



# Department of Environmental Protection

Jeb Bush  
Governor

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

David B. Struhs  
Secretary

January 27, 2004

Mr. Pick Talley  
Director of Utilities  
Pinellas County Utilities Administration  
14 South Fort Harrison Avenue, 5<sup>th</sup> Floor  
Clearwater, Florida 33756

Re: Title V Air Operation Permit Revision  
PROPOSED Permit Project No.: 1030117-005-AV  
Revision to Title V Air Operation Permit No.: 1030117-002-AV  
Pinellas County Resource Recovery Facility

Dear Mr. Talley:

One copy of the "PROPOSED Determination" for the Title V Air Operation Permit Revision for the Pinellas County Resource Recovery Facility located at 3095 114th Avenue North, St. Petersburg, Pinellas 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/permitting/airpermits/AirSearch\\_ltd.asp](http://www.dep.state.fl.us/air/permitting/airpermits/AirSearch_ltd.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Permit will not be issued until the permitting authority receives written notice that the objection is resolved or withdrawn.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 Edward J. Svec at 850/921-8985.

Sincerely,

A handwritten signature in black ink that reads 'Trina L. Vielhauer'.

Trina L. Vielhauer, Chief  
Bureau of Air Regulation

TV/es

Enclosures

e-mail copy furnished to:  
Gerald Kissel, P.E., FDEP SWD  
Peter Hessling, PCDEM AQD  
USEPA, Region 4

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## **PROPOSED Determination**

Title V Air Operation Permit Revision

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

An "INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION" to Pinellas County Utilities Administration for the Pinellas County Resource Recovery Facility located at 3095 114th Avenue North, St. Petersburg, Pinellas County was clerked on November 3, 2003. The "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION" was published in the St. Petersburg Times on November 21, 2003. The DRAFT Permit was available for public inspection at the Department's Southwest District office in Tampa and the permitting authority's office in Tallahassee. Proof of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION" was received on December 1, 2003.

### **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 one respondent during the 30 (thirty) day public comment period. The comment(s) will not be restated. Where duplicative comments exist, the original response is referenced.

A. Letter from Mr. Warren N. Smith dated December 22, 2003, and received by electronic mail on December 22, 2003.

**1. Response:** The Department agrees with the comment. Specific Conditions **B.77.** and **B.90.** are changed, as follows:

**From: B.77.** 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.

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- (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)]

**B.90.** Submit to the Department a written report of emissions in excess of emission limiting standard for each calendar quarter. The nature and cause of the excess emissions shall be explained. This report does not relieve the owner or operator of the legal liability for violations. All recorded data shall be maintained on file by the Source for a period of five years.

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

**To: B.77.** 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 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)]

**B.90.** Submit to the Department a written report as follows:

a. Submittal of reports of any required monitoring at least every 6 months. All instances of deviations from permit requirements must be clearly identified in such reports;

b. Reporting, in accordance with requirements of subsection 62-210.700(6) and Rule 62-4.130, F.A.C., of deviations from permit requirements, including those attributable to upset conditions as defined in the permit. Reports shall include the probable cause of such deviations, and any corrective actions or preventive measures taken.

[Rule 62-213.440(1)(b)3., F.A.C.]

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**2. Response:** The Department agrees with the comment on Specific Condition **B.37.1**. Specific Condition **B.37**. is changed, as follows:

**From: B.37.1. Startup, Shutdown and Malfunction.** The provisions for startup, shutdown, and malfunction are provided in paragraph (1).

(1) The standards under 40 CFR 60, Subpart Cb, as incorporated in Rule 62-204.800(8)(b), F.A.C., apply at all times except during periods of startup, shutdown, or malfunction. Duration of startup, shutdown, or malfunction periods are limited to 3 hours per occurrence.

(i) The startup period commences when the affected facility begins the continuous burning of municipal solid waste and does not include any warm-up period when the affected facility is combusting fossil fuel or other nonmunicipal solid waste fuel, and no municipal solid waste is being fed to the combustor.

(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.

[Rule 62-204.800(8)(b), F.A.C.; 40 CFR 60.38b; and 40 CFR 60.58b(a)]

**B.37.2. Startup, Shutdown and Malfunction.** Except as provided by 40 CFR 60.56b, the standards under 40 CFR 60, Subpart Cb, as incorporated in Rule 62-204.800(8)(b), F.A.C., apply at all times except during periods of startup, shutdown, or malfunction. Duration of startup or shutdown periods are limited to 3 hours per occurrence, except as provided in 40 CFR 60.58b(a)(1)iii.

(i) The startup period commences when the affected facility begins the continuous burning of municipal solid waste and does not include any warm-up period when the affected facility is combusting fossil fuel or other nonmunicipal solid waste fuel, and no municipal solid waste is being fed to the combustor.

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

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

**B.37.3.** For the purpose of compliance with the carbon monoxide emission limits in 40 CFR 60.53b(a), if a loss of boiler water level control (e.g., loss of combustion air fan, induced draft fan, combustion grate bar failure) is determined to be a malfunction, the duration of the malfunction period is limited to 15 hours per occurrence.

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

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**To: B.37.1. Startup, Shutdown and Malfunction.** Except as provided by 40 CFR 60.56b, the standards under 40 CFR 60, Subpart Cb, as incorporated in Rule 62-204.800(8)(b), F.A.C., apply at all times except during periods of startup, shutdown, or malfunction. Duration of startup or shutdown periods are limited to 3 hours per occurrence, except as provided in 40 CFR 60.58b(a)(1)iii.

(i) The startup period commences when the affected facility begins the continuous burning of municipal solid waste and does not include any warm-up period when the affected facility is combusting fossil fuel or other nonmunicipal solid waste fuel, and no municipal solid waste is being fed to the combustor.

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

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

**B.37.2.** For the purpose of compliance with the carbon monoxide emission limits in 40 CFR 60.53b(a), if a loss of boiler water level control (e.g., loss of combustion air fan, induced draft fan, combustion grate bar failure) is determined to be a malfunction, the duration of the malfunction period is limited to 15 hours per occurrence.

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

**3. Response:** The first half of the comment requests that the “24-hour period” timeframe in Rule 62-210.700, F.A.C., cited at Specific Condition **B.38.**, be replaced with the NSPS timeframe of “per occurrence”. Three other Title V permits were cited as having this language and therefore, the justification for the requested change. The “per occurrence” timeframe language was incorrectly inserted for the “24-hour period” timeframe in these permits so, in accordance with Rule 62-213.440(4), F.A.C., the misquoted rule language in these permits will be corrected upon the next opening of these permits. Since this permit contains the correct rule language, no changes are necessary.

The second part of the comment requests changes to Specific Condition **B.37.2.**, formally Specific Condition **B.37.3.**, to be consistent with a PSD permit recently issued to Lee County. The Department cannot change rule requirements for Pinellas County because another county was issued a permit with seemingly different requirements. The Department will review this language at the time the PSD permit is incorporated into Lee County’s Title V permit and if necessary any misquoted rule language will be corrected in accordance with Rule 62-213.440(4), F.A.C. However, the Department discovered that the rule language was not properly quoted in Specific Condition **B.37.2.**, so the following change is made:

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**From: B.37.2.** For the purpose of compliance with the carbon monoxide emission limits in 40 CFR 60.53b(a), if a loss of boiler water level control (e.g., loss of combustion air fan, induced draft fan, combustion grate bar failure) is determined to be a malfunction, the duration of the malfunction period is limited to 15 hours per occurrence.

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

**To: B.37.2.** For the purpose of compliance with the carbon monoxide emission limits in 40 CFR 60.53b(a), if a loss of boiler water level control (e.g., boiler water wall tube failure) or a loss of combustion air control (e.g., loss of combustion air fan, induced draft fan, combustion grate bar failure) is determined to be a malfunction, the duration of the malfunction period is limited to 15 hours per occurrence.

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

**4. Response:** Although the Department would agree with the basis of the comment, we feel the appropriate place to address this point is in the emissions units descriptions, rather than the specific condition that addresses the operating hours of the emissions units. The following changes are made to the descriptions of Emissions Unit ID Nos. 005 and 008:

**From:** Emissions unit -005 is the Metal Recovery System (MRS). The MRS separates up to 112 tons per hour of MWC residue into ferrous and nonferrous metal streams and an aggregate stream. The aggregate is later deposited in a landfill. A cyclone/wet scrubber is used to capture the lighter, non-metallic ash fugitives that separate from the ash stream in the MRS and reduce fugitive ash emissions. The MRS is located inside the Ash Storage and Processing Building. This building has 2 roof ventilation fans and an attached conveyor enclosure with 2 roof ventilation fans. Since emissions from the MRS are controlled by the cyclone/wet scrubber and the ash is wetted before conveying and processed and stored in a wet state, no emissions controls are on the Ash Storage and Processing Building. Particulate matter and visible emissions are controlled by a Newell Industries, Inc. cyclone/wet scrubber (Model No. 80104). The scrubber parameters are as follows: stack height = 54 feet; exit diameter = 0.7 feet; exit temperature = 77 °F, actual volumetric flow rate = 40,000 acfm. The initial startup date of the scrubber was November 1, 1989.

Emissions unit -008 is the Ash Conditioning Building (ACB). It contains two 20 ton capacity fly ash surge bins. Stabilizers such as lime and phosphoric acid are added to condition the fly ash. Particulate matter emissions are controlled by a Tri-Mer Corporation wet venturi scrubber (Model No. 50-H). The scrubber parameters are as follows: stack height = 65 feet; exit diameter = 1.3 feet; exit temperature = 77 °F, actual volumetric flow rate = approx. 5,000 acfm. The initial startup date of the scrubber was September 24, 1998.

**To:** Emissions unit -005 is the Metal Recovery System (MRS). The MRS separates up to 112 tons per hour of MWC residue into ferrous and nonferrous metal streams and an aggregate stream. The aggregate is later deposited in a landfill. A cyclone/wet scrubber is used to capture the lighter, non-metallic ash fugitives that separate from the ash stream in the MRS and reduce fugitive ash

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emissions. The scrubber is operated whenever the shredder/crusher is operating and whenever deemed necessary by the operator. The MRS is located inside the Ash Storage and Processing Building. This building has 2 roof ventilation fans and an attached conveyor enclosure with 2 roof ventilation fans. Since emissions from the MRS are controlled by the cyclone/wet scrubber and the ash is wetted before conveying and processed and stored in a wet state, no emissions controls are on the Ash Storage and Processing Building. Particulate matter and visible emissions are controlled by a Newell Industries, Inc. cyclone/wet scrubber (Model No. 80104). The scrubber parameters are as follows: stack height = 54 feet; exit diameter = 0.7 feet; exit temperature = 77 °F, actual volumetric flow rate = 40,000 acfm. The initial startup date of the scrubber was November 1, 1989.

Emissions unit -008 is the Ash Conditioning Building (ACB). It contains two 20 ton capacity fly ash surge bins. Stabilizers such as lime and phosphoric acid are added to condition the fly ash. Particulate matter emissions inside the building are controlled by a Tri-Mer Corporation wet venturi scrubber (Model No. 50-H). The scrubber is operated when deemed necessary by the operator. The scrubber parameters are as follows: stack height = 65 feet; exit diameter = 1.3 feet; exit temperature = 77 °F, actual volumetric flow rate = approx. 5,000 acfm. The initial startup date of the scrubber was September 24, 1998.

**5. Response:** The Department agrees that Emissions Unit ID Nos. 004, 006 and 007, Lime and carbon silos, are eligible for reclassification as Insignificant Emissions Units. However, the reclassification from regulated emissions units will require an additional permitting action and public notice. Since the County anticipates requesting additional changes in the near future which will require permitting actions, the Department suggests that this request be included in the future permit submittal.

**6. Response:** Rule 62-213.440(1), F.A.C. states that each Title V permit shall incorporate all applicable requirements. Since 40 CFR Chapter 1, Subchapter J (Superfund requirements) has not been adopted as an applicable requirement, The Department has no rule authority to include CERCLA requirements in Title V permits. Also, the Department has no rule authority to set emissions limits on excess emissions. Without rule authority, a condition must be identified as "not federally enforceable". The request was for federally enforceable emissions limits on certain pollutants. For these reasons, the Department is unable to grant this request.

**7. Response:** The Department agrees with the request and makes the following changes to **Appendix U-1: List of Unregulated Emissions Units and/or Activities** and **Appendix I-1: List of Insignificant Emissions Units and/or Activities**:

**Appendix U-1: List of Unregulated Emissions Units and/or Activities**

Delete:

<u>E.U. ID No.</u>	<u>Brief Description of Emissions Units and/or Activity</u>
-010	2 Diesel Fuel-Fired Internal Combustion Engines – Resource Recovery Facility Emergency Diesel Fire Pump and Lift Station Emergency Diesel Fire Pump which are not subject to the Acid Rain Program and have a total fuel consumption, in the aggregate, of 32,000 gallons per year or less of diesel fuel.
-011	3 Diesel Fuel-Fired Generators - at Chlorine Treatment Area, Scale Station, and Maintenance Service Building which are not subject to the Acid Rain Program and have a total fuel consumption, in the aggregate, of 32,000 gallons per year or less of diesel fuel.
-012	2 Gasoline-Fired Generators - at Mosquito Control Area and Maintenance Service Building which are not subject to the Acid Rain Program and have a total fuel consumption, in the aggregate, of 4,000 gallons per year or less of gasoline.

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

- Add:** 36. RRF Emergency Fire Pump  
37. Lift station Emergency Fire Pump  
38. Chlorine Treatment Emergency Generator. Emergency generator is defined at Rule 62-210.220(96), F.A.C.  
39. Scale Station Emergency Generator. Emergency generator is defined at Rule 62-210.220(96), F.A.C.  
40. Maintenance Service Building Emergency Generator. Emergency generator is defined at Rule 62-210.220(96), F.A.C.  
41. Mosquito Control Area Emergency Generator. Emergency generator is defined at Rule 62-210.220(96), F.A.C.



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**8. Response:** The Department agrees with the comment and will change **Appendix U-1: List of Unregulated Emissions Units and/or Activities**, as follows:

**Appendix U-1: List of Unregulated Emissions Units and/or Activities**

**Add:**

<u>E.U.</u> <u>ID</u> <u>No.</u>	<u>Brief Description of Emissions Units and/or Activity</u>
-XXX	Cooling Tower

**9. Response:** It is the Department's intent that any fuel or waste not identified as an approved fuel or waste in Specific Condition **B.11.** obtain approval prior to being combusted. This condition appears in every waste-to-energy Title V permit and will not be altered for Pinellas County.

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

-Letter received December 22, 2003, from Mr. Warren N. Smith.

**III. Conclusion.**

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

## STATEMENT OF BASIS

Pinellas County Utilities Administration  
Pinellas County Resource Recovery Facility  
Facility ID No.: 1030117  
Pinellas County

Title V Air Operation Permit Revision  
PROPOSED Permit Project No.: 1030117-005-AV  
Revision to Title V Air Operation Permit No.: 1030117-002-AV

The initial Title V Air Operation Permit, No. 1030117-002-AV, was effective on October 23, 2000. This Title V Air Operation Permit Revision is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210 and 62-213. The above named permittee is hereby authorized to operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

The subject of this permit revision is to delete obsolete specific conditions and language which address plant operation prior to the implementation of 40 CFR 60, Subparts Cb and Eb; incorporate changes to 40 CFR 60, Subparts Cb and Eb, allowing 15 hours of excess carbon monoxide emissions for specified malfunctions; incorporate the provisions of a capital replacement project authorized by permit 1030117-003-AC; incorporate Administrative Permit Correction 1030117-004-AV; and, make minor changes to recordkeeping requirements and insignificant activities.

The following changes are made:

### **Section III. Subsection A.**

*(RESERVED)*

### **Section III. Subsection B.**

#### **Description**

**From:** Units 1 and 2 began commercial operation May 4, 1983; Unit 3 began commercial operation August 1, 1986. Units 2 and 3 exhaust through a common stack with separate flues and Unit 1 currently exhausts through a separate stack. Units 1 and 2 share a common turbine and Unit 3 has a separate turbine. Following retrofit, all three units will exhaust to a common stack consisting of three separate flues. Stack height = 165 feet, exit diameter = 8.5 feet, exit temperature = 270 °F, actual volumetric flow rate = 243,117 acfm. Also, the existing generation equipment will be maintained and operated such that the existing three (3) steam generating units supply the existing two (2) turbine/generator (T/G) sets which have a combined electrical output of 75 MW.

Particulate matter emissions from Unit 1 are controlled by an electrostatic precipitator (ESP), while CO and NO<sub>x</sub> emissions are controlled by good combustion practices. Odor is controlled by drawing combustion air from the refuse tipping area. Following retrofit to comply with NSPS – 40 CFR 60, Subpart Cb, spray dry absorbers and baghouses will be used for control of acid gases and particulates, Selective Non-Catalytic Reduction (SNCR) for control of NO<sub>x</sub>, and activated carbon injection systems (ACI) for control of Hg and certain organic emissions. Units 2 and 3 have already been retrofit with the above air pollution controls and resumed commercial operation July 19, 1999 and September 24,

1998, respectively. Initial compliance was demonstrated December 4, 1998 for retrofitted Unit 3 and September 18, 1999 for retrofitted Unit 2. Unit 1 is still being retrofit.

**To:** Units 1 and 2 began commercial operation May 4, 1983; Unit 3 began commercial operation August 1, 1986. Units 1 and 2 share a common turbine and Unit 3 has a separate turbine. All three units will exhaust to a common stack consisting of three separate flues. Stack height = 165 feet, exit diameter = 8.5 feet, exit temperature = 270 °F, actual volumetric flow rate = 243,117 acfm. Also, the existing generation equipment will be maintained and operated such that the existing three (3) steam generating units supplying the existing two (2) turbine/generator (T/G) sets have a combined electrical output of 75 MW.

Odor is controlled by drawing combustion air from the refuse tipping area. Following retrofit to comply with NSPS – 40 CFR 60, Subpart Cb, spray dry absorbers and baghouses will be used for control of acid gases and particulates, selective non-catalytic reduction (SNCR) for control of NO<sub>x</sub>, and activated carbon injection systems (ACI) for control of Hg and certain organic emissions.

### Section III. Subsection B.

**From: B.9. Capacity.**

(a) The maximum individual MWC throughput shall not exceed 1100 tons MSW per day (3300 tons per day entire facility), 458 MMBtu per hour and 275,000 pounds steam per hour (on a 4-hour block arithmetic average). The MWCs shall not be loaded in excess of their maximum operating capacity, equivalent to 3300 tons MSW per day total, but no more than 3000 tons MSW per day on a rolling 12 month average (see specific condition **B.95.**).

(b) The procedures specified in paragraphs (1) and (2) shall be used for calculating municipal waste combustor unit capacity as defined under 40 CFR 60.51b.

(1) For municipal waste combustor units capable of combusting municipal solid waste continuously for a 24-hour period, municipal waste combustor unit capacity shall be calculated based on 24 hours of operation at the maximum charging rate. The maximum charging rate shall be determined as specified in paragraphs (i) and (ii) as applicable.

(i) For combustors that are designed based on heat capacity, the maximum charging rate shall be calculated based on the maximum design heat input capacity of the unit and a heating value of 12,800 kilojoules per kilogram for combustors firing refuse-derived fuel and a heating value of 10,500 kilojoules per kilogram for combustors firing municipal solid waste that is not refuse-derived fuel.

(ii) For combustors that are not designed based on heat capacity, the maximum charging rate shall be the maximum design charging rate.

(2) For batch feed municipal waste combustor units, municipal waste combustor unit capacity shall be calculated as the maximum design amount of municipal solid waste that can be charged per batch multiplied by the maximum number of batches that could be processed in a 24-hour period. The maximum number of batches that could be processed in a 24-hour period is calculated as 24 hours divided by the design number of hours required to process one batch of municipal solid waste, and may include fractional batches (e.g., if one batch requires 16 hours, then 24/16, or 1.5 batches, could be combusted in a 24-hour period). For batch combustors that are designed based on heat capacity, the design heating value of 12,800 kilojoules per kilogram for combustors firing refuse-derived fuel and a heating value of 10,500 kilojoules per kilogram for combustors firing municipal solid waste that is not refuse-derived fuel shall be used in calculating the municipal waste combustor unit capacity.

[40 CFR 60.31b and 40 CFR 60.58b(j); Rules 62-4.160(2), 62-210.200(PTE), and 62-213.440, F.A.C.; PA 78-11(B) & PA 83-18(B); applicant request in Draft Title V comments received November 19, 1999; and, revised Title V application received April 26, 2000]

{Permitting note: Nothing in the following three conditions shall be construed to imply that maximum capacity, as defined in specific condition **B.9.**, can be exceeded.}

**B.11. Methods of Operation - Fuels.**

(5) Waste Tires. 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 in accordance with specific condition **B.96.**, below.

(6) Other Solid Waste/Segregated Loads. Subject to the conditions and limitations contained in this permit, the following other solid waste materials may be used as fuel at the facility (i.e. the following are authorized fuels that are non-MSW material). The total quantity of the following non-MSW material received as segregated loads and burned at the facility shall not exceed 5%, by weight, of the facility's total fuel. Compliance with this limitation shall be determined by using a rolling 30 day average in accordance with specific condition **B.96.**, below.

**B.17. Operating Requirements.** The procedures specified in paragraphs (1) through (11) shall...

(3) 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.

**B.37. Startup, Shutdown and Malfunction.** The provisions for startup, shutdown, and malfunction are provided in paragraph (1).

(1) The standards under 40 CFR 60, Subpart Cb, as incorporated in Rule 62-204.800(8)(b), F.A.C., apply at all times except during periods of startup, shutdown, or malfunction. Duration of startup, shutdown, or malfunction periods are limited to 3 hours per occurrence.

(i) The startup period commences when the affected facility begins the continuous burning of municipal solid waste and does not include any warm-up period when the affected facility is combusting fossil fuel or other nonmunicipal solid waste fuel, and no municipal solid waste is being fed to the combustor.

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

[Rule 62-204.800(8)(b), F.A.C.; 40 CFR 60.38b; and 40 CFR 60.58b(a)]

**B.82.** The owner or operator of an affected facility subject to the standards under 40 CFR.

(2) The emission concentrations and parameters measured using continuous monitoring systems as specified under paragraphs (i) and (ii).

(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.

(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).

**B.91.** For Unit 3, CEM data recorded during periods of startup, shutdown, and malfunction shall be reported but excluded from compliance averaging periods for carbon monoxide and opacity.

[PSD-FL-098(A)]

**B.92.** Two copies of the results of the stack tests shall be submitted within 60 days of testing to the DEP Southwest District Office.

[PA 78-11(B) & PA 83-18(B)]

**B.96. Segregated Solid Waste Record Keeping.** The following records shall be made and kept to demonstrate compliance with the segregated non-MSW percentage limitations of specific condition **B.11.:**

(2) Each day the total weight of segregated tires received shall be computed, and the daily total shall be added to the sum of the daily totals from the previous 29 days. The resultant 30 day total weight of tires shall be divided by the total weight of all waste materials received in the same 30 day period, and the resultant number shall be multiplied by 100 to express the ratio in percentage terms. The percentage computed shall be compared to the 3% limitation.

(3) Each day the total weight of segregated non-MSW materials received that are subject to the 5% restriction shall be computed, and the daily total shall be added to the sum of the daily totals from the previous 29 days. The resultant 30 day total weight of segregated non-MSW materials shall be divided by the total weight of all waste materials received in the same 30 day period, and the resultant number shall be multiplied by 100 to express the ratio in percentage terms. The percentage computed shall be compared to the 5% limitation.

**To: B.9. Capacity.**

(a) The maximum individual MWC throughput shall not exceed 1100 tons MSW per day (3300 tons per day entire facility), 458 MMBtu per hour and 275,000 pounds steam per hour (on a 4-hour block arithmetic average). The MWCs shall not be loaded in excess of their maximum operating capacity, equivalent to 3300 tons MSW per day total, but no more than 3000 tons MSW per day on a rolling 12 month average (see specific condition **B.95.**).

(b) The procedures specified in paragraph (1) 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) as applicable.

(i) For combustors that are designed based on heat capacity, the maximum charging rate shall be calculated based on the maximum design heat input capacity of the unit and a heating value of 12,800 kilojoules per kilogram for combustors firing refuse-derived fuel and a heating value of 10,500 kilojoules per kilogram for combustors firing municipal solid waste that is not refuse-derived fuel. [40 CFR 60.31b and 40 CFR 60.58b(j); Rules 62-4.160(2), 62-210.200(PTE), and 62-213.440, F.A.C.; PA 78-11(B) & PA 83-18(B); applicant request in Draft Title V comments received November 19, 1999; and, revised Title V application received April 26, 2000]

{Permitting note: Nothing in specific conditions **B.10.**, **B.12.**, or **B.13.** shall be construed to imply that maximum capacity, as defined in specific condition **B.9.**, can be exceeded.}

**B.11. Methods of Operation - Fuels.**

(5) **Waste Tires.** 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 on a calendar month basis in accordance with specific condition **B.96.**, below.

(6) **Other Solid Waste/Segregated Loads.** Subject to the conditions and limitations contained in this permit, the following other solid waste materials may be used as fuel at the facility (i.e. the following are authorized fuels that are non-MSW material). The total quantity of the following non-MSW material received as segregated loads and burned at the facility shall not exceed 5%, by weight, of the facility's total fuel. Compliance with this limitation shall be determined on a calendar month basis in accordance with specific condition **B.96.**, below.

**B.17. Operating Requirements.** The procedures specified in paragraphs (1) through (11) shall....

(3) The 4-hour block arithmetic averages specified in paragraph (1) 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.

**B.37.1. Startup, Shutdown and Malfunction.** The provisions for startup, shutdown, and malfunction are provided in paragraph (1).

(1) The standards under 40 CFR 60, Subpart Cb, as incorporated in Rule 62-204.800(8)(b), F.A.C., apply at all times except during periods of startup, shutdown, or malfunction. Duration of startup, shutdown, or malfunction periods are limited to 3 hours per occurrence.

(i) The startup period commences when the affected facility begins the continuous burning of municipal solid waste and does not include any warm-up period when the affected facility is combusting fossil fuel or other nonmunicipal solid waste fuel, and no municipal solid waste is being fed to the combustor.

(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.

[Rule 62-204.800(8)(b), F.A.C.; 40 CFR 60.38b; and 40 CFR 60.58b(a)]

**B.37.2. Startup, Shutdown and Malfunction.** Except as provided by 40 CFR 60.56b, the standards under 40 CFR 60, Subpart Cb, as incorporated in Rule 62-204.800(8)(b), F.A.C., apply at all times except during periods of startup, shutdown, or malfunction. Duration of startup or shutdown periods are limited to 3 hours per occurrence, except as provided in 40 CFR 60.58b(a)(1)iii.

(i) The startup period commences when the affected facility begins the continuous burning of municipal solid waste and does not include any warm-up period when the affected facility is combusting fossil fuel or other nonmunicipal solid waste fuel, and no municipal solid waste is being fed to the combustor.

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

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

**B.37.3.** For the purpose of compliance with the carbon monoxide emission limits in 40 CFR 60.53b(a), if a loss of boiler water level control (e.g., loss of combustion air fan, induced draft fan, combustion grate bar failure) is determined to be a malfunction, the duration of the malfunction period is limited to 15 hours per occurrence.

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

**B.82.** The owner or operator of an affected facility subject to the standards under 40 CFR.

(2) The emission concentrations and parameters measured using continuous monitoring systems as specified under paragraphs (i) and (ii).

(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.

(C) All 4-hour block arithmetic average carbon monoxide emission concentrations, as applicable, as specified under 40 CFR 60.58b(i).

**B.91.** Reserved

**B.92.** A copy of the results of the stack tests shall be submitted within 60 days of testing to the DEP Southwest District Office.  
[1030117-004-AV]

**B.96. Segregated Solid Waste Record Keeping.** The following records shall be made and kept to demonstrate compliance with the segregated non-MSW percentage limitations of specific condition **B.11.:**

(2) Each day the total weight of segregated tires received shall be computed, and the daily total shall be added to the sum of the daily totals from the previous days in the current calendar month. At the end of each calendar month, the resultant monthly total weight of tires shall be divided by the total weight of all waste materials received in the same calendar month, and the resultant number shall be multiplied by 100 to express the ratio in percentage terms. The percentage computed shall be compared to the 3% limitation.

(3) Each day the total weight of segregated non-MSW materials received that are subject to the 5% restriction shall be computed, and the daily total shall be added to the sum of the daily totals from the previous days in the current calendar month. At the end of each calendar month, the resultant monthly total weight of segregated non-MSW materials subject to the 5% restriction shall be divided by the total weight of all waste materials received in the same calendar month, and the resultant number shall be multiplied by 100 to express the ratio in percentage terms. The percentage computed shall be compared to the 5% limitation.

### **Section III. Subsection C. Description**

**From:** Emissions unit -005 is the Metal Recovery System (MRS). The MRS separates up to 112 tons per hour of MWC residue into ferrous and nonferrous metal streams and an aggregate stream. The aggregate is later deposited in a landfill. A cyclone/wet scrubber is used to capture the lighter, non-metallic ash fugitives that separate from the ash stream in the MRS and reduce fugitive ash emissions. The MRS is located inside the Ash Storage and Processing Building. This building has 4 roof ventilation fans and an attached conveyor enclosure with 2 roof ventilation fans.

**To:** Emissions unit -005 is the Metal Recovery System (MRS). The MRS separates up to 112 tons per hour of MWC residue into ferrous and nonferrous metal streams and an aggregate stream. The aggregate is later deposited in a landfill. A cyclone/wet scrubber is used to capture the lighter, non-metallic ash fugitives that separate from the ash stream in the MRS and reduce fugitive ash emissions. The MRS is located inside the Ash Storage and Processing Building. This building has 2 roof ventilation fans and an attached conveyor enclosure with 2 roof ventilation fans.

### **Appendix U-1: List of Unregulated Emissions Units and/or Activities.**

**From:**

**E.U. ID**

**No.**

**Brief Description of Emissions Units and/or Activity**

- |      |  |
|------|--|
| -010 | 3 Diesel Fuel-Fired Internal Combustion Engines – drive Yard Waste Trommel Mulching Machine, Resource Recovery Facility Emergency Diesel Fire Pump, and Lift Station Emergency Diesel Fire Pump. |
| -011 | 3 Diesel Fuel-Fired Generators - at Chlorine Treatment Area, Scale Station, and Maintenance Service Building.  |
| -012 | 2 Gasoline-Fired Generators - at Mosquito Control Area and Maintenance Service Building.   |

To:

E.U. ID

<u>No.</u>	<u>Brief Description of Emissions Units and/or Activity</u>
-010	3 Diesel Fuel-Fired Internal Combustion Engines – drive Yard Waste Trommel Mulching Machine, Resource Recovery Facility Emergency Diesel Fire Pump, and Lift Station Emergency Diesel Fire Pump which are not subject to the Acid Rain Program and have a total fuel consumption, in the aggregate, of 32,000 gallons per year or less of diesel fuel.
-011	3 Diesel Fuel-Fired Generators - at Chlorine Treatment Area, Scale Station, and Maintenance Service Building which are not subject to the Acid Rain Program and have a total fuel consumption, in the aggregate, of 32,000 gallons per year or less of diesel fuel.
-012	2 Gasoline-Fired Generators - at Mosquito Control Area and Maintenance Service Building which are not subject to the Acid Rain Program and have a total fuel consumption, in the aggregate, of 4,000 gallons per year or less of gasoline.

**The following conditions were relocated:**

**From: A.1. Ambient Air Monitors.** The permittee shall operate two continuous SO<sub>2</sub> monitors and one continuous wind direction and velocity monitor in the immediate vicinity of the site. The monitors shall be specifically located as designated by the DEP and shall conform to 40 CFR 53 (see specific condition A.2.). Monitoring shall have begun upon commencement of operation.

[PA 78-11(B) & 83-18(B)]

**A.2. Designation of reference and equivalent methods.**

(a) A candidate method determined by the Administrator to satisfy the applicable requirements of this part shall be designated as a reference method or equivalent method (as applicable), and a notice of the designation shall be submitted for publication in the Federal Register not later than 15 days after the determination is made.

(b) A notice indicating that the method has been determined to be a reference method or an equivalent method shall be sent to the applicant. This notice shall constitute proof of the determination until a notice of designation is published in accordance with paragraph (a) of this section.

(c) The Administrator will maintain a current list of methods designated as reference or equivalent methods in accordance with this part and will send a copy of the list to any person or group upon request. A copy of the list will be available for inspection or copying at EPA Regional Offices.

[40 CFR 53.8]

**To: B.104. Ambient Air Monitors.** The permittee shall operate two continuous SO<sub>2</sub> monitors and one continuous wind direction and velocity monitor in the immediate vicinity of the site. The monitors shall be specifically located as designated by the DEP and shall conform to 40 CFR 53 (see specific condition B.105.). Monitoring shall have begun upon commencement of operation.

[PA 78-11(B) & 83-18(B)]

**B.105. Designation of reference and equivalent methods.**

(a) A candidate method determined by the Administrator to satisfy the applicable requirements of this part shall be designated as a reference method or equivalent method (as applicable), and a notice of the designation shall be submitted for publication in the Federal Register not later than 15 days after the determination is made.

(b) A notice indicating that the method has been determined to be a reference method or an equivalent method shall be sent to the applicant. This notice shall constitute proof of the determination until a notice of designation is published in accordance with paragraph (a) of this section.



(c) The Administrator will maintain a current list of methods designated as reference or equivalent methods in accordance with this part and will send a copy of the list to any person or group upon request. A copy of the list will be available for inspection or copying at EPA Regional Offices.  
[40 CFR 53.8]

**The following were added:**

**B.106. Capital Replacement Project.** The owner or operator is authorized to construct its Capital Replacement Project as described in the letter application from Pinellas County Utilities dated August 30, 2000, and subsequent related information. The owner or operator is authorized to perform the construction activities generally described as: boiler refurbishment consisting primarily of replacement of the components from the furnace gas exit to the economizer gas exit for boiler unit trains 1, 2 and 3; rebuilding the refuse cranes; refurbishment of the cooling tower; upgrading the instrumentation control systems; refurbishment or replacement of feed water pumps; tipping floor improvements; and upgrading the existing water regeneration equipment through the replacement of two nominal 100 gallon per minute demineralizer trains.

The owner or operator shall submit to the Department on an annual basis, for a period of five years representative of normal post-change operations of MWC units 1, 2 and 3 ("the units"), within the period not longer than 10 years following the completion of construction of the last unit, information demonstrating that the Capital Replacement Project did not result in a PSD-significant emissions increase. A PSD-significant increase shall be defined as noted in Table 212.400-2 of Chapter 62-212, F.A.C. The information required above shall be based on a comparison of "baseline" past actual annual emissions with actual annual emissions for the given year after completion of the Capital Replacement Project, shall be reported on a calendar year basis, and shall start the first full calendar year following the completion of the Capital Replacement Project's boiler refurbishment of the last unit. The owner or operator shall utilize the "representative actual annual emissions" methodology, defined at Rule 62-210.200(12)(d), F.A.C., and the provisions of 40 CFR 52.21(b)(33), adopted by state rule, in its demonstration. If the Capital Replacement Project results in a PSD-significant emissions increase, or if the owner or operator fails to submit the required information, the units shall be subject to the requirements of PSD at that future time, which shall include a BACT determination for each PSD-significant pollutant.

The owner or operator shall estimate actual annual emissions using the general methodology shown in its letter application and subsequent related information, as discussed generally as follows. The owner or operator shall use the continuous emission monitoring system (CEMS) data to estimate actual annual emissions of the pollutants monitored by the CEMS: NO<sub>x</sub>, SO<sub>2</sub>, and CO. The owner or operator shall use data from all post-retrofit compliance test(s) to estimate past actual annual emissions of other pollutants not monitored by the CEMS: PM/PM<sub>10</sub>, lead, mercury, dioxins, hydrogen chloride. The owner or operator shall use the CEMS data to determine unit availability, which shall be used in determining actual annual emissions. The owner or operator shall use the CEMS data starting from June 1, 2000 until the start of construction of the Capital Replacement Project's boiler refurbishment for its determination of baseline past actual annual emissions. No more than two years of data shall be used to determine the baseline past actual annual emissions. As an alternative to the above, the owner or operator may use other methods approved by the Department.

[1030117-003-AC]

**Appendix I-1: List of Insignificant Emissions Units and/or Activities.**

26. Fire and Safety Equipment
27. Paint Usage Less Than 6.0 Gallons Per Day
28. Vehicular Traffic and Mobile Equipment On-site
29. Storage and Use of Drums of Cooling Tower and Boiler Chemicals
30. Laboratory Vents/Hoods
31. Refuse Pit
32. Flanges and Valves
33. Makeup Water Treatment Plant
34. Solvent Degreasers
35. Plant Road Fugitive Emissions

In addition to these changes, the applicant requested other changes that could not be made because they impose the requirements of either state or federal rules; they impose the requirements of current federally enforceable permits; or, they are inconsistent with the requirements imposed on other waste-to-energy facilities. However, because applicant's request to combust waste grease from restaurants meets the federal definition of municipal waste, the Department feels that the ability to combust this waste is already approved and additional action is not required.

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

Based on the initial Title V permit application received June 14, 1996, this facility is a major source of hazardous air pollutants (HAPs).

Pinellas County Utilities Administration  
Pinellas County Resource Recovery Facility  
**Facility ID No.:** 1030117  
Pinellas County

## **Title V Air Operation Permit Revision**

**PROPOSED Permit No.:** 1030117-005-AV  
**Revision to Title V Air Operation Permit No.:** 1030117-002-AV

Permitting Authority:

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

Mail Station #5505  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400  
Telephone: 850/488-0114  
Fax: 850/922-6979

Compliance Authority:

State of Florida  
Department of Environmental Protection  
Southwest District Office  
8497 Laurel Fair Circle  
Tampa, Florida 33619  
Telephone: 813/744-6100  
Fax: 813/744-6458

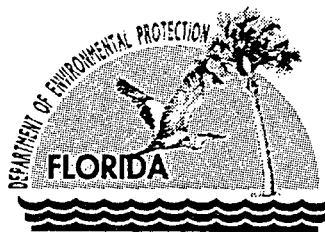
Title V Air Operation Permit Revision

**PROPOSED Permit No.:** 1030117-005-AV

**Revision to Title V Air Operation Permit No.:** 1030117-002-AV

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Jeb Bush  
Governor

# Department of Environmental Protection

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

David B. Struhs  
Secretary

**Permittee:**

Pinellas County Utilities Administration  
14 South Fort Harrison Avenue, 5<sup>th</sup> Floor  
Clearwater, Florida 33756

**PROPOSED Permit No.:** 1030117-005-AV

**Facility ID No.:** 1030117

**SIC No(s):** 49, 4953

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

This permit revision is being issued for the purpose of deleting obsolete specific conditions which address plant operation prior to the implementation of 40 CFR 60, Subparts Cb and Eb; incorporating changes to 40 CFR 60, Subparts Cb and Eb, allowing 15 hours of excess carbon monoxide emissions for specified malfunctions; incorporating the provisions of a capital replacement project authorized by permit 1030117-003-AC; incorporating Administrative Permit Correction 1030117-004-AV; and, making minor changes to recordkeeping requirements and insignificant activities at the existing Pinellas County Resource Recovery Facility located at 3001 110th Avenue North, St. Petersburg, Pinellas County; UTM Coordinates: Zone 17, Zone 17, 335.20 km East and 3084.10 km North; Latitude: 27° 52' 23" North and Longitude: 82° 40' 25" West.

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

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

Appendix U-1, List of Unregulated Emissions Units and/or Activities

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

APPENDIX TV-4, TITLE V CONDITIONS version dated 02/12/02

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

TABLE 297.310-1, CALIBRATION SCHEDULE version dated 10/07/96

FIGURE 1 - SUMMARY REPORT-GASEOUS AND OPACITY EXCESS EMISSION AND  
MONITORING SYSTEM PERFORMANCE REPORT version dated 07/96

**Initial Effective Date:** October 23, 2000

**Revision Effective Date:** (ARMS Day 55)

**Renewal Application Due Date:** April 25, 2005

**Expiration Date:** October 22, 2005

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Michael G. Cooke, Director  
Division of Air Resource  
Management

MGC/sms/es

*"More Protection, Less Process"*

*Printed on recycled paper.*

## Section I. Facility Information.

### Subsection A. Facility Description.

This facility consists of three municipal solid waste combustors (Unit Nos. 1, 2, and 3) with auxiliary burners, lime storage and processing facilities, an activated carbon storage facility, ash storage and processing facilities, a metals recovery system, a cooling tower (not operated with chromium based water treatment chemicals), ancillary support equipment, and a contiguous municipal solid waste landfill. The gross nominal electric generating capacity of the facility is 75 megawatts (MW), which is sold to Florida Power Corporation (FPC). Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

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

Based on the initial Title V permit application received June 14, 1996, this facility is a major source of hazardous air pollutants (HAPs).

### Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).

<u>E.U. ID No.</u>	<u>Brief Description</u>
-001	1100 TPD (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 1
-002	1100 TPD (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 2
-003	1100 TPD (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 3
-004	Hydrated Lime Storage Silo
-005	Metals Recovery System
-006	Activated Carbon Storage Silo
-007	Lime Storage Silo
-008	Ash Conditioning Building
-009	Municipal Solid Waste Landfill

#### Unregulated Emissions Units and/or Activities

<u>E.U. ID No.</u>	<u>Brief Description</u>
-010	Diesel Fuel-Fired Internal Combustion Engines – Yard Waste Trommel Mulching Machine
-xxx	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 2-1, Summary of Compliance Requirements

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

Appendix H-1: Permit History

Appendix BW, Biological Waste Definitions

Statement of Basis

These documents are on file with the permitting authority:

Initial Title V Air Operation Permit issued October 23, 2000

Application for a Title V Air Operation Permit Revision received April 30, 2003

Additional Information Request dated June 11, 2003

Additional Information Response received August 20, 2003

## Section II. Facility-wide Conditions.

### The following conditions apply facility-wide:

1. APPENDIX TV-4, TITLE V CONDITIONS, is a part of this permit.  
{Permitting note: APPENDIX TV-4, 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.; and, Pinellas County Ordinance 97-05, Section 33, Sec. 58-178]
  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 3346  
Merrifield, VA 22116-3346  
Telephone: 703/816-4434
- 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 (VOC) Emissions or Organic Solvents (OS) Emissions.** The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic



compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.

**“Nothing was deemed necessary and ordered at this time.”**

[Rule 62-296.320(1)(a), F.A.C.; and, initial Title V permit application received June 14, 1996]

**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-4, TITLE V CONDITIONS):

[Rule 62-296.320(4)(c)2., F.A.C.; and, proposed by the applicant in the initial Title V permit application received June 14, 1996]

**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.

[Rules 62-213.440(3) and 62-213.900, F.A.C.]

{Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2. & 3., F.A.C. (see Condition 51. of APPENDIX TV-4, TITLE V CONDITIONS)}

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

Department of Environmental Protection  
Southwest District Office  
3804 Coconut Palm Drive  
Tampa, Florida 33619-8218  
Telephone: 813/744-6100; Fax: 813/744-6458

**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 Conditions.**

**Subsection A. This section addresses the following emissions unit(s).**

*(RESERVED)*

### Section III. Emissions Unit(s) and Conditions.

#### Subsection B. This section addresses the following emissions unit(s).

<u>E.U. ID No.</u>	<u>Brief Description</u>
-001	1100 TPD (max.) Municipal Waste Combustor & Auxiliary Burners - Unit 1
-002	1100 TPD (max.) Municipal Waste Combustor & Auxiliary Burners - Unit 2
-003	1100 TPD (max.) Municipal Waste Combustor & Auxiliary Burners - Unit 3

Emissions unit numbers -001, -002, and -003 are Riley Stoker manufactured municipal solid waste (MSW) combustors designated as "Unit 1", "Unit 2", and "Unit 3", respectively. Each unit consists of a mass burn water wall boiler with two auxiliary natural gas fired burners. The burners are used to fire the MSW combustors during start-up, shutdown, and at other times when necessary and consistent with good combustion practices.

Each of the three municipal waste combustors (MWCs) shall have a nominal design rate capacity of 1000 tons MSW per day, 417 MMBtu per hour, and 250,000 pounds steam per hour with MSW having a heating value of 5000 Btu per pound. The "operating window" of 110 percent (%) over the nominal design rate of 417 MMBtu heat input corresponds to 458 MMBtu/hr heat input and 275,000 lbs steam/hour per each boiler. Short term capacity is limited by limiting steam production (275,000 lb/hr), which effectively limits heat input. The net design steam enthalpy for useful work is 1,158 Btu/lb.

Units 1 and 2 began commercial operation May 4, 1983; Unit 3 began commercial operation August 1, 1986. Units 1 and 2 share a common turbine and Unit 3 has a separate turbine. All three units will exhaust to a common stack consisting of three separate flues. Stack height = 165 feet, exit diameter = 8.5 feet, exit temperature = 270 °F, actual volumetric flow rate = 243,117 acfm. Also, the existing generation equipment will be maintained and operated such that the existing three (3) steam generating units supplying the existing two (2) turbine/generator (T/G) sets have a combined electrical output of 75 MW.

Odor is controlled by drawing combustion air from the refuse tipping area. Following retrofit to comply with NSPS - 40 CFR 60, Subpart Cb, spray dry absorbers and baghouses will be used for control of acid gases and particulates, selective non-catalytic reduction (SNCR) for control of NO<sub>x</sub>, and activated carbon injection systems (ACI) for control of Hg and certain organic emissions.

The new limits imposed in Subpart Cb are more stringent than PA 78-11 and PA 83-18 limits for SO<sub>2</sub>, PM, and VE emissions for Units 1 and 2 and for SO<sub>2</sub>, PM, VE, CO, NO<sub>x</sub>, Pb, and Hg emissions for Unit 3. Pollutants regulated by Subpart Cb that were not regulated in PA 78-11 and PA 83-18 are given below for each unit: CO, NO<sub>x</sub>, Pb, Cd, HCl, Hg, and dioxins/furans for Units 1 and 2; Cd, HCl, and dioxins/furans for Unit 3.

{Permitting notes. These emissions units are regulated under NSPS - 40 CFR 60, Subpart Cb, Emissions Guidelines and Compliance Times for Large Municipal Waste Combustors That Are Constructed on or Before September 20, 1994, adopted and incorporated by reference, subject to provisions, in Rule 62-204.800(8)(b), F.A.C.; NSPS - 40 CFR 60, Subpart E, Standards of Performance for Incinerators, adopted and incorporated by reference in Rule 62-204.800(7),

F.A.C.; Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD) (PSD-FL-011(A) for Units 1 & 2; PSD FL-098(A) for Unit 3); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT); Rule 62-296.401(2), F.A.C., Incinerators; Rule 62-296.416, F.A.C., Waste-to-Energy Facilities; and, PA 78-11 & 83-18 (A, B, & C). Also, please note that conditions in 40 CFR 60, Subpart Cb, are contained in 40 CFR 60, Subpart Eb.}

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

**General**

**B.1.** 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.]

**B.2. 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.]

**B.3. Definitions – Subpart Cb.** For purposes of Rule 62-204.800(8)(b), F.A.C., the definitions in 40 CFR 60.51b shall apply except for the term “municipal waste combustor plant” which shall have the same meaning as defined in 40 CFR 60.31b.

[Rule 62-204.800(8)(b)2., F.A.C.]

**B.4. Circumvention.** No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

[40 CFR 60.12]

**B.5.** Each MWC shall have a metal name plate affixed in a conspicuous place on the shell showing manufacturer, model number, type waste, rated capacity, efficiency (Unit 3 only), and certification number.

[PSD-FL-098; and, PA 78-11(B) & PA 83-18(B)]

**B.6.** The permittee shall have installed, shall continuously operate, and shall maintain a particulate emission control device for the control of particulates.  
[PSD-FL-098]

**B.7.** After the modifications to the Resource Recovery Facility are complete, the height of the boiler stack shall not be less than 165 feet above the ground level at the base of the stack.  
[PA 78-11(B) & PA 83-18(B)]

**B.8.** Units 1, 2, and 3 are subject to the requirements of 40 CFR 60, Subpart E; except that where requirements within this permit are more restrictive, the requirements of this permit shall apply.  
[PSD-FL-011 and PSD-FL-098]

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

#### **B.9. Capacity.**

(a) The maximum individual MWC throughput shall not exceed 1100 tons MSW per day (3300 tons per day entire facility), 458 MMBtu per hour and 275,000 pounds steam per hour (on a 4-hour block arithmetic average). The MWCs shall not be loaded in excess of their maximum operating capacity, equivalent to 3300 tons MSW per day total, but no more than 3000 tons MSW per day on a rolling 12 month average (see specific condition **B.95.**).

(b) The procedures specified in paragraph (1) 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) as applicable.

(i) For combustors that are designed based on heat capacity, the maximum charging rate shall be calculated based on the maximum design heat input capacity of the unit and a heating value of 12,800 kilojoules per kilogram for combustors firing refuse-derived fuel and a heating value of 10,500 kilojoules per kilogram for combustors firing municipal solid waste that is not refuse-derived fuel.

[40 CFR 60.31b and 40 CFR 60.58b(j); Rules 62-4.160(2), 62-210.200(PTE), and 62-213.440, F.A.C.; PA 78-11(B) & PA 83-18(B); applicant request in Draft Title V comments received November 19, 1999; and, revised Title V application received April 26, 2000]

{Permitting note: Nothing in specific conditions **B.10.**, **B.12.**, or **B.13.** shall be construed to imply that maximum capacity, as defined in specific condition **B.9.**, can be exceeded.}

**B.10. Emissions Unit Operating Rate Limitation After Testing.** See specific condition **B.58.**  
[Rule 62-297.310(2), F.A.C.]

#### **B.11. Methods of Operation - Fuels.**

(1) **Municipal Solid Waste.** The primary fuel for the Resource Recovery Facility is municipal solid waste (MSW), including the items and materials that fit within the definition of MSW contained in either 40 CFR 60.51b or Section 403.706(5), F.S.

(2) Unauthorized Fuel. 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

(a) shall not burn:

- (i) those materials that are prohibited by state or federal law;
- (ii) those materials that are prohibited by this permit;
- (iii) lead acid batteries;
- (iv) hazardous waste;
- (v) nuclear waste;
- (vi) radioactive waste;
- (vii) sewage sludge;
- (viii) explosives;
- (ix) beryllium-containing waste, as defined in 40 CFR 61, Subpart C.

(b) and shall not knowingly burn:

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

(3) The fuel may be received either as a mixture or as a single-item stream (segregated load) of discarded materials. If the facility intends to use an authorized fuel that is segregated non-MSW material, the fuel shall be either:

- (a) well mixed with MSW in the refuse pit; or
- (b) alternately charged with MSW in the hopper.

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

(4) Other Solid Waste. Subject to the conditions and limitations contained in this permit, the following other solid waste may be used as fuel at the facility:

- (a) Confidential, proprietary or special documents (including but not limited to business records, lottery tickets, event tickets, coupons 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.

(5) Waste Tires. 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 on a calendar month basis in accordance with specific condition **B.96.**, below.

(6) Other Solid Waste/Segregated Loads. Subject to the conditions and limitations contained in this permit, the following other solid waste materials may be used as fuel at the facility (i.e. the following are authorized fuels that are non-MSW material). The total quantity of the following non-MSW material received as segregated loads and burned at the facility shall not exceed 5%, by weight, of the facility's total fuel. Compliance with this limitation shall be determined on a calendar month basis in accordance with specific condition **B.96.**, below.

- (a) Construction and demolition debris.
- (b) Oil spill debris from aquatic, coastal, estuarine or river environments. Such items or materials include but are not limited to rags, wipes, and absorbents.
- (c) Items suitable for human, plant or domesticated animal use, consumption or application where the item's shelf-life has expired or the generator wishes to remove the items from the market. Such items or materials include but are not limited to off-specification or expired consumer products, pharmaceuticals, medications, health and personal care products, cosmetics, foodstuffs, nutritional supplements, returned goods, and controlled substances.
- (d) Consumer-packaged products intended for human or domesticated animal use or application but not consumption. Such items or materials include but are not limited to carpet cleaners, household or bathroom cleaners, polishes, waxes and detergents.
- (e) Waste materials that:
  - (i) are generated in the manufacture of items in categories (c) or (d), above and are functionally or commercially useless (expired, rejected or spent); or
  - (ii) are not yet formed or packaged for commercial distribution. Such items or materials must be substantially similar to other items or materials routinely found in MSW.
- (f) Waste materials that contain oil from:
  - (i) the routine cleanup of industrial or commercial establishments and machinery; or
  - (ii) spills of virgin or used petroleum products. Such items or materials include but are not limited to rags, wipes, and absorbents.
- (g) Used oil and used oil filters. Used oil containing a PCB concentration equal or greater than 50 ppm shall not be burned, pursuant to the limitations of 40 CFR 761.20(e).
- (h) Waste materials generated by manufacturing, industrial or agricultural activities, provided that these items or materials are substantially similar to items or materials that are found routinely in MSW, subject to prior approval of the Department.

(7) Natural Gas. Auxiliary burners for each MSW unit shall be fired only with natural gas. Natural gas may be used as a supplemental fuel during startups, shutdowns, and at other times when necessary and consistent with good combustion practices.

(8) Other fuels or wastes, not listed above, shall not be burned in the MSW combustors without prior specific written approval of the Secretary of the Department of Environmental Protection. [Rules 62-4.160(2), 62-210.200, and 62-213.440(1), F.A.C.; PSD-FL-098; and, PA 78-11(B) & PA 83-18(B)]

**B.12. 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 **B.28.**  
[40 CFR 60.34b(b) and 40 CFR 60.51b]



**B.13. Maximum Demonstrated Particulate Matter Control Device Temperature.** Maximum demonstrated particulate matter control device temperature means the highest 4-hour arithmetic average flue gas temperature measured at the particulate matter control device inlet during four consecutive hours during the most recent dioxin/furan performance test demonstrating compliance with the applicable limit for municipal waste combustor organics specified in specific condition **B.28.**

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

**B.14. Hours of Operation.** MWC units 1, 2, and 3 are allowed to operate continuously, i.e., 8,760 hours/year, each.

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

### **Operating Practices and Requirements**

**B.15.** No owner or operator of an affected facility shall cause such facility to operate at a load level greater than 110 percent of the maximum demonstrated municipal waste combustor unit load as defined in specific condition **B.12.**, except as specified below. The averaging time is specified in specific condition **B.17.**

(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)]

**B.16.** No owner or operator of an affected facility shall cause such facility to operate at a temperature, measured at the particulate matter control device inlet, exceeding 17°C above the maximum demonstrated particulate matter control device temperature, as defined in specific condition **B.13.**, except as specified below. The averaging time is specified in specific condition **B.17.** 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) ; and, PA 78-11(B) & PA 83-18(B)]

**B.17. Operating Requirements.** The procedures specified in paragraphs (1) through (11) 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.
- (2) 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.
- (3) The 4-hour block arithmetic averages specified in paragraph (1) 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.
- (4) 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).
- (5) 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 feed water flow meter; measure steam (or feed water) flow in kilograms per hour (or pounds per hour) on a continuous basis; and record the output of the monitor. Steam (or feed water) 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 feed water) 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 feed water flow) measurements must be calibrated according to the manufacturer's instructions before each dioxin/furan performance test, and at least once per year.

(6) 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.

(7) 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.

(8) 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.

(9) 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.

(10) 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.

(11) 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)]

### Emission Limitations and Standards

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

{Permitting Note: Unless otherwise specified, the averaging times for Specific Conditions **B.18.-B.21.** and **B.25.-B.34.** are based on the specified averaging time of the applicable test method.}

### Particulate Matter

**B.18.** The emission limit for particulate matter (PM/PM<sub>10</sub>) contained in the gases discharged to the atmosphere is 27 milligrams per dry standard cubic meter, corrected to 7 percent oxygen. [40 CFR 60.33b(a)(1)(i); and, PA 78-11(B) & PA 83-18(B)]

### Visible Emissions

**B.19.** The emission limit for opacity exhibited by the gases discharged to the atmosphere is 10 percent (6-minute block average). [40 CFR 60.33b(a)(1)(iii); and, PA 78-11(B) & PA 83-18(B)]

### Cadmium

**B.20.** 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)]

### Mercury

**B.21.** The emission limit for mercury contained in the gases discharged to the atmosphere is, (1) 0.070 milligrams per dry standard cubic meter, corrected to 7 percent oxygen; or (2) 15 percent of the potential mercury emission concentration (85-percent reduction by weight), corrected to 7 percent oxygen, with a not-to-exceed cap of 0.10 milligrams per dry standard cubic meter, corrected to 7 percent oxygen, whichever is less stringent. [40 CFR 60.33b(a)(3); Rule 62-296.416(3)(a)1., F.A.C.; and, PA 78-11(B) & PA 83-18(B)]

**B.22.** 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 through the use of mercury control equipment, shall comply with the mercury emissions limiting standard of Rule 62-296.416(3)(a)1., F.A.C., by July 1, 1995. All other facilities choosing to control mercury emissions through the use of mercury control equipment shall comply with the mercury emissions limiting standard of Rule 62-296.416(3)(a)1., F.A.C., by the date that the facility is required to demonstrate compliance with sulfur dioxide and hydrogen chloride emission limits, which limits are established at Rule 62-204.800(8)(b), F.A.C. [Rule 62-296.416(3)(a)2., F.A.C.]

**B.23.** 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.]

**B.24.** 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), F.A.C.  
[Rule 62-296.416(3)(c), F.A.C.]

### Lead

**B.25.** 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)]

### Sulfur Dioxide

**B.26.** The emission limit for sulfur dioxide contained in the gases discharged to the atmosphere is,  
(1) 29 parts per million by volume, corrected to 7 percent oxygen (dry basis); or  
(2) 25 percent of the potential sulfur dioxide emission concentration (75-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), with a not-to-exceed cap of 122 parts per million by volume, corrected to 7 percent oxygen (dry basis), whichever is less stringent. Compliance with this emission limit is based on a 24-hour daily geometric mean.  
[40 CFR 60.33b(b)(3)(i); and, PA 78-11(B) & PA 83-18(B)]

### Hydrogen Chloride

**B.27.** The emission limit for hydrogen chloride contained in the gases discharged to the atmosphere is,  
(1) 29 parts per million by volume, corrected to 7 percent oxygen (dry basis); or  
(2) 5 percent of the potential hydrogen chloride emission concentration (95-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), with a not-to-exceed cap of 100 parts per million by volume, corrected to 7 percent oxygen (dry basis), whichever is less stringent.  
[40 CFR 60.33b(b)(3)(ii); and, PA 78-11(B) & PA 83-18(B)]

### Dioxins/Furans

**B.27.** The emission limit for dioxins/furans contained in the gases discharged to the atmosphere that do not employ an electrostatic precipitator-based emission control system is 30 nanograms per dry standard cubic meter (total mass), corrected to 7 percent oxygen.  
[40 CFR 60.33b(c)(1)(ii); and, PA 78-11(B) & PA 83-18(B)]

### Nitrogen Oxides

**B.29.** The emission limit for nitrogen oxides contained in the gases discharged to the atmosphere is 205 parts per million by volume, corrected to 7 percent oxygen, dry basis. The permittee may request authorization from the Department to conduct nitrogen oxides emissions averaging pursuant to 40 CFR 60.33b.

[40 CFR 60.33b(d); and, PA 78-11(B) & PA 83-18(B)]

### Carbon Monoxide

**B.30.** The emission limit for carbon monoxide contained in the gases discharged to the atmosphere is 100 parts per million by volume, measured at the combustor outlet in conjunction with a measurement of oxygen concentration, corrected to 7 percent oxygen, dry basis, and calculated as a 4-hour block average.

[40 CFR 60.34b(a); and, PA 78-11(B) & PA 83-18(B)]

### Fugitive Ash Emissions

**B.31.** 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 (see specific condition **B.42.**), no owner or operator of an affected facility shall cause to be discharged to the atmosphere visible emissions of combustion ash from an ash conveying system (including conveyor transfer points) in excess of 5 percent of the observation period (i.e., 9 minutes per 3-hour period), as determined by EPA Reference Method 22 observations as specified in 40 CFR 60.58b(k), except as provided in paragraphs (b) and (c). See specific condition **B.53.**

(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]

**B.32.** For Unit 3, there shall be a 10% opacity limit for emissions from the refuse bunker and ash handling load out. The potential for dust generation by ash handling activities will be mitigated by quenching the ash prior to loading in ash transport trucks and/or scrap piles.

[PSD-FL-098]

### Beryllium

**B.33.** Emissions of beryllium to the atmosphere from Unit 3 shall not exceed  $9.0 \times 10^{-5}$  lbs/hr. EPA and the permittee mutually agree that actual test data may demonstrate that a higher emission limit is required because the unit's emission controls are for particulate (PM) control only, without regard to the composition of the particulate matter. Any request for modification shall be in accordance with the requirements of the Florida PSD regulations (Rule 62-212.400, F.A.C.).

[PSD-FL-098(A)]

**Total Fluorides**

**B.34.** Total fluorides emissions from Unit 3 shall not exceed 8.31 lbs/hr. EPA and the permittee mutually agree that actual test data may demonstrate that a higher emission limit is required. Any request for modification shall be in accordance with the requirements of the Florida PSD regulations (Rule 62-212.400, F.A.C.).  
 [PSD-FL-098(A)]

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

Pollutant	lbs/MMBtu/unit	lbs/hr/unit	tons/year/unit
Particulate Matter (PM/PM <sub>10</sub> )	0.031	14.4	63.1
Cadmium (Cd)	4.6 x 10 <sup>-5</sup>	0.021	0.092
Mercury (Hg)	1.2 x 10 <sup>-4</sup>	5.24 x 10 <sup>-2</sup>	0.23
Lead (Pb)	5.0 x 10 <sup>-4</sup>	0.230	1.01
Sulfur Dioxide (SO <sub>2</sub> )	0.372	170.0	744.6
Hydrogen Chloride (HCl)	0.174	79.8	349.5
Dioxins/Furans	3.44 x 10 <sup>-8</sup>	1.6 x 10 <sup>-5</sup>	6.9 x 10 <sup>-5</sup>
Nitrogen Oxides (NO <sub>x</sub> )	0.450	205.3	899.2
Carbon Monoxide (CO)	0.133	61.0	267.2

These values are given in PA 78-11(B,C) & PA 83-18 (B,C) and are determined using a maximum flow rate of 139, 792 dscfm @ 7% O<sub>2</sub> and a maximum heat input of 458 MMBtu/hr.}

**Excess Emissions**

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

**B.35.** The opacity standards set forth in 40 CFR 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.  
 [40 CFR 60.11(c)]

**B.36.** At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.  
 [40 CFR 60.11(d)]

**B.37.1. Startup, Shutdown and Malfunction.** Except as provided by 40 CFR 60.56b, the standards under 40 CFR 60, Subpart Cb, as incorporated in Rule 62-204.800(8)(b), F.A.C., apply at all times except during periods of startup, shutdown, or malfunction. Duration of startup or shutdown periods are limited to 3 hours per occurrence, except as provided in 40 CFR 60.58b(a)(1)iii.

(i) The startup period commences when the affected facility begins the continuous burning of municipal solid waste and does not include any warm-up period when the affected facility is combusting fossil fuel or other nonmunicipal solid waste fuel, and no municipal solid waste is being fed to the combustor.

(ii) Continuous burning is the continuous, semicontinuous, or batch feeding of municipal solid waste for purposes of waste disposal, energy production, or providing heat to the combustion system in preparation for waste disposal or energy production. The use of municipal solid waste solely to provide thermal protection of the grate or hearth during the startup period when municipal solid waste is not being fed to the grate is not considered to be continuous burning. [40 CFR 60.38b and 40 CFR 60.58b(a)]

**B.37.2.** For the purpose of compliance with the carbon monoxide emission limits in 40 CFR 60.53b(a), if a loss of boiler water level control (e.g., boiler water wall tube failure) or a loss of combustion air control (e.g., loss of combustion air fan, induced draft fan, combustion grate bar failure) is determined to be a malfunction, the duration of the malfunction period is limited to 15 hours per occurrence. [40 CFR 60.58b(a)(1)iii]

**B.38.** Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24-hour period unless specifically authorized by the Department for longer duration. The Department authorizes three hours in any 24-hour period for this emissions unit. A malfunction means any unavoidable failure of air pollution control equipment or process equipment to operate in a normal or usual manner. [Rule 62-210.700(1), F.A.C.; PSD FL-098(A); and, authorized by Department on March 27, 2000]

**B.39.** 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 malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

### **Test Methods and Procedures**

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

**B.40.** Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other



times as may be required by the Administrator under section 114 of the Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s).

[40 CFR 60.8(a)]

**B.41.** Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, (3) approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance, (4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or (5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.

[40 CFR 60.8(b)]

**B.42.** Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

[40 CFR 60.8(c)]

**B.43.** The owner or operator of an affected facility shall provide the Administrator at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the Administrator the opportunity to have an observer present.

[40 CFR 60.8(d)]

**B.44.** The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

(1) Sampling ports adequate for test methods applicable to such facility. This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

(2) Safe sampling platform(s).

(3) Safe access to sampling platform(s).

(4) Utilities for sampling and testing equipment.

{Permitting note: See specific condition **B.61.** and Appendix SS-1, Stack Sampling Facilities (version dated 10/7/96) for State of Florida Stack Sampling Requirements.}

[40 CFR 60.8(e)]

**B.45.** Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs.

[40 CFR 60.8(f)]

### **Particulate Matter and Opacity**

**B.46.** 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 40 CFR 60.58b(b)(6).
- (5) As specified under 40 CFR 60.8, all performance tests shall consist of three test runs. The average of the particulate matter emission concentrations from the three test runs is used to determine compliance.
- (6) In accordance with paragraphs (7) and (11), EPA Reference Method 9 shall be used for determining compliance with the opacity limit except as provided under 40 CFR 60.11(e)
- (7) The owner or operator of an affected facility shall conduct an initial performance test for particulate matter emissions and opacity as required under 40 CFR 60.8.
- (8) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous opacity monitoring system for measuring opacity and shall follow the methods and procedures specified in paragraphs (8)(i) through (8)(iv).
  - (i) The output of the continuous opacity monitoring system shall be recorded on a 6-minute average basis.
  - (ii) The continuous opacity monitoring system shall be installed, evaluated, and operated in accordance with 40 CFR 60.13.
  - (iii) The continuous opacity monitoring system shall conform to Performance Specification 1 in Appendix B of 40 CFR 60.
  - (iv) The initial performance evaluation shall be completed no later than 180 days after the date of the initial startup of the municipal waste combustor unit, as specified under 40 CFR 60.8.
- (9) Following the date that the initial performance test for particulate matter is completed or is required to be completed under 40 CFR 60.8 for an affected facility, the owner or operator shall

conduct a performance test for particulate matter on an annual basis (no more than 12 calendar months following the previous performance test).

(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**

**B.47.** 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).

(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 (%PHg) is computed using equation 1:

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

where:

$\%P_{HG}$  = percent reduction of the potential mercury emissions achieved.

$E_i$  = potential mercury emission concentration measured at the control device inlet, corrected to 7 percent oxygen (dry basis).

$E_o$  = 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).

(xi) The owner or operator of an affected facility where activated carbon injection is used to comply with the mercury emission limit shall follow the procedures specified in 40 CFR 60.58b(m) (see specific condition **B.101.**) for measuring and calculating carbon usage.

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

**B.48. 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) (see specific condition **B.16.**), incorporated by reference in Rule 62-204.800, F.A.C., shall apply.

(b) Temperature Monitoring. The temperature monitoring requirements set forth in 40 CFR 60.58b(i) (see specific condition **B.17.**), incorporated by reference in Rule 62-204.800, F.A.C., shall apply.

(5) Carbon Usage Rate. The carbon injection rate operating standard and monitoring requirements set forth in 40 CFR 60.58b(m) (see specific condition **B.101.**), incorporated by reference in Rule 62-204.800, F.A.C. shall apply.

[Rules 62-296.416(3)(d),(4), and (5), F.A.C.]

### **Sulfur Dioxide**

**B.49.** 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 (measured between 12:00 midnight and the following midnight) 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); and, PA 78-11(B) & PA 83-18(B)]

### Hydrogen Chloride

**B.50.** The procedures and test methods specified in paragraphs (1) through (8) shall be used for determining compliance with the hydrogen chloride emission limit.

- (1) The EPA Reference Method 26 or 26A, as applicable, shall be used to determine the hydrogen chloride emission concentration. The minimum sampling time for Method 26 shall be 1 hour.
- (2) An oxygen (or carbon dioxide) measurement shall be obtained simultaneously with each Method 26 test run for hydrogen chloride required by paragraph (1).
- (3) The percent reduction in potential hydrogen chloride emissions (% 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.

$E_i$ =potential hydrogen chloride emission concentration measured at the control device inlet, corrected to 7 percent oxygen (dry basis).

$E_o$ =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).

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

### **Dioxin/Furan**

**B.51.** 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.)

(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), corrected to 7 percent oxygen, 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), corrected to 7 percent oxygen, 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), corrected to 7 percent oxygen.

(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**

**B.52.** The procedures and test methods specified in paragraphs (1) through (12) shall be used to determine compliance with the nitrogen oxides emission limit for affected facilities under 40 CFR 60.52b(d).

(1) The EPA Reference Method 19, section 4.1, shall be used for determining the daily arithmetic average nitrogen oxides emission concentration.

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

(3) The owner or operator of an affected facility subject to the nitrogen oxides limit shall conduct an initial performance test for nitrogen oxides as required under 40 CFR 60.8. Compliance with the nitrogen oxides emission limit shall be determined by using the continuous emission monitoring system specified in paragraph (4) for measuring nitrogen oxides and calculating a 24-hour daily arithmetic average emission concentration using EPA Reference Method 19, section 4.1.



- (4) The owner or operator of an affected facility subject to the nitrogen oxides emission shall install, calibrate, maintain, and operate a continuous emission monitoring system for measuring nitrogen oxides discharged to the atmosphere, and record the output of the system.
- (5) Following the date that the initial performance test for nitrogen oxides is completed or is required to be completed under 40 CFR 60.8, compliance with the emission limit for nitrogen oxides shall be determined based on the 24-hour (measured between 12:00 midnight and the following midnight) 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); and, PA 78-11(B) & PA 83-18(B)]

### **Fugitive Ash**

**B.53.** 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. (See specific condition **B.31.**)

(1) The EPA Reference Method 22 shall be used for determining compliance with the fugitive ash emission limit under 40 CFR 60.55b. The minimum observation time shall be a series of three 1-hour observations. The observation period shall include times when the facility is transferring ash from the municipal waste combustor unit to the area where ash is stored or loaded into containers or trucks.

(2) The average duration of visible emissions per hour shall be calculated from the three 1-hour observations. The average shall be used to determine compliance with 40 CFR 60.55b.

(3) The owner or operator of an affected facility shall conduct an initial performance test for fugitive ash emissions as required under 40 CFR 60.8.

(4) Following the date that the initial performance test for fugitive ash emissions is completed or is required to be completed under 40 CFR 60.8 for an affected facility, the owner or operator shall conduct a performance test for fugitive ash emissions on an annual basis (no more than 12 calendar months following the previous performance test).

[40 CFR 60.38b and 40 CFR 60.58b(k); and, PA 78-11(B) & PA 83-18(B)]

**B.54.** Compliance with the opacity standard in specific condition **B.32.** shall be determined by evaluating emissions from the refuse bunker and ash handling and load out stations for Unit 3 in accordance with EPA Reference Method 9.

[PSD-FL-098]

### **Beryllium**

**B.55.** The test method for beryllium emissions shall be EPA method 29 or 104, adopted and incorporated by reference in Rule 62-204.800, F.A.C. One sample shall constitute one test run.  
[Rule 62-213.440, F.A.C.; and, PSD-FL-098]

### **Total Fluoride**

**B.56.** The test method for total fluoride emissions shall be EPA method 13B, adopted and incorporated by reference in Rule 62-204.800, F.A.C. One sample shall constitute one test run.  
[PSD-FL-098]

**B.57. Required Number of Test Runs.** For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's

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

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

**B.58. Operating Rate During Testing.** Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

[Rules 62-297.310(2) & (2)(b), F.A.C.]

**B.59. Calculation of Emission Rate.** The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule.

[Rule 62-297.310(3), F.A.C.]

**B.60. 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.]

**B.61. Required Stack Sampling Facilities**. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit.  
[Rule 62-297.310(6), F.A.C.]

**B.62. Frequency of Compliance Tests**. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
- Did not operate; or
  - 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:
- Visible emissions, if there is an applicable standard;
  - 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
  - Each NESHAP pollutant, if there is an applicable emission standard.
5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.
9. The owner or operator shall notify the DEP Southwest District Office, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

(b) Special Compliance Tests. When the DEP Southwest District Office, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the DEP Southwest District Office.

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

### **Compliance With Standards and Maintenance Requirements**

**B.63.** 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)]

**B.64.** Compliance with opacity standards in 40 CFR 60 shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60, any alternative method that is approved by the Administrator, or as provided in 40 CFR 60.11(e)(5).  
[40 CFR 60.11(b)]

**B.65.** 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**

**B.66.** For the purposes of 40 CFR 60.13, all continuous monitoring systems (CMS) required under applicable subparts shall be subject to the provisions of 40 CFR 60.13 upon promulgation of performance specifications for continuous monitoring systems under Appendix B of 40 CFR 60 and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, Appendix F of 40 CFR 60, unless otherwise specified in an applicable subpart or by the Administrator. Appendix F is applicable December 4, 1987.

[40 CFR 60.13(a)]

**B.67.** 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)]

**B.68.** (1) Owners and operators of all continuous emission monitoring systems (CEMS) installed in accordance with the provisions of this part shall check the zero (or low-level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span shall, as a minimum, be adjusted whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications in Appendix B. The system must allow the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified, whenever specified. For continuous monitoring systems measuring opacity of emissions, the optical surfaces exposed to the effluent gases shall be cleaned prior to performing the zero and span drift adjustments except that for systems using automatic zero adjustments. The optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.

(2) Unless otherwise approved by the Administrator, the following procedures shall be followed for continuous monitoring systems measuring opacity of emissions. Minimum procedures shall include a method for producing a simulated zero opacity condition and an upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known

obscuration of the light beam. Such procedures shall provide a system check of the analyzer internal optical surfaces and all electronic circuitry including the lamp and photo detector assembly.

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

**B.69.** Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d), all continuous monitoring systems (CMS) shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

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

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

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

**B.70.** All continuous monitoring systems (CMS) or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of Appendix B of 40 CFR 60 shall be used.

[40 CFR 60.13(f)]

**B.71.** When the effluents from a single affected facility or two or more affected facilities subject to the same emission standards are combined before being released to the atmosphere, the owner or operator may install applicable continuous monitoring systems (CMS) on each effluent or on the combined effluent. When the affected facilities are not subject to the same emission standards, separate continuous monitoring systems shall be installed on each effluent. When the effluent from one affected facility is released to the atmosphere through more than one point, the owner or operator shall install an applicable continuous monitoring system on each separate effluent unless the installation of fewer systems is approved by the Administrator. When more than one continuous monitoring system is used to measure the emissions from one affected facility (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required from each continuous monitoring system.

[40 CFR 60.13(g)]

**B.72.** Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to 6-minute averages and for continuous monitoring systems other than opacity to 1-hour averages for time periods as defined in 40 CFR 60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period. For continuous monitoring systems other than opacity, 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non reduced form (e.g., ppm pollutant and percent O<sub>2</sub> or ng/J of pollutant). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in subparts. After conversion into units of the standard, the data

may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit (e.g., rounded to the nearest 1 percent opacity).  
[40 CFR 60.13(h)]

**B.73. 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**

**B.74.** 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)]

### **Recordkeeping and Reporting Requirements**

**B.75.** The owner or operator subject to the provisions of 40 CFR 60 shall furnish the Administrator written notification as follows:

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

[40 CFR 60.7(a)(4)]

**B.76.** The owner or operator subject to the provisions of 40 CFR 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or, any periods during which a continuous monitoring system or monitoring device is inoperative.

[40 CFR 60.7(b)]

**B.77.** 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 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)]

**B.78.** The summary report form shall contain the information and be in the format shown in Figure 1 (attached) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.

(1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.

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

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

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

**B.79.** (1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent)

basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

- (i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;
- (ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and
- (iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).

(2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

(3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) and (e)(2).

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

**B.80.** 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.]

**B.81. Notification of Construction or Reconstruction.** The owner or operator of an affected facility with a capacity to combust greater than 250 tons per day shall submit a notification of construction, which includes the information specified in paragraphs (1) through (4).

- (1) Intent to construct.
- (2) Planned initial startup date.

- (3) The types of fuels that the owner or operator plans to combust in the affected facility.
- (4) The municipal waste combustor unit capacity and supporting capacity calculations prepared in accordance with 40 CFR 60.58b(j).  
[40 CFR 60.39b and 40 CFR 60.59b(b)]

**B.82.** 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 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).
- (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).
- (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)]

**B.83.** 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)]

**B.84.** 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)]

**B.85.** 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 60.59b(d)(9) document any particulate matter, opacity, cadmium, lead, mercury, dioxins/furans, hydrogen chloride, and fugitive ash emission levels that were above the applicable pollutant limits, the semiannual report shall include a copy of the test report documenting the emission levels and the corrective actions taken.

(4) The semiannual report shall include the information recorded under 40 CFR 60.59b(d)(15) for the carbon injection system operating parameter(s) that are the primary indicator(s) of carbon mass feed rate.

(5) For each operating date reported as required by paragraph (4), the semiannual report shall include the carbon feed rate data recorded under 40 CFR 60.59b(d)(4)(iii).

(6) Semiannual reports required by this condition shall be submitted according to the schedule specified in paragraphs (i) and (ii).

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

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

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

**B.86.** All reports specified under 40 CFR 60.59b(a), (b), (c), (f), (g), (h), and (i) shall be submitted as a paper copy, postmarked on or before the submittal dates specified under these paragraphs, and maintained onsite as a paper copy for a period of 5 years.

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

**B.87.** All records specified under 40 CFR 60.59b(d) and (e) shall be maintained onsite in either paper copy or computer-readable format, unless an alternative format is approved by the Administrator.

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

**B.88.** If the owner or operator of an affected facility would prefer a different annual or semiannual date for submitting the periodic reports required by 40 CFR 60.59b(g), (h) and (i), then the dates may be changed by mutual agreement between the owner or operator and the Administrator according to the procedures specified in 40 CFR 60.19(c) of Subpart A of this part.

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

**B.89.** In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the DEP Southwest District Office in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the DEP Southwest District Office.

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

**B.90.** Submit to the Department a written report as follows:

a. Submittal of reports of any required monitoring at least every 6 months. All instances of deviations from permit

requirements must be clearly identified in such reports;

b. Reporting, in accordance with requirements of subsection 62-210.700(6) and Rule 62-4.130, F.A.C., of deviations from

permit requirements, including those attributable to upset conditions as defined in the permit.

Reports shall include the probable

cause of such deviations, and any corrective actions or preventive measures taken.

[Rule 62-213.440(1)(b)3., F.A.C.]

**B.91.** Reserved

**B.92.** A copy of the results of the stack tests shall be submitted within 60 days of testing to the DEP Southwest District Office.

[1030117-004-AV]



**B.93. Test Reports.**

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

(c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the DEP Southwest District Office to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

1. The type, location, and designation of the emissions unit tested.
2. The facility at which the emissions unit is located.
3. The owner or operator of the emissions unit.
4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
8. The date, starting time and duration of each sampling run.
9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
10. The number of points sampled and configuration and location of the sampling plane.
11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
12. The type, manufacturer and configuration of the sampling equipment used.
13. Data related to the required calibration of the test equipment.
14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals, who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

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

**B.94.** Monthly records shall be maintained of the amount of natural gas used by the auxiliary burners of each MSW unit and the equivalent heat input from natural gas (calculated using the heat value for natural gas provided by the natural gas supplier).

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

**B.95. Charging Rate Monitoring.** The average daily solid waste charging rate shall be determined on a monthly basis and recorded for each MWC unit. The daily charging rate shall be determined each month on an average daily basis for each MWC unit using the Facility's truck scale weight data, refuse pit inventory data and MWC operating data for the preceding calendar month. Monthly truck scale weight records of the weight of solid waste received and processed at the Facility, and refuse pit inventory data, shall be used to determine the amount of solid waste charged during the preceding calendar month on an average daily basis. The MWC load level measurements or other operating data shall be used to determine the number of operating hours per MWC unit for each day during the preceding calendar month.

[Rule 62-213.440, F.A.C.; and, 40 CFR 60.53(a)]

**B.96. Segregated Solid Waste Record Keeping.** The following records shall be made and kept to demonstrate compliance with the segregated non-MSW percentage limitations of specific condition **B.11.:**

(1) Each segregated load of non-MSW materials, that is subject to the percentage weight limitations of specific condition **B.11.**, which is received for processing shall be documented as to waste description and weight. The weight of all waste materials received for processing shall be measured using the facility truck scale and recorded.

(2) Each day the total weight of segregated tires received shall be computed, and the daily total shall be added to the sum of the daily totals from the previous days in the current calendar month. At the end of each calendar month, the resultant monthly total weight of tires shall be divided by the total weight of all waste materials received in the same calendar month, and the resultant number shall be multiplied by 100 to express the ratio in percentage terms. The percentage computed shall be compared to the 3% limitation.

(3) Each day the total weight of segregated non-MSW materials received that are subject to the 5% restriction shall be computed, and the daily total shall be added to the sum of the daily totals from the previous days in the current calendar month. At the end of each calendar month, the resultant monthly total weight of segregated non-MSW materials subject to the 5% restriction shall be divided by the total weight of all waste materials received in the same calendar month, and the resultant number shall be multiplied by 100 to express the ratio in percentage terms. The percentage computed shall be compared to the 5% limitation.

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

### **Operator Training and Certification**

**B.97.** 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 month after the date of startup of the affected facility or 12 months after State plan approval [40 CFR 60.39b(c)(4)(ii)], whichever is later.

(2) If 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 paragraph (e)(1) through (e)(11).

(1) A summary of the applicable standards;

(2) A description of basic combustion theory applicable to a municipal waste combustor unit;

(3) Procedures for receiving, handling, and feeding municipal solid waste;

(4) Municipal waste combustor unit startup, shutdown, and malfunction procedures;

(5) Procedures for maintaining proper combustion air supply levels;

(6) Procedures for operating the municipal waste combustor unit within the standards established;

(7) Procedures for responding to periodic upset or off-specification conditions;

(8) Procedures for minimizing particulate matter carryover;

(9) Procedures for handling ash;

(10) Procedures for monitoring municipal waste combustor unit emissions; and

(11) Reporting and recordkeeping procedures.

(f) The owner or operator of an affected facility shall establish a training program to review the operating manual according to the schedule specified in paragraphs (f)(1) and (f)(2) with each person who has responsibilities affecting the operation of an affected facility including, but not limited to, chief facility operators, shift supervisors, control room operators, ash handlers, maintenance personnel, and crane/load handlers.

(1) Each person specified in paragraph (f) shall undergo initial training no later than the date specified in paragraph (f)(1)(i), (f)(1)(ii), or (f)(1)(iii), whichever is later.

(i) The date 6 months after the date of startup of the affected facility;

(ii) The date prior to the day the person assumes responsibilities affecting municipal waste combustor unit operation; or

(iii) 12 months after State plan approval [40 CFR 60.39b(c)(4)(iii)].

(2) Annually, following the initial review required by paragraph (f)(1).  
(g) The operating manual required by paragraph (e) shall be kept in a readily accessible location for all persons required to undergo training under paragraph (f). The operating manual and records of training shall be available for inspection by the EPA or its delegated enforcement agency upon request.  
[40 CFR 60.35b, 40 CFR 60.39b(c)(4)(ii) & (iii), and 40 CFR 60.54b]

**B.98.** The requirement specified in 40 CFR 60.54b(d) does not apply to chief operators, shift supervisors, and control room operators who have obtained full certification from the American Society of Mechanical Engineers on or before the date of State plan approval.  
[40 CFR 60.39b(c)(4)(iii)(A)]

**B.99.** 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)]

**B.100.** 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)]

### **Miscellaneous Requirements.**

**B.101. Activated Carbon Injection.** The owner or operator of an affected facility where activated carbon injection is used to comply with the mercury emission limit (see specific condition **B.21.**), or the dioxin/furan emission limits (see specific condition **B.28.**), or the dioxin/furan emission level specified in 40 CFR 60.58b(g)(5)(iii) shall follow the procedures specified in paragraphs (1) through (3).  
(1) During the performance tests for dioxins/furans and mercury, as applicable, the owner or operator shall estimate an average carbon mass feed rate based on carbon injection system operating parameters such as the screw feeder speed, hopper volume, hopper refill frequency, or other parameters appropriate to the feed system being employed, as specified in paragraphs (i) and(ii).  
(i) An average carbon mass feed rate in kilograms per hour or pounds per hour shall be estimated during the initial performance test for mercury emissions and each subsequent performance test for mercury emissions.  
(ii) An average carbon mass feed rate in kilograms per hour or pounds per hour shall be estimated during the initial performance test for dioxin/furan emissions and each subsequent performance test for dioxin/furan emissions.  
(2) During operation of the affected facility, the carbon injection system operating parameter(s) that are the primary indicator(s) of the carbon mass feed rate (e.g., screw feeder setting) must

equal or exceed the level(s) documented during the performance tests specified under paragraphs (1)(i) and (1)(ii).

(3) The owner or operator of an affected facility shall estimate the total carbon usage of the plant (kilograms or pounds) for each calendar quarter by two independent methods, according to the procedures in paragraphs (i) and (ii).

(i) The weight of carbon delivered to the plant.

(ii) Estimate the average carbon mass feed rate in kilograms per hour or pounds per hour for each hour of operation for each affected facility based on the parameters specified under paragraph (1), and sum the results for all affected facilities at the plant for the total number of hours of operation during the calendar quarter.

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

**B.102. Acid Rain Part Application.** For any unit which was a solid waste incinerator, burning less than 20 percent fossil fuel as described in 40 CFR 72.6(b)(7), adopted and incorporated by reference at Rule 62-204.800, F.A.C., the designated representative of the source containing the unit shall submit a complete Acid Rain Part 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.

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

**B.103. Operation and Maintenance Plans.** A separate Operation and Maintenance (O&M) plan shall be on file with DEP Southwest District Office for each MWC unit and associated air pollution control devices. These emissions units and associated control devices shall be operated and maintained in accordance with the submitted O&M plans. The O&M documentation logs shall be maintained for a minimum of the most recent 5 years and be made available for inspection upon request.

[Rule 62-213.440(b), F.A.C.; and, Pinellas County Ordinance 97-05, Section 22, Sec. 58-128]

**B.104. Ambient Air Monitors.** The permittee shall operate two continuous SO<sub>2</sub> monitors and one continuous wind direction and velocity monitor in the immediate vicinity of the site. The monitors shall be specifically located as designated by the DEP and shall conform to 40 CFR 53 (see specific condition **B.105.**). Monitoring shall have begun upon commencement of operation.  
[PA 78-11(B) & 83-18(B)]

**B.105. Designation of reference and equivalent methods.**

(a) A candidate method determined by the Administrator to satisfy the applicable requirements of this part shall be designated as a reference method or equivalent method (as applicable), and a notice of the designation shall be submitted for publication in the Federal Register not later than 15 days after the determination is made.

(b) A notice indicating that the method has been determined to be a reference method or an equivalent method shall be sent to the applicant. This notice shall constitute proof of the determination until a notice of designation is published in accordance with paragraph (a) of this section.

(c) The Administrator will maintain a current list of methods designated as reference or equivalent methods in accordance with this part and will send a copy of the list to any person or group upon request. A copy of the list will be available for inspection or copying at EPA Regional Offices.  
[40 CFR 53.8]

**B.106. Capital Replacement Project.** The owner or operator is authorized to construct its Capital Replacement Project as described in the letter application from Pinellas County Utilities dated August 30, 2000, and subsequent related information. The owner or operator is authorized to perform the construction activities generally described as: boiler refurbishment consisting primarily of replacement of the components from the furnace gas exit to the economizer gas exit for boiler unit trains 1, 2 and 3; rebuilding the refuse cranes; refurbishment of the cooling tower; upgrading the instrumentation control systems; refurbishment or replacement of feed water pumps; tipping floor improvements; and upgrading the existing water regeneration equipment through the replacement of two nominal 100 gallon per minute demineralizer trains.

The owner or operator shall submit to the Department on an annual basis, for a period of five years representative of normal post-change operations of MWC units 1, 2 and 3 ("the units"), within the period not longer than 10 years following the completion of construction of the last unit, information demonstrating that the Capital Replacement Project did not result in a PSD-significant emissions increase. A PSD-significant increase shall be defined as noted in Table 212.400-2 of Chapter 62-212, F.A.C. The information required above shall be based on a comparison of "baseline" past actual annual emissions with actual annual emissions for the given year after completion of the Capital Replacement Project, shall be reported on a calendar year basis, and shall start the first full calendar year following the completion of the Capital Replacement Project's boiler refurbishment of the last unit. The owner or operator shall utilize the "representative actual annual emissions" methodology, defined at Rule 62-210.200(12)(d), F.A.C., and the provisions of 40 CFR 52.21(b)(33), adopted by state rule, in its demonstration. If the Capital Replacement Project results in a PSD-significant emissions increase, or if the owner or operator fails to submit the required information, the units shall be subject to the requirements of PSD at that future time, which shall include a BACT determination for each PSD-significant pollutant.

The owner or operator shall estimate actual annual emissions using the general methodology shown in its letter application and subsequent related information, as discussed generally as follows. The owner or operator shall use the continuous emission monitoring system (CEMS) data to estimate actual annual emissions of the pollutants monitored by the CEMS: NO<sub>x</sub>, SO<sub>2</sub>, and CO. The owner or operator shall use data from all post-retrofit compliance test(s) to estimate past actual annual emissions of other pollutants not monitored by the CEMS: PM/PM<sub>10</sub>, lead, mercury, dioxins, hydrogen chloride. The owner or operator shall use the CEMS data to determine unit availability, which shall be used in determining actual annual emissions. The owner or operator shall use the CEMS data starting from June 1, 2000 until the start of construction of the Capital Replacement Project's boiler refurbishment for its determination of baseline past actual annual emissions. No more than two years of data shall be used to determine the baseline past actual annual emissions. As an alternative to the above, the owner or operator may use other methods approved by the Department.

[1030117-003-AC]

### Section III. Emissions Unit(s) and Conditions.

#### Subsection C. This section addresses the following emissions unit(s).

<u>E.U. ID No.</u>	<u>Brief Description</u>
-004	Hydrated Lime Storage Silo
-005	Metal Recovery System (MRS)
-006	Activated Carbon Storage Silo
-007	Lime Storage Silo
-008	Ash Conditioning Building (ACB)

Emissions unit -004 is a 2,667 cubic foot hydrated lime storage silo manufactured by Chemco. This emissions unit is located in the water softening area of the facility. It is part of a lime system designed to mix lime with water to produce lime slurry and store and transfer the lime slurry to the clarifier in the water treatment facility. A supply truck pneumatically transfers dry lime to the silo through a fill line. Particulate matter and visible emissions from the silo are controlled by a Siloair dust filter system (Model No. VS20KS3). The filter system parameters are as follows: stack height = 60 feet; exit diameter = 0.6 feet; exit temperature = 77 °F, actual volumetric flow rate = 1,000 acfm; total cloth filtration area = 215.0 ft<sup>2</sup>. The initial startup date of the silo was February 15, 1995.

Emissions unit -005 is the Metal Recovery System (MRS). The MRS separates up to 112 tons per hour of MWC residue into ferrous and nonferrous metal streams and an aggregate stream. The aggregate is later deposited in a landfill. A cyclone/wet scrubber is used to capture the lighter, non-metallic ash fugitives that separate from the ash stream in the MRS and reduce fugitive ash emissions. The scrubber is operated whenever the shredder/crusher is operating and whenever deemed necessary by the operator. The MRS is located inside the Ash Storage and Processing Building. This building has 2 roof ventilation fans and an attached conveyor enclosure with 2 roof ventilation fans. Since emissions from the MRS are controlled by the cyclone/wet scrubber and the ash is wetted before conveying and processed and stored in a wet state, no emissions controls are on the Ash Storage and Processing Building. Particulate matter and visible emissions are controlled by a Newell Industries, Inc. cyclone/wet scrubber (Model No. 80104). The scrubber parameters are as follows: stack height = 54 feet; exit diameter = 0.7 feet; exit temperature = 77 °F, actual volumetric flow rate = 40,000 acfm. The initial startup date of the scrubber was November 1, 1989.

Emissions unit -006 is a 30 ton capacity silo for storage of activated carbon powder manufactured by Chemco. It is part of the activated carbon injection (ACI) system for control of mercury emissions from the municipal waste combustion units. A supply truck pneumatically transfers the activated carbon powder to the silo through a fill line. Particulate matter emissions are controlled by a Wheelabrator Canada, Inc. baghouse (Model No. 22WSC-BV). The baghouse parameters are as follows: stack height = 43 feet; exit diameter = 0.7 feet; exit temperature = 77 °F, actual volumetric flow rate = 1,200 acfm. The initial startup date of the silo was September 24, 1998.

Emissions unit -007 is a 70 ton capacity silo for storage of pebble lime. It is part of the spray dry absorber (SDA) system used for control of acid gases and sulfur dioxide emissions from the municipal waste combustion units. A supply truck pneumatically transfers pebble lime to the silo

through a fill line. Particulate matter emissions are controlled by a Wheelabrator Canada, Inc. baghouse (Model No. 22WSC-BV). The baghouse parameters are as follows: stack height = 58 feet; exit diameter = 0.7 feet; exit temperature = 77 °F, actual volumetric flow rate = 1,200 acfm. The initial startup date of the silo was September 24, 1998.

Emissions unit -008 is the Ash Conditioning Building (ACB). It contains two 20 ton capacity fly ash surge bins. Stabilizers such as lime and phosphoric acid are added to condition the fly ash. Particulate matter emissions inside the building are controlled by a Tri-Mer Corporation wet venturi scrubber (Model No. 50-H). The scrubber is operated when deemed necessary by the operator. The scrubber parameters are as follows: stack height = 65 feet; exit diameter = 1.3 feet; exit temperature = 77 °F, actual volumetric flow rate = approx. 5,000 acfm. The initial startup date of the scrubber was September 24, 1998.

{Permitting note(s): Emissions unit -004 is a minor source regulated under AC52-259351 (January 24, 1995); Rule 62-210.300, F.A.C., Permits Required; and, PA 78-11(B, C) and PA 83-18 (B, C). Emissions units -005 through -008 are minor sources regulated under Rule 62-210.300, F.A.C., Permits Required; and, PA 78-11(B, C) and PA 83-18 (B, C).}

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

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

**C.1. Permitted Capacity.**

(1) The normal filling rate for the hydrated lime storage silo shall be at least 25 tons/hour and occur in less than one hour.

(2) The filling rate for the activated carbon and lime storage silos shall be at least 20,000 and 30,000 lbs/hr, respectively.

(3) The charging rate for the ACB shall not exceed 41.7 tons/hr fly ash.

(4) The charging rate for the MRS shall not exceed 112 tons/hr ash.

[(1) AC52-259351; (2-3) Revised Initial Title V Application received 03/25/99; and, (4) Initial Title V Application received June 14, 1996]

{Permitting note: The charging rate/filling rate limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. The averaging time for this condition is based on the run time of the specified test method.}

**C.2. Emissions Unit Operating Rate Limitation After Testing.** See specific condition C.15.  
[Rule 62-297.310(2), F.A.C.]

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



### **Emission Limitations and Standards**

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

{Permitting Note: Unless otherwise specified, the averaging times for Specific Conditions C.4.-C.5. are based on the specified averaging time of the applicable test method.}

#### **C.4. Particulate Matter Emissions.**

- (1) Hydrated lime storage silo. Particulate matter emissions shall not exceed 0.005 gr/dscf from the baghouse outlet at the hydrated lime storage silo.
- (2) MRS. Particulate matter emissions shall not exceed 0.0102 gr/dscf from the cyclone/wet scrubber system outlet at the MRS.
- (3) Activated carbon and lime storage silos. Particulate matter emissions shall not exceed 0.005 gr/dscf from the baghouse outlet at each silo.
- (4) ACB. Particulate matter emissions shall not exceed 0.03 gr/dscf from the wet scrubber system outlet at the ACB.

[ (1) Rule 62-297.620(4), F.A.C.; and, Revised Title V application pages received September 15, 1999; (2) Applicant request and, PA 78-11(B,C) & PA 83-18(B,C); (3) Rule 62-297.620(4), F.A.C., applicant request and, PA 78-11(B,C) & PA 83-18(B,C); and, (4) PA 78-11(C) & PA 83-18(C) ]

**C.5. Visible Emissions.** Visible emissions from each emissions unit shall not exceed 20% opacity.

[Rules 62-296.320(4)(b)1., F.A.C.]

### **Excess Emissions**

**C.6.** Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.

[Rule 62-210.700(1), F.A.C.]

**C.7.** Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.

[Rule 62-210.700(4), F.A.C.]

### **Monitoring of Operations**

#### **C.8. 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.]

**C.9. Operation and Maintenance Plans**. A separate Operation and Maintenance (O&M) plan shall be on file with DEP Southwest District Office for the hydrated lime storage silo and associated baghouse, lime storage silo and associated baghouse, activated carbon storage silo and associated baghouse, the MRS and associated scrubber, and the ACB and associated scrubber. These emissions units and associated control devices shall be operated and maintained in accordance with the submitted O&M plans. The O&M documentation logs shall be maintained for a minimum of the most recent 5 years and be made available for inspection upon request. [AO52-268853; Rule 62-213.440(b), F.A.C.; and, Pinellas County Ordinance 97-05, Section 22, Sec. 58-128]

### **Test Methods and Procedures**

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

**C.10. Annual Tests Required**. Annual visible emissions compliance tests shall be performed for each emissions unit.

[Rule 62-297.310(7), F.A.C.; and, AC52-259351]

**C.11. Visible Emissions**. The test method for visible emissions for all emissions units shall be EPA Method 9, adopted and incorporated in Rule 62-204.800, F.A.C.

[AC52-259351 (E.U. ID No. 004); and, PA 78-11(B,C) & PA 83-18(B,C) (all units)]

**C.12. Particulate Matter Emissions**. The test method for particulate matter emissions for all units shall be EPA Method 5, adopted and incorporated in Rule 62-204.800, F.A.C.

[PA 78-11(B,C) & PA 83-18(B,C)]

**C.13. Particulate Matter Emissions – storage silos (E.U. ID Nos. 004, 006, and 007)**. In the case of an emissions unit which has the potential to emit less than 100 tons per year of particulate matter and is equipped with a baghouse, the Department waives any particulate matter compliance test requirements for such emissions unit specified in any otherwise applicable rule, and specifies an alternative standard of 5% opacity.

If the Department has reason to believe that the particulate weight emission standard applicable to such an emissions unit (see specific condition C.4.) is not being met, it shall require that compliance be demonstrated by the test method specified in the applicable rule (see specific condition C.12.).

[Rule 62-297.620(4), F.A.C.; AC52-259351; and, PA 78-11(B,C) & PA 83-18(B,C)]

**C.14. Required Number of Test Runs.** For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

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

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

[Rules 62-297.310(2) & (2)(b), F.A.C.]

**C.16. Calculation of Emission Rate.** The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule.

[Rule 62-297.310(3), F.A.C.]

**C.17. 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 to this permit.
- (e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube. [Rule 62-297.310(4), F.A.C.]

**C.18. 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.]

**C.19. Frequency of Compliance Tests**. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

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

5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.

9. The owner or operator shall notify the DEP Southwest District Office, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

(b) Special Compliance Tests. When the DEP Southwest District Office, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the DEP Southwest District Office.

(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.

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

### **Recordkeeping and Reporting**

**C.20.** In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the DEP Southwest District Office in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the DEP Southwest District Office.

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

#### **C.21. Test Reports.**

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

(b) The required test report shall be filed with the DEP Southwest District Office as soon as practical but no later than 45 days after the last sampling run of each test is completed.

(c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the DEP Southwest District Office to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

1. The type, location, and designation of the emissions unit tested.
2. The facility at which the emissions unit is located.
3. The owner or operator of the emissions unit.
4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.

5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
8. The date, starting time and duration of each sampling run.
9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
10. The number of points sampled and configuration and location of the sampling plane.
11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
12. The type, manufacturer and configuration of the sampling equipment used.
13. Data related to the required calibration of the test equipment.
14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals, who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

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

### Section III. Emissions Unit(s) and Conditions.

#### Subsection D. This section addresses the following emissions unit(s).

<u>E.U. ID No.</u>	<u>Brief Description</u>
-009	Municipal Solid Waste Landfill

Pinellas County Resource Recovery Facility contains a contiguous landfill, Bridgeway Acres. It has a maximum design capacity of 8.4 million megagrams. This site began modification/reconstruction in 1985 and first accepted waste in 1976. The scheduled landfill closure date is 2036. The landfill currently accepts both municipal solid waste and ash from the resource recovery facility. In compliance with 40 CFR Subpart Cc regulations adopted and incorporated by Rule 62-204.800(8), F.A.C., NMOC emissions from Bridgeway acres were calculated. Tier I calculation yielded an NMOC value of 249 Megagrams per year (Mg/year), which is greater than the threshold NMOC value of 50 Mg/yr. Tier II testing was used to obtain a parameter for NMOC calculation specific to the Bridgeway Acres landfill. The Tier II calculated value was below the 50 Mg/yr threshold NMOC value and therefore a gas collection and control system was not installed at this landfill site.

{Permitting notes: This emissions unit is regulated under 40 CFR 60, Subpart Cc, Emissions Guidelines and Compliance Times for Municipal Solid Waste Landfills, adopted and incorporated by reference, subject to provisions, in Rule 62-204.800(8)(c), F.A.C. Also, please note that conditions in 40 CFR 60, Subpart Cc, are contained in 40 CFR 60, Subpart WWW.}

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

##### General

##### D.1. Designated Facility.

- (a) The designated facility to which the guidelines apply is each existing MSW landfill
  - (i) for which construction, reconstruction or modification was commenced before May 30, 1991; and
  - (ii) which has accepted waste at any time since November 8, 1987, or has additional design capacity available for future waste deposition.
- (b) Physical or operational changes made to an existing MSW landfill solely to comply with the provisions of Rule 62-204.800(8)(c), F.A.C. are not considered a modification or reconstruction and would not subject an existing MSW landfill to the requirements of 40 CFR 60, Subpart WWW [see 40 CFR 60.750].
- (d) When a MSW landfill subject to 40 CFR 60, Subpart Cc 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 Rule 62-204.800(8)(c)3.; or
  - (2) The owner or operator meets the conditions for control system removal specified in 40 CFR 60.752(b)(2)(v).

[Rules 62-204.800(8)(c)1. & 3., F.A.C.; 40 CFR 60.32c; and, 40 CFR 60.33c(a)(1)]

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

[Rule 62-204.800(8)(a)2., F.A.C.; and, 40 CFR 60.2]

**D.3. Definitions – Subpart Cc.** The terms used but not defined in 40 CFR 60, Subpart Cc have the meaning given to them in the Act and in Subparts A, B, and WWW of 40 CFR 60.

[Rule 62-204.800(8)(c)2., F.A.C.; and, 40 CFR 60.31c]

**D.4. Standards for Air Emissions from MSW Landfills.** Any MSW landfill which has a design capacity greater than or equal to 2.5 million Megagrams and 2.5 million cubic meters but whose NMOC emission rate as of December 31, 1996, is less than 50 Megagrams per year shall comply with the provisions of 40 CFR 60.752(b)(2)(i) through (v) (see specific condition **D.5.**) commencing from December 31 of the first year after 1996 for which the nonmethane organic compound emission rate equals or exceeds 50 Megagrams per year.

[Rule 62-204.800(8)(c)3.b., F.A.C.]

**D.5. Collection and Control System Requirements.**

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 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 (ii) below.

(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 (i) (A),(B) and (C) above 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.

(ii) Install a collection and control system that captures the gas generated within the landfill as required by paragraphs (ii)(A) or (B) and (iii) below 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).

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



- (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).
- (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 (iii) (A) or (B) above.
- (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 (v) (A), (B), and (C) below 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.

[40 CFR 60.752(b)(2)(i) through (v)]

**D.6. Hours of Operation.** The landfill may operate continuously, i.e., 8,760 hrs/yr.  
[Rules 62-213.440 and 62-210.200(PTE), F.A.C.]

### **Test Methods and Procedures**

**D.7.** The provisions of 40 CFR 60.754, as applicable, shall be used to calculate the landfill NMOC emission rate for the purposes of the submittal of NMOC emission rate reports and determining whether the landfill has a nonmethane organic compound (NMOC) emission rate of 50 Megagrams per year or more.

[Rule 62-204.800(c)5., F.A.C.]

### **D.8. Method of Calculating NMOC Emissions.**

The landfill owner or operator shall calculate the NMOC emission rate using either the equation provided in paragraph (i) below or the equation provided in paragraph (ii) below. Both equations may be used if the actual year-to-year solid waste acceptance rate is known, as specified in paragraph (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 (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.

$$M_{\text{NMOC}} = \sum_{i=1}^n 2kL_o M_i (e^{-kt_i}) (C_{\text{NMOC}}) (3.6 \times 10^{-9})$$

where,

$M_{\text{NMOC}}$  = 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.

[40 CFR 60.754(a)(1)]

**D.9. Requirements if Calculated NMOC Emissions are less than 50 megagrams per year.**

*Tier I.* 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).  
[40 CFR 60.754(a)(2)]

**D.10. Method for Determining Site-Specific NMOC Emissions.**

*Tier II.* 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 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).  
[40 CFR 60.754(a)(3)]

**D.11. Method for Determining Site-Specific Methane Emissions.**

*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.

[40 CFR 60.754(a)(4)]

**D.12. Alternative Methods.** 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.

[40 CFR 60.754(a)(5)]

**D.13.** The NMOC emission rate shall be recalculated annually, except as provided in 40 CFR 60.757(b)(1)(ii).

(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, 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.

(2) (i) If the NMOC emission rate, upon initial calculation or annual recalculation required in paragraph (1)(ii) above, is equal to or greater than 50 megagrams per year, the owner or operator shall install a collection and control system as provided in 40 CFR 60.752(b)(2).

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

[40 CFR 60.33c(e)]

### **Reporting Requirements**

**D.14.** Each owner or operator of an MSW landfill to which Rule 62-204.800(8)(c), F.A.C., applies shall comply with the reporting and recordkeeping provisions of 40 CFR 60.757 and .758, as applicable.

[Rule 62-204.800(c)5., F.A.C.]

**D.15. Notification of any Increase in Design Capacity.** 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).

[40 CFR 60.757(a)(3)]

**D.16. Annual NMOC Emission Rate.** Each owner or operator subject to the requirements of Rule 62-204.800(8)(c), F.A.C., shall submit an NMOC emission rate report to the Administrator annually, except as provided for in paragraphs (1)(ii) or (3) below. 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) NMOC emission rate reports shall be submitted annually, except as provided for in paragraphs (1)(ii) and (3) below.
  - (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 paragraphs (1) and (2) above, 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(8)(c)5., F.A.C.; and, 40 CFR 60.757(b)]

**D.17. Collection and Control System Design Plan.** 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.  
[40 CFR 60.757(c)]

**D.18. Controlled Landfill Closure Report.** Except as provided in 40 CFR 60.752(b)(2)(i)(B), 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).  
[40 CFR 60.757(d)]

**D.19. Uncontrolled Landfill Closure Report.** Each owner or operator of an uncontrolled landfill shall submit a closure report to the DEP Southwest District Office within 30 days of waste acceptance cessation. The Department 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 Department, 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 62-213.440, F.A.C.]

### **Recordkeeping Requirements**

#### **D.20. Test Reports.**

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the DEP Southwest District Office on the results of each such test.
- (b) The required test report shall be filed with the DEP Southwest District Office as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the DEP Southwest District Office to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
1. The type, location, and designation of the emissions unit tested.
  2. The facility at which the emissions unit is located.
  3. The owner or operator of the emissions unit.
  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.
  12. The type, manufacturer and configuration of the sampling equipment used.
  13. Data related to the required calibration of the test equipment.
  14. Data on the identification, processing and weights of all filters used.
  15. Data on the types and amounts of any chemical solutions used.
  16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
  17. The names of individuals, who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
  18. All measured and calculated data required to be determined by each applicable test procedure for each run.

19. The detailed calculations for one run that relate the collected data to the calculated emission rate.

20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.

21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

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

**D.21. Capacity and Acceptance Reports.** 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.

[40 CFR 60.758(a)]

**D.22. Design Capacity Calculations.** 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.

[40 CFR 60.758(f)]

## **Appendix U-1: List of Unregulated Emissions Units and/or Activities.**

Pinellas County Utilities Administration  
Pinellas County Resource Recovery Facility

**PROPOSED Permit No.:** 1030117-005-AV  
**Facility ID No.:** 1030117

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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’.

### **E.U. ID**

<b><u>No.</u></b>	<b><u>Brief Description of Emissions Units and/or Activity</u></b>
-010	Diesel Fuel-Fired Internal Combustion Engines. – Yard Waste Trommel Mulching Machine.
-xxx	Cooling Tower



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

Pinellas County Utilities Administration  
Pinellas County Resource Recovery Facility

PROPOSED Permit No.: 1030117-005-AV  
Facility ID No.: 1030117

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

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

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

1. 500 & 250 Gallon Diesel Oil Storage Tanks
2. 250 Gallon Unleaded Gasoline Storage Tank
3. 250 Gallon Hydraulic Oil Storage Tank
4. (2) 2000 Gallon Turbine Oil Storage Tanks
5. 2000 Gallon Turbine Oil Collection Tank
6. Welding Station Vent in Maintenance Building
7. 20,000 & 7800 Gallon Phosphoric Acid Storage Tanks
8. 5200 Gallon Caustic Storage Tank
9. 5200 & 5000 Gallon Sulfuric Acid Storage Tanks
10. 8000 Gallon Sodium Carbonate Storage Tank
11. 25,000 Gallon Urea Storage Tank
12. (5) 1-ton Chlorine Cylinders
13. 500 Gallon Diesel Oil Storage Tank at Chlorine Treatment Area
14. 500 Gallon In ground Diesel Oil Storage Tank at Scale Station
15. 12,000 Gallon In ground Gasoline Storage Tank at Mosquito Control Area
16. 12,000 Gallon In ground Diesel Storage Tank at Mosquito Control Area
17. (2) 1000 Gallon Pesticide Storage Tanks
18. (2) 1000 Gallon Aboveground Diesel Storage Tanks at Landfill Contractor
19. 1000 Gallon Waste Oil Storage Tank at Landfill Contractor
20. 275 Gallon Gasoline Storage Tank at Landfill Contractor
21. 275 Gallon Oil Storage Tank at Landfill Contractor
22. 275 Gallon Hydraulic Oil Storage Tank at Landfill Contractor
23. (7) 1-ton Chlorine Cylinders
24. 100 Gallon Above Ground Diesel Storage Tank At Mulch Area
25. 250 Gallon Mixed Waste Gasoline Tank At Landfill Contractor Area
26. Fire and Safety Equipment
27. Paint Usage Less Than 6.0 Gallons Per Day
28. Vehicular Traffic and Mobile Equipment On-site
29. Storage and Use of Drums of Cooling Tower and Boiler Chemicals
30. Laboratory Vents/Hoods
31. Refuse Pit
32. Flanges and Valves

Brief Description of Emissions Units and/or Activities

33. Makeup Water Treatment Plant
34. Solvent Degreasers
35. Plant Road Fugitive Emissions
36. RRF Emergency Fire Pump
37. Lift station Emergency Fire Pump
38. Chlorine Treatment Emergency Generator. Emergency generator is defined at Rule 62-210.220(96), F.A.C.
39. Scale Station Emergency Generator. Emergency generator is defined at Rule 62-210.220(96), F.A.C.
40. Maintenance Service Building Emergency Generator. Emergency generator is defined at Rule 62-210.220(96), F.A.C.
41. Mosquito Control Area Emergency Generator. Emergency generator is defined at Rule 62-210.220(96), F.A.C.

## Appendix H-1: Permit History

Pinellas County Utilities Administration  
Pinellas County Resource Recovery Facility

**PROPOSED Permit No.:** 1030117-005-AV  
**Facility ID No.:** 1030117

E.U. ID No.	Description	Permit No.	Effective Date	Expiration Date	Project Type <sup>1</sup>
All	Facility	1030117-002-AV	11/16/2000	10/22/2005	Initial
-001	1100 TPD (max) Municipal Waste Combustor & Auxiliary Burners - Unit 1	1030117-003-AC	12/21/2000	12/21/2005	Construction (mod.)
-002	1100 TPD (max) Municipal Waste Combustor & Auxiliary Burners - Unit 2	1030117-003-AC	12/21/2000	12/21/2005	Construction (mod.)
-003	1100 TPD (max) Municipal Waste Combustor & Auxiliary Burners - Unit 3	1030117-003-AC	12/21/2000	12/21/2005	Construction (mod.)
All	Facility	1030117-004-AV	09/17/2001	10/22/2005	Admin. Correction
All	Facility	1030117-005-AV	Pending <sup>2</sup>	10/22/2005	Revision

<sup>1</sup> Project Type (select one): Title V: Initial, Revision, Renewal, or Admin. Correction; Construction (new or mod.); or, Extension (AC only).

<sup>2</sup> Change to an actual date, which is day 55 from the date of posting the PROPOSED Permit for EPA review (see confirmation e-mail from Tallahassee) or the date that EPA confirms resolution of any objections.

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

Pinellas County Utilities Administration  
Pinellas County Resource Recovery Facility

**PROPOSED Permit No.:** 1030117-005-AV  
**Facility ID No.:** 1030117

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

E. U. ID No.	Brief Description	Pollutant Name	Fuel(s)	Hours/Year	Allowable Emissions			Equivalent Emissions		Regulatory Citation(s)	See Permit Condition(s)
					Standard(s)	lbs./hour	TPY	lbs./hour	TPY		
-001	UNIT 1 - Municipal Solid Waste (MSW) Combustor (275,000 lbs/hr - steam) (1100 TPD - MSW) (458 MMBtu/hour-MSW)	VE	MSW	8760	10%			N/A	N/A	40 CFR 60.33b(a)(1)(iii)	B.19.
		VE - Fugitive Ash		8760	5%			N/A	N/A	40 CFR 60.36b	B.31.
		PM <sup>1</sup>	MSW	8760	27 mg/dscm			14.4	63.1	40 CFR 60.33b(a)(1)(i)	B.18.
		PM <sub>10</sub> <sup>1</sup>	MSW	8760	27 mg/dscm			14.4	63.1	40 CFR 60.33b(a)(1)(i)	B.18.
		CO <sup>1</sup>	MSW	8760	100 ppm <sub>dv</sub>			61.0	267	40 CFR 60.34b(a)	B.30.
		NO <sub>x</sub> <sup>1</sup>	MSW	8760	205 ppm <sub>dv</sub>			205	899	40 CFR 60.33b(d)	B.29.
		SO <sub>2</sub> <sup>1,2</sup>	MSW	8760	29 ppm <sub>dv</sub> or			26.8	117	40 CFR 60.33b(b)(3)(i)	B.26.
					75% reduction nte 122 ppm <sub>dv</sub>			170	745	40 CFR 60.33b(b)(3)(i)	B.26.
		HCl <sup>1,2</sup>	MSW	8760	29 ppm <sub>dv</sub> or			23.0	101	40 CFR 60.33b(b)(3)(ii)	B.27.
					95% reduction nte 100 ppm <sub>dv</sub>			79.8	350	40 CFR 60.33b(b)(3)(ii)	B.27.
		dioxin/furan <sup>1</sup>	MSW	8760	30 ng/dscm (total mass)			1.60E-05	6.90E-05	40 CFR 60.33b(c)(1)(ii)	B.28.
		Cd <sup>1</sup>	MSW	8760	0.040 mg/dscm			0.0210	0.0920	40 CFR 60.33b(a)(2)(i)	B.20.
		Hg <sup>1,2</sup>	MSW	8760	0.070 mg/dscm or			0.0367	0.161	Rule 62-296.416(3)(a)1., F.A.C.	B.21.
85% reduction nte 0.10 mg/dscm						0.0524	0.230	40 CFR 60.33b(a)(3)	B.21.		
Pb <sup>1</sup>	MSW	8760	0.44 mg/dscm			0.230	1.01	40 CFR 60.33b(a)(4)	B.25.		
-002	UNIT 2 - Municipal Solid Waste (MSW) Combustor (275,000 lbs/hr - steam) (1100 TPD - MSW) (458 MMBtu/hour-MSW)	VE	MSW	8760	10%			N/A	N/A	40 CFR 60.33b(a)(1)(iii)	B.19.
		VE - Fugitive Ash		8760	5%			N/A	N/A	40 CFR 60.36b	B.31.
		PM <sup>1</sup>	MSW	8760	27 mg/dscm			14.4	63.1	40 CFR 60.33b(a)(1)(i)	B.18.
		PM <sub>10</sub> <sup>1</sup>	MSW	8760	27 mg/dscm			14.4	63.1	40 CFR 60.33b(a)(1)(i)	B.18.
		CO <sup>1</sup>	MSW	8760	100 ppm <sub>dv</sub>			61.0	267	40 CFR 60.34b(a)	B.30.
		NO <sub>x</sub> <sup>1</sup>	MSW	8760	205 ppm <sub>dv</sub>			205	899	40 CFR 60.33b(d)	B.29.
		SO <sub>2</sub> <sup>1,2</sup>	MSW	8760	29 ppm <sub>dv</sub> or			40.4	177	40 CFR 60.33b(b)(3)(i)	B.26.
					75% reduction nte 122 ppm <sub>dv</sub>			170	745	40 CFR 60.33b(b)(3)(i)	B.26.
		HCl <sup>1,2</sup>	MSW	8760	29 ppm <sub>dv</sub> or			23.0	101	40 CFR 60.33b(b)(3)(ii)	B.27.
					95% reduction nte 100 ppm <sub>dv</sub>			79.8	350	40 CFR 60.33b(b)(3)(ii)	B.27.
		dioxin/furan <sup>1</sup>	MSW	8760	30 ng/dscm (total mass)			1.60E-05	6.90E-05	40 CFR 60.33b(c)(1)(ii)	B.28.
		Cd <sup>1</sup>	MSW	8760	0.040 mg/dscm			0.0210	0.0920	40 CFR 60.33b(a)(2)(i)	B.20.
		Hg <sup>1,2</sup>	MSW	8760	0.070 mg/dscm or			0.0367	0.161	Rule 62-296.416(3)(a)1., F.A.C.	B.21.
85% reduction nte 0.10 mg/dscm						0.0524	0.230	40 CFR 60.33b(a)(3)	B.21.		
Pb <sup>1</sup>	MSW	8760	0.44 mg/dscm			0.230	1.01	40 CFR 60.33b(a)(4)	B.25.		

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

Pinellas County Utilities Administration  
Pinellas County Resource Recovery Facility

**PROPOSED Permit No.: 1030117-005-AV**  
**Facility ID No.: 1030117**

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

E. U. ID No	Brief Description	Pollutant Name	Fuel(s)	Hours/Year	Allowable Emissions			Equivalent Emissions*		Regulatory Citation(s)	See Permit Condition(s)
					Standard(s)	lbs./hour	TPY	lbs./hour	TPY		
-003	UNIT 3 - Municipal Solid Waste (MSW) Combustor (275,000 lbs/hr - steam) (1100 TPD - MSW) (458 MMBtu/hour-MSW)	VE	MSW	8760	10%			N/A	N/A	40 CFR 60.33b(a)(1)(iii)	B.19.
		VE - Fugitive Ash		8760	5%			N/A	N/A	40 CFR 60.36b	B.31.
		PM <sup>1</sup>	MSW	8760	27 mg/dscm			14.4	63.1	40 CFR 60.33b(a)(1)(i)	B.18.
		PM <sub>10</sub> <sup>1</sup>	MSW	8760	27 mg/dscm			14.4	63.1	40 CFR 60.33b(a)(1)(i)	B.18.
		CO <sup>1</sup>	MSW	8760	100 ppm <sub>v</sub>			61.0	267	40 CFR 60.34b(a)	B.30.
		NO <sub>x</sub> <sup>1</sup>	MSW	8760	205 ppm <sub>v</sub>			205	899	40 CFR 60.33b(d)	B.29.
		SO <sub>2</sub> <sup>1,2</sup>	MSW	8760	29 ppm <sub>v</sub> or			40.4	177	40 CFR 60.33b(b)(3)(i)	B.26.
					75% reduction nte 122 ppm <sub>v</sub>			170	745	40 CFR 60.33b(b)(3)(i)	B.26.
		HCl <sup>1,2</sup>	MSW	8760	29 ppm <sub>v</sub> or			23.0	101	40 CFR 60.33b(b)(3)(ii)	B.27.
					95% reduction nte 100 ppm <sub>v</sub>			79.8	350	40 CFR 60.33b(b)(3)(ii)	B.27.
		dioxin/furan <sup>1</sup>	MSW	8760	30 ng/dscm (total mass)			1.60E-05	6.90E-05	40 CFR 60.33b(c)(1)(ii)	B.28.
		Cd <sup>1</sup>	MSW	8760	0.040 mg/dscm			0.0210	0.0920	40 CFR 60.33b(a)(2)(i)	B.20.
		Hg <sup>1,2</sup>	MSW	8760	0.070 mg/dscm or			0.0367	0.161	Rule 62-296.416(3)(a)1., F.A.C.	B.21.
					85% reduction nte 0.10 mg/dscm			0.0524	0.230	40 CFR 60.33b(a)(3)	B.21.
Pb <sup>1</sup>	MSW	8760	0.44 mg/dscm			0.230	1.01	40 CFR 60.33b(a)(4)	B.25.		
Be	MSW	8760			9.0E-05		3.94E-04	40 CFR 61.32(a) and PSD-FL-098(A)	B.33.		
Fl	MSW	8760			8.31		36.4	PSD-FL-098(A)	B.34.		
-004	Hydrated Lime Storage Silo	VE		8760	shall not exceed 20%			N/A	N/A	Rule 62-296.320(4)(b)1., F.A.C.	C.5.
		PM		8760	0.005 gr/dscf			0.043	0.19	Rule 62-297.620(4), F.A.C.; and, Revised Title V application pages received September 15, 1999.	C.4.
-005	Metal Recovery System (MRS)	VE		8760	shall not exceed 20%			N/A	N/A	Rule 62-296.320(4)(b)1., F.A.C.	C.5.
		PM		8760	0.0102 gr/dscf			3.50	15.3	Applicant request; and, PA 78-11(B,C) & PA 83-18(B,C)	C.4.
-006	Activated Carbon Storage Silo	VE		8760	shall not exceed 20%			N/A	N/A	Rule 62-296.320(4)(b)1., F.A.C.	C.5.
		PM		8760	0.005 gr/dscf			0.0514	0.225	Rule 62-297.620(4), F.A.C., and applicant request	C.4.
-007	Lime Storage Silo	VE		8760	shall not exceed 20%			N/A	N/A	Rule 62-296.320(4)(b)1., F.A.C.	C.5.
		PM		8760	0.005 gr/dscf			0.0514	0.225	Rule 62-297.620(4), F.A.C., and applicant request	C.4.
-008	Ash Conditioning Building (ACB)	VE		8760	shall not exceed 20%			N/A	N/A	Rule 62-296.320(4)(b)1., F.A.C.	C.5.
		PM		8760	0.03 gr/dscf			1.29	5.63	PA 78-11(C) & PA 83-18(C)	C.4.

**Notes:**

\* The "Equivalent Emissions" listed are for informational purposes.

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

2. Whichever is least stringent.

**Table 2-1, Summary of Compliance Requirements**

Pinellas County Utilities Administration  
Pinellas County Resource Recovery Facility

**PROPOSED Permit No.:** 1030117-005-AV  
**Facility ID No.:** 1030117


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

E. U. ID No.	Brief Description	Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time Frequency	Frequency Base Date	Min. Compliance Test Duration	CMS <sup>1</sup>	See Permit Condition(s)	
-001	Municipal Solid Waste (MSW) Combustors (275,000 lbs/hr - steam) (1100 TPD - MSW) (458 MMBtu/hour - MSW)	VE	MSW	EPA Method 9	Annually		30 minutes	Yes	B.46.	
-002		VE- Fugitive Ash		EPA Method 22	Annually		1 hour	No	B.53.	
-003		PM								
		PM <sub>10</sub>	MSW	EPA Method 5	Annually		1 hour	No	B.46.	
		CO	MSW	EPA Method 10, 10A, 10B	Daily		1 hour	Yes	B.17.	
		NO <sub>x</sub>	MSW	EPA Method 19	Daily		1 hour	Yes	B.52.	
		SO <sub>2</sub>	MSW	EPA Method 19	Daily		1 hour	Yes	B.49.	
		HCl	MSW	EPA Method 26, 26A	Annually		1 hour	No	B.50.	
		dioxin/furan	MSW	EPA Method 23	Annually <sup>3</sup>		N/A	No	B.51.	
		Cd	MSW	EPA Method 29	Annually		1 hour	No	B.47.	
		Hg	MSW	EPA Method 29	Annually		1 hour	No	B.47., B.48.	
		Pb	MSW	EPA Method 29	Annually		1 hour	No	B.47.	
		Be <sup>2</sup>	MSW	EPA Method 29 or 104	Annually		N/A	No	B.55.	
	Fl <sup>2</sup>	MSW	EPA Method 13B	Every 5 years		1 hour	No	B.56.		
-004	Hydrated Lime Storage Silo	VE		EPA Method 9	Annually <sup>5</sup>	15-Feb	30 minutes	No	C.11.	
		PM		EPA Method 5	As required <sup>4</sup>		1 hour	No	C.12.	
-005	Metal Recovery System (MRS)	VE		EPA Method 9	Annually		30 minutes	No	C.11.	
		PM		EPA Method 5	Every 5 years		1 hour	No	C.12.	
-006	Activated Carbon Storage Silo	VE		EPA Method 9	Annually		30 minutes	No	C.11.	
		PM		EPA Method 5	As required <sup>4</sup>		1 hour	No	C.12.	
-007	Lime Storage Silo	VE		EPA Method 9	Annually		30 minutes	No	C.11.	
		PM		EPA Method 5	As required <sup>4</sup>		1 hour	No	C.12.	
-008	Ash Conditioning Building (ACB)	VE		EPA Method 9	Annually		30 minutes	No	C.11.	
		PM		EPA Method 5	Every 5 years		1 hour	No	C.12.	
-009	MSW Landfill	NMOC		EPA Method 18 or 25C	Every 5 years <sup>6</sup>			No	D.10.	

**Notes:**

1. CMS [=] continuous monitoring system used for monitoring requirement in lieu of fuel sampling and analysis if marked 'yes'.  
(Acceptable as long as CMS is maintained and calibrated as required.)
2. Applies only to Unit 3.
3. Test at least one unit annually, subject to 40 CFR 60.58b(g) requirements.
4. Particulate matter tests are not required unless visible emissions tests indicate standards may have been violated.
5. Within 60 days prior to or on February 15 or within 12 months of previous test.
6. If Tier II testing is used to determine site-specific NMOC emission rate.

## **Florida's PROPOSED Permit Electronic Notification Cover Memorandum**

**TO:** Gracy Danois, U.S. EPA Region 4  
**CC:** Jeaneanne Gettle, U.S. EPA Region 4  
**THRU:** Scott Sheplak, P.E., Bureau of Air Regulation  
**FROM:** Edward J. Svec, Permit Engineer   
**DATE:** January 27, 2004  
**RE:** U.S. EPA Region 4 PROPOSED Title V Operation Permit Revision Review

The following PROPOSED Title V operation permit(s) revision and associated documents have been posted on the DEP World Wide Web Internet site for your review. The PROPOSED permit is to authorize 15 hours of excess carbon monoxide emissions authorized by the recent change to the NSPS; incorporate the provisions of a capital replacement project authorized by permit 1030117-003-AC; incorporate Administrative Permit Correction 1030117-004-AV; and, make minor changes to recordkeeping requirements and insignificant activities at the Pinellas County Resource Recovery Facility. Please provide any comments via Internet E-mail, within forty five (45) days of receiving this notice, to Scott Sheplak, at "SHEPLAK\_S@dep.state.fl.us".

<u>Applicant Name</u>	<u>County</u>	<u>Method of Transmittal</u>	<u>Electronic File Name(s)</u>
Pinellas County Utilities Administration Pinellas County Resource Recovery Facility	Pinellas	INTERNET	1030117Rp.zip

This zipped file contains the following electronic files:

sob.doc  
1030117Rp.doc  
10301171.xls  
10301172.xls  
1030117g.doc  
1030117u.doc  
1030117h.doc

**Friday, Barbara**

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**To:** Kissel, Gerald; phesslering@co.pinellas.f.us

**Cc:** Svec, Ed

**Subject:** PROPOSED Title V Permit Revision - Pinellas County RRF #1030117-005-AV

Find attached the subject PROPOSED Permit Revision for your information and files.

If I may be of further assistance, please feel free to contact me.

Barbara J. Friday  
Planner II  
Title V Section  
Bureau of Air Regulation  
(850)921-9524  
[Barbara.Friday@dep.state.fl.us](mailto:Barbara.Friday@dep.state.fl.us)



Florida Department of  
Environmental Protection

Memorandum

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TO: Trina Vielhauer  
THRU: Scott Sheplak *SS*  
FROM: Edward Svec *ES*  
DATE: January 22, 2004  
SUBJECT: Pinellas County RRF  
Title V Permit Revision  
1030117-005-AV

Attached is the PROPOSED Title V Permit Revision 1030117-005-AV for the Pinellas County Resource Recovery Facility for your review and approval. Comments on the DRAFT Permit Revision were received from Pinellas County Department of Solid Waste and a minor changes were made to the permit, the unregulated emissions units and the insignificant emissions units.

I recommend your approval of this PROPOSED permit.

Attachments

/es