 62-204.800, F.A.C.; 40 CFR 63.1960]

**AAAA.3. Deviation.** A deviation is defined in Sec. 63.1990. For the purposes of the landfill monitoring and SSM plan requirements, deviations include the items in paragraphs (a) through (c) of this section.

(a) A deviation occurs when the control device operating parameter boundaries described in 40 CFR 60.758(c)(1) of subpart WWW are exceeded.

(b) A deviation occurs when 1 hour or more of the hours during the 3-hour block averaging period does not constitute a valid hour of data. A valid hour of data must have measured values for at least three 15-minute monitoring periods within the hour.

(c) A deviation occurs when a SSM plan is not developed, implemented, or maintained on site.

[Rule 62-204.800, F.A.C.; 40 CFR 63.1965]

**AAAA.4. Calculation of the 3-hour block average used to demonstrate compliance.** Averages are calculated in the same way as they are calculated in 40 CFR part 60, subpart WWW, except that the data collected during the events listed in paragraphs (a), (b), (c), and (d) of this section are not to be included in any average computed under this subpart (AAAA):

(a) Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments.

(b) Startups.

(c) Shutdowns.

(d) Malfunctions.

[Rule 62-204.800, F.A.C.; 40 CFR 63.1975]

**AAAA.5. Recordkeeping and reporting.**

(a) Keep records and reports as specified in 40 CFR part 60, subpart WWW, or in the Federal plan, EPA approved State plan or tribal plan that implements 40 CFR part 60, subpart Cc, whichever applies to your landfill, with one exception: You must submit the annual report described in 40 CFR 60.757(f) every 6 months. The semi-annual reports are due March 1<sup>st</sup> and September 1<sup>st</sup>.

[\*Applicant's Request]

(b) You must also keep records and reports as specified in the general provisions of 40 CFR part 60 and this part as shown in Appendix 1 of this subpart (AAAA). Applicable records in the general provisions include items such as SSM plans and the SSM plan reports.

(c)-(h) Reserved  
[Rule 62-204.800, F.A.C.; 40 CFR 63.1980]

The following Specific Conditions from the General Provisions of NSPS 40 CFR 60 - Subpart A and NESHAP 40 CFR 63 - Subpart A also apply to the emissions units listed above:

**G.1. Prohibited activities and circumvention.**

(a) *Prohibited activities.*

(1) No owner or operator subject to the provisions of this part must operate any affected source in violation of the requirements of this part. Affected sources subject to and in compliance with either an extension of compliance or an exemption from compliance are not in violation of the requirements of this part. An extension of compliance can be granted by the Administrator under this part; by a State with an approved permit program; or by the President under section 112(i)(4) of the Act.

(2) No owner or operator subject to the provisions of this part shall fail to keep records, notify, report, or revise reports as required under this part.

(3) [Reserved]

(4) [Reserved]

(5) [Reserved]

(b) *Circumvention.* [Reserved]

(c) *Severability.* Notwithstanding any requirement incorporated into a title V permit obtained by an owner or operator subject to the provisions of this part, the provisions of this part are federally enforceable.

[Rule 62-204.800, F.A.C.; 40 CFR 63.4]

**G.2. Circumvention.** No owner or operator subject to the provisions of this part 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.

[Rule 62-204.800, F.A.C.; 40 CFR 60.12]

**G.3. <reserved>**

**G.4. <reserved>**

**G.5. State authority and delegations.**

(a) The provisions of this part shall not be construed in any manner to preclude any State or political subdivision thereof from -

(1) Adopting and enforcing any standard, limitation, prohibition, or other regulation applicable to an affected source subject to the requirements of this part, provided that such standard, limitation, prohibition, or regulation is not less stringent than any requirement applicable to such source established under this part;

(2) Requiring the owner or operator of an affected source to obtain permits, licenses, or approvals prior to initiating construction, reconstruction, modification, or operation of such source; or

(3) Requiring emission reductions in excess of those specified in subpart D of this part as a condition for granting the extension of compliance authorized by section 112(i)(5) of the Act.

[Rule 62-204.800, F.A.C.; 40 CFR 60.10 and 63.12]

G.6. <reserved>

G.7. Compliance with standards and maintenance requirements.

(a)-(d) [Reserved]

(e) *Operation and maintenance requirements.*

(1) (i) At all times, including periods of startup, shutdown, and malfunction, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the owner or operator reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require the owner or operator to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether such operation 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, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan required in paragraph (e)(3) of this section), review of operation and maintenance records, and inspection of the source.

(i) Malfunctions must be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown, and malfunction plan required in paragraph (e)(3) of this section. To the extent that an unexpected event arises during a startup, shutdown, or malfunction, an owner or operator must comply by minimizing emissions during such a startup, shutdown, and malfunction event consistent with safety and good air pollution control practices.

(iii) Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable independent of emissions limitations or other requirements in relevant standards.

(2) [Reserved]

(3) **Startup, shutdown, and malfunction plan.**

(i) The owner or operator of an affected source must develop and implement a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control and monitoring equipment used to comply with the relevant standard.

(A) Ensure that, at all times, the owner or operator operates and maintains each affected source, including associated air pollution control and monitoring equipment, in a manner which satisfies the general duty to minimize emissions established by paragraph (e)(1)(i) of this section;

(B) Ensure that owners or operators are prepared to correct malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of hazardous air pollutants; and

(C) Reduce the reporting burden associated with periods of startup, shutdown, and malfunction (including corrective action taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation).

(ii) During periods of startup, shutdown, and malfunction, the owner or operator of an affected source must operate and maintain such source (including associated air pollution control and monitoring equipment) in accordance with the procedures specified in the startup, shutdown, and malfunction plan developed under paragraph (e)(3)(i) of this section.

(iii) When actions taken by the owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) are consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, the owner or operator must keep records for that event which demonstrate that the procedures specified in the plan were followed. These records may take the form of a "checklist," or other effective form of recordkeeping that confirms conformance with the startup, shutdown, and malfunction plan for that event. In addition, the owner or operator must keep records of these events as specified in § 63.10(b), including records of the occurrence and duration of each startup, shutdown, or malfunction of operation and each malfunction of the air pollution control and monitoring equipment. Furthermore, the owner or operator shall confirm that actions taken during the relevant reporting period during periods of startup, shutdown, and malfunction were consistent with the affected source's startup, shutdown and malfunction plan in the semiannual (or more frequent) startup, shutdown, and malfunction report required in § 63.10(d)(5).

(iv) If an action taken by the owner or operator during a startup, shutdown, or malfunction (including an action taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, and the source exceeds any applicable emission limitation in the relevant emission standard, then the owner or operator must record the actions taken for that event and must report such actions within 2 working days after commencing actions inconsistent with the plan, followed by a letter within 7 working days after the end of the event, in accordance with Sec. 63.10(d)(5) (unless the owner or operator makes alternative reporting arrangements, in advance, with the Administrator).

(v) The owner or operator must maintain at the affected source a current startup, shutdown, and malfunction plan and must make the plan available upon request for inspection and copying by the Administrator. In addition, if the startup, shutdown, and malfunction plan is subsequently revised as provided in paragraph (e)(3)(viii) of this section, the owner or operator must maintain at the affected source each previous (i.e., superseded) version of the startup, shutdown, and malfunction plan, and must make each such previous version available for inspection and copying by the Administrator for a period of 5 years after revision of the plan. If at any time after adoption of a startup, shutdown, and malfunction plan the affected source ceases operation or is otherwise no longer subject to the provisions of this part, the owner or operator must retain a copy of the most recent plan for 5 years from the date the source ceases operation or is no longer subject to this part and must make the plan available upon request for inspection and copying by the Administrator. The Administrator may at any time request in writing that the owner or operator submit a copy of any startup, shutdown, and malfunction plan (or a portion thereof) which is maintained at the affected source or in the possession of the owner or operator. Upon receipt of such a request, the owner or operator must promptly submit a copy of the requested plan (or a portion thereof) to the Administrator. The Administrator must request that the owner or operator submit a particular startup, shutdown, or malfunction plan (or a portion thereof) whenever a member of the public submits a specific and reasonable request to examine or to receive a copy of that plan or portion of a plan. The owner or operator may elect to submit the required copy of any startup, shutdown, and malfunction plan to the Administrator in an electronic format. If the owner or operator claims that any portion of such a startup, shutdown, and malfunction plan is confidential business information entitled to protection from disclosure under section 114(c) of the Act or 40 CFR 2.301, the material which is claimed as confidential must be clearly designated in the submission.

(vi) To satisfy the requirements of this section to develop a startup, shutdown, and malfunction plan, the owner or operator may use the affected source's standard operating procedures (SOP) manual, or an Occupational Safety and Health Administration (OSHA) or other plan, provided the alternative plans meet all the requirements of this section and are made available for inspection or submitted when requested by the Administrator.

(vii) Based on the results of a determination made under paragraph (e)(1)(i) of this section, the Administrator may require that an owner or operator of an affected source make changes to the

startup, shutdown, and malfunction plan for that source. The Administrator must require appropriate revisions to a startup, shutdown, and malfunction plan, if the Administrator finds that the plan:

(A) Does not address a startup, shutdown, or malfunction event that has occurred;

(B) Fails to provide for the operation of the source (including associated air pollution control and monitoring equipment) during a startup, shutdown, or malfunction event in a manner consistent with the general duty to minimize emissions established by paragraph (e)(1)(i) of this section;

(C) Does not provide adequate procedures for correcting malfunctioning process and/or air pollution control and monitoring equipment as quickly as practicable; or

(D) Includes an event that does not meet the definition of startup, shutdown, or malfunction listed in § 63.2.

(viii) The owner or operator may periodically revise the startup, shutdown, and malfunction plan for the affected source as necessary to satisfy the requirements of this part or to reflect changes in equipment or procedures at the affected source. Unless the permitting authority provides otherwise, the owner or operator may make such revisions to the startup, shutdown, and malfunction plan without prior approval by the Administrator or the permitting authority. However, each such revision to a startup, shutdown, and malfunction plan must be reported in the semiannual report required by § 63.10(d)(5). If the startup, shutdown, and malfunction plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction but was not included in the startup, shutdown, and malfunction plan at the time the owner or operator developed the plan, the owner or operator must revise the startup, shutdown, and malfunction plan within 45 days after the event to include detailed procedures for operating and maintaining the source during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control and monitoring equipment. In the event that the owner or operator makes any revision to the startup, shutdown, and malfunction plan which alters the scope of the activities at the source which are deemed to be a startup, shutdown, or malfunction, or otherwise modifies the applicability of any emission limit, work practice requirement, or other requirement in a standard established under this part, the revised plan shall not take effect until after the owner or operator has provided a written notice describing the revision to the permitting authority.

(ix) The title V permit for an affected source must require that the owner or operator adopt a startup, shutdown, and malfunction plan which conforms to the provisions of this part, and that the owner or operator operate and maintain the source in accordance with the procedures specified in the current startup, shutdown, and malfunction plan. However, any revisions made to the startup, shutdown, and malfunction plan in accordance with the procedures established by this part shall not be deemed to constitute permit revisions under part 70 or part 71 of this chapter. Moreover, none of the procedures specified by the startup, shutdown, and malfunction plan for an affected source shall be deemed to fall within the permit shield provision in section 504(f) of the Act.

**(f) Compliance with nonopacity emission standards - Affected Sources are already subject to the provisions of paragraphs (f)(1) and (2)(1) through the same provisions under 40 CFR, part 60 subpart A.**

(1) *Applicability.* [Reserved]

(2) *Methods for determining compliance.*

(i) [Reserved]

(ii) The Administrator will determine compliance with nonopacity emission standards in this part by evaluation of an owner or operator's conformance with operation and maintenance requirements, including the evaluation of monitoring data, as specified in § 63.6(e) and applicable subparts of this part.

(iii) If an affected source conducts performance testing at startup to obtain an operating permit in the State in which the source is located, the results of such testing may be used to demonstrate compliance with a relevant standard if -

(A) The performance test was conducted within a reasonable amount of time before an initial performance test is required to be conducted under the relevant standard;

(B) The performance test was conducted under representative operating conditions for the source;

(C) The performance test was conducted and the resulting data were reduced using EPA-approved test methods and procedures, as specified in § 63.7(e) of this subpart; and

(D) The performance test was appropriately quality-assured, as specified in § 63.7(c).

(iv) The Administrator will determine compliance with design, equipment, work practice, or operational emission standards in this part by review of records, inspection of the source, and other procedures specified in applicable subparts of this part.

(v) The Administrator will determine compliance with design, equipment, work practice, or operational emission standards in this part by evaluation of an owner or operator's conformance with operation and maintenance requirements, as specified in paragraph (e) of this section and applicable subparts of this part.

(3) *Finding of compliance.* The Administrator will make a finding concerning an affected source's compliance with a non-opacity emission standard, as specified in paragraphs (f)(1) and (2) of this section, upon obtaining all the compliance information required by the relevant standard (including the written reports of performance test results, monitoring results, and other information, if applicable), and information available to the Administrator pursuant to paragraph (e)(1)(i) of this section.

(g)-(j) [Reserved]

[Rule 62-204.800, F.A.C.; 40 CFR 63.6]

#### **G.8. Monitoring requirements.**

(a) For the purposes of this section, all continuous monitoring systems required under applicable subparts shall be subject to the provisions of this section 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 to 40 CFR 60, unless otherwise specified in an applicable subpart or by the Administrator. Appendix F is applicable December 4, 1987.

(b) All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests under 40 CFR 60.8. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device.

(c) 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/she 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.

(2) Except as provided in 40 CFR 60.13(c)(1), the owner or operator of an affected facility shall furnish the Administrator within 60 days of completion two or, upon request, more copies of a written report of the results of the performance evaluation.

(d) (1) Owners and operators of all continuous emission monitoring systems 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 a COMS, the optical surfaces, exposed to the effluent gases, must be cleaned before performing the zero and upscale drift adjustments, except for systems using automatic zero adjustments. The optical surfaces must 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.

(e) Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d), all continuous monitoring systems 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.

(f) All continuous monitoring systems 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.

(g) (1) When more than one continuous monitoring system is used to measure the emissions from only one affected facility (e.g. multiple breechings, multiple outlets), the owner or operator shall report the results as required from each continuous monitoring system. 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 installation of fewer systems is approved by the Administrator.

(2) When the effluents from two or more affected facilities subject to the same opacity standard are combined before being released to the atmosphere, the owner or operator may

either install a continuous opacity monitoring system at a location monitoring the combined effluent or install an opacity combiner system comprised of opacity and flow monitoring systems on each stream, and shall report as per Sec. 60.7(c) on the combined effluent. When the affected facilities are not subject to the same opacity standard applicable, except for documented periods of shutdown of the affected facility, subject to the most stringent opacity standard shall apply

(3) When the effluents from two or more affected facilities subject to the same emissions standard, other than opacity, are combined before released to the atmosphere, the owner or operator may install applicable continuous monitoring systems on each effluent or on the combined effluent. When the affected facilities are not subject to the continuous monitoring standard, separate continuous monitoring systems shall be installed on each effluent and the owner or operator shall report as required for each affected facility.

(h) 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 system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. For owners or operators complying with the requirements in Sec. 60.7(f)(1) or (2), data averages must include any data recorded during periods of monitor breakdown or malfunction. 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 or pollutant per J of heat input). 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). [Rule 62-296.800, F.A.C.; 40 CFR 60.13(h)].

(i) After receipt and consideration of written application, the Administrator may approve alternatives to any monitoring procedures or requirements of this part including, but not limited to the following:

(1) Alternative monitoring requirements when installation of a continuous monitoring system or monitoring device specified by this part would not provide accurate measurements due to liquid water or other interferences caused by substances in the effluent gases.

(2) Alternative monitoring requirements when the affected facility is infrequently operated.

(3) Alternative monitoring requirements to accommodate continuous monitoring systems that require additional measurements to correct for stack moisture conditions.

(4) Alternative locations for installing continuous monitoring systems or monitoring devices when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements.

(5) Alternative methods of converting pollutant concentration measurements to units of the standards.

(6) Alternative procedures for performing daily checks of zero and span drift that do not involve use of span gases or test cells.

(7) Alternatives to the A.S.T.M. test methods or sampling procedures specified by any subpart.

(8) Alternative continuous monitoring systems that do not meet the design or performance requirements in Performance Specification 1, appendix B, but adequately demonstrate a definite and consistent relationship between its measurements and the measurements of opacity by a system complying

with the requirements in Performance Specification 1. The Administrator may require that such demonstration be performed for each affected facility.

(9) Alternative monitoring requirements when the effluent from a single affected facility or the combined effluent from two or more affected facilities is released to the atmosphere through more than one point.

[Rule 62-296.800, F.A.C.; 40 CFR 60.13(i)].

(j) An alternative to the relative accuracy (RA) test specified in Performance Specification 2 of appendix B may be requested as follows:

(1) An alternative to the reference method tests for determining RA is available for sources with emission rates demonstrated to be less than 50 percent of the applicable standard. A source owner or operator may petition the Administrator to waive the RA test in section 8.4 of Performance Specification 2 and substitute the procedures in section 16.0 if the results of a performance test conducted according to the requirements in 40 CFR 60.8 of this subpart or other tests performed following the criteria in 40 CFR 60.8 demonstrate that the emission rate of the pollutant of interest in the units of the applicable standard is less than 50 percent of the applicable standard. For sources subject to standards expressed as control efficiency levels, a source owner or operator may petition the Administrator to waive the RA test and substitute the procedures in section 16.0 of Performance Specification 2 if the control device exhaust emission rate is less than 50 percent of the level needed to meet the control efficiency requirement. The alternative procedures do not apply if the continuous emission monitoring system is used to determine compliance continuously with the applicable standard. The petition to waive the RA test shall include a detailed description of the procedures to be applied. Included shall be location and procedure for conducting the alternative, the concentration or response levels of the alternative RA materials, and the other equipment checks included in the alternative procedure. The Administrator will review the petition for completeness and applicability. The determination to grant a waiver will depend on the intended use of the CEMS data (e.g., data collection purposes other than NSPS) and may require specifications more stringent than in Performance Specification 2 (e.g., the applicable emission limit is more stringent than NSPS).

(2) The waiver of a CEMS RA test will be reviewed and may be rescinded at such time, following successful completion of the alternative RA procedure that the CEMS data indicate the source emissions approaching the level. The criterion for reviewing the waiver is the collection of CEMS data showing that emissions have exceeded 70 percent of the applicable standard for seven, consecutive, averaging periods as specified by the applicable regulation(s). For sources subject to standards expressed as control efficiency levels, the criterion for reviewing the waiver is the collection of CEMS data showing that exhaust emissions have exceeded 70 percent of the level needed to meet the control efficiency requirement for seven, consecutive, averaging periods as specified by the applicable regulation(s) [e.g., 40 CFR 60.45(g)(2) and 40 CFR 60.45(g)(3), 40 CFR 60.73(e), and 40 CFR 60.84(e)]. It is the responsibility of the source operator to maintain records and determine the level of emissions relative to the criterion on the waiver of RA testing. If this criterion is exceeded, the owner or operator must notify the Administrator within 10 days of such occurrence and include a description of the nature and cause of the increasing emissions. The Administrator will review the notification and may rescind the waiver and require the owner or operator to conduct a RA test of the CEMS as specified in section 8.4 of Performance Specification 2.

[Rule 62-296.800, F.A.C.; 40 CFR 60.13(j)]

[Rule 62-296.800, F.A.C.; 40 CFR 60.13]

#### **G.9. General notification and reporting requirements.**

(a) For the purposes of this part, time periods specified in days shall be measured in calendar days, even if the word "calendar" is absent, unless otherwise specified in an applicable requirement.

(b) 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 post-marked 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 post-mark 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.

(c) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.

(d) If an owner or operator of an affected facility in a State with delegated authority is required to submit periodic reports under this part to the State, and if the State has an established timeline for the submission of periodic reports that is consistent with the reporting frequency(ies) specified for such facility under this part, the owner or operator may change the dates by which periodic reports under this part shall be submitted (without changing the frequency of reporting) to be consistent with the State's schedule by mutual agreement between the owner or operator and the State. The allowance in the previous sentence applies in each State beginning 1 year after the affected facility is required to be in compliance with the applicable subpart in this part. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.

(e) If an owner or operator supervises one or more stationary sources affected by standards set under this part and standards set under part 61, part 63, or both such parts of this chapter, he/she may arrange by mutual agreement between the owner or operator and the Administrator (or the State with an approved permit program) a common schedule on which periodic reports required by each applicable standard shall be submitted throughout the year. The allowance in the previous sentence applies in each State beginning 1 year after the stationary source is required to be in compliance with the applicable subpart in this part, or 1 year after the stationary source is required to be in compliance with the applicable 40 CFR part 61 or part 63 of this chapter standard, whichever is latest. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.

(f) (1) (i) Until an adjustment of a time period or postmark deadline has been approved by the Administrator under paragraphs (f)(2) and (f)(3) of this section, the owner or operator of an affected facility remains strictly subject to the requirements of this part.

(ii) An owner or operator shall request the adjustment provided for in paragraphs (f)(2) and (f)(3) of this section each time he or she wishes to change an applicable time period or postmark deadline specified in this part.

(2) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. An owner or operator who wishes to request a change in a time period or postmark deadline for a particular requirement shall request the adjustment in writing as soon as

practicable before the subject activity is required to take place. The owner or operator shall include in the request whatever information he or she considers useful to convince the Administrator that an adjustment is warranted.

(3) If, in the Administrator's judgment, an owner or operator's request for an adjustment to a particular time period or postmark deadline is warranted, the Administrator will approve the adjustment. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an adjustment within 15 calendar days of receiving sufficient information to evaluate the request.

(4) If the Administrator is unable to meet a specified deadline, he or she will notify the owner or operator of any significant delay and inform the owner or operator of the amended schedule.

[Rule 62-296.800, F.A.C.; 40 CFR 60.19]

#### **G.10. Recordkeeping and reporting requirements.**

(a)-(b) [Reserved]

(2) The owner or operator of an affected source subject to the provisions of this part shall maintain relevant records for such source of -

(i) The occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., process equipment);

(ii) The occurrence and duration of each malfunction of the required air pollution control and monitoring equipment;

(iii) All required maintenance performed on the air pollution control and monitoring equipment;

(iv) Actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) when such actions are different from the procedures specified in the affected source's startup, shutdown, and malfunction plan (see § 63.6(e)(3));

(v) All information necessary to demonstrate conformance with the affected source's startup, shutdown, and malfunction plan (see § 63.6(e)(3)) when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. (The information needed to demonstrate conformance with the startup, shutdown, and malfunction plan may be recorded using a "checklist," or some other effective form of recordkeeping, in order to minimize the recordkeeping burden for conforming events);

(vi)-(xiv) [Reserved]

(3) [Reserved]

(c) [Reserved]

(d) *General reporting requirements.*

(1)-(4) [Reserved]

(5) (i) Periodic startup, shutdown, and malfunction reports. If actions taken by an owner or operator during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan (see Sec. 63.6(e)(3)), the owner or operator shall state such information in a startup, shutdown, and malfunction report. Such a report shall identify any instance where any action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the affected source's startup, shutdown, and malfunction plan, but the

source does not exceed any applicable emission limitation in the relevant emission standard. Such a report shall also include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report shall consist of a letter, containing the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy, that shall be submitted to the Administrator semiannually (or on a more frequent basis if specified otherwise in a relevant standard or as established otherwise by the permitting authority in the source's title V permit). The startup, shutdown, and malfunction report is due March 1<sup>st</sup> and September 1<sup>st</sup>. If the owner or operator is required to submit excess emissions and continuous monitoring system performance (or other periodic) reports under this part, the startup, shutdown, and malfunction reports required under this paragraph may be submitted simultaneously with the excess emissions and continuous monitoring system performance (or other) reports. If startup, shutdown, and malfunction reports are submitted with excess emissions and continuous monitoring system performance (or other periodic) reports, and the owner or operator receives approval to reduce the frequency of reporting for the latter under paragraph (e) of this section, the frequency of reporting for the startup, shutdown, and malfunction reports also may be reduced if the Administrator does not object to the intended change. The procedures to implement the allowance in the preceding sentence shall be the same as the procedures specified in paragraph (e)(3) of this section.

(ii) Immediate startup, shutdown, and malfunction reports. Notwithstanding the allowance to reduce the frequency of reporting for periodic startup, shutdown, and malfunction reports under paragraph (d)(5)(i) of this section, any time an action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, and the source exceeds any applicable emission limitation in the relevant emission standard, the owner or operator shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan followed by a letter within 7 working days after the end of the event. The immediate report required under this paragraph (d)(5)(ii) shall consist of a telephone call (or facsimile (FAX) transmission) to the Administrator within 2 working days after commencing actions inconsistent with the plan, and it shall be followed by a letter, delivered or postmarked within 7 working days after the end of the event, that contains the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and describing all excess emissions and/or parameter monitoring exceedances which are believed to have occurred. Notwithstanding the requirements of the previous sentence, after the effective date of an approved permit program in the State in which an affected source is located, the owner or operator may make alternative reporting arrangements, in advance, with the permitting authority in that State. Procedures governing the arrangement of alternative reporting requirements under this paragraph (d)(5)(ii) are specified in Sec. 63.9(i).

(e) –(f) [Reserved]

\*Applicant's Request.

[Rule 62-296.800, F.A.C.; 40 CFR 63.10]

## **G.11. Availability of information and confidentiality.**

### **(a) Availability of information.**

(1) With the exception of information protected through part 2 of this chapter, all reports, records, and other information collected by the Administrator under this part are available to the public. In addition, a copy of each permit application, compliance plan (including the schedule of compliance), notification of compliance status, excess emissions and continuous monitoring

systems performance report, and title V permit is available to the public, consistent with protections recognized in section 503(e) of the Act.

(2) The availability to the public of information provided to or otherwise obtained by the Administrator under this part shall be governed by part 2 of this chapter.

(b) *Confidentiality.*

(1) If an owner or operator is required to submit information entitled to protection from disclosure under section 114(c) of the Act, the owner or operator may submit such information separately. The requirements of section 114(c) shall apply to such information.

(2) The contents of a title V permit shall not be entitled to protection under section 114(c) of the Act; however, information submitted as part of an application for a title V permit may be entitled to protection from disclosure.

[Rule 62-296.800, F.A.C.; 40 CFR 63.15]

**LT.1. 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.

2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid and/or solid fuel for more than 400 hours other than during startup.

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 Department, 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) Special Compliance Tests. When the Department, 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 Department.

(c) Waiver of Compliance Test Requirements. 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.

**LT.2. 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.]

**LT.3. Test Reports**.

(a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.

(b) The required test report shall be filed with the Department 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 Department 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.]

PROPOSED

**CAM Plan**

**Compliance Assurance Monitoring Plan**

# CAM Plan

## HF (Fluoride) Emissions

Spray Dryer Absorber for Control of Fluoride Emissions  
Facility: North County Resource Recovery Facility

### I. Background

#### A. Emissions Unit:

Description: Municipal Waste Combustion Unit No. 1  
Municipal Waste Combustion Unit No. 2

Identification: EU Nos. 001, 002

Facility: North County Resource Recovery Facility

#### B. Applicable Regulation, Emission Limit, and Monitoring Requirements:

Regulation No.: PSD-FL-108A, permit

Emission Limit: 0.0032 lb/MMBTU

Monitoring Requirement: Annual Stack Test (every five years) – EPA Method 13A or 13B for determination of fluoride concentrations and associated moisture content.

#### C. Control Technology:

Spray dryer absorber (SDA) manufactured by Joy Corporation

### II. Monitoring Approach

The key elements of the monitoring approach are presented below:

#### A. Indicator

The Federal Emission Guidelines limit for sulfur dioxide will be used as an indicator. (40 CFR 60 Subpart Cb)

#### B. Measurement Approach

SO<sub>2</sub> outlet concentration is currently measured at the stack (downstream of the SDA). Compliance with the SO<sub>2</sub> emission limitation serves as continuous indication that the acid gas scrubber is performing adequately. The facility will continuously monitor SO<sub>2</sub> emissions to verify proper operation of the acid gas scrubber, and insure compliance with the fluoride emission limitation.

#### C. Indicator Range

## CAM Plan

The emission limit for sulfur dioxide contained in the gases discharged to the atmosphere is 29 parts per million by volume or 75-percent reduction, corrected to 7 percent oxygen (dry basis), whichever is less stringent. This emission limit is based on a 24-hour daily geometric mean.

### D. QIP Threshold

The QIP Threshold is six excursions of the 24-hour daily geometric mean in a six month reporting period. This specific QIP threshold adequately implements Condition 10. of the CAM Requirements.

### E. Performance Criteria

Data Representativeness: SO<sub>2</sub> concentration measurements are taken in compliance with a Continuous Emission Monitoring System (CEMS) that is certified pursuant to 40 CFR 60, Appendix B

Verification of Operational Status: 40 CFR 60, Subpart Cb mandates CEMS monitoring availability

QA/QC Practices and Criteria: 40 CFR 60.13 and 40 CFR 60, Appendix B

Monitoring Frequency and Data Collection Procedure: Continuous

## III. Justification

### A. Background

Fluoride is a regulated pollutant according to PSD permits issued for the facility. Stack tests continue to demonstrate that emissions are well below permitted levels.

### B. Rationale for Selection of Performance Indicator

Fluoride contained in the waste is liberated in the combustor(s) and converted to hydrogen fluoride, and ultimately to hydrofluoric acid. Hydrofluoric acid is a very strong acid which will be rapidly neutralized in the spray dryer absorber (SDA) and be converted to CaF<sub>2</sub>. The SDA removes multiple acid gases, including HF, HCl, and SO<sub>2</sub>. Under normal scrubber operating conditions, the available lime slurry will neutralize HF before neutralizing SO<sub>2</sub>. Therefore, if adequate SO<sub>2</sub> emissions are being demonstrated by the facility CEMS, there is sufficient assurance that HF is being equally controlled.

### C. Rationale for Selection of Indicator Level

Stack testing results supplied to the Department demonstrate that SO<sub>2</sub> concentrations, based on a 24-hour daily geometric mean, are below the permitted emission limit. There has never been a notice of violation for SO<sub>2</sub> at the NCRRF. This indicates that the SDA is performing adequately

## CAM Plan

at removing acid gases. Therefore, the selected indicator range is sufficient to insure that fluoride emissions are being adequately controlled.

# CAM Plan

## HCl (Hydrogen Chloride) Emissions

Spray Dryer Absorber for Control of Hydrogen Chloride Emissions  
Facility: North County Resource Recovery Facility

### IV. Background

#### A. Emissions Unit:

Description: Municipal Waste Combustion Unit No. 1  
Municipal Waste Combustion Unit No. 2

Identification: EU Nos. 001, 002

Facility: North County Resource Recovery Facility

#### B. Applicable Regulation, Emission Limit, and Monitoring Requirements:

Regulation No.: PSD-FL-108A, permit and Federal  
Emissions Guidelines 40 CFR 60 Subpart  
Cb (more stringent limit/guideline applies)

Emission Limit: 90% removal or 25 ppmvd (PSD Limit)  
95% removal or 29 ppmvd (Federal EG)

Monitoring Requirement: Annual Stack Test – EPA Method 26 for  
determination of hydrochloric acid  
concentration

#### C. Control Technology:

Spray dryer absorber (SDA) manufactured by Joy Corporation

### V. Monitoring Approach

The key elements of the monitoring approach are presented below:

#### A. Indicator

The Federal Emission Guidelines limit for sulfur dioxide will be used as an indicator. (40 CFR 60 Subpart Cb)

#### B. Measurement Approach

SO<sub>2</sub> outlet concentration is currently measured at the stack (downstream of the SDA). Compliance with the SO<sub>2</sub> emission limitation serves as continuous indication that the acid gas scrubber is performing adequately. The facility will continuously monitor SO<sub>2</sub> emissions to verify proper operation of the acid gas scrubber, and insure compliance with the fluoride emission limitation

## CAM Plan

### C. Indicator Range

The emission limit for sulfur dioxide contained in the gases discharged to the atmosphere is 29 parts per million by volume or 75-percent reduction, corrected to 7 percent oxygen (dry basis), whichever is less stringent. This emission limit is based on a 24-hour daily geometric mean.

### D. QIP Threshold

The QIP Threshold is six excursions of the 24-hour daily geometric mean in a six month reporting period. This specific QIP threshold adequately implements Condition 10. of the CAM Requirements.

### E. Performance Criteria

Data Representativeness: SO<sub>2</sub> concentration measurements are taken in compliance with a Continuous Emission Monitoring System (CEMS) that is certified pursuant to 40 CFR 60, Appendix B

Verification of Operational Status: 40 CFR 60, Subpart Cb mandates CEMS monitoring availability

QA/QC Practices and Criteria: 40 CFR 60.13 and 40 CFR 60, Appendix B

Monitoring Frequency and Data Collection Procedure: Continuous

## VI. Justification

### A. Background

Hydrogen Chloride is a regulated pollutant according to PSD and Title V permits issued for the facility. Annual stack tests continue to demonstrate that emissions are below permitted levels.

### B. Rationale for Selection of Performance Indicator

The SDA removes multiple acid gases, including HF, HCl, and SO<sub>2</sub>. Under normal scrubber operating conditions, the available lime slurry will neutralize HCl before neutralizing SO<sub>2</sub>. Therefore, if adequate SO<sub>2</sub> removal is being demonstrated by the facility CEMS, there is sufficient assurance that HCl is being equally controlled.

### C. Rationale for Selection of Indicator Level

Stack testing results supplied to the Department demonstrate that SO<sub>2</sub> concentrations, based on a 24-hour daily geometric mean, are below the permitted emission limit. There has never been a notice of violation for SO<sub>2</sub> at the NCRRF. This indicates that the SDA is performing adequately at removing acid gases. Therefore, the selected indicator range is sufficient to insure that HCl emissions are being adequately controlled.

# CAM Plan

## PM (Particulate Matter) Emissions

Electrostatic Precipitator for Control of Particulate Matter Emissions  
Facility: North County Resource Recovery Facility

### VII. Background

#### A. Emissions Unit:

Description: Municipal Waste Combustion Unit No. 1  
Municipal Waste Combustion Unit No. 2

Identification: EU Nos. 001, 002

Facility: North County Resource Recovery Facility

#### B. Applicable Regulation, Emission Limit, and Monitoring Requirements:

Regulation No.: PSD-FL-108A, permit and Federal  
Emissions Guidelines 40 CFR 60 Subpart  
Cb (more stringent limit/guideline applies)

Emission Limit: 0.015 grains/dscf (PSD Limit)  
27 mg/dscm (Federal EG)

Monitoring Requirement: Annual Stack Test – EPA Method 5 for  
determination of particulate matter  
concentration and associated moisture  
content

#### C. Control Technology:

Babcock & Wilcox /BHS Krefeld 4-field Electrostatic precipitator

### VIII. Monitoring Approach

The key elements of the monitoring approach are presented below:

#### A. Indicator

Particulate matter concentration as determined by annual stack testing will be used as an indicator. (40 CFR 60 Subpart Cb)

#### B. Measurement Approach

Outlet testing is performed in the breaching between the electrostatic precipitators and the induced draft fan to the exhaust stack.

#### C. Indicator Range

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 Subpart Cb)



## CAM Plan

### D. QIP Threshold / Performance Criteria

Test Procedures are performed in strict accordance with the EPA Method 5 found in the Code of Federal Regulations (40 CFR 60) Appendix A.

### IX. Justification

Emission limiting standards written subsequent to the 1990 Clean Air Act Amendments (November 15, 1990) are required to contain sufficient periodic monitoring to ensure continuous compliance. Accordingly, pollutants regulated by such standards are exempt from requirements to develop a CAM plan. The particulate matter emission limiting standard of 40 CFR 60, Subpart Cb mandates a compliance demonstration approach of annual stack testing. Because the post-1990 particulate matter EG standard is more stringent than the particulate matter emission limiting standard established by PSD-FL-108A, the particulate matter monitoring requirements of 40 CFR 60, Subpart Cb are proposed as CAM for the PSD-FL-108A PM limitation.

# CAM Plan

## Pb (Lead) Emissions

Electrostatic Precipitator for Control of Lead Emissions  
Facility: North County Resource Recovery Facility

### X. Background

#### A. Emissions Unit:

Description: Municipal Waste Combustion Unit No. 1  
Municipal Waste Combustion Unit No. 2

Identification: EU Nos. 001, 002

Facility: North County Resource Recovery Facility

#### B. Applicable Regulation, Emission Limit, and Monitoring Requirements:

Regulation No.: PSD-FL-108A, permit and Federal  
Emissions Guidelines 40 CFR 60 Subpart  
Cb (more stringent limit/guideline applies)

Emission Limit:  $4.0 \times 10^{-4}$  lb/MMBtu (PSD Limit)  
0.440 mg/dscm (Federal EG)

Monitoring Requirement: Annual Stack Test – EPA Method 29 for  
determination of multi-metals

#### C. Control Technology:

Babcock & Wilcox /BHS Krefeld 4-field Electrostatic precipitator

### XI. Monitoring Approach

The key elements of the monitoring approach are presented below:

#### A. Indicator

Lead concentration as determined by annual stack testing will be used as  
an indicator. (40 CFR 60 Subpart Cb)

#### B. Measurement Approach

Outlet testing is performed in the breaching between the electrostatic  
precipitators and the induced draft fan to the exhaust stack.

#### C. Indicator Range

The emission limit for lead contained in the gases discharged to the  
atmosphere is 0.44 milligrams per dry standard cubic meter, corrected to 7  
percent oxygen. (40 CFR 60.33 b (a) (4))

#### D. QIP Threshold / Performance Criteria

## CAM Plan

Test Procedures are performed in strict accordance with the EPA Method 29 found in the Code of Federal Regulations (40 CFR 60) Appendix A.

### XII. Justification

Emission limiting standards written subsequent to the 1990 Clean Air Act Amendments (November 15, 1990) are required to contain sufficient periodic monitoring to ensure continuous compliance. Accordingly, pollutants regulated by such standards are exempt from requirements to develop a CAM plan. The Pb emission limiting standard of 40 CFR 60, Subpart Cb mandates a compliance demonstration approach of annual stack testing. Because the post-1990 Pb NSPS standard is more stringent than the Pb emission limiting standard established by PSD-FL-108A, the Pb monitoring requirements of 40 CFR 60, Subpart Cb are proposed as CAM for the PSD-FL-108A Pb limitation.

**Appendix U-1. List of Unregulated Emissions Units and/or Activities.**

Unregulated Emissions Units and/or Activities. An emissions unit which emits no “emissions-limited pollutant” and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit-specific emissions or work practice standards.

The below listed emissions units and/or activities are neither ‘regulated emissions units’ nor ‘insignificant emissions units’.

<b>E.U. ID Nos.</b>	<b>Brief Description</b>
005	RDF Storage
006	RDF Processing Lines
007	Oversized Bulk Waste Processing Line
017	Woody Waste Facility Diesel Engine
018	Cooling Tower

**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, are exempt from the permitting requirements of Chapters 62-210 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 Rule 62-210.300(3)(a), 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 Rule 62.210.300(3)(a), 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.

<b>Description</b>
Fly Ash Storage Silos
Lime Storage Silos
Ash Treatment Chemical Storage Silo
Ashloading Building
Composting Facility
Ferrous processing facility
Materials recycling facility
Woody waste recycling facility
Auto spray booth

The below activities are listed by location.

<u>Location</u>	<u>Activity</u>
Resource Recovery Facility	Emergency Diesel Generator Diesel Fire Water Pump
Utilities Facility	Emergency Diesel Generator
Household Hazardous Waste	Laboratory Hood
Trash Processing, Wood Waste	Grinder, Fugitive Dust From
Mulch Processing, Yard Waste	Grinder, Fugitive Dust From
Tire Cutting Operations	Diesel Generator For Segmentizer

**Table 1-2, Summary of Compliance Requirements**

Solid Waste Authority of Palm Beach County  
 North County Regional Resource Recovery Facility

PROPOSED Permit No.: 0990234-010-AV  
 Facility ID No.: 0990234

Emissions Unit	Brief Description
-002	Municipal Solid Waste Boiler Unit 2

Pollutant/ Parameter	Fuel(s)	Compliance Method	Testing Time or Frequency <sup>0</sup>	Frequency Base Date <sup>1</sup>	Minimum Compliance Test Time	CMS <sup>2</sup>	See Permit Condition(s)
Opacity (VE)	RDF	EPA Method 9	Annual	N/A	1 hour	Yes	T.3.
SO <sub>2</sub>	RDF	EPA Method 6, 6C or 8	Annual	N/A	1 hour	Yes	T.6.
NO <sub>x</sub>	RDF	EPA Method 7, 7A, 7B, 7C, 7D, or 7E	Annual	N/A	1 hour	Yes	T.9.
PM	RDF	EPA Method 5	Annual	N/A	6 hours	No	T.3.
VOC	RDF	EPA Method 25 or 25A	Annual	N/A	N/A	No	T.16.2.
CO	RDF	EPA Method 10	Annual	N/A	N/A	Yes	
HCl	RDF	EPA Method 26	Annual	N/A	N/A	No	T.7.
Cd	RDF	EPA Method 29	Annual	N/A	N/A	No	T.4.
Dioxins/Furans	RDF	EPA Method 23	Annual	N/A	N/A	No	T.8.
F	RDF	EPA Method 13A or 13B	Renewal	N/A	N/A	No	T.16.2.
Hg	RDF	EPA Method 29	Annual	N/A	N/A	No	T.4 & T.5
Pb	RDF	EPA Method 12	Annual	N/A	N/A	No	T.4.
Be	RDF	EPA Method 104	Renewal	N/A	N/A	No	T.16.2.
O <sub>2</sub> or CO <sub>2</sub>	RDF	N/A	N/A	N/A	N/A	Yes	C.1.

Notes:

0. See permit conditions T.16.1 and T.16.2.
1. Frequency base date established for planning purposes only. [see Rule 62-297.310, F.A.C.]
2. Continuous Monitoring System.

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

## Appendix H-1. Permit History/ID Number Changes.

Solid Waste Authority of Palm Beach County  
North County Regional Resource Recovery Facility

**PROPOSED Permit No.:** 0990234-010-AV  
**Facility ID No.:** 0990234

### Permit History (for tracking purposes):

<u>E.U. ID No(s).</u>	<u>Project Description</u>	<u>Permit No.</u>	<u>Effective Date</u>	<u>Expiration Date</u>
All	Initial Title V Permit	0990234-001-AV	10/30/00	10/29/05
-001 & -004	Administrative Correction - Interior Wellhead Temperature Change		11/27/00	
-001 & -002	Administrative Correction	0990234-003-AV	04/20/01	-
-004	Class III Landfill monitoring frequency reduction	0990234-005-AC, PSD-FL-108E	09/11/02	-
All	Title V Permit Revision	0990234-004-AV <sup>1</sup>	11/24/02	-

<sup>1</sup> the most recently posted Title V permit on the web site.

### Subsequent Permits Issued

<u>E.U. ID No(s).</u>	<u>Project Description</u>	<u>Permit No.</u>	<u>Effective Date</u>	<u>Expiration Date</u>
<u>Permit section(s) affected<sup>1</sup></u>				
-008 Section B.	New Class I Landfill Flare 3500 scfm	0990234-008-AC	03/24/04	11/01/05
new Appendix U-1	Woody Waste Diesel Engine	0990234-009-AC	###/###/05	-
new	Biosolids Pelletization Project	0990234-006-AC, PSD-FL-108F	02/02/06	03/31/08
	Biosolids Pelletization	0990234-007-AC	-	-

	Project	{see Project -006}		
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**Permitting History from the most recently posted Title V permit on the web site**

E.U. ID No	Description	Permit No.	Issue Date	Permit No.	Issue Date	Permit No.	Issue Date
-001	Municipal Waste Boiler No. 1	PA 84-20	03/14/86	PSD-FL-108	12/16/86	PSD-FL-108A	01/14/92
-002	Municipal Waste Boiler No. 2	PA 84-20	03/14/86	PSD-FL-108	12/16/86	PSD-FL-108A	01/14/92
						PSD-FL-108C	08/14/97
-003	Class I MSW Landfill	PA 84-20	03/14/86	PSD-FL-108B	02/21/96		
-004	Class III MSW Landfill	PA 84-20	03/14/86	PSD-FL-108B	02/21/96		
				0990234-002-AC	05/11/99		
				PSD-FL-108D	05/11/99		



PROPOSED

**CAM Plan**

**Compliance Assurance Monitoring Plan**

# CAM Plan

## HF (Fluoride) Emissions

Spray Dryer Absorber for Control of Fluoride Emissions  
Facility: North County Resource Recovery Facility

### I. Background

#### A. Emissions Unit:

Description: Municipal Waste Combustion Unit No. 1  
Municipal Waste Combustion Unit No. 2

Identification: EU Nos. 001, 002

Facility: North County Resource Recovery Facility

#### B. Applicable Regulation, Emission Limit, and Monitoring Requirements:

Regulation No.: PSD-FL-108A, permit

Emission Limit: 0.0032 lb/MMBTU

Monitoring Requirement: Annual Stack Test (every five years) – EPA Method 13A or 13B for determination of fluoride concentrations and associated moisture content.

#### C. Control Technology:

Spray dryer absorber (SDA) manufactured by Joy Corporation

### II. Monitoring Approach

The key elements of the monitoring approach are presented below:

#### A. Indicator

The Federal Emission Guidelines limit for sulfur dioxide will be used as an indicator. (40 CFR 60 Subpart Cb)

#### B. Measurement Approach

SO<sub>2</sub> outlet concentration is currently measured at the stack (downstream of the SDA). Compliance with the SO<sub>2</sub> emission limitation serves as continuous indication that the acid gas scrubber is performing adequately. The facility will continuously monitor SO<sub>2</sub> emissions to verify proper operation of the acid gas scrubber, and insure compliance with the fluoride emission limitation.

#### C. Indicator Range

## CAM Plan

The emission limit for sulfur dioxide contained in the gases discharged to the atmosphere is 29 parts per million by volume or 75-percent reduction, corrected to 7 percent oxygen (dry basis), whichever is less stringent. This emission limit is based on a 24-hour daily geometric mean.

### D. QIP Threshold

The QIP Threshold is six excursions of the 24-hour daily geometric mean in a six month reporting period. This specific QIP threshold adequately implements Condition 10. of the CAM Requirements.

### E. Performance Criteria

Data Representativeness: SO<sub>2</sub> concentration measurements are taken in compliance with a Continuous Emission Monitoring System (CEMS) that is certified pursuant to 40 CFR 60, Appendix B

Verification of Operational Status: 40 CFR 60, Subpart Cb mandates CEMS monitoring availability

QA/QC Practices and Criteria: 40 CFR 60.13 and 40 CFR 60, Appendix B

Monitoring Frequency and Data Collection Procedure: Continuous

## III. Justification

### A. Background

Fluoride is a regulated pollutant according to PSD permits issued for the facility. Stack tests continue to demonstrate that emissions are well below permitted levels.

### B. Rationale for Selection of Performance Indicator

Fluoride contained in the waste is liberated in the combustor(s) and converted to hydrogen fluoride, and ultimately to hydrofluoric acid. Hydrofluoric acid is a very strong acid which will be rapidly neutralized in the spray dryer absorber (SDA) and be converted to CaF<sub>2</sub>. The SDA removes multiple acid gases, including HF, HCl, and SO<sub>2</sub>. Under normal scrubber operating conditions, the available lime slurry will neutralize HF before neutralizing SO<sub>2</sub>. Therefore, if adequate SO<sub>2</sub> emissions are being demonstrated by the facility CEMS, there is sufficient assurance that HF is being equally controlled.

### C. Rationale for Selection of Indicator Level

Stack testing results supplied to the Department demonstrate that SO<sub>2</sub> concentrations, based on a 24-hour daily geometric mean, are below the permitted emission limit. There has never been a notice of violation for SO<sub>2</sub> at the NCRRF. This indicates that the SDA is performing adequately

## CAM Plan

at removing acid gases. Therefore, the selected indicator range is sufficient to insure that fluoride emissions are being adequately controlled.

# CAM Plan

## HCl (Hydrogen Chloride) Emissions

Spray Dryer Absorber for Control of Hydrogen Chloride Emissions  
Facility: North County Resource Recovery Facility

### IV. Background

#### A. Emissions Unit:

Description: Municipal Waste Combustion Unit No. 1  
Municipal Waste Combustion Unit No. 2

Identification: EU Nos. 001, 002

Facility: North County Resource Recovery Facility

#### B. Applicable Regulation, Emission Limit, and Monitoring Requirements:

Regulation No.: PSD-FL-108A, permit and Federal  
Emissions Guidelines 40 CFR 60 Subpart  
Cb (more stringent limit/guideline applies)

Emission Limit: 90% removal or 25 ppmvd (PSD Limit)  
95% removal or 29 ppmvd (Federal EG)

Monitoring Requirement: Annual Stack Test – EPA Method 26 for  
determination of hydrochloric acid  
concentration

#### C. Control Technology:

Spray dryer absorber (SDA) manufactured by Joy Corporation

### V. Monitoring Approach

The key elements of the monitoring approach are presented below:

#### A. Indicator

The Federal Emission Guidelines limit for sulfur dioxide will be used as an indicator. (40 CFR 60 Subpart Cb)

#### B. Measurement Approach

SO<sub>2</sub> outlet concentration is currently measured at the stack (downstream of the SDA). Compliance with the SO<sub>2</sub> emission limitation serves as continuous indication that the acid gas scrubber is performing adequately. The facility will continuously monitor SO<sub>2</sub> emissions to verify proper operation of the acid gas scrubber, and insure compliance with the fluoride emission limitation

## CAM Plan

### C. Indicator Range

The emission limit for sulfur dioxide contained in the gases discharged to the atmosphere is 29 parts per million by volume or 75-percent reduction, corrected to 7 percent oxygen (dry basis), whichever is less stringent. This emission limit is based on a 24-hour daily geometric mean.

### D. QIP Threshold

The QIP Threshold is six excursions of the 24-hour daily geometric mean in a six month reporting period. This specific QIP threshold adequately implements Condition 10. of the CAM Requirements.

### E. Performance Criteria

Data Representativeness: SO<sub>2</sub> concentration measurements are taken in compliance with a Continuous Emission Monitoring System (CEMS) that is certified pursuant to 40 CFR 60, Appendix B

Verification of Operational Status: 40 CFR 60, Subpart Cb mandates CEMS monitoring availability

QA/QC Practices and Criteria: 40 CFR 60.13 and 40 CFR 60, Appendix B

Monitoring Frequency and Data Collection Procedure: Continuous

## VI. Justification

### A. Background

Hydrogen Chloride is a regulated pollutant according to PSD and Title V permits issued for the facility. Annual stack tests continue to demonstrate that emissions are below permitted levels.

### B. Rationale for Selection of Performance Indicator

The SDA removes multiple acid gases, including HF, HCl, and SO<sub>2</sub>. Under normal scrubber operating conditions, the available lime slurry will neutralize HCl before neutralizing SO<sub>2</sub>. Therefore, if adequate SO<sub>2</sub> removal is being demonstrated by the facility CEMS, there is sufficient assurance that HCl is being equally controlled.

### C. Rationale for Selection of Indicator Level

Stack testing results supplied to the Department demonstrate that SO<sub>2</sub> concentrations, based on a 24-hour daily geometric mean, are below the permitted emission limit. There has never been a notice of violation for SO<sub>2</sub> at the NCRRF. This indicates that the SDA is performing adequately at removing acid gases. Therefore, the selected indicator range is sufficient to insure that HCl emissions are being adequately controlled.

# CAM Plan

## PM (Particulate Matter) Emissions

Electrostatic Precipitator for Control of Particulate Matter Emissions  
Facility: North County Resource Recovery Facility

### VII. Background

#### A. Emissions Unit:

Description: Municipal Waste Combustion Unit No. 1  
Municipal Waste Combustion Unit No. 2

Identification: EU Nos. 001, 002

Facility: North County Resource Recovery Facility

#### B. Applicable Regulation, Emission Limit, and Monitoring Requirements:

Regulation No.: PSD-FL-108A, permit and Federal  
Emissions Guidelines 40 CFR 60 Subpart  
Cb (more stringent limit/guideline applies)

Emission Limit: 0.015 grains/dscf (PSD Limit)  
27 mg/dscm (Federal EG)

Monitoring Requirement: Annual Stack Test – EPA Method 5 for  
determination of particulate matter  
concentration and associated moisture  
content

#### C. Control Technology:

Babcock & Wilcox /BHS Krefeld 4-field Electrostatic precipitator

### VIII. Monitoring Approach

The key elements of the monitoring approach are presented below:

#### A. Indicator

Particulate matter concentration as determined by annual stack testing will be used as an indicator. (40 CFR 60 Subpart Cb)

#### B. Measurement Approach

Outlet testing is performed in the breaching between the electrostatic precipitators and the induced draft fan to the exhaust stack.

#### C. Indicator Range

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 Subpart Cb)

## CAM Plan

### D. QIP Threshold / Performance Criteria

Test Procedures are performed in strict accordance with the EPA Method 5 found in the Code of Federal Regulations (40 CFR 60) Appendix A.

### IX. Justification

Emission limiting standards written subsequent to the 1990 Clean Air Act Amendments (November 15, 1990) are required to contain sufficient periodic monitoring to ensure continuous compliance. Accordingly, pollutants regulated by such standards are exempt from requirements to develop a CAM plan. The particulate matter emission limiting standard of 40 CFR 60, Subpart Cb mandates a compliance demonstration approach of annual stack testing. Because the post-1990 particulate matter EG standard is more stringent than the particulate matter emission limiting standard established by PSD-FL-108A, the particulate matter monitoring requirements of 40 CFR 60, Subpart Cb are proposed as CAM for the PSD-FL-108A PM limitation.



# CAM Plan

## Pb (Lead) Emissions

Electrostatic Precipitator for Control of Lead Emissions  
Facility: North County Resource Recovery Facility

### X. Background

#### A. Emissions Unit:

Description: Municipal Waste Combustion Unit No. 1  
Municipal Waste Combustion Unit No. 2

Identification: EU Nos. 001, 002

Facility: North County Resource Recovery Facility

#### B. Applicable Regulation, Emission Limit, and Monitoring Requirements:

Regulation No.: PSD-FL-108A, permit and Federal  
Emissions Guidelines 40 CFR 60 Subpart  
Cb (more stringent limit/guideline applies)

Emission Limit: 4.0 x 10<sup>-4</sup> lb/MMBtu (PSD Limit)  
0.440 mg/dscm (Federal EG)

Monitoring Requirement: Annual Stack Test – EPA Method 29 for  
determination of multi-metals

#### C. Control Technology:

Babcock & Wilcox /BHS Krefeld 4-field Electrostatic precipitator

### XI. Monitoring Approach

The key elements of the monitoring approach are presented below:

#### A. Indicator

Lead concentration as determined by annual stack testing will be used as an indicator. (40 CFR 60 Subpart Cb)

#### B. Measurement Approach

Outlet testing is performed in the breaching between the electrostatic precipitators and the induced draft fan to the exhaust stack.

#### C. Indicator Range

The emission limit for lead contained in the gases discharged to the atmosphere is 0.44 milligrams per dry standard cubic meter, corrected to 7 percent oxygen. (40 CFR 60.33 b (a) (4))

#### D. QIP Threshold / Performance Criteria

## CAM Plan

Test Procedures are performed in strict accordance with the EPA Method 29 found in the Code of Federal Regulations (40 CFR 60) Appendix A.

### XII. Justification

Emission limiting standards written subsequent to the 1990 Clean Air Act Amendments (November 15, 1990) are required to contain sufficient periodic monitoring to ensure continuous compliance. Accordingly, pollutants regulated by such standards are exempt from requirements to develop a CAM plan. The Pb emission limiting standard of 40 CFR 60, Subpart Cb mandates a compliance demonstration approach of annual stack testing. Because the post-1990 Pb NSPS standard is more stringent than the Pb emission limiting standard established by PSD-FL-108A, the Pb monitoring requirements of 40 CFR 60, Subpart Cb are proposed as CAM for the PSD-FL-108A Pb limitation.

**Appendix U-1. List of Unregulated Emissions Units and/or Activities.**

Unregulated Emissions Units and/or Activities. An emissions unit which emits no “emissions-limited pollutant” and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit-specific emissions or work practice standards.

The below listed emissions units and/or activities are neither ‘regulated emissions units’ nor ‘insignificant emissions units’.

<b>E.U. ID Nos.</b>	<b>Brief Description</b>
005	RDF Storage
006	RDF Processing Lines
007	Oversized Bulk Waste Processing Line
017	Woody Waste Facility Diesel Engine
018	Cooling Tower

**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, are exempt from the permitting requirements of Chapters 62-210 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 Rule 62-210.300(3)(a), 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 Rule 62.210.300(3)(a), 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.

<b>Description</b>
Fly Ash Storage Silos
Lime Storage Silos
Ash Treatment Chemical Storage Silo
Ashloading Building
Composting Facility
Ferrous processing facility
Materials recycling facility
Woody waste recycling facility
Auto spray booth

The below activities are listed by location.

<u>Location</u>	<u>Activity</u>
Resource Recovery Facility	Emergency Diesel Generator Diesel Fire Water Pump
Utilities Facility	Emergency Diesel Generator
Household Hazardous Waste	Laboratory Hood
Trash Processing, Wood Waste	Grinder, Fugitive Dust From
Mulch Processing, Yard Waste	Grinder, Fugitive Dust From
Tire Cutting Operations	Diesel Generator For Segmentizer

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

Solid Waste Authority of Palm Beach County  
North County Regional Resource Recovery Facility

PROPOSED Permit No.: 0990234-010-AV  
Facility ID No.: 0990234

Emissions Unit	Brief Description
-001	Municipal Solid Waste Boiler Unit 1

Pollutant	Fuel(s)	Hours	Allowable Emissions			Equivalent		Regulatory Citations	Permit Condition
			Standard(s)	lb/hr	TPY	lb/hr	TPY		
Opacity	RDF	8760	10% opacity					40CFR60.33b(a)(1)(iii)	A.6.
SO <sub>2</sub>	RDF	8760	75% removal or 29 ppmvd 24-hour daily geometric mean			4582	200.68	40CFR60.33b(b)(3)(i)	A.6.
NOx	RDF	8760	250 ppmvd (24-hr block average)			284.77	1247.29	40CFR60.33b(d)	A.6.
PM	RDF	8760	27 mg/dscm			16.35	71.63	40CFR60.33b(a)(1)(i)	A.6.
VOC	RDF	8760	1.6e-2 lb/MMBtu			6.6	28.9	PSD-FL-108A	A.6.
CO	RDF	8760	200 ppmvd (24-hr block average)			137.8	603.56	40CFR60.34b(a)	A.6.
HCl	RDF	8760	95% removal or 29 ppmvd			28.08	122.98	40CFR60.33b(b)(3)(ii)	A.6.
Cd	RDF	8760	0.040 mg/dscm			<1	<1	40CFR60.33b(a)(2)(i)	A.6.
Dioxins/Furans	RDF	8760	60 ng/dscm			<1	<1	40CFR60.33b(c)(1)(i)	A.6.
F	RDF	8760	3.2e-3 lb/MMBtu			1.3	5.8	PSD-FL-108A	A.6.
Hg	RDF	8760	70 ug/dscm			4.16E-02	0.182	Rule 62-296.416(3)(b), FAC	A.6.
Pb	RDF	8760	0.440 mg/dscm			2.61E-01	1.14	40CFR60.33b(a)(4)	A.6.
Be	RDF	8760	7.3e-7 lb/MMBtu			<1	<1	PSD-FL-108A	A.6.

Emissions Unit	Brief Description
-002	Municipal Solid Waste Boiler Unit 2

Pollutant	Fuel(s)	Hours	Allowable Emissions			Equivalent		Regulatory Citations	Permit Condition
			Standard(s)	lb/hr	TPY	lb/hr	TPY		
Opacity	RDF	8760	10% opacity					40CFR60.33b(a)(1)(iii)	A.6.
SO <sub>2</sub>	RDF	8760	75% removal or 29 ppmvd 24-hour daily geometric mean			4582	200.68	40CFR60.33b(b)(3)(i)	A.6.
NOx	RDF	8760	250 ppmvd (24-hr block average)			284.77	1247.29	40CFR60.33b(d)	A.6.
PM	RDF	8760	27 mg/dscm			16.35	71.63	40CFR60.33b(a)(1)(i)	A.6.
VOC	RDF	8760	1.6e-2 lb/MMBtu			6.6	28.9	PSD-FL-108A	A.6.
CO	RDF	8760	200 ppmvd (24-hr block average)			137.8	603.56	40CFR60.34b(a)	A.6.
HCl	RDF	8760	95% removal or 29 ppmvd			28.08	122.98	40CFR60.33b(b)(3)(ii)	A.6.
Cd	RDF	8760	0.040 mg/dscm			<1	<1	40CFR60.33b(a)(2)(i)	A.6.
Dioxins/Furans	RDF	8760	60 ng/dscm			<1	<1	40CFR60.33b(c)(1)(i)	A.6.
F	RDF	8760	3.2e-3 lb/MMBtu			1.3	5.8	PSD-FL-108A	A.6.
Hg	RDF	8760	70 ug/dscm			4.16E-02	0.182	Rule 62-296.416(3)(b), FAC	A.6.
Pb	RDF	8760	0.440 mg/dscm			2.61E-01	1.14	40CFR60.33b(a)(4)	A.6.
Be	RDF	8760	7.3e-7 lb/MMBtu			<1	<1	PSD-FL-108A	A.6.

Emissions Unit	Brief Description
-003	Class I Landfill (1800 scfm Flare Removed)
-008	Class I Landfill and 3500 scfm Flare

Pollutant	Fuel(s)	Hours	Allowable Emissions			Equivalent		Regulatory Citations	Permit Condition
			Standard(s)	lb/hr	TPY	lb/hr	TPY		
Opacity		8760	no visible emissions					40CFR60.18(c)(1)	B.48.
NMOC		8760	reduce NMOC by 98 weight percent					40CFR60.752(b)	B.2.

Emissions Unit	Brief Description
-004	Class III Landfill and 1800 scfm Flare

Pollutant	Fuel(s)	Hours	Allowable Emissions			Equivalent		Regulatory Citations	Permit Condition
			Standard(s)	lb/hr	TPY	lb/hr	TPY		
Opacity		8760	no visible emissions					40CFR60.18(c)(1)	B.48.
NMOC		8760	reduce NMOC by 98 weight percent					40CFR60.752(b)	B.2.

- Notes:
1. The "Equivalent Emissions" listed are for informational purposes only.
  2. Above limits are corrected to 7% O<sub>2</sub> where appropriate.

**Table 1-2, Summary of Compliance Requirements**

Solid Waste Authority of Palm Beach County  
 North County Regional Resource Recovery Facility

PROPOSED Permit No.: 0990234-010-AV  
 Facility ID No.: 0990234

Emissions Unit	Brief Description						
-001	Municipal Solid Waste Boiler Unit 1						
Pollutant/ Parameter	Fuel(s)	Compliance Method	Testing Time or Frequency <sup>0</sup>	Frequency Base Date <sup>1</sup>	Minimum Compliance Test Time	CMS <sup>2</sup>	See Permit Condition(s)
Opacity (VE)	RDF	EPA Method 9	Annual	N/A	1 hour	Yes	T.3.
SO <sub>2</sub>	RDF	EPA Method 6, 6C or 8	Annual	N/A	1 hour	Yes	T.6.
NO <sub>x</sub>	RDF	EPA Method 7, 7A, 7B, 7C, 7D, or 7E	Annual	N/A	1 hour	Yes	T.9.
PM	RDF	EPA Method 5	Annual	N/A	6 hours	No	T.3.
VOC	RDF	EPA Method 25 or 25A	Annual	N/A	N/A	No	T.16.2.
CO	RDF	EPA Method 10	Annual	N/A	N/A	Yes	
HCl	RDF	EPA Method 26	Annual	N/A	N/A	No	T.7.
Cd	RDF	EPA Method 29	Annual	N/A	N/A	No	T.4.
Dioxins/Furans	RDF	EPA Method 23	Annual	N/A	N/A	No	T.8.
F	RDF	EPA Method 13A or 13B	Renewal	N/A	N/A	No	T.16.2.
Hg	RDF	EPA Method 29	Annual	N/A	N/A	No	T.4 & T.5
Pb	RDF	EPA Method 12	Annual	N/A	N/A	No	T.4.
Be	RDF	EPA Method 29	Renewal	N/A	N/A	No	T.16.2.
O <sub>2</sub> or CO <sub>2</sub>	RDF	N/A	N/A	N/A	N/A	Yes	C.1.

Notes:

- 0. See permit conditions T.16.1. and T.16.2.
- 1. Frequency base date established for planning purposes only. [see Rule 62-297.310, F.A.C.]
- 2. Continuous Monitoring System.

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

## Table 1-2, Summary of Compliance Requirements

Solid Waste Authority of Palm Beach County  
North County Regional Resource Recovery Facility

PROPOSED Permit No.: 0990234-010-AV  
Facility ID No.: 0990234

Emissions Unit	Brief Description						
-002	Municipal Solid Waste Boiler Unit 2						
Pollutant/ Parameter	Fuel(s)	Compliance Method	Testing Time or Frequency <sup>0</sup>	Frequency Base Date <sup>1</sup>	Minimum Compliance Test Time	CMS <sup>2</sup>	See Permit Condition(s)
Opacity (VE)	RDF	EPA Method 9	Annual	N/A	1 hour	Yes	T.3.
SO <sub>2</sub>	RDF	EPA Method 6, 6C or 8	Annual	N/A	1 hour	Yes	T.6.
NO <sub>x</sub>	RDF	EPA Method 7, 7A, 7B, 7C, 7D, or 7E	Annual	N/A	1 hour	Yes	T.9.
PM	RDF	EPA Method 5	Annual	N/A	6 hours	No	T.3.
VOC	RDF	EPA Method 25 or 25A	Annual	N/A	N/A	No	T.16.2.
CO	RDF	EPA Method 10	Annual	N/A	N/A	Yes	
HCl	RDF	EPA Method 26	Annual	N/A	N/A	No	T.7.
Cd	RDF	EPA Method 29	Annual	N/A	N/A	No	T.4.
Dioxins/Furans	RDF	EPA Method 23	Annual	N/A	N/A	No	T.8.
F	RDF	EPA Method 13A or 13B	Renewal	N/A	N/A	No	T.16.2.
Hg	RDF	EPA Method 29	Annual	N/A	N/A	No	T.4 & T.5
Pb	RDF	EPA Method 12	Annual	N/A	N/A	No	T.4.
Be	RDF	EPA Method 104	Renewal	N/A	N/A	No	T.16.2.
O <sub>2</sub> or CO <sub>2</sub>	RDF	N/A	N/A	N/A	N/A	Yes	C.1.

Notes:

0. See permit conditions T.16.1. and T.16.2.
1. Frequency base date established for planning purposes only. [see Rule 62-297.310, F.A.C.]
2. Continuous Monitoring System.

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

## Appendix H-1. Permit History/ID Number Changes.

Solid Waste Authority of Palm Beach County  
North County Regional Resource Recovery Facility

**PROPOSED Permit No.:** 0990234-010-AV  
**Facility ID No.:** 0990234

### Permit History (for tracking purposes):

<u>E.U. ID No(s).</u>	<u>Project Description</u>	<u>Permit No.</u>	<u>Effective Date</u>	<u>Expiration Date</u>
All	Initial Title V Permit	0990234-001-AV	10/30/00	10/29/05
-001 & -004	Administrative Correction - Interior Wellhead Temperature Change		11/27/00	
-001 & -002	Administrative Correction	0990234-003-AV	04/20/01	-
-004	Class III Landfill monitoring frequency reduction	0990234-005-AC, PSD-FL-108E	09/11/02	-
All	Title V Permit Revision	0990234-004-AV <sup>1</sup>	11/24/02	-

<sup>1</sup> the most recently posted Title V permit on the web site.

### Subsequent Permits Issued

<u>E.U. ID No(s).</u>	<u>Project Description</u>	<u>Permit No.</u>	<u>Effective Date</u>	<u>Expiration Date</u>
<u>Permit section(s) affected<sup>1</sup></u>				
-008 Section B.	New Class I Landfill Flare 3500 scfm	0990234-008-AC	03/24/04	11/01/05
new Appendix U-1	Woody Waste Diesel Engine	0990234-009-AC	##/##/05	-
new	Biosolids Pelletization Project	0990234-006-AC, PSD-FL-108F	02/02/06	03/31/08
	Biosolids Pelletization	0990234-007-AC	-	-



	Project	{see Project -006}		
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**Permitting History from the most recently posted Title V permit on the web site**

E.U. ID No	Description	Permit No.	Issue Date	Permit No.	Issue Date	Permit No.	Issue Date
-001	Municipal Waste Boiler No. 1	PA 84-20	03/14/86	PSD-FL-108	12/16/86	PSD-FL-108A	01/14/92
-002	Municipal Waste Boiler No. 2	PA 84-20	03/14/86	PSD-FL-108	12/16/86	PSD-FL-108A	01/14/92
						PSD-FL-108C	08/14/97
-003	Class I MSW Landfill	PA 84-20	03/14/86	PSD-FL-108B	02/21/96		
-004	Class III MSW Landfill	PA 84-20	03/14/86	PSD-FL-108B	02/21/96		
				0990234-002-AC	05/11/99		
				PSD-FL-108D	05/11/99		

Florida Department of  
Environmental Protection

Memorandum

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TO: Trina L. Vielhauer  
THRU: A. A. Linero, P.E. *aal*  
FROM: Scott M. Sheplak, P.E. *sms*  
DATE: May 3, 2006  
SUBJECT: Solid Waste Authority of Palm Beach County  
North County Resource Recovery Facility

PROPOSED Permit Package

Title V Air Operation Permit Renewal

**PROPOSED Permit No.:** 0990234-010-AV

**Air Construction Permit No.:** 0990234-009-AC

This application was received via EPSAP.

Attached for approval and signature is a permit to renew the Title V air operation permit and for an air construction permit, No. 0990234-009-AC. The permit renewal is for the operation of the Solid Waste Authority of Palm Beach County, North County Resource Recovery Facility. The after-the-fact air construction permit is for a woody waste facility diesel engine. The engine is an unregulated emissions unit.

The STATEMENT OF BASIS contains an overview of changes made in this permit to the most recently posted Title V permit on the web site. In summary, format changes were made, updates to reflect federal regulation changes, inclusion of approved alternatives, inclusion of permits issued subsequent to the initial Title V permit, inclusion of the new NESHAP for the landfills {MACT, requirements from 40 CFR 63, Subparts AAAA and A} and inclusion of CAM requirements for Boiler Nos. 1 & 2.

The applicant submitted comments on February 9<sup>th</sup>. The PROPOSED permit determination contains responses to the comments.

We recommend your approval and signature.

Attachments

AAL/SMS

**Friday, Barbara**

---

**To:** leokc@adm.com; mmorrison@swa.org; Graziani, Darrel  
**Cc:** Sheplak, Scott  
**Subject:** PROPOSED Title V Permit Renewal No.: 0990234-010-AV - Solid Waste Authority of Palm Beach Co.- North County RRF  
**Attachments:** 0990234.010.AV.P[1].zip

Attached for your records is a zip file for the subject PROPOSED Title V Permit Renewal.

If I may be of further assistance, please feel free to contact me.

Barbara J. Friday  
Planner II  
Bureau of Air Regulation  
(850)921-9524  
[Barbara.Friday@dep.state.fl.us](mailto:Barbara.Friday@dep.state.fl.us)

5/8/2006

**Friday, Barbara**

---

**From:** System Administrator  
**To:** Graziani, Darrel  
**Sent:** Monday, May 08, 2006 9:09 AM  
**Subject:** Delivered: PROPOSED Title V Permit Renewal No.: 0990234-010-AV - Solid Waste Authority of Palm Beach Co.- North County RRF

Your message

**To:** 'leokc@adm.com'; 'mmorrison@swa.org'; Graziani, Darrel  
**Cc:** Sheplak, Scott  
**Subject:** PROPOSED Title V Permit Renewal No.: 0990234-010-AV - Solid Waste Authority of Palm Beach Co.- North County RRF  
**Sent:** 5/8/2006 9:09 AM

was delivered to the following recipient(s):

Graziani, Darrel on 5/8/2006 9:09 AM

## Friday, Barbara

---

**From:** Exchange Administrator  
**Sent:** Monday, May 08, 2006 9:10 AM  
**To:** Friday, Barbara  
**Subject:** Delivery Status Notification (Relay)

**Attachments:** ATT147263.txt; PROPOSED Title V Permit Renewal No.: 0990234-010-AV - Solid Waste Authority of Palm Beach Co.- North County RRF



ATT147263.txt (279 B) PROPOSED Title V Permit Renewa...

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.

leokc@adm.com