

Department of Environmental Protection

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

David B. Struhs Secretary

P.E. Certification Statement

Permittee:

Ogden Martin Systems of Lake, Inc.

DRAFT Permit No.: 0690046-001-AV

Facility ID No.: 0690046

Project type: Initial Title V Air Operation Permit

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

Permit conditions A.6. and B.7. requiring the design furnace mean temperature at the fully mixed zone of the combustor to be no less than 1800°F with a combustion gas residence time of at least one second, assure complete destruction of pathogens in the biomedical waste burned in Unit (in Region) conditions A.73. and B.111. requiring the complete combustion of waste, further assured burned in Unit 1.

Scott M. Sheplak, P.E

Registration Number: 48866

Permitting Authority:

Department of Environmental Protection Bureau of Air Regulation 111 South Magnolia Drive, Suite 4 Tallahassee, Florida 32301

date

Tallahassee, Florida 32301 Telephone: 850/921-9532

Fax: 850/922-6979

"More Protection, Less Process"

File



Department of Environmental Protection

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

David B. Struhs Secretary

May 10, 2000

CERTIFIED MAIL - Return Receipt Requested

Gary K. Crane, Ph.D. Executive Vice President Ogden Martin Systems of Lake, Inc. 3830 Rogers Industrial Park Road Okahumpka, FL 34762

Re: DRAFT Title V Permit No.: 0690046-001-AV Ogden Martin Systems of Lake, Inc.

Dear Dr. Crane:

One copy of the DRAFT Title V Air Operation Pennit for the Ogden Martin Systems of Lake, Inc., located at 3830 Rogers Industrial Park Road, Okahumpka, Lake County, is enclosed. The permitting authority's "INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" is also included.

The Department will publish the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V A.R OPERATION PERMIT" as soon as possible. This issue is important in order for you to receive your fitle V FINAL Permit by October 25, 2000.

Please submit any written comments you wish to have considered concerning the permitting authority's proposed action to Scott M. Sheplak, P.E., at the above letterhead address. If you have any other questions, please contact Bruce Mitchell at 850/921-9506.

Sincerely,

C. H. Famcy, P.E

Chief

Bureau of Air Regulation

CHF/rbm

Enclosures

In the Matter of an Application for Permit by:

Ogden Martin Systems of Lake, Inc. 3830 Rogers Industrial Park Road Okahumpka, Florida 34762

DRAFT Permit No.: 0690046-001-AV Ogden Martin Systems of Lake, Inc. Lake County

INTENT TO ISSUE TITLE V AIR OPERATION PERMIT

The Department of Environmental Protection (permitting authority) gives notice of its intent to issue a Title V air operation permit (copy of DRAFT Permit enclosed) for the Title V source detailed in the application specified above, for the reasons stated below.

The applicant, Ogden Martin Systems of Lake, Inc., applied on June 14, 1996, to the permitting authority for a Title V air operation permit for the Ogden Martin Systems of Lake, Inc., located at 3830 Rogers Industrial Park Road, Okahumpka, Lake County.

The permitting authority has permitting jurisdiction 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. This source is not exempt from Title V permitting procedures. The permitting authority has determined that a Title V air operation permit is required to commence or continue operations at the described facility.

The permitting authority intends to issue this Title V air operation permit based on the belief that reasonable assurances have been provided to indicate that operation of the source will not adversely impact air quality, and the source will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-213, 62-256, 62-257, 62-281, 62-296, and 62-297, F.A.C.

Pursuant to Sections 403.815 and 403.087, F.S., and Rules 62-110.106 and 62-210.350(3), F.A.C., you (the applicant) are required to publish at your own expense the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT." However, the Department will publish the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" as soon as possible. This issue is important in order for you to receive your Title V FINAL Permit by October 25, 2000.

The permitting authority will issue the Title V PROPOSED Permit, and subsequent Title V FINAL Permit, in accordance with the conditions of the attached Title V DRAFT Permit unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The permitting authority will accept written comments concerning the proposed permit issuance action for a period of 30 (thirty) days from the date of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT." Written comments should be provided to the permitting authority office. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Permit, the permitting authority shall issue a Revised DRAFT Permit and require, if applicable, another Public Notice.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: 850/488-9730; Fax: 850/487-4938). Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), F.S., however,

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any person who asked the permitting authority for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the permitting authority's action is based must contain the following information:

- (a) The name and address of each agency affected and each agency's file or identification number, if known:
- (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination;
- (c) A statement of how and when each petitioner received notice of the agency action or proposed action:
- (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate:
- (e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief;
- (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and,
- (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the permitting authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

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

Mediation will not be available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply to the Department of Environmental Protection for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542, F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

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The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information:

- (a) The name, address, and telephone number of the petitioner;
- (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any;
- (c) Each rule or portion of a rule from which a variance or waiver is requested;
- (d) The citation to the statute underlying (implemented by) the rule identified in (c) above;
- (e) The type of action requested;
- (f) The specific facts that would justify a variance or waiver for the petitioner;
- (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and,
- (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2), F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the United States Environmental Protection Agency and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

Finally, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 (sixty) days of the expiration of the Administrator's 45 (forty-five) day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to issuance of any permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30 (thirty) day public comment period provided in this notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at: U.S. EPA, 401 M Street, S.W., Washington, D.C. 20460.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

C. H. Fancy, P.E.

Chief

Bureau of Air Regulation

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CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this INTENT TO ISSUE TITLE V AIR OPERATION PERMIT (including the DRAFT permit) and all copies were sent by certified mail before the close of business on 05-12-00 to the person(s) listed:

Gary Crane, OMSL, Executive V.P., Responsible Official

In addition, the undersigned duly designated deputy agency clerk hereby certifies that copies of this INTENT TO ISSUE TITLE V AIR OPERATION PERMIT (including the DRAFT permit) were sent by U.S. mail on the same date to the person(s) listed:

Len Kozlov, CD Welton Cadwell, Chairman, Lake County BCC Tom John, P.E., TJE Jason Gorrie, OMSP U.S. EPA, Region 4 (INTERNET E-mail Memorandum)

Clerk Stamp

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

__ <u>05-12-00</u> (Date)

PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION Title V DRAFT Permit No.: 0690046-001-AV Ogden Martin Systems of Lake, Inc. Lake County

The Department of Environmental Protection (permitting authority) gives notice of its intent to issue a Title V air operation permit to Ogden Martin Systems of Lake for the resource recovery facility located at 3830 Rogers Industrial Park Road, Okahumpka, Lake County. The applicant's name and address are: Ogden Martin Systems of Lake, Inc., 3830 Rogers Industrial Park Road, Okahumpka, FL 34762.

The permitting authority will issue the Title V PROPOSED Permit, and subsequent Title V FINAL Permit, in accordance with the conditions of the Title V DRAFT Permit unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The permitting authority will accept written comments concerning the proposed Title V DRAFT Permit issuance action for a period of 30 (thirty) days from the date of publication of this Notice. Written comments should be provided to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Permit, the permitting authority shall issue a Revised DRAFT Permit and require, if applicable, another Public Notice.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57 of the Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: 850/488-9730; Fax: 850/487-4938). Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of the notice of intent, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the permitting authority for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the applicable time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code (F.A.C.).

A petition that disputes the material facts on which the permitting authority's action is based must contain the following information:

- (a) The name and address of each agency affected and each agency's file or identification number, if known:
- (b) The name, address and telephone number of the petitioner; name address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how petitioner's substantial rights will be affected by the agency determination;
- (c) A statement of how and when the petitioner received notice of the agency action or proposed action;

- (d) A statement of all disputed issues of material fact. If there are none, the petition must so state;
- (e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle petitioner to relief;
- (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and,
- (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the permitting authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

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

Mediation is not available for this proceeding.

In addition to the above, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 (sixty) days of the expiration of the Administrator's 45 (forty-five) day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to issuance of any permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30 (thirty) day public comment period provided in this notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at: U.S. EPA, 401 M Street, S.W., Washington, D.C. 20460.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Permitting Authority:

Department of Environmental Protection Bureau of Air Regulation 111 South Magnolia Drive, Suite 4 Tallahassee, Florida 32301

Telephone: 850/488-0114

Fax: 850/922-6979

Affected District/Local Program:

Department of Environmental Protection Central District

3319 Maguire Boulevard, Suite 232 Orlando, Florida 32803-3767

Telephone: 407/894-7555 Fax: 407/897-5963

uplete project file includes the DRAFT Permit, the application, and t

The complete project file includes the DRAFT Permit, the application, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact Scott M. Sheplak, P.E., at the above address, or call 850/921-9532, for additional information.

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY	
 Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 1. Article Addressed to: Mr. Gary Crane, Executive Vice President Ogden Martin Systems of Lake, Inc. 3830 Rogers Industrial Park Rd. Okahumpka, FL 34762 	A. Received by (Please Print Clearly) B. Date of Delivery 7.2777 C. Signature Agent Addressee D. Is delivery address different from item 1?	
Article Number (Copy from service label)	3. Service Type Certified Mail	
2 210 660 438		
PS Form 3811, July 1999 Domestic Ret	rurn Receipt 102595-99-M-1789	

Z 210 660 438

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Mr. Gary Crane, Executive Vice President Ogden Martin Systems of Lake, Inc. 3830 Rogers Industrial Park Rd. Okahumpka, FL 34762

	Certified Fee	
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ın:	Restricted Delivery Fee	
April 1995	Return Receipt Showing to Whom & Date Delivered	
٦,	Return Receipt Showing to Whom, 'Date, & Addressee's Address	
80	TOTAL Postage & Fees	\$
PS Form 3800	Postmark or Date $05-12$	-00 Sok

STATEMENT OF BASIS

Ogden Martin Systems of Lake, Inc. Facility ID No.: 0690046 Lake County

Initial Title V Air Operation Permit **DRAFT Permit No.:** 0690046-001-AV

This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213, and 62-214. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

This facility consists of two mass-burn municipal solid waste and wood chip combustors (Units 1 & 2; and, includes boxed biomedical waste in only Unit 1), with auxiliary burners, lime storage and processing facilities, an activated carbon storage facility, ash storage and processing facilities, a metals recovery system, cooling towers, and ancillary support equipment. Solid waste is brought to the facility by truck, unloaded, and pushed into the bunker in the tipping hall. An overhead crane is used to mix the waste, separate unacceptable items, and load acceptable waste material into the two process train feed hoppers. Each processing train consists of a feed hopper, a mass-fed waterwall furnace with a horizontal grate system, a dry scrubber/baghouse filter system, an induced draft fan, a stack with individual flues, and various ancillary equipment. The flue gas exiting each furnace passes through a dry scrubber system, where slaked lime is injected for acid gas neutralization and activated carbon is injected for mercury and dioxin control. Particulate matter, consisting of fly ash, activated carbon, reacted salts and unreacted lime, is then removed in the baghouse filter system. A Selective Non-Catalytic Reduction (SNCR) system is used for the removal of nitrogen oxides. Bottom ash from the furnaces, as well as the fly ash from the dry scrubbers and baghouses, are processed in an ash handling system and transported off-site to municipal solid waste ash monofills via truck or rail. Ferrous metals are continuously recovered from the ash residue. Steam output from the two processing trains drives a turbine-generator for the generation of electricity. The facility is rated for a maximum of 15.7 megawatts (MW) of energy production. The auxiliary burners may fire distillate fuel oil or gas (e.g., natural and propane).

{Permitting note: On December 10, 1990, an amendment was issued for construction/PSD permits Nos. AC35-115379/PSD-FL-113, which recognized that solid waste included biohazardous waste; and, the amendment allowed the transporting of only "boxed" biohazardous waste from the tipping floor to the combustor feed hopper. In 1996, the term biohazardous waste gave way to "special waste" under the term "solid waste" [defined at Section 403.703(13), F.S.]. Special waste by definition [Section 403.703(32), F.S.] includes "biological waste". Biological waste by definition [Section 403.703(39), F.S.] includes "biomedical waste".

Pursuant to Section 403.703(32), F.S., "special wastes" is defined as:

"Solid wastes that can require special handling and management, including, but not limited to, white goods, waste tires, used oil, lead-acid batteries, construction and demolition debris, ash residue, yard trash, and biological wastes."

Pursuant to Section 403.703(39), F.S., "biological waste" is defined as:

"Solid waste that causes or has the capability of causing disease or infection and includes, but is not limited to, biomedical waste, diseased or dead animals, and other wastes capable of transmitting pathogens to humans or animals. The term does not include human remains that are disposed of by persons licensed under Chapter 470."

Pursuant to Section 403.703(37), F.S., "biomedical waste" is defined as:

"Any solid waste or liquid waste which may present a threat of infection to humans. The term includes, but is not limited to, nonliquid human tissue and body parts; laboratory and veterinary waste which contain human-disease-causing agents; discarded disposable sharps; human blood, and human blood products and body fluids; and other materials which in the opinion of the Department of Health and Rehabilitative Services represent a significant risk of infection to persons outside the generating facility. The term does not include human remains that are disposed of by persons licensed under Chapter 470."}

Statement of Basis (cont.)
Ogden Martin Systems of Lake, Inc.

Lake County

Facility ID No.: 0690046 Permit No.: 0690046-001-AV

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Emissions unit No. -001 is a municipal solid waste (MSW) and wood combustor designated as "Unit 1". The combustor consists of a mass burn waterwall boiler with a design rated capacity of 250 tons MSW and wood per day, 104 MMBtu heat input per hour, and 60,200 pounds steam output per hour, with the MSW having a heating value of 5,000 Btu per pound. The maximum solid waste throughput is 288 tons MSW and wood per day, 120 MMBtu per hour heat input (3-hr average), and 69,000 pounds of steam output per hour (3-hour average). The auxiliary burners associated with the combustor are permitted to fire distillate fuel oil or gas (e.g., natural and propane). The auxiliary burners are used to fire the MSW and wood during start-up, shutdown, and at other times when necessary and consistent with good combustion practices. The maximum permitted steam production rate is 69,000 lbs/hr when firing MSW and wood. Only Unit 1 is allowed to dispose of "boxed biomedical waste".

Unit 1 began commercial operation on August 22, 1990. Particulate matter emissions are controlled by a fabric filter baghouse system. Acid gas emissions are controlled by dry scrubbing followed by a fabric filter baghouse system. Carbon monoxide (CO) emissions are currently controlled by good combustion practices. Nitrogen oxides (NO_x) are controlled by a Selective Non-Catalytic Reduction (SNCR) system. Mercury (Hg) and certain organic (dioxin) emissions are to be controlled by activated carbon injection (ACI) followed by a fabric filter baghouse system. Units 1 and 2 discharge their emissions independently through their own stack, but are co-located within a single support structure/stack. (Unit 1's stack height: 199 feet; exit diameter: 4.3 feet; exit temperature: 270 °F; actual volumetric flow rate: 59,400 acfm; and, dry standard volumetric flow rate: 43,200 dscfm.).

Unit 1 is regulated under 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-113/AC35-115379; and, one federally enforceable amendment); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT); Rule 62-296.401(4), Biological Waste Incineration Facilities; and, Rule 62-296.416, F.A.C., Waste-to-Energy Facilities.

On and after December 19, 2000, Unit 1 is 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-113/AC35-115379; and, one federally enforceable amendment); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT); Rule 62-296.401(4), F.A.C., Biological Waste Incineration Facilities; and, Rule 62-296.416, F.A.C., Waste-to-Energy Facilities. Also, please note that conditions in 40 CFR 60, Subpart Cb, reference requirements that are contained in 40 CFR 60, Subpart Eb.

Because Unit 1 will be co-firing less than 10% medical waste, then the emissions unit is not subject to the Emissions Guidelines and Compliance Dates for Hospital/Medical/Infectious Waste Incinerators pursuant to 40 CFR 60, Subpart Ce. Since Unit 1 has failed to meet the mercury standard during a recent performance test, a periodic monitoring requirement has been imposed, which will require the permittee to conduct quarterly performance tests using EPA Reference Method 29.

For Unit 1 and periodic monitoring, the permittee shall install, calibrate, maintain, and operate (1) CEMS devices for opacity, oxygen, carbon monoxide, and sulfur dioxide; and, (2) CMS devices to continuously monitor and record steam production, the furnace exit gas temperature (FEGT), the secondary (or last) combustion chamber exit temperature, and the flue gas temperature at the exit of the acid gas control equipment.

Statement of Basis (cont.)
Ogden Martin Systems of Lake, Inc.
Lake County

Facility ID No.: 0690046 Permit No.: 0690046-001-AV

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Emissions unit No. -002 is a municipal solid waste (MSW) and wood combustor designated as "Unit 2". The combustor consists of a mass burn waterwall boiler with a design rated capacity of 250 tons MSW and wood per day, 104 MMBtu heat input per hour, and 60,200 pounds steam output per hour with the MSW having a heating value of 5,000 Btu per pound. The maximum solid waste throughput is 288 tons MSW and wood per day, 120 MMBtu per hour heat input, and 69,000 pounds of steam output per hour (3-hour average). The auxiliary burners associated with the combustor are permitted to fire distillate fuel oil or gas (e.g., natural and propane). The auxiliary burners are used to fire the MSW during start-up, shutdown, and at other times when necessary and consistent with good combustion practices. The maximum permitted steam production rate is 69,000 lbs/hr when firing MSW and wood. Unit 2 is not allowed to process "boxed biomedical waste" and will require a construction permit to install/construct the physical plant to dispose of biomedical waste.

Unit 2 began commercial operation August 22, 1990. Particulate matter emissions are controlled by a fabric filter baghouse system. Acid gas emissions are controlled by dry scrubbing followed by a fabric filter baghouse system. Carbon monoxide (CO) emissions are currently controlled by good combustion practices. Nitrogen oxides (NO_x) are controlled by a Selective Non-Catalytic Reduction (SNCR) system. Mercury (Hg) and certain organic (dioxin) emissions are to be controlled by activated carbon injection (ACI) followed by a fabric filter baghouse system. Units 1 and 2 discharge their emissions independently through their own stack, but are co-located within a single support structure/stack. (Unit 2's stack height: 199 feet; exit diameter: 4.3 feet; exit temperature: 270 °F; actual volumetric flow rate: 59,400 acfm; and, dry standard volumetric flow rate: 43,200 dscfm.

Unit 2 is regulated under 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-113/AC35-115379; Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT); and, Rule 62-296.416, F.A.C., Waste-to-Energy Facilities.

On and after December 19, 2000, Unit 2 is 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-113/AC35-115379); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT); and, Rule 62-296.416, F.A.C., Waste-to-Energy Facilities. Also, please note that conditions in 40 CFR 60, Subpart Cb, reference requirements that are contained in 40 CFR 60, Subpart Eb.

For Unit 2 and periodic monitoring, the permittee shall install, calibrate, maintain, and operate (1) CEMS devices for opacity, oxygen, carbon monoxide, and sulfur dioxide; and, (2) CMS devices to continuously monitor and record steam production, the furnace exit gas temperature (FEGT), and the flue gas temperature at the exit of the acid gas control equipment.

Emissions unit -003 is an approximate 2,935 cubic foot silo for the storage of activated carbon. The silo is typically filled every 75 days. It is part of the activated carbon injection (ACI) system for control of mercury and dioxin/furan 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 Tech-Air baghouse system (Model No. SBR-25-6-230). The baghouse parameters are as follows: stack height = 53 feet; exit diameter = 0.8 feet; exit temperature = 77 °F, actual volumetric flow rate = 650 acfm. The initial startup date of the silo was June 14, 1995.

Emissions unit -003 is a minor emissions unit regulated under AC35-264176 (April 14, 1995); and, Rule 62-210.300, F.A.C., Permits Required.

Statement of Basis (cont.) Ogden Martin Systems of Lake, Inc. Lake County

Facility ID No.: 0690046 Permit No.: 0690046-001-AV

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The cooling towers are not subject to the 40 CFR 63, Subpart Q, because they are not operated with chromium-based water treatment chemicals.

Also included in this permit are miscellaneous 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).

Ogden Martin Systems of Lake, Inc. Facility ID No.: 0690046 Lake County

Initial Title V Air Operation Permit DRAFT Permit No.: 0690046-001-AV

Permitting Authority

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

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
Central District Office
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767
Telephone: 407/894-7555
Fax: 407/897-2966

Initial Title V Air Operation Permit

DRAFT Permit No.: 0690046-001-AV

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Department of Environmental Protection

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

David B. Struhs Secretary

Permittee:

Ogden Martin Systems of Lake, Inc. 3830 Rogers Industrial Road Okahumpka, FL 34762

DRAFT Permit No.: 0690046-001-AV

Facility ID No.: 0690046

SIC Nos.: 49; 4953

Project: Initial Title V Air Operation Permit

This permit is for the operation of the Ogden Martin Systems of Lake, Inc. located 3830 Rogers Industrial Road, Okahumpka, Lake County. UTM Coordinates: Zone 17; 413.12 km East; and, 3179.21 km North; Latitude: 28° 44' 22" North; and, Longitude: 81° 53' 23" West.

STATEMENT OF BASIS: This Title V air operation permit 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 perform the work or 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 I-1, List of Insignificant Emissions Units and/or Activities

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

Appendix TV-3, Title V Conditions (version dated 04/30/99)

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

Table 297.310-1, Calibration Schedule

Effective Date: day 55 from PROPOSED posting date
Renewal Application Due Date: 180 days prior to exp.

Expiration Date: 5 yrs from effective date

Howard L. Rhodes, Director, Division of Air Resources Management

HLR/sms/bm

Section I. Facility Information.

Subsection A. Facility Description.

This facility consists of two mass-burn municipal solid waste and wood chip combustors (Units 1 & 2; and, includes boxed biomedical waste in only Unit 1), with auxiliary burners, lime storage and processing facilities, an activated carbon storage facility, ash storage and processing facilities, a metals recovery system, cooling towers, and ancillary support equipment. Solid waste is brought to the facility by truck, unloaded, and pushed into the bunker in the tipping hall. An overhead crane is used to mix the waste, separate unacceptable items, and load acceptable waste material into the two process train feed hoppers. Each processing train consists of a feed hopper, a mass-fed waterwall furnace with a horizontal grate system, a dry scrubber/baghouse filter system, an induced draft fan, a stack with individual flues, and various ancillary equipment. The flue gas exiting each furnace passes through a dry scrubber system, where slaked lime is injected for acid gas neutralization and activated carbon is injected for mercury and dioxin control. Particulate matter, consisting of fly ash, activated carbon, reacted salts and unreacted lime, is then removed in the baghouse filter system. A Selective Non-Catalytic Reduction (SNCR) system is used for the removal of nitrogen oxides. Bottom ash from the furnaces, as well as the fly ash from the dry scrubbers and baghouses, are processed in an ash handling system and transported off-site to municipal solid waste ash monofills via truck or rail. Ferrous metals are continuously recovered from the ash residue. Steam output from the two processing trains drives a turbine-generator for the generation of electricity. The facility is rated for a maximum of 15.7 megawatts (MW) of energy production. The auxiliary burners may fire distillate fuel oil or gas (e.g., natural and propane).

{Permitting note: On December 10, 1990, an amendment was issued for construction/PSD permits Nos. AC35-115379/PSD-FL-113, which recognized that solid waste included biohazardous waste; and, the amendment allowed the transporting of only "boxed" biohazardous waste from the tipping floor to the combustor feed hopper. In 1996, the term biohazardous waste gave way to "special waste" under the term "solid waste" [defined at Section 403.703(13), F.S.]. Special waste by definition [Section 403.703(32), F.S.] includes "biological waste". Biological waste by definition [Section 403.703(39), F.S.] includes "biomedical waste".

Pursuant to Section 403.703(32), F.S., "special wastes" is defined as:

"Solid wastes that can require special handling and management, including, but not limited to, white goods, waste tires, used oil, lead-acid batteries, construction and demolition debris, ash residue, yard trash, and biological wastes."

Pursuant to Section 403.703(39), F.S., "biological waste" is defined as:

"Solid waste that causes or has the capability of causing disease or infection and includes, but is not limited to, biomedical waste, diseased or dead animals, and other wastes capable of transmitting pathogens to humans or animals. The term does not include human remains that are disposed of by persons licensed under Chapter 470."

Pursuant to Section 403.703(37), F.S., "biomedical waste" is defined as:

"Any solid waste or liquid waste which may present a threat of infection to humans. The term includes, but is not limited to, nonliquid human tissue and body parts; laboratory and veterinary waste which contain human-disease-causing agents; discarded disposable sharps; human blood, and human blood products and body fluids; and other materials which in the opinion of the Department of Health and Rehabilitative Services represent a significant risk of infection to persons outside the generating facility. The term does not include human remains that are disposed of by persons licensed under Chapter 470."}

Facility ID No.: 0690046

Also included in this permit are miscellaneous 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).

The use of 'Permitting Notes' throughout this permit are for informational purposes <u>only</u> and are not permit conditions.

Facility ID No.: 0690046

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

E.U. ID No.	Brief Description
-001	288 TPD (maximum) Municipal Solid Waste Combustor & Auxiliary Burners - Unit 1
-002	288 TPD (maximum) Municipal Solid Waste Combustor & Auxiliary Burners - Unit 2
-003	Activated Carbon Storage Silo

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

Subsection C. Relevant Documents.

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

These documents are provided to the permittee for informational purposes:

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers (version dated 2/5/97). Appendix H-1, Permit History/ID Number Transfers.

These documents are on file with the permitting authority:

Initial Title V permit application received June 14, 1996.

Additional information received from Tom John on June 24, 1996.

Application for Air Construction Permit received September 29, 1998 (0690046-002-AC/PSD-FL-113A).

Addendum to the initial Title V application received from William Crellin on October 25, 1999.

Notice of Withdrawal of Permit Application received April 20, 2000 (0690046-002-AC/PSD-FL-113A).

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. Appendix TV-3, Title V Conditions, is a part of this permit.

{Permitting note: Appendix TV-3, Title V Conditions is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided one copy when requested or otherwise appropriate. If desired, a copy of Appendix TV-3, Title V Conditions can be downloaded from the Division of Air Resources Management's Internet Web site located at the following address:

"http://www.dep.state.fl.us/air/permitting/TitleVperm.htm".}

2. <u>General Pollutant Emission Limiting Standards</u>. <u>Objectionable Odor Prohibited</u>. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.

[Rules 62-296.320(2) and 62-296.401(2)(b), F.A.C.; and, AC35-264176]

- 3. 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; 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]
- **4.** <u>Insignificant Emissions Units and/or Activities</u>. 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.]
- 5. <u>Unregulated Emissions Units and/or Activities</u>. Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit. **None were identified in the application**. [Rule 62-213.440(1), F.A.C.]
- 6. General Pollutant Emission Limiting Standards. Volatile Organic Compounds Emissions or Organic Solvents Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.

{Permitting Note: No vapor emission control devices or systems are deemed necessary nor ordered by the Department at this time.} [Rule 62-296.320(1)(a), F.A.C.]

7. 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.]

8. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

- a. All roads and parking areas are paved, and unpaved areas are landscaped with plants or vegetation.
- b. Application of water would be performed as required during any demolition, grading roads, construction, land clearing operations, or should unconfined particulate matter emissions occur.
- c. Potential emissions of particulate matter from the ash generated at the facility is controlled as detailed in the Lake County Resource Recovery Facility Ash Residue Management Plan.
- d. The loading operation shall be maintained and properly operated. [Rule 62-296.320(4)(c), F.A.C.; AC35-264176; and, applicant requested]
- 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. The permittee shall submit all compliance related notifications and reports required of this permit to the Department of Environmental Protection, Central District Office:

Department of Environmental Protection Central District Office 3319 Maguire Boulevard, Suite 232 Orlando, Florida 32803-3767 Telephone: 407/894-7555 Fax: 407/897-2966

11. Any reports, data, notifications, certifications, 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 & EPCRA Enforcement Branch
Air Enforcement Section
61 Forsyth Street
Atlanta, Georgia 30303
Telephone: 404/562-9155

Fax: 404/562-9163

12. <u>Statement of Compliance</u>. The permittee shall submit a statement of compliance with all terms and conditions of the permit. {See condition 51., APPENDIX TV-3, TITLE V CONDITIONS} [Rule 62-213.440(3), F.A.C.]

Facility ID No.: 0690046

Section III. Emissions Units and Conditions.

Subsection A. This section addresses the following emissions unit.

E.U. ID No.	Brief Description	
-001	288 TPD (maximum) Municipal Solid Waste Combustor & Auxiliary Burners - Unit 1	

Emissions unit No. -001 is a municipal solid waste (MSW) and wood chip combustor designated as "Unit 1". The combustor consists of a mass burn waterwall boiler with a design rated capacity of 250 tons MSW and wood chips per day, 104 MMBtu heat input per hour, and 60,200 pounds steam output per hour, with the MSW having a heating value of 5,000 Btu per pound. The maximum solid waste throughput is 288 tons MSW and wood chips per day, 120 MMBtu per hour heat input (3-hr average), and 69,000 pounds of steam output per hour (3-hour average). The auxiliary burners associated with the combustor are permitted to fire distillate fuel oil or gas (e.g., natural and propane). The auxiliary burners are used to fire the MSW and wood chips during start-up, shutdown, and at other times when necessary and consistent with good combustion practices. The maximum permitted steam production rate is 69,000 lbs/hr when firing MSW and wood chips. Only Unit 1 is allowed to dispose of "boxed biomedical waste".

Unit 1 began commercial operation on August 22, 1990. Particulate matter emissions are controlled by a fabric filter baghouse system. Acid gas emissions are controlled by dry scrubbing followed by a fabric filter baghouse system. Carbon monoxide (CO) emissions are currently controlled by good combustion practices. Nitrogen oxides (NO_x) are controlled by a Selective Non-Catalytic Reduction (SNCR) system. Mercury (Hg) and certain organic (dioxin) emissions are to be controlled by activated carbon injection (ACI) followed by a fabric filter baghouse system. Units 1 and 2 discharge their emissions independently through their own stack, but are co-located within a single support structure/stack. (Unit 1's stack height: 199 feet; exit diameter: 4.3 feet; exit temperature: 270 °F; actual volumetric flow rate: 59,400 acfm; and, dry standard volumetric flow rate: 43,200 dscfm.).

{Permitting notes. This emissions unit is regulated under 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-113/AC35-115379; and, one federally enforceable amendment); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT); Rule 62-296.401(4), Biological Waste Incineration Facilities; and, Rule 62-296.416, F.A.C., Waste-to-Energy Facilities.}

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

General

A.0. This Subsection A shall become null and void upon the date the permittee submits the performance test results that the facility is in final compliance with 40 CFR 60, Subpart Cb, and shall be replaced by the following Subsection B.

[Rule 62-4.070(3), F.A.C.]

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

DRAFT Permit No.: 0690046-001-AV

Facility ID No.: 0690046

A.1. The Standards of Performance for New Stationary Sources adopted by reference in Rule 62-204.800(7), F.A.C., shall be controlling over other standards in the air pollution rules of the Department, except that any emissions limiting standard contained in or determined pursuant to the air pollution rules of the Department, which is more stringent than one contained in a Standard of Performance, or which regulates emissions of pollutants or emissions units not regulated by an applicable Standard of Performance, shall apply.

A.2. <u>Definitions: Administrator</u>. For the purposes of Rule 62-204.800(7), F.A.C., the definitions contained in the various provisions of 40 CFR Part 60, adopted herein, shall apply, except that the term "Administrator", when used in 40 CFR Part 60, shall mean the Secretary or the Secretary's designee.

[40 CFR 60.2; and, Rule 62-204.800(7)(a), F.A.C.]

- **A.3.** 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]
- **A.4.** Unit 1 shall have a metal name plate affixed in a conspicuous place on the shell showing manufacturer, model number, type waste, rated capacity and certification number. [Rule 62-4.070(3), F.A.C.]
- **A.5.** Unit 1 is 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. [Rule 62-4.070(3), F.A.C.]
- **A.6.** Combustion Zone Design Temperature and Residence Time. The design furnace mean temperature at the fully mixed zone of the combustor shall not be less than 1800 °F for a combustion gas residence time of at least one second.

[PSD-FL-113 and AC35-115379 (and amendment)]

Essential Potential to Emit (PTE) Parameters:

A.7. Permitted Capacity.

- (1) <u>Municipal Solid Waste</u>. Unit 1 shall not be loaded in excess of its maximum rated capacity of 24,000 lbs/hr and 288 tons/day of municipal solid waste (MSW) and wood chips.
- (2) Steam. The maximum steam production rate for Unit 1 is 69,000 lbs/hr (3-hr average).
- (3) <u>Boxed Biomedical Waste</u>. For Unit 1 <u>only</u>, the maximum throughput of "<u>boxed biomedical waste</u>" is 1.12 tons/hr and 26.88 tons/day.
- (4) Heat Input. The maximum heat input for Unit 1 is 120 million Btu per hour (3-hr average).
- (5) Normal Operating Range. The normal operating range for Unit 1 is 80% to 115% of design rated capacity, which is 250 tons/day of MSW and wood chips, 104 million Btu heat input per hour (3-hr average), and 60,200 lbs/hr steam output (3-hr average), with the MSW having a heating value of 5,000 Btu per pound.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; PSD-FL-113 and AC35-115379; and, requested by Mr. John Power in a letter dated 8/3/92]

A.8. Emissions Unit Operating Rate Limitation After Testing. See specific condition **A.46.** [Rule 62-297.310(2), F.A.C.]

A.9. Methods of Operation - Fuels.

- (1) <u>Municipal Solid Waste</u>. The primary fuels for Unit 1 are MSW and wood chips, and the items and materials that fit within the definition of MSW contained in Section 403.706(5), F.S.
- (2) <u>Biomedical Waste.</u> Only Unit 1 is allowed to burn "<u>boxed biomedical waste</u>". A specially designed conveyor system is used to transport the boxed biomedical waste from the tipping floor to the combustor feed hopper, so that biomedical waste is not mixed with other municipal waste until it enters the feed hopper. Mechanically fed facilities shall maintain an air lock system to prevent opening the incinerator to the room environment. The volume of the loading system shall be designed to prevent overcharging, thereby assuring complete combustion of the waste. Incineration of biomedical waste shall not begin until the combustion chamber temperature requirement of 1800 °F is attained.
- (3) <u>Internally Generated Used Oil</u>. The facility is allowed to burn the used oil, which is generated as a result of internal operations, after thoroughly mixing it with the refuse in the pit. A log of the amount of all internally generated used oil burned shall be maintained pursuant to 40 CFR Part 279 and Rule 62-213.440, F.A.C.
- (4) <u>Used Oil</u>. No liquid used oil can be accepted by the facility from any outside generators.
- (5) <u>Auxiliary Burners</u>. The auxiliary burners are permitted to fire only distillate fuel oil or gas (e.g., natural or propane). The auxiliary burners shall be used at startup during the introduction of MSW and wood chip fuel (other than biomedical) until design furnace gas temperature is attained. All air pollution control and continuous emissions monitoring equipment shall be operational and functioning properly prior to the incineration or ignition of waste and until all the wastes are incinerated. During shutdown, the combustion chamber temperature requirement shall be maintained using auxiliary burners until the wastes are completely combusted.
- (6) <u>Unauthorized Fuel</u>. Subject to the limitations contained in this permit, the authorized fuels for the facility also include the other solid wastes that are not MSW which are described in categories (8), (9), and (10), below. However, the facility shall not burn:
 - (a) those materials that are prohibited by state or federal law;
 - (b) those materials that are prohibited by this permit;
 - (c) lead acid batteries;
 - (d) hazardous waste, unless a permit has been issued for the combustor to allow such burning or the waste is of such quantity to be exempt in accordance with Department Chapter 62-30, F.A.C.;
 - (e) nuclear waste;
 - (f) radioactive waste, unless a permit has been issued for the combustor to allow such burning or the waste is of such quantity to be exempt in accordance with Department of Health and Rehabilitative Services Rule 10D-91 or 10D-104.003, F.A.C.;
 - (g) sewage sludge;
 - (h) explosives;
 - (i) beryllium-containing wastes, as defined in 40 CFR 61, Subpart C.
- (7) 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 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 [see (9) and (10)]. 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.

- (8) 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.
- (9) <u>Waste Tires</u>. Subject to the conditions and limitations contained in this permit, waste tires may be used as fuel at the facility. The total quantity of waste tires received as <u>segregated loads</u> and burned at the facility shall not exceed 3%, by weight, of the facility's total fuel. Compliance with this limitation shall be determined by using a rolling 30-day average in accordance with specific condition **A.64**.
- (10) 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, unless otherwise stated. Compliance with this limitation shall be determined by using a rolling 30-day average in accordance with specific condition A.64.
 - (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 to or greater than 50 ppm shall not be burned, pursuant to the limitations of 40 CFR 761.20(e). All used oil shall comply with the definition stated in 40 CFR 260.10 and shall not exceed the specification levels for arsenic, cadmium, chromium, lead, and the total halogens contained in Table 1 of 40 CFR 279.11, or contain any hazardous waste as defined in 40 CFR 261.3. See specific condition A.15.
- (h) For the wastes defined in categories (b), (f) and (g) above, the maximum percentage of oil contaminated waste defined as oil spill cleanup debris and absorbing media, including oil filters, fired in Unit 1 is 20%, by weight, of the total solid waste input, based on a rolling 30-day average.
- (i) 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.
- (11) Other fuels or wastes shall not be burned in Unit 1 without prior specific written approval of the Secretary of the Department of Environmental Protection.
- (12) The combustor shall be fed so as to prevent opening the combustor to the environment.
- (13) Incineration or ignition of waste shall not begin until the combustion chamber temperature requirement is attained. All air pollution control and continuous emission monitoring equipment shall be operational and functioning properly prior to the incineration or ignition of waste and until all the wastes are incinerated. The combustion chamber temperature requirement shall be maintained until the wastes are completely combusted.

[Rules 62-4.160(2), 62-210.200, 62-213.440(1) and 62-296.401(4)(d)2. & 4., F.A.C.; and, PSD-FL-113 and AC35-115379 (and amendment)]

A.10. Hours of Operation. Unit 1 is allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200(PTE), F.A.C.; and, PSD-FL-113 and AC35-115379]

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Emission Limitations and Standards

A.11. Emission Limits. Stack emissions from Unit 1 shall not exceed the following:

(1) Particulate Matter (PM): 0.0150 gr/dscf, corrected to 12% CO₂;

or,

0.020 gr/dscf corrected to 7% O_2 , whichever is less.

(2) Sulfur Dioxide (SO₂): 60 ppmvd, corrected to 12% CO₂, 6-hr rolling average;

or,

70% reduction of uncontrolled SO₂ emissions, 6-hr rolling average. Not to exceed 120 ppmvd, corrected to

12% CO₂, 6-hr rolling average.

(3) Nitrogen Oxides (NOx): 385 ppmvd, corrected to 12% CO₂.

(4) Carbon Monoxide (CO): 100 ppmvd, corrected to 7% O₂, on an hourly-average

basis.

(5) Volatile Organic Compounds (VOC): 70 ppmvd as carbon, corrected to 12% CO₂.

(6) Lead (Pb): 3.1 x 10⁻⁴ gr/dscf, corrected to 12% CO₂.

(7) Fluoride (Fl): 1.5 x 10⁻³ gr/dscf, corrected to 12% CO₂. (8) Beryllium (Be): 2.0 x 10⁻⁷ gr/dscf, corrected to 12% CO₂.

(9) Mercury (Hg): 2.0 \times 10 gr/dscf, corrected to 12% CO₂. 3.4 \times 10⁻⁴ gr/dscf, corrected to 12% CO₂.

(10) Hydrogen Chloride (HCl): 50 ppmvd, corrected to 7% O₂, 3-hr average basis;

or,

90% reduction, by weight, on an hourly-average basis.

For each pollutant for which a continuous emissions monitoring system (CEMS) is required, the emission averaging time specified above shall be used to establish operating limits and reportable excess emissions.

[PSD-FL-113 and AC35-115379 (and amendment); BACT; and, Rule 62-296.401(4)(c)2., F.A.C.]

A.12. Relationship to Best Available Control Technology. The emission limitations in Rule 62-296.416, F.A.C., supersede any less stringent emission limitations including those based on a best available control technology (BACT) determination made pursuant to Rule 62-212.400, F.A.C., or 40 CFR 52.21. The application of BACT shall not result in emissions of any air contaminant which exceeds the emission limits set forth in Rule 62-296.416, F.A.C. See specific conditions **A.11.** and **C.13.** [Rule 62-296.416(2), F.A.C.]

A.13. Emissions Standard for Facilities Using Mercury Control Equipment.

- (1) Mercury emissions from facilities using post-combustion control equipment designed to remove mercury from flue gases shall not exceed 70 micrograms per dry standard cubic meter of flue gas, corrected to 7 percent O₂, or 20 percent by weight of the mercury in the flue gas upstream of the mercury control device (80 percent reduction by weight), whichever occurs first.
- (2) 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.

(3) 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), F.A.C.]

- **A.14.** <u>Visible Emissions (VE)</u>. VE shall not exceed 15% opacity (6-min average), except for one 6-minute period per hour of not more than 20% opacity. Because the vent stacks of both Units 1 and 2 are co-located in a support structure/stack, any visible emissions violations from the structure/stack will be attributed to both units unless opacity meter results show the specific unit causing the violation. [Rule 62-4.070(3), F.A.C.; and, PSD-FL-113 and AC35-115379]
- **A.15.** "On-Specification" Used Oil: The burning of "on-specification" used oil is allowed at this facility in accordance with all other conditions of this permit and the following additional conditions:
- a. Only "on-specification" used oil is allowed be burned in these emissions units that is generated on-site from internal operations. "On-specification" used oil is defined as that which meets the specifications of 40 CFR 279 (Standards for the Management of Used Oil) listed below. Used oil that does not meet all of the following specifications is considered "off-specification" oil and shall not be burned. See specific conditions **B.106**. and **B.107**.

CONSTITUENT / PROPERTY *	<u>ALLOWABLE LEVEL</u>
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Flash Point	100 °F minimum
PCBs	less than 50 ppm

* As determined by approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).

[40 CFR 279.11; and, PSD-FL-113 and AC35-115379 amendment]

A.16. Air Pollution Control Equipment.

- a. Unit 1 shall be equipped with a particulate emission control device.
- b. Unit 1 shall be equipped with an acid gas control device to remove at least 90% of acid gases and 70% sulfur dioxide emissions.
- c. The acid gas control system for Unit 1 shall cool the flue gases to an average temperature not exceeding 300 °F (3-hr rolling average).

[PSD-FL-113 and AC35-115379]

Excess Emissions

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

A.17. Excess emissions resulting from startup, shutdown, or malfunction of any emissions unit shall be permitted provided that (1) best operational practices to minimize emissions are adhered to and (2) 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.]

A.18. 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.]

A.19. 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)]

Monitoring of Operations

A.20. Determination of Process Variables.

- (a) <u>Required Equipment</u>. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- (b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value. [Rule 62-297.310(5), F.A.C.]
- **A.21.** Continuous Emissions Monitoring Systems (CEMS) or Continuous Monitoring Systems (CMS). The permittee shall install, calibrate, maintain, and operate (1) CEMS devices for opacity, oxygen, carbon monoxide, and sulfur dioxide; and, (2) CMS devices to continuously monitor and record steam production, the furnace exit gas temperature (FEGT), the secondary (or last) combustion chamber exit temperature, and the flue gas temperature at the exit of the acid gas control equipment.
- a. The CEMS and CMS devices shall meet the applicable requirements of Chapter 62-297, F.A.C. (see specific conditions **A.20**. & **A.23**.) and 40 CFR 60.13 (see specific conditions **A.24**. thru **A.30**.), including certification of each device.
- b. Each CEMS shall meet performance specifications of 40 CFR 60, Appendix B. The SO₂ CEMS sample point shall be located downstream of the control device.
- c. CEMS data shall be recorded during periods of startup, shutdown and malfunction, but shall be excluded from emission averaging calculations for CO, SO₂, and opacity.
- d. A malfunction means any sudden and unavoidable failure of air pollution control equipment or process equipment to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.
- e. The procedures under 40 CFR 60.13 shall be followed for installation, evaluation and operation of all CEMS.
- f. Opacity monitoring system data shall be reduced to 6-minute averages, based on 36 or more data points, and gaseous CEMS data shall be reduced to 1-hour averages, based on 4 or more data points, in accordance with 40 CFR 60.13(h).

g. Average CO and SO_2 emission concentrations, corrected for CO_2 , shall be computed in accordance with the appropriate averaging time periods included in specific condition A.11.

- h. A FEGT to combustion zone correlation shall be established to relate furnace temperature at the temperature monitor location to furnace temperature in the overfire air fully mixed zone.
- i. Each owner or operator of a biological waste incineration facility shall install, operate, and maintain in accordance with the manufacturer's instructions CMS equipment to monitor and record the secondary (or last) combustion chamber exit temperature.
- j. The furnace heat load shall be maintained between 80% and 115% of the design rated capacity during normal operations. The lower limit may be extended provided compliance with the carbon monoxide emissions limit and the FEGT within this permit at the extended turndown rate are achieved. [40 CFR 60.13; PSD-FL-113 and AC35-115379; and, Rule 62-296.401(4)(g), F.A.C.]

A.22. 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 specific condition.
- (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]
- A.23. Continuous Monitor Performance Specifications. If continuous monitoring systems are required by rule or permit to be used for demonstrating compliance with the standards of the Department, they must be installed, maintained and calibrated in accordance with the EPA performance specifications listed below. These Performance Specifications are contained in 40 CFR 60, Appendix B, and are adopted by reference in Rule 62-204.800, F.A.C. The EPA performance specifications that are adopted by reference at Rule 62-204.800, F.A.C., are adopted in their entirety except for those provisions referring to approval of alternative procedures by the Administrator. For purposes of this rule, such alternative procedures may only be approved by the Secretary or his or her designee in accordance with Rule 62-297.620, F.A.C.
- (1) Performance Specification 1--Specifications and Test Procedures for Opacity Continuous Emission Monitoring Systems in Stationary Sources.
- (3) Performance Specification 3--Specifications and Test Procedures for O₂ and CO₂ Continuous Emission Monitoring Systems in Stationary Sources.
 [Rule 62-297.520, F.A.C.]
- **A.24.** 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, 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)]
- **A.25.** 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)]
- **A.26.** (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)]
- **A.27.** 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)]

A.28. 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)]

- **A.29.** 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)]
- A.30. 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 I-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 O₂ 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 I percent opacity).

 [40 CFR 60.13(h)]

Required Tests, Test Methods and Procedures

A.31. Annual Tests Required. Annual compliance tests shall be performed for PM, SO₂, NOx, CO, HCl, Be, Hg and VE.

[Rule 62-297.310(7), F.A.C.; and, PSD-FL-113 and AC35-115379 (and amendment)]

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A.32. The following test methods and procedures of 40 CFR Parts 60 and 61, or equivalent methods approved in writing by the Department, shall be used for compliance testing:

Purpose / Substance	Test Methods
Selection of sample site and sample traverses	EPA Method 1
Determining stack gas flow rate	EPA Method 2
Gas analysis for calculation of percent O ₂ and CO ₂	EPA Method 3 or 3A
Determining stack gas moisture content to convert the flow rate from	EPA Method 4
actual standard cubic feet (ascf) to dry standard cubic feet (dscf) for use in	
converting concentrations in dry gases to or from mass emission limits	
PM and associated moisture content	EPA Method 5 or 26A
SO ₂	EPA Method 6, 6C or 8
NOx	EPA Method 7, 7A, or 7E
СО	EPA Method 10
VOC	EPA Method 25 or 25A
Pb	EPA Method 12
Fl	EPA Method 13B
Be	EPA Method 104
Hg	EPA Method 101A or 29
HCI	EPA Method 26 or 26A
VE	DEP or EPA Method 9

[Rules 62-213.440, 62-296.416(3)(d) and 62-297.401, F.A.C.; 40 CFR 60 and 61; and, PSD-FL-113 and AC35-115379 (and amendment)]

- **A.33.** The minimum sample volume for EPA Method 5 shall be 30 dry standard cubic feet. [Rule 62-296.400(4)(e)4., F.A.C.]
- **A.34.** 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)]
- A.35. 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)]
- **A.36.** 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)]

- **A.37.** 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 **A.49.** and Appendix SS-1, Stack Sampling Facilities (version dated 10/7/96) for State of Florida Stack Sampling Requirements.}

[40 CFR 60.8(e)]

A.38. 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)]

- **A.39.** Compliance with standards in 40 CFR 60, other than opacity standards, shall be determined only by performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard. [40 CFR 60.11(a)]
- **A.40.** 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)]
- **A.41.** 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)]

A.42. Special provisions set forth under an applicable subpart shall supersede any conflicting provisions in 40 CFR 60.11(a) through (e). [40 CFR 60.11(f)]

A.43. For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in 40 CFR 60, nothing in 40 CFR 60 shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

[40 CFR 60.11(g)]

- **A.44.** The owner or operator shall determine compliance with the particulate matter standard as follows (see specific condition **A.11.**):
- (1) The emission rate (c_{12}) of particulate matter, corrected to 12 percent CO_2 , shall be computed for each run using the following equation:

$$c_{12} = c_s (12/\%CO_2)$$

where:

 c_{12} = concentration of particulate matter, corrected to 12 percent CO₂, g/dscm (gr/dscf).

 c_s = concentration of particulate matter, g/dscm (gr/dscf).

 $%CO_2 = CO_2$ concentration, percent dry basis.

- (2) Method 5 shall be used to determine the particulate matter concentration (c_s). The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).
- (3) The emission rate correction factor, integrated or grab sampling and analysis procedure of Method 3B shall be used to determine CO₂ concentration (%CO₂).
 - (i) The CO₂ sample shall be obtained simultaneously with, and at the same traverse points as, the particulate run. If the particulate run has more than 12 traverse points, the CO₂ traverse points may be reduced to 12 if Method 1 is used to locate the 12 CO₂ traverse points. If individual CO₂ samples are taken at each traverse point, the CO₂ concentration (%CO₂) used in the correction equation shall be the arithmetic mean of all the individual CO₂ sample concentrations at each traverse point.

[40 CFR 60.54(b)(1)]

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Compliance Test Requirements

A.45. 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.]

A.46. Operating Rate During Testing.

Unless otherwise stated in the applicable emission limiting standard rule, testing of emissions shall be conducted with the emissions unit operating at permitted capacity, defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the 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.]

A.47. 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.]

A.48. 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.

{Permitting note: Specific conditions **A.33**. and **A.44**. specify a minimum sample volume of 30 dry standard cubic feet.}

- (c) <u>Required Flow Rate Range</u>. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) <u>Calibration of Sampling Equipment</u>. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, attached to this permit.
- (e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube. [Rule 62-297.310(4), F.A.C.]
- **A.49.** 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.]

- **A.50.** 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 Department's Central District, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
- (b) <u>Special Compliance Tests</u>. When the Department's Central District, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department's Central District.
- (c) <u>Waiver of Compliance Test Requirements</u>. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

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

Reporting and Recordkeeping

- **A.51.** In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department's Central District in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department's Central District. [Rule 62-210.700(6), F.A.C]
- **A.52.** For purposes of reports required under this permit, excess emissions are defined as any calculated average emission concentration, as determined pursuant to this specific condition, which exceeds the applicable emission limit in specific condition **A.11**. [PSD-FL-113 and AC35-115379 (and amendment)]

A.53. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department's Central District on the results of each such test.
- (b) The required test report shall be filed with the Department's Central District as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department's Central District 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.]

- **A.54.** The owner or operator of an affected facility shall submit the written reports required under 40 CFR 60, Subpart A, to the Department's Central District for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter. [Rule 62-213.440(b)(3)(a), F.A.C.]
- **A.55.** Any 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)]

- **A.56.** Any 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)]
- A.57. Each owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form [see 40 CFR 60.7(d)] to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or, the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or, the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:
- (1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
- (2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
- (3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
- (4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report. [40 CFR 60.7(c)(1), (2), (3), and (4)]
- **A.58.** 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)]

A.59. (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)]

A.60. 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, Rules 62-213.440(1)(b)2.b. and 62-296.401(4)(g)2., F.A.C.]

- **A.61.** The owner or operator of any incinerator subject to the provisions of 40 CFR 60, Subpart E, shall record the daily charging rates and hours of operation. [40 CFR 60.53(a); and, PSD-FL-113 and AC35-115379]
- **A.62.** <u>Auxiliary Burners Fuel Recordkeeping</u>. Monthly records shall be maintained of the amount each type of fuel (e.g., natural gas and propane) used by the auxiliary burners of each MSW unit and the equivalent heat input from each type of fuel (can be supplied by the supplier). [Rule 62-213.440(1), F.A.C.]

A.63. MSW Charging Rate Monitoring. The average daily solid waste charging rate shall be determined on a monthly basis and recorded for Unit 1. The daily charging rate shall be determined each month on an average daily basis for Unit 1 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 determined the number of operating hours per MWC unit for each day during the preceding calendar month. [Rule 62-213.440(1), F.A.C.; and, 40 CFR 60.53(a)]

- A.64. <u>Segregated Solid Waste Recordkeeping</u>. The following records shall be made and kept to demonstrate compliance with the segregated non-MSW percentage limitations of specific condition A.9. (1) Each segregated load of non-MSW materials, that is subject to the percentage weight limitations of specific condition A.9., which is received for processing shall be documented as to waste description and weight. The weight of all waste materials received for processing shall be measured using the facility truck scale and recorded.
- (2) Each day the total weight of segregated tires received shall be computed, and the daily total shall be added to the sum of the daily totals from the previous 29 days. The resultant 30-day total weight of tires shall be divided by the total weight of all waste materials received in the same 30-day period, and the resultant number shall be multiplied by 100 to express the ratio in percentage terms. The percentage computed shall be compared to the 3% limitation.
- (3) Each day the total weight of segregated non-MSW materials received that are subject to the 5% and 20% restrictions 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% and 20% limitations.
- (4) Records shall be maintained showing the oil-contaminated waste generator's written certification that the waste is non-hazardous. Documentation requirements shall include a written description of the waste, a material characterization form (sample submitted with the request dated March 20, 1995), and the applicable material safety data sheets for the waste components. Tonnages of oil-contaminated waste fired shall be recorded and made available for inspection by the Department. These records shall be maintained for a period of five years.

[Rule 62-213.440(1), F.A.C.; and, PSD-FL-113 and AC35-115379 amendment]

A.65. Boxed Biomedical Waste Recordkeeping. The hourly and daily feed rate of boxed biomedical waste into Unit 1 shall be measured, recorded, and kept available for inspection by the Department for a minimum of five years.

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

- **A.66.** Special Recordkeeping Requirements On-specification Used Oil. The owner or operator shall obtain, make, and keep the following records related to the use of used oil:
- (1) The gallons of on-specification used oil burned each month. (This record shall be completed no later than the fifteenth day of the succeeding month.)

(2) The total gallons of on-specification used oil burned in the preceding calendar year. The records shall be retained in a form suitable for inspection at the facility by the Department, and shall be retained for 5 years. See specific conditions **A.15**. and **A.67**.

[Rule 62-213.440(1)(b)2.b., F.A.C.; 40 CFR 279.61 and 761.20(e); and, PSD-FL-113 and AC35-115379 amendment]

A.67. Reporting Required- On-specification Used Oil. The owner or operator shall submit, with the Annual Operation Report (AOR) form, the total amount of on-specification used oil burned in Unit 1 during the previous calendar year to the Department's Central District. See specific conditions **A.15.** and **A.66.**

[Rules 62-4.070(3), 62-212.400(2)(f)1. and 62-213.440(1)(b)2.b., F.A.C.]

Miscellaneous

A.68. Compliance Schedule. The following dates shall be/have been met to satisfy measurable progress milestones to come into compliance with 40 CFR 60, Subpart Cb:

E.U. ID. No.	Milestone	Milestone Date
1	Submittal of a final control plan to the Department	April 12, 1998
1	Awarding of contracts for emission control systems or process	April 12, 1999
	modifications, or issuance of orders for the purchase of component parts	
	to accomplish emission control or process modification	•
1	Initiation of on-site construction or installation of emission control	October 12, 1999
	equipment or process change	
1	Completion of on-site construction or installation of emission control	February 12, 2000
	equipment or process change.	
1	Final Compliance	December 19, 2000

{Permitting note: "Final compliance" means that the performance test results have been submitted by the permittee for demonstration that the facility is in compliance with 40 CFR 60, Subpart Cb.}

[40 CFR 60.21(h); 40 CFR 60.39b; and, State Plan approved 01/12/98 and effective 01/12/98]

A.69. Closure Agreement. The permittee shall cease operation of any unit that has not completed on-site construction or installation of emission control equipment and is not involved in performance testing by December 19, 2000. After closure, said units may commence startup, shakedown, and performance/compliance testing per the closure agreement on file with the Department. Performance/compliance tests must be completed within 180 days of startup.

[40 CFR 60.39b; and, State Plan approved 11/13/97 and effective 01/12/98]

- A.70. Periodic Monitoring Mercury. For purposes of periodic monitoring for mercury:
- a. Quarterly testing shall be required using EPA Method 29.

[Rules 62-4.070(3) & (5), 62-213.440(1)(b)1.b. and 62-297.310(7)(a)4., F.A.C.]

A.71. Operator Training.

a. The permittee shall submit a copy of a certificate verifying the incinerator operators' satisfactory completion of a Department-approved training program prior to issuance of the operating permit.

b. Any operator of Unit 1 shall be trained by the equipment manufacturer's representative or an equivalent organization using a state-approved training program.

- (1). The content of the training program shall be submitted to the Department for approval. The training shall provide a basic understanding of the principles of the combustion process, provide instruction on proper operating practices and procedures, and increase awareness of regulation requirements and safety concerns. Training programs shall be minimum of 16 hours of instruction. The Department shall approve training programs which meet, at a minimum, the criteria set forth in the EPA Medical Waste Incinerator Operator Training Program Course Handbook EPA 453/B-93-018 and Instructor's Guide EPA 453/B-93-019.
- (2). A copy of the training certificate for each operator having satisfactorily completed the Department-approved training program must be submitted to the Department within 15 days of training. If the incinerator is modified to the extent that a Department construction permit is required, the operators shall be retrained to operate the modified incinerator. Owners of new and modified incinerators shall submit copies of the operator training certificates within 15 days after completion of the initial compliance test.
- (3). An operator's certificate must be kept on file at the facility for the duration of the operator's employment and for an additional two years after termination of employment. The owner shall not allow the incinerator to be operated unless it is operated by an operator who has satisfactorily completed the required training program.

[PSD-FL-113 and AC35-115379 amendment); and, Rule 62-296.401(4)(d)7., F.A.C.]

- A.72. 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.]
- **A.73.** All of the combustibles in the MSW, including biomedical waste, placed in the furnace must be completely combusted prior to removing from the furnace for further processing, such as ash handling and landfilling.

[Rules 62-4.070(3) & (5) and 62-213.440(1), F.A.C.; and, PSD-FL-113 and AC35-115379 amendment]

A.74. Periodic Monitoring: Combustion Chamber Temperature.

- a. A continuous temperature monitor shall be installed, calibrated, maintained, and operated in the furnace combustion chamber. The temperature monitor shall be calibrated every calendar quarter.
- b. An electrical interlock shall be established between the combustion chamber temperature monitor and the biomedical waste feed system; and, any time that the combustion chamber temperature drops below 1800 °F, the biomedical waste feed system shall cease operation until the combustion chamber temperature of 1800 °F is restored.

[Rules 62-4.070(3) & (5) and 62-213.440(1)(b)1.b., F.A.C.]

Subsection B. This section addresses the following emissions unit.

E.U. ID No.	Brief Description
-001	288 TPD (maximum) Municipal Solid Waste Combustor & Auxiliary Burners - Unit 1

Emissions unit No. -001 is a municipal solid waste (MSW) and wood chip combustor designated as "Unit 1". The combustor consists of a mass burn waterwall boiler with a design rated capacity of 250 tons MSW and wood chips per day, 104 MMBtu heat input per hour, and 60,200 pounds steam output per hour, with the MSW having a heating value of 5,000 Btu per pound. The maximum solid waste throughput is 288 tons MSW and wood chips per day, 120 MMBtu per hour heat input, and 69,000 pounds of steam output per hour (3-hour average). The auxiliary burners associated with the combustor are permitted to fire distillate fuel oil or gas (e.g., natural and propane). The auxiliary burners are used to fire the MSW and wood chips during start-up, shutdown, and at other times when necessary and consistent with good combustion practices. The maximum permitted steam production rate is 69,000 lbs/hr when firing MSW and wood chips. Only Unit 1 is allowed to dispose of "boxed biomedical waste".

Unit 1 began commercial operation August 22, 1990. Particulate matter emissions are controlled by a fabric filter baghouse system. Acid gas emissions are controlled by dry scrubbing followed by a fabric filter baghouse system. Carbon monoxide (CO) emissions are currently controlled by good combustion practices. Nitrogen oxides (NO_x) are controlled by a Selective Non-Catalytic Reduction (SNCR) system. Mercury (Hg) and certain organic (dioxin) emissions are to be controlled by activated carbon injection (ACI) followed by a fabric filter baghouse system. Units 1 and 2 discharge their emissions independently through their own stack, but are co-located within a single support structure/stack. (Unit 1's stack height: 199 feet; exit diameter: 4.3 feet; exit temperature: 270 °F; actual volumetric flow rate: 59,400 acfm; and, dry standard volumetric flow rate: 43,200 dscfm.).

{Permitting notes. This emissions unit is 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-113/AC35-115379; and, one federally enforceable amendment); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT); Rule 62-296.401(4), F.A.C., Biological Waste Incineration Facilities; and, Rule 62-296.416, F.A.C., Waste-to-Energy Facilities. Also, please note that conditions in 40 CFR 60, Subpart Cb, reference requirements that are contained in 40 CFR 60, Subpart Eb.}

The following specific conditions apply to the emissions unit 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. <u>Definitions</u>. 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.** The incinerator boilers shall have a metal name plate affixed in a conspicuous place on the shell showing manufacturer, model number, type waste, rated capacity and certification number. [Rule 62-4.070(3), F.A.C.]
- **B.6.** Unit 1 is 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. [Rule 62-4.070(3), F.A.C.]
- **B.7.** Combustion Zone Design Temperature and Residence Time. The design furnace mean temperature at the fully mixed zone of the combustor shall not be less than 1800 °F for a combustion gas residence time of at least one second.

[PSD-FL-113 and AC35-115379 (and amendment)]

Essential Potential to Emit (PTE) Parameters

B.8. Capacity.

- (a) <u>Municipal Solid Waste</u>. Unit 1 shall not be loaded in excess of its maximum rated capacity of 24,000 lbs/hr and 288 tons/day of municipal solid waste (MSW) and wood chips. Unit 1 shall not be loaded in excess of 250 tons/day of MSW and wood chips on a 12-month rolling average (see specific condition **B.103.**).
- (b) Steam. The maximum steam production rate for Unit 1 is 69,000 lbs/hr (3-hr average).
- (c) <u>Boxed Biomedical Waste</u>. For Unit 1 <u>only</u>, the maximum throughput of "<u>boxed biomedical waste</u>" is 1.12 tons/hr and 26.88 tons/day. See specific conditions **B.103**. and **B.105**.
- (d) <u>Heat Input</u>. The maximum heat input for Unit 1 is 120 million Btu per hour (3-hr average).

(e) Normal Operating Range. The normal operating range for Unit 1 is 80% to 115% of design rated capacity, which is 250 tons/day of MSW and wood chips, 104 million Btu heat input per hour (3-hr average), and 60,200 lbs/hr steam output (3-hr average), with the MSW having a heating value of 5,000 Btu per pound.

- (f) 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 MSW 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 MSW 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 MSW 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 MSW, 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 MSW 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); 40 CFR 60.53c(c); Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; PSD-FL-113 and AC35-115379; and, requested by Mr. John Power in a letter dated 8/3/92]

- **B.9.** Emissions Unit Operating Rate Limitation After Testing. See specific condition **B.64.** [Rule 62-297.310(2), F.A.C.]
- **B.10.** 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.32**. [40 CFR 60.34b(b) and 40 CFR 60.51b]
- **B.11.** 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.32**. [40 CFR 60.34b(b) and 40 CFR 60.51b]

B.12. Methods of Operation - Fuels.

(1) <u>Municipal Solid Waste</u>. The primary fuels for Unit 1 are MSW and wood chips, and the items and materials that fit within the definition of MSW contained in Section 403.706(5), F.S.

- (2) <u>Biomedical Waste</u>. <u>Only Unit 1</u> is allowed to burn "<u>boxed biomedical waste</u>". A specially designed conveyor system is used to transport the boxed biomedical waste from the tipping floor to the combustor feed hopper, so that biomedical waste is not mixed with other municipal waste until it enters the feed hopper. Mechanically fed facilities shall maintain an air lock system to prevent opening the incinerator to the room environment. The volume of the loading system shall be designed to prevent overcharging, thereby assuring complete combustion of the waste. Incineration of biomedical waste shall not begin until the combustion chamber temperature requirement of 1800 °F is attained.
- (3) <u>Internally Generated Used Oil</u>. The facility is allowed to burn used oil, which is generated as a result of internal operations, after thoroughly mixing it with the refuse in the pit. A log of the amount of all internally generated used oil burned shall be maintained pursuant to 40 CFR Part 279 and Rule 62-213.440, F.A.C.
- (4) <u>Used Oil</u>. No liquid used oil can be accepted by the facility from any outside generators.
- (5) <u>Auxiliary Burners</u>. The auxiliary burners are permitted to fire only distillate fuel oil or gas (e.g., natural or propane). The auxiliary burners shall be used at startup during the introduction of MSW and wood chip fuel (other than biomedical) until design furnace gas temperature is attained. All air pollution control and continuous emissions monitoring equipment shall be operational and functioning properly prior to the incineration or ignition of waste and until all the wastes are incinerated. During shutdowns, the combustion chamber temperature requirement shall be maintained using auxiliary burners until the wastes are completely combusted.
- (6) <u>Unauthorized Fuel</u>. Subject to the limitations contained in this permit, the authorized fuels for the facility also include the other solid wastes that are not MSW which are described in categories (8), (9), and (10), below. However, the facility <u>shall not burn</u>:
 - (a) those materials that are prohibited by state or federal law;
 - (b) those materials that are prohibited by this permit;
 - (c) lead acid batteries;
 - (d) hazardous waste, unless a permit has been issued for the combustor to allow such burning or the waste is of such quantity to be exempt in accordance with Department Chapter 62-30, F.A.C.;
 - (e) nuclear waste;
 - (f) radioactive waste, unless a permit has been issued for the combustor to allow such burning or the waste is of such quantity to be exempt in accordance with Department of Health and Rehabilitative Services Rule 10D-91 or 10D-104.003, F.A.C.;
 - (g) sewage sludge;
 - (h) explosives;
 - (i) beryllium-containing wastes, as defined in 40 CFR 61, Subpart C.
- (7) 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 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 [see (9) and (10)]. 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.

- (8) 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.
- (9) <u>Waste Tires</u>. Subject to the conditions and limitations contained in this permit, waste tires may be used as fuel at the facility. The total quantity of waste tires received as <u>segregated loads</u> and burned at the facility shall not exceed 3%, by weight, of the facility's total fuel. Compliance with this limitation shall be determined by using a rolling 30-day average in accordance with specific condition **B.104**.
- (10) 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, unless otherwise stated. Compliance with this limitation shall be determined by using a rolling 30-day average in accordance with specific condition **B.104**.
 - (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.

(j) Used oil and used oil filters. Used oil containing a PCB concentration equal to or greater than 50 ppm shall not be burned, pursuant to the limitations of 40 CFR 761.20(e). All used oil shall comply with the definition stated in 40 CFR 260.10 and shall not exceed the specification levels for arsenic, cadmium, chromium, lead, and the total halogens contained in Table 1 of 40 CFR 279.11, or contain any hazardous waste as defined in 40 CFR 261.3. See specific condition **B.39**.

- (k) For the wastes defined in categories (b), (f) and (g) above, the maximum percentage of oil contaminated waste defined as oil spill cleanup debris and absorbing media, including oil filters, fired in Unit 1 is 20%, by weight, of the total solid waste input, based on a rolling 30-day average.
- (l) 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.
- (11) Other fuels or wastes shall not be burned in Unit 1 without prior specific written approval of the Secretary of the Department of Environmental Protection.
- (12) The combustor shall be fed so as to prevent opening the combustor to the environment.
- (13) Incineration or ignition of waste shall not begin until the combustion chamber temperature requirement is attained. All air pollution control and continuous emission monitoring equipment shall be operational and functioning properly prior to the incineration or ignition of waste and until all the wastes are incinerated. The combustion chamber temperature requirement shall be maintained until the wastes are completely combusted.

[Rules 62-4.160(2), 62-210.200, 62-213.440(1) and 62-296.401(4)(d)2. & 4., F.A.C.; and, PSD-FL-113 and AC35-115379 (and amendment)]

B.13. Hours of Operation. Unit 1 is allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200(PTE), F.A.C.; and, PSD-FL-113 and AC35-115379]

Operating Practices and Requirements

- **B.14.** 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.10.**, except as specified below. The averaging time is specified in specific condition **B.16.**
- (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.15.** 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.11.**, except as specified below. The averaging time is specified in specific condition **B.16.** 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)]

- **B.16.** Operating Requirements. The procedures specified in paragraphs (1) through (12) shall be used for determining compliance with the operating requirements under 40 CFR 60.53b.
- (1) Compliance with the carbon monoxide emission limits in 40 CFR 60.53b(a) shall be determined using a 4-hour block arithmetic average for all types of affected facilities except mass burn rotary waterwall municipal waste combustors and refuse-derived fuel stokers.

{Permitting note: The averaging time was established in the PSD-FL-113/AC35-115379 permitting action. See specific condition **B.34.**}

- (2) For affected mass burn rotary waterwall municipal waste combustors and refuse-derived fuel stokers, compliance with the carbon monoxide emission limits in 40 CFR 60.53b(a) shall be determined using a 24-hour daily arithmetic average.
- (3) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous emission monitoring system for measuring carbon monoxide at the combustor outlet and record the output of the system and shall follow the procedures and methods specified in paragraphs(i) through(iii).
 - (i) The continuous emission monitoring system shall be operated according to Performance Specification 4A in Appendix B of 40 CFR 60.
 - (ii) During each relative accuracy test run of the continuous emission monitoring system required by Performance Specification 4A in Appendix B of 40 CFR 60, carbon monoxide and oxygen (or carbon dioxide) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and the test methods specified in paragraphs (A) and (B).
 - (A) For carbon monoxide, EPA Reference Method 10, 10A, or 10B shall be used.
 - (B) For oxygen (or carbon dioxide), EPA Reference Method 3, 3A, or 3B, as applicable shall be used.
 - (iii) The span value of the continuous emission monitoring system shall be 125 percent of the maximum estimated hourly potential carbon monoxide emissions of the municipal waste combustor unit.
- (4) The 4-hour block and 24-hour daily arithmetic averages specified in paragraphs (1) and (2) shall be calculated from 1-hour arithmetic averages expressed in parts per million by volume corrected to 7 percent oxygen (dry basis). The 1-hour arithmetic averages shall be calculated using the data points generated by the continuous emission monitoring system. At least two data points shall be used to calculate each 1-hour arithmetic average.
- (5) The owner or operator of an affected facility may request that compliance with the carbon monoxide emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in 40 CFR 60.58b(b)(6).
- (6) The procedures specified in paragraphs (i) through (v) shall be used to determine compliance with load level requirements under 40 CFR 60.53b(b).
 - (i) The owner or operator of an affected facility with steam generation capability shall install, calibrate, maintain, and operate a steam flow meter or a feedwater flow meter; measure steam (or feedwater) flow in kilograms per hour (or pounds per hour) on a continuous basis; and record the output of the monitor. Steam (or feedwater) flow shall be calculated in 4-hour block arithmetic averages.

(ii) The method included in the ``American Society of Mechanical Engineers Power Test Codes: Test Code for Steam Generating Units, Power Test Code 4.1-1964 (R1991)" section 4 (incorporated by reference, see 40 CFR 60.17) shall be used for calculating the steam (or feedwater) flow required under paragraph (6)(i). The recommendations in ``American Society of Mechanical Engineers Interim Supplement 19.5 on Instruments and Apparatus: Application, Part II of Fluid Meters, 6th edition (1971)," chapter 4 (incorporated by reference-see 40 CFR 60.17) shall be followed for design, construction, installation, calibration, and use of nozzles and orifices except as specified in (iii).

- (iii) Measurement devices such as flow nozzles and orifices are not required to be recalibrated after they are installed.
- (iv) All signal conversion elements associated with steam (or feedwater flow) measurements must be calibrated according to the manufacturer's instructions before each dioxin/furan performance test, and at least once per year.
- (7) To determine compliance with the maximum particulate matter control device temperature requirements under 40 CFR 60.53b(c), the owner or operator of an affected facility shall install, calibrate, maintain, and operate a device for measuring on a continuous basis the temperature of the flue gas stream at the inlet to each particulate matter control device utilized by the affected facility. Temperature shall be calculated in 4-hour block arithmetic averages.
- (8) The maximum demonstrated municipal waste combustor unit load shall be determined during the initial performance test for dioxins/furans and each subsequent performance test during which compliance with the dioxin/furan emission limit specified in 40 CFR 60.52b(c) is achieved. The maximum demonstrated municipal waste combustor unit load shall be the highest 4-hour arithmetic average load achieved during four consecutive hours during the most recent test during which compliance with the dioxin/furan emission limit was achieved.
- (9) For each particulate matter control device employed at the affected facility, the maximum demonstrated particulate matter control device temperature shall be determined during the initial performance test for dioxins/furans and each subsequent performance test during which compliance with the dioxin/furan emission limit specified in 40 CFR 60.52b(c) is achieved. The maximum demonstrated particulate matter control device temperature shall be the highest 4-hour arithmetic average temperature achieved at the particulate matter control device inlet during four consecutive hours during the most recent test during which compliance with the dioxin/furan limit was achieved.
- (10) At a minimum, valid continuous emission monitoring system hourly averages shall be obtained as specified in paragraphs (i) and (ii) for 75 percent of the operating hours per day for 90 percent of the operating days per calendar quarter that the affected facility is combusting municipal solid waste.
 - (i) At least two data points per hour shall be used to calculate each 1-hour arithmetic average.
 - (ii) At a minimum, each carbon monoxide 1-hour arithmetic average shall be corrected to 7 percent oxygen on an hourly basis using the 1-hour arithmetic average of the oxygen (or carbon dioxide) continuous emission monitoring system data.
- (11) All valid continuous emission monitoring system data must be used in calculating the parameters specified under 40 CFR 60.58b(i) even if the minimum data requirements of paragraph (10) are not met. When carbon monoxide continuous emission data are not obtained because of continuous emission monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained using other monitoring systems as approved by the Administrator or EPA Reference Method 10 to provide, as necessary, the minimum valid emission data.
- (12) Quarterly accuracy determinations and daily calibration drift tests for the carbon monoxide continuous emission monitoring system shall be performed in accordance with procedure 1 in Appendix F of 40 CFR 60.

[40 CFR 60.38b and 40 CFR 60.58b(i); and, PSD-FL-113 and AC35-115379 (and amendment)]

Operator Training and Certification

B.17. 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 I2 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.18.** 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.19.** 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.20.** 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)]

B.21. Operator Training.

- a. The permittee shall submit a copy of a certificate verifying the incinerator operators' satisfactory completion of a Department-approved training program prior to issuance of the operating permit.
- b. Any operator of Unit 1 shall be trained by the equipment manufacturer's representative or an equivalent organization using a state-approved training program.
 - (1) The content of the training program shall be submitted to the Department for approval. The training shall provide a basic understanding of the principles of the combustion process, provide instruction on proper operating practices and procedures, and increase awareness of regulation requirements and safety concerns. Training programs shall be minimum of 16 hours of instruction. The Department shall approve training programs which meet, at a minimum, the criteria set forth in the EPA Medical Waste Incinerator Operator Training Program Course Handbook EPA 453/B-93-018 and Instructor's Guide EPA 453/B-93-019.
 - (2) A copy of the training certificate for each operator having satisfactorily completed the Department-approved training program must be submitted to the Department within 15 days of training. If the incinerator is modified to the extent that a Department construction permit is required, the operators shall be retrained to operate the modified incinerator. Owners of new and modified incinerators shall submit copies of the operator training certificates within 15 days after completion of the initial compliance test.

(3) An operator's certificate must be kept on file at the facility for the duration of the operator's employment and for an additional two years after termination of employment. The owner shall not allow the incinerator to be operated unless it is operated by an operator who has satisfactorily completed the required training program.

[PSD-FL-113 and AC35-115379 amendment; and, Rule 62-296.401(4)(d)7., F.A.C.]

Emission Limitations and Standards

Particulate Matter

B.22. The emission limit for particulate matter (PM/PM₁₀) 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)]

Visible Emissions

B.23. The emission limit for opacity exhibited by the gases discharged to the atmosphere is 10 percent (6-minute block average). Because the vent stacks of both Units 1 and 2 are co-located in a support structure/stack, any visible emissions violations from the structure/stack will be attributed to both units unless opacity meter results show the specific unit causing the violation. [40 CFR 60.33b(a)(1)(iii); Rule 62-4.070(3), F.A.C.; and, PSD-FL-113 and AC35-115379]

Cadmium

B.24. 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.25.** 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); and, Rule 62-296.416(3)(a)1., F.A.C.]
- **B.26.** 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.27. 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.28. Mercury Emissions Inventory. For emissions inventory purposes, all waste-to-energy facilities with charging rates of 40 tons or more per day shall perform annual individual emissions unit mercury emissions tests and report the results to the Department. This testing shall begin during calendar year 1993 and end upon initiation of mercury testing pursuant to Rule 62-296.416(3)(a) or (b), F.A.C. [Rule 62-296.416(3)(c), F.A.C.]

Lead

B.29. 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.30.** The emission limit for sulfur dioxide contained in the gases discharged to the atmosphere is:
- a.1. 60 parts per million by volume, corrected to 7 percent oxygen (dry basis), and calculated as a 6-hour rolling average; or,
- a.2. 30 percent of the potential sulfur dioxide emission concentration (70-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), with a not-to-exceed cap of 120 parts per million by volume, corrected to 7 percent oxygen (dry basis), and calculated as a 6-hour rolling average, whichever is less stringent; and,
- b.1. 29 parts per million by volume, corrected to 7 percent oxygen (dry basis), and calculated as a 24-hour daily geometric average; or,
- b.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 120 parts per million by volume, corrected to 7 percent oxygen (dry basis), and calculated as a 24-hour daily geometric average, whichever is less stringent.

[PSD-FL-113 and AC35-115379; and, 40 CFR 60.33b(b)(3)(i)]

Hydrogen Chloride

- **B.31.** 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), calculated as a 3-hour average; 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), and calculated as an 1-hour average, whichever is less stringent.

[40 CFR 60.33b(b)(3)(ii); and, PSD-FL-113 and AC35-115379 (and amendment)]

Dioxins/Furans

B.32. 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)]

Nitrogen Oxides

B.33. 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)]

Carbon Monoxide

B.34. 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 an 1-hour average. [PSD-FL-113 and AC35-115379 (and amendment); and, Rule 62-296.401(4)(d)3., F.A.C.]

Fugitive Ash Emissions

B.35. 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.48.**), 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.59.**
- (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]

Beryllium

B.36. Emissions of beryllium to the atmosphere shall not exceed 2.0 x 10^{-7} gr/dscf, corrected to 12% CO₂.

[PSD-FL-113 and AC35-115379]

Fluorides

B.37. Fluoride emissions to the atmosphere shall not exceed 1.5 x 10^{-3} gr/dscf, corrected to 12% CO₂. [PSD-FL-113 and AC35-115379]

Volatile Organic Compounds

B.38. Volatile Organic Compounds emissions to the atmosphere shall not exceed 70 ppmvd, corrected to 12% CO₂.

[PSD-FL-113 and AC35-115379]

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On-Specification Used Oil

B.39. "On-Specification" Used Oil: The burning of "on-specification" used oil is allowed at this facility in accordance with all other conditions of this permit and the following additional conditions:

a. Only "on-specification" used oil is allowed be burned in these emissions units that is generated on-site from internal operations. "On-specification" used oil is defined as that which meets the specifications of 40 CFR 279 (Standards for the Management of Used Oil) listed below. Used oil that does not meet all of the following specifications is considered "off-specification" oil and shall not be burned. See specific conditions **B.106.** and **B.107.**

CONSTITUENT / PROPERTY *	ALLOWABLE LEVEL
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Flash Point	100 °F minimum
PCBs	less than 50 ppm

^{*} As determined by approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).

[40 CFR 279.11; and, PSD-FL-113 and AC35-115379 amendment]

B.40. Air Pollution Control Equipment.

a. The acid gas control system for Unit 1 shall cool the flue gases to an average temperature not exceeding 300 °F (3-hr rolling average). [PSD-FL-113 and AC35-115379]

Excess Emissions

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

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

[40 CFR 60.11(d)]

B.43. Startup, Shutdown and Malfunction. The provisions for startup, shutdown, and malfunction are provided in paragraph (1).

- (1) Except as provided by 40 CFR 60.56b, the standards under 40 CFR 60, Subpart Cb, as incorporated in Rule 62-204.800(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.
 - (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.44. 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.]

B.45. 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.]

Test Methods and Procedures

B.46. 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.47. 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.48. 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.49.** 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.50.** 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.67.** 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.51. 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.52.** 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 ± 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).
- (10) [reserved]
- (11) Following the date that the initial performance test for opacity is completed or is required to be completed under 40 CFR 60.8 for an affected facility, the owner or operator shall conduct a performance test for opacity on an annual basis (no more than 12 calendar months following the previous performance test) using the test method specified in paragraph (6).
- [40 CFR 60.38b and 40 CFR 60.58b(c)]

Cadmium, Lead and Mercury

- **B.53.** The procedures and test methods specified in paragraphs (1) and (2) shall be used to determine compliance with the emission limits for cadmium, lead, and mercury.
- (1) The procedures and test methods specified in paragraphs (1)(i) through (1)(ix) shall be used to determine compliance with the emission limits for cadmium and lead.
 - (i) The EPA Reference Method 1 shall be used for determining the location and number of sampling points.
 - (ii) The EPA Reference Method 3, 3A, or 3B, as applicable, shall be used for flue gas analysis.
 - (iii) The EPA Reference Method 29 shall be used for determining compliance with the cadmium and lead emission limits.
 - (iv) An oxygen or carbon dioxide measurement shall be obtained simultaneously with each Method 29 test run for cadmium and lead required under paragraph (1)(iii).

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

- (vi) All performance tests shall consist of a minimum of three test runs conducted under representative full load operating conditions. The average of the cadmium or lead emission concentrations from three test runs or more shall be used to determine compliance.
- (vii) Following the date of the initial performance test or the date on which the initial performance test is required to be completed under 40 CFR 60.8, the owner or operator of an affected facility shall conduct a performance test for compliance with the emission limits for cadmium and lead on an annual basis (no more than 12 calendar months following the previous performance test).
- (viii) [reserved]
- (ix) [reserved]
- (2) The procedures and test methods specified in paragraphs (2)(i) through (2)(xi) shall be used to determine compliance with the mercury emission limit.
 - (i) The EPA Reference Method 1 shall be used for determining the location and number of sampling points.
 - (ii) The EPA Reference Method 3, 3A, or 3B, as applicable, shall be used for flue gas analysis.
 - (iii) The EPA Reference Method 29 shall be used to determine the mercury emission concentration. The minimum sample volume when using Method 29 for mercury shall be 1.7 cubic meters.
 - (iv) An oxygen (or carbon dioxide) measurement shall be obtained simultaneously with each Method 29 test run for mercury required under paragraph (2)(iii).
 - (v) The percent reduction in the potential mercury emissions (%P_{Hg}) is computed using equation 1:

$$[\%P_{Hg}] = [(E_i - E_o)/E_i] \times 100$$
 (equation 1)

where:

 $^{9}P_{Hg}$ = 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_0 = controlled mercury emission concentration measured at the mercury control device outlet, corrected to 7 percent oxygen (dry basis).

- (vi) All performance tests shall consist of a minimum of three test runs conducted under representative full load operating conditions. The average of the mercury emission concentrations or percent reductions from three test runs or more is used to determine compliance.
- (vii) The owner or operator of an affected facility may request that compliance with the mercury emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in paragraph 40 CFR 60.58b(b)(6).
- (viii) The owner or operator of an affected facility shall conduct an initial performance test for mercury emissions as required under 40 CFR 60.8.
- (ix) Following the date that the initial performance test for mercury is completed or is required to be completed under 40 CFR 60.8, the owner or operator of an affected facility shall conduct a performance test for mercury emissions on a annual basis (no more than 12 calendar months from the previous performance test).

(x) [reserved]

(xi) The owner or operator of an affected facility where activated carbon injection is used to comply with the mercury emission limit shall follow the procedures specified in 40 CFR 60.58b(m) (see specific condition **B.108.**) for measuring and calculating carbon usage.

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

B.54. Mercury Emissions Test Method and Procedures.

- (3)(d) 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.15.**), 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.16.**), 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.108.**), 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.55.** 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. See specific condition **B.30**.
- (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)]

Hydrogen Chloride

- **B.56.** 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_{HCI}) is computed using equation 2:

$$[\%P_{HCI}] = [(E_i - E_o)/E_i] \times 100$$
 (equation 2)

where:

%P_{HCI} = 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_0 = controlled hydrogen chloride emission concentration measured at the control device outlet, corrected to 7 percent oxygen (dry basis).

- (4) The owner or operator of an affected facility may request that compliance with the hydrogen chloride emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in 40 CFR 60.58b(b)(6).
- (5) As specified under 40 CFR 60.8, all performance tests shall consist of three test runs. The average of the hydrogen chloride emission concentrations or percent reductions from the three test runs is used to determine compliance.
- (6) The owner or operator of an affected facility shall conduct an initial performance test for hydrogen chloride as required under 40 CFR 60.8.
- (7) Following the date that the initial performance test for hydrogen chloride is completed or is required to be completed under 40 CFR 60.8, the owner or operator of an affected facility shall conduct a performance test for hydrogen chloride emissions on an annual basis (no more than 12 calendar months following the previous performance test).
- (8) [reserved]
- [40 CFR 60.38b and 40 CFR 60.58b(f)]

Dioxins/Furans

- **B.57.** The procedures and test methods specified in paragraphs (1) through (9) shall be used to determine compliance with the limits for dioxin/furan emissions.
- (1) The EPA Reference Method 1 shall be used for determining the location and number of sampling points.
- (2) The EPA Reference Method 3, 3A, or 3B, as applicable, shall be used for flue gas analysis.
- (3) The EPA Reference Method 23 shall be used for determining the dioxin/furan emission concentration.
 - (i) The minimum sample time shall be 4 hours per test run.

(ii) An oxygen (or carbon dioxide) measurement shall be obtained simultaneously with each Method 23 test run for dioxins/furans.

- (4) The owner or operator of an affected facility shall conduct an initial performance test for dioxin/furan emissions in accordance with paragraph (3), as required under 40 CFR 60.8.
- (5) Following the date that the initial performance test for dioxins/furans is completed or is required to be completed under 40 CFR 60.8, the owner or operator of an affected facility shall conduct performance tests for dioxin/furan emissions in accordance with paragraph (3), according to one of the schedules specified in paragraphs (i) through (iii).
 - (i) For affected facilities, performance tests shall be conducted on an annual basis (no more than 12 calendar months following the previous performance test.)
 - (ii) [reserved]
 - (iii) Where all performance tests over a 2-year period indicate that dioxin/furan emissions are less than or equal to 7 nanograms per dry standard cubic meter (total mass) for all affected facilities located within a municipal waste combustor plant, the owner or operator of the municipal waste combustor plant may elect to conduct annual performance tests for one affected facility (i.e., unit) per year at the municipal waste combustor plant. At a minimum, a performance test for dioxin/furan emissions shall be conducted 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 7 nanograms per dry standard cubic meter (total mass), the owner or operator may continue conducting a performance test on only one affected facility per year. If any annual performance test indicates a dioxin/furan emission level greater than 7 nanograms per dry standard cubic meter (total mass), performance tests thereafter shall be conducted annually on all affected facilities at the plant until and unless all annual performance tests for all affected facilities at the plant over a 2-year period indicate a dioxin/furan emission level less than or equal to 7 nanograms per dry standard cubic meter (total mass).
- (6) The owner or operator of an affected facility that selects to follow the performance testing schedule specified in paragraph (5)(iii) shall follow the procedures specified in 40 CFR 60 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.58.** 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)]

Fugitive Ash

- **B.59.** 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.35.**)
- (1) The EPA Reference Method 22 shall be used for determining compliance with the fugitive ash emission limit under 40 CFR 60.55b. The minimum observation time shall be a series of three 1-hour observations. The observation period shall include times when the facility is transferring ash from the municipal waste combustor unit to the area where ash is stored or loaded into containers or trucks.
- (2) The average duration of visible emissions per hour shall be calculated from the three 1-hour observations. The average shall be used to determine compliance with 40 CFR 60.55b.
- (3) The owner or operator of an affected facility shall conduct an initial performance test for fugitive ash emissions as required under 40 CFR 60.8.
- (4) Following the date that the initial performance test for fugitive ash emissions is completed or is required to be completed under 40 CFR 60.8 for an affected facility, the owner or operator shall conduct a performance test for fugitive ash emissions on an annual basis (no more than 12 calendar months following the previous performance test).

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

Beryllium

B.60. The test method for beryllium emissions shall be EPA Reference Method 104, adopted and incorporated by reference in Rule 62-204.800, F.A.C. [PSD-FL-113 and AC35-115379]

Fluorides

B.61. The test method for fluoride emissions shall be EPA Reference Method 13B, adopted and incorporated by reference in Rule 62-204.800, F.A.C. [PSD-FL-113 and AC35-115379]

Volatile Organic Compounds

- **B.62.** The test method for volatile organic compounds shall be EPA Reference Method 25 or 25A, adopted and incorporated by reference in Rule 62-204.800, F.A.C. [PSD-FL-113 and AC35-115379]
- **B.63.** 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.64.** 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.65.** 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.66. Applicable Test Procedures.

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

(b) <u>Minimum Sample Volume</u>. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.

{Permitting note: Specific condition **D.51.** specifies a minimum sample volume of 1.7 cubic meters.}

- (c) <u>Required Flow Rate Range</u>. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) <u>Calibration of Sampling Equipment</u>. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, attached as part of this permit.
- (e) <u>Allowed Modification to EPA Method 5</u>. 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.67.** 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.68.** 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 Department's Central District, 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.

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

(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.69.** Compliance with standards in 40 CFR 60, other than opacity standards, shall be determined only by performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard. [40 CFR 60.11(a)]
- **B.70.** 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.71.** 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.72. 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.73.** 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.74.** (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.75. 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.76.** 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.77.** 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.78.** 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 O₂ 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.79. Determination of Process Variables.

(a) <u>Required Equipment</u>. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with

emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

- (b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value. [Rule 62-297.310(5), F.A.C.]
- **B.80.** Continuous Emissions Monitoring Systems (CEMS) or Continuous Monitoring Systems (CMS). The permittee shall install, calibrate, maintain, and operate (1) CEMS devices for opacity, oxygen, carbon monoxide, and sulfur dioxide; and, (2) CMS devices to continuously monitor and record steam production, the furnace exit gas temperature (FEGT), the secondary (or last) combustion chamber exit temperature, and the flue gas temperature at the exit of the acid gas control equipment.
- a. The CEMS and CMS devices shall meet the applicable requirements of Chapter 62-297, F.A.C. (see specific conditions **B.79.** and **B.81.**) and 40 CFR 60.13 (see specific conditions **B.72.** thru **B.78.**), including certification of each device.
- b. Each CEMS shall meet performance specifications of 40 CFR 60, Appendix B. The SO₂ CEMS sample point shall be located downstream of the control device.
- c. CEMS data shall be recorded during periods of startup, shutdown and malfunction, but shall be excluded from emission averaging calculations for CO, SO₂, and opacity.
- d. A malfunction means any sudden and unavoidable failure of air pollution control equipment or process equipment to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.
- e. The procedures under 40 CFR 60.13 shall be followed for installation, evaluation and operation of all CEMS.
- f. Opacity monitoring system data shall be reduced to 6-minute averages, based on 36 or more data points, and gaseous CEMS data shall be reduced to 1-hour averages, based on 4 or more data points, in accordance with 40 CFR 60.13(h).
- g. Average CO and SO₂ emission concentrations, corrected for CO₂, shall be computed in accordance with the appropriate averaging time periods included in specific conditions **B.34**. and **B.30**.
- h. A FEGT to combustion zone correlation shall be established to relate furnace temperature at the temperature monitor location to furnace temperature in the overfire air fully mixed zone.
- i. Each owner or operator of a biological waste incineration facility shall install, operate, and maintain in accordance with the manufacturer's instruction CMS equipment to monitor and record the secondary (or last) combustion chamber exit temperature.
- j. The furnace heat load shall be maintained between 80% and 115% of the design rated capacity during normal operations. The lower limit may be extended provided compliance with the carbon monoxide emissions limit and the FEGT within this permit at the extended turndown rate are achieved. [40 CFR 60.13; PSD-FL-113 and AC35-115379; and, Rule 62-296.401(4)(g), F.A.C.]
- **B.81.** Continuous Monitor Performance Specifications. If continuous monitoring systems are required by rule or permit to be used for demonstrating compliance with the standards of the Department, they must be installed, maintained and calibrated in accordance with the EPA performance specifications listed below. These Performance Specifications are contained in 40 CFR 60, Appendix B, and are adopted by reference in Rule 62-204.800, F.A.C. The EPA performance specifications that are adopted by reference at Rule 62-204.800, F.A.C., are adopted in their entirety except for those provisions referring to approval of alternative procedures by the Administrator. For purposes of this rule, such alternative procedures may only be approved by the Secretary or his or her designee in accordance with Rule 62-297.620, F.A.C.

(1) Performance Specification 1--Specifications and Test Procedures for Opacity Continuous Emission Monitoring Systems in Stationary Sources.

(3) Performance Specification 3--Specifications and Test Procedures for O₂ and CO₂ Continuous Emission Monitoring Systems in Stationary Sources. [Rule 62-297.520, F.A.C.]

CEM for Oxygen and Carbon Dioxide

- **B.82.** 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 and 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 monitor shall be 25 percent oxygen; and, the span value of the carbon dioxide monitor shall be 25 percent carbon dioxide.
- (2) The monitors 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 monitors 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 monitors.
- (6) Because carbon dioxide is required 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); and, PSD-FL-113 and AC35-115379]

Recordkeeping and Reporting Requirements

- **B.83.** 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.84.** 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.85.** Each owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form [see 40 CFR 60.7(d)] to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or, the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or, the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:
- (1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
- (2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
- (3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
- (4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report. [40 CFR 60.7(c)(1), (2), (3), and (4)]
- **B.86.** 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.87. (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.88. 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, Rules 62-213.440(1)(b)2.b. and 62-296.401(4)(g)2., F.A.C.]

- **B.89.** 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.90.** The owner or operator of an affected facility subject to the standards under 40 CFR. 60.53b, 60.54b, and 60.55b shall maintain records of the information specified in paragraphs (1) through (15), as applicable, for each affected facility for a period of at least 5 years.
- (1) The calendar date of each record.
- (2) The emission concentrations and parameters measured using continuous monitoring systems as specified under paragraphs (i) and (ii).
 - (i) The measurements specified in paragraphs (A) through (D) shall be recorded and be available for submittal to the Administrator or review onsite by an inspector.
 - (A) All 6-minute average opacity levels as specified under 40 CFR 60.58b(c).
 - (B) All 1-hour average sulfur dioxide emission concentrations as specified under 40 CFR 60.58b(e).
 - (C) All 1-hour average nitrogen oxides emission concentrations as specified under 40 CFR 60.58b(h).
 - (D) All 1-hour average carbon monoxide emission concentrations, municipal waste combustor unit load measurements, and particulate matter control device inlet temperatures as specified under 40 CFR 60.58b(i).
 - (ii) The average concentrations and percent reductions, as applicable, specified in paragraphs (2)(ii)(A) through (2)(ii)(D) shall be computed and recorded, and shall be available for submittal to the Administrator or review on-site by an inspector.
 - (A) All 24-hour daily geometric average sulfur dioxide emission concentrations and all 24-hour daily geometric average percent reductions in sulfur dioxide emissions as specified under 40 CFR 60.58b(e).
 - (B) All 24-hour daily arithmetic average nitrogen oxides emission concentrations as specified under 40 CFR 60.58b(h).
 - (C) All 4-hour block or 24-hour daily arithmetic average carbon monoxide emission concentrations, as applicable, as specified under 40 CFR 60.58b(i).
 - (D) All 4-hour block arithmetic average municipal waste combustor unit load levels and particulate matter control device inlet temperatures as specified under 40 CFR 60.58b(i).
- (3) Identification of the calendar dates when any of the average emission concentrations, percent reductions, or operating parameters recorded under paragraphs (2)(ii)(A) through (2)(ii)(D), or the opacity levels recorded under paragraph (2)(i)(A) are above the applicable limits, with reasons for such exceedances and a description of corrective actions taken.
- (4) For affected facilities that apply activated carbon for mercury or dioxin/furan control, the records specified in paragraphs (i) through (v).
 - (i) The average carbon mass feed rate (in kilograms per hour or pounds per hour) estimated as required under 40 CFR 60.58b(m)(1)(i) during the initial mercury performance test and all subsequent annual performance tests, with supporting calculations.
 - (ii) The average carbon mass feed rate (in kilograms per hour or pounds per hour) estimated as required under 40 CFR 60.58b(m)(1)(ii) during the initial dioxin/furan performance test and all subsequent annual performance tests, with supporting calculations.
 - (iii) The average carbon mass feed rate (in kilograms per hour or pounds per hour) estimated for each hour of operation as required under 40 CFR 60.58b(m)(3)(ii), with supporting calculations.
 - (iv) The total carbon usage for each calendar quarter estimated as specified by 40 CFR 60.58b(m)(3), with supporting calculations.

(v) Carbon injection system operating parameter data for the parameter(s) that are the primary indicator(s) of carbon feed rate (e.g., screw feeder speed).

- (5) [Reserved]
- (6) Identification of the calendar dates for which the minimum number of hours of any of the data specified in paragraphs (i) through (v) have not been obtained including reasons for not obtaining sufficient data and a description of corrective actions taken.
 - (i) Sulfur dioxide emissions data;
 - (ii) Nitrogen oxides emissions data;
 - (iii) Carbon monoxide emissions data;
 - (iv) Municipal waste combustor unit load data; and
 - (v) Particulate matter control device temperature data.
- (7) Identification of each occurrence that sulfur dioxide emissions data, nitrogen oxides emissions data (large municipal waste combustors only), or operational data (i.e., carbon monoxide emissions, unit load, and particulate matter control device temperature) have been excluded from the calculation of average emission concentrations or parameters, and the reasons for excluding the data.
- (8) The results of daily drift tests and quarterly accuracy determinations for sulfur dioxide, nitrogen oxides, and carbon monoxide continuous emission monitoring systems, as required under Appendix F of this part, procedure 1.
- (9) The test reports documenting the results of the initial performance test and all annual performance tests listed in paragraphs (i) and (ii) shall be recorded along with supporting calculations.
 - (i) The results of the initial performance test and all annual performance tests conducted to determine compliance with the particulate matter, opacity, cadmium, lead, mercury, dioxins/furans, hydrogen chloride, and fugitive ash emission limits.
 - (ii) For the initial dioxin/furan performance test and all subsequent dioxin/furan performance tests recorded under paragraph (9)(i), the maximum demonstrated municipal waste combustor unit load and maximum demonstrated particulate matter control device temperature (for each particulate matter control device).
- (10) [Reserved]
- (12) 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.
- (13) Records showing the names of persons who have completed a review of the operating manual as required by 40 CFR 60.54b(f) including the date of the initial review and subsequent annual reviews.

 (14) For affected facilities that apply activated carbon 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.

- (15) 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)(ii) and 40 CFR 60.58b(m)(1)(iii), with reasons for such occurrences and a description of corrective actions taken.

 [40 CFR 60.39b and 40 CFR 60.59b(d)]
- **B.91.** 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.92.** 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.93.** The owner or operator of an affected facility shall submit a semiannual report that includes the information specified in paragraphs (1) through (5) for any recorded pollutant or parameter that does not comply with the pollutant or parameter limit specified under this subpart, according to the schedule specified under paragraph (6).
- (1) The semiannual report shall include information recorded under 40 CFR 60.59b(d)(3) for sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor unit load level, particulate matter control device inlet temperature, and opacity.
- (2) For each date recorded as required by 40 CFR 60.59b(d)(3) and reported as required by paragraph (1), the semiannual report shall include the sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor unit load level, particulate matter control device inlet temperature, or opacity data, as applicable, recorded under 40 CFR 60.59b(d)(2)(ii)(A) through (d)(2)(ii)(D) and (d)(2)(i)(A), as applicable.
- (3) If the test reports recorded under 40 CFR 56.59b(d)(9) document any particulate matter, opacity, cadmium, lead, mercury, dioxins/furans, hydrogen chloride, and fugitive ash emission levels that were above the applicable pollutant limits, the semiannual report shall include a copy of the test report documenting the emission levels and the corrective actions taken.
- (4) The semiannual report shall include the information recorded under 40 CFR 60.59b(d)(15) for the carbon injection system operating parameter(s) that are the primary indicator(s) of carbon mass feed rate.
- (5) For each operating date reported as required by paragraph (4), the semiannual report shall include the carbon feed rate data recorded under 40 CFR 60.59b(d)(4)(iii).
- (6) Semiannual reports required by this condition shall be submitted according to the schedule specified in paragraphs (i) and (ii).
 - (i) If the data reported in accordance with paragraphs (1) through (5) were collected during the first calendar half, then the report shall be submitted by August 1 following the first calendar half.
 - (ii) If the data reported in accordance with paragraphs (1) through (5) were collected during the second calendar half, then the report shall be submitted by February 1 following the second calendar half.

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

B.94. 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.95. 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.96.** 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.97.** In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department's Central District in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department's Central District. [Rule 62-210.700(6), F.A.C.]
- **B.98.** 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(1), F.A.C.]
- **B.99.** For purposes of reports required under this permit, excess emissions are defined as any calculated average emission concentration, as determined pursuant to this specific condition, which exceeds the applicable emission limit in specific conditions **B.22.**, **B.24.**, **B.25.**, **B.29.**, **B.30.**, **B.31.**, **B.32.**, **B.33.**, **B.34.**, **B.36.**, **B.37.** and **B.38.**

[PSD-FL-113 and AC35-115379 (and amendment)]

B.100. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department's Central District on the results of each such test.
- (b) The required test report shall be filed with the Department's Central District as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department's Central District 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.101.** The owner or operator of any incinerator subject to the provisions of 40 CFR 60, Subpart E, shall record the daily charging rates and hours of operation. [40 CFR 60.53(a); and, PSD-FL-113 and AC35-115379]
- **B.102.** <u>Auxiliary Burners Fuel Recordkeeping</u>. Monthly records shall be maintained of the amount each type of fuel (e.g., natural gas and propane) used by the auxiliary burners of Unit 1 and the equivalent heat input from each type of fuel (can be supplied by the supplier). [Rule 62-213.440(1), F.A.C.]
- **B.103.** MSW Charging Rate Monitoring. The average daily solid waste charging rate shall be determined on a monthly basis and recorded for Unit 1. The daily charging rate shall be determined each month on an average daily basis for Unit 1 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 determined the number of operating hours per MWC unit for each day during the preceding calendar month.

[Rule 62-213.440(1), F.A.C.; and, 40 CFR 60.53(a)]

B.104. Segregated Solid Waste Recordkeeping. The following records shall be made and kept to demonstrate compliance with the segregated non-MSW percentage limitations of specific condition **B.12**.:

- (1) Each segregated load of non-MSW materials, that is subject to the percentage weight limitations of specific condition **B.12.**, which is received for processing shall be documented as to waste description and weight. The weight of all waste materials received for processing shall be measured using the facility truck scale and recorded.
- (2) Each day the total weight of segregated tires received shall be computed, and the daily total shall be added to the sum of the daily totals from the previous 29 days. The resultant 30 day total weight of tires shall be divided by the total weight of all waste materials received in the same 30 day period, and the resultant number shall be multiplied by 100 to express the ratio in percentage terms. The percentage computed shall be compared to the 3% limitation.
- (3) Each day the total weight of segregated non-MSW materials received that are subject to the 5% and 20% restrictions 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% and 20% limitations.
- (4) Records shall be maintained showing the oil-contaminated waste generator's written certification that the waste is non-hazardous. Documentation requirements shall include a written description of the waste, a material characterization form (sample submitted with the request dated March 20, 1995), and the applicable material safety data sheets for the waste components. Tonnages of oil-contaminated waste fired shall be recorded and made available for inspection by the Department. These records shall be maintained for a period of five years.

[Rule 62-213.440(1), F.A.C.; and, PSD-FL-113 and AC35-115379 amendment]

B.105. Boxed Biomedical Waste Recordkeeping. The hourly, daily, and calendar quarterly feed rate, by weight, of boxed biomedical waste into Unit 1 shall be measured, recorded, and kept available for inspection by the Department for a minimum of five years.

[40 CFR 60.50c(c); and, Rule 62-4.070(3) and 62-213.440(1), F.A.C.]

- **B.106.** Special Recordkeeping Requirements On-specification Used Oil. The owner or operator shall obtain, make, and keep the following records related to the use of used oil:
- (1) The gallons of on-specification used oil burned each month. (This record shall be completed no later than the fifteenth day of the succeeding month.)
- (2) The total gallons of on-specification used oil burned in the preceding calendar year. The records shall be retained in a form suitable for inspection at the facility by the Department, and shall be retained for 5 years. See specific conditions **B.39**. and **B.107**.

[Rule 62-213.440(1)(b)2.b., F.A.C.; 40 CFR 279.61 and 761.20(e); and, PSD-FL-113 and AC35-115379 amendment]

B.107. Reporting Required - On-specification Used Oil. The owner or operator shall submit, with the Annual Operation Report (AOR) form, the total amount of on-specification used oil burned in Unit 1 during the previous calendar year to the Department's Central District. See specific conditions **B.39.** and **B.106.**

[Rules 62-4.070(3), 62-212.400(2)(f)1. and 62-213.440(1)(b)2.b., F.A.C.]

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Miscellaneous Requirements.

B.108. 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.25.**), or the dioxin/furan emission limits (see specific condition **B.32.**), 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.109. Periodic Monitoring - Mercury. For purposes of periodic monitoring for mercury: a. Quarterly testing shall be required using EPA Method 29. [Rules 62-4.070(3) & (5) and 62-213.440(1)(b)1.b., F.A.C.]

B.110. 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.111. All of the combustibles in the MSW, including biomedical waste, placed in the furnace must be completely combusted prior to removing from the furnace for further processing, such as ash handling and landfilling.

[Rules 62-4.070(3) & (5) and 62-213.440(1), F.A.C.; and, PSD-FL-113 and AC35-115379 amendment]

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B.112. Periodic Monitoring: Combustion Chamber Temperature.

a. A continuous temperature monitor shall be installed, calibrated, maintained, and operated in the furnace combustion chamber. The temperature monitor shall be calibrated every calendar quarter.

b. An electrical interlock shall be established between the combustion chamber temperature monitor and the biomedical waste feed system; and, any time that the combustion chamber temperature drops below 1800 °F, the biomedical waste feed system shall cease operation until the combustion chamber temperature of 1800 °F is restored.

[Rules 62-4.070(3) & (5) and 62-213.440(1)(b)1.b., F.A.C.]

Subsection C. This section addresses the following emissions unit.

E.U. ID No.	Brief Description		
-002	288 TPD (maximum) Municipal Solid Waste Combustor & Auxiliary Burners - Unit 2		

Emissions unit No. -002 is a municipal solid waste (MSW) and wood chip combustor designated as "Unit 2". The combustor consists of a mass burn waterwall boiler with a design rated capacity of 250 tons MSW and wood chips per day, 104 MMBtu heat input per hour, and 60,200 pounds steam output per hour with the MSW having a heating value of 5,000 Btu per pound. The maximum solid waste throughput is 288 tons MSW and wood chips per day, 120 MMBtu per hour heat input, and 69,000 pounds of steam output per hour (3-hour average). The auxiliary burners associated with the combustor are permitted to fire distillate fuel oil or gas (e.g., natural and propane). The auxiliary burners are used to fire the MSW and wood chips during start-up, shutdown, and at other times when necessary and consistent with good combustion practices. The maximum permitted steam production rate is 69,000 lbs/hr when firing MSW and wood chips. Unit 2 is not allowed to process "boxed biomedical waste".

Unit 2 began commercial operation August 22, 1990. Particulate matter emissions are controlled by a fabric filter baghouse system. Acid gas emissions are controlled by dry scrubbing followed by a fabric filter baghouse system. Carbon monoxide (CO) emissions are currently controlled by good combustion practices. Nitrogen oxides (NO_x) are controlled by a Selective Non-Catalytic Reduction (SNCR) system. Mercury (Hg) and certain organic (dioxin) emissions are to be controlled by activated carbon injection (ACI) followed by a fabric filter baghouse system. Units 1 and 2 discharge their emissions independently through their own stack, but are co-located within a single support structure/stack. (Unit 2's stack height: 199 feet; exit diameter: 4.3 feet; exit temperature: 270 °F; actual volumetric flow rate: 59,400 acfm; and, dry standard volumetric flow rate: 43,200 dscfm.).

{Permitting notes. This emissions unit is regulated under 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-113/AC35-115379; Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT); and, Rule 62-296.416, F.A.C., Waste-to-Energy Facilities.}

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

General

C.0. This Subsection C shall become null and void upon the date the permittee submits the performance test results that the facility is in final compliance with 40 CFR 60, Subpart Cb, and shall be replaced with Subsection D.

[Rule 62-4.070(3), F.A.C.]

C.1. The Standards of Performance for New Stationary Sources adopted by reference in Rule 62-204.800(7), F.A.C., shall be controlling over other standards in the air pollution rules of the Department, except that any emissions limiting standard contained in or determined pursuant to the air pollution rules of the Department, which is more stringent than one contained in a Standard of Performance, or which regulates emissions of pollutants or emissions units not regulated by an applicable Standard of Performance, shall apply.

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

C.2. <u>Definitions: Administrator</u>. For the purposes of Rule 62-204.800(7), F.A.C., the definitions contained in the various provisions of 40 CFR Part 60, adopted herein, shall apply, except that the term "Administrator", when used in 40 CFR Part 60, shall mean the Secretary or the Secretary's designee. [40 CFR 60.2; and, Rule 62-204.800(7)(a), F.A.C.]

- **C.3.** 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]
- **C.4.** The incinerator boilers shall have a metal name plate affixed in a conspicuous place on the shell showing manufacturer, model number, type waste, rated capacity and certification number. [Rule 62-4.070(3), F.A.C.]
- C.5. Unit 2 is 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. [Rule 62-4.070(3), F.A.C.]
- **C.6.** Combustion Zone Design Temperature. The design furnace mean temperature at the fully mixed zone of the combustor shall not be less than 1800 °F. [PSD-FL-113 and AC35-115379]

Essential Potential to Emit (PTE) Parameters:

C.7. <u>Permitted Capacity</u>.

- (1) <u>Municipal Solid Waste</u>. Unit 2 shall not be loaded in excess of its maximum rated capacity of 24,000 lbs/hr and 288 tons/day of municipal solid waste (MSW) and wood chips.
- (2) Steam. The maximum steam production rate for Unit 2 is 69,000 lbs/hr (3-hr average).
- (3) Heat Input. The maximum heat input for Unit 2 is 120 million Btu per hour (3-hr average).
- (4) <u>Normal Operating Range</u>. The normal operating range for Unit 2 is 80% to 115% of design rated capacity, which is 250 tons/day of MSW and wood chips, 104 million Btu heat input per hour (3-hr average), and 60,200 lbs/hr steam output (3-hr average), with the MSW having a heating value of 5,000 Btu per pound.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, PSD-FL-113 and AC35-115379]

- **C.8.** Emissions Unit Operating Rate Limitation After Testing. See specific condition **C.46**. [Rule 62-297.310(2), F.A.C.]
- **C.9.** Methods of Operation Fuels.
- (1) <u>Municipal Solid Waste</u>. The primary fuels for Unit 2 are MSW and wood chips, and the items and materials that fit within the definition of MSW contained in Section 403.706(5), F.S.
- (2) <u>Internally Generated Used Oil</u>. The facility is allowed to burn used oil, which is generated as a result of internal operations, after thoroughly mixing it with the refuse in the pit. A log of the amount of all internally generated used oil burned shall be maintained pursuant to 40 CFR Part 279 and Rule 62-213.440, F.A.C.
- (3) <u>Used Oil</u>. No liquid used oil can be accepted by the facility from any outside generators.

(4) <u>Auxiliary Burners</u>. The auxiliary burners are permitted to fire only distillate fuel oil or gas (e.g., natural or propane). The auxiliary burners shall be used at startup during the introduction of MSW and wood chip fuel until design furnace gas temperature is achieved; and, at other times when necessary and consistent with good combustion practices. All air pollution control and continuous emissions monitoring equipment shall be operational and functioning properly prior to the incineration or ignition of waste and until all the wastes are incinerated. During shutdown, the combustion chamber temperature shall be maintained using auxiliary burners until the wastes are completely combusted.

- (5) <u>Unauthorized Fuel</u>. Subject to the limitations contained in this permit, the authorized fuels for the facility also include the other solid wastes that are not MSW which are described in categories (7), (8), and (9), below. However, the facility <u>shall not burn</u>:
 - (a) those materials that are prohibited by state or federal law;
 - (b) those materials that are prohibited by this permit;
 - (c) lead acid batteries;
 - (d) hazardous waste, unless a permit has been issued for the combustor to allow such burning or the waste is of such quantity to be exempt in accordance with Department Chapter 62-30, F.A.C.;
 - (e) nuclear waste;
 - (f) radioactive waste, unless a permit has been issued for the combustor to allow such burning or the waste is of such quantity to be exempt in accordance with Department of Health and Rehabilitative Services Rule 10D-91 or 10D-104.003, F.A.C.;
 - (g) sewage sludge;
 - (h) explosives;
 - (i) biomedical waste;
 - (j) beryllium-containing wastes, as defined in 40 CFR 61, Subpart C.
- (6) 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 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 [see (8) and (9)]. 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.

- (7) 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.

- (8) <u>Waste Tires</u>. Subject to the conditions and limitations contained in this permit, waste tires may be used as fuel at the facility. The total quantity of waste tires received as <u>segregated loads</u> and burned at the facility shall not exceed 3%, by weight, of the facility's total fuel. Compliance with this limitation shall be determined by using a rolling 30-day average in accordance with specific condition **C.64**.
- (9) 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, unless otherwise stated. Compliance with this limitation shall be determined by using a rolling 30-day average in accordance with specific condition C.64.
 - (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.
 - (m) Used oil and used oil filters. Used oil containing a PCB concentration equal to or greater than 50 ppm shall not be burned, pursuant to the limitations of 40 CFR 761.20(e). All used oil shall comply with the definition stated in 40 CFR 260.10 and shall not exceed the specification levels for arsenic, cadmium, chromium, lead, and the total halogens contained in Table 1 of 40 CFR 279.11, or contain any hazardous waste as defined in 40 CFR 261.3. See specific condition C.15.
 - (n) For the wastes defined in categories (b), (f) and (g) above, the maximum percentage of oil contaminated waste defined as oil spill cleanup debris and absorbing media, including oil filters, fired in Unit 2 is 20%, by weight, of the total solid waste input, based on a rolling 30-day average.
 - (o) 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.
- (10) Other fuels or wastes shall not be burned in Unit 2 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.; and, PSD-FL-113 and AC35-115379 (and amendment)]

C.10. Hours of Operation. Unit 2 is allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200(PTE), F.A.C.; and, PSD-FL-113 and AC35-115379]

Emission Limitations and Standards

C.11. Emission Limits: Stack emissions from Unit 2 shall not exceed the following:

(1) Particulate Matter (PM):

0.0150 gr/dscf, corrected to 12% CO₂.

(2) Sulfur Dioxide (SO₂):

60 ppmvd, corrected to 12% CO₂, 6-hr rolling average;

70% reduction of uncontrolled SO₂ emissions, 6-hr rolling average. Not to exceed 120 ppmvd, corrected to

12% CO₂, 6-hr rolling average.

(3) Nitrogen Oxides (NOx):

385 ppmvd, corrected to 12% CO₂.

(4) Carbon Monoxide (CO):

200 ppmvd, corrected to 12% CO₂, 4-hour rolling

average.

(5) Volatile Organic Compounds (VOC):

70 ppmvd as carbon, corrected to 12% CO₂.

(6) Lead (Pb):

3.1 x 10⁻⁴ gr/dscf, corrected to 12% CO₂.

(7) Fluoride (Fl):

1.5 x 10⁻³ gr/dscf, corrected to 12% CO₂. 2.0 x 10⁻⁷ gr/dscf, corrected to 12% CO₂. 3.4 x 10⁻⁴ gr/dscf, corrected to 12% CO₂.

(8) Beryllium (Be):

(9) Mercury (Hg):

For each pollutant for which a continuous emissions monitoring system (CEMS) is required, the emission averaging time specified above shall be used to establish operating limits and reportable excess emissions.

[PSD-FL-113 and AC35-115379; and, BACT]

C.12. Relationship to Best Available Control Technology. The emission limitations in Rule 62-296.416, F.A.C., supersede any less stringent emission limitations including those based on a best available control technology (BACT) determination made pursuant to Rule 62-212.400, F.A.C., or 40 CFR 52.21. The application of BACT shall not result in emissions of any air contaminant which exceeds the emission limits set forth in Rule 62-296.416, F.A.C. See specific conditions C.11. and C.13. [Rule 62-296.416(2), F.A.C.]

C.13. Emissions Standard for Facilities Using Mercury Control Equipment.

- (1) Mercury emissions from facilities using post-combustion control equipment designed to remove mercury from flue gases shall not exceed 70 micrograms per dry standard cubic meter of flue gas, corrected to 7 percent O2, or 20 percent by weight of the mercury in the flue gas upstream of the mercury control device (80 percent reduction by weight), whichever occurs first.
- (2) 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.

(3) 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), F.A.C.]

- C.14. <u>Visible Emissions (VE)</u>. VE shall not exceed 15% opacity (6-min average), except for one 6-minute period per hour of not more than 20% opacity. Because the vent stacks of both Units 1 and 2 are co-located in a support structure/stack, any visible emissions violations from the structure/stack will be attributed to both units unless opacity meter results show the specific unit causing the violation. [Rule 62-4.070(3), F.A.C.; and, PSD-FL-113 and AC35-115379]
- C.15. "On-Specification" Used Oil: The burning of "on-specification" used oil is allowed at this facility in accordance with all other conditions of this permit and the following additional conditions:
- a. Only "on-specification" used oil is allowed be burned in these emissions units that is generated on-site from internal operations. "On-specification" used oil is defined as that which meets the specifications of 40 CFR 279 (Standards for the Management of Used Oil) listed below. Used oil that does not meet all of the following specifications is considered "off-specification" oil and shall not be burned. See specific conditions **C.65.** and

C.66.

CONSTITUENT / PROPERTY	· <u>ALLOWABLE LEVEI</u>
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Flash Point	100 °F minimum
PCBs	less than 50 ppm

* As determined by approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).

[40 CFR 279.11; and, PSD-FL-113 and AC35-115379 amendment]

C.16. Air Pollution Control Equipment.

- a. Unit 2 shall be equipped with a particulate emission control device.
- b. Unit 2 shall be equipped with an acid gas control device to remove at least 90% of acid gases and 70% sulfur dioxide emissions.
- c. The acid gas control system for Unit 2 shall cool the flue gases to an average temperature not exceeding $300\,^{\circ}F$ (3-hr rolling average).

[PSD-FL-113 and AC35-115379]

Excess Emissions

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

C.17. Excess emissions resulting from startup, shutdown, or malfunction of any emissions unit shall be permitted provided that (1) best operational practices to minimize emissions are adhered to and (2) 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.18. 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.]

C.19. 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)]

Monitoring of Operations

C.20. Determination of Process Variables.

- (a) <u>Required Equipment</u>. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- (b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value. [Rule 62-297.310(5), F.A.C.]
- **C.21.** Continuous Emissions Monitoring Systems (CEMS) or Continuous Monitoring Systems (CMS). The permittee shall install, calibrate, maintain, and operate (1) CEMS devices for opacity, oxygen, carbon monoxide, and sulfur dioxide; and, (2) CMS devices to continuously monitor and record steam production, the furnace exit gas temperature (FEGT), and the flue gas temperature at the exit of the acid gas control equipment.
- a. The CEMS and CMS devices shall meet the applicable requirements of Chapter 62-297, F.A.C. (see specific conditions **C.20.** and **C.23.**) and 40 CFR 60.13 (see specific conditions
- C.24. thru C.30.), including certification of each device.
- b. Each CEMS shall meet performance specifications of 40 CFR 60, Appendix B. The SO₂ CEMS sample point shall be located downstream of the control device.
- c. CEMS data shall be recorded during periods of startup, shutdown and malfunction, but shall be excluded from emission averaging calculations for CO, SO₂, and opacity.
- d. A malfunction means any sudden and unavoidable failure of air pollution control equipment or process equipment to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.
- e. The procedures under 40 CFR 60.13 shall be followed for installation, evaluation and operation of all CEMS.

f. Opacity monitoring system data shall be reduced to 6-minute averages, based on 36 or more data points, and gaseous CEMS data shall be reduced to 1-hour averages, based on 4 or more data points, in accordance with 40 CFR 60.13(h).

- g. Average CO and SO_2 emission concentrations, corrected for CO_2 , shall be computed in accordance with the appropriate averaging time periods included in specific condition C.11.
- h. A FEGT to combustion zone correlation shall be established to relate furnace temperature at the temperature monitor location to furnace temperature in the overfire air fully mixed zone.
- i. The furnace heat load shall be maintained between 80% and 115% of the design rated capacity during normal operations. The lower limit may be extended provided compliance with the carbon monoxide emissions limit and the FEGT within this permit at the extended turndown rate are achieved. [40 CFR 60.13; and, PSD-FL-113 and AC35-115379]

C.22. 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 specific condition.
- (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]
- C.23. Continuous Monitor Performance Specifications. If continuous monitoring systems are required by rule or permit to be used for demonstrating compliance with the standards of the Department, they must be installed, maintained and calibrated in accordance with the EPA performance specifications listed below. These Performance Specifications are contained in 40 CFR 60, Appendix B, and are adopted by reference in Rule 62-204.800, F.A.C. The EPA performance specifications that are adopted by reference at Rule 62-204.800, F.A.C., are adopted in their entirety except for those provisions referring to approval of alternative procedures by the Administrator. For purposes of this rule, such alternative procedures may only be approved by the Secretary or his or her designee in accordance with Rule 62-297.620, F.A.C.
- (1) Performance Specification 1--Specifications and Test Procedures for Opacity Continuous Emission Monitoring Systems in Stationary Sources.
- (3) Performance Specification 3--Specifications and Test Procedures for O₂ and CO₂ Continuous Emission Monitoring Systems in Stationary Sources. [Rule 62-297.520, F.A.C.]
- C.24. 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, 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)]
- C.25. 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)]
- C.26. (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)]
- C.27. 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)]

C.28. 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.

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[40 CFR 60.13(f)]

C.29. 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)]

C.30. 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 O₂ 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)]

Required Tests, Test Methods and Procedures

C.31. <u>Annual Tests Required</u>. Annual compliance tests shall be performed for PM, SO₂, NOx, CO, Be, Hg and VE.

[Rule 62-297.310(7), F.A.C.; and, PSD-FL-113 and AC35-115379]

C.32. The following test methods and procedures of 40 CFR Parts 60 and 61, or equivalent methods approved in writing by the Department, shall be used for compliance testing:

Purpose / Substance	Test Methods
Selection of sample site and sample traverses	EPA Method 1
Determining stack gas flow rate	EPA Method 2
Gas analysis for calculation of percent O ₂ and CO ₂	EPA Method 3 or 3A
Determining stack gas moisture content to convert the flow rate from	EPA Method 4
actual standard cubic feet (ascf) to dry standard cubic feet (dscf) for use in	
converting concentrations in dry gases to or from mass emission limits	
PM and associated moisture content	EPA Method 5 or 26A
SO_2	EPA Method 6, 6C or 8
NOx	EPA Method 7, 7A, or 7E
CO	EPA Method 10
VOC	EPA Method 25 or 25A
Pb	EPA Method 12
Fl	EPA Method 13B
Be	EPA Method 104
Hg	EPA Method 101A or 29
VE	DEP or EPA Method 9

[Rules 62-213.440, 62-296.416(3)(d) and 62-297.401, F.A.C.; 40 CFR 60 and 61; and, PSD-FL-113 and AC35-115379]

- **C.33.** The minimum sample volume for EPA Method 5 shall be 30 dry standard cubic feet. [Rule 62-296.400(4)(e)4., F.A.C.]
- C.34. 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)]
- C.35. 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)]
- **C.36.** 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)]

- **C.37.** 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 C.49. and Appendix SS-1, Stack Sampling Facilities (version dated 10/7/96) for State of Florida Stack Sampling Requirements.}

[40 CFR 60.8(e)]

C.38. 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)]

- **C.39.** Compliance with standards in 40 CFR 60, other than opacity standards, shall be determined only by performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard. [40 CFR 60.11(a)]
- **C.40.** 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)]
- C.41. 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)]

C.42. Special provisions set forth under an applicable subpart shall supersede any conflicting provisions in 40 CFR 60.11(a) through (e). [40 CFR 60.11(f)]

- **C.43.** For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in 40 CFR 60, nothing in 40 CFR 60 shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

 [40 CFR 60.11(g)]
- C.44. The owner or operator shall determine compliance with the particulate matter standard as follows (see specific condition C.11.):
- (1) The emission rate (c_{12}) of particulate matter, corrected to 12 percent CO_2 , shall be computed for each run using the following equation:

$$c_{12} = c_s (12/\%CO_2)$$

where:

 c_{12} = concentration of particulate matter, corrected to 12 percent CO₂, g/dscm (gr/dscf). c_s = concentration of particulate matter, g/dscm (gr/dscf).

 $%CO_2 = CO_2$ concentration, percent dry basis.

- (2) Method 5 shall be used to determine the particulate matter concentration (c_s). The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).
- (3) The emission rate correction factor, integrated or grab sampling and analysis procedure of Method 3B shall be used to determine CO₂ concentration (%CO₂).
 - (i) The CO_2 sample shall be obtained simultaneously with, and at the same traverse points as, the particulate run. If the particulate run has more than 12 traverse points, the CO_2 traverse points may be reduced to 12 if Method 1 is used to locate the 12 CO_2 traverse points. If individual CO_2 samples are taken at each traverse point, the CO_2 concentration (% CO_2) used in the correction equation shall be the arithmetic mean of all the individual CO_2 sample concentrations at each traverse point.

[40 CFR 60.54(b)]

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Compliance Test Requirements

C.45. 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.46. Operating Rate During Testing.

Unless otherwise stated in the applicable emission limiting standard rule, testing of emissions shall be conducted with the emissions unit operating at permitted capacity, defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the 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.47. <u>Calculation of Emission Rate</u>. 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.]

C.48. Applicable Test Procedures.

(a) Required Sampling Time.

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

b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.

- c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- (b) <u>Minimum Sample Volume</u>. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
 - {Permitting note: Specific conditions **C.33**. and **C.44**. specify a minimum sample volume of 30 dry standard cubic feet.}
- (c) <u>Required Flow Rate Range</u>. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) <u>Calibration of Sampling Equipment</u>. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, attached to this permit.
- (e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube. [Rule 62-297.310(4), F.A.C.]
- **C.49.** 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.50.** <u>Frequency of Compliance Tests</u>. 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 Department's Central District, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
- (b) <u>Special Compliance Tests</u>. When the Department's Central District, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department's Central District.
- (c) <u>Waiver of Compliance Test Requirements</u>. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

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

Reporting and Recordkeeping

- **C.51.** In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department's Central District in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department's Central District. [Rule 62-210.700(6), F.A.C]
- **C.52.** For purposes of reports required under this permit, excess emissions are defined as any calculated average emission concentration, as determined pursuant to this specific condition, which exceeds the applicable emission limit in specific condition **C.11**. [PSD-FL-113 and AC35-115379]

C.53. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department's Central District on the results of each such test.
- (b) The required test report shall be filed with the Department's Central District as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department's Central District 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.]

- **C.54.** The owner or operator of an affected facility shall submit the written reports required under 40 CFR 60, Subpart A, to the Department's Central District for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter. [Rule 62-213.440(b)(3)(a), F.A.C.]
- **C.55.** Any 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)]

- **C.56.** Any 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)]
- C.57. Each owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form [see 40 CFR 60.7(d)] to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or, the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or, the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:
- (1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
- (2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
- (3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
- (4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report. [40 CFR 60.7(c)(1), (2), (3), and (4)]
- **C.58.** 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)]

C.59. (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)]

C.60. 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.]

C.61. The owner or operator of any incinerator subject to the provisions of 40 CFR 60, Subpart E, shall record the daily charging rates and hours of operation.

[40 CFR 60.53(a); and, PSD-FL-113 and AC35-115379]

C.62. <u>Auxiliary Burners – Fuel Recordkeeping</u>. Monthly records shall be maintained of the amount each type of fuel (e.g., natural gas and propane) used by the auxiliary burners of Unit 2 and the equivalent heat input from each type of fuel (can be supplied by the supplier). [Rule 62-213.440(1), F.A.C.]

- C.63. MSW Charging Rate Monitoring. The average daily solid waste charging rate shall be determined on a monthly basis and recorded for Unit 2. The daily charging rate shall be determined each month on an average daily basis for Unit 2 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 determined the number of operating hours per MWC unit for each day during the preceding calendar month.

 [Rule 62-213.440(1), F.A.C.; and, 40 CFR 60.53(a)]
- C.64. <u>Segregated Solid Waste Recordkeeping</u>. The following records shall be made and kept to demonstrate compliance with the segregated non-MSW percentage limitations of specific condition C.9. (1) Each segregated load of non-MSW materials, that is subject to the percentage weight limitations of specific condition C.9., which is received for processing shall be documented as to waste description and weight. The weight of all waste materials received for processing shall be measured using the facility truck scale and recorded.
- (2) Each day the total weight of segregated tires received shall be computed, and the daily total shall be added to the sum of the daily totals from the previous 29 days. The resultant 30-day total weight of tires shall be divided by the total weight of all waste materials received in the same 30-day period, and the resultant number shall be multiplied by 100 to express the ratio in percentage terms. The percentage computed shall be compared to the 3% limitation.
- (3) Each day the total weight of segregated non-MSW materials received that are subject to the 5% and 20% restrictions 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% and 20% limitations.
- (4) Records shall be maintained showing the oil-contaminated waste generator's written certification that the waste is non-hazardous. Documentation requirements shall include a written description of the waste, a material characterization form (sample submitted with the request dated March 20, 1995), and the applicable material safety data sheets for the waste components. Tonnages of oil-contaminated waste fired shall be recorded and made available for inspection by the Department. These records shall be maintained for a period of five years.

[Rule 62-213.440(1), F.A.C.; and, PSD-FL-113 and AC35-115379 amendment]

- **C.65.** Special Recordkeeping Requirements On-specification Used Oil. The owner or operator shall obtain, make, and keep the following records related to the use of used oil:
- (1) The gallons of on-specification used oil burned each month. (This record shall be completed no later than the fifteenth day of the succeeding month.)
- (2) The total gallons of on-specification used oil burned in the preceding calendar year. The records shall be retained in a form suitable for inspection at the facility by the Department, and shall be retained for 5 years. See specific conditions C.15. and C.66.

[Rule 62-213.440(1)(b)2.b., F.A.C.; 40 CFR 279.61 and 761.20(e); and, PSD-FL-113 and AC35-115379 amendment]

C.66. Reporting Required - On-specification Used Oil. The owner or operator shall submit, with the Annual Operation Report (AOR) form, the total amount of on-specification used oil burned in Unit 2 during the previous calendar year to the Department's Central District. See specific conditions C.15. and C.65.

[Rules 62-4.070(3), 62-212.400(2)(f)1. and 62-213.440(1)(b)2.b., F.A.C.]

Miscellaneous

C.67. Compliance Schedule. The following dates shall be/have been met to satisfy measurable progress milestones to come into compliance with 40 CFR 60, Subpart Cb:

E.U. ID: No.	Milestone	Milestone Date
2	Submittal of a final control plan to the Department	April 12, 1998
2	Awarding of contracts for emission control systems or process	April 12, 1999
	modifications, or issuance of orders for the purchase of component parts	
	to accomplish emission control or process modification	
2	Initiation of on-site construction or installation of emission control	October 12, 1999
	equipment or process change	
2	Completion of on-site construction or installation of emission control	February 12, 2000
	equipment or process change.	
2	Final Compliance	December 19, 2000

{Permitting note: "Final compliance" means that the performance test results have been submitted by the permittee for demonstration that the facility is in compliance with 40 CFR 60, Subpart Cb.}

[40 CFR 60.21(h); 40 CFR 60.39b; and, State Plan approved 01/12/98 and effective 01/12/98]

C.68. Closure Agreement. The permittee shall cease operation of any unit that has not completed on-site construction or installation of emission control equipment and is not involved in performance testing by December 19, 2000. After closure, said units may commence startup, shakedown, and performance/compliance testing per the closure agreement on file with the Department. Performance/compliance tests must be completed within 180 days of startup.

[40 CFR 60.39b; and, State Plan approved 11/13/97 and effective 01/12/98]

C.69. 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.]

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Facility ID No.: 0690046

Subsection D. This section addresses the following emissions unit.

E.U. ID No.	Brief Description	the state of the s
-002	288 TPD (maximum) Municipal Solid Waste Combustor &	& Auxiliary Burners - Unit 2

Emissions unit No. -002 is a municipal solid waste (MSW) and wood chip combustor designated as "Unit 2". The combustor consists of a mass burn waterwall boiler with a design rated capacity of 250 tons MSW and wood chips per day, 104 MMBtu heat input per hour, and 60,200 pounds steam output per hour, with the MSW having a heating value of 5,000 Btu per pound. The maximum solid waste throughput is 288 tons MSW and wood chips per day, 120 MMBtu per hour heat input, and 69,000 pounds of steam output per hour (3-hour average). The auxiliary burners associated with the combustor are permitted to fire distillate fuel oil or gas (e.g., natural and propane). The auxiliary burners are used to fire the MSW and wood chips during start-up, shutdown, and at other times when necessary and consistent with good combustion practices. The maximum permitted steam production rate is 69,000 lbs/hr when firing MSW and wood chips. Unit 2 is not allowed to process "biomedical waste".

Unit 2 began commercial operation August 22, 1990. Particulate matter emissions are controlled by a fabric filter baghouse system. Acid gas emissions are controlled by dry scrubbing followed by a fabric filter baghouse system. Carbon monoxide (CO) emissions are currently controlled by good combustion practices. Nitrogen oxides (NO_x) are controlled by a Selective Non-Catalytic Reduction (SNCR) system. Mercury (Hg) and certain organic (dioxin) emissions are to be controlled by activated carbon injection (ACI) followed by a fabric filter baghouse system. Units 1 and 2 discharge their emissions independently through their own stack, but are co-located within a single support structure/stack. (Unit 2's stack height: 199 feet; exit diameter: 4.3 feet; exit temperature: 270 °F; actual volumetric flow rate: 59,400 acfm; and, dry standard volumetric flow rate: 43,200 dscfm.).

{Permitting notes. This emissions unit is 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-113/AC35-115379); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT); and, Rule 62-296.416, F.A.C., Waste-to-Energy Facilities. Also, please note that conditions in 40 CFR 60, Subpart Cb, reference requirements that are contained in 40 CFR 60, Subpart Eb.}

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

General

D.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.]

D.2. <u>Definitions</u>. 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.]

- **D.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.]
- **D.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]
- **D.5.** Unit 2 shall have a metal name plate affixed in a conspicuous place on the shell showing manufacturer, model number, type waste, rated capacity and certification number. [Rule 62-4.070(3), F.A.C.]
- **D.6.** Unit 2 is 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. [Rule 62-4.070(3), F.A.C.]
- **D.7.** <u>Combustion Zone Design Temperature</u>. The design furnace mean temperature at the fully mixed zone of the combustor shall not be less than 1800 °F. [PSD-FL-113 and AC35-115379]

Essential Potential to Emit (PTE) Parameters

D.8. Capacity.

- (a) <u>Municipal Solid Waste</u>. Unit 2 shall not be loaded in excess of its maximum rated capacity of 24,000 lbs/hr and 288 tons/day of municipal solid waste (MSW) and wood chips. Unit 2 shall not be loaded in excess of 250 tons/day of MSW and wood chips on a 12-month rolling average (see specific condition **D.102.**).
- (b) Steam. The maximum steam production rate for Unit 2 is 69,000 lbs/hr (3-hr average).
- (c) Heat Input. The maximum heat input for Unit 2 is 120 million Btu per hour (3-hr average).
- (d) Normal Operating Range. The normal operating range for Unit 2 is 80% to 115% of design rated capacity, which is 250 tons/day of MSW and wood chips, 104 million Btu heat input per hour (3-hr average), and 60,200 lbs/hr steam output (3-hr average), with the MSW having a heating value of 5,000 Btu per pound.

(e) 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 MSW 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 MSW 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 MSW 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 MSW, 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 MSW that is not refuse-derived fuel shall be used in calculating the municipal waste combustor unit capacity.

[40 CFR 60.31b and 40 CFR 60.58b(j); Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, PSD-FL-113 and AC35-115379]

- **D.9.** Emissions Unit Operating Rate Limitation After Testing. See specific condition **D.63**. [Rule 62-297.310(2), F.A.C.]
- **D.10.** 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 **D.31**. [40 CFR 60.34b(b) and 40 CFR 60.51b]
- **D.11.** 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 **D.31.** [40 CFR 60.34b(b) and 40 CFR 60.51b]

D.12. Methods of Operation - Fuels.

- (1) <u>Municipal Solid Waste</u>. The primary fuels for the Unit 2 are MSW and wood chips, and the items and materials that fit within the definition of MSW contained in Section 403.706(5), F.S.
- (2) <u>Internally Generated Used Oil</u>. The facility is allowed to burn used oil, which is generated as a result of internal operations, after thoroughly mixing it with the refuse in the pit. A log of the amount of all internally generated used oil burned shall be maintained pursuant to 40 CFR Part 279 and Rule 62-213.440, F.A.C.

(3) <u>Used Oil</u>. No liquid used oil can be accepted by the facility from any outside generators.

- (4) <u>Auxiliary Burners</u>. The auxiliary burners are permitted to fire only distillate fuel oil or gas (e.g., natural or propane). The auxiliary burners shall be used at startup during the introduction of MSW and wood chip fuel until design furnace gas temperature is achieved; and, at other times when necessary and consistent with good combustion practices. All air pollution control and continuous emissions monitoring equipment shall be operational and functioning properly prior to the incineration or ignition of waste and until all the wastes are incinerated.
- (5) <u>Unauthorized Fuel</u>. Subject to the limitations contained in this permit, the authorized fuels for the facility also include the other solid wastes that are not MSW which are described in categories (7), (8), and (9), below. However, the facility shall not burn:
 - (a) those materials that are prohibited by state or federal law;
 - (b) those materials that are prohibited by this permit;
 - (c) lead acid batteries;
 - (d) hazardous waste, unless a permit has been issued for the combustor to allow such burning or the waste is of such quantity to be exempt in accordance with Department Chapter 62-30, F.A.C.;
 - (e) nuclear waste;
 - (f) radioactive waste, unless a permit has been issued for the combustor to allow such burning or the waste is of such quantity to be exempt in accordance with Department of Health and Rehabilitative Services Rule 10D-91 or 10D-104.003, F.A.C.;
 - (g) sewage sludge;
 - (h) explosives;
 - (i) biomedical waste;
 - (i) beryllium-containing wastes, as defined in 40 CFR 61, Subpart C.
- (6) 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 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 [see (8) and (9)]. 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.

- (7) 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

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

- (8) <u>Waste Tires</u>. Subject to the conditions and limitations contained in this permit, waste tires may be used as fuel at the facility. The total quantity of waste tires received as <u>segregated loads</u> and burned at the facility shall not exceed 3%, by weight, of the facility's total fuel. Compliance with this limitation shall be determined by using a rolling 30-day average in accordance with specific condition **D.103**.
- (9) 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, unless otherwise stated. Compliance with this limitation shall be determined by using a rolling 30-day average in accordance with specific condition **D.103.**
 - (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 to or greater than 50 ppm shall not be burned, pursuant to the limitations of 40 CFR 761.20(e). All used oil shall comply with the definition stated in 40 CFR 260.10 and shall not exceed the specification levels for arsenic, cadmium, chromium, lead, and the total halogens contained in Table 1 of 40 CFR 279.11, or contain any hazardous waste as defined in 40 CFR 261.3. See specific condition **D.38**.
 - (h) For the wastes defined in categories (b), (f) and (g) above, the maximum percentage of oil contaminated waste defined as oil spill cleanup debris and absorbing media, including oil filters, fired in Unit 2 is 20%, by weight, of the total solid waste input, based on a rolling 30-day average.
 - (i) 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.
- (10) Other fuels or wastes shall not be burned in Unit 2 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.; and, PSD-FL-113 and AC35-115379 (and amendment)]

D.13. Hours of Operation. Unit 2 is allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200(PTE), F.A.C.; and, PSD-FL-113 and AC35-115379]

Operating Practices and Requirements

- **D.14.** 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 **D.10.**, except as specified below. The averaging time is specified in specific condition **D.16.**
- (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)]

- **D.15.** 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 **D.11.**, except as specified below. The averaging time is specified in specific condition **D.16.** 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)]

- **D.16.** Operating Requirements. The procedures specified in paragraphs (1) through (12) shall be used for determining compliance with the operating requirements under 40 CFR 60.53b.
- (1) Compliance with the carbon monoxide emission limits in 40 CFR 60.53b(a) shall be determined using a 4-hour block arithmetic average for all types of affected facilities except mass burn rotary waterwall municipal waste combustors and refuse-derived fuel stokers.
- (2) For affected mass burn rotary waterwall municipal waste combustors and refuse-derived fuel stokers, compliance with the carbon monoxide emission limits in 40 CFR 60.53b(a) shall be determined using a 24-hour daily arithmetic average.
- (3) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous emission monitoring system for measuring carbon monoxide at the combustor outlet and record the output of the system and shall follow the procedures and methods specified in paragraphs(i) through(iii).
 - (i) The continuous emission monitoring system shall be operated according to Performance Specification 4A in Appendix B of 40 CFR 60.
 - (ii) During each relative accuracy test run of the continuous emission monitoring system required by Performance Specification 4A in Appendix B of 40 CFR 60, carbon monoxide and oxygen (or carbon

dioxide) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and the test methods specified in paragraphs (A) and (B).

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

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performance test for dioxins/furans and each subsequent performance test during which compliance with the dioxin/furan emission limit specified in 40 CFR 60.52b(c) is achieved. The maximum demonstrated particulate matter control device temperature shall be the highest 4-hour arithmetic average temperature achieved at the particulate matter control device inlet during four consecutive hours during the most recent test during which compliance with the dioxin/furan limit was achieved.

- (10) At a minimum, valid continuous emission monitoring system hourly averages shall be obtained as specified in paragraphs (i) and (ii) for 75 percent of the operating hours per day for 90 percent of the operating days per calendar quarter that the affected facility is combusting municipal solid waste.
 - (i) At least two data points per hour shall be used to calculate each 1-hour arithmetic average.
 - (ii) At a minimum, each carbon monoxide 1-hour arithmetic average shall be corrected to 7 percent oxygen on an hourly basis using the 1-hour arithmetic average of the oxygen (or carbon dioxide) continuous emission monitoring system data.
- (11) All valid continuous emission monitoring system data must be used in calculating the parameters specified under 40 CFR 60.58b(i) even if the minimum data requirements of paragraph (10) are not met. When carbon monoxide continuous emission data are not obtained because of continuous emission monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained using other monitoring systems as approved by the Administrator or EPA Reference Method 10 to provide, as necessary, the minimum valid emission data.
- (12) Quarterly accuracy determinations and daily calibration drift tests for the carbon monoxide continuous emission monitoring system shall be performed in accordance with procedure 1 in Appendix F of 40 CFR 60.

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

Operator Training and Certification

- **D.17.** 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).

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(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]
- **D.18.** 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)]
- **D.19.** 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)]
- **D.20.** The initial training requirements specified in 40 CFR 60.54b(f)(1) shall be completed no later than the date specified in (1), (2), or (3), whichever is later.
- (1) The date six (6) months after the date of startup of the affected facility;

(2) Twelve (12) months after State plan approval; or

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

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

Emission Limitations and Standards

Particulate Matter

D.21. The emission limit for particulate matter (PM/PM₁₀) 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)]

Visible Emissions

D.22. The emission limit for opacity exhibited by the gases discharged to the atmosphere is 10 percent (6-minute block average). Because the vent stacks of both Units 1 and 2 are co-located in a support structure/stack, any visible emissions violations from the structure/stack will be attributed to both units unless opacity meter results show the specific unit causing the violation. [40 CFR 60.33b(a)(1)(iii); Rule 62-4.070(3), F.A.C.; and, PSD-FL-113 and AC35-115379]

Cadmium

D.23. 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

- **D.24.** 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); and, Rule 62-296.416(3)(a)1., F.A.C.]
- **D.25.** 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.]

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D.26. 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.]

D.27. Mercury Emissions Inventory. For emissions inventory purposes, all waste-to-energy facilities with charging rates of 40 tons or more per day shall perform annual individual emissions unit mercury emissions tests and report the results to the Department. This testing shall begin during calendar year 1993 and end upon initiation of mercury testing pursuant to Rule 62-296.416(3)(a) or (b), F.A.C. [Rule 62-296.416(3)(c), F.A.C.]

Lead

D.28. 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

- **D.29.** The emission limit for sulfur dioxide contained in the gases discharged to the atmosphere is:
- a.1. 60 parts per million by volume, corrected to 7 percent oxygen (dry basis), and calculated as a 6-hour rolling average; or,
- a.2. 30 percent of the potential sulfur dioxide emission concentration (70-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), with a not-to-exceed cap of 120 parts per million by volume, corrected to 7 percent oxygen (dry basis), and calculated as a 6-hour rolling average, whichever is less stringent; and,
- b.1. 29 parts per million by volume, corrected to 7 percent oxygen (dry basis), and calculated as a 24-hour daily geometric average; or,
- b.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 120 parts per million by volume, corrected to 7 percent oxygen (dry basis), and calculated as a 24-hour daily geometric average, whichever is less stringent.

[PSD-FL-113 and AC35-115379; and, 40 CFR 60.33b(b)(3)(i)]

Hydrogen Chloride

- **D.30.** 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), calculated as a 3-hour average; 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), and calculated as an 1-hour average, whichever is less stringent.

[40 CFR 60.33b(b)(3)(ii); and, PSD-FL-113 and AC35-115379]

Dioxins/Furans

D.31. 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)]

Nitrogen Oxides

D.32. 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)]

Carbon Monoxide

D.33. 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)]

Fugitive Ash Emissions

D.34. 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 **D.47.**), 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 **D.58.**
- (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]

Beryllium

D.35. Emissions of beryllium to the atmosphere shall not exceed 2.0 x 10^{-7} gr/dscf, corrected to 12% CO₂.

[PSD-FL-113 and AC35-115379]

<u>Fluorides</u>

D.36. Fluoride emissions to the atmosphere shall not exceed 1.5 x 10^{-3} gr/dscf, corrected to 12% CO₂. [PSD-FL-113 and AC35-115379]

Volatile Organic Compounds

D.37. Volatile Organic Compounds emissions to the atmosphere shall not exceed 70 ppmvd, corrected to 12% CO₂.

[PSD-FL-113 and AC35-115379]

On-Specification Used Oil

D.38. "On-Specification" Used Oil: The burning of "on-specification" used oil is allowed at this facility in accordance with all other conditions of this permit and the following additional conditions:

a. Only "on-specification" used oil is allowed be burned in these emissions units that is generated on-site from internal operations. "On-specification" used oil is defined as that which meets the specifications of 40 CFR 279 (Standards for the Management of Used Oil) listed below. Used oil that does not meet all of the following specifications is considered "off-specification" oil and shall not be burned. See specific conditions **D.104.** and **D.105.**

CONSTITUENT / PROPERTY	<u>ALLOWABLE LEVEL</u>
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Flash Point	100 °F minimum
PCBs	less than 50 ppm

^{*} As determined by approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).

[40 CFR 279.11; and, PSD-FL-113 and AC35-115379 amendment]

D.39. Air Pollution Control Equipment.

a. The acid gas control system for Unit 1 shall cool the flue gases to an average temperature not exceeding 300 °F (3-hr rolling average).

[PSD-FL-113 and AC35-115379]

Excess Emissions

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

- **D.40.** 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)]
- **D.41.** 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)]

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D.42. Startup. Shutdown and Malfunction. The provisions for startup, shutdown, and malfunction are provided in paragraph (1).

- (1) Except as provided by 40 CFR 60.56b, the standards under 40 CFR 60, Subpart Cb, as incorporated in Rule 62-204.800(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.
 - (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)]

D.43. 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.]

D.44. 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.]

Test Methods and Procedures

D.45. 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)]

D.46. 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)]

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D.47. 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)]

- **D.48.** 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)]
- **D.49.** 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 **D.66**. and Appendix SS-1, Stack Sampling Facilities (version dated 10/7/96) for State of Florida Stack Sampling Requirements.}

[40 CFR 60.8(e)]

D.50. 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

- **D.51.** 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 ± 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).
- (10) [reserved]
- (11) Following the date that the initial performance test for opacity is completed or is required to be completed under 40 CFR 60.8 for an affected facility, the owner or operator shall conduct a performance test for opacity on an annual basis (no more than 12 calendar months following the previous performance test) using the test method specified in paragraph (6).

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

Cadmium, Lead and Mercury

- **D.52.** The procedures and test methods specified in paragraphs (1) and (2) shall be used to determine compliance with the emission limits for cadmium, lead, and mercury.
- (1) The procedures and test methods specified in paragraphs (1)(i) through (1)(ix) shall be used to determine compliance with the emission limits for cadmium and lead.
 - (i) The EPA Reference Method 1 shall be used for determining the location and number of sampling points.
 - (ii) The EPA Reference Method 3, 3A, or 3B, as applicable, shall be used for flue gas analysis.
 - (iii) The EPA Reference Method 29 shall be used for determining compliance with the cadmium and lead emission limits.
 - (iv) An oxygen or carbon dioxide measurement shall be obtained simultaneously with each Method 29 test run for cadmium and lead required under paragraph (1)(iii).
 - (v) The owner or operator of an affected facility may request that compliance with the cadmium or lead emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in paragraph 40 CFR 60.58b(b)(6).

(vi) All performance tests shall consist of a minimum of three test runs conducted under representative full load operating conditions. The average of the cadmium or lead emission concentrations from three test runs or more shall be used to determine compliance.

- (vii) Following the date of the initial performance test or the date on which the initial performance test is required to be completed under 40 CFR 60.8, the owner or operator of an affected facility shall conduct a performance test for compliance with the emission limits for cadmium and lead on an annual basis (no more than 12 calendar months following the previous performance test).
- (viii) [reserved]
- (ix) [reserved]
- (2) The procedures and test methods specified in paragraphs (2)(i) through (2)(xi) shall be used to determine compliance with the mercury emission limit.
 - (i) The EPA Reference Method 1 shall be used for determining the location and number of sampling points.
 - (ii) The EPA Reference Method 3, 3A, or 3B, as applicable, shall be used for flue gas analysis.
 - (iii) The EPA Reference Method 29 shall be used to determine the mercury emission concentration. The minimum sample volume when using Method 29 for mercury shall be 1.7 cubic meters.
 - (iv) An oxygen (or carbon dioxide) measurement shall be obtained simultaneously with each Method 29 test run for mercury required under paragraph (2)(iii).
 - (v) The percent reduction in the potential mercury emissions (${}^{\circ}P_{H_p}$) is computed using equation 1:

$$[\%P_{Hg}] = [(E_i - E_o)/E_i] \times 100$$
 (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_0 = controlled mercury emission concentration measured at the mercury control device outlet, corrected to 7 percent oxygen (dry basis).

- (vi) All performance tests shall consist of a minimum of three test runs conducted under representative full load operating conditions. The average of the mercury emission concentrations or percent reductions from three test runs or more is used to determine compliance.
- (vii) The owner or operator of an affected facility may request that compliance with the mercury emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in paragraph 40 CFR 60.58b(b)(6).
- (viii) The owner or operator of an affected facility shall conduct an initial performance test for mercury emissions as required under 40 CFR 60.8.
- (ix) Following the date that the initial performance test for mercury is completed or is required to be completed under 40 CFR 60.8, the owner or operator of an affected facility shall conduct a performance test for mercury emissions on a annual basis (no more than 12 calendar months from the previous performance test).
- (x) [reserved]

(xi) The owner or operator of an affected facility where activated carbon injection is used to comply with the mercury emission limit shall follow the procedures specified in 40 CFR 60.58b(m) (see specific condition **D.106.**) for measuring and calculating carbon usage. [40 CFR 60.38b and 40 CFR 60.58b(d)]

D.53. Mercury Emissions Test Method and Procedures.

- (3)(d) 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 **D.15.**), 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 **D.16.**), 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 **D.106.**), 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

- **D.54.** 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. See specific condition **D.29**.
- (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.

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(7) At a minimum, valid continuous monitoring system hourly averages shall be obtained as specified in paragraphs (7)(i) and (7)(ii) for 75 percent of the operating hours per day for 90 percent of the operating days per calendar quarter that the affected facility is combusting municipal solid waste.

- (i) At least two data points per hour shall be used to calculate each 1-hour arithmetic average.
- (ii) Each sulfur dioxide 1-hour arithmetic average shall be corrected to 7 percent oxygen on an hourly basis using the 1-hour arithmetic average of the oxygen (or carbon dioxide) continuous emission monitoring system data.
- (8) The 1-hour arithmetic averages required under paragraph (6) shall be expressed in parts per million corrected to 7 percent oxygen (dry basis) and used to calculate the 24-hour daily geometric average emission concentrations and daily geometric average emission percent reductions. The 1-hour arithmetic averages shall be calculated using the data points required under 40 CFR 60.13(e)(2).
- (9) All valid continuous emission monitoring system data shall be used in calculating average emission concentrations and percent reductions even if the minimum continuous emission monitoring system data requirements of paragraph (7) are not met.
- (10) The procedures under 40 CFR 60.13 shall be followed for installation, evaluation, and operation of the continuous emission monitoring system.
- (11) The initial performance evaluation shall be completed no later than 180 days after the date of initial startup of the municipal waste combustor as specified under 40 CFR 60.8.
- (12) The continuous emission monitoring system shall be operated according to Performance Specification 2 in 40 CFR 60 Appendix B.
 - (i) During each relative accuracy test run of the continuous emission monitoring system required by Performance Specification 2 in 40 CFR 60 Appendix B, sulfur dioxide and oxygen (or carbon dioxide) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and the test methods specified in paragraphs (A) and (B).
 - (A) For sulfur dioxide, EPA Reference Method 6, 6A, or 6C shall be used.
 - (B) For oxygen (or carbon dioxide), EPA Reference Method 3, 3A, or 3B, as applicable shall be used.
 - (ii) The span value of the continuous emissions monitoring system at the inlet to the sulfur dioxide control device shall be 125 percent of the maximum estimated hourly potential sulfur dioxide emissions of the municipal waste combustor unit. The span value of the continuous emission monitoring system at the outlet of the sulfur dioxide control device shall be 50 percent of the maximum estimated hourly potential sulfur dioxide emissions of the municipal waste combustor unit.
- (13) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with procedure 1 in Appendix F of 40 CFR 60.
- (14) When sulfur dioxide emissions data are not obtained because of continuous emission monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained by using other monitoring systems as approved by the Administrator or EPA Reference Method 19 to provide, as necessary, valid emissions data for a minimum of 75 percent of the hours per day that the affected facility is operated and combusting municipal solid waste for 90 percent of the days per calendar quarter that the affected facility is operated and combusting municipal solid waste.

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

Hydrogen Chloride

- **D.55.** 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_{HCl}) is computed using equation 2:

$$[\%P_{HCl}] = [(E_i - E_o)/E_i] \times 100$$
 (equation 2)

where:

%P_{HCl} = 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_0 = controlled hydrogen chloride emission concentration measured at the control device outlet, corrected to 7 percent oxygen (dry basis).

- (4) The owner or operator of an affected facility may request that compliance with the hydrogen chloride emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in 40 CFR 60.58b(b)(6).
- (5) As specified under 40 CFR 60.8, all performance tests shall consist of three test runs. The average of the hydrogen chloride emission concentrations or percent reductions from the three test runs is used to determine compliance.
- (6) The owner or operator of an affected facility shall conduct an initial performance test for hydrogen chloride as required under 40 CFR 60.8.
- (7) Following the date that the initial performance test for hydrogen chloride is completed or is required to be completed under 40 CFR 60.8, the owner or operator of an affected facility shall conduct a performance test for hydrogen chloride emissions on an annual basis (no more than 12 calendar months following the previous performance test).
- (8) [reserved]

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

Dioxins/Furans

- **D.56.** The procedures and test methods specified in paragraphs (1) through (9) shall be used to determine compliance with the limits for dioxin/furan emissions.
- (1) The EPA Reference Method 1 shall be used for determining the location and number of sampling points.
- (2) The EPA Reference Method 3, 3A, or 3B, as applicable, shall be used for flue gas analysis.
- (3) The EPA Reference Method 23 shall be used for determining the dioxin/furan emission concentration.
 - (i) The minimum sample time shall be 4 hours per test run.
 - (ii) An oxygen (or carbon dioxide) measurement shall be obtained simultaneously with each Method 23 test run for dioxins/furans.
- (4) The owner or operator of an affected facility shall conduct an initial performance test for dioxin/furan emissions in accordance with paragraph (3), as required under 40 CFR 60.8.
- (5) Following the date that the initial performance test for dioxins/furans is completed or is required to be completed under 40 CFR 60.8, the owner or operator of an affected facility shall conduct performance

tests for dioxin/furan emissions in accordance with paragraph (3), according to one of the schedules specified in paragraphs (i) through (iii).

- (i) For affected facilities, performance tests shall be conducted on an annual basis (no more than 12 calendar months following the previous performance test.)
- (ii) [reserved]
- (iii) Where all performance tests over a 2-year period indicate that dioxin/furan emissions are less than or equal to 7 nanograms per dry standard cubic meter (total mass) for all affected facilities located within a municipal waste combustor plant, the owner or operator of the municipal waste combustor plant may elect to conduct annual performance tests for one affected facility (i.e., unit) per year at the municipal waste combustor plant. At a minimum, a performance test for dioxin/furan emissions shall be conducted 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 7 nanograms per dry standard cubic meter (total mass), the owner or operator may continue conducting a performance test on only one affected facility per year. If any annual performance test indicates a dioxin/furan emission level greater than 7 nanograms per dry standard cubic meter (total mass), performance tests thereafter shall be conducted annually on all affected facilities at the plant until and unless all annual performance tests for all affected facilities at the plant over a 2-year period indicate a dioxin/furan emission level less than or equal to 7 nanograms per dry standard cubic meter (total mass).
- (6) The owner or operator of an affected facility that selects to follow the performance testing schedule specified in paragraph (5)(iii) shall follow the procedures specified in 40 CFR 60 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

- **D.57.** 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

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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)]

Fugitive Ash

- **D.58.** 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 **D.34.**)
- (1) The EPA Reference Method 22 shall be used for determining compliance with the fugitive ash emission limit under 40 CFR 60.55b. The minimum observation time shall be a series of three 1-hour observations. The observation period shall include times when the facility is transferring ash from the municipal waste combustor unit to the area where ash is stored or loaded into containers or trucks.
- (2) The average duration of visible emissions per hour shall be calculated from the three 1-hour observations. The average shall be used to determine compliance with 40 CFR 60.55b.
- (3) The owner or operator of an affected facility shall conduct an initial performance test for fugitive ash emissions as required under 40 CFR 60.8.
- (4) Following the date that the initial performance test for fugitive ash emissions is completed or is required to be completed under 40 CFR 60.8 for an affected facility, the owner or operator shall conduct a performance test for fugitive ash emissions on an annual basis (no more than 12 calendar months following the previous performance test).

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

Beryllium

D.59. The test method for beryllium emissions shall be EPA Reference Method 104, adopted and incorporated by reference in Rule 62-204.800, F.A.C. [PSD-FL-113 and AC35-115379]

Fluorides

D.60. The test method for fluoride emissions shall be EPA Reference Method 13B, adopted and incorporated by reference in Rule 62-204.800, F.A.C. [PSD-FL-113 and AC35-115379]

Volatile Organic Compounds

- **D.61.** The test method for volatile organic compounds shall be EPA Reference Method 25 or 25A, adopted and incorporated by reference in Rule 62-204.800, F.A.C. [PSD-FL-113 and AC35-115379]
- **D.62.** 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.]

- **D.63.** 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.]
- **D.64.** 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.]

D.65. Applicable Test Procedures.

- (a) Required Sampling Time.
 - 1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
 - 2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.
 - b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.
 - c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- (b) <u>Minimum Sample Volume</u>. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
 - {Permitting note: Specific condition **D.51.** specifies a minimum sample volume of 1.7 cubic meters.}
- (c) <u>Required Flow Rate Range</u>. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.

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(d) <u>Calibration of Sampling Equipment</u>. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, attached as part of this permit.

- (e) <u>Allowed Modification to EPA Method 5</u>. 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.]
- **D.66.** 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.]

- **D.67.** 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 Department's Central District, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
- (b) <u>Special Compliance Tests</u>. When the Department's Central District, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department's Central District.
- (c) <u>Waiver of Compliance Test Requirements</u>. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable

weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

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

Compliance With Standards and Maintenance Requirements

- **D.68.** Compliance with standards in 40 CFR 60, other than opacity standards, shall be determined only by performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard. [40 CFR 60.11(a)]
- **D.69.** 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)]
- **D.70.** 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

D.71. 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)]

D.72. 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)]
- **D.73.** (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)]
- **D.74.** 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)]
- **D.75.** 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)]

D.76. 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)]

D.77. 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 O₂ 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)]

D.78. 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.]
- **D.79.** Continuous Emissions Monitoring Systems (CEMS) or Continuous Monitoring Systems (CMS). The permittee shall install, calibrate, maintain, and operate (1) CEMS devices for opacity, oxygen, carbon monoxide, and sulfur dioxide; and, (2) CMS devices to continuously monitor and record steam production, the furnace exit gas temperature (FEGT), and the flue gas temperature at the exit of the acid gas control equipment.

a. The CEMS and CMS devices shall meet the applicable requirements of Chapter 62-297, F.A.C. (see specific conditions **D.78.** and **D.80.**) and 40 CFR 60.13 (see specific conditions **D.71.** thru **D.77.**), including certification of each device.

- b. Each CEMS shall meet performance specifications of 40 CFR 60, Appendix B. The SO₂ CEMS sample point shall be located downstream of the control device.
- c. CEMS data shall be recorded during periods of startup, shutdown and malfunction, but shall be excluded from emission averaging calculations for CO, SO₂, and opacity.
- d. A malfunction means any sudden and unavoidable failure of air pollution control equipment or process equipment to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.
- e. The procedures under 40 CFR 60.13 shall be followed for installation, evaluation and operation of all CEMS.
- f. Opacity monitoring system data shall be reduced to 6-minute averages, based on 36 or more data points, and gaseous CEMS data shall be reduced to 1-hour averages, based on 4 or more data points, in accordance with 40 CFR 60.13(h).
- g. Average CO and SO₂ emission concentrations, corrected for CO₂, shall be computed in accordance with the appropriate averaging time periods included in specific conditions **D.33**. and **D.29**.
- h. A FEGT to combustion zone correlation shall be established to relate furnace temperature at the temperature monitor location to furnace temperature in the overfire air fully mixed zone.
- i. The furnace heat load shall be maintained between 80% and 115% of the design rated capacity during normal operations. The lower limit may be extended provided compliance with the carbon monoxide emissions limit and the FEGT within this permit at the extended turndown rate are achieved. [40 CFR 60.13; and, PSD-FL-113 and AC35-115379]
- **D.80.** Continuous Monitor Performance Specifications. If continuous monitoring systems are required by rule or permit to be used for demonstrating compliance with the standards of the Department, they must be installed, maintained and calibrated in accordance with the EPA performance specifications listed below. These Performance Specifications are contained in 40 CFR 60, Appendix B, and are adopted by reference in Rule 62-204.800, F.A.C. The EPA performance specifications that are adopted by reference at Rule 62-204.800, F.A.C., are adopted in their entirety except for those provisions referring to approval of alternative procedures by the Administrator. For purposes of this rule, such alternative procedures may only be approved by the Secretary or his or her designee in accordance with Rule 62-297.620, F.A.C.
- (1) Performance Specification 1--Specifications and Test Procedures for Opacity Continuous Emission Monitoring Systems in Stationary Sources.
- (3) Performance Specification 3--Specifications and Test Procedures for O₂ and CO₂ Continuous Emission Monitoring Systems in Stationary Sources. [Rule 62-297.520, F.A.C.]

CEM for Oxygen and Carbon Dioxide

- **D.81.** 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 and 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 monitor shall be 25 percent oxygen; and, the span value of the carbon dioxide monitor shall be 25 percent carbon dioxide.
- (2) The monitors shall be installed, evaluated, and operated in accordance with 40 CFR 60.13.

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(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 monitors 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 monitors.
- (6) Because carbon dioxide is required 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); and, PSD-FL-113 and AC35-115379]

Recordkeeping and Reporting Requirements

- **D.82.** 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)]
- **D.83.** 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)]
- **D.84.** Each owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form [see 40 CFR 60.7(d)] to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or, the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or, the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall

be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:

- (1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
- (2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
- (3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
- (4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report. [40 CFR 60.7(c)(1), (2), (3), and (4)]
- **D.85.** 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)]

- **D.86.** (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)]

D.87. 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.]

- **D.88.** 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)]
- **D.89.** The owner or operator of an affected facility subject to the standards under 40 CFR. 60.53b, 60.54b, and 60.55b shall maintain records of the information specified in paragraphs (1) through (15), as applicable, for each affected facility for a period of at least 5 years.
- (1) The calendar date of each record.
- (2) The emission concentrations and parameters measured using continuous monitoring systems as specified under paragraphs (i) and (ii).
 - (i) The measurements specified in paragraphs (A) through (D) shall be recorded and be available for submittal to the Administrator or review onsite by an 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).

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(D) All 1-hour average carbon monoxide emission concentrations, municipal waste combustor unit load measurements, and particulate matter control device inlet temperatures as specified under 40 CFR 60.58b(i).

- (ii) The average concentrations and percent reductions, as applicable, specified in paragraphs (2)(ii)(A) through (2)(ii)(D) shall be computed and recorded, and shall be available for submittal to the Administrator or review on-site by an inspector.
 - (A) All 24-hour daily geometric average sulfur dioxide emission concentrations and all 24-hour daily geometric average percent reductions in sulfur dioxide emissions as specified under 40 CFR 60.58b(e).
 - (B) All 24-hour daily arithmetic average nitrogen oxides emission concentrations as specified under 40 CFR 60.58b(h).
 - (C) All 4-hour block or 24-hour daily arithmetic average carbon monoxide emission concentrations, as applicable, as specified under 40 CFR 60.58b(i).
 - (D) All 4-hour block arithmetic average municipal waste combustor unit load levels and particulate matter control device inlet temperatures as specified under 40 CFR 60.58b(i).
- (3) Identification of the calendar dates when any of the average emission concentrations, percent reductions, or operating parameters recorded under paragraphs (2)(ii)(A) through (2)(ii)(D), or the opacity levels recorded under paragraph (2)(i)(A) are above the applicable limits, with reasons for such exceedances and a description of corrective actions taken.
- (4) For affected facilities that apply activated carbon for mercury or dioxin/furan control, the records specified in paragraphs (i) through (v).
 - (i) The average carbon mass feed rate (in kilograms per hour or pounds per hour) estimated as required under 40 CFR 60.58b(m)(1)(i) during the initial mercury performance test and all subsequent annual performance tests, with supporting calculations.
 - (ii) The average carbon mass feed rate (in kilograms per hour or pounds per hour) estimated as required under 40 CFR 60.58b(m)(1)(ii) during the initial dioxin/furan performance test and all subsequent annual performance tests, with supporting calculations.
 - (iii) The average carbon mass feed rate (in kilograms per hour or pounds per hour) estimated for each hour of operation as required under 40 CFR 60.58b(m)(3)(ii), with supporting calculations.
 - (iv) The total carbon usage for each calendar quarter estimated as specified by 40 CFR 60.58b(m)(3), with supporting calculations.
 - (v) Carbon injection system operating parameter data for the parameter(s) that are the primary indicator(s) of carbon feed rate (e.g., screw feeder speed).
- (5) [Reserved]
- (6) Identification of the calendar dates for which the minimum number of hours of any of the data specified in paragraphs (i) through (v) have not been obtained including reasons for not obtaining sufficient data and a description of corrective actions taken.
 - (i) Sulfur dioxide emissions data;
 - (ii) Nitrogen oxides emissions data:
 - (iii) Carbon monoxide emissions data;
 - (iv) Municipal waste combustor unit load data; and
 - (v) Particulate matter control device temperature data.
- (7) Identification of each occurrence that sulfur dioxide emissions data, nitrogen oxides emissions data (large municipal waste combustors only), or operational data (i.e., carbon monoxide emissions, unit load, and particulate matter control device temperature) have been excluded from the calculation of average emission concentrations or parameters, and the reasons for excluding the data.
- (8) The results of daily drift tests and quarterly accuracy determinations for sulfur dioxide, nitrogen oxides, and carbon monoxide continuous emission monitoring systems, as required under Appendix F of this part, procedure 1.

(9) The test reports documenting the results of the initial performance test and all annual performance tests listed in paragraphs (i) and (ii) shall be recorded along with supporting calculations.

- (i) The results of the initial performance test and all annual performance tests conducted to determine compliance with the particulate matter, opacity, cadmium, lead, mercury, dioxins/furans, hydrogen chloride, and fugitive ash emission limits.
- (ii) For the initial dioxin/furan performance test and all subsequent dioxin/furan performance tests recorded under paragraph (9)(i), the maximum demonstrated municipal waste combustor unit load and maximum demonstrated particulate matter control device temperature (for each particulate matter control device).
- (10) [Reserved]
- (12) 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.
- (13) Records showing the names of persons who have completed a review of the operating manual as required by 40 CFR 60.54b(f) including the date of the initial review and subsequent annual reviews.
- (14) For affected facilities that apply activated carbon 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.
- (15) 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)]
- **D.90.** 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)]
- **D.91.** 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)]
- **D.92.** The owner or operator of an affected facility shall submit a semiannual report that includes the information specified in paragraphs (1) through (5) for any recorded pollutant or parameter that does not comply with the pollutant or parameter limit specified under this subpart, according to the schedule specified under paragraph (6).
- (1) The semiannual report shall include information recorded under 40 CFR 60.59b(d)(3) for sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor unit load level, particulate matter control device inlet temperature, and opacity.

(2) For each date recorded as required by 40 CFR 60.59b(d)(3) and reported as required by paragraph (1), the semiannual report shall include the sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor unit load level, particulate matter control device inlet temperature, or opacity data, as applicable, recorded under 40 CFR 60.59b(d)(2)(ii)(A) through (d)(2)(ii)(D) and (d)(2)(i)(A), as applicable.

- (3) If the test reports recorded under 40 CFR 56.59b(d)(9) document any particulate matter, opacity, cadmium, lead, mercury, dioxins/furans, hydrogen chloride, and fugitive ash emission levels that were above the applicable pollutant limits, the semiannual report shall include a copy of the test report documenting the emission levels and the corrective actions taken.
- (4) The semiannual report shall include the information recorded under 40 CFR 60.59b(d)(15) for the carbon injection system operating parameter(s) that are the primary indicator(s) of carbon mass feed rate.
- (5) For each operating date reported as required by paragraph (4), the semiannual report shall include the carbon feed rate data recorded under 40 CFR 60.59b(d)(4)(iii).
- (6) Semiannual reports required by this condition shall be submitted according to the schedule specified in paragraphs (i) and (ii).
 - (i) If the data reported in accordance with paragraphs (1) through (5) were collected during the first calendar half, then the report shall be submitted by August 1 following the first calendar half.
 - (ii) If the data reported in accordance with paragraphs (1) through (5) were collected during the second calendar half, then the report shall be submitted by February 1 following the second calendar half.

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

- **D.93.** 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)]
- **D.94.** 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)]
- **D.95.** 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)]
- **D.96.** In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department's Central District in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department's Central District. [Rule 62-210.700(6), F.A.C.]
- **D.97.** 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(1), F.A.C.]

D.98. For purposes of reports required under this permit, excess emissions are defined as any calculated average emission concentration, as determined pursuant to this specific condition, which exceeds the applicable emission limit in specific conditions **D.21.**, **D.23.**, **D.24.**, **D.28.**, **D.29.**, **D.30.**, **D.31.**, **D.32.**, **D.33.**, **D.35.**, **D.36.** and **D.37.**

[PSD-FL-113 and AC35-115379]

D.99. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department's Central District on the results of each such test.
- (b) The required test report shall be filed with the Department's Central District as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department's Central District 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.]

- **D.100.** The owner or operator of any incinerator subject to the provisions of 40 CFR 60, Subpart E, shall record the daily charging rates and hours of operation. [40 CFR 60.53(a); and, PSD-FL-113 and AC35-115379]
- **D.101.** <u>Auxiliary Burners Fuel Recordkeeping</u>. Monthly records shall be maintained of the amount each type of fuel (e.g., natural gas and propane) used by the auxiliary burners of Unit 2 and the equivalent heat input from each type of fuel (can be supplied by the supplier). [Rule 62-213.440(1), F.A.C.]
- **D.102.** MSW Charging Rate Monitoring. The average daily solid waste charging rate shall be determined on a monthly basis and recorded for Unit 2. The daily charging rate shall be determined each month on an average daily basis for Unit 2 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 determined the number of operating hours per MWC unit for each day during the preceding calendar month.

[Rule 62-213.440(1), F.A.C.; and, 40 CFR 60.53(a)]

- **D.103.** <u>Segregated Solid Waste Recordkeeping</u>. The following records shall be made and kept to demonstrate compliance with the segregated non-MSW percentage limitations of specific condition **D.12.**:
- (1) Each segregated load of non-MSW materials, that is subject to the percentage weight limitations of specific condition **D.12.**, which is received for processing shall be documented as to waste description and weight. The weight of all waste materials received for processing shall be measured using the facility truck scale and recorded.
- (2) Each day the total weight of segregated tires received shall be computed, and the daily total shall be added to the sum of the daily totals from the previous 29 days. The resultant 30 day total weight of tires shall be divided by the total weight of all waste materials received in the same 30 day period, and the resultant number shall be multiplied by 100 to express the ratio in percentage terms. The percentage computed shall be compared to the 3% limitation.
- (3) Each day the total weight of segregated non-MSW materials received that are subject to the 5% and 20% restrictions 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% and 20% limitations.
- (4) Records shall be maintained showing the oil-contaminated waste generator's written certification that the waste is non-hazardous. Documentation requirements shall include a written description of the waste, a material characterization form (sample submitted with the request dated March 20, 1995), and the applicable material safety data sheets for the waste components. Tonnages of oil-contaminated waste

fired shall be recorded and made available for inspection by the Department. These records shall be maintained for a period of five years.

[Rule 62-213.440(1), F.A.C.; and, PSD-FL-113 and AC35-115379 amendment]

- **D.104.** Special Recordkeeping Requirements On-specification Used Oil. The owner or operator shall obtain, make, and keep the following records related to the use of used oil:
- (1) The gallons of on-specification used oil burned each month. (This record shall be completed no later than the fifteenth day of the succeeding month.)
- (2) The total gallons of on-specification used oil burned in the preceding calendar year. The records shall be retained in a form suitable for inspection at the facility by the Department, and shall be retained for 5 years. See specific conditions **D.38**. and **D.105**..

[Rule 62-213.440(1)(b)2.b., F.A.C.; 40 CFR 279.61 and 761.20(e); and, PSD-FL-113 and AC35-115379 amendment]

D.105. Reporting Required- On-specification Used Oil. The owner or operator shall submit, with the Annual Operation Report (AOR) form, the total amount of on-specification used oil burned in Unit 2 during the previous calendar year to the Department's Central District. See specific conditions **D.38.** and **D.104.**

[Rules 62-4.070(3), 62-212.400(2)(f)1. and 62-213.440(1)(b)2.b., F.A.C.]

Miscellaneous Requirements.

- **D.106.** 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 **D.24.**), or the dioxin/furan emission limits (see specific condition **D.31.**), 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)]

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D.107. 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.]

DRAFT Permit No.: 0690046-001-AV

Facility ID No.: 0690046

Subsection E. This section addresses the following emissions unit.

E.U. ID No.	Brief Description: Material Handling Systems and Treatment Operations
-003	Activated Carbon Storage Silo

Emissions unit -003 is an approximate 2,935 cubic foot silo for the storage of activated carbon. The silo is typically filled every 75 days. It is part of the activated carbon injection (ACI) system for control of mercury and dioxin/furan 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 Tech-Air baghouse system (Model No. SBR-25-6-230). The baghouse parameters are as follows: stack height = 53 feet; exit diameter = 0.8 feet; exit temperature = 77 °F, actual volumetric flow rate = 650 acfm. The initial startup date of the silo was June 14, 1995.

{Permitting note(s): Emissions unit -003 is a minor emissions unit regulated under AC35-264176 (April 14, 1995); and, Rule 62-210.300, F.A.C., Permits Required.}

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

Essential Potential to Emit (PTE) Parameters

E.1. Permitted Capacity. The minimum actual volumetric flow rate is 650 actual cubic feet per minute when filling the activated carbon silo.

[AC35-264176; and, initial Title V application received June 14, 1996]

- **E.2.** Emissions Unit Operating Rate Limitation After Testing. See specific condition **E.14.** [Rule 62-297.310(2), F.A.C.]
- **E.3.** Hours of Operation. The emissions unit may operate continuously, i.e., 8,760 hrs/yr. [Rules 62-213.440 and 62-210.200(PTE), F.A.C.; and, AC35-264176]

E.4. Method of Operation.

- a. The carbon injection rate shall be 11 lbs/hr at a rate of 60-80 ft/second.
- b. The carbon grind size shall be at least 95% passing through 325 mesh.
- c. The activated carbon shall be pneumatically conveyed and injected into the flue gas duct near the scrubber outlet.
- d. The pressure in the carbon duct shall be approximately 1.5 psig.
- e. The activated carbon, along with the adsorbed mercury, dioxins and other heavy metals, shall be captured in the scrubber under flow and in the baghouse for disposal along with the fly ash and the bottom ash.

[AC35-264176 amendment]

Emission Limitations and Standards

E.5. Particulate Matter Emissions. Particulate matter emissions shall not exceed 0.10 lb/hr from the baghouse outlet of the activated carbon storage silo.

[Rule 62-297.620(4), F.A.C.; and, initial Title V application received June 14, 1996]

E.6. Visible Emissions. Visible emissions from the emissions unit shall be less than 20% opacity. However, since the emissions unit's potential particulate matter emissions is less than 100 TPY and it is equipped with a baghouse control system, the particulate matter compliance test is waived and an alternate visible emissions standard of 5% opacity is allowed. As long as the visible emissions do not exceed 5 percent opacity, compliance is assumed for the particulate matter limitation established in specific condition E.5.

If the Department has reason to believe that the particulate matter weight emissions standard in specific condition E.5. is not being met, it shall require that compliance be demonstrated by the test method specified in specific condition E.12.

[Rules 62-296.320(4)(b)1. and 62-297.620(4), F.A.C.; and, AC35-264176]

Excess Emissions

E.7. 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.]

E.8. 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

E.9. 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.]

Test Methods and Procedures

- **E.10.** Annual Tests Required. An annual visible emissions compliance test is required. [Rule 62-297.310(7)4.a., F.A.C.; and, AC35-264176]
- E.11. Visible Emissions. The test method for visible emissions shall be EPA Method 9, adopted and incorporated in Chapter 62-297, F.A.C.

[Rules 62-296.320(4)(b)4a. & b., F.A.C.; and, AC35-264176]

E.12. Particulate Matter. The test method for particulate matter emissions shall be EPA Method 5, adopted and incorporated in Chapter 62-297, F.A.C. [Rules 62-4.070(3) and 62-297.401, F.A.C.]

E.13. 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.]

- **E.14.** 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.]
- **E.15.** 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.]

E.16. 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) <u>Required Flow Rate Range</u>. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) <u>Calibration of Sampling Equipment</u>. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, attached to this permit.
- (e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube. [Rule 62-297.310(4), F.A.C.]
- **E.17.** 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.]

- **E.18.** 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.
 - 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; and,
 - b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit 100 tons per year or more of any other regulated air pollutant.
 - 9. The owner or operator shall notify the Department's Central District, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
- (b) <u>Special Compliance Tests</u>. When the Department's Central District, 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 Department's Central District.

(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

E.19. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department's Central District in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department's Central District. [Rule 62-210.700(6), F.A.C.]

E.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 Department's Central District on the results of each such test.
- (b) The required test report shall be filed with the Department's Central District as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department's Central District 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.]

DRAFT Permit No.: 0690046-001-AV

Facility ID No.: 0690046

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

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, are exempt from the permitting requirements of Chapters 62-210 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rule 62-210.300(3)(a), F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rule 62.210.300(3)(a), F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

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

Emissions Unit/Activity	Description		
Facility Stack/Vent ID			
101	Administration Building Roof Exhaust		
102	Bathroom/Sewer Vent		
103	Bathroom/Sewer Vent		
104	Administration Building Passive Wall Vent		
105	Passive Wall Vent		
106	Bathroom/Sewer Vent		
107	Bathroom/Sewer Vent		
108	Battery Storage Room Wall Exhaust		
109	Bathroom/Sewer Vent		
110	T/G Building Steam Release Vent		
111	Room Exhaust		
112	Boiler Flash Tank Steam Vent		
113	T/G Building Room Exhaust		
114	Turbine Air Ejector Vent		
115	T/G Building Steam Release Vent		
116	T/G Building Room Exhaust		
117	T/G Building Steam Release Vent		
118	T/G Building Steam Release Vent		
119	T/G Building Steam Release Vent		
120	T/G Building Steam Release Vent		
121	T/G Building Steam Release Vent		
122	T/G Building Steam Release Vent		
123	T/G Building Steam Release Vent		
124	T/G Building Steam Release Vent		
125	T/G Building Steam Release Vent		

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126	T/G Building Steam Release Vent		
127	T/G Building Steam Release Vent		
128	Superheater Steam Relief Valve		
129	Superheater Steam Relief Valve		
130	Superheater Steam Relief Valve		
131	Superheater Steam Relief Valve		
132	Soot Blower Steam Relief Valve		
133	Soot Blower Steam Relief Valve		
134	Ash Handling Building Roof Vent		
135	Ash Handling Building Roof Vent		
136	Ash Handling Building Roof Vent		
137	Ash Handling Building Roof Vent		
	Ash Conveyors		
	Safety-Kleen Degreaser (1)		
	Acetylene Torches (2)		
	Electric Welders (2)		
	200 gallon Diesel Storage Tank		
	500 gallon Diesel Storage Tank		
	185 hp Diesel-fired Fire Water Pump		
	CEM Vent Lines		
,	Cooling Towers		
	Lime Storage Silo		

Appendix H-1, Permit History/ID Number Changes

Ogden Martin Systems of Lake, Inc.

DRAFT Permit No.: 0690046-001-AV

Facility ID No.: 0690046

Permit History (for tracking purposes):

E.U. ID No	Description	Permit No.	Issue Date	Revised Date(s)
-001	Unit 1	PSD-FL-113/AC35-115379	02/19/88	12/12/90; 06/22/95
-002	Unit 2	PSD-FL-113/AC35-115379	02/19/88	06/22/95
-003	Activated Carbon Storage Silo	AC35-264176	04/14/95	05/22/95

(if applicable) ID Number Changes (for tracking purposes):

From: Facility ID No.: 30ORL350046

To: Facility ID No.: 0690046

Notes:

1 - AO permit(s) automatic extension(s) in Rule 62-210.300(2)(a)3.a., F.A.C., effective 03/21/96. 2 - AC permit(s) automatic extension(s) in Rule 62-213.420(1)(a)4., F.A.C., effective 03/20/96.

{Rule 62-213.420(1)(b)2., F.A.C., effective 03/20/96, allows Title V Sources to operate under existing valid permits that

were in effect at the time of application until the Title V permit becomes effective}