

Florida Department of Environmental Protection

Memorandum

TO: Jeffery Koerner, Program Administrator, Office of Permitting and Compliance (OPC) *JK*
THROUGH: Jon Holtom, P.E., OPC *JH*
FROM: Yousry (Joe) Attalla, OPC *YHA*
DATE: August 1, 2011
SUBJECT: Draft Permit No. 0570127-006-AV
City of Tampa, McKay Bay Refuse to Energy Facility
Title V Air Operation Permit Renewal

Attached for your review are the following items:

- Written Notice of Intent to Issue Air Permit;
- Public Notice of Intent to Issue Air Permit;
- Statement of Basis;
- Draft permit; and,
- P.E. Certification.

The draft permit renews the Title V permit for the McKay Bay Refuse to Energy Facility, which is located in Hillsborough County, Florida. The Statement of Basis provides a summary of the project and the rationale for issuance. The P.E. certification briefly summarizes the proposed project.

The application was received on October 28, 2010 and deemed complete on May 26, 2011. Day 90 is August 24, 2011.

Request for additional information (RAI) dated and sent via e-mail on December 20, 2010.

Additional Information Response received on March 1, 2011.

2nd Request for Additional Information dated and sent via e-mail on March 30, 2011.

2nd Additional Information Response received on May 26, 2011.

There is no ongoing/open enforcement case for this facility, according to Hillsborough County Environmental Protection Commission.

We recommend your approval of the attached draft permit.

Attachments

P.E. CERTIFICATION STATEMENT

PERMITTEE

City of Tampa
306 East Jackson Street
Tampa, Florida 33602

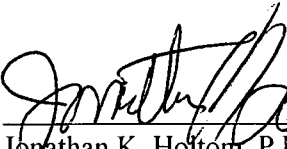
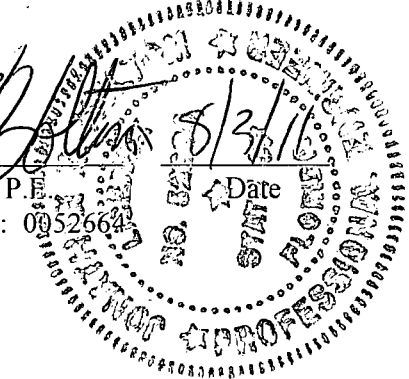
Permit No. 0570127-006-AV
Facility ID No. 0570127
McKay Bay Refuse to Energy Facility
Title V Air Operation Permit Renewal
Hillsborough County, Florida

PROJECT DESCRIPTION

This project is for the renewal of Title V permit No. 0570127-005-AV for the above referenced facility. No revisions were requested by the applicant as part of this project; however, the permit has been reformatted to reflect the current permit style.

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

This review was conducted by Yousry (Joe) Attalla under my responsible supervision.


Jonathan K. Holtom, P.E.
Registration Number: 0952664
Date: 8/3/16




Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard Jr.
Secretary

Electronic Mail – Received Receipt Requested

Mr. Steve W. Daignault, Public Works and Utilities Services
City of Tampa
306 East Jackson Street
Tampa, Florida 33602

Re: Permit No. 0570127-006-AV
McKay Bay Refuse to Energy Facility
Title V Permit Renewal

Dear Mr. Daignault:

Enclosed is the draft permit package to renew the Title V air operation permit for McKay Bay Refuse to Energy Facility. This facility is located in Hillsborough County at 107 North 34th Street, Tampa, Florida. The permit package includes the following documents:

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

If you have any questions, please contact the Project Engineer, Yousry (Joe) Attalla, by telephone at (850) 717-9078 or by e-mail at yousry.attalla@dep.state.fl.us.

Sincerely,

Jeffery F. Koerner, Program Administrator
Office of Permitting and Compliance
Division of Air Resource Management

8-4-11

(Date)

Enclosures
JFK/jh/yha

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

*In the Matter of an
Application for Title V Air Operation Permit by:*

City of Tampa
306 East Jackson Street
Tampa, Florida 33602

Permit No. 0570127-006-AV
Facility ID No. 0570127
McKay Bay Refuse to Energy Facility
Title V Air Operation Permit Renewal
Hillsborough County, Florida

Responsible Official:
Steve W. Daignault
Public Works and Utilities Services

Facility Location: City of Tampa operates the McKay Bay Refuse to Energy Facility, which is located in Hillsborough County at 107 North 34th Street, Tampa, Florida.

Project: The purpose of this project is to renew Title V air operation permit No. 0570127-005-AV. Details of the project are provided in the application and the enclosed Statement of Basis.

Permitting Authority: Applications for Title V air operation permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-213 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and a Title V air operation permit is required to operate the facility. The Division of Air Resource Management is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is (850) 717-9000.

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

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

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

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

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

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within 14 days of receipt of this Written Notice of Intent to Issue Air Permit. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the attached Public Notice or within 14 days of receipt of this Written Notice of Intent to Issue Air Permit, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

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

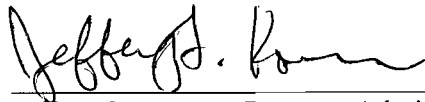
Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Written Notice of Intent to Issue Air Permit. Persons whose substantial interests 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.

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

Mediation: Mediation is not available in this proceeding.

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

Executed in Tallahassee, Florida



Jeffery F. Koerner, Program Administrator
Office of Permitting and Compliance
Division of Air Resource Management

8-4-11

(Date)

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Written Notice of Intent to Issue Air Permit (including the Public Notice, the Statement of Basis, and the draft permit), or a link to these documents available electronically on a publicly accessible server, was sent by electronic mail with received receipt requested before the close of business on 8-4-11 to the persons listed below.

Mr. Steve W. Daignault, Public Works and Utilities Services, City of Tampa: steve.daignault@tampagov.net
Ms. Diana M. Lee, P.E., Chief Air Permitting, Hillsborough County: Lee@epchc.org
Mr. Stephen R. Hathaway, Hillsborough County: hathaways@epchc.org
Mr. Christopher C. Tilman, P.E. Malcolm Pirnie Inc.: ctilman@pirnie.com
Ms. Katy Forney, U.S. EPA Region 4: forney.kathleen@epamail.epa.gov
Ms. Ana Oquendo, EPA Region 4: oquendo.ana@epamail.epa.gov
Ms. Barbara Friday, DEP OPC: barbara.friday@dep.state.fl.us (for posting with U.S. EPA, Region 4)
Ms. Lynn Searce, DEP OPC: lynn.searce@dep.state.fl.us (for reading file)

Clerk Stamp

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

Lynn Searce (Clerk) August 4, 2011 (Date)

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Florida Department of Environmental Protection
Division of Air Resource Management
Draft Permit No. 0570127-006-AV
City of Tampa, McKay Bay Refuse to Energy Facility
Hillsborough County, Florida

Applicant: The applicant for this project is City of Tampa. The applicant's responsible official and mailing address are: Steve W. Daignault, Public Works and Utilities Services, City of Tampa, McKay Bay Refuse to Energy Facility, 306 East Jackson Street, Tampa, Florida 33602.

Facility Location: The applicant operates the existing McKay Bay Refuse to Energy Facility, which is located in Hillsborough County at 107 North 34th Street, Tampa, Florida.

Project: The applicant applied on October 28, 2010 to the Department for a renewal of Title V air operation permit No. 0570127-005-AV. The existing facility consists of four stationary water wall mass burn type waste-to-energy units. Each unit has a short term tonnage capacity of 288 tons of waste per day. The nominal capacity is limited to 250 tons of waste per day per unit (approximately 1,000 tons of municipal solid waste per day) as determined by a rolling 12-month average. Short-term capacity is restricted by limiting steam production. The units are equipped with natural gas fired auxiliary burners and combustion control systems with continuous monitoring devices for combustion and process parameters. Emissions from the four municipal waste combustor (MWC) units are monitored by continuous emissions monitoring systems (CEMS) for sulfur dioxide (SO₂), nitrogen oxides (NO_x) and carbon monoxide (CO) to improve combustion efficiency and control. The four units are coupled to a common General Electric steam turbine with a 22.5 megawatt generator and a cooling tower. The air pollution control equipment for each line consists of a spray dryer absorber (SDA), a fabric filter baghouse, a powdered activated carbon injection system, and a selective non-catalytic reduction system (SNCR). The facility also has an ash handling system, including scrubbers that are operated as needed for the ash building and handling system, two Pebble Lime storage silos with common vent filter, and two activated carbon storage silos. The activated carbon is utilized for the control of mercury and dioxin/furans. Emissions from the silos are controlled by baghouses. The four MWC's have separate stacks (flues) located within a common enclosure.

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

Permitting Authority: Applications for Title V air operation permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-213 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and a Title V air operation permit is required to operate the facility. The Division of Air Resource Management is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is (850) 717-9000.

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

Notice of Intent to Issue Permit: The Permitting Authority gives notice of its intent to issue a renewed Title V air operation permit to the applicant for the project described above. The applicant has provided reasonable assurance that continued operation of the existing equipment will not adversely impact air quality and that the

(Public Notice to be Published in the Newspaper)

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a proposed permit and a subsequent final permit in accordance with the conditions of the draft permit unless a response received in accordance with the following procedures results in a different decision or a significant change of terms or conditions.

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

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the Public Notice or receipt of a written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

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

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Public

(Public Notice to be Published in the Newspaper)

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available for this proceeding.

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

STATEMENT OF BASIS

**City of Tampa
McKay Bay Refuse to Energy Facility
Title V Air Operation Permit Renewal
Permit No. 0570127-006-AV**

APPLICANT

The applicant for this project is City of Tampa. The applicant's responsible official and mailing address are: Steve W. Daignault, Public Works and Utilities Services, City of Tampa, McKay Bay Refuse-to-Energy Facility, 306 East Jackson Street, Tampa, Florida 33602.

FACILITY DESCRIPTION

The applicant operates the existing McKay Bay Refuse-to-Energy Facility, which is located in Hillsborough County at 107 North 34th Street, Tampa, Florida.

McKay Bay Refuse-to-Energy Facility began commercial operation on July 2, 1982. The facility consists of four stationary water wall mass burn type waste-to-energy units. Each unit has a short term tonnage capacity of 288 tons of waste per day and a maximum heat input capacity of 120 MMBtu/hr. Nominal heat input capacity is 104 MMBtu/hr. These capacities are not limited by this permit. Instead the nominal capacity is limited to 250 tons of waste per day per unit (approximately 1,000 tons of municipal solid waste per day) at 5,000 Btu/lb as determined by a rolling 12-month average. Short-term capacity is restricted by limiting steam production, which effectively limits heat input. Natural gas fired auxiliary burners and combustion control systems with continuous monitoring devices for combustion and process parameters and sulfur dioxide (SO₂), nitrogen oxides (NO_x) and carbon monoxide (CO) are installed to improve combustion efficiency and control. Emissions from the four municipal waste combustors (MWC) units are monitored by the continuous emissions monitoring system (CEMS). The four units are coupled to a common General Electric steam turbine with a 22.5 megawatt generator and a cooling tower. The air pollution control equipment for each line consists of a spray dryer absorber (SDA), fabric filter baghouse, a powdered activated carbon injection system, selective non-catalytic reduction system (SNCR), and auxiliary gas burners are installed in the furnaces. The facility also has an ash handling system, including scrubbers, that are operated as needed for the ash building and handling system, two Pebble Lime storage silos with common vent filter, and two activated carbon storage silos, each silo is equipped with its own vent filter. Lime used in the spray dryer absorbers for each municipal waste combustor is stored in two silos. The carbon injection system utilizes two activated carbon storage silos with separate discharges for each municipal waste combustor unit. The activated carbon is utilized for the control of mercury and dioxin/furans. Emissions from the silos are controlled by baghouses. The four MWC's have separate stacks (flues) located within a common enclosure.

These emissions units are regulated under NSPS - 40 CFR 60, Subpart Cb, Emissions Guidelines and Compliance Times for Large Municipal Waste Combustors that are constructed on or before September 20, 1994, adopted and incorporated by reference, subject to provisions, in Rule 62-204.800(8)(b), F.A.C.; NSPS - 40 CFR 60, Subpart E, Standards of Performance for Incinerators, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.; Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT); Rule 62-212.500, F.A.C., Rule 62-296.401(2), F.A.C., Incinerators; Rule 62-296.416, F.A.C., Waste-to-Energy Facilities. The facility is subject to the requirements of 40 CFR 60, Subpart Cb. This permit may refer to the requirements of 40 CFR 60, Subpart Eb where these requirements are referenced by Subpart Cb.

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

PROJECT DESCRIPTION

The purpose of this permitting project is to renew the existing Title V permit for the above referenced facility.

STATEMENT OF BASIS

PROCESSING SCHEDULE AND RELATED DOCUMENTS

Application for a Title V Air Operation Permit Renewal received on October 28, 2010.
Request for Additional Information dated and sent via e-mail on December 20, 2010.
Additional Information Response received on March 1, 2011.
2nd Request for Additional Information dated and sent via e-mail on March 30, 2011.
2nd Additional Information Response received on May 26, 2011.
Draft Title V Air Operation Permit Renewal posted onto web site on Month day, 2011.
Public Notice published on Month day, 2011.
Proposed Title V Air Operation Permit Renewal posted on Month day, 2011.

PRIMARY REGULATORY REQUIREMENTS

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

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

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

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

CAIR: This facility does not operate units subject to the Clean Air Interstate Rule (CAIR) set forth in Rule 62-296.470, F.A.C.

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

CAM: Emissions units at this facility are not subject to Compliance Assurance Monitoring (CAM) for one or more of the following reasons: they do not trigger the potential pre-air pollution control device major source emission thresholds; they demonstrate continuous compliance with a continuous emission monitoring system (CEMS); they are not equipped with air pollution control device(s); they are equipped with device(s) which are considered to be inherent to the process/operation; or, they satisfy CAM by meeting the post-1990 40 CFR 60 Subparts Cb/Eb federal monitoring requirements for the same or similar air pollutants.

The Applicant demonstrated that the pre-control emissions estimates for the following pollutants were below the major source thresholds, and thus the CAM rule does not apply to the control devices for: cadmium (Cd), mercury (Hg), dioxins/furans (D/F) and fluoride (F). Since there is no control device installed for carbon monoxide (CO), the CAM rule does not apply for that pollutant. The City of Tampa intends to use the existing nitrogen oxides (NO_x) CEMS system to demonstrate compliance with the permit limits, therefore the control device for NO_x is exempt from CAM.

PROJECT REVIEW

Changes were made in the format of this renewed Title V air operation permit.

Changes were made in the permit for Beryllium emissions from MWC units 1, 2, 3 and 4.

Beryllium Emissions from MWC Units: A Prevention of Significant Deterioration (PSD)/Best Available Control Technology (BACT) determination was performed in 1987. PSD-FL-086(A), Specific Condition **B.8**, limits beryllium (Be) emissions from the MWC Units 1, 2, 3 and 4. Rule 62-210.200 (Significant Emission Rates), F.A.C. no longer lists Be, therefore, Be was effectively "delisted" as a PSD pollutant in this rule change effective August 15, 1999. The Be limit is deemed to be obsolete in accordance with Rule 62-210.300(1)(b), F.A.C. The emission limit and testing requirement have been removed from the permit. The affected Emissions Units are: E.U. ID No's. 103, 104, 105 and 106 (Municipal Waste Combustor & Auxiliary Burners Units 1, 2, 3 and 4).

STATEMENT OF BASIS

CONCLUSION

This project renews Title V air operation permit No. 0570127-005-AV, which was effective on June 28, 2006. This Title V air operation permit renewal is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-4, 62-210, and 62-213, F.A.C.

City of Tampa

McKay Bay Refuse to Energy Facility

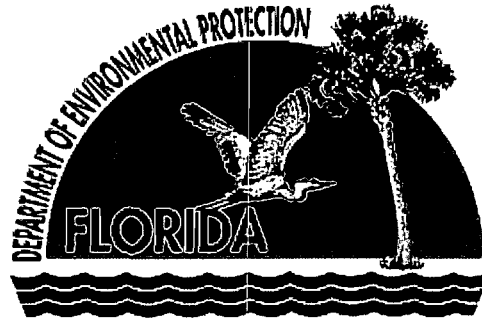
Facility ID No. 0570127

Hillsborough County

Title V Air Operation Permit Renewal

Permit No. 0570127-006-AV

(Renewal of Title V Air Operation Permit No. 0570127-005-AV)



Permitting Authority:

State of Florida
Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
Title V Section
2600 Blair Stone Road
Mail Station #5505
Tallahassee, Florida 32399-2400
Telephone: (850) 717-9000
Fax: (850) 717-9097

Compliance Authority:

Hillsborough County Environmental Protection Commission
Air Quality Management Division
Roger P. Stewart Center
3629 Queen Palm Drive
Tampa, Florida 33619
Telephone: (813) 627-2600
Fax: (813) 272-2660

Title V Air Operation Permit Renewal

Permit No. 0570127-006-AV

Table of Contents

<u>Section</u>	<u>Page Number</u>
Placard Page.	1
I. Facility Information.	
A. Facility Description.	2
B. Summary of Emissions Units.	2
C. Applicable Regulations.	3
II. Facility-wide Conditions.	4
III. Emissions Units and Conditions.	
A. Emissions Unit -103 120 MMBtu/hr (maximum) MWC & Auxiliary Burners - Unit 1.	6
-104 120 MMBtu/hr (maximum) MWC & Auxiliary Burners - Unit 2	
-105 120 MMBtu/hr (maximum) MWC & Auxiliary Burners - Unit 3	
-106 120 MMBtu/hr (maximum) MWC & Auxiliary Burners - Unit 4	
B. Emissions Unit -100 Ash Building and Handling System.	21
C. Emissions Unit -101 Pebble Lime Storage Silos.	24
D. Emissions Unit -102 Activated Carbon Storage Silos.	26
IV. Appendices.	28
Appendix A: Glossary.	
Appendix BW: Biomedical Waste Definitions.	
Appendix I: List of Insignificant Emissions Units and/or Activities.	
Appendix NSPS A: 40 CFR 60, Subpart A - General Provisions.	
Appendix NSPS Cb: 40 CFR 60, Subpart Cb - Standards of Performance for Large Municipal Waste Combustors.	
Appendix NSPS Eb: 40 CFR 60, Subpart Eb - Standards of Performance for Large Municipal Waste Combustors.	
Appendix RR: Facility-wide Reporting Requirements.	
Appendix TR: Facility-wide Testing Requirements.	
Appendix TV: Title V General Conditions.	
Appendix U: List of Unregulated Emissions Units and/or Activities.	
Referenced Attachments.	At End
Figure 1, Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance (40 CFR 60, July, 1996).	
Table H, Permit History.	
Table 1, Summary of Air Pollutant Standards and Terms.	
Table 2, Compliance Requirements.	

Draft

PERMITTEE:

City of Tampa
306 East Jackson Street
Tampa, Florida 33602

Permit No. 0570127-006-AV
McKay Bay Refuse to Energy Facility
Facility ID No. 0570127
Title V Air Operation Permit Renewal

The purpose of this permit is to renew the Title V air operation permit for the above referenced facility and to incorporate all of the recent amendments to the federal regulations 40 Code of Federal Regulations (CFR) 60, Subpart Cb and Subpart Eb - Standards of Performance for Large Municipal Waste Emission Guidelines.

The existing McKay Bay Refuse to Energy Facility is located at 107 North 34th Street, Tampa, in Hillsborough County. UTM Coordinates are: Zone 17, 360.0 km East and 3091.9 km North. Latitude is: 27° 56' 51" North; and Longitude is: 82° 25' 14" West.

The 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 operate the facility in accordance with the terms and conditions of this permit.

Effective Date: *(day 55)*
Renewal Application Due Date: *(Exp. date -225 days)*
Expiration Date: *(Day 55 + 5 years)*

Executed in Tallahassee, Florida

(Draft)

Jeffery F. Koerner, Program Administrator (Date)
Office of Permitting and Compliance
Division of Air Resource Management

JFK/jkh/yha

SECTION I. FACILITY INFORMATION.

Subsection A. Facility Description.

McKay Bay Refuse-to-Energy Facility began commercial operation on July 2, 1982. The facility consists of four stationary water wall mass burn type waste-to-energy units. Each unit has a short term tonnage capacity of 288 tons of waste per day and a maximum heat input capacity of 120 MMBtu/hr. Nominal heat input capacity is 104 MMBtu/hr. These capacities are not limited by this permit. Instead the nominal capacity is limited to 250 tons of waste per day per unit (approximately 1,000 tons of municipal solid waste per day) at 5,000 Btu/lb as determined by a rolling 12-month average. Short-term capacity is restricted by limiting steam production, which effectively limits heat input. Natural gas fired auxiliary burners and combustion control systems with continuous monitoring devices for combustion and process parameters and sulfur dioxide (SO₂), nitrogen oxides (NO_x) and carbon monoxide (CO) are installed to improve combustion efficiency and control. Emissions from the four municipal waste combustors (MWC) units are monitored by the continuous emissions monitoring system (CEMS). The four units are coupled to a common General Electric steam turbine with a 22.5 megawatt generator and a cooling tower. The air pollution control equipment for each line consists of a spray dryer absorber (SDA), fabric filter baghouse, a powdered activated carbon injection system, selective non-catalytic reduction system (SNCR), and auxiliary gas burners are installed in the furnaces. The facility also has an ash handling system, including scrubbers, that are operated as needed for the ash building and handling system with a 50 feet high and 1.3 exit diameter stack, two Pebble Lime storage silos with common vent filter, and two activated carbon storage silos, each silo is equipped with its own vent filter. Lime used in the spray dryer absorbers for each municipal waste combustor is stored in two silos. The carbon injection system utilizes two activated carbon storage silos with separate discharges for each municipal waste combustor unit. The activated carbon is utilized for the control of mercury and dioxin/furans. Emissions from the silos are controlled by baghouses. The four MWC's have separate stacks (flues) located within a common enclosure that is 201 feet high and 4.2 feet exit diameter for each stack flue.

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

Subsection B. Summary of Emissions Units.

EU No.	Brief Description
<i>Regulated Emissions Units</i>	
100	Ash Building and Handling System
101	Two Pebble Lime Storage Silos
102	Two Activated Carbon Storage Silos
103	120 MMBtu/hr (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 1
104	120 MMBtu/hr (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 2
105	120 MMBtu/hr (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 3
106	120 MMBtu/hr (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 4
<i>Unregulated Emissions Units and Activities</i>	
107	Cooling Tower

SECTION I. FACILITY INFORMATION.

Subsection C. Applicable Regulations.

Based on the Title V Air Operation Renewal application received October 28, 2010, this facility is a major source of hazardous air pollutants (HAP). The existing facility is a PSD major source of air pollutants in accordance with Rule 62-212.400, F.A.C. A summary of applicable regulations is shown in the following table.

Regulation	EU No.
<i>Federal Rule Citations</i>	
40 CFR 60, Subpart A, NSPS General Provisions	100, 101, 102, 103, 104, 105 & 106
40 CFR 60, Subpart Cb, Standards of Performance for Large Municipal Waste Combustors.	103, 104, 105 & 106
40 CFR 60, Subpart Eb, Standards of Performance for Large Municipal Waste Combustors.	103, 104, 105 & 106
<i>State Rule Citations</i>	
Rule 62-204, F.A.C., Ambient Air Quality Requirements, PSD Increments, and Federal Regulations Adopted by Reference.	100, 101, 102, 103, 104, 105 & 106
Rule 62-210, F.A.C., Permits Required, Public Notice, Reports, Stack Height Policy, Circumvention, Excess Emissions, and Forms.	
Rule 62-296, F.A.C., Emission Limiting Standards.	
Rule 62-297, F.A.C., Stationary Sources - Emissions Monitoring.	

SECTION II. FACILITY-WIDE CONDITIONS.

The following conditions apply facility-wide to all emission units and activities:

FW1. Appendices. The permittee shall comply with all documents identified in Section IV, Appendices, listed in the Table of Contents. Each document is an enforceable part of this permit unless otherwise indicated. [Rule 62-213.440, F.A.C.]

Emissions and Controls

FW2. Not federally Enforceable. Objectionable Odor Prohibited. No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rule 62-296.320(2) and 62-210.200(Definitions), F.A.C.]

FW3. General Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed-necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]

{Permitting Note: Nothing is deemed necessary and ordered at this time.}

FW4. General Visible Emissions. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b), F.A.C.]

FW5. Unconfined Particulate Matter. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction; alteration; demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

- a. Roads, parking areas, and yards are paved. A street sweeper equipped with a vacuum system is used to remove particulate matter from roads and other paved areas.
- b. The tipping floor is located in an enclosed building. Airflow to the boilers provides a negative draft in the tipping building, which minimizes emissions of particulate matter. Floors are washed as required by the Facility's solid waste permit.
- c. Unpaved areas of the facility are maintained and either sodded or landscaped.
- d. Boiler ash and grate siftings are quenched and wetted. Ash conveyors and transfer points are enclosed and maintained to minimize fugitive emissions. The fly ash is wetted in a pug mill ash conditioning system and then blended with the wet boiler ash and grate siftings. The wetted combined ash is processed for recyclable ferrous metals and stored in a building prior to loading into a truck for disposal. The scalper building and ash management building are equipped with wet scrubbers to control fugitive emissions. The ash hauling trucks are equipped with tarps.

[Rule 62-296.320(4)(c), F.A.C., 0570127-002-AC/PSD-FL-086(A), and proposed by applicant in Title V air operation permit renewal application received October 28, 2010.]

Annual Reports and Fees

See Appendix RR, Facility-wide Reporting Requirements for additional details.

FW6. Annual Operating Report. The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by April 1st of each year. [Rule 62-210.370(3), F.A.C.]

FW7. Annual Emissions Fee Form and Fee. The annual Title V emissions fees are due (postmarked) by March 1st of each year. The completed form and calculated fee shall be submitted to: Major Air Pollution Source

SECTION II. FACILITY-WIDE CONDITIONS.

Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070. The forms are available for download by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: <http://www.dep.state.fl.us/air/emission/tvfee.htm>. [Rule 62-213.205, F.A.C.]

- FW8. Annual Statement of Compliance.** The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit within 60 days after the end of each calendar year during which the Title V permit was effective. [Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]
- FW9. Prevention of Accidental Releases (Section 112(r) of CAA).** If, and when, the facility becomes subject to 112(r), the permittee shall:
- a. Submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038. Telephone: (703) 227-7650.
 - b. 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]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Units 103, 104, 105 and 106

The specific conditions in this section apply to the following emissions units:

EU No.	Brief Description
103	120 MMBtu/hr (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 1
104	120 MMBtu/hr (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 2
105	120 MMBtu/hr (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 3
106	120 MMBtu/hr (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 4

The facility consists of four stationary water wall mass burn type waste-to-energy units. Each unit has a short term tonnage capacity of 288 tons of waste per day and a maximum heat input capacity of 120 MMBtu/hr. Nominal heat input capacity is 104 MMBtu/hr. These capacities are not limited by this permit. Instead the nominal capacity is limited to 250 tons of waste per day per unit (approximately 1,000 tons of municipal solid waste per day) as determined by a rolling 12-month average. Short-term capacity is restricted by limiting steam production, which effectively limits heat input. The dry standard cubic feet per minute (dscfm) flow rate for each municipal waste combustor (MWC) is 27,289.8 dscfm. Units 1, 2, 3 and 4 are subject to multi-unit emissions caps of 460 tons for sulfur dioxide (SO₂), 185 tons for carbon monoxide (CO) and 679 tons for nitrogen oxides (NO_x) in any consecutive 12 month period.

Units 1, 2, 3 and 4 began commercial operation on July 2, 1982. Emissions from the four MWC units are monitored by continuous emissions monitoring systems (CEMS). To comply with the NSPS at 40 CFR 60, Subpart Cb, these units were modified to include an air pollution control (APC) system for each line. The modified units resumed operation on August 30, 2001 and include the following: a spray dryer absorber, a fabric filter baghouse, a powdered activated carbon injection system, and a selective non-catalytic reduction system (SNCR). Auxiliary gas burners were also installed in the furnaces. The four MWC's have separate stacks (flues) having an exit diameter of 4.2 feet each located within a common enclosure that is 201 feet high.

{Permitting Note: These emissions units are regulated under NSPS - 40 CFR 60, Subpart Cb, Emissions Guidelines and Compliance Times for Large Municipal Waste Combustors that are constructed on or before September 20, 1994, adopted and incorporated by reference, subject to provisions, in Rule 62-204.800(8)(b), F.A.C.; NSPS - 40 CFR 60, Subpart E, Standards of Performance for Incinerators, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.; Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT); Rule 62-212.500, F.A.C., Rule 62-296.401(2), F.A.C., Incinerators; Rule 62-296.416, F.A.C., Waste-to-Energy Facilities. This permit may refer to the requirements of 40 CFR 60, Subpart Eb where these requirements are referenced by Subpart Cb.}

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. Each of the four municipal waste combustor units shall have a maximum rated capacity of 79,300 pounds of steam produced per hour based on a 4-hour block averaged measurement, with a net steam energy of 1,103 Btu/lb of steam (the net steam energy may be calculated as the difference in enthalpy between the steam at the superheater outlet and the feedwater at the inlet). This capacity shall not be exceeded. Additionally, each unit shall not be charged with more than 250 tons of waste per day, as determined by a rolling 12-month average. The procedures specified in paragraphs a. and b. shall be used for calculating municipal waste combustor unit capacity as defined under 40 CFR 60.51b.

a. For municipal waste combustor units capable of combusting municipal solid waste continuously for a 24-hour period, municipal waste combustor unit capacity shall be calculated based on 24 hours of operation at the maximum charging rate. The maximum charging rate shall be determined as specified in paragraphs (1) and (2) as applicable.

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

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Units 103, 104, 105 and 106

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

- b. For batch feed municipal waste combustor units, municipal waste combustor unit capacity shall be calculated as the maximum design amount of municipal solid waste that can be charged per batch multiplied by the maximum number of batches that could be processed in a 24-hour period. The maximum number of batches that could be processed in a 24-hour period is calculated as 24 hours divided by the design number of hours required to process one batch of municipal solid waste, and may include fractional batches (e.g., if one batch requires 16 hours, then 24/16, or 1.5 batches, could be combusted in a 24-hour period). For batch combustors that are designed based on heat capacity, the design heating value of 12,800 kilojoules per kilogram for combustors firing refuse-derived fuel and a heating value of 10,500 kilojoules per kilogram for combustors firing municipal solid waste that is not refuse-derived fuel shall be used in calculating the municipal waste combustor unit capacity. See 40 CFR 60.31b of Appendix 40 CFR 60, Subpart Cb and 40 CFR 60.58b(j) of Appendix 40 CFR 60, Subpart Eb for additional restrictions on capacity.

[Rules 62-4.160(2), 62-204.800, 62-210.200(PTE), F.A.C., and 0570127-002-AC/PSD-FL-086(A)]

- A.2. Load Level.** Unit load means the steam load of the municipal waste combustor (MWC) measured as specified in 40 CFR 60.58b(i)(6) (see Specific Condition **A.30.**). Compliance with load level requirements shall be determined by a steam meter using ASME Power Test Code for Steam Generating Units, Power Test Code 4.1, Section 4 (see 40 CFR 60.58b(i)(6)(ii) & (iii)). Each MWC unit shall not operate at a load level greater than 110 percent of the unit's maximum demonstrated unit load based on 4-hour block averaged measurements of steam flow. The maximum demonstrated unit load is the highest arithmetic averaged measurement of steam flow recorded for four consecutive hours during the most recent dioxin/furan performance stack test in which compliance with the dioxin/furan emission limit was achieved. Higher loads are allowed for testing purposes as specified at 40 CFR 60.53b(b) and Specific Condition **A.42.** of this permit. [Rule 62-204.800(8), F.A.C., 40 CFR 60.321b; 60.38b; 60.51b; 60.53b(b); and 60.58b(i)(6)&(8)]

- A.3. Emissions Unit Operating Rate Limitation After Testing.** See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. See the "maximum demonstrated municipal waste combustor unit load" provisions of 40 CFR 60.34b(b) and 40 CFR 60.51b for additional restrictions on operating rate. [Rule 62-297.310(2), F.A.C., and 40 CFR 60.34b(b) & 40 CFR 60.51b.]

A.4. Methods of Operation - Fuel.

a. *Allowable Fuels.*

- (1) The only fuels allowed to be burned in the MWC are municipal solid waste and wood waste, with natural gas as an auxiliary fuel (Natural gas may be used as fuel during warm-up, startup, shutdown, and malfunction periods, and at other times when necessary and consistent with good combustion practices). Other wastes shall not be burned without written prior approval from the Department. The wood waste utilization rate shall not exceed 160 tons per day for the facility. Wood waste shall be used when sufficient municipal solid waste (MSW) is not available to maintain a steady heat rate.
- (2) The primary fuel for the facility is MSW, including the items and materials that fit within the definition of MSW contained in either 40 CFR 60.51b or Section 403.706(5), Florida Statutes (1995).

- b. *Unauthorized Fuels.* 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 d. - f., below.

However, the facility

(1) 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;
- (e) Nuclear waste;
- (f) Radioactive waste;

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Units 103, 104, 105 and 106

- (g) Sewage sludge;
 - (h) Explosives;
 - (i) Beryllium-containing waste, as defined in 40 CFR 61, Subpart C.
- (2) And shall not knowingly burn:
- (a) Untreated biomedical waste from biomedical waste generators regulated pursuant to Chapter 64E-16, F.A.C., and from other similar generators (or sources). See the attached Appendix BW: Biomedical Waste Definitions, for definitions of what constitutes biomedical waste;
 - (b) Segregated loads of biological waste.
- c. *Fuel Handling.* 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:
- (1) Well mixed with MSW on the tipping floor; or
 - (2) 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 Specific Conditions **A.4.e.**, **A.4.f.** and **A.48.**). 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.
- d. *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:
- (1) Confidential, proprietary or special documents (including but not limited to business records, lottery tickets, event tickets, coupons and microfilm);
 - (2) 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;
 - (3) Wood pallets, clean wood, and land clearing debris;
 - (4) Packaging materials and containers;
 - (5) Clothing, natural and synthetic fibers, fabric remnants, and similar debris, including but not limited to aprons and gloves; or
 - (6) Rugs, carpets, and floor coverings, but not asbestos-containing materials or polyethylene or polyurethane vinyl floor coverings.
- e. *Waste Tires.* Subject to the conditions and limitations contained in this permit, waste tires may be used as fuel at the facility. The total quantity of waste tires received as segregated loads and burned at the facility shall not exceed 3%, by weight, of the facility's total fuel. Compliance with this limitation shall be determined by using a rolling 30-day average, in accordance with Specific Condition **A.48.**, below.
- f. *Non-MSW Material.* Subject to the conditions and limitations contained in this permit, the following other solid waste materials may be used as fuel at the facility (i.e., the following are authorized fuels that are non-MSW material). The total quantity of the following non-MSW material received as segregated loads and burned at the facility shall not exceed 5%, by weight, of the facility's total fuel. Compliance with this limitation shall be determined by using a rolling 30-day average.
- (1) Construction and demolition debris.
 - (2) Oil spill debris from aquatic, coastal, estuarine or river environments. Such items or materials include but are not limited to rags, wipes, and absorbents.
 - (3) 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.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Units 103, 104, 105 and 106

- (4) 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.
- (5) Waste materials that:
 - (a) Are generated in the manufacture of items in categories c. or d., above and are functionally or commercially useless (expired, rejected or spent); or
 - (b) 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.
- (6) Waste materials that contain oil from:
 - (a) The routine cleanup of industrial or commercial establishments and machinery; or
 - (b) Spills of virgin or used petroleum products. Such items or materials include but are not limited to rags, wipes, and absorbents.
- (7) Used oil and used oil filters. Used oil containing a polychlorinated biphenyls (PCB) concentration equal or greater than 50 ppm shall not be burned, pursuant to the limitations of 40 CFR 761.20(e).
- (8) Waste materials generated by manufacturing, industrial or agricultural activities, provided that these items or materials are substantially similar to items or materials that are found routinely in MSW, subject to prior approval of the Department.

[Rules 62-4.070(1), (3), 62-213.410 & 62-213.440, F.A.C., and Permit No. 0570127-002-AC/PSD-FL-086(A)]

A.5. Auxiliary Fuel Burners. Auxiliary burners for each unit shall be fired only with natural gas. The annual capacity factor for natural gas for each unit shall be limited to 10% or less. The annual capacity factor for natural gas is the ratio between the heat input to the unit from natural gas during a calendar year and the potential heat input to the unit had it been operated for 8,760 hours during a calendar year at the maximum steady state design heat input capacity. Monthly records shall be maintained of the amount of natural gas used by the auxiliary burners of each unit and the equivalent heat input from natural gas. On an annual basis (no later than 30 days after the end of the calendar year), a demonstration must be performed based on the monthly records showing that the capacity factor for natural gas for each unit was 10% or less. [Rules 62-4.160(2), 62-210.200, 62-213.440(1), F.A.C. and Permit No. 0570127-002-AC/PSD-FL-086(A)]

{Permitting Note: Nitrogen oxides emissions from the auxiliary burners are expected to be approximately 2.4 lb/hr and 10.5 tons/year per unit, These emissions are included in, and not in addition to, combustor emissions. Allowable emissions for MSW combustors include emissions from auxiliary burners. This condition effectively limits annual average heat input from natural gas to approximately 12 MMBtu/hr per unit.}

A.6. Hours of Operation. These emissions units may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE), F.A.C., Permit No. 0570127-002-AC/PSD-FL-086(A)]

Control Technology

- A.7. Required Controls.** For each unit the permittee is required to operate and maintain a fabric filter baghouse, a spray dryer absorber, a powdered activated carbon injection system, and selective non-catalytic reduction system (SNCR).
- a. **Fabric filter baghouse.** Each unit is equipped with a particulate control baghouse designed, constructed and operated to control a particulate matter so as not to exceed a maximum emission rate of 25 mg/dscm corrected to 7 percent O₂. These baghouses must be equipped with pressure drop monitoring equipment.
 - b. **Spray dryer absorbers (SDA).** Each unit is equipped with a SDA (scrubber) designed, constructed and operated so as to remove SO₂ at an efficiency of 75 percent, or not to exceed a maximum emission rate of 29 parts per million by volume on a dry basis (ppmvd) corrected to 7 percent O₂, 24-hour daily block geometric mean, whichever is less stringent.
 - c. **Carbon Injection.** Each unit is equipped with a carbon injection system. The activated carbon is utilized for the control of mercury and dioxin/furans. The carbon injection rate must be estimated and maintained in compliance with requirements set forth in 40 CFR 60.58b(m).

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Units 103, 104, 105 and 106

- d. *Selective Non Catalytic Reduction System (SNCR)*. Each unit is equipped with a selective non-catalytic reduction system designed, constructed and operated so as not to exceed a maximum NO_x emission rate of 205 ppmvd corrected to 7 percent O₂, 24-hour daily block arithmetic mean (midnight to midnight).
[0570127-002-AC/PSD-FL-086(A)]

Emission Limitations and Standards

{Permitting Note: The emissions standards apply to each municipal waste combustor unit. The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

Unless otherwise specified, the averaging times for Specific Conditions **A.8. - A.18.** are based on the specified averaging time of the applicable test method.

{Permitting Note: The May 10, 2006 amendments to 40 CFR 60 Subpart Cb, changed some of the emission standards and limitations for Units 1-4. The Four (4) air pollutant standards/limitations that were lowered under the amendments are: Particulate Matter (PM), Cadmium (Cd), Lead (Pb), and Mercury (Hg).}

- A.8. Visible Emissions (VE).** As determined by the continuous opacity monitoring system (COMS) or EPA Method 9, the emission limit for opacity exhibited by the gases discharged to the atmosphere from each unit is 10 percent (6-minute average).
[Rule 62-204.800(9)(b)3.b., F.A.C., 40 CFR 60.33b(a)(1)(iii) and Permit No. 0570127-002-AC/PSD-FL-086(A)]
- A.9. Sulfur Dioxide (SO₂).** As determined by the continuous emissions monitoring system (CEMS), the emissions of sulfur dioxide contained in the gases discharged to the atmosphere from each MWC unit shall not exceed:
- a. *Pursuant to NSPS and PSD-FL-086(A)*: 29 parts per million by volume or 25 percent of the potential sulfur dioxide emission concentration (75-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent. Compliance with this emission limit is based on a 24-hour daily block geometric mean (midnight to midnight).
 - b. *Pursuant to PSD-FL-086(A)*: Emissions from all four MWC Units shall not exceed 460 tons in any consecutive 12-month period.
[Rule 62-204.800(9)(b)3.e., F.A.C., 40 CFR 60.33b(b)(3)(i), and Permit No. 0570127-002-AC/PSD-FL-086(A)]
- A.10. Nitrogen Oxides (NO_x).** As determined by the CEMS, the emissions of nitrogen oxides contained in the gases discharged to the atmosphere from each MWC unit shall not exceed:
- a. *Pursuant to NSPS and PSD-FL-086(A)*: 205 parts per million by volume, corrected to 7 percent oxygen, dry basis.
 - b. *Pursuant to PSD-FL-086(A)*:
 - (1) 0.335 lb/MMBtu, heat input.
 - (2) 40.1 lbs/hr. Compliance with this emission limit is based on a 24-hour daily block arithmetic mean (midnight to midnight).
 - (3) Emissions from all four MWC units shall not exceed 679 tons in any consecutive 12-month period.
[Rule 62-204.800(9)(b)3.h., F.A.C., 40 CFR 60.33b(d), and Permit No. 0570127-002-AC/PSD-FL-086(A)]
- A.11. Carbon Monoxide (CO).** As determined by the CEMS, the emissions of carbon monoxide contained in the gases discharged to the atmosphere from each MWC unit shall not exceed:
- a. *Pursuant to NSPS and PSD-FL-086(A)*: 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, 4-hour block arithmetic average.
 - b. *Pursuant to PSD-FL-086(A)*:
 - (1) 0.0995 lb/MMBtu, heat input, 4-hour block arithmetic average.
 - (2) 11.9 lbs/hr, 4-hour block arithmetic average.
 - (3) Emissions from all four MWC Units shall not exceed 185 tons in any consecutive 12-month period.
[Rule 62-204.800(9)(b)3.i., F.A.C., 40 CFR 60.34b(a), and Permit No. 0570127-002-AC/PSD-FL-086(A)]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Units 103, 104, 105 and 106

- A.12. Particulate Matter (PM).** As determined by stack tests, the emissions of PM contained in the gases discharged to the atmosphere from each MWC unit shall not exceed:
- a. *Pursuant to NSPS:* 25 milligrams per dry standard cubic meter, corrected to 7 percent oxygen.
 - b. *Pursuant to PSD-FL-086(A):*
 - (1) 27 milligrams per dry standard cubic meter, corrected to 7 percent oxygen.
 - (2) 0.0230 lb/MMBtu, heat input.
 - (3) 2.76 lbs/hr.
 - (4) 12.1 tons/yr.
- [Rule 62-204.800(9)(b)3.a., F.A.C., 40 CFR 60.33b(a)(1)(i), and Permit No. 0570127-002-AC/PSD-FL-086(A)]
- A.13. Cadmium (Cd).** As determined by stack tests, the emissions of Cd contained in the gases discharged to the atmosphere from each MWC unit shall not exceed:
- a. *Pursuant to NSPS:* 0.035 milligrams per dry standard cubic meter, corrected to 7 percent oxygen.
 - b. *Pursuant to PSD-FL-086(A):*
 - (1) 0.040 milligrams per dry standard cubic meter, corrected to 7 percent oxygen.
 - (2) 3.42E-05 lb/MMBtu, heat input.
 - (3) 4.10E-03 lb/hr.
 - (4) 0.0179 tons/yr.
- [Rule 62-204.800(9)(b)3.c., F.A.C., 40 CFR 60.33b(a)(2)(i), and Permit No. 0570127-002-AC/PSD-FL-086(A)]
- A.14. Lead (Pb).** As determined by stack tests, the emissions of Pb contained in the gases discharged to the atmosphere from each MWC unit shall not exceed:
- a. *Pursuant to NSPS:* 0.40 milligrams per dry standard cubic meter, corrected to 7 percent oxygen.
 - b. *Pursuant to PSD-FL-086(A):*
 - (1) 0.44 milligrams per dry standard cubic meter, corrected to 7 percent oxygen.
 - (2) 3.76E-04 lb/MMBtu, heat input.
 - (3) 0.0451 lb/hr.
 - (4) 0.197 ton/yr.
- [Rule 62-204.800(9)(b)3.c., F.A.C., 40 CFR 60.33b(a)(4), and Permit No. 0570127-002-AC/PSD-FL-086(A)]
- A.15. Hydrogen Chloride (HCl).** As determined by stack tests, the emission limit for hydrogen chloride contained in the gases discharged to the atmosphere from each MWC unit shall not exceed:
- a. *Pursuant to NSPS and PSD-FL-086(A):* 29 parts per million by volume or 5 percent of the potential hydrogen chloride emission concentration (95-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent;
 - b. *Pursuant to PSD-FL-086(A):* 67.9 tons/yr.
- [40 CFR 60.33b(b)(3)(ii), and Permit No. 0570127-002-AC/PSD-FL-086(A)]
- A.16. Dioxins/Furan (D/F).** As determined by stack tests, the emission limit for dioxins/furans contained in the gases discharged to the atmosphere from each MWC unit that do not employ an electrostatic precipitator-based emission control system shall not exceed:
- a. *Pursuant to NSPS and PSD-FL-086(A):* 30 nanograms per dry standard cubic meter (total mass), corrected to 7 percent oxygen.
 - b. *Pursuant to PSD-FL-086(A):*
 - (1) 2.56E-08 lb/MMBtu, heat input.
 - (2) 3.07E-06 lb/hr.
 - (3) 1.35E-05 ton/yr.
- [62-204.800(9)(b)3.g., F.A.C., 40 CFR 60.33b(c)(1)(iii), and 0570127-002-AC/PSD-FL-086(A)]
- A.17. Fluoride (F).** As determined by stack tests, the emission limit for fluoride contained in the gases discharged to the atmosphere from each MWC unit shall not exceed:
- a. 1.5 lbs/hr.
 - b. 0.0125 lb/MMBtu, heat input.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Units 103, 104, 105 and 106

c. 6.57 tons/yr.

[Permit No. 0570127-002-AC/PSD-FL-086(A)]

- A.18. Mercury (Hg).** As determined by stack tests, the emissions of Hg contained in the gases discharged to the atmosphere from each MWC unit shall not exceed:
- a. *Pursuant to NSPS:* 0.050 milligrams per dry standard cubic meter, corrected to 7 percent oxygen or 15 percent of the potential mercury emission concentration (85-percent reduction by weight), whichever is less stringent.
 - b. *Pursuant to PSD-FL-086(A):*
 - (1) 0.070 milligrams per dry standard cubic meter corrected to 7 percent oxygen, or 15 percent of the potential mercury emission concentration (85-percent reduction by weight), whichever is less stringent.
 - (2) 0.0605 ton/yr.
- [Rule 62-204.800(9)(b)3.d., F.A.C., 40 CFR 60.33b(a)(3), and Permit No. 0570127-002-AC/PSD-FL-086(A)]

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C. cannot vary any requirement of an NSPS or NESHAP program provision.

- A.19. Startup, Shutdown and Malfunction.** The emission limitations for this facility shall apply at all times, except during periods of warm-up, startup, shutdown, or malfunctions, provided that the duration of startup, shutdown, or malfunction periods do not exceed three (3) hours per occurrence. The duration of warm-up periods is not limited. The startup period commences when the affected facility begins the continuous burning of waste and does not include any warm-up period when the affected facility is combusting only natural gas and waste is not being introduced to the combustor. The use of waste solely to provide thermal protection to the grate during the warm-up periods when waste is not being fed to the combustor is not considered to be continuous burning. During all startups, shutdowns, and malfunctions, the owner/operator shall use best operational practices to minimize air pollutant emissions.
- [Rules 62-210.700, and 62-204.800, F.A.C., 40 CFR 60.58(a)(1) and 0570127-002-AC/PSD-FL-086(A)]
- A.20. Excess Emissions Allowed.** Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed three hours per occurrence. A malfunction means any unavoidable failure of air pollution control equipment or process equipment to operate in a normal or usual manner.
- [Rule 62-210.700(1), F.A.C., and, 0570127-002-AC/PSD-FL-086(A)]
- A.21. Excess Emissions Prohibited.** Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C. and 0570127-002-AC/PSD-FL-086(A)]

Compliance With NSPS Standards and Maintenance Requirements

The following conditions are to be used when demonstrating compliance with the NSPS requirements. In addition, these emissions units are also subject to the federal requirements contained in the following attached appendices: Appendix NSPS A: 40 CFR 60, Subpart A - General Provisions; Appendix NSPS Cb: 40 CFR 60, Subpart Cb - Standards of Performance for Large Municipal Waste Combustors; and, Appendix NSPS Eb: 40 CFR 60, Subpart Eb - Standards of Performance for Large Municipal Waste Combustors.

- A.22. NSPS Compliance Requirements.** Compliance with standards in 40 CFR 60, other than opacity standards, shall be determined in accordance with performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard. [40 CFR 60.11(a)]
- A.23. Emission Guidelines.** The affected emissions units shall comply with all applicable provisions of the 40 CFR 60, Subpart Cb-Emission Guidelines and Compliance Times for Large Municipal Waste Combustors

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Units 103, 104, 105 and 106

That are Constructed on or Before September 20, 1994, which are incorporated within this permit. {Note: exceptions were made in Florida's adoption of 40 CFR 60, Subpart Cb.} [Rule 62-204.800(9)(b), F.A.C.]
{Permitting note: Some requirements of 40 CFR 60, Subpart Cb, are contained in 40 CFR 60, Subpart Eb.}

- A.24. Federal Requirements.** In addition to the requirements listed below, these emissions units are also subject to all of the applicable terms and conditions contained in the following attached appendices:
- Appendix NSPS A, 40 CFR 60, Subpart A - General Provisions.
 - Appendix NSPS, 40 CFR 60, Subpart Cb - Standards of Performance for Large Municipal Waste Combustors.
 - Appendix NSPS, 40 CFR 60, Subpart Eb - Standards of Performance for Large Municipal Waste Combustors.
- [Rule 62-204.800(8)(d), F.A.C.]
- A.25. Compliance With NSPS Opacity Standards.** 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). See Specific Condition **A.28.** [40 CFR 60.11(b)]
- A.26. NSPS Opacity Requirements.** 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)]
- A.27. NSPS Operating and Maintenance Procedures.** 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)]
- A.28. NSPS COMS Data.** 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.29. NSPS Startup, Shutdown and Malfunction Provisions.** 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, shutdown, or malfunction periods are limited to 3 hours per occurrence, except as provided in 40 CFR 60.58b(a)(1)(iii). During periods

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Units 103, 104, 105 and 106

of startup, shutdown, or malfunction, monitoring data shall be dismissed or excluded from compliance calculations, but shall be recorded and reported in accordance with the provisions of 40 CFR 60.59b(d)(7).

- a. 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 non-municipal solid waste fuel, and no municipal solid waste is being fed to the combustor.
- b. Continuous burning is the continuous, semi-continuous, or batch feeding of municipal solid waste for purposes of waste disposal, energy production, or providing heat to the combustion system in preparation for waste disposal or energy production. The use of municipal solid waste solely to provide thermal protection of the grate or hearth during the startup period when municipal solid waste is not being fed to the grate is not considered to be continuous burning.
- c. For the purpose of compliance with the carbon monoxide emission limits in 40 CFR 60.53b(a), if a loss of boiler water level control (e.g., boiler waterwall tube failure) or a loss of combustion air control (e.g., loss of combustion air fan, induced draft fan, combustion grate bar failure) is determined to be a malfunction, the duration of the malfunction period is limited to 15 hours per occurrence. During such periods of malfunction, monitoring data shall be dismissed or excluded from compliance calculations, but shall be recorded and reported in accordance with the provisions of 40 CFR 60.59b(d)(7).

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

Monitoring of Operations

- A.30. Continuous Load Monitoring.** The owner or operator shall install, calibrate, maintain, and operate a steam flow meter, measure steam flow in kilograms (or pounds) per hour on a continuous basis, and record the output of the monitor (in accordance with the ASME method described in 40 CFR 60.58b(i)(6)). Steam flow shall be calculated in 4-hour block arithmetic averages. Higher loads are allowed for testing purposes pursuant to 40 CFR 60.53b(b). [Rule 62-204.800(8), F.A.C., 40 CFR 60.31b, 60.38b, 60.51b, 60.53b(b), 60.58b(i)(6), and permit No. 0570127-002-AC/PSD-FL-086(A)]
- A.31. Carbon Injection Rate.** The owner or operator of an affected facility where activated carbon injection is used to comply with the mercury emission limit, or the dioxin/furan emission limits, or the dioxin/furan emission level specified in 40 CFR 60.58b(g)(5)(iii) shall follow the procedures specified in paragraphs a. through c.
- a. 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 (1) and (2).
 - (1) 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.
 - (2) 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.
 - b. 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 a.(1) and a.(2).
 - c. 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 (1) and (2).
 - (1) The weight of carbon delivered to the plant.
 - (2) 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 a., and sum the results for all affected facilities at the plant for the total number of hours of operation during the calendar quarter.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Units 103, 104, 105 and 106

[40 CFR 60.38b, 40 CFR 60.58b(m) and permit No. 0570127-002-AC/PSD-FL-086(A)]

- A.32. Compliance with the PM Control Device Temperature.** Each MWC unit is required to continuously monitor and record the flue gas temperature at the inlet to the PM control device in accordance with the requirements at 40 CFR 60.58b(i)(7). The PM control device temperature shall be calculated in 4-hour block arithmetic averages. Each MWC unit shall be allowed to operate up to 17°C (30° F) above the unit's maximum demonstrated PM control device temperature. The maximum demonstrated PM control device temperature is the highest 4-hour arithmetic measurement of temperature at the inlet to the PM control device record for 4 consecutive hours during the most recent dioxin/furan performance test which complied with the limit given above. The PM control device inlet temperature and the steam flow for each unit during the stack test shall be continuously monitored and recorded in accordance with 40 CFR 60, Subpart Cb. Higher temperatures are allowed for testing purposes, as specified at 40 CFR 60.53b(c). [Rule 62-204.800(8), F.A.C., 40 CFR 60.38b, 40 CFR 60.53b(c), 60.58(i)(7),(9) and permit No. 0570127-002-AC/PSD-FL-086(A)]
- A.33. Other Monitoring Requirements.** To ensure the facility's fuel does not adversely affect the facility's combustion process or emissions, the facility operator shall:
- Comply with good combustion operating practices in accordance with 40 CFR 60.53b;
 - Install, operate and maintain continuous monitors (CEMS) for oxygen, carbon monoxide, sulfur dioxide, oxides of nitrogen and temperature in accordance with 40 CFR 60.58b; and
 - Record and maintain the CEMS data in accordance with 40 CFR 60.59b.
- [Rule 40 CFR 60.53b, 40 CFR 60.58b, 40 CFR 60.59b and 0570127-002-AC/PSD-FL-086(A)]
- A.34. Charging Rate Monitoring.** The average daily solid waste charging rate shall be determined on a monthly basis and recorded for each MWC unit. The daily charging rate shall be determined each month on an average daily basis for each MWC unit using the Facility's truck scale weight data, refuse pit inventory data and MWC operating data for the preceding calendar month. Monthly truck scale weight records of the weight of solid waste received and processed at the Facility, and refuse pit inventory data, shall be used to determine the amount of solid waste charged during the preceding calendar month on an average daily basis. The MWC load level measurements or other operating data shall be used to determine the number of operating hours per MWC unit for each day during the preceding calendar month. [Rules 62-204.800(8) and 62-4.070(3), F.A.C., 40 CFR 60.53(a), and 0570127-002-AC/PSD-FL-086(A)]

Continuous Monitoring Requirements

- A.35. Continuous Emissions Monitoring Systems (CEMS) Required.** For these emissions units, the permittee shall calibrate, operate and maintain continuous emissions monitoring systems (CEMS) for monitoring opacity, sulfur dioxide (SO₂), nitrogen oxides (NO_x) and carbon monoxide (CO). CEMS shall be used to demonstrate compliance with the multi-unit emissions cap limitations for NO_x, SO₂ and CO. (See Specific Conditions **A.9.** - **A.11.**). [Rule 62-213.440, F.A.C., and 40 CFR 60.38b, 40 CFR 60.58b(c)(8) (opacity), 40 CFR 60.58b(e)(5) (SO₂), 40 CFR 60.58b(h)(4) (NO_x) & 40 CFR 60.58b(i)(3) (CO). and permit No. 0570127-002-AC/PSD-FL-086(A)]
- A.36. Continuous Opacity Monitoring System (COMS).** The permittee shall operate and maintain a continuous opacity monitoring system (COMS) to demonstrate compliance with the stack opacity standard for Unit No's 1-4. The COMS shall monitor and record data during all periods of Units 1-4 operation including startup, shutdown, malfunction or emergency conditions, but not including COMS breakdowns, repairs, or calibration checks. [Permit No. 0570127-002-AC/PSD-FL-086(A)]
- A.37. CEMS Operation and Calibration Requirements.** The CEMS required in Specific Condition **A.35.** shall be operated in accordance with the following requirements:
- In the event of a replacement of a major component of a CEMS, a performance specification test, in accordance with 40 CFR 60, Appendix B, shall be conducted within 60 days of such replacement.
 - CEMS data shall be recorded during periods of startup, shutdown, and malfunction, but shall be excluded from emissions averaging calculations for carbon monoxide and opacity.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Units 103, 104, 105 and 106

- c. 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.
- d. The procedures under 40 CFR 60.13 shall be followed for evaluation and operation of all CEMS.
- e. 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).
- f. Carbon monoxide emissions, corrected to 7% oxygen, shall be recorded. A wet oxygen monitor may be used for carbon monoxide emission correction. A wet oxygen reading shall be corrected to a dry basis using a moisture correction determined annually using EPA Method 4. A carbon monoxide value of 400 ppmvd shall indicate good combustion.
- g. For purposes of reports required under this permit, excess emissions are defined as any calculated average emission concentration which exceeds the applicable emission limits in Specific Conditions **A.8. - A.18.**
- h. Quality Assurance Procedures of 40 CFR 60 Appendix F applicable to these CEMS shall be adhered to. These shall include, but not be limited to:
 - (1) *Calibration Drift Assessment.* The permittee shall keep all required records, and make them available for Department inspection. The permittee shall report as soon as possible by telephone any instances of Out-of-Control Periods due to calibration drift criteria.
 - (2) *Data Accuracy Assessment.* The permittee shall keep all required records, and make them available for Department inspection. The permittee shall report as soon as possible by telephone any instances of Out-of-Control Periods due to excessive inaccuracy.
 - (3) *Reporting Requirements.* The permittee shall submit a Data Assessment Report for each quarterly audit on each CEMS.

[0570127-002-AC/PSD-FL-086(A)]

Test Methods and Procedures

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

A.38. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
5 or 5B	Method for Determining Particulate Matter Emissions (All PM is assumed to be PM ₁₀ .)
6, 6A, 6B or 6C	Determination of Sulfur Dioxide
7, 7A, 7C, 7D or 7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10, 10A or 10B	Determination of Carbon Monoxide Emissions from Stationary Sources {Note: The method shall be based on a continuous sampling train.}
12 or 29	Determination of Inorganic Lead Emissions from Stationary Sources
13A or 13B	Determination of Total Fluoride Emissions from Stationary Sources
23	Determination of Dioxin/Furan Emissions From Stationary Sources
25 and or 25A	Method for Determining Gaseous Organic Concentrations (Flame Ionization)

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Units 103, 104, 105 and 106

Method	Description of Method and Comments
26 or 26A	Determination of Hydrogen Chloride Emissions From Stationary Sources
29	Determination of Metals Emission from Stationary Sources (Mercury, Cadmium, Lead)

The above methods are described in Chapter 62-297, F.A.C. and/or 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [40 CFR 60.54(b)(2), 62-297.401, F.A.C., and 0570127-002-AC/PSD-FL-086(A)]

- A.39. Common Testing Requirements.** Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]
- A.40. Annual Compliance Tests Required.** Annual testing (no less than 9 calendar months and no more than 15 calendar months following the previous performance test; and must complete five performance tests in each 5-year calendar period) shall be conducted on each EU to demonstrate compliance with the emissions standards for VE (except as provided in Specific Condition **A.28.**), PM, Cd, D/F, Pb and Hg. Annual testing (no more than 12 calendar months following the previous performance test) shall also be conducted on each EU to demonstrate compliance with the emissions standards for HCl. [Rule 62-297.310(7), F.A.C., 40 CFR 60.38b, and 0570127-002-AC/PSD-FL-086(A)]
- A.41. Compliance Tests Prior To Renewal.** Compliance tests shall be performed for Fluoride (F) once every 5 years. The tests shall occur prior to obtaining a renewed operating permit to demonstrate compliance with the emission limits in Specific Conditions **A.8. - A.18.** [62-297.310(7)(a), F.A.C.]
- A.42. 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. Higher loads are allowed for testing purposes as specified at 40 CFR 60.53b(b). [Rules 62-297.310(2) & (2)(b), F.A.C. and 0570127-002-AC/PSD-FL-086(A)]
- A.43. CEMS Annual Emissions Requirement.** The owner or operator shall use data from the NO_x, SO₂ and CO CEMS when calculating annual emissions for purposes of computing actual emissions, baseline actual emissions, and net emissions increase, as defined at Rule 62-210.200, F.A.C., and for purposes of computing emissions pursuant to the reporting requirements of Rule 62-210.370(3), F.A.C., Annual Operating Report. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of startup and shutdown of each emissions unit. [Rules 62-210.200(Definitions) & 62-210.370(3), F.A.C. and 0570127-002-AC/PSD-FL-086(A)]
- A.44. Other Testing Requirements.**
- a. Pursuant to 40 CFR 60.58b(c)(3), 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.
 - b. Dioxin/Furan emission limit expressed as the total mass of tetra- through octa- chlorinated dibenzo-p-dioxins and dibenzofurans. The facility may perform less frequent testing for dioxin/furan emissions, as allowed by 40 CFR 60.38b(b) with prior notice to the Department, if the facility's dioxin/furan emissions do not exceed 15 ng/dscm corrected to 7% O₂ or less for all MWC units.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Units 103, 104, 105 and 106

- c. Mercury and HCl stack tests upstream and downstream of the control device(s) shall be conducted to calculate percent control.
 - d. Testing for compliance with the fluoride emission limits shall be demonstrated during the initial compliance test and every five years thereafter.
- Unit load levels (steam flow) and particulate control device inlet temperatures may be varied for purposes of testing in accordance with 40 CFR 60.53b(b)&(c). See Specific Conditions **A.2.**, **A.30.**, **A.32.** and **A.42.** of this permit. [Permit No. 0570127-002-AC/PSD-FL-086(A)]

Recordkeeping and Reporting Requirements

A.45. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority: [Rule 62-213.440, F.A.C.]

Report	Reporting Deadline	Related Condition(s)
Segregated Solid Waste Record Keeping	30-day period	A.48.
Charging Rate Monitoring	Average daily basis	A.34.

- A.46. Other Reporting Requirements.** See Appendices RR: Facility-Wide Reporting Requirements, NSPS Cb: 40 CFR 60, Subpart Cb - Standards of Performance for Large Municipal Waste Combustors and NSPS Eb: 40 CFR 60, Subpart Eb - Standards of Performance for Large Municipal Waste Combustors, for additional reporting requirements. [Rule 62-213.440, F.A.C.]
- A.47. Quarterly Reports.** The owner or operator shall submit excess emission reports for any calendar quarter during which there are excess emissions from the facility pursuant to 40 CFR 60.7(c). If there are no excess emissions during the calendar quarter, the owner or operator shall submit a report quarterly stating that no excess emissions occurred during the quarterly reporting period. The report shall include the following:
- a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, and the date and time of commencement and completion of each period of excess emissions. [40 CFR 60.7(c)(1)]
 - b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the furnace boiler system. The nature and cause of any malfunction (if known) and the corrective action taken or preventive measures adopted. [40 CFR 60.7(c)(2)]
 - c. The date and time identifying each period during which the continuous monitoring system (CEMS/COMS) was inoperative except for zero and span checks, and the nature of the system repairs or adjustments. [40 CFR 60.7(d)(2) as applicable]
 - d. When no excess emissions have occurred or the continuous monitoring system (CEMS/COM) has not been inoperative, repaired, or adjusted, such information shall be stated in the report. [40 CFR 60.7(c)(4)]
- A.48. Segregated Solid Waste Record Keeping.** The following records shall be made and kept to demonstrate compliance with the segregated non-MSW percentage limitations of specific condition **A.4.e.** and **A.4.f.** Each segregated load of non-MSW materials, that is subject to the percentage weight limitations of specific condition **A.4.e.** and **A.4.f.**, 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.

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.

Each day the total weight of segregated non-MSW materials received that are subject to the 5% restriction shall be computed, and the daily total shall be added to the sum of the daily totals from the previous 29 days. The resultant 30-day total weight of segregated non-MSW materials shall be divided by the total weight of all

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Units 103, 104, 105 and 106

waste materials received in the same 30-day period, and the resultant number shall be multiplied by 100 to express the ratio in percentage terms. The percentage computed shall be compared to the 5% limitation. [0570127-002-AC/PSD-FL-086(A)]

- A.49. Other Excess Emissions Reports.** In the case of excess emissions resulting from malfunctions*, the owner or operator shall notify the Department's Southwest District office (DEPSWD) and the Hillsborough County Environmental Protection Commission (HCEPC) in accordance with Section 62-4.130, F.A.C. The DEPSWD and the HCEPC shall be notified within one working day of: the nature, extent, and duration of the excess emission; and the action taken to correct the problem. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the DEPSWD or HCEPC.

*Malfunction is defined at Rule 62-210.200(179) to mean any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner.

[Rule 62-4.130 and 62-210.700(6), F.A.C. and Permit No. 0570127-002-AC/PSD-FL-086(A)]

- A.50. Emission Compliance Stack Test Reports.**

- (a) A *test report* indicating the results of the required compliance tests shall be filed with the Department's Southwest District office (DEPSWD) and the Hillsborough County Environmental Protection Commission (HCEPC) as soon as practical, but no later than 45 days after the last sampling run is completed.
- (b) The *test report* shall provide sufficient detail on the tested emissions unit and the procedures used to allow the Department to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in Rule 62-297.310(8), F.A.C. [Rule 62-297.310(8), F.A.C., 40 CFR 60.59(b)(f) and 0570127-002-AC/PSD-FL-086(A)]

Operating Practices, Training and Certification

- A.51. Operating Practices.** Operating practices of each MWC shall be at least as protective as those requirements listed in 40 CFR 60.53(b) and (c) of NSPS Subpart Eb. [40 CFR 60.34b(b) and 0570127-002-AC/PSD-FL-086(A)]

- A.52. Operator Training and Certification.** Operator training and certification for the each MWC shall be at least as protective as those requirements listed in 40 CFR 60.54b of NSPS Subpart Eb. Compliance with these requirements shall be in accordance with the schedule specified in 40 CFR 60.39b(c)(4). [40 CFR 60.35b and 0570127-002-AC/PSD-FL-086(A)]

- A.53. Other Operating and Training Requirements.**

- a. One of the following persons must be on duty at the facility at any time during which one or more of the MWC units is operating, a fully certified chief facility operator or shift supervisor, or a provisionally certified chief facility operator or shift supervisor who is scheduled to take the full certification exam. If this person must leave the facility his or her operating shift, a provisionally certified control room operator who is on site may fulfill this requirement. [Rule 40 CFR 60.39b (c)(4)(ii) and 40 CFR 60.54b]
- b. Each chief facility operator and shift supervisor must obtain and maintain a current provisional operator certification and be scheduled for a full certification exam, or receive full certification; with either the ASME or an equivalent state-approved certification program before the date that person assumes responsibility for operation of the facility. [Rule 40 CFR 60.39b(c)(4)(ii) and 40 CFR 60.54b(a) and (b)]
- c. Each chief facility operator, and shift supervisor, and control room operator must complete the EPA or state approved MWC operator training course before the date person assumes responsibility for operation of the facility. The operator training course requirements of 40 CFR 60.54(d) do not apply to chief facility operators, shift supervisors and control room operators who have full ASME certification on or before the date of state plane approval (November 13, 1997). [40 CFR 60.39b(c)(4)(iii)(A).] The owner or operator may request that the Department waive the operator training course requirements specified in 40 CFR 60.54b(d) for chief facility operators, shift supervisors and control room operators who have obtained provisional ASME certification on or before the date of State plan approval (November 13, 1997) [40 CFR 60.39b(c)(4) and CFR 60.54b(d)]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Units 103, 104, 105 and 106

- d. A site-specific operating manual must be developed and updated on an annual basis. A training program must be established to review the operating manual with each person who has responsibility affecting the operation of the MWC including chief facility operators, shift supervisors, control room operator, ash handlers, maintenance personnel, and crane/load handlers. Each person must undergo initial training before the day that person assumes responsibilities affecting operation of the facility and annually thereafter pursuant to 40 CFR 60.54b(f). The operating manual must be kept in a readily accessible location for persons required to undergo training. [40 CFR 60.35, CFR 60.54b(e) & (f) and 0570127-002-AC/PSD-FL-086(A)]

Other Requirements.

- A.54. Name Plate.** The combustor boilers shall have a metal name plate affixed in a conspicuous place on the shell showing manufacturer, model number, type waste, and rated capacity. [Rule 62-204.800(9)(b)5., F.A.C., and 40 CFR 60.35b & 40 CFR 60.54b., and 0570127-002-AC/PSD-FL-086(A)]
- A.55. Waste Disposal.** The owner or operator shall treat, store and dispose of all liquid, solid, and hazardous wastes in accordance with all applicable Federal, State, and Local regulations. This air pollution permit does not relieve the permittee from securing any other type of required permits, licenses, or certifications. [Permit No. 0570127-002-AC/PSD-FL-086(A)]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection B. Emissions Unit -100

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
100	Ash Building and Handling System

The emissions unit consists of bottom ash and fly ash handling systems, including a scrubber for the ash building and the scalper building. This emission unit serves the four municipal waste combustors. Fugitive ash emissions are controlled by enclosing the ash transfer and storage system. The scrubber has a stack that is 50 feet high with an exit diameter of 1.3 feet. The unit is designed to process up to 280 tons of ash per day. Because the potential uncontrolled PM emissions are below the major source threshold, the CAM rule does not apply to the ash transfer and storage system’s scrubber.

{Permitting note: 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.; Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT); and Rule 62-212.500, F.A.C. Note: This emissions unit is subject to the requirements of 40 CFR 60, Subpart Cb. and may refer to the requirements of 40 CFR 60, Subpart Eb where these requirements are referenced by Subpart Cb.}

Essential Potential to Emit (PTE) Parameters

- B.1. Emissions Unit Operating Rate Limitation After Testing.** See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]
- B.2. Hours of Operation.** This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE), F.A.C., Permit No. 0570127-002-AC/PSD-FL-086(A)]

Control Technology

- B.3. Ash Handling Requirements.** The potential for dust generation by ash handling activities will be mitigated by quenching the ash prior to loading in ash transport trucks. The ash handling facilities shall be enclosed. Residue from the grates, grate siftings, and ash from the combustor/boiler and fabric filter hoppers during normal operations shall be discharged into the ash quenching system, or otherwise handled in a manner to minimize visible dust. The ash/residue in the ash handling building shall remain sufficiently moist to prevent dust during storage and handling operations. [0570127-003-AC/PSD-FL-086(B)]

Emission Limitations and Standards

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

Unless otherwise specified, the averaging time for Specific Condition **B.5.** are based on the specified averaging time of the applicable test method.

- B.4. Visible Emissions (VE).** As determined by the stack tests, visible emissions from the ash conveyor systems, transfer points, buildings, or enclosures of ash conveying systems shall not occur more than 5 percent of the time during the observation period, except during times of maintenance or repair of these systems. [0570127-002-AC/PSD-FL-086(A)]

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C. cannot vary any requirement of an NSPS or NESHAP program provision.

- B.5. Excess Emissions Allowed.** Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection B. Emissions Unit -100

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.; and Permit No. 0570127-002-AC/PSD-FL-086(A)]

- B.6. Excess Emissions Prohibited.** Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C., and Permit No. 0570127-002-AC/PSD-FL-086(A)]

Test Methods and Procedures

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

- B.7. Test Methods.** Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
22	Visual Determination of the Opacity of Emissions from Stationary Sources

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [62-297.401, F.A.C. and 0570127-002-AC/PSD-FL-086(A)]

- B.8. Common Testing Requirements.** Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]
- B.9. Annual Compliance Tests Required.** During each federal fiscal year (October 1st to September 30th), the ash handling facilities shall be tested to demonstrate compliance with the emissions standards for VE. [Rule 62-297.310(7), F.A.C. and 0570127-002-AC/PSD-FL-086(A)]
- B.10. Fugitive Ash.** The procedures specified in paragraphs (a. - c.) shall be used for determining compliance with the fugitive ash emission limit under 40 CFR 60.55b.
- a. 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 will be three hours, and will include periods when ash is being transferred from the MWC unit to the storage area, and when ash is being loaded for disposal.
 - b. 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.
 - c. Following the date that the initial performance test for fugitive ash emissions is completed or is required to be completed under Sec. 60.8 for an affected facility, the owner or operator shall conduct a performance test for fugitive ash emissions on an annual basis (no more than 12 calendar months following the previous performance test). [40 CFR 60.38b, and 40 CFR 60.58b(k)]
- B.11. Operating Rate During Testing.** Compliance testing shall be conducted with the emissions unit operation at capacity, which is defined as testing with all four combustion units operating and producing ash. [Rule 62-213.440, F.A.C.]

Recordkeeping and Reporting Requirements

- B.12. Reporting Requirements.** See Appendix RR, Facility-Wide Reporting Requirements, for reporting requirements. [Rule 62-213.440, F.A.C.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection B. Emissions Unit -100

Federal Requirements

B.13. NSPS. In addition to the above requirements, this emissions unit shall also comply with the applicable requirements contained in the following Appendices: Appendix NSPS A: 40 CFR 60, Subpart A - General Provisions; Appendix NSPS Cb: 40 CFR 60, Subpart Cb - Standards of Performance for Large Municipal Waste Combustors; and, Appendix NSPS Eb: 40 CFR 60, Subpart Eb - Standards of Performance for Large Municipal Waste Combustors. [Rule 62-213.440, F.A.C., 40 CFR 60.38b and 40 CFR 60.58b]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection C. Emissions Unit -101

Subsection C. The specific conditions in this section apply to the following emissions units:

EU No.	Brief Description
101	Two Pebble Lime Storage Silos

Pebble lime used in the spray dryer absorbers (SDA) for each municipal waste combustor is stored in two silos which exhaust through a common baghouse during silo loading operations. The silos are designed to process up to 3,300 tons per year of pebble lime. The dry standard cubic feet per minute (dscfm) flow rate from the common baghouse for the two silos is 1,200 dscfm. The emission unit has the potential to emit particulate matter (PM) less than 100 tons per year. Since the potential uncontrolled PM emissions are below the major source threshold, the CAM rule does not apply to the lime storage silos baghouses.

{Permitting notes: This emissions unit is regulated under Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C.; Best Available Control Technology (BACT); and Rule 62-212.500, F.A.C.}

Essential Potential to Emit (PTE) Parameters

- C.1. Emissions Unit Operating Rate Limitation After Testing.** See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]
- C.2. Hours of Operation.** This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE), F.A.C. and 0570127-002-AC/PSD-FL-086(A)]

Control Technology

- C.3. Fabric Filter Baghouse.** The two pebble lime storage silos are equipped with a common baghouse for the control of particulate matter emissions. The baghouse is designed, constructed and operated to control particulate matter so as not to exceed a maximum emission rate of 0.015 grains per dry standard cubic foot (gr/dscf) for each silo. [0570127-002-AC/PSD-FL-086(A)]

Emission Limitations and Standards

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

Unless otherwise specified, the averaging times for Specific Conditions C.4. and C.5. are based on the specified averaging time of the applicable test method.

- C.4. Visible Emissions (VE).** As determined by the EPA Method 9, visible emissions shall not exceed five (5) percent opacity. [0570127-002-AC/PSD-FL-086(A)]
- C.5. Particulate Matter (PM).** As determined by EPA method 5 or 5B, the emission limit for particulate matter contained in the gases discharged to the atmosphere from each silo shall not exceed 0.015 grains per dry standard cubic foot (gr/dscf) during filling operations of the lime storage silo. [0570127-002-AC/PSD-FL-086(A)]

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C. cannot vary any requirement of an NSPS or NESHAP program provision.

- C.6. Excess Emissions Allowed.** Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C. and 0570127-002-AC/PSD-FL-086(A)]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection C. Emissions Unit -101

C.7. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C. and 0570127-002-AC/PSD-FL-086(A)]

Test Methods and Procedures

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

C.8. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
5 or 5B	Method for Determining Particulate Matter Emissions (All PM is assumed to be PM ₁₀ .)
9	Visual Determination of the Opacity of Emissions from Stationary Sources

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [62-297.401, F.A.C. and 0570127-002-AC/PSD-FL-086(A)]

- C.9. Common Testing Requirements.** Unless otherwise specified, tests (when required) shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]
- C.10. Annual Compliance Tests Required.** During each federal fiscal year (October 1st to September 30th), each EU shall be tested to demonstrate compliance with the emissions standards for VE. [Rule 62-297.310(7), F.A.C. and 0570127-002-AC/PSD-FL-086(A)]
- C.11. Operating Rate During Testing.** Testing of emissions shall be conducted while pneumatically loading the silos at the normal operational loading rate. [Rule 62-213.440, F.A.C.]
- C.12. Lime Storage Silos PM Compliance Requirements.** The PM compliance test requirements are waived for the lime storage silos and an alternate standard of 5 percent opacity shall apply. The visible emission tests shall be performed for each silo during filling operations using EPA Method 9. A visible emission reading greater than 5 percent opacity does not create a presumption that the particulate matter emission limit (in gr/dscf) is being violated, but may require the owner or operator to perform a particulate matter stack test. Permanent stack testing facilities are not required for the lime silos. The owner or operator may install temporary stack sampling facilities to conduct such a test, if required. [0570127-002-AC/PSD-FL-086(A)]

Recordkeeping and Reporting Requirements

C.13. Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440, F.A.C.]

Federal Requirements

C.14. NSPS. In addition to the above requirements, this emissions unit shall also comply with the applicable requirements contained in the following Appendices: Appendix NSPS A: 40 CFR 60, Subpart A - General Provisions; Appendix NSPS Cb: 40 CFR 60, Subpart Cb - Standards of Performance for Large Municipal Waste Combustors; and, Appendix NSPS Eb: 40 CFR 60, Subpart Eb - Standards of Performance for Large Municipal Waste Combustors. [Rule 62-213.440, F.A.C., 40 CFR 60.38b and 40 CFR 60.58b]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection D. Emissions Unit -102

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
102	Two Activated Carbon Storage Silos

This emissions unit consists of two activated carbon storage silos with a separate discharge for each municipal waste combustor unit. The activated carbon is utilized for the control of mercury and dioxin/furans. Emissions from the silos are controlled by baghouses. The silos continuously feed activated carbon to the spray dryer absorber (SDA) units. Each of the activated carbon storage silos exhaust through a separate baghouse during silo loading operations. The two silos are design to process up to 120 tons per year of activated carbon. The dry standard cubic feet per minute (dscfm) exhaust flow rate from each of the silos is 1,200 dscfm. Since the potential uncontrolled PM emissions are below the major source threshold, the CAM rule does not apply to the activated carbon storage silo vent filters.

{Permitting note: This emissions unit is regulated under Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C.; and Best Available Control Technology (BACT); and Rule 62-212.500, F.A.C.}

Essential Potential to Emit (PTE) Parameters

- D.1. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C. and 0570127-002-AC/PSD-FL-086(A)]
- D.2. Hours of Operation. This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE), F.A.C. and 0570127-002-AC/PSD-FL-086(A)]

Control Technology

- D.3. Fabric Filter Baghouses. The two activated carbon storage silos are equipped with two Baghouses, one for each silo for the control of particulate matter emissions. The Baghouses are designed, constructed and operated to control particulate matter so as not to exceed a maximum emission rate of 0.015 grains per dry standard cubic foot (gr/dscf) for each silo. [0570127-002-AC/PSD-FL-086(A)]

Emission Limitations and Standards

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

Unless otherwise specified, the averaging times for Specific Conditions D.4. and D.5. are based on the specified averaging time of the applicable test method.

- D.4. Visible Emissions. As determined by the EPA Method 9, visible emissions shall not exceed five (5) percent opacity. [0570127-002-AC/PSD-FL-086(A)]
- D.5. Particulate Matter (PM). As determined by EPA method 5 or 5B, the emission limit for particulate matter contained in the gases discharged to the atmosphere from each silo shall not exceed 0.015 grains per dry standard cubic foot. [0570127-002-AC/PSD-FL-086(A)]

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C. cannot vary any requirement of an NSPS or NESHAP program provision.

- D.6. Excess Emissions Allowed. Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C. and 0570127-002-AC/PSD-FL-086(A)]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection D. Emissions Unit -102

D.7. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C. and 0570127-002-AC/PSD-FL-086(A)]

Test Methods and Procedures

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

D.8. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
5 or 5B	Method for Determining Particulate Matter Emissions (All PM is assumed to be PM ₁₀ .)
9	Visual Determination of the Opacity of Emissions from Stationary Sources

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [62-297.401, F.A.C. and 0570127-002-AC/PSD-FL-086(A)]

D.9. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

D.10. Annual Compliance Tests Required. During each federal fiscal year (October 1st to September 30th), each baghouse shall be tested to demonstrate compliance with the emissions standards for VE. [Rule 62-297.310(7), F.A.C. and 0570127-002-AC/PSD-FL-086(A)]

D.11. Operating Rate During Testing. Testing of emissions shall be conducted while pneumatically loading the silos at the normal operational loading rate. [Requested by applicant in letter dated January 3, 2001]

D.12. Carbon Storage Silos PM Compliance Requirements. The PM compliance test requirements are waived for the carbon storage silos and an alternate standard of 5 percent opacity shall apply. The visible emission tests shall be performed for each silo during filling operations using EPA Method 9. A visible emission reading greater than 5 percent opacity does not create a presumption that the particulate matter emission limit (in gr/dscf) is being violated, but may require the owner or operator to perform a particulate matter stack test. Permanent stack testing facilities are not required for the carbon silos. The owner or operator may install temporary stack sampling facilities to conduct such a test, if required. [0570127-002-AC/PSD-FL-086(A)]

Recordkeeping and Reporting Requirements

D.13. Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440, F.A.C.]

Federal Requirements

D.14. NSPS. In addition to the above requirements, this emissions unit shall also comply with the applicable requirements contained in the following Appendices: Appendix NSPS A: 40 CFR 60, Subpart A - General Provisions; Appendix NSPS Cb: 40 CFR 60, Subpart Cb - Standards of Performance for Large Municipal Waste Combustors; and, Appendix NSPS Eb: 40 CFR 60, Subpart Eb - Standards of Performance for Large Municipal Waste Combustors. [Rule 62-213.440, F.A.C., 40 CFR 60.38b and 40 CFR 60.58b]

SECTION IV. APPENDICES.

The Following Appendices Are Enforceable Part of This Permit:

Appendix A: Glossary.

Appendix BW: Biomedical Waste Definitions.

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

Appendix NSPS A: 40 CFR 60, Subpart A - General Provisions.

Appendix NSPS Cb: 40 CFR 60, Subpart Cb - Standards of Performance for Large Municipal Waste Combustors.

Appendix NSPS Eb: 40 CFR 60, Subpart Eb - Standards of Performance for Large Municipal Waste Combustors.

Appendix RR: Facility-wide Reporting Requirements.

Appendix TR: Facility-wide Testing Requirements.

Appendix TV: Title V General Conditions.

Appendix U: List of Unregulated Emissions Units and/or Activities.

APPENDIX A

ABBREVIATIONS, ACRONYMS, CITATIONS AND IDENTIFICATION NUMBERS

° F: degrees Fahrenheit	kPa: kilopascals
acfm: actual cubic feet per minute	LAT: Latitude
AOR: Annual Operating Report	lb: pound
ARMS: Air Resource Management System (Department's database)	lbs/hr: pounds per hour
BACT: best available control technology	LONG: Longitude
Btu: British thermal units	MACT: maximum achievable technology
CAM: compliance assurance monitoring	mm: millimeter
CEMS: continuous emissions monitoring system	MMBtu: million British thermal units
cfm: cubic feet per minute	MSDS: material safety data sheets
CFR: Code of Federal Regulations	MW: megawatt
CO: carbon monoxide	NESHAP: National Emissions Standards for Hazardous Air Pollutants
COMS: continuous opacity monitoring system	NO_x: nitrogen oxides
DARM: Division of Air Resources Management	NSPS: New Source Performance Standards
DCA: Department of Community Affairs	O&M: operation and maintenance
DEP: Department of Environmental Protection	O₂: oxygen
Department: Department of Environmental Protection	ORIS: Office of Regulatory Information Systems
dscfm: dry standard cubic feet per minute	OS: Organic Solvent
EPA: Environmental Protection Agency	Pb: lead
ESP: electrostatic precipitator (control system for reducing particulate matter)	PM: particulate matter
EU: emissions unit	PM₁₀: particulate matter with a mean aerodynamic diameter of 10 microns or less
F.A.C.: Florida Administrative Code	PSD: prevention of significant deterioration
F.D.: forced draft	psi: pounds per square inch
F.S.: Florida Statutes	PTE: potential to emit
FGR: flue gas recirculation	RACT: reasonably available control technology
Fl: fluoride	RATA: relative accuracy test audit
ft²: square feet	RMP: Risk Management Plan
ft³: cubic feet	RO: Responsible Official
gpm: gallons per minute	SAM: sulfuric acid mist
gr: grains	scf: standard cubic feet
HAP: hazardous air pollutant	scfm: standard cubic feet per minute
Hg: mercury	SIC: standard industrial classification code
I.D.: induced draft	SNCR: selective non-catalytic reduction (control system used for reducing emissions of nitrogen oxides)
ID: identification	SOA: Specific Operating Agreement
ISO: International Standards Organization (refers to those conditions at 288 Kelvin, 60% relative humidity and 101.3 kilopascals pressure.)	SO₂: sulfur dioxide
	TPH: tons per hour

APPENDIX A

ABBREVIATIONS, ACRONYMS, CITATIONS AND IDENTIFICATION NUMBERS

TPY: tons per year

VOC: volatile organic compounds

UTM: Universal Transverse Mercator coordinate system

x: By or times

VE: visible emissions

Citations:

The following examples illustrate the methods used in this permit to abbreviate and cite the references of rules, regulations, guidance memorandums, permit numbers and ID numbers.

Code of Federal Regulations:

Example: [40 CFR 60.334]

Where:	40	refers to	Title 40
	CFR	refers to	Code of Federal Regulations
	60	refers to	Part 60
	60.334	refers to	Regulation 60.334

Florida Administrative Code (F.A.C.) Rules:

Example: [Rule 62-213.205, F.A.C.]

Where:	62	refers to	Title 62
	62-213	refers to	Chapter 62-213
	62-213.205	refers to	Rule 62-213.205, F.A.C.

Identification Numbers:

Facility Identification (ID) Number:

Example: Facility ID No.: 1050221

Where:

105 =	3-digit number code identifying the facility is located in Polk County
0221 =	4-digit number assigned by state database.

Permit Numbers:

*Example: 1050221-002-AV, or
1050221-001-AC*

Where:

AC =	Air Construction Permit
AV =	Air Operation Permit (Title V Source)

APPENDIX A

ABBREVIATIONS, ACRONYMS, CITATIONS AND IDENTIFICATION NUMBERS

105 = 3-digit number code identifying the facility is located in Polk County
0221= 4-digit number assigned by permit tracking database
001 or 002= 3-digit sequential project number assigned by permit tracking database

Example: PSD-FL-185
PA95-01
AC53-208321

Where:

PSD = Prevention of Significant Deterioration Permit
PA = Power Plant Siting Act Permit
AC53 = old Air Construction Permit numbering identifying the facility is located in Polk County

APPENDIX BW

BIOMEDICAL WASTE DEFINITIONS

The following definitions are excerpted from Rule 64E-16.002 Definitions, Florida Administrative Code (version dated 6/3/97). For ease of reference, the rule numbering has been retained.

- (2) **Biomedical Waste** -- Any solid or liquid waste which may present a threat of infection to humans, including nonliquid tissue, body parts, blood, blood products, and body fluids from humans and other primates; laboratory and veterinary wastes which contain human disease-causing agents; and discarded sharps. The following are also included:
- (a) Used, absorbent materials saturated with blood, blood products, body fluids, or excretions or secretions contaminated with visible blood; and absorbent materials saturated with blood or blood products that have dried.
 - (b) Non-absorbent, disposable devices that have been contaminated with blood, body fluids, or secretions or excretions visibly contaminated with blood, but have not been treated by an approved method.
- (3) **Biomedical Waste Generator** -- A facility or person that produces biomedical waste. The term includes hospitals, skilled nursing or convalescent hospitals, intermediate care facilities, clinics, dialysis clinics, dental offices, health maintenance organizations, surgical clinics, medical buildings, physicians' offices, laboratories, veterinary clinics and funeral homes.
- (a) Mobile health care units, such as bloodmobiles, that are part of a stationary biomedical waste generator, are not considered individual biomedical waste generators.
 - (b) Funeral homes that do not practice embalming are not considered biomedical waste generators.
- (4) **Body Fluids** -- Those fluids which have the potential to harbor pathogens, such as human immunodeficiency virus and hepatitis B virus and include blood, blood products, lymph, semen, vaginal secretions, cerebrospinal, synovial, pleural, peritoneal, pericardial and amniotic fluids. In instances where identification of the fluid cannot be made, it shall be considered to be a regulated body fluid. Body excretions such as feces and secretions such as nasal discharges, saliva, sputum, sweat, tears, urine, and vomitus shall not be considered biomedical waste unless visibly contaminated with blood.

APPENDIX I

LIST OF INSIGNIFICANT EMISSIONS UNITS AND/OR ACTIVITIES

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.

Item No.	Brief Description of Emissions Units and/or Activities
1	Paint usage less than 6.0 gallons per day
2	Boiler water treatment
3	Cooling tower water treatment
4	Solvent degreaser
5	6,000 Gallons Urea storage tank
6	Caustic soda tank
7	5,000 Gallons Sulfuric acid tank
8	500 gallons diesel fuel storage tank above ground
9	Vehicular traffic and mobile on-site equipment
10	Refuse pit
11	Portable air compressors
12	Portable welding machines
13	Sandblasting equipment
14	250 Gallons gasoline above ground storage tank

Federal Regulations Adopted by Reference

In accordance with Rule 62-204.800, F.A.C., the following federal regulation in Title 40 of the Code of Federal Regulations (CFR) was adopted by reference. The original federal rule numbering has been retained.

Federal Revision Date: January 28, 2009

State Rule Effective Date: November 18, 2009

Standardized Conditions Revision Date: February 5, 2010

Subpart A-General Provisions

§ 60.1 Applicability.

- (a) Except as provided in subparts B and C, the provisions of this part apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of any standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.
- (b) Any new or revised standard of performance promulgated pursuant to section 111(b) of the Act shall apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of such new or revised standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.
- (c) In addition to complying with the provisions of this part, the owner or operator of an affected facility may be required to obtain an operating permit issued to stationary sources by an authorized State air pollution control agency or by the Administrator of the U.S. Environmental Protection Agency (EPA) pursuant to Title V of the Clean Air Act (Act) as amended November 15, 1990 (42 U.S.C. 7661). For more information about obtaining an operating permit see part 70 of this chapter.
- (d) *Site-specific standard for Merck & Co., Inc.'s Stonewall Plant in Elkton, Virginia. {Not Applicable}*

[40 FR 53346, Nov. 17, 1975, as amended at 55 FR 51382, Dec. 13, 1990; 59 FR 12427, Mar. 16, 1994; 62 FR 52641, Oct. 8, 1997]

§ 60.2 Definitions.

The terms used in this part are defined in the Act or in this section as follows:

Act means the Clean Air Act (42 U.S.C. 7401 *et seq.*)

Administrator means the Administrator of the Environmental Protection Agency or his authorized representative.

Affected facility means, with reference to a stationary source, any apparatus to which a standard is applicable.

Alternative method means any method of sampling and analyzing for an air pollutant which is not a reference or equivalent method but which has been demonstrated to the Administrator's satisfaction to, in specific cases, produce results adequate for his determination of compliance.

Approved permit program means a State permit program approved by the Administrator as meeting the requirements of part 70 of this chapter or a Federal permit program established in this chapter pursuant to Title V of the Act (42 U.S.C. 7661).

Capital expenditure means an expenditure for a physical or operational change to an existing facility which exceeds the product of the applicable "annual asset guideline repair allowance percentage" specified in the latest edition of Internal Revenue Service (IRS) Publication 534 and the existing facility's basis, as defined by section 1012 of the Internal Revenue Code. However, the total expenditure for a physical or operational change to an existing facility must not be reduced by any "excluded additions" as defined in IRS Publication 534, as would be done for tax purposes.

NSPS SUBPART A

40 CFR 60, SUBPART A - LIST GENERAL PROVISIONS

Clean coal technology demonstration project means a project using funds appropriated under the heading 'Department of Energy-Clean Coal Technology', up to a total amount of \$2,500,000,000 for commercial demonstrations of clean coal technology, or similar projects funded through appropriations for the Environmental Protection Agency.

Commenced means, with respect to the definition of *new source* in section 111(a)(2) of the Act, that an owner or operator has undertaken a continuous program of construction or modification or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or modification.

Construction means fabrication, erection, or installation of an affected facility.

Continuous monitoring system means the total equipment, required under the emission monitoring sections in applicable subparts, used to sample and condition (if applicable), to analyze, and to provide a permanent record of emissions or process parameters.

Electric utility steam generating unit means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

Equivalent method means any method of sampling and analyzing for an air pollutant which has been demonstrated to the Administrator's satisfaction to have a consistent and quantitatively known relationship to the reference method, under specified conditions.

Excess Emissions and Monitoring Systems Performance Report is a report that must be submitted periodically by a source in order to provide data on its compliance with stated emission limits and operating parameters, and on the performance of its monitoring systems.

Existing facility means, with reference to a stationary source, any apparatus of the type for which a standard is promulgated in this part, and the construction or modification of which was commenced before the date of proposal of that standard; or any apparatus which could be altered in such a way as to be of that type.

Force majeure means, for purposes of §60.8, an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents the owner or operator from complying with the regulatory requirement to conduct performance tests within the specified timeframe despite the affected facility's best efforts to fulfill the obligation. Examples of such events are acts of nature, acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility.

Isokinetic sampling means sampling in which the linear velocity of the gas entering the sampling nozzle is equal to that of the undisturbed gas stream at the sample point.

Issuance of a part 70 permit will occur, if the State is the permitting authority, in accordance with the requirements of part 70 of this chapter and the applicable, approved State permit program. When the EPA is the permitting authority, issuance of a Title V permit occurs immediately after the EPA takes final action on the final permit.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Modification means any physical change in, or change in the method of operation of, an existing facility which increases the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility or which results in the emission of any air pollutant (to which a standard applies) into the atmosphere not previously emitted.

Monitoring device means the total equipment, required under the monitoring of operations sections in applicable subparts, used to measure and record (if applicable) process parameters.

Nitrogen oxides means all oxides of nitrogen except nitrous oxide, as measured by test methods set forth in this part.

One-hour period means any 60-minute period commencing on the hour.

NSPS SUBPART A

40 CFR 60, SUBPART A - LIST GENERAL PROVISIONS

Opacity means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

Owner or operator means any person who owns, leases, operates, controls, or supervises an affected facility or a stationary source of which an affected facility is a part.

Part 70 permit means any permit issued, renewed, or revised pursuant to part 70 of this chapter.

Particulate matter means any finely divided solid or liquid material, other than uncombined water, as measured by the reference methods specified under each applicable subpart, or an equivalent or alternative method.

Permit program means a comprehensive State operating permit system established pursuant to title V of the Act (42 U.S.C. 7661) and regulations codified in part 70 of this chapter and applicable State regulations, or a comprehensive Federal operating permit system established pursuant to title V of the Act and regulations codified in this chapter.

Permitting authority means:

- (1) The State air pollution control agency, local agency, other State agency, or other agency authorized by the Administrator to carry out a permit program under part 70 of this chapter; or
- (2) The Administrator, in the case of EPA-implemented permit programs under title V of the Act (42 U.S.C. 7661).

Proportional sampling means sampling at a rate that produces a constant ratio of sampling rate to stack gas flow rate.

Reactivation of a very clean coal-fired electric utility steam generating unit means any physical change or change in the method of operation associated with the commencement of commercial operations by a coal-fired utility unit after a period of discontinued operation where the unit:

- (1) Has not been in operation for the two-year period prior to the enactment of the Clean Air Act Amendments of 1990, and the emissions from such unit continue to be carried in the permitting authority's emissions inventory at the time of enactment;
- (2) Was equipped prior to shut-down with a continuous system of emissions control that achieves a removal efficiency for sulfur dioxide of no less than 85 percent and a removal efficiency for particulates of no less than 98 percent;
- (3) Is equipped with low-NO_x burners prior to the time of commencement of operations following reactivation; and
- (4) Is otherwise in compliance with the requirements of the Clean Air Act.

Reference method means any method of sampling and analyzing for an air pollutant as specified in the applicable subpart.

Repowering means replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or as determined by the Administrator, in consultation with the Secretary of Energy, a derivative of one or more of these technologies, and any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990. Repowering shall also include any oil and/or gas-fired unit which has been awarded clean coal technology demonstration funding as of January 1, 1991, by the Department of Energy.

Run means the net period of time during which an emission sample is collected. Unless otherwise specified, a run may be either intermittent or continuous within the limits of good engineering practice.

Shutdown means the cessation of operation of an affected facility for any purpose.

Six-minute period means any one of the 10 equal parts of a one-hour period.

Standard means a standard of performance proposed or promulgated under this part.

NSPS SUBPART A

40 CFR 60, SUBPART A - LIST GENERAL PROVISIONS

Standard conditions means a temperature of 293 K (68F) and a pressure of 101.3 kilopascals (29.92 in Hg).

Startup means the setting in operation of an affected facility for any purpose.

State means all non-Federal authorities, including local agencies, interstate associations, and State-wide programs, that have delegated authority to implement: (1) The provisions of this part; and/or (2) the permit program established under part 70 of this chapter. The term, State shall have its conventional meaning where clear from the context.

Stationary source means any building, structure, facility, or installation which emits or may emit any air pollutant.

Title V permit means any permit issued, renewed, or revised pursuant to Federal or State regulations established to implement title V of the Act (42 U.S.C. 7661). A title V permit issued by a State permitting authority is called a part 70 permit in this part.

Volatile Organic Compound means any organic compound which participates in atmospheric photochemical reactions; or which is measured by a reference method, an equivalent method, an alternative method, or which is determined by procedures specified under any subpart.

[44 FR 55173, Sept. 25, 1979, as amended at 45 FR 5617, Jan. 23, 1980; 45 FR 85415, Dec. 24, 1980; 54 FR 6662, Feb. 14, 1989; 55 FR 51382, Dec. 13, 1990; 57 FR 32338, July 21, 1992; 59 FR 12427, Mar. 16, 1994; 72 FR 27442, May 16, 2007]

§ 60.3 Units and abbreviations.

Used in this part are abbreviations and symbols of units of measure. These are defined as follows:

(a) System International (SI) units of measure:

A—ampere

g—gram

Hz—hertz

J—joule

K—degree Kelvin

kg—kilogram

m—meter

m³—cubic meter

mg—milligram—10⁻³ gram

mm—millimeter—10⁻³ meter

Mg—megagram—10⁶ gram

mol—mole

N—newton

ng—nanogram—10⁻⁹ gram

nm—nanometer—10⁻⁹ meter

Pa—pascal

s—second

V—volt

W—watt

Ω—ohm

μg—microgram—10⁻⁶ gram

NSPS SUBPART A

40 CFR 60, SUBPART A - LIST GENERAL PROVISIONS

(b) Other units of measure:

Btu—British thermal unit
°C—degree Celsius (centigrade)
cal—calorie
cfm—cubic feet per minute
cu ft—cubic feet
dcf—dry cubic feet
dcm—dry cubic meter
dscf—dry cubic feet at standard conditions
dscm—dry cubic meter at standard conditions
eq—equivalent
°F—degree Fahrenheit
ft—feet
gal—gallon
gr—grain
g-eq—gram equivalent
hr—hour
in—inch
k—1,000
l—liter
lpm—liter per minute
lb—pound
meq—milliequivalent
min—minute
ml—milliliter
mol. wt.—molecular weight
ppb—parts per billion
ppm—parts per million
psia—pounds per square inch absolute
psig—pounds per square inch gage
°R—degree Rankine
scf—cubic feet at standard conditions
scfh—cubic feet per hour at standard conditions
scm—cubic meter at standard conditions
sec—second
sq ft—square feet

40 CFR 60, SUBPART A - LIST GENERAL PROVISIONS

std—at standard conditions

(c) Chemical nomenclature:

CdS—cadmium sulfide

CO—carbon monoxide

CO₂—carbon dioxide

HCl—hydrochloric acid

Hg—mercury

H₂O—water

H₂S—hydrogen sulfide

H₂SO₄—sulfuric acid

N₂—nitrogen

NO—nitric oxide

NO₂—nitrogen dioxide

NO_x—nitrogen oxides

O₂—oxygen

SO₂—sulfur dioxide

SO₃—sulfur trioxide

SO_x—sulfur oxides

(d) Miscellaneous:

A.S.T.M.—American Society for Testing and Materials

[42 FR 37000, July 19, 1977; 42 FR 38178, July 27, 1977]

§ 60.4 Address.

All addresses that pertain to Florida have been incorporated. To see the complete list of addresses please go to <http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&rgn=div6&view=text&node=40:6.0.1.1.1.1&idno=40>.

[Link to an amendment published at 73 FR 18164, Apr. 3, 2008.](#)

(a) All requests, reports, applications, submittals, and other communications to the Administrator pursuant to this part shall be submitted in duplicate to the appropriate Regional Office of the U.S. Environmental Protection Agency to the attention of the Director of the Division indicated in the following list of EPA Regional Offices.

Region IV (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee), Director, Air and Waste Management Division, U.S. Environmental Protection Agency, 345 Courtland Street, NE., Atlanta, GA 30365.

(b) Section 111(c) directs the Administrator to delegate to each State, when appropriate, the authority to implement and enforce standards of performance for new stationary sources located in such State. All information required to be submitted to EPA under paragraph (a) of this section, must also be submitted to the appropriate State Agency of any State to which this authority has been delegated (provided, that each specific delegation may except sources from a certain Federal or State reporting requirement). The appropriate mailing address for those States whose delegation request has been approved is as follows:

(K) Bureau of Air Quality Management, Department of Environmental Regulation, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, FL 32301.

NSPS SUBPART A

40 CFR 60, SUBPART A - LIST GENERAL PROVISIONS

[40 FR 18169, Apr. 25, 1975]

Editorial Note: For Federal Register citations affecting §60.4 see the List of CFR Sections Affected which appears in the Finding Aids section of the printed volume and on GPO Access.

§ 60.5 Determination of construction or modification.

- (a) When requested to do so by an owner or operator, the Administrator will make a determination of whether action taken or intended to be taken by such owner or operator constitutes construction (including reconstruction) or modification or the commencement thereof within the meaning of this part.
- (b) The Administrator will respond to any request for a determination under paragraph (a) of this section within 30 days of receipt of such request.

[40 FR 58418, Dec. 16, 1975]

§ 60.6 Review of plans.

- (a) When requested to do so by an owner or operator, the Administrator will review plans for construction or modification for the purpose of providing technical advice to the owner or operator.
- (b)
 - (1) A separate request shall be submitted for each construction or modification project.
 - (2) Each request shall identify the location of such project, and be accompanied by technical information describing the proposed nature, size, design, and method of operation of each affected facility involved in such project, including information on any equipment to be used for measurement or control of emissions.
- (c) Neither a request for plans review nor advice furnished by the Administrator in response to such request shall (1) relieve an owner or operator of legal responsibility for compliance with any provision of this part or of any applicable State or local requirement, or (2) prevent the Administrator from implementing or enforcing any provision of this part or taking any other action authorized by the Act.

[36 FR 24877, Dec. 23, 1971, as amended at 39 FR 9314, Mar. 8, 1974]

§ 60.7 Notification and record keeping.

- (a) Any owner or operator subject to the provisions of this part shall furnish the Administrator written notification or, if acceptable to both the Administrator and the owner or operator of a source, electronic notification, as follows:
 - (1) A notification of the date construction (or reconstruction as defined under §60.15) of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form.
 - (2) [Reserved]
 - (3) A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.
 - (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 §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.
 - (5) A notification of the date upon which demonstration of the continuous monitoring system performance commences in accordance with §60.13(c). Notification shall be postmarked not less than 30 days prior to such date.

NSPS SUBPART A

40 CFR 60, SUBPART A - LIST GENERAL PROVISIONS

- (6) A notification of the anticipated date for conducting the opacity observations required by §60.11(e)(1) of this part. The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date.
- (7) A notification that continuous opacity monitoring system data results will be used to determine compliance with the applicable opacity standard during a performance test required by §60.8 in lieu of Method 9 observation data as allowed by §60.11(e)(5) of this part. This notification shall be postmarked not less than 30 days prior to the date of the performance test.
- (b) Any owner or operator subject to the provisions of this part 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.
- (c) Each owner or operator required to install a continuous monitoring device shall submit excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and-or summary report form (see paragraph (d) of this section) to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each six-month period. Written reports of excess emissions shall include the following information:
 - (1) The magnitude of excess emissions computed in accordance with §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.
- (d) The summary report form shall contain the information and be in the format shown in figure 1 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 §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 §60.7(c) shall both be submitted.

Figure 1—Summary Report—Gaseous and Opacity Excess Emission and Monitoring System Performance

Pollutant (Circle One—SO₂/NO_x/TRS/H₂S/CO/Opacity)

Reporting period dates: From _____ to _____

Company:

Emission Limitation _____

Address:

NSPS SUBPART A
40 CFR 60, SUBPART A - LIST GENERAL PROVISIONS

Monitor Manufacturer and Model No. _____
 Date of Latest CMS Certification or Audit _____

Process Unit(s) Description:

Total source operating time in reporting period¹ _____

Emission data summary ¹		CMS performance summary ¹	
1. Duration of excess emissions in reporting period due to:		1. CMS downtime in reporting period due to:	
a. Startup/shutdown		a. Monitor equipment malfunctions	
b. Control equipment problems		b. Non-Monitor equipment malfunctions	
c. Process problems		c. Quality assurance calibration	
d. Other known causes		d. Other known causes	
e. Unknown causes		e. Unknown causes	
2. Total duration of excess emission		2. Total CMS Downtime	
3. Total duration of excess emissions × (100) [Total source operating time]	% ²	3. [Total CMS Downtime] × (100) [Total source operating time]	% ²

¹For opacity, record all times in minutes. For gases, record all times in hours.

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

On a separate page, describe any changes since last quarter in CMS, process or controls. I certify that the information contained in this report is true, accurate, and complete.

 Name

 Signature

 Title

Date

(e)

- (1) Notwithstanding the frequency of reporting requirements specified in paragraph (c) of this section, 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 this subpart and the applicable standard; and

NSPS SUBPART A

40 CFR 60, SUBPART A - LIST GENERAL PROVISIONS

- (iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in paragraph (e)(2) of this section.
- (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 paragraphs (e)(1) and (e)(2) of this section.
- (f) Any owner or operator subject to the provisions of this part 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 this part recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:
- (1) This paragraph applies to owners or operators required to install a continuous emissions monitoring system (CEMS) where the CEMS installed is automated, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. An automated CEMS records and reduces the measured data to the form of the pollutant emission standard through the use of a computerized data acquisition system. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (f) of this section, the owner or operator shall retain the most recent consecutive three averaging periods of subhourly measurements and a file that contains a hard copy of the data acquisition system algorithm used to reduce the measured data into the reportable form of the standard.
- (2) This paragraph applies to owners or operators required to install a CEMS where the measured data is manually reduced to obtain the reportable form of the standard, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (f) of this section, the owner or operator shall retain all subhourly measurements for the most recent reporting period. The subhourly measurements shall be retained for 120 days from the date of the most recent summary or excess emission report submitted to the Administrator.
- (3) The Administrator or delegated authority, upon notification to the source, may require the owner or operator to maintain all measurements as required by paragraph (f) of this section, if the Administrator or the delegated authority determines these records are required to more accurately assess the compliance status of the affected source.
- (g) If notification substantially similar to that in paragraph (a) of this section is required by any other State or local agency, sending the Administrator a copy of that notification will satisfy the requirements of paragraph (a) of this section.

NSPS SUBPART A

40 CFR 60, SUBPART A - LIST GENERAL PROVISIONS

- (h) Individual subparts of this part may include specific provisions which clarify or make inapplicable the provisions set forth in this section.

[36 FR 24877, Dec. 28, 1971, as amended at 40 FR 46254, Oct. 6, 1975; 40 FR 58418, Dec. 16, 1975; 45 FR 5617, Jan. 23, 1980; 48 FR 48335, Oct. 18, 1983; 50 FR 53113, Dec. 27, 1985; 52 FR 9781, Mar. 26, 1987; 55 FR 51382, Dec. 13, 1990; 59 FR 12428, Mar. 16, 1994; 59 FR 47265, Sep. 15, 1994; 64 FR 7463, Feb. 12, 1999]

§ 60.8 Performance tests.

- (a) Except as specified in paragraphs (a)(1), (a)(2), (a)(3), and (a)(4) of this section, 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, or at such other times specified by this part, 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).
- (1) If a force majeure is about to occur, occurs, or has occurred for which the affected owner or operator intends to assert a claim of force majeure, the owner or operator shall notify the Administrator, in writing as soon as practicable following the date the owner or operator first knew, or through due diligence should have known that the event may cause or caused a delay in testing beyond the regulatory deadline, but the notification must occur before the performance test deadline unless the initial force majeure or a subsequent force majeure event delays the notice, and in such cases, the notification shall occur as soon as practicable.
 - (2) The owner or operator shall provide to the Administrator a written description of the force majeure event and a rationale for attributing the delay in testing beyond the regulatory deadline to the force majeure; describe the measures taken or to be taken to minimize the delay; and identify a date by which the owner or operator proposes to conduct the performance test. The performance test shall be conducted as soon as practicable after the force majeure occurs.
 - (3) The decision as to whether or not to grant an extension to the performance test deadline is solely within the discretion of the Administrator. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an extension as soon as practicable.
 - (4) Until an extension of the performance test deadline has been approved by the Administrator under paragraphs (a)(1), (2), and (3) of this section, the owner or operator of the affected facility remains strictly subject to the requirements of this part.
- (b) Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, (3) approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance, (4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or (5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.
- (c) Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.
- (d) 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. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Administrator (or delegated State or local agency) as soon as possible of any delay in the

NSPS SUBPART A

40 CFR 60, SUBPART A - LIST GENERAL PROVISIONS

original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Administrator (or delegated State or local agency) by mutual agreement.

- (e) 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.
- (f) 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.

[36 FR 24877, Dec. 23, 1971, as amended at 39 FR 9314, Mar. 8, 1974; 42 FR 57126, Nov. 1, 1977; 44 FR 33612, June 11, 1979; 54 FR 6662, Feb. 14, 1989; 54 FR 21344, May 17, 1989; 64 FR 7463, Feb. 12, 1999; 72 FR 27442, May 16, 2007]

§ 60.9 Availability of information.

The availability to the public of information provided to, or otherwise obtained by, the Administrator under this part shall be governed by part 2 of this chapter. (Information submitted voluntarily to the Administrator for the purposes of §§60.5 and 60.6 is governed by §§2.201 through 2.213 of this chapter and not by §2.301 of this chapter.)

§ 60.10 State authority.

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

- (a) Adopting and enforcing any emission standard or limitation applicable to an affected facility, provided that such emission standard or limitation is not less stringent than the standard applicable to such facility.
- (b) Requiring the owner or operator of an affected facility to obtain permits, licenses, or approvals prior to initiating construction, modification, or operation of such facility.

§ 60.11 Compliance with standards and maintenance requirements.

- (a) Compliance with standards in this part, other than opacity standards, shall be determined in accordance with performance tests established by §60.8, unless otherwise specified in the applicable standard.
- (b) Compliance with opacity standards in this part shall be determined by conducting observations in accordance with Method 9 in appendix A of this part, any alternative method that is approved by the Administrator, or as provided in paragraph (e)(5) of this section. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).
- (c) The opacity standards set forth in this part shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

NSPS SUBPART A

40 CFR 60, SUBPART A - LIST GENERAL PROVISIONS

- (d) 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.
- (e)
- (1) For the purpose of demonstrating initial compliance, opacity observations shall be conducted concurrently with the initial performance test required in §60.8 unless one of the following conditions apply. If no performance test under §60.8 is required, then opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. If visibility or other conditions prevent the opacity observations from being conducted concurrently with the initial performance test required under §60.8, the source owner or operator shall reschedule the opacity observations as soon after the initial performance test as possible, but not later than 30 days thereafter, and shall advise the Administrator of the rescheduled date. In these cases, the 30-day prior notification to the Administrator required in §60.7(a)(6) shall be waived. The rescheduled opacity observations shall be conducted (to the extent possible) under the same operating conditions that existed during the initial performance test conducted under §60.8. The visible emissions observer shall determine whether visibility or other conditions prevent the opacity observations from being made concurrently with the initial performance test in accordance with procedures contained in Method 9 of appendix B of this part. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. The owner or operator of an affected facility shall make available, upon request by the Administrator, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. Except as provided in paragraph (e)(5) of this section, the results of continuous monitoring by transmissometer which indicate that the opacity at the time visual observations were made was not in excess of the standard are probative but not conclusive evidence of the actual opacity of an emission, provided that the source shall meet the burden of proving that the instrument used meets (at the time of the alleged violation) Performance Specification 1 in appendix B of this part, has been properly maintained and (at the time of the alleged violation) that the resulting data have not been altered in any way.
 - (2) Except as provided in paragraph (e)(3) of this section, the owner or operator of an affected facility to which an opacity standard in this part applies shall conduct opacity observations in accordance with paragraph (b) of this section, shall record the opacity of emissions, and shall report to the Administrator the opacity results along with the results of the initial performance test required under §60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.
 - (3) The owner or operator of an affected facility to which an opacity standard in this part applies may request the Administrator to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. The owner or operator of the affected facility shall report the opacity results. Any request to the Administrator to determine and to record the opacity of emissions from an affected facility shall be included in the notification required in §60.7(a)(6). If, for some reason, the Administrator cannot determine and record the opacity of emissions from the affected facility during the performance test, then the provisions of paragraph (e)(1) of this section shall apply.
 - (4) An owner or operator of an affected facility using a continuous opacity monitor (transmissometer) shall record the monitoring data produced during the initial performance test required by §60.8 and shall furnish the Administrator a written report of the monitoring results along with Method 9 and §60.8 performance test results.
 - (5) An 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 §60.8 in lieu of Method 9 observation data. If an owner or operator elects to submit

NSPS SUBPART A

40 CFR 60, SUBPART A - LIST GENERAL PROVISIONS

COMS data for compliance with the opacity standard, he shall notify the Administrator of that decision, in writing, at least 30 days before any performance test required under §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 §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 §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 §60.13(c) of this part, 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 Method 9 data indicates noncompliance, the Method 9 data will be used to determine compliance with the opacity standard.

- (6) Upon receipt from an owner or operator of the written reports of the results of the performance tests required by §60.8, the opacity observation results and observer certification required by §60.11(e)(1), and the COMS results, if applicable, the Administrator will make a finding concerning compliance with opacity and other applicable standards. If COMS data results are used to comply with an opacity standard, only those results are required to be submitted along with the performance test results required by §60.8. If the Administrator finds that an affected facility is in compliance with all applicable standards for which performance tests are conducted in accordance with §60.8 of this part but during the time such performance tests are being conducted fails to meet any applicable opacity standard, he shall notify the owner or operator and advise him that he may petition the Administrator within 10 days of receipt of notification to make appropriate adjustment to the opacity standard for the affected facility.
 - (7) The Administrator will grant such a petition upon a demonstration by the owner or operator that the affected facility and associated air pollution control equipment was operated and maintained in a manner to minimize the opacity of emissions during the performance tests; that the performance tests were performed under the conditions established by the Administrator; and that the affected facility and associated air pollution control equipment were incapable of being adjusted or operated to meet the applicable opacity standard.
 - (8) The Administrator will establish an opacity standard for the affected facility meeting the above requirements at a level at which the source will be able, as indicated by the performance and opacity tests, to meet the opacity standard at all times during which the source is meeting the mass or concentration emission standard. The Administrator will promulgate the new opacity standard in the Federal Register.
- (f) Special provisions set forth under an applicable subpart shall supersede any conflicting provisions in paragraphs (a) through (e) of this section.
- (g) For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this part, nothing in this part 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.

[38 FR 28565, Oct. 15, 1973, as amended at 39 FR 39873, Nov. 12, 1974; 43 FR 8800, Mar. 3, 1978; 45 FR 23379, Apr. 4, 1980; 48 FR 48335, Oct. 18, 1983; 50 FR 53113, Dec. 27, 1985; 51 FR 1790, Jan. 15, 1986; 52 FR 9781, Mar. 26, 1987; 62 FR 8328, Feb. 24, 1997; 65 FR 61749, Oct. 17, 2000]

§ 60.12 Circumvention.

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

[39 FR 9314, Mar. 8, 1974]

NSPS SUBPART A

40 CFR 60, SUBPART A - LIST GENERAL PROVISIONS

§ 60.13 Monitoring requirements.

- (a) For the purposes of this section, all continuous monitoring systems required under applicable subparts shall be subject to the provisions of this section upon promulgation of performance specifications for continuous monitoring systems under appendix B to this part and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, appendix F to this part, unless otherwise specified in an applicable subpart or by the Administrator. Appendix F is applicable December 4, 1987.
- (b) All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests under §60.8. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device.
- (c) If the owner or operator of an affected facility elects to submit continuous opacity monitoring system (COMS) data for compliance with the opacity standard as provided under §60.11(e)(5), he shall conduct a performance evaluation of the COMS as specified in Performance Specification 1, appendix B, of this part before the performance test required under §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 §60.8 or within 30 days thereafter in accordance with the applicable performance specification in appendix B of this part. 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 §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 paragraph (c) of this section at least 10 days before the performance test required under §60.8 is conducted.
 - (2) Except as provided in paragraph (c)(1) of this section, the owner or operator of an affected facility shall furnish the Administrator within 60 days of completion two or, upon request, more copies of a written report of the results of the performance evaluation.
- (d)
 - (1) Owners and operators of a CEMS installed in accordance with the provisions of this part, must 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 must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of this part. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified. Owners and operators of a COMS installed in accordance with the provisions of this part, must automatically, intrinsic to the opacity monitor, check the zero and upscale (span) calibration drifts at least once daily. For a particular COMS, the acceptable range of zero and upscale calibration materials is as defined in the applicable version of PS-1 in appendix B of this part. For a COMS, the optical surfaces, exposed to the effluent gases, must be cleaned before performing the zero and upscale drift adjustments, except for systems using automatic zero adjustments. The optical surfaces must be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.
 - (2) Unless otherwise approved by the Administrator, the following procedures must be followed for a COMS. Minimum procedures must include an automated method for producing a simulated zero opacity condition and an upscale opacity condition using a certified neutral density filter or other related technique to produce a known obstruction of the light beam. Such procedures must provide a system check of all active analyzer internal optics with power or curvature, all active electronic circuitry including the light source and photodetector assembly, and electronic or electro-mechanical systems and hardware and or software used during normal measurement operation.

NSPS SUBPART A

40 CFR 60, SUBPART A - LIST GENERAL PROVISIONS

- (e) Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under paragraph (d) of this section, all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:
- (1) All continuous monitoring systems referenced by paragraph (c) of this section 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 paragraph (c) of this section for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.
- (f) All continuous monitoring systems or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of appendix B of this part shall be used.
- (g) 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 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.
- (h)
- (1) 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 §60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period.
 - (2) For continuous monitoring systems other than opacity, 1-hour averages shall be computed as follows, except that the provisions pertaining to the validation of partial operating hours are only applicable for affected facilities that are required by the applicable subpart to include partial hours in the emission calculations:
 - (i) Except as provided under paragraph (h)(2)(iii) of this section, for a full operating hour (any clock hour with 60 minutes of unit operation), at least four valid data points are required to calculate the hourly average, *i.e.*, one data point in each of the 15-minute quadrants of the hour.
 - (ii) Except as provided under paragraph (h)(2)(iii) of this section, for a partial operating hour (any clock hour with less than 60 minutes of unit operation), at least one valid data point in each 15-minute quadrant of the hour in which the unit operates is required to calculate the hourly average.
 - (iii) For any operating hour in which required maintenance or quality-assurance activities are performed:
 - (A) If the unit operates in two or more quadrants of the hour, a minimum of two valid data points, separated by at least 15 minutes, is required to calculate the hourly average; or
 - (B) If the unit operates in only one quadrant of the hour, at least one valid data point is required to calculate the hourly average.
 - (iv) If a daily calibration error check is failed during any operating hour, all data for that hour shall be invalidated, unless a subsequent calibration error test is passed in the same hour and the requirements of paragraph (h)(2)(iii) of this section are met, based solely on valid data recorded after the successful calibration.

NSPS SUBPART A

40 CFR 60, SUBPART A - LIST GENERAL PROVISIONS

- (v) For each full or partial operating hour, all valid data points shall be used to calculate the hourly average.
 - (vi) Except as provided under paragraph (h)(2)(vii) of this section, data recorded during periods of continuous monitoring system breakdown, repair, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph.
 - (vii) Owners and operators complying with the requirements of §60.7(f)(1) or (2) must include any data recorded during periods of monitor breakdown or malfunction in the data averages.
 - (viii) When specified in an applicable subpart, hourly averages for certain partial operating hours shall not be computed or included in the emission averages (e.g. hours with < 30 minutes of unit operation under §60.47b(d)).
 - (ix) Either arithmetic or integrated averaging of all data may be used to calculate the hourly averages. The data may be recorded in reduced or nonreduced form (e.g. , ppm pollutant and percent O₂ or ng/J of pollutant).
- (3) All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in the applicable subpart. After conversion into units of the standard, the data may be rounded to the same number of significant digits used in the applicable subpart to specify the emission limit.
- (i) After receipt and consideration of written application, the Administrator may approve alternatives to any monitoring procedures or requirements of this part including, but not limited to the following:
 - (1) Alternative monitoring requirements when installation of a continuous monitoring system or monitoring device specified by this part would not provide accurate measurements due to liquid water or other interferences caused by substances in the effluent gases.
 - (2) Alternative monitoring requirements when the affected facility is infrequently operated.
 - (3) Alternative monitoring requirements to accommodate continuous monitoring systems that require additional measurements to correct for stack moisture conditions.
 - (4) Alternative locations for installing continuous monitoring systems or monitoring devices when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements.
 - (5) Alternative methods of converting pollutant concentration measurements to units of the standards.
 - (6) Alternative procedures for performing daily checks of zero and span drift that do not involve use of span gases or test cells.
 - (7) Alternatives to the A.S.T.M. test methods or sampling procedures specified by any subpart.
 - (8) Alternative continuous monitoring systems that do not meet the design or performance requirements in Performance Specification 1, appendix B, but adequately demonstrate a definite and consistent relationship between its measurements and the measurements of opacity by a system complying with the requirements in Performance Specification 1. The Administrator may require that such demonstration be performed for each affected facility.
 - (9) Alternative monitoring requirements when the effluent from a single affected facility or the combined effluent from two or more affected facilities is released to the atmosphere through more than one point.
- (j) An alternative to the relative accuracy (RA) test specified in Performance Specification 2 of appendix B may be requested as follows:
- (1) An alternative to the reference method tests for determining RA is available for sources with emission rates demonstrated to be less than 50 percent of the applicable standard. A source owner or operator may petition the Administrator to waive the RA test in Section 8.4 of Performance Specification 2 and substitute the procedures in Section 16.0 if the results of a performance test conducted according to the requirements in §60.8 of this subpart or other tests performed following the criteria in §60.8 demonstrate that the emission

NSPS SUBPART A

40 CFR 60, SUBPART A - LIST GENERAL PROVISIONS

rate of the pollutant of interest in the units of the applicable standard is less than 50 percent of the applicable standard. For sources subject to standards expressed as control efficiency levels, a source owner or operator may petition the Administrator to waive the RA test and substitute the procedures in Section 16.0 of Performance Specification 2 if the control device exhaust emission rate is less than 50 percent of the level needed to meet the control efficiency requirement. The alternative procedures do not apply if the continuous emission monitoring system is used to determine compliance continuously with the applicable standard. The petition to waive the RA test shall include a detailed description of the procedures to be applied. Included shall be location and procedure for conducting the alternative, the concentration or response levels of the alternative RA materials, and the other equipment checks included in the alternative procedure. The Administrator will review the petition for completeness and applicability. The determination to grant a waiver will depend on the intended use of the CEMS data (e.g., data collection purposes other than NSPS) and may require specifications more stringent than in Performance Specification 2 (e.g., the applicable emission limit is more stringent than NSPS).

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

[40 FR 46255, Oct. 6, 1975; 40 FR 59205, Dec. 22, 1975, as amended at 41 FR 35185, Aug. 20, 1976; 48 FR 13326, Mar. 30, 1983; 48 FR 23610, May 25, 1983; 48 FR 32986, July 20, 1983; 52 FR 9782, Mar. 26, 1987; 52 FR 17555, May 11, 1987; 52 FR 21007, June 4, 1987; 64 FR 7463, Feb. 12, 1999; 65 FR 48920, Aug. 10, 2000; 65 FR 61749, Oct. 17, 2000; 66 FR 44980, Aug. 27, 2001; 71 FR 31102, June 1, 2006; 72 FR 32714, June 13, 2007]

Editorial Note: At 65 FR 61749, Oct. 17, 2000, §60.13 was amended by revising the words “ng/J of pollutant” to read “ng of pollutant per J of heat input” in the sixth sentence of paragraph (h). However, the amendment could not be incorporated because the words “ng/J of pollutant” do not exist in the sixth sentence of paragraph (h).

§ 60.14 Modification.

- (a) Except as provided under paragraphs (e) and (f) of this section, any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere.
- (b) Emission rate shall be expressed as kg/hr of any pollutant discharged into the atmosphere for which a standard is applicable. The Administrator shall use the following to determine emission rate:
 - (1) Emission factors as specified in the latest issue of “Compilation of Air Pollutant Emission Factors,” EPA Publication No. AP-42, or other emission factors determined by the Administrator to be superior to AP-42 emission factors, in cases where utilization of emission factors demonstrates that the emission level resulting from the physical or operational change will either clearly increase or clearly not increase.
 - (2) Material balances, continuous monitor data, or manual emission tests in cases where utilization of emission factors as referenced in paragraph (b)(1) of this section does not demonstrate to the Administrator's satisfaction whether the emission level resulting from the physical or operational change will either clearly increase or clearly not increase, or where an owner or operator demonstrates to the Administrator's

NSPS SUBPART A

40 CFR 60, SUBPART A - LIST GENERAL PROVISIONS

satisfaction that there are reasonable grounds to dispute the result obtained by the Administrator utilizing emission factors as referenced in paragraph (b)(1) of this section. When the emission rate is based on results from manual emission tests or continuous monitoring systems, the procedures specified in appendix C of this part shall be used to determine whether an increase in emission rate has occurred. Tests shall be conducted under such conditions as the Administrator shall specify to the owner or operator based on representative performance of the facility. At least three valid test runs must be conducted before and at least three after the physical or operational change. All operating parameters which may affect emissions must be held constant to the maximum feasible degree for all test runs.

- (c) The addition of an affected facility to a stationary source as an expansion to that source or as a replacement for an existing facility shall not by itself bring within the applicability of this part any other facility within that source.
- (d) [Reserved]
- (e) The following shall not, by themselves, be considered modifications under this part:
 - (1) Maintenance, repair, and replacement which the Administrator determines to be routine for a source category, subject to the provisions of paragraph (c) of this section and §60.15.
 - (2) An increase in production rate of an existing facility, if that increase can be accomplished without a capital expenditure on that facility.
 - (3) An increase in the hours of operation.
 - (4) Use of an alternative fuel or raw material if, prior to the date any standard under this part becomes applicable to that source type, as provided by §60.1, the existing facility was designed to accommodate that alternative use. A facility shall be considered to be designed to accommodate an alternative fuel or raw material if that use could be accomplished under the facility's construction specifications as amended prior to the change. Conversion to coal required for energy considerations, as specified in section 111(a)(8) of the Act, shall not be considered a modification.
 - (5) The addition or use of any system or device whose primary function is the reduction of air pollutants, except when an emission control system is removed or is replaced by a system which the Administrator determines to be less environmentally beneficial.
 - (6) The relocation or change in ownership of an existing facility.
- (f) Special provisions set forth under an applicable subpart of this part shall supersede any conflicting provisions of this section.
- (g) Within 180 days of the completion of any physical or operational change subject to the control measures specified in paragraph (a) of this section, compliance with all applicable standards must be achieved.
- (h) No physical change, or change in the method of operation, at an existing electric utility steam generating unit shall be treated as a modification for the purposes of this section provided that such change does not increase the maximum hourly emissions of any pollutant regulated under this section above the maximum hourly emissions achievable at that unit during the 5 years prior to the change.
- (i) Repowering projects that are awarded funding from the Department of Energy as permanent clean coal technology demonstration projects (or similar projects funded by EPA) are exempt from the requirements of this section provided that such change does not increase the maximum hourly emissions of any pollutant regulated under this section above the maximum hourly emissions achievable at that unit during the five years prior to the change.
- (j)
 - (1) Repowering projects that qualify for an extension under section 409(b) of the Clean Air Act are exempt from the requirements of this section, provided that such change does not increase the actual hourly emissions of any pollutant regulated under this section above the actual hourly emissions achievable at that unit during the 5 years prior to the change.

NSPS SUBPART A

40 CFR 60, SUBPART A - LIST GENERAL PROVISIONS

- (2) This exemption shall not apply to any new unit that:
- (i) Is designated as a replacement for an existing unit;
 - (ii) Qualifies under section 409(b) of the Clean Air Act for an extension of an emission limitation compliance date under section 405 of the Clean Air Act; and
 - (iii) Is located at a different site than the existing unit.
- (k) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project is exempt from the requirements of this section. A *temporary clean coal control technology demonstration project*, for the purposes of this section is a clean coal technology demonstration project that is operated for a period of 5 years or less, and which complies with the State implementation plan for the State in which the project is located and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.
- (l) The reactivation of a very clean coal-fired electric utility steam generating unit is exempt from the requirements of this section.

[40 FR 58419, Dec. 16, 1975, as amended at 43 FR 34347, Aug. 3, 1978; 45 FR 5617, Jan. 23, 1980; 57 FR 32339, July 21, 1992; 65 FR 61750, Oct. 17, 2000]

§ 60.15 Reconstruction.

- (a) An existing facility, upon reconstruction, becomes an affected facility, irrespective of any change in emission rate.
- (b) "Reconstruction" means the replacement of components of an existing facility to such an extent that:
- (1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, and
 - (2) It is technologically and economically feasible to meet the applicable standards set forth in this part.
- (c) "Fixed capital cost" means the capital needed to provide all the depreciable components.
- (d) If an owner or operator of an existing facility proposes to replace components, and the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, he shall notify the Administrator of the proposed replacements. The notice must be postmarked 60 days (or as soon as practicable) before construction of the replacements is commenced and must include the following information:
- (1) Name and address of the owner or operator.
 - (2) The location of the existing facility.
 - (3) A brief description of the existing facility and the components which are to be replaced.
 - (4) A description of the existing air pollution control equipment and the proposed air pollution control equipment.
 - (5) An estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new facility.
 - (6) The estimated life of the existing facility after the replacements.
 - (7) A discussion of any economic or technical limitations the facility may have in complying with the applicable standards of performance after the proposed replacements.
- (e) The Administrator will determine, within 30 days of the receipt of the notice required by paragraph (d) of this section and any additional information he may reasonably require, whether the proposed replacement constitutes reconstruction.
- (f) The Administrator's determination under paragraph (e) shall be based on:

NSPS SUBPART A

40 CFR 60, SUBPART A - LIST GENERAL PROVISIONS

- (1) The fixed capital cost of the replacements in comparison to the fixed capital cost that would be required to construct a comparable entirely new facility;
 - (2) The estimated life of the facility after the replacements compared to the life of a comparable entirely new facility;
 - (3) The extent to which the components being replaced cause or contribute to the emissions from the facility; and
 - (4) Any economic or technical limitations on compliance with applicable standards of performance which are inherent in the proposed replacements.
- (g) Individual subparts of this part may include specific provisions which refine and delimit the concept of reconstruction set forth in this section.

[40 FR 58420, Dec. 16, 1975]

§ 60.16 Priority list.

A list of prioritized major source categories may be found at the following EPA web site:

<http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&rgn=div6&view=text&node=40:6.0.1.1.1.1&idno=40>

[47 FR 951, Jan. 8, 1982, as amended at 47 FR 31876, July 23, 1982; 51 FR 42796, Nov. 25, 1986; 52 FR 11428, Apr. 8, 1987; 61 FR 9919, Mar. 12, 1996]

§ 60.17 Incorporations by reference.

The materials listed below are incorporated by reference in the corresponding sections noted. These incorporations by reference were approved by the Director of the Federal Register on the date listed. These materials are incorporated as they exist on the date of the approval, and a notice of any change in these materials will be published in the Federal Register. The materials are available for purchase at the corresponding address noted below, and all are available for inspection at the Library (C267-01), U.S. EPA, Research Triangle Park, NC or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

- (a) The following materials are available for purchase from at least one of the following addresses: American Society for Testing and Materials (ASTM), 100 Barr Harbor Drive, Post Office Box C700, West Conshohocken, PA 19428-2959; or ProQuest, 300 North Zeeb Road, Ann Arbor, MI 48106.
- (1) ASTM A99-76, 82 (Reapproved 1987), Standard Specification for Ferromanganese, incorporation by reference (IBR) approved for §60.261.
 - (2) ASTM A100-69, 74, 93, Standard Specification for Ferrosilicon, IBR approved for §60.261.
 - (3) ASTM A101-73, 93, Standard Specification for Ferrochromium, IBR approved for §60.261.
 - (4) ASTM A482-76, 93, Standard Specification for Ferrochromesilicon, IBR approved for §60.261.
 - (5) ASTM A483-64, 74 (Reapproved 1988), Standard Specification for Silicomanganese, IBR approved for §60.261.
 - (6) ASTM A495-76, 94, Standard Specification for Calcium-Silicon and Calcium Manganese-Silicon, IBR approved for §60.261.
 - (7) ASTM D86-78, 82, 90, 93, 95, 96, Distillation of Petroleum Products, IBR approved for §§60.562-2(d), 60.593(d), 60.593a(d), and 60.633(h).
 - (8) ASTM D129-64, 78, 95, 00, Standard Test Method for Sulfur in Petroleum Products (General Bomb Method), IBR approved for §§60.106(j)(2), 60.335(b)(10)(i), and Appendix A: Method 19, 12.5.2.2.3.
 - (9) ASTM D129-00 (Reapproved 2005), Standard Test Method for Sulfur in Petroleum Products (General Bomb Method), IBR approved for §60.4415(a)(1)(i).

NSPS SUBPART A

40 CFR 60, SUBPART A - LIST GENERAL PROVISIONS

- (10) ASTM D240–76, 92, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter, IBR approved for §§60.46(c), 60.296(b), and Appendix A: Method 19, Section 12.5.2.2.3.
- (11) ASTM D270–65, 75, Standard Method of Sampling Petroleum and Petroleum Products, IBR approved for Appendix A: Method 19, Section 12.5.2.2.1.
- (12) ASTM D323–82, 94, Test Method for Vapor Pressure of Petroleum Products (Reid Method), IBR approved for §§60.111(l), 60.111a(g), 60.111b(g), and 60.116b(f)(2)(ii).
- (13) ASTM D388–77, 90, 91, 95, 98a, 99 (Reapproved 2004)^{e1}, Standard Specification for Classification of Coals by Rank, IBR approved for §§60.24(h)(8), 60.41 of subpart D of this part, 60.45(f)(4)(i), 60.45(f)(4)(ii), 60.45(f)(4)(vi), 60.41Da of subpart Da of this part, 60.41b of subpart Db of this part, 60.41c of subpart Dc of this part, and 60.4102.
- (14) ASTM D388–77, 90, 91, 95, 98a, Standard Specification for Classification of Coals by Rank, IBR approved for §§60.251(b) and (c) of subpart Y of this part.
- (15) ASTM D396–78, 89, 90, 92, 96, 98, Standard Specification for Fuel Oils, IBR approved for §§60.41b of subpart Db of this part, 60.41c of subpart Dc of this part, 60.111(b) of subpart K of this part, and 60.111a(b) of subpart Ka of this part.
- (16) ASTM D975–78, 96, 98a, Standard Specification for Diesel Fuel Oils, IBR approved for §§60.111(b) of subpart K of this part and 60.111a(b) of subpart Ka of this part.
- (17) ASTM D1072–80, 90 (Reapproved 1994), Standard Test Method for Total Sulfur in Fuel Gases, IBR approved for §60.335(b)(10)(ii).
- (18) ASTM D1072–90 (Reapproved 1999), Standard Test Method for Total Sulfur in Fuel Gases, IBR approved for §60.4415(a)(1)(ii).
- (19) ASTM D1137–53, 75, Standard Method for Analysis of Natural Gases and Related Types of Gaseous Mixtures by the Mass Spectrometer, IBR approved for §60.45(f)(5)(i).
- (20) ASTM D1193–77, 91, Standard Specification for Reagent Water, IBR approved for Appendix A: Method 5, Section 7.1.3; Method 5E, Section 7.2.1; Method 5F, Section 7.2.1; Method 6, Section 7.1.1; Method 7, Section 7.1.1; Method 7C, Section 7.1.1; Method 7D, Section 7.1.1; Method 10A, Section 7.1.1; Method 11, Section 7.1.3; Method 12, Section 7.1.3; Method 13A, Section 7.1.2; Method 26, Section 7.1.2; Method 26A, Section 7.1.2; and Method 29, Section 7.2.2.
- (21) ASTM D1266–87, 91, 98, Standard Test Method for Sulfur in Petroleum Products (Lamp Method), IBR approved for §§60.106(j)(2) and 60.335(b)(10)(i).
- (22) ASTM D1266–98 (Reapproved 2003)^{e1}, Standard Test Method for Sulfur in Petroleum Products (Lamp Method), IBR approved for §60.4415(a)(1)(i).
- (23) ASTM D1475–60 (Reapproved 1980), 90, Standard Test Method for Density of Paint, Varnish Lacquer, and Related Products, IBR approved for §60.435(d)(1), Appendix A: Method 24, Section 6.1; and Method 24A, Sections 6.5 and 7.1.
- (24) ASTM D1552–83, 95, 01, Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method), IBR approved for §§60.106(j)(2), 60.335(b)(10)(i), and Appendix A: Method 19, Section 12.5.2.2.3.
- (25) ASTM D1552–03, Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method), IBR approved for §60.4415(a)(1)(i).
- (26) ASTM D1826–77, 94, Standard Test Method for Calorific Value of Gases in Natural Gas Range by Continuous Recording Calorimeter, IBR approved for §§60.45(f)(5)(ii), 60.46(c)(2), 60.296(b)(3), and Appendix A: Method 19, Section 12.3.2.4.

NSPS SUBPART A**40 CFR 60, SUBPART A - LIST GENERAL PROVISIONS**

- (27) ASTM D1835–87, 91, 97, 03a, Standard Specification for Liquefied Petroleum (LP) Gases, IBR approved for §§60.41Da of subpart Da of this part, 60.41b of subpart Db of this part, and 60.41c of subpart Dc of this part.
- (28) ASTM D1945–64, 76, 91, 96, Standard Method for Analysis of Natural Gas by Gas Chromatography, IBR approved for §60.45(f)(5)(i).
- (29) ASTM D1946–77, 90 (Reapproved 1994), Standard Method for Analysis of Reformed Gas by Gas Chromatography, IBR approved for §§60.18(f)(3), 60.45(f)(5)(i), 60.564(f)(1), 60.614(e)(2)(ii), 60.614(e)(4), 60.664(e)(2)(ii), 60.664(e)(4), 60.704(d)(2)(ii), and 60.704(d)(4).
- (30) ASTM D2013–72, 86, Standard Method of Preparing Coal Samples for Analysis, IBR approved for Appendix A: Method 19, Section 12.5.2.1.3.
- (31) ASTM D2015–77 (Reapproved 1978), 96, Standard Test Method for Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, IBR approved for §60.45(f)(5)(ii), 60.46(c)(2), and Appendix A: Method 19, Section 12.5.2.1.3.
- (32) ASTM D2016–74, 83, Standard Test Methods for Moisture Content of Wood, IBR approved for Appendix A: Method 28, Section 16.1.1.
- (33) ASTM D2234–76, 96, 97b, 98, Standard Methods for Collection of a Gross Sample of Coal, IBR approved for Appendix A: Method 19, Section 12.5.2.1.1.
- (34) ASTM D2369–81, 87, 90, 92, 93, 95, Standard Test Method for Volatile Content of Coatings, IBR approved for Appendix A: Method 24, Section 6.2.
- (35) ASTM D2382–76, 88, Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High-Precision Method), IBR approved for §§60.18(f)(3), 60.485(g)(6), 60.485a(g)(6), 60.564(f)(3), 60.614(e)(4), 60.664(e)(4), and 60.704(d)(4).
- (36) ASTM D2504–67, 77, 88 (Reapproved 1993), Noncondensable Gases in C3 and Lighter Hydrocarbon Products by Gas Chromatography, IBR approved for §§60.485(g)(5) and 60.485a(g)(5).
- (37) ASTM D2584–68 (Reapproved 1985), 94, Standard Test Method for Ignition Loss of Cured Reinforced Resins, IBR approved for §60.685(c)(3)(i).
- (38) ASTM D2597–94 (Reapproved 1999), Standard Test Method for Analysis of Demethanized Hydrocarbon Liquid Mixtures Containing Nitrogen and Carbon Dioxide by Gas Chromatography, IBR approved for §60.335(b)(9)(i).
- (39) ASTM D2622–87, 94, 98, Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-Ray Fluorescence Spectrometry, IBR approved for §§60.106(j)(2) and 60.335(b)(10)(i).
- (40) ASTM D2622–05, Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-Ray Fluorescence Spectrometry, IBR approved for §60.4415(a)(1)(i).
- (41) ASTM D2879–83, 96, 97, Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, IBR approved for §§60.111b(f)(3), 60.116b(e)(3)(ii), 60.116b(f)(2)(i), 60.485(e)(1), and 60.485a(e)(1).
- (42) ASTM D2880–78, 96, Standard Specification for Gas Turbine Fuel Oils, IBR approved for §§60.111(b), 60.111a(b), and 60.335(d).
- (43) ASTM D2908–74, 91, Standard Practice for Measuring Volatile Organic Matter in Water by Aqueous-Injection Gas Chromatography, IBR approved for §60.564(j).
- (44) ASTM D2986–71, 78, 95a, Standard Method for Evaluation of Air, Assay Media by the Monodisperse DOP (Dioctyl Phthalate) Smoke Test, IBR approved for Appendix A: Method 5, Section 7.1.1; Method 12, Section 7.1.1; and Method 13A, Section 7.1.1.2.
- (45) ASTM D3173–73, 87, Standard Test Method for Moisture in the Analysis Sample of Coal and Coke, IBR approved for Appendix A: Method 19, Section 12.5.2.1.3.

NSPS SUBPART A

40 CFR 60, SUBPART A - LIST GENERAL PROVISIONS

- (46) ASTM D3176–74, 89, Standard Method for Ultimate Analysis of Coal and Coke, IBR approved for §60.45(f)(5)(i) and Appendix A: Method 19, Section 12.3.2.3.
- (47) ASTM D3177–75, 89, Standard Test Method for Total Sulfur in the Analysis Sample of Coal and Coke, IBR approved for Appendix A: Method 19, Section 12.5.2.1.3.
- (48) ASTM D3178–73 (Reapproved 1979), 89, Standard Test Methods for Carbon and Hydrogen in the Analysis Sample of Coal and Coke, IBR approved for §60.45(f)(5)(i).
- (49) ASTM D3246–81, 92, 96, Standard Test Method for Sulfur in Petroleum Gas by Oxidative Microcoulometry, IBR approved for §60.335(b)(10)(ii).
- (50) ASTM D3246–05, Standard Test Method for Sulfur in Petroleum Gas by Oxidative Microcoulometry, IBR approved for §60.4415(a)(1)(ii).
- (51) ASTM D3270–73T, 80, 91, 95, Standard Test Methods for Analysis for Fluoride Content of the Atmosphere and Plant Tissues (Semiautomated Method), IBR approved for Appendix A: Method 13A, Section 16.1.
- (52) ASTM D3286–85, 96, Standard Test Method for Gross Calorific Value of Coal and Coke by the Isooperibol Bomb Calorimeter, IBR approved for Appendix A: Method 19, Section 12.5.2.1.3.
- (53) ASTM D3370–76, 95a, Standard Practices for Sampling Water, IBR approved for §60.564(j).
- (54) ASTM D3792–79, 91, Standard Test Method for Water Content of Water-Reducible Paints by Direct Injection into a Gas Chromatograph, IBR approved for Appendix A: Method 24, Section 6.3.
- (55) ASTM D4017–81, 90, 96a, Standard Test Method for Water in Paints and Paint Materials by the Karl Fischer Titration Method, IBR approved for Appendix A: Method 24, Section 6.4.
- (56) ASTM D4057–81, 95, Standard Practice for Manual Sampling of Petroleum and Petroleum Products, IBR approved for Appendix A: Method 19, Section 12.5.2.2.3.
- (57) ASTM D4057–95 (Reapproved 2000), Standard Practice for Manual Sampling of Petroleum and Petroleum Products, IBR approved for §60.4415(a)(1).
- (58) ASTM D4084–82, 94, Standard Test Method for Analysis of Hydrogen Sulfide in Gaseous Fuels (Lead Acetate Reaction Rate Method), IBR approved for §60.334(h)(1).
- (59) ASTM D4084–05, Standard Test Method for Analysis of Hydrogen Sulfide in Gaseous Fuels (Lead Acetate Reaction Rate Method), IBR approved for §§60.4360 and 60.4415(a)(1)(ii).
- (60) ASTM D4177–95, Standard Practice for Automatic Sampling of Petroleum and Petroleum Products, IBR approved for Appendix A: Method 19, Section 12.5.2.2.1.
- (61) ASTM D4177–95 (Reapproved 2000), Standard Practice for Automatic Sampling of Petroleum and Petroleum Products, IBR approved for §60.4415(a)(1).
- (62) ASTM D4239–85, 94, 97, Standard Test Methods for Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods, IBR approved for Appendix A: Method 19, Section 12.5.2.1.3.
- (63) ASTM D4294–02, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, IBR approved for §60.335(b)(10)(i).
- (64) ASTM D4294–03, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, IBR approved for §60.4415(a)(1)(i).
- (65) ASTM D4442–84, 92, Standard Test Methods for Direct Moisture Content Measurement in Wood and Wood-base Materials, IBR approved for Appendix A: Method 28, Section 16.1.1.
- (66) ASTM D4444–92, Standard Test Methods for Use and Calibration of Hand-Held Moisture Meters, IBR approved for Appendix A: Method 28, Section 16.1.1.

NSPS SUBPART A

40 CFR 60, SUBPART A - LIST GENERAL PROVISIONS

- (67) ASTM D4457-85 (Reapproved 1991), Test Method for Determination of Dichloromethane and 1, 1, 1-Trichloroethane in Paints and Coatings by Direct Injection into a Gas Chromatograph, IBR approved for Appendix A: Method 24, Section 6.5.
- (68) ASTM D4468-85 (Reapproved 2000), Standard Test Method for Total Sulfur in Gaseous Fuels by Hydrogenolysis and Rateometric Colorimetry, IBR approved for §§60.335(b)(10)(ii) and 60.4415(a)(1)(ii).
- (69) ASTM D4629-02, Standard Test Method for Trace Nitrogen in Liquid Petroleum Hydrocarbons by Syringe/Inlet Oxidative Combustion and Chemiluminescence Detection, IBR approved for §§60.49b(e) and 60.335(b)(9)(i).
- (70) ASTM D4809-95, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter (Precision Method), IBR approved for §§60.18(f)(3), 60.485(g)(6), 60.485a(g)(6), 60.564(f)(3), 60.614(d)(4), 60.664(e)(4), and 60.704(d)(4).
- (71) ASTM D4810-88 (Reapproved 1999), Standard Test Method for Hydrogen Sulfide in Natural Gas Using Length of Stain Detector Tubes, IBR approved for §§60.4360 and 60.4415(a)(1)(ii).
- (72) ASTM D5287-97 (Reapproved 2002), Standard Practice for Automatic Sampling of Gaseous Fuels, IBR approved for §60.4415(a)(1).
- (73) ASTM D5403-93, Standard Test Methods for Volatile Content of Radiation Curable Materials, IBR approved for Appendix A: Method 24, Section 6.6.
- (74) ASTM D5453-00, Standard Test Method for Determination of Total Sulfur in Light Hydrocarbons, Motor Fuels and Oils by Ultraviolet Fluorescence, IBR approved for §60.335(b)(10)(i).
- (75) ASTM D5453-05, Standard Test Method for Determination of Total Sulfur in Light Hydrocarbons, Motor Fuels and Oils by Ultraviolet Fluorescence, IBR approved for §60.4415(a)(1)(i).
- (76) ASTM D5504-01, Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Chemiluminescence, IBR approved for §§60.334(h)(1) and 60.4360.
- (77) ASTM D5762-02, Standard Test Method for Nitrogen in Petroleum and Petroleum Products by Boat-Inlet Chemiluminescence, IBR approved for §60.335(b)(9)(i).
- (78) ASTM D5865-98, Standard Test Method for Gross Calorific Value of Coal and Coke, IBR approved for §60.45(f)(5)(ii), 60.46(c)(2), and Appendix A: Method 19, Section 12.5.2.1.3.
- (79) ASTM D6216-98, Standard Practice for Opacity Monitor Manufacturers to Certify Conformance with Design and Performance Specifications, IBR approved for Appendix B, Performance Specification 1.
- (80) ASTM D6228-98, Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Flame Photometric Detection, IBR approved for §60.334(h)(1).
- (81) ASTM D6228-98 (Reapproved 2003), Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Flame Photometric Detection, IBR approved for §§60.4360 and 60.4415.
- (82) ASTM D6348-03, Standard Test Method for Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform Infrared (FTIR) Spectroscopy, IBR approved for table 7 of Subpart IIII of this part and table 2 of subpart JJJJ of this part.
- (83) ASTM D6366-99, Standard Test Method for Total Trace Nitrogen and Its Derivatives in Liquid Aromatic Hydrocarbons by Oxidative Combustion and Electrochemical Detection, IBR approved for §60.335(b)(9)(i).
- (84) ASTM D6420-99 (Reapproved 2004) Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry, IBR approved for table 2 of subpart JJJJ of this part.

NSPS SUBPART A

40 CFR 60, SUBPART A - LIST GENERAL PROVISIONS

- (85) ASTM D6522-00, Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers, IBR approved for §60.335(a).
- (86) ASTM D6522-00 (Reapproved 2005), Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers, IBR approved for table 2 of subpart JJJJ of this part.
- (87) ASTM D6667-01, Standard Test Method for Determination of Total Volatile Sulfur in Gaseous Hydrocarbons and Liquefied Petroleum Gases by Ultraviolet Fluorescence, IBR approved for §60.335(b)(10)(ii).
- (88) ASTM D6667-04, Standard Test Method for Determination of Total Volatile Sulfur in Gaseous Hydrocarbons and Liquefied Petroleum Gases by Ultraviolet Fluorescence, IBR approved for §60.4415(a)(1)(ii).
- (89) ASTM D6784-02, Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method), IBR approved for Appendix B to part 60, Performance Specification 12A, Section 8.6.2.
- (90) ASTM E168-67, 77, 92, General Techniques of Infrared Quantitative Analysis, IBR approved for §§60.485a(d)(1), 60.593(b)(2), 60.593a(b)(2), and 60.632(f).
- (91) ASTM E169-63, 77, 93, General Techniques of Ultraviolet Quantitative Analysis, IBR approved for §§60.485a(d)(1), 60.593(b)(2), 60.593a(b)(2), and 60.632(f).
- (92) ASTM E260-73, 91, 96, General Gas Chromatography Procedures, IBR approved for §§60.485a(d)(1), 60.593(b)(2), 60.593a(b)(2), and 60.632(f).
- (b) The following material is available for purchase from the Association of Official Analytical Chemists, 1111 North 19th Street, Suite 210, Arlington, VA 22209.
 - (1) AOAC Method 9, Official Methods of Analysis of the Association of Official Analytical Chemists, 11th edition, 1970, pp. 11-12, IBR approved January 27, 1983 for §§60.204(b)(3), 60.214(b)(3), 60.224(b)(3), 60.234(b)(3).
- (c) The following material is available for purchase from the American Petroleum Institute, 1220 L Street NW., Washington, DC 20005.
 - (1) API Publication 2517, Evaporation Loss from External Floating Roof Tanks, Second Edition, February 1980, IBR approved January 27, 1983, for §§60.111(i), 60.111a(f), 60.111a(f)(1) and 60.116b(e)(2)(i).
- (d) The following material is available for purchase from the Technical Association of the Pulp and Paper Industry (TAPPI), Dunwoody Park, Atlanta, GA 30341.
 - (1) TAPPI Method T624 os-68, IBR approved January 27, 1983 for §60.285(d)(3).
- (e) The following material is available for purchase from the Water Pollution Control Federation (WPCF), 2626 Pennsylvania Avenue NW., Washington, DC 20037.
 - (1) Method 209A, Total Residue Dried at 103-105 °C, in Standard Methods for the Examination of Water and Wastewater, 15th Edition, 1980, IBR approved February 25, 1985 for §60.683(b).
- (f) The following material is available for purchase from the following address: Underwriter's Laboratories, Inc. (UL), 333 Pfingsten Road, Northbrook, IL 60062.
 - (1) UL 103, Sixth Edition revised as of September 3, 1986, Standard for Chimneys, Factory-built, Residential Type and Building Heating Appliance.
- (g) The following material is available for purchase from the following address: West Coast Lumber Inspection Bureau, 6980 SW. Barnes Road, Portland, OR 97223.

NSPS SUBPART A

40 CFR 60, SUBPART A - LIST GENERAL PROVISIONS

- (1) West Coast Lumber Standard Grading Rules No. 16, pages 5–21 and 90 and 91, September 3, 1970, revised 1984.
- (h) The following material is available for purchase from the American Society of Mechanical Engineers (ASME), Three Park Avenue, New York, NY 10016–5990.
- (1) ASME QRO–1–1994, Standard for the Qualification and Certification of Resource Recovery Facility Operators, IBR approved for §§60.56a, 60.54b(a), 60.54b(b), 60.1185(a), 60.1185(c)(2), 60.1675(a), and 60.1675(c)(2).
- (2) ASME PTC 4.1–1964 (Reaffirmed 1991), Power Test Codes: Test Code for Steam Generating Units (with 1968 and 1969 Addenda), IBR approved for §§60.46b of subpart Db of this part, 60.58a(h)(6)(ii), 60.58b(i)(6)(ii), 60.1320(a)(3) and 60.1810(a)(3).
- (3) ASME Interim Supplement 19.5 on Instruments and Apparatus: Application, Part II of Fluid Meters, 6th Edition (1971), IBR approved for §§60.58a(h)(6)(ii), 60.58b(i)(6)(ii), 60.1320(a)(4), and 60.1810(a)(4).
- (4) ANSI/ASME PTC 19.10–1981, Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus], IBR approved for Tables 1 and 3 of subpart EEEE, Tables 2 and 4 of subpart FFFF, Table 2 of subpart JJJJ, and §§60.4415(a)(2) and 60.4415(a)(3) of subpart KKKK of this part.
- (i) Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,” EPA Publication SW–846 Third Edition (November 1986), as amended by Updates I (July 1992), II (September 1994), IIA (August, 1993), IIB (January 1995), and III (December 1996). This document may be obtained from the U.S. EPA, Office of Solid Waste and Emergency Response, Waste Characterization Branch, Washington, DC 20460, and is incorporated by reference for appendix A to part 60, Method 29, Sections 7.5.34; 9.2.1; 9.2.3; 10.2; 10.3; 11.1.1; 11.1.3; 13.2.1; 13.2.2; 13.3.1; and Table 29–3.
- (j) “Standard Methods for the Examination of Water and Wastewater,” 16th edition, 1985. Method 303F: “Determination of Mercury by the Cold Vapor Technique.” This document may be obtained from the American Public Health Association, 1015 18th Street, NW., Washington, DC 20036, and is incorporated by reference for appendix A to part 60, Method 29, Sections 9.2.3; 10.3; and 11.1.3.
- (k) This material is available for purchase from the American Hospital Association (AHA) Service, Inc., Post Office Box 92683, Chicago, Illinois 60675–2683. You may inspect a copy at EPA’s Air and Radiation Docket and Information Center (Docket A–91–61, Item IV–J–124), Room M–1500, 1200 Pennsylvania Ave., NW., Washington, DC.
- (1) An Ounce of Prevention: Waste Reduction Strategies for Health Care Facilities. American Society for Health Care Environmental Services of the American Hospital Association. Chicago, Illinois. 1993. AHA Catalog No. 057007. ISBN 0–87258–673–5. IBR approved for §60.35e and §60.55c.
- (l) This material is available for purchase from the National Technical Information Services, 5285 Port Royal Road, Springfield, Virginia 22161. You may inspect a copy at EPA’s Air and Radiation Docket and Information Center (Docket A–91–61, Item IV–J–125), Room M–1500, 1200 Pennsylvania Ave., NW., Washington, DC.
- (1) OMB Bulletin No. 93–17: Revised Statistical Definitions for Metropolitan Areas. Office of Management and Budget, June 30, 1993. NTIS No. PB 93–192–664. IBR approved for §60.31e.
- (m) This material is available for purchase from at least one of the following addresses: The Gas Processors Association, 6526 East 60th Street, Tulsa, OK, 74145; or Information Handling Services, 15 Inverness Way East, PO Box 1154, Englewood, CO 80150–1154. You may inspect a copy at EPA’s Air and Radiation Docket and Information Center, Room B108, 1301 Constitution Ave., NW., Washington, DC 20460.
- (1) Gas Processors Association Method 2377–86, Test for Hydrogen Sulfide and Carbon Dioxide in Natural Gas Using Length of Stain Tubes, IBR approved for §§60.334(h)(1), 60.4360, and 60.4415(a)(1)(ii).
- (2) [Reserved]
- (n) This material is available for purchase from IHS Inc., 15 Inverness Way East, Englewood, CO 80112.

NSPS SUBPART A

40 CFR 60, SUBPART A - LIST GENERAL PROVISIONS

- (1) International Organization for Standards 8178-4: 1996(E), Reciprocating Internal Combustion Engines—Exhaust Emission Measurement—Part 4: Test Cycles for Different Engine Applications, IBR approved for §60.4241(b).
- (2) [Reserved]

[48 FR 3735, Jan. 27, 1983]

Editorial Note: For Federal Register citations affecting §60.17, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and on GPO Access.

§ 60.18 General control device and work practice requirements.

(a) *Introduction.*

- (1) This section contains requirements for control devices used to comply with applicable subparts of 40 CFR parts 60 and 61. The requirements are placed here for administrative convenience and apply only to facilities covered by subparts referring to this section.
- (2) This section also contains requirements for an alternative work practice used to identify leaking equipment. This alternative work practice is placed here for administrative convenience and is available to all subparts in 40 CFR parts 60, 61, 63, and 65 that require monitoring of equipment with a 40 CFR part 60, Appendix A-7, Method 21 monitor.

(b) *Flares.* Paragraphs (c) through (f) apply to flares.

(c)

- (1) Flares shall be designed for and operated with no visible emissions as determined by the methods specified in paragraph (f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
- (2) Flares shall be operated with a flame present at all times, as determined by the methods specified in paragraph (f).
- (3) An owner/operator has the choice of adhering to either the heat content specifications in paragraph (c)(3)(ii) of this section and the maximum tip velocity specifications in paragraph (c)(4) of this section, or adhering to the requirements in paragraph (c)(3)(i) of this section.

(i)

- (A) Flares shall be used that have a diameter of 3 inches or greater, are nonassisted, have a hydrogen content of 8.0 percent (by volume), or greater, and are designed for and operated with an exit velocity less than 37.2 m/sec (122 ft/sec) and less than the velocity, V_{max} , as determined by the following equation:

$$V_{max} = (X_{H2} - K_1) * K_2$$

Where:

V_{max} = Maximum permitted velocity, m/sec.

K_1 = Constant, 6.0 volume-percent hydrogen.

K_2 = Constant, 3.9(m/sec)/volume-percent hydrogen.

X_{H2} = The volume-percent of hydrogen, on a wet basis, as calculated by using the American Society for Testing and Materials (ASTM) Method D1946-77. (Incorporated by reference as specified in §60.17).

- (B) The actual exit velocity of a flare shall be determined by the method specified in paragraph (f)(4) of this section.

- (ii) Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net

NSPS SUBPART A

40 CFR 60, SUBPART A - LIST GENERAL PROVISIONS

heating value of the gas being combusted shall be determined by the methods specified in paragraph (f)(3) of this section.

- (4)
- (i) Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4) of this section, less than 18.3 m/sec (60 ft/sec), except as provided in paragraphs (c)(4) (ii) and (iii) of this section.
 - (ii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec) are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).
 - (iii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), less than the velocity, V_{max} , as determined by the method specified in paragraph (f)(5), and less than 122 m/sec (400 ft/sec) are allowed.
- (5) Air-assisted flares shall be designed and operated with an exit velocity less than the velocity, V_{max} , as determined by the method specified in paragraph (f)(6).
- (6) Flares used to comply with this section shall be steam-assisted, air-assisted, or nonassisted.
- (d) Owners or operators of flares used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how owners or operators of flares shall monitor these control devices.
- (e) Flares used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.
- (f)
- (1) Method 22 of appendix A to this part shall be used to determine the compliance of flares with the visible emission provisions of this subpart. The observation period is 2 hours and shall be used according to Method 22.
 - (2) The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.
 - (3) The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

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

[View or download PDF](#)

where:

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

$$K = \text{Constant} \cdot \frac{1}{1.740 \times 10^{-7}} \left(\frac{1}{\text{ppm}} \right) \left(\frac{\text{g mole}}{\text{scm}} \right) \left(\frac{\text{MJ}}{\text{kcal}} \right)$$

where the standard temperature for $\left(\frac{\text{g mole}}{\text{scm}} \right)$ is 20 °C;

[View or download PDF](#)

C_i = Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946-77 or 90 (Reapproved 1994) (Incorporated by reference as specified in §60.17); and

NSPS SUBPART A

40 CFR 60, SUBPART A - LIST GENERAL PROVISIONS

H_i = Net heat of combustion of sample component i , kcal/g mole at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382–76 or 88 or D4809–95 (incorporated by reference as specified in §60.17) if published values are not available or cannot be calculated.

- (4) The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip.
- (5) The maximum permitted velocity, V_{max} , for flares complying with paragraph (c)(4)(iii) shall be determined by the following equation.

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

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

28.8 = Constant

31.7 = Constant

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

- (6) The maximum permitted velocity, V_{max} , for air-assisted flares shall be determined by the following equation.

$$V_{max}=8.706+0.7084 (H_T)$$

V_{max} = Maximum permitted velocity, m/sec

8.706 = Constant

0.7084 = Constant

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

- (g) *Alternative work practice for monitoring equipment for leaks.* Paragraphs (g), (h), and (i) of this section apply to all equipment for which the applicable subpart requires monitoring with a 40 CFR part 60, Appendix A–7, Method 21 monitor, except for closed vent systems, equipment designated as leakless, and equipment identified in the applicable subpart as having no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background. An owner or operator may use an optical gas imaging instrument instead of a 40 CFR part 60, Appendix A–7, Method 21 monitor. Requirements in the existing subparts that are specific to the Method 21 instrument do not apply under this section. All other requirements in the applicable subpart that are not addressed in paragraphs (g), (h), and (i) of this section apply to this standard. For example, equipment specification requirements, and non-Method 21 instrument recordkeeping and reporting requirements in the applicable subpart continue to apply. The terms defined in paragraphs (g)(1) through (5) of this section have meanings that are specific to the alternative work practice standard in paragraphs (g), (h), and (i) of this section.

- (1) *Applicable subpart* means the subpart in 40 CFR parts 60, 61, 63, or 65 that requires monitoring of equipment with a 40 CFR part 60, Appendix A–7, Method 21 monitor.
- (2) *Equipment* means pumps, valves, pressure relief valves, compressors, open-ended lines, flanges, connectors, and other equipment covered by the applicable subpart that require monitoring with a 40 CFR part 60, Appendix A–7, Method 21 monitor.
- (3) *Imaging* means making visible emissions that may otherwise be invisible to the naked eye.
- (4) *Optical gas imaging instrument* means an instrument that makes visible emissions that may otherwise be invisible to the naked eye.
- (5) *Repair* means that equipment is adjusted, or otherwise altered, in order to eliminate a leak.
- (6) *Leak* means:
 - (i) Any emissions imaged by the optical gas instrument;
 - (ii) Indications of liquids dripping;

NSPS SUBPART A

40 CFR 60, SUBPART A - LIST GENERAL PROVISIONS

- (iii) Indications by a sensor that a seal or barrier fluid system has failed; or
 - (iv) Screening results using a 40 CFR part 60, Appendix A-7, Method 21 monitor that exceed the leak definition in the applicable subpart to which the equipment is subject.
- (h) The alternative work practice standard for monitoring equipment for leaks is available to all subparts in 40 CFR parts 60, 61, 63, and 65 that require monitoring of equipment with a 40 CFR part 60, Appendix A-7, Method 21 monitor.
- (1) An owner or operator of an affected source subject to CFR parts 60, 61, 63, or 65 can choose to comply with the alternative work practice requirements in paragraph (i) of this section instead of using the 40 CFR part 60, Appendix A-7, Method 21 monitor to identify leaking equipment. The owner or operator must document the equipment, process units, and facilities for which the alternative work practice will be used to identify leaks.
 - (2) Any leak detected when following the leak survey procedure in paragraph (i)(3) of this section must be identified for repair as required in the applicable subpart.
 - (3) If the alternative work practice is used to identify leaks, re-screening after an attempted repair of leaking equipment must be conducted using either the alternative work practice or the 40 CFR part 60, Appendix A-7, Method 21 monitor at the leak definition required in the applicable subpart to which the equipment is subject.
 - (4) The schedule for repair is as required in the applicable subpart.
 - (5) When this alternative work practice is used for detecting leaking equipment, choose one of the monitoring frequencies listed in Table 1 to subpart A of this part in lieu of the monitoring frequency specified for regulated equipment in the applicable subpart. Reduced monitoring frequencies for good performance are not applicable when using the alternative work practice.
 - (6) When this alternative work practice is used for detecting leaking equipment the following are not applicable for the equipment being monitored:
 - (i) Skip period leak detection and repair;
 - (ii) Quality improvement plans; or
 - (iii) Complying with standards for allowable percentage of valves and pumps to leak.
 - (7) When the alternative work practice is used to detect leaking equipment, the regulated equipment in paragraph (h)(1)(i) of this section must also be monitored annually using a 40 CFR part 60, Appendix A-7, Method 21 monitor at the leak definition required in the applicable subpart. The owner or operator may choose the specific monitoring period (for example, first quarter) to conduct the annual monitoring. Subsequent monitoring must be conducted every 12 months from the initial period. Owners or operators must keep records of the annual Method 21 screening results, as specified in paragraph (i)(4)(vii) of this section.
- (i) An owner or operator of an affected source who chooses to use the alternative work practice must comply with the requirements of paragraphs (i)(1) through (i)(5) of this section.
- (1) Instrument Specifications. The optical gas imaging instrument must comply with the requirements in (i)(1)(i) and (i)(1)(ii) of this section.
 - (i) Provide the operator with an image of the potential leak points for each piece of equipment at both the detection sensitivity level and within the distance used in the daily instrument check described in paragraph (i)(2) of this section. The detection sensitivity level depends upon the frequency at which leak monitoring is to be performed.
 - (ii) Provide a date and time stamp for video records of every monitoring event.
 - (2) Daily Instrument Check. On a daily basis, and prior to beginning any leak monitoring work, test the optical gas imaging instrument at the mass flow rate determined in paragraph (i)(2)(i) of this section in accordance with the procedure specified in paragraphs (i)(2)(ii) through (i)(2)(iv) of this section for each camera

NSPS SUBPART A

40 CFR 60, SUBPART A - LIST GENERAL PROVISIONS

configuration used during monitoring (for example, different lenses used), unless an alternative method to demonstrate daily instrument checks has been approved in accordance with paragraph (i)(2)(v) of this section.

- (i) Calculate the mass flow rate to be used in the daily instrument check by following the procedures in paragraphs (i)(2)(i)(A) and (i)(2)(i)(B) of this section.
 - (A) For a specified population of equipment to be imaged by the instrument, determine the piece of equipment in contact with the lowest mass fraction of chemicals that are detectable, within the distance to be used in paragraph (i)(2)(iv)(B) of this section, at or below the standard detection sensitivity level.
 - (B) Multiply the standard detection sensitivity level, corresponding to the selected monitoring frequency in Table 1 of subpart A of this part, by the mass fraction of detectable chemicals from the stream identified in paragraph (i)(2)(i)(A) of this section to determine the mass flow rate to be used in the daily instrument check, using the following equation.

$$E_{dic} = (E_{sds}) \sum_{i=1}^k x_i$$

Where:

E_{dic} = Mass flow rate for the daily instrument check, grams per hour

x_i = Mass fraction of detectable chemical(s) i seen by the optical gas imaging instrument, within the distance to be used in paragraph (i)(2)(iv)(B) of this section, at or below the standard detection sensitivity level, E_{sds} .

E_{sds} = Standard detection sensitivity level from Table 1 to subpart A, grams per hour

k = Total number of detectable chemicals emitted from the leaking equipment and seen by the optical gas imaging instrument.

- (ii) Start the optical gas imaging instrument according to the manufacturer's instructions, ensuring that all appropriate settings conform to the manufacturer's instructions.
 - (iii) Use any gas chosen by the user that can be viewed by the optical gas imaging instrument and that has a purity of no less than 98 percent.
 - (iv) Establish a mass flow rate by using the following procedures:
 - (A) Provide a source of gas where it will be in the field of view of the optical gas imaging instrument.
 - (B) Set up the optical gas imaging instrument at a recorded distance from the outlet or leak orifice of the flow meter that will not be exceeded in the actual performance of the leak survey. Do not exceed the operating parameters of the flow meter.
 - (C) Open the valve on the flow meter to set a flow rate that will create a mass emission rate equal to the mass rate specified in paragraph (i)(2)(i) of this section while observing the gas flow through the optical gas imaging instrument viewfinder. When an image of the gas emission is seen through the viewfinder at the required emission rate, make a record of the reading on the flow meter.
 - (v) Repeat the procedures specified in paragraphs (i)(2)(ii) through (i)(2)(iv) of this section for each configuration of the optical gas imaging instrument used during the leak survey.
 - (vi) To use an alternative method to demonstrate daily instrument checks, apply to the Administrator for approval of the alternative under §60.13(i).
- (3) Leak Survey Procedure. Operate the optical gas imaging instrument to image every regulated piece of equipment selected for this work practice in accordance with the instrument manufacturer's operating parameters. All emissions imaged by the optical gas imaging instrument are considered to be leaks and are

NSPS SUBPART A

40 CFR 60, SUBPART A - LIST GENERAL PROVISIONS

subject to repair. All emissions visible to the naked eye are also considered to be leaks and are subject to repair.

- (4) Recordkeeping. You must keep the records described in paragraphs (i)(4)(i) through (i)(4)(vii) of this section:
- (i) The equipment, processes, and facilities for which the owner or operator chooses to use the alternative work practice.
 - (ii) The detection sensitivity level selected from Table 1 to subpart A of this part for the optical gas imaging instrument.
 - (iii) The analysis to determine the piece of equipment in contact with the lowest mass fraction of chemicals that are detectable, as specified in paragraph (i)(2)(i)(A) of this section.
 - (iv) The technical basis for the mass fraction of detectable chemicals used in the equation in paragraph (i)(2)(i)(B) of this section.
 - (v) The daily instrument check. Record the distance, per paragraph (i)(2)(iv)(B) of this section, and the flow meter reading, per paragraph (i)(2)(iv)(C) of this section, at which the leak was imaged. Keep a video record of the daily instrument check for each configuration of the optical gas imaging instrument used during the leak survey (for example, the daily instrument check must be conducted for each lens used). The video record must include a time and date stamp for each daily instrument check. The video record must be kept for 5 years.
 - (vi) Recordkeeping requirements in the applicable subpart. A video record must be used to document the leak survey results. The video record must include a time and date stamp for each monitoring event. A video record can be used to meet the recordkeeping requirements of the applicable subparts if each piece of regulated equipment selected for this work practice can be identified in the video record. The video record must be kept for 5 years.
 - (vii) The results of the annual Method 21 screening required in paragraph (h)(7) of this section. Records must be kept for all regulated equipment specified in paragraph (h)(1) of this section. Records must identify the equipment screened, the screening value measured by Method 21, the time and date of the screening, and calibration information required in the existing applicable subpart.
- (5) Reporting. Submit the reports required in the applicable subpart. Submit the records of the annual Method 21 screening required in paragraph (h)(7) of this section to the Administrator via e-mail to *CCG-AWP@EPA.GOV*.

[51 FR 2701, Jan. 21, 1986, as amended at 63 FR 24444, May 4, 1998; 65 FR 61752, Oct. 17, 2000; 73 FR 78209, Dec. 22, 2008]

§ 60.19 General notification and reporting requirements.

- (a) For the purposes of this part, time periods specified in days shall be measured in calendar days, even if the word “calendar” is absent, unless otherwise specified in an applicable requirement.
- (b) For the purposes of this part, if an explicit postmark deadline is not specified in an applicable requirement for the submittal of a notification, application, report, or other written communication to the Administrator, the owner or operator shall postmark the submittal on or before the number of days specified in the applicable requirement. For example, if a notification must be submitted 15 days before a particular event is scheduled to take place, the notification shall be postmarked on or before 15 days preceding the event; likewise, if a notification must be submitted 15 days after a particular event takes place, the notification shall be delivered or postmarked on or before 15 days following the end of the event. The use of reliable non-Government mail carriers that provide indications of verifiable delivery of information required to be submitted to the Administrator, similar to the postmark provided by the U.S. Postal Service, or alternative means of delivery, including the use of electronic media, agreed to by the permitting authority, is acceptable.
- (c) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time

NSPS SUBPART A

40 CFR 60, SUBPART A - LIST GENERAL PROVISIONS

periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.

- (d) If an owner or operator of an affected facility in a State with delegated authority is required to submit periodic reports under this part to the State, and if the State has an established timeline for the submission of periodic reports that is consistent with the reporting frequency(ies) specified for such facility under this part, the owner or operator may change the dates by which periodic reports under this part shall be submitted (without changing the frequency of reporting) to be consistent with the State's schedule by mutual agreement between the owner or operator and the State. The allowance in the previous sentence applies in each State beginning 1 year after the affected facility is required to be in compliance with the applicable subpart in this part. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.
- (e) If an owner or operator supervises one or more stationary sources affected by standards set under this part and standards set under part 61, part 63, or both such parts of this chapter, he/she may arrange by mutual agreement between the owner or operator and the Administrator (or the State with an approved permit program) a common schedule on which periodic reports required by each applicable standard shall be submitted throughout the year. The allowance in the previous sentence applies in each State beginning 1 year after the stationary source is required to be in compliance with the applicable subpart in this part, or 1 year after the stationary source is required to be in compliance with the applicable 40 CFR part 61 or part 63 of this chapter standard, whichever is latest. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.
- (f)
 - (1)
 - (i) Until an adjustment of a time period or postmark deadline has been approved by the Administrator under paragraphs (f)(2) and (f)(3) of this section, the owner or operator of an affected facility remains strictly subject to the requirements of this part.
 - (ii) An owner or operator shall request the adjustment provided for in paragraphs (f)(2) and (f)(3) of this section each time he or she wishes to change an applicable time period or postmark deadline specified in this part.
 - (2) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. An owner or operator who wishes to request a change in a time period or postmark deadline for a particular requirement shall request the adjustment in writing as soon as practicable before the subject activity is required to take place. The owner or operator shall include in the request whatever information he or she considers useful to convince the Administrator that an adjustment is warranted.
 - (3) If, in the Administrator's judgment, an owner or operator's request for an adjustment to a particular time period or postmark deadline is warranted, the Administrator will approve the adjustment. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an adjustment within 15 calendar days of receiving sufficient information to evaluate the request.
 - (4) If the Administrator is unable to meet a specified deadline, he or she will notify the owner or operator of any significant delay and inform the owner or operator of the amended schedule.

[59 FR 12428, Mar. 16, 1994, as amended at 64 FR 7463, Feb. 12, 1998]

Table 1 to Subpart A to Part 60—Detection Sensitivity Levels (grams per hour)

Monitoring frequency per subpart ^a	Detection sensitivity level
Bi-Monthly	60
Semi-Quarterly	85

NSPS SUBPART A

40 CFR 60, SUBPART A - LIST GENERAL PROVISIONS

Monthly	100
---------	-----

^aWhen this alternative work practice is used to identify leaking equipment, the owner or operator must choose one of the monitoring frequencies listed in this table in lieu of the monitoring frequency specified in the applicable subpart. Bi-monthly means every other month. Semi-quarterly means twice per quarter. Monthly means once per month.

[73 FR 78211, Dec. 22, 2008]

NSPS SUBPART Cb

40 CFR 60, SUBPART Cb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

Federal Regulations Adopted by Reference

In accordance with Rule 62-204.800, F.A.C., the following federal regulation in Title 40 of the Code of Federal Regulations (CFR) was adopted by reference. The original federal rule numbering has been retained.

Federal Revision Date: May 10, 2006

State Rule Effective Date: May 31, 2007

Standardized Conditions Revision Date: March 24, 2010

40 CFR Part 60, Subpart Cb - Emissions Guidelines and Compliance Times for Large Municipal Waste Combustors That are Constructed on or Before September 20, 1994

Source: 60 FR 65415, Dec. 19, 1995, unless otherwise noted.

§ 60.30b Scope and delegation of authority.

- (a) This subpart contains emission guidelines and compliance schedules for the control of certain designated pollutants from certain municipal waste combustors in accordance with section 111(d) and section 129 of the Clean Air Act and subpart B of this part. The provisions in these emission guidelines apply instead of the provisions of §60.24(f) of subpart B of this part.
- (b) The following authorities are retained by EPA:
 - (1) Approval of exemption claims in §60.32b(b)(1), (d), (e), (f)(1), (i)(1);
 - (2) Approval of a nitrogen oxides trading program under §60.33b(d)(2);
 - (3) Approval of major alternatives to test methods;
 - (4) Approval of major alternatives to monitoring;
 - (5) Waiver of recordkeeping; and
 - (6) Performance test and data reduction waivers under §608(b).

[71 FR 27332, May 10, 2006]

§ 60.31b Definitions.

Terms used but not defined in this subpart have the meaning given them in the Clean Air Act and subparts A, B, and Eb of this part.

EPA means the Administrator of the U.S. EPA or employee of the U.S. EPA who is delegated to perform the specified task.

Municipal waste combustor plant means one or more designated facilities (as defined in §60.32b) at the same location.

Semi-suspension refuse-derived fuel-fired combustor/wet refuse-derived fuel process conversion means a combustion unit that was converted from a wet refuse-derived fuel process to a dry refuse-derived fuel process, and because of constraints in the design of the system, includes a low furnace height (less than 60 feet between the grate and the roof) and a high waste capacity-to-undergrate air zone ratio (greater than 300 tons of waste per day (tpd) fuel per each undergrate air zone).

Spreader stoker fixed floor refuse-derived fuel-fired combustor/100 percent coal capable means a spreader stoker type combustor with a fixed floor grate design that typically fires 100 percent refuse-derived fuel but is equipped to burn 100 percent coal instead of refuse-derived fuel to fulfill 100 percent steam or energy demand.

[60 FR 65415, Dec. 19, 1995, as amended at 62 FR 45119, 45125, Aug. 25, 1997; 71 FR 27332, May 10, 2006]

NSPS SUBPART Cb

40 CFR 60, SUBPART Cb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

§ 60.32b Designated facilities.

- (a) The designated facility to which these guidelines apply is each municipal waste combustor unit with a combustion capacity greater than 250 tons per day of municipal solid waste for which construction was commenced on or before September 20, 1994.
- (b) Any municipal waste combustion unit that is capable of combusting more than 250 tons per day of municipal solid waste and is subject to a federally enforceable permit limiting the maximum amount of municipal solid waste that may be combusted in the unit to less than or equal to 11 tons per day is not subject to this subpart if the owner or operator:
 - (1) Notifies EPA of an exemption claim,
 - (2) Provides a copy of the federally enforceable permit that limits the firing of municipal solid waste to less than 11 tons per day, and
 - (3) Keeps records of the amount of municipal solid waste fired on a daily basis.
- (c) Physical or operational changes made to an existing municipal waste combustor unit primarily for the purpose of complying with emission guidelines under this subpart are not considered in determining whether the unit is a modified or reconstructed facility under subpart Ea or subpart Eb of this part.
- (d) A qualifying small power production facility, as defined in section 3(17)(C) of the Federal Power Act (16 U.S.C. 796(17)(C)), that burns homogeneous waste (such as automotive tires or used oil, but not including refuse-derived fuel) for the production of electric energy is not subject to this subpart if the owner or operator of the facility notifies EPA of this exemption and provides data documenting that the facility qualifies for this exemption.
- (e) A qualifying cogeneration facility, as defined in section 3(18)(B) of the Federal Power Act (16 U.S.C. 796(18)(B)), that burns homogeneous waste (such as automotive tires or used oil, but not including refuse-derived fuel) for the production of electric energy and steam or forms of useful energy (such as heat) that are used for industrial, commercial, heating, or cooling purposes, is not subject to this subpart if the owner or operator of the facility notifies EPA of this exemption and provides data documenting that the facility qualifies for this exemption.
- (f) Any unit combusting a single-item waste stream of tires is not subject to this subpart if the owner or operator of the unit:
 - (1) Notifies EPA of an exemption claim, and
 - (2) Provides data documenting that the unit qualifies for this exemption.
- (g) Any unit required to have a permit under section 3005 of the Solid Waste Disposal Act is not subject to this subpart.
- (h) Any materials recovery facility (including primary or secondary smelters) that combusts waste for the primary purpose of recovering metals is not subject to this subpart.
- (i) Any co-fired combustor, as defined under §60.51b of subpart Eb of this part, that meets the capacity specifications in paragraph (a) of this section is not subject to this subpart if the owner or operator of the co-fired combustor:
 - (1) Notifies EPA of an exemption claim,
 - (2) Provides a copy of the federally enforceable permit (specified in the definition of co-fired combustor in this section), and
 - (3) Keeps a record on a calendar quarter basis of the weight of municipal solid waste combusted at the co-fired combustor and the weight of all other fuels combusted at the co-fired combustor.
- (j) Air curtain incinerators, as defined under §60.51b of subpart Eb of this part, that meet the capacity specifications in paragraph (a) of this section, and that combust a fuel stream composed of 100 percent yard

40 CFR 60, SUBPART Cb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

waste are exempt from all provisions of this subpart except the opacity standard under §60.37b, the testing procedures under §60.38b, and the reporting and recordkeeping provisions under §60.39b.

- (k) Air curtain incinerators that meet the capacity specifications in paragraph (a) of this section and that combust municipal solid waste other than yard waste are subject to all provisions of this subpart.
- (l) Pyrolysis/combustion units that are an integrated part of a plastics/rubber recycling unit (as defined in §60.51b) are not subject to this subpart if the owner or operator of the plastics/rubber recycling unit keeps records of the weight of plastics, rubber, and/or rubber tires processed on a calendar quarter basis; the weight of chemical plant feedstocks and petroleum refinery feedstocks produced and marketed on a calendar quarter basis; and the name and address of the purchaser of the feedstocks. The combustion of gasoline, diesel fuel, jet fuel, fuel oils, residual oil, refinery gas, petroleum coke, liquefied petroleum gas, propane, or butane produced by chemical plants or petroleum refineries that use feedstocks produced by plastics/rubber recycling units are not subject to this subpart.
- (m) Cement kilns firing municipal solid waste are not subject to this subpart.
- (n) Any affected facility meeting the applicability requirements under this section is not subject to subpart E of this part.

[60 FR 65415, Dec. 19, 1995, as amended at 62 FR 45119, 45125, Aug. 25, 1997; 71 FR 27332, May 10, 2006]

§ 60.33b Emission guidelines for municipal waste combustor metals, acid gases, organics, and nitrogen oxides.

- (a) The emission limits for municipal waste combustor metals are specified in paragraphs (a)(1) through (a)(3) of this section.
 - (1) For approval, a State plan shall include emission limits for particulate matter and opacity at least as protective as the emission limits for particulate matter and opacity specified in paragraphs (a)(1)(i) through (a)(1)(iii) of this section.
 - (i) Before April 28, 2009, the emission limit for particulate matter contained in the gases discharged to the atmosphere from a designated facility is 27 milligrams per dry standard cubic meter, corrected to 7 percent oxygen. On and after April 28, 2009, the emission limit for particulate matter contained in the gases discharged to the atmosphere from a designated facility is 25 milligrams per dry standard cubic meter, corrected to 7 percent oxygen.
 - (ii) [Reserved]
 - (iii) The emission limit for opacity exhibited by the gases discharged to the atmosphere from a designated facility is 10 percent (6-minute average).
 - (2) For approval, a State plan shall include emission limits for cadmium at least as protective as the emission limits for cadmium specified in paragraphs (a)(2)(i) through (a)(2)(iv) of this section.
 - (i) Before April 28, 2009, the emission limit for cadmium contained in the gases discharged to the atmosphere from a designated facility is 40 micrograms per dry standard cubic meter, corrected to 7 percent oxygen. On and after April 28, 2009, the emission limit for cadmium contained in the gases discharged to the atmosphere from a designated facility is 35 micrograms per dry standard cubic meter, corrected to 7 percent oxygen.
 - (ii) [Reserved]
 - (3) For approval, a State plan shall include emission limits for mercury at least as protective as the emission limits specified in this paragraph. Before April 28, 2009, the emission limit for mercury contained in the gases discharged to the atmosphere from a designated facility is 80 micrograms per dry standard cubic meter or 15 percent of the potential mercury emission concentration (85-percent reduction by weight), corrected to 7 percent oxygen, whichever is less stringent. On and after April 28, 2009, the emission limit for mercury contained in the gases discharged to the atmosphere from a designated facility is 50

40 CFR 60, SUBPART Cb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

micrograms per dry standard cubic meter or 15 percent of the potential mercury emission concentration (85-percent reduction by weight), corrected to 7 percent oxygen, whichever is less stringent.

- (4) For approval, a State plan shall include an emission limit for lead at least as protective as the emission limit for lead specified in this paragraph. Before April 28, 2009, the emission limit for lead contained in the gases discharged to the atmosphere from a designated facility is 440 micrograms per dry standard cubic meter, corrected to 7 percent oxygen. On and after April 28, 2009, the emission limit for lead contained in the gases discharged to the atmosphere from a designated facility is 400 micrograms per dry standard cubic meter, corrected to 7 percent oxygen.
- (b) The emission limits for municipal waste combustor acid gases, expressed as sulfur dioxide and hydrogen chloride, are specified in paragraphs (b)(1) and (b)(2) of this section.
 - (1) For approval, a State plan shall include emission limits for sulfur dioxide at least as protective as the emission limits for sulfur dioxide specified in paragraphs (b)(1)(i) and (b)(1)(ii) of this section.
 - (i) The emission limit for sulfur dioxide contained in the gases discharged to the atmosphere from a designated facility is 31 parts per million by volume or 25 percent of the potential sulfur dioxide emission concentration (75-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent. Compliance with this emission limit is based on a 24-hour daily geometric mean.
 - (ii) [Reserved]
 - (2) For approval, a State plan shall include emission limits for hydrogen chloride at least as protective as the emission limits for hydrogen chloride specified in paragraphs (b)(2)(i) and (b)(2)(ii) of this section.
 - (i) The emission limit for hydrogen chloride contained in the gases discharged to the atmosphere from a designated facility is 31 parts per million by volume or 5 percent of the potential hydrogen chloride emission concentration (95-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent.
 - (ii) [Reserved]
 - (3) For approval, a State plan shall be submitted by August 25, 1998 and shall include emission limits for sulfur dioxide and hydrogen chloride at least as protective as the emission limits specified in paragraphs (b)(3)(i) and (b)(3)(ii) of this section.
 - (i) The emission limit for sulfur dioxide contained in the gases discharged to the atmosphere from a designated facility is 29 parts per million by volume or 25 percent of the potential sulfur dioxide emission concentration (75-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent. Compliance with this emission limit is based on a 24-hour daily geometric mean.
 - (ii) The emission limit for hydrogen chloride contained in the gases discharged to the atmosphere from a designated facility is 29 parts per million by volume or 5 percent of the potential hydrogen chloride emission concentration (95-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent.
- (c) The emission limits for municipal waste combustor organics, expressed as total mass dioxin/furan, are specified in paragraphs (c)(1) and (c)(2) of this section.
 - (1) For approval, a State plan shall include an emission limit for dioxin/furan contained in the gases discharged to the atmosphere from a designated facility at least as protective as the emission limit for dioxin/furan specified in paragraphs (c)(1)(i), (c)(1)(ii), and (c)(1)(iii) of this section, as applicable.
 - (i) Before April 28, 2009, the emission limit for designated facilities that employ an electrostatic precipitator-based emission control system is 60 nanograms per dry standard cubic meter (total mass), corrected to 7 percent oxygen.

40 CFR 60, SUBPART Cb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

- (ii) On and after April 28, 2009, the emission limit for designated facilities that employ an electrostatic precipitator-based emission control system is 35 nanograms per dry standard cubic meter (total mass), corrected to 7 percent oxygen.
- (iii) The emission limit for designated facilities 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.
- (d) For approval, a State plan shall include emission limits for nitrogen oxides at least as protective as the emission limits listed in table 1 of this subpart for designated facilities. Table 1 provides emission limits for the nitrogen oxides concentration level for each type of designated facility.
 - (1) A State plan may allow nitrogen oxides emissions averaging as specified in paragraphs (d)(1)(i) through (d)(1)(v) of this section.
 - (i) The owner or operator of a municipal waste combustor plant may elect to implement a nitrogen oxides emissions averaging plan for the designated facilities that are located at that plant and that are subject to subpart Cb, except as specified in paragraphs (d)(1)(i)(A) and (d)(1)(i)(B) of this section.
 - (A) Municipal waste combustor units subject to subpart Ea or Eb cannot be included in the emissions averaging plan.
 - (B) Mass burn refractory municipal waste combustor units and other municipal waste combustor technologies not listed in paragraph (d)(1)(iii) of this section may not be included in the emissions averaging plan.
 - (ii) The designated facilities included in the nitrogen oxides emissions averaging plan must be identified in the initial compliance report specified in §60.59b(f) or in the annual report specified in §60.59b(g), as applicable, prior to implementing the averaging plan. The designated facilities being included in the averaging plan may be redesignated each calendar year. Partial year redesignation is allowable with State approval.
 - (iii) To implement the emissions averaging plan, the average daily (24-hour) nitrogen oxides emission concentration level for gases discharged from the designated facilities being included in the emissions averaging plan must be no greater than the levels specified in table 2 of this subpart. Table 2 provides emission limits for the nitrogen oxides concentration level for each type of designated facility.
 - (iv) Under the emissions averaging plan, the average daily nitrogen oxides emissions specified in paragraph (d)(1)(iii) of this section shall be calculated using equation (1). Designated facilities that are offline shall not be included in calculating the average daily nitrogen oxides emission level.

$$NO_{x_{24-hr}} = \frac{\sum_{i=1}^h (NO_{x_i})(S_i)}{\sum_{i=1}^h (S_i)} \quad (1)$$

where:

NOX24-hr = 24-hr daily average nitrogen oxides emission concentration level for the emissions averaging plan (parts per million by volume corrected to 7 percent oxygen).

NOXi-hr = 24-hr daily average nitrogen oxides emission concentration level for designated facility i (parts per million by volume, corrected to 7 percent oxygen), calculated according to the procedures in §60.58b(h) of this subpart.

S_i = maximum demonstrated municipal waste combustor unit load for designated facility i (pounds per hour steam or feedwater flow as determined in the most recent dioxin/furan performance test).

h = total number of designated facilities being included in the daily emissions average.

40 CFR 60, SUBPART Cb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

- (v) For any day in which any designated facility included in the emissions averaging plan is offline, the owner or operator of the municipal waste combustor plant must demonstrate compliance according to either paragraph (d)(1)(v)(A) of this section or both paragraphs (d)(1)(v)(B) and (d)(1)(v)(C) of this section.
- (A) Compliance with the applicable limits specified in table 2 of this subpart shall be demonstrated using the averaging procedure specified in paragraph (d)(1)(iv) of this section for the designated facilities that are online.
- (B) For each of the designated facilities included in the emissions averaging plan, the nitrogen oxides emissions on a daily average basis shall be calculated and shall be equal to or less than the maximum daily nitrogen oxides emission level achieved by that designated facility on any of the days during which the emissions averaging plan was achieved with all designated facilities online during the most recent calendar quarter. The requirements of this paragraph do not apply during the first quarter of operation under the emissions averaging plan.
- (C) The average nitrogen oxides emissions (kilograms per day) calculated according to paragraph (d)(1)(v)(C)(2) of this section shall not exceed the average nitrogen oxides emissions (kilograms per day) calculated according to paragraph (d)(1)(v)(C)(1) of this section.
- (1) For all days during which the emissions averaging plan was implemented and achieved and during which all designated facilities were online, the average nitrogen oxides emissions shall be calculated. The average nitrogen oxides emissions (kilograms per day) shall be calculated on a calendar year basis according to paragraphs (d)(1)(v)(C)(1)(i) through (d)(1)(v)(C)(1)(iii) of this section.
- (i) For each designated facility included in the emissions averaging plan, the daily amount of nitrogen oxides emitted (kilograms per day) shall be calculated based on the hourly nitrogen oxides data required under §60.38b(a) and specified under §60.58b(h)(5) of subpart Eb of this part, the flue gas flow rate determined using table 19-1 of EPA Reference Method 19 or a State-approved method, and the hourly average steam or feedwater flow rate.
- (ii) The daily total nitrogen oxides emissions shall be calculated as the sum of the daily nitrogen oxides emissions from each designated facility calculated under paragraph (d)(1)(v)(C)(1)(i) of this section.
- (iii) The average nitrogen oxides emissions (kilograms per day) on a calendar year basis shall be calculated as the sum of all daily total nitrogen oxides emissions calculated under paragraph (d)(1)(v)(C)(1)(ii) of this section divided by the number of calendar days for which a daily total was calculated.
- (2) For all days during which one or more of the designated facilities under the emissions averaging plan was offline, the average nitrogen oxides emissions shall be calculated. The average nitrogen oxides emissions (kilograms per day) shall be calculated on a calendar year basis according to paragraphs (d)(1)(v)(C)(2)(i) through (d)(1)(v)(C)(2)(iii) of this section.
- (i) For each designated facility included in the emissions averaging plan, the daily amount of nitrogen oxides emitted (kilograms per day) shall be calculated based on the hourly nitrogen oxides data required under §60.38b(a) and specified under §60.58b(h)(5) of subpart Eb of this part, the flue gas flow rate determined using table 19-1 of EPA Reference Method 19 or a State-approved method, and the hourly average steam or feedwater flow rate.
- (ii) The daily total nitrogen oxides emissions shall be calculated as the sum of the daily nitrogen oxides emissions from each designated facility calculated under paragraph (d)(1)(v)(C)(2)(i) of this section.

NSPS SUBPART Cb

40 CFR 60, SUBPART Cb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

(iii) The average nitrogen oxides emissions (kilograms per day) on a calendar year basis shall be calculated as the sum of all daily total nitrogen oxides emissions calculated under paragraph (d)(1)(v)(C)(2)(ii) of this section divided by the number of calendar days for which a daily total was calculated.

- (2) A State plan may establish a program to allow owners or operators of municipal waste combustor plants to engage in trading of nitrogen oxides emission credits. A trading program must be approved by EPA before implementation.
- (3) For approval, a State plan shall include emission limits for nitrogen oxides from fluidized bed combustors at least as protective as the emission limits listed in paragraphs (d)(3)(i) and (d)(3)(ii) of this section.
 - (i) The emission limit for nitrogen oxides contained in the gases discharged to the atmosphere from a designated facility that is a fluidized bed combustor is 180 parts per million by volume, corrected to 7 percent oxygen.
 - (ii) If a State plan allows nitrogen oxides emissions averaging as specified in paragraphs (d)(1)(i) through (d)(1)(v) of this section, the emission limit for nitrogen oxides contained in the gases discharged to the atmosphere from a designated facility that is a fluidized bed combustor is 165 parts per million by volume, corrected to 7 percent oxygen.

[60 FR 65415, Dec. 19, 1995, as amended at 62 FR 45119, 45125, Aug. 25, 1997; 71 FR 27333, May 10, 2006]

§ 60.34b Emission guidelines for municipal waste combustor operating practices.

- (a) For approval, a State plan shall include emission limits for carbon monoxide at least as protective as the emission limits for carbon monoxide listed in table 3 of this subpart. Table 3 provides emission limits for the carbon monoxide concentration level for each type of designated facility.
- (b) For approval, a State plan shall include requirements for municipal waste combustor operating practices at least as protective as those requirements listed in §60.53b(b) and (c) of subpart Eb of this part.

[60 FR 65415, Dec. 19, 1995, as amended at 62 FR 45120, 45125, Aug. 25, 1997; 69 FR 42121, July 14, 2004; 71 FR 27333, May 10, 2006]

§ 60.35b Emission guidelines for municipal waste combustor operator training and certification.

For approval, a State plan shall include requirements for designated facilities for municipal waste combustor operator training and certification at least as protective as those requirements listed in §60.54b of subpart Eb of this part. The State plan shall require compliance with these requirements according to the schedule specified in §60.39b(c)(4).

[60 FR 65415, Dec. 19, 1995, as amended at 62 FR 45120, Aug. 25, 1997]

§ 60.36b Emission guidelines for municipal waste combustor fugitive ash emissions.

For approval, a State plan shall include requirements for municipal waste combustor fugitive ash emissions at least as protective as those requirements listed in §60.55b of subpart Eb of this part.

§ 60.37b Emission guidelines for air curtain incinerators.

For approval, a State plan shall include emission limits for opacity for air curtain incinerators at least as protective as those listed in §60.56b of subpart Eb of this part.

§ 60.38b Compliance and performance testing.

- (a) For approval, a State plan shall include the performance testing methods listed in §60.58b of subpart Eb of this part, as applicable, except as provided for under §60.24(b)(2) of subpart B of this part and paragraphs (b) and (c) of this section.
- (b) For approval, a State plan shall include for designated facilities the alternative performance testing schedule for dioxins/furans specified in §60.58b(g)(5)(iii) of subpart Eb of this part, as applicable, for those designated

NSPS SUBPART Cb

40 CFR 60, SUBPART Cb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

facilities that achieve a dioxin/furan emission level less than or equal to 15 nanograms per dry standard cubic meter total mass, corrected to 7 percent oxygen.

(c) [Reserved]

[60 FR 65415, Dec. 19, 1995, as amended at 62 FR 45120, Aug. 25, 1997]

§ 60.39b Reporting and recordkeeping guidelines and compliance schedules.

- (a) For approval, a State plan shall include the reporting and recordkeeping provisions listed in §60.59b of subpart Eb of this part, as applicable, except for the siting requirements under §60.59b(a), (b)(5), and (d)(11) of subpart Eb of this part.
- (b) Except as provided in paragraph (e) of this section, not later than December 19, 1996, each State in which a designated facility is located shall submit to EPA a plan to implement and enforce all provisions of this subpart except the revised April 28, 2009 emission limits in §60.33b(a), (c), and (d). Not later than April 28, 2007, each State in which a designated facility is located shall submit to EPA a plan to implement and enforce all provisions of this subpart, as amended on May 10, 2006. The submittal schedule specified in this paragraph is in accordance with section 129(b)(2) of the Clean Air Act and applies instead of the schedule provided in §60.23(a)(1) of subpart B of this part.
- (c) For approval, a State plan that is submitted prior to May 10, 2006 shall include the compliance schedules specified in paragraphs (c)(1) through (c)(5) of this section.
- (1) A State plan shall allow designated facilities to comply with all requirements of a State plan (or close) within 1 year after approval of the State plan, except as provided by paragraph (c)(1)(i) and (c)(1)(ii) of this section.
- (i) A State plan that allows designated facilities more than 1 year but less than 3 years following the date of issuance of a revised construction or operation permit, if a permit modification is required, or more than 1 year but less than 3 years following approval of the State plan, if a permit modification is not required, shall include measurable and enforceable incremental steps of progress toward compliance. Suggested measurable and enforceable activities are specified in paragraphs (c)(1)(i)(A) through (c)(1)(i)(J) of this section.
- (A) Date for obtaining services of an architectural and engineering firm regarding the air pollution control device(s);
- (B) Date for obtaining design drawings of the air pollution control device(s);
- (C) Date for submittal of permit modifications, if necessary;
- (D) Date for submittal of the final control plan to the Administrator. [§60.21 (h)(1) of subpart B of this part.];
- (E) Date for ordering the air pollution control device(s);
- (F) Date for obtaining the major components of the air pollution control device(s);
- (G) Date for initiation of site preparation for installation of the air pollution control device(s);
- (H) Date for initiation of installation of the air pollution control device(s);
- (I) Date for initial startup of the air pollution control device(s); and
- (J) Date for initial performance test(s) of the air pollution control device(s).
- (ii) A State plan that allows designated facilities more than 1 year but up to 3 years after State plan approval to close shall require a closure agreement. The closure agreement must include the date of plant closure.
- (2) If the State plan requirements for a designated facility include a compliance schedule longer than 1 year after approval of the State plan in accordance with paragraph (c)(1)(i) or (c)(1)(ii) of this section, the State

NSPS SUBPART Cb

40 CFR 60, SUBPART Cb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

plan submittal (for approval) shall include performance test results for dioxin/furan emissions for each designated facility that has a compliance schedule longer than 1 year following the approval of the State plan, and the performance test results shall have been conducted during or after 1990. The performance test shall be conducted according to the procedures in §60.38b.

(3) [Reserved]

(4) A State plan shall require compliance with the municipal waste combustor operator training and certification requirements under §60.35b according to the schedule specified in paragraphs (c)(4)(i) through (c)(4)(iii) of this section.

(i) [Reserved]

(ii) For designated facilities, the State plan shall require compliance with the municipal waste combustor operator training and certification requirements specified under §60.54b (a) through (c) of subpart Eb of this part by the date 6 months after the date of startup or 12 months after State plan approval, whichever is later.

(iii) For designated facilities, the State plan shall require compliance with the requirements specified in §60.54b (d), (f), and (g) of subpart Eb of this part no later than 6 months after startup or 12 months after State plan approval, whichever is later.

(A) The requirement specified in §60.54b(d) of subpart Eb of this part does not apply to chief facility 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.

(B) The owner or operator of a designated facility may request that the Administrator waive the requirement specified in §60.54b(d) of subpart Eb of this part for chief facility operators, shift supervisors, and control room operators who have obtained provisional certification from the American Society of Mechanical Engineers on or before the initial date of State plan approval.

(C) The initial training requirements specified in §60.54b(f)(1) of subpart Eb of this part shall be completed no later than the date specified in paragraph (c)(4)(iii)(C)(1), (c)(4)(iii)(C)(2), or (c)(4)(iii)(C)(3), of this section whichever is later.

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

(2) Twelve months after State plan approval; or

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

(5) A State plan shall require all designated facilities for which construction, modification, or reconstruction is commenced after June 26, 1987 to comply with the emission limit for mercury specified in §60.33b(a)(3) and the emission limit for dioxins/furans specified in §60.33b(c)(1) within 1 year following issuance of a revised construction or operation permit, if a permit modification is required, or within 1 year following approval of the State plan, whichever is later.

(d) In the event no plan for implementing the emission guidelines is approved by EPA, all designated facilities meeting the applicability requirements under §60.32b shall be in compliance with all of the guidelines, except those specified under §60.33b (a)(4), (b)(3), and (d)(3), no later than December 19, 2000.

(e) Not later than August 25, 1998, each State in which a designated facility is operating shall submit to EPA a plan to implement and enforce all provisions of this subpart specified in §60.33b(b)(3) and (d)(3) and the emission limit in paragraph (a)(4) that applies before April 28, 2009.

(f) In the event no plan for implementing the emission guidelines is approved by EPA, all designated facilities meeting the applicability requirements under §60.32b shall be in compliance with all of the guidelines, including those specified under §60.33b (a)(4), (b)(3), and (d)(3), no later than August 26, 2002.

NSPS SUBPART Cb

40 CFR 60, SUBPART Cb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

- (g) For approval, a revised State plan submitted not later than April 28, 2007 in accordance with paragraph (b) of this section, shall include compliance schedules for meeting the revised April 28, 2009 emission limits in §60.33b(a), (c), and (d) and the revised testing provisions in §60.38b(b).
- (1) Compliance with the revised April 28, 2009 emission limits is required as expeditiously as practicable, but no later than April 28, 2009, except as provided in paragraph (g)(2) of this section.
 - (2) The owner or operator of an affected facility who is planning an extensive emission control system upgrade may petition the Administrator for a longer compliance schedule and must demonstrate to the satisfaction of the Administrator the need for the additional time. If approved, the schedule may exceed the schedule in paragraph (g)(1) of this section, but cannot exceed May 10, 2011.
- (h) In the event no plan for implementing the emission guidelines is approved by EPA, all designated facilities meeting the applicability requirements under §60.32b shall be in compliance with all of the guidelines, including the revised April 28, 2009 emission limits in §60.33b(a), (b), (c), (d), and §60.34b(a), and the revised testing provisions in §60.38b(b), no later than May 10, 2011.

[60 FR 65415, Dec. 19, 1995, as amended at 62 FR 45120, 45125, Aug. 25, 1997; 71 FR 27333, May 10, 2006]

NSPS SUBPART Cb

40 CFR 60, SUBPART Cb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

Table 1 to Subpart Cb of Part 60—Nitrogen Oxides Guidelines for Designated Facilities

Municipal waste combustor technology	Before April 28, 2009, nitrogen oxides emission limit (parts per million by volume)^a	On and after April 28, 2009, nitrogen oxides emission limit (parts per million by volume)^a
Mass burn waterwall	205	205.
Mass burn rotary waterwall	250	210.
Refuse-derived fuel combustor	250	250.
Fluidized bed combustor	180	180.
Mass burn refractory combustors	No limit	No limit.

^aCorrected to 7 percent oxygen, dry basis.

[71 FR 27334, May 10, 2006]

Table 2 to Subpart Cb of Part 60—Nitrogen Oxides Limits for Existing Designated Facilities Included in an Emissions Averaging Plan at a Municipal Waste Combustor Plant^b

Municipal waste combustor technology	Before April 28, 2009, nitrogen oxides emission limit (parts per million by volume)^b	On and after April 28, 2009, nitrogen oxides emission limit (parts per million by volume)^a
Mass burn waterwall	185	185
Mass burn rotary waterwall	220	190
Refuse-derived fuel combustor	230	230
Fluidized bed combustor	165	165

^aMass burn refractory municipal waste combustors and other MWC technologies not listed above may not be included in an emissions averaging plan.

^bCorrected to 7 percent oxygen, dry basis.

[71 FR 27334, May 10, 2006]

NSPS SUBPART Cb

40 CFR 60, SUBPART Cb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

Table 3 to Subpart Cb of Part 60—Municipal Waste Combustor Operating Guidelines

Municipal waste combustor technology	Carbon monoxide emissions levels (parts per million by volume)^a	Averaging time (hrs)^b
Mass burn waterwall	100	4
Mass burn refractory	100	4
Mass burn rotary refractory	100	24
Mass burn rotary waterwall	250	24
Modular starved air	50	4
Modular excess air	50	4
Refuse-derived fuel stoker	200	24
Fluidized bed, mixed fuel (wood/refuse-derived fuel)	200	°24
Bubbling fluidized bed combustor	100	4
Circulating fluidized bed combustor	100	4
Pulverized coal/refuse-derived fuel mixed fuel-fired combustor	150	4
Spreader stoker coal/refuse-derived fuel mixed fuel-fired combustor	200	24
Semi-suspension refuse-derived fuel-fired combustor/wet refuse-derived fuel process conversion	250	°24
Spreader stoker fixed floor refuse-derived fuel-fired combustor/100 percent coal capable	250	°24

^aMeasured at the combustor outlet in conjunction with a measurement of oxygen concentration, corrected to 7 percent oxygen, dry basis. Calculated as an arithmetic average.

^bAveraging times are 4-hour or 24-hour block averages.

^c24-hour block average, geometric mean.

[71 FR 27334, May 10, 2006]

40 CFR 60, SUBPART Eb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

{Updated 11/21/03}

Subpart Eb-Standards of Performance for Large Municipal Waste Combustors for Which Construction is Commenced After September 20, 1994 or for Which Modification or Reconstruction is Commenced After June 19, 1996

(Source: 60 FR 65419, Dec. 19, 1995, unless otherwise noted, revised 12/08/01 to reflect 11/16/01 revision, revised 2/7/02 to reflect FR 10/17/00 revision)

Sec. 60.50b Applicability and delegation of authority.

(a) The affected facility to which this subpart applies is each municipal waste combustor unit with a combustion capacity greater than 250 tons per day of municipal solid waste for which construction is commenced after September 20, 1994 or for which modification or reconstruction is commenced after June 19, 1996.

(b) Any waste combustion unit that is capable of combusting more than 250 tons per day of municipal solid waste and is subject to a federally enforceable permit limiting the maximum amount of municipal solid waste that may be combusted in the unit to less than or equal to 11 tons per day is not subject to this subpart if the owner or operator:

- (1) Notifies the EPA Administrator of an exemption claim;
- (2) Provides a copy of the federally enforceable permit that limits the firing of municipal solid waste to less than 11 tons per day; and
- (3) Keeps records of the amount of municipal solid waste fired on a daily basis.

(c) An affected facility to which this subpart applies is not subject to subpart E or Ea of this part.

(d) Physical or operational changes made to an existing municipal waste combustor unit primarily for the purpose of complying with emission guidelines under subpart Cb are not considered a modification or reconstruction and do not result in an existing municipal waste combustor unit becoming subject to this subpart.

(e) A qualifying small power production facility, as defined in section 3(17)(C) of the Federal Power Act (16 U.S.C. 796(17)(C)), that burns homogeneous waste (such as automotive tires or used oil, but not including refuse-derived fuel) for the production of electric energy is not subject to this subpart if the owner or operator of the facility notifies the EPA Administrator of this exemption and provides data documenting that the facility qualifies for this exemption.

(f) A qualifying cogeneration facility, as defined in section 3(18)(B) of the Federal Power Act (16 U.S.C. 796(18)(B)), that burns homogeneous waste (such as automotive tires or used oil, but not including refuse-derived fuel) for the production of electric energy and steam or forms of useful energy (such as heat) that are used for industrial, commercial, heating, or cooling purposes, is not subject to this subpart if the owner or operator of the facility notifies the EPA Administrator of this exemption and provides data documenting that the facility qualifies for this exemption.

(g) Any unit combusting a single-item waste stream of tires is not subject to this subpart if the owner or operator of the unit:

- (1) Notifies the EPA Administrator of an exemption claim; and
- (2) [Reserved]

NSPS SUBPART Eb

40 CFR 60, SUBPART Eb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

- (3) Provides data documenting that the unit qualifies for this exemption.
- (h) Any unit required to have a permit under section 3005 of the Solid Waste Disposal Act is not subject to this subpart.
- (i) Any materials recovery facility (including primary or secondary smelters) that combusts waste for the primary purpose of recovering metals is not subject to this subpart.
- (j) Any cofired combustor, as defined under Sec. 60.51b, that meets the capacity specifications in paragraph (a) of this section is not subject to this subpart if the owner or operator of the cofired combustor:
- (1) Notifies the EPA Administrator of an exemption claim;
 - (2) Provides a copy of the federally enforceable permit (specified in the definition of cofired combustor in this section); and
 - (3) Keeps a record on a calendar quarter basis of the weight of municipal solid waste combusted at the cofired combustor and the weight of all other fuels combusted at the cofired combustor.
- (k) Air curtain incinerators, as defined under Sec. 60.51b, located at a plant that meet the capacity specifications in paragraph (a) of this section and that combust a fuel stream composed of 100 percent yard waste are exempt from all provisions of this subpart except the opacity limit under Sec. 60.56b, the testing procedures under Sec. 60.58b(l), and the reporting and recordkeeping provisions under Sec. 60.59b (e) and (i).
- (l) Air curtain incinerators located at plants that meet the capacity specifications in paragraph (a) of this section combusting municipal solid waste other than yard waste are subject to all provisions of this subpart.
- (m) Pyrolysis/combustion units that are an integrated part of a plastics/rubber recycling unit (as defined in Sec. 60.51b) are not subject to this subpart if the owner or operator of the plastics/rubber recycling unit keeps records of the weight of plastics, rubber, and/or rubber tires processed on a calendar quarter basis; the weight of chemical plant feedstocks and petroleum refinery feedstocks produced and marketed on a calendar quarter basis; and the name and address of the purchaser of the feedstocks. The combustion of gasoline, diesel fuel, jet fuel, fuel oils, residual oil, refinery gas, petroleum coke, liquified petroleum gas, propane, or butane produced by chemical plants or petroleum refineries that use feedstocks produced by plastics/rubber recycling units are not subject to this subpart.
- (n) The following authorities shall be retained by the Administrator and not transferred to a State: None.
- (o) This subpart shall become effective June 19, 1996.
- (p) Cement kilns firing municipal solid waste are not subject to this subpart. [60 FR 65419, Dec. 19, 1995, as amended at 62 FR 45120, 45125, Aug. 25, 1997]

Sec. 60.51b Definitions.

NSPS SUBPART Eb

40 CFR 60, SUBPART Eb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

Air curtain incinerator means an incinerator that operates by forcefully projecting a curtain of air across an open chamber or pit in which burning occurs. Incinerators of this type can be constructed above or below ground and with or without refractory walls and floor.

Batch municipal waste combustor means a municipal waste combustor unit designed so that it cannot combust municipal solid waste continuously 24 hours per day because the design does not allow waste to be fed to the unit or ash to be removed while combustion is occurring.

Bubbling fluidized bed combustor means a fluidized bed combustor in which the majority of the bed material remains in a fluidized state in the primary combustion zone.

Calendar quarter means a consecutive 3-month period (nonoverlapping) beginning on January 1, April 1, July 1, and October 1.

Calendar year means the period including 365 days starting January 1 and ending on December 31.

Chief facility operator means the person in direct charge and control of the operation of a municipal waste combustor and who is responsible for daily onsite supervision, technical direction, management, and overall performance of the facility.

Circulating fluidized bed combustor means a fluidized bed combustor in which the majority of the fluidized bed material is carried out of the primary combustion zone and is transported back to the primary zone through a recirculation loop.

Clean wood means untreated wood or untreated wood products including clean untreated lumber, tree stumps (whole or chipped), and tree limbs (whole or chipped). Clean wood does not include yard waste, which is defined elsewhere in this section, or construction, renovation, and demolition wastes (including but not limited to railroad ties and telephone poles), which are exempt from the definition of municipal solid waste in this section.

Cofired combustor means a unit combusting municipal solid waste with nonmunicipal solid waste fuel (e.g., coal, industrial process waste) and subject to a federally enforceable permit limiting the unit to combusting a fuel feed stream, 30 percent or less of the weight of which is comprised, in aggregate, of municipal solid waste as measured on a calendar quarter basis.

Continuous emission monitoring system means a monitoring system for continuously measuring the emissions of a pollutant from an affected facility.

Dioxin/furan means tetra- through octa- chlorinated dibenzo-p-dioxins and dibenzofurans.

Federally enforceable means all limitations and conditions that are enforceable by the Administrator including the requirements of 40 CFR parts 60, 61, and 63, requirements within any applicable State implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 40 CFR 51.24.

First calendar half means the period starting on January 1 and ending on June 30 in any year.

Four-hour block average or 4-hour block average means the average of all hourly emission concentrations when the affected facility is operating and combusting municipal solid waste measured over 4-hour periods of time from 12:00 midnight to 4 a.m., 4 a.m. to 8 a.m., 8 a.m. to 12:00 noon, 12:00 noon to 4 p.m., 4 p.m. to 8 p.m., and 8 p.m. to 12:00 midnight.

Mass burn refractory municipal waste combustor means a field-erected combustor that combusts municipal solid waste in a refractory wall furnace. Unless otherwise specified, this includes combustors with a cylindrical rotary refractory wall furnace.

Mass burn rotary waterwall municipal waste combustor means a field-erected combustor that combusts municipal solid waste in a cylindrical rotary waterwall furnace or on a tumbling-tile grate.

Mass burn waterwall municipal waste combustor means a field-erected combustor that combusts municipal solid waste in a waterwall furnace.

Materials separation plan means a plan that identifies both a goal and an approach to separate certain components of municipal solid waste for a given service area in order to make the separated

40 CFR 60, SUBPART Eb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

materials available for recycling. A materials separation plan may include elements such as dropoff facilities, buy-back or deposit-return incentives, curbside pickup programs, or centralized mechanical separation systems. A materials separation plan may include different goals or approaches for different subareas in the service area, and may include no materials separation activities for certain subareas or, if warranted, an entire service area.

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 under Sec. 60.52b(c).

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 under Sec. 60.52b(c).

Modification or modified municipal waste combustor unit means a municipal waste combustor unit to which changes have been made after June 19, 1996 if the cumulative cost of the changes, over the life of

the unit, exceed 50 percent of the original cost of construction and installation of the unit (not including the cost of any land purchased in connection with such construction or installation) updated to current costs; or any physical change in the municipal waste combustor unit or change in the method of operation of the municipal waste combustor unit increases the amount of any air pollutant emitted by the unit for which

standards have been established under section 129 or section 111. Increases in the amount of any air pollutant emitted by the municipal waste combustor unit are determined at 100-percent physical load capability and downstream of all air pollution control devices, with no consideration given for load restrictions based on permits or other nonphysical operational restrictions.

Modular excess-air municipal waste combustor means a combustor that combusts municipal solid waste and that is not field-erected and has multiple combustion chambers, all of which are designed to operate at conditions with combustion air amounts in excess of theoretical air requirements.

Modular starved-air municipal waste combustor means a combustor that combusts municipal solid waste and that is not field-erected and has multiple combustion chambers in which the primary combustion chamber is designed to operate at substoichiometric conditions.

Municipal solid waste or municipal-type solid waste or MSW means household, commercial/retail, and/or institutional waste. Household waste includes material discarded by single and multiple residential

dwelling, hotels, motels, and other similar permanent or temporary housing establishments or facilities.

Commercial/retail waste includes material discarded by stores, offices, restaurants, warehouses, nonmanufacturing activities at industrial facilities, and other similar establishments or facilities.

Institutional waste includes material discarded by schools, nonmedical waste discarded by hospitals, material discarded by nonmanufacturing activities at prisons and government facilities, and material discarded by other similar establishments or facilities. Household, commercial/retail, and institutional waste does not include used oil; sewage sludge; wood pallets; construction, renovation, and demolition wastes (which includes but is not limited to railroad ties and telephone poles); clean wood; industrial process or manufacturing wastes; medical waste; or motor vehicles (including motor vehicle parts or vehicle fluff). Household, commercial/retail, and institutional wastes include:

- (1) Yard waste;
- (2) Refuse-derived fuel; and
- (3) Motor vehicle maintenance materials limited to vehicle batteries and

tires except as specified in Sec. 60.50b(g).

Municipal waste combustor, MWC, or municipal waste combustor unit:

NSPS SUBPART Eb

40 CFR 60, SUBPART Eb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

(1) Means any setting or equipment that combusts solid, liquid, or gasified municipal solid waste including, but not limited to, field-erected incinerators (with or without heat recovery), modular incinerators (starved-air or excess-air), boilers (i.e., steam generating units), furnaces (whether suspension-fired, grate-fired, mass-fired, air curtain incinerators, or fluidized bed-fired), and pyrolysis/combustion units. Municipal waste combustors do not include pyrolysis/combustion units located at a plastics/rubber recycling unit (as specified in Sec. 60.50b(m)). Municipal waste combustors do not include cement kilns firing municipal solid waste (as specified in Sec. 60.50b(p)). Municipal waste combustors do not include internal combustion engines, gas turbines, or other combustion devices that combust landfill gases collected by landfill gas collection systems.

(2) The boundaries of a municipal solid waste combustor are defined as follows. The municipal waste combustor unit includes, but is not limited to, the municipal solid waste fuel feed system, grate system, flue gas system, bottom ash system, and the combustor water system. The municipal waste combustor boundary starts at the municipal solid waste pit or hopper and extends through:

(i) The combustor flue gas system, which ends immediately following the heat recovery equipment or, if there is no heat recovery equipment, immediately following the combustion chamber,

(ii) The combustor bottom ash system, which ends at the truck loading station or similar ash handling equipment that transfer the ash to final disposal, including all ash handling systems that are connected to the bottom ash handling system; and

(iii) The combustor water system, which starts at the feed water pump and ends at the piping exiting the steam drum or superheater.

(3) The municipal waste combustor unit does not include air pollution control equipment, the stack, water treatment equipment, or the turbine-generator set.

Municipal waste combustor acid gases means all acid gases emitted in the exhaust gases from municipal waste combustor units including, but not limited to, sulfur dioxide and hydrogen chloride gases.

Municipal waste combustor metals means metals and metal compounds emitted in the exhaust gases from municipal waste combustor units.

Municipal waste combustor organics means organic compounds emitted in the exhaust gases from municipal waste combustor units and includes tetra-through octa-chlorinated dibenzo-p-dioxins and dibenzofurans.

Municipal waste combustor plant means one or more affected facilities (as defined in Sec. 60.50b) at the same location.

Municipal waste combustor unit capacity means the maximum charging rate of a municipal waste combustor unit expressed in tons per day of municipal solid waste combusted, calculated according to the procedures under Sec. 60.58b(j). Section 60.58b(j) includes procedures for determining municipal waste combustor unit capacity for continuous and batch feed municipal waste combustors.

Municipal waste combustor unit load means the steam load of the municipal waste combustor unit measured as specified in Sec. 60.58b(i)(6).

Particulate matter means total particulate matter emitted from municipal waste combustor units as measured by EPA Reference Method 5 (see Sec. 60.58b(c)).

Plastics/rubber recycling unit means an integrated processing unit where plastics, rubber, and/or rubber tires are the only feed materials (incidental contaminants may be included in the feed materials) and they are processed into a chemical plant feedstock or petroleum refinery feedstock, where the feedstock is marketed to and used by a chemical plant or petroleum refinery as input feedstock. The combined weight of the chemical plant feedstock and petroleum refinery feedstock produced by the

40 CFR 60, SUBPART Eb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

plastics/ rubber recycling unit on a calendar quarter basis shall be more than 70 percent of the combined weight of the plastics, rubber, and rubber tires processed by the plastics/rubber recycling unit on a calendar quarter basis. The plastics, rubber, and/or rubber tire feed materials to the plastics/rubber recycling unit may originate from the separation or diversion of plastics, rubber, or rubber tires from MSW or industrial solid waste, and may include manufacturing scraps, trimmings, and off-specification plastics, rubber, and rubber tire discards. The plastics, rubber, and rubber tire feed materials to the plastics/rubber recycling unit may contain incidental contaminants (e.g., paper labels on plastic bottles, metal rings on plastic bottle caps, etc.).

Potential hydrogen chloride emission concentration means the hydrogen chloride emission concentration that would occur from combustion of municipal solid waste in the absence of any emission controls for municipal waste combustor acid gases.

Potential mercury emission concentration means the mercury emission concentration that would occur from combustion of municipal solid waste in the absence of any mercury emissions control.

Potential sulfur dioxide emissions means the sulfur dioxide emission concentration that would occur from combustion of municipal solid waste in the absence of any emission controls for municipal waste combustor acid gases.

Pulverized coal/refuse-derived fuel mixed fuel-fired combustor means a combustor that fires coal and refuse-derived fuel simultaneously, in which pulverized coal is introduced into an air stream that carries the coal to the combustion chamber of the unit where it is fired in suspension. This includes both conventional pulverized coal and micropulverized coal.

Pyrolysis/combustion unit means a unit that produces gases, liquids, or solids through the heating of municipal solid waste, and the gases, liquids, or solids produced are combusted and emissions vented to the atmosphere.

Reconstruction means rebuilding a municipal waste combustor unit for which the reconstruction commenced after June 19, 1996, and the cumulative costs of the construction over the life of the unit exceed 50 percent of the original cost of construction and installation of the unit (not including any cost of land purchased in connection with such construction or installation) updated to current costs (current dollars).

Refractory unit or refractory wall furnace means a combustion unit having no energy recovery (e.g., via a waterwall) in the furnace (i.e., radiant heat transfer section) of the combustor.

Refuse-derived fuel means a type of municipal solid waste produced by processing municipal solid waste through shredding and size classification. This includes all classes of refuse-derived fuel including low-density fluff refuse-derived fuel through densified refuse-derived fuel and pelletized refuse-derived fuel.

Refuse-derived fuel stoker means a steam generating unit that combusts refuse-derived fuel in a semisuspension firing mode using air-fed distributors.

Same location means the same or contiguous property that is under common ownership or control including properties that are separated only by a street, road, highway, or other public right-of-way. Common ownership or control includes properties that are owned, leased, or operated by the same entity, parent entity, subsidiary, subdivision, or any combination thereof including any municipality or other governmental unit, or any quasi-governmental authority (e.g., a public utility district or regional waste disposal authority).

Second calendar half means the period starting July 1 and ending on December 31 in any year.

40 CFR 60, SUBPART Eb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

Shift supervisor means the person who is in direct charge and control of the operation of a municipal waste combustor and who is responsible for onsite supervision, technical direction, management, and overall performance of the facility during an assigned shift.

Spreader stoker coal/refuse-derived fuel mixed fuel-fired combustor means a combustor that fires coal and refuse-derived fuel simultaneously, in which coal is introduced to the combustion zone by a mechanism that throws the fuel onto a grate from above. Combustion takes place both in suspension and on the grate.

Standard conditions means a temperature of 20° C and a pressure of 101.3 kilopascals.

Total mass dioxin/furan or total mass means the total mass of tetra- through octa- chlorinated dibenzo-p-dioxins and dibenzofurans, as determined using EPA Reference Method 23 and the procedures specified under Sec. 60.58b(g).

Tumbling-tile means a grate tile hinged at one end and attached to a ram at the other end. When the ram extends, the grate tile rotates around the hinged end.

Twenty-four hour daily average or 24-hour daily average means either the arithmetic mean or geometric mean (as specified) of all hourly emission concentrations when the affected facility is operating and combusting municipal solid waste measured over a 24-hour period between 12:00 midnight and the following midnight.

Untreated lumber means wood or wood products that have been cut or shaped and include wet, air-dried, and kiln-dried wood products. Untreated lumber does not include wood products that have been painted, pigment-stained, or "pressure-treated." Pressure-treating compounds include, but are not limited to, chromate copper arsenate, pentachlorophenol, and creosote.

Waterwall furnace means a combustion unit having energy (heat) recovery in the furnace (i.e., radiant heat transfer section) of the combustor.

Yard waste means grass, grass clippings, bushes, shrubs, and clippings from bushes and shrubs that are generated by residential, commercial/retail, institutional, and/or industrial sources as part of maintenance activities associated with yards or other private or public lands. Yard waste does not include construction, renovation, and demolition wastes, which are exempt from the definition of municipal solid waste in this section. Yard waste does not include clean wood, which is exempt from the definition of municipal solid waste in this section.[60 FR 65419, Dec. 19, 1995, as amended at 62 FR 45121, 45126, Aug. 25, 1997]

Sec. 60.52b Standards for municipal waste combustor metals, acid gases, organics, and nitrogen oxides.

(a) The limits for municipal waste combustor metals are specified in paragraphs (a)(1) through (a)(5) of this section.

(1) On and after the date on which the initial performance test is completed or is required to be completed under Sec. 60.8 of subpart A of this part, no owner or operator of an affected facility shall cause to

be discharged into the atmosphere from that affected facility any gases that contain particulate matter in excess of 24 milligrams per dry standard cubic meter, corrected to 7 percent oxygen.

(2) On and after the date on which the initial performance test is completed or is required to be completed under Sec. 60.8 of subpart A of this part, no owner or operator of an affected facility shall cause to be discharged into the atmosphere from that affected facility any gases that exhibit greater than 10 percent opacity (6-minute average).

NSPS SUBPART Eb

40 CFR 60, SUBPART Eb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

(3) On and after the date on which the initial performance test is completed or is required to be completed under Sec. 60.8 of subpart A of this part, no owner or operator of an affected facility shall cause to be discharged into the atmosphere from that affected facility any gases that contain cadmium in excess of 0.020 milligrams per dry standard cubic meter, corrected to 7 percent oxygen.

(4) On and after the date on which the initial performance test is completed or is required to be completed under Sec. 60.8 of subpart A of this part, no owner or operator of an affected facility shall cause to be discharged into the atmosphere from the affected facility any gases that contain lead in excess of 0.20 milligrams per dry standard cubic meter, corrected to 7 percent oxygen.

(5) On and after the date on which the initial performance test is completed or is required to be completed under Sec. 60.8 of subpart A of this part, no owner or operator of an affected facility shall cause to be discharged into the atmosphere from the affected facility any gases that contain mercury in excess of 0.080 milligrams per dry standard cubic meter or 15 percent of the potential mercury emission concentration (85-percent reduction by weight), corrected to 7 percent oxygen, whichever is less stringent.

(b) The limits for municipal waste combustor acid gases are specified in paragraphs (b)(1) and (b)(2) of this section.

(1) On and after the date on which the initial performance test is completed or is required to be completed under Sec. 60.8 of subpart A of this part, no owner or operator of an affected facility shall cause to be discharged into the atmosphere from that affected facility any gases that contain sulfur dioxide in excess of 30 parts per million by volume or 20 percent of the potential sulfur dioxide emission concentration (80-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent. The averaging time is specified under Sec. 60.58b(e).

(2) On and after the date on which the initial performance test is completed or is required to be completed under Sec. 60.8 of subpart A of this part, no owner or operator of an affected facility shall cause to be discharged into the atmosphere from that affected facility any gases that contain hydrogen chloride in excess of 25 parts per million by volume or 5 percent of the potential hydrogen chloride emission concentration (95-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent.

(c) The limits for municipal waste combustor organics are specified in paragraphs (c)(1) and (c)(2) of this section.

(1) On and after the date on which the initial performance test is completed or is required to be completed under Sec. 60.8 of subpart A of this part, no owner or operator of an affected facility for which construction, modification or reconstruction commences on or before November 20, 1997 shall cause to be discharged into the atmosphere from that affected facility any gases that contain dioxin/furan emissions that exceed 30 nanograms per dry standard cubic meter (total mass), corrected to 7 percent oxygen, for the first 3 years following the date of initial startup. After the first 3 years following the date of initial startup, no owner or operator shall cause to be discharged into the atmosphere from that affected facility any gases that contain dioxin/furan total mass emissions that exceed 13 nanograms per dry standard cubic meter (total mass), corrected to 7 percent oxygen.

NSPS SUBPART Eb

40 CFR 60, SUBPART Eb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

(2) On and after the date on which the initial performance test is completed or is required to be completed under Sec. 60.8 of subpart A of this part, no owner or operator of an affected facility for which construction, modification, or reconstruction commences after November 20, 1997 shall cause to be discharged into the atmosphere from that affected facility any gases that contain dioxin/furan total mass emissions that exceed 13 nanograms per dry standard cubic meter (total mass), corrected to 7 percent oxygen.

(d) The limits for nitrogen oxides are specified in paragraphs (d)(1) and (d)(2) of this section.

(1) During the first year of operation after the date on which the initial performance test is completed or is required to be completed under Sec. 60.8 of subpart A of this part, no owner or operator of an affected facility shall cause to be discharged into the atmosphere from that affected facility any gases that contain nitrogen oxides in excess of 180 parts per million by volume, corrected to 7 percent oxygen (dry basis). The averaging time is specified under Sec. 60.58b(h).

(2) After the first year of operation following the date on which the initial performance test is completed or is required to be completed under Sec. 60.8 of subpart A of this part, no owner or operator of an affected facility shall cause to be discharged into the atmosphere from that affected facility any gases that contain nitrogen oxides in excess of 150 parts per million by volume, corrected to 7 percent oxygen (dry basis). The averaging time is specified under Sec. 60.58b(h). [60 FR 65419, Dec. 19, 1995, as amended at 62 FR 45121, 45126, Aug. 25, 1997]

Sec. 60.53b Standards for municipal waste combustor operating practices.

(a) On and after the date on which the initial performance test is completed or is required to be completed under Sec. 60.8 of subpart A of this part, no owner or operator of an affected facility shall cause to be discharged into the atmosphere from that affected facility any gases that contain carbon monoxide in excess of the emission limits specified in table 1 of this subpart.

Table 1.--Municipal Waste Combustor Operating Guidelines

Municipal waste combustor technology	Carbon monoxide emissions level (parts per million million by volume) ^a	Averaging time (hrs) ^b
Mass burn waterwall.....	100	4
Mass burn refractory.....	100	4
Mass burn rotary waterwall.....	100	24
Modular starved air.....	50	4
Modular excess air.....	50	4
Refuse-derived fuel stoker.....	150	24
Buddling fluidized bed combustor.....	100	4
Circulating fluidized bed combustor.....	100	4
Pulverized coal/refuse-derived fuel mixed fuel-fired combustor.....	150	4

NSPS SUBPART Eb

40 CFR 60, SUBPART Eb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

Spreader stoker coal/refuse-derived fuel mixed
fuel-fired combustor..... 150 24

^a Measured at the combustor outlet in conjunction with a measurement of oxygen concentration, corrected to 7 percent oxygen, dry basis. The averaging times are specified in greater detail in § 60.58b(i).
^b Averaging times are 4-hour or 24-hour block averages.

(b) 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 Sec. 60.51b, except as specified in paragraphs (b)(1) and (b)(2) of this section. The averaging time is specified under Sec. 60.58b(i).

(1) During the annual dioxin/furan performance test and the 2 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.

(c) 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 Sec. 60.51b, except as specified in paragraphs (c)(1) and (c)(2) of this section. The averaging time is specified under Sec. 60.58b(i). The requirements specified in this paragraph apply to each particulate matter control device utilized at the affected facility.

(1) During the annual dioxin/furan performance test and the 2 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. [60 FR 65419, Dec. 19, 1995, as amended at 62 FR 45126, Aug. 25, 1997]

Sec. 60.54b 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 on December 19, 1996, 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 Sec. 60.17 of subpart A of this part)] or a State certification program.

(b) Not later than the date 6 months after the date of startup of an affected facility or on December 19, 1996, 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

NSPS SUBPART Eb

40 CFR 60, SUBPART Eb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

Mechanical Engineers [QRO-1-1994 (incorporated by reference--see Sec. 60.17 of subpart A of this part)] 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) of this section, a fully certified shift supervisor, or a provisionally certified shift supervisor who is scheduled to take the full certification exam according to the schedule specified in paragraph (b) of this section.

(1) The requirement specified in paragraph (c) of this section shall take effect 6 months after the date of startup of the affected facility or on December 19, 1996, whichever is later.

(2) If one of the persons listed in paragraph (c) of this section 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) of this section.

(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 December 19, 1996, whichever is later.

(e) The owner or operator of an affected facility shall develop and update on a yearly basis a site-specific operating manual that shall, at a minimum, address the elements of municipal waste combustor unit operation specified in paragraphs (e)(1) through (e)(11) of this section.

- (1) A summary of the applicable standards under this subpart;
- (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 under this subpart;
- (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) of this section 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) of this section shall undergo initial training no later than the date specified in paragraph (f)(1)(i), (f)(1)(ii), or (f)(1)(iii) of this section 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) December 19, 1996.

(2) Annually, following the initial review required by paragraph (f)(1) of this section.

40 CFR 60, SUBPART Eb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

(g) The operating manual required by paragraph (e) of this section shall be kept in a readily accessible location for all persons required to undergo training under paragraph (f) of this section. The operating manual and records of training shall be available for inspection by the EPA or its delegated enforcement agency upon request. [60 FR 65419, Dec. 19, 1995, as amended at 62 FR 45126, Aug. 25, 1997]

Sec. 60.55b Standards for municipal waste combustor fugitive ash emissions.

(a) On and after the date on which the initial performance test is completed or is required to be completed under Sec. 60.8 of subpart A of this part, 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 Sec. 60.58b(k), except as provided in paragraphs (b) and (c) of this section.

(b) The emission limit specified in paragraph (a) of this section does not cover visible emissions discharged inside buildings or enclosures of ash conveying systems; however, the emission limit specified in paragraph (a) of this section does cover visible emissions discharged to the atmosphere from buildings or enclosures of ash conveying systems.

(c) The provisions specified in paragraph (a) of this section do not apply during maintenance and repair of ash conveying systems. [60 FR 65419, Dec. 19, 1995, as amended at 62 FR 45126, Aug. 25, 1997]

Sec. 60.56b Standards for air curtain incinerators.

On and after the date on which the initial performance test is completed or is required to be completed under Sec. 60.8 of subpart A of this part, the owner or operator of an air curtain incinerator with the capacity to combust greater than 250 tons per day of municipal solid waste and that combusts a fuel feed stream composed of 100 percent yard waste and no other municipal solid waste materials shall at no time cause to be discharged into the atmosphere from that incinerator any gases that exhibit greater than 10-percent opacity (6-minute average), except that an opacity level of up to 35 percent (6-minute average) is permitted during startup periods during the first 30 minutes of operation of the unit. [60 FR 65419, Dec. 19, 1995, as amended at 62 FR 45126, Aug. 25, 1997]

Sec. 60.57b Siting requirements.

(a) The owner or operator of an affected facility for which the initial application for a construction permit under 40 CFR part 51, subpart I, or part 52, as applicable, is submitted after December 19, 1995, shall prepare a materials separation plan, as defined in Sec. 60.51b, for the affected facility and its service area, and shall

comply with the requirements specified in paragraphs (a)(1) through (a)(10) of this section. The initial application is defined as representing a good faith submittal for complying with the requirements under 40 CFR part 51, subpart I, or part 52, as applicable, as determined by the Administrator.

(1) The owner or operator shall prepare a preliminary draft materials separation plan and shall make the plan available to the public as specified in paragraphs (a)(1)(i) and (a)(1)(ii) of this section.

(i) The owner or operator shall distribute the preliminary draft materials separation plan to the principal public libraries in the area where the affected facility is to be constructed.

40 CFR 60, SUBPART Eb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

(ii) The owner or operator shall publish a notification of a public meeting in the principal newspaper(s) serving the area where the affected facility is to be constructed and where the waste treated by the affected facility will primarily be collected. As a minimum, the notification shall include the information specified in paragraphs (a)(1)(ii)(A) through (a)(1)(ii)(D) of this section.

(A) The date, time, and location of the public meeting.

(B) The location of the public libraries where the preliminary draft materials separation plan may be found, including normal business hours of the libraries.

(C) An agenda of the issues to be discussed at the public meeting.

(D) The dates that the public comment period on the preliminary draft materials separation plan begins and ends.

(2) The owner or operator shall conduct a public meeting, accept comments on the preliminary draft materials separation plan, and comply with the requirements specified in paragraphs (a)(2)(i) through (a)(2)(iv) of this section.

(i) The public meeting shall be conducted in the county where the affected facility is to be located.

(ii) The public meeting shall be scheduled to occur 30 days or more after making the preliminary draft materials separation plan available to the public as specified under paragraph (a)(1) of this section.

(iii) Suggested issues to be addressed at the public meeting are listed in paragraphs (a)(2)(iii)(A) through (a)(2)(iii)(H) of this section.

(A) The expected size of the service area for the affected facility.

(B) The amount of waste generation anticipated for the service area.

(C) The types and estimated amounts of materials proposed for separation.

(D) The methods proposed for materials separation.

(E) The amount of residual waste to be disposed.

(F) Alternate disposal methods for handling the residual waste.

(G) Identification of the location(s) where responses to public comment on the preliminary draft materials separation plan will be available for inspection, as specified in paragraphs (a)(3) and (a)(4) of this section.

(H) Identification of the locations where the final draft materials separation plan will be available for inspection, as specified in paragraph (a)(7).

(iv) Nothing in this section shall preclude an owner or operator from combining this public meeting with any other public meeting required as part of any other Federal, State, or local permit review process except the public meeting required under paragraph (b)(4) of this section.

(3) Following the public meeting required by paragraph (a)(2) of this section, the owner or operator shall prepare responses to the comments received at the public meeting.

(4) The owner or operator shall make the document summarizing responses to public comments available to the public (including distribution to the principal public libraries used to announce the meeting) in the service area where the affected facility is to be located.

(5) The owner or operator shall prepare a final draft materials separation plan for the affected facility considering the public comments received at the public meeting.

(6) As required under Sec. 60.59b(a), the owner or operator shall submit to the Administrator a copy of the notification of the public meeting, a transcript of the public meeting, the document summarizing responses to public comments, and copies of both the preliminary and final draft materials separation plans on or before the time the facility's application for a construction permit is submitted under 40 CFR part 51, subpart I, or part 52, as applicable.

40 CFR 60, SUBPART Eb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

(7) As part of the distribution of the siting analysis required under paragraph (b)(3) of this section, the owner or operator shall make the final draft materials separation plan required under paragraph (a)(5) of this section available to the public, as specified in paragraph (b)(3) of this section.

(8) As part of the public meeting for review of the siting analysis required under paragraph (b)(4) of this section, the owner or operator shall address questions concerning the final draft materials separation plan required by paragraph (a)(5) of this section including discussion of how the final draft materials separation plan has changed from the preliminary draft materials separation plan that was discussed at the first public meeting required by paragraph (a)(2) of this section.

(9) If the owner or operator receives any comments on the final draft materials separation plan during the public meeting required in paragraph (b)(4) of this section, the owner or operator shall respond to those comments in the document prepared in accordance with paragraph (b)(5) of this section.

(10) The owner or operator shall prepare a final materials separation plan and shall submit, as required under Sec. 60.59b(b)(5)(ii), the final materials separation plan as part of the initial notification of construction.

(b) The owner or operator of an affected facility for which the initial application for a construction permit under 40 CFR part 51, subpart I, or part 52, as applicable, is submitted after December 19, 1995 shall prepare a siting analysis in accordance with paragraphs (b)(1) and (b)(2) of this section and shall comply with the requirements specified in paragraphs (b)(3) through (b)(7) of this section.

(1) The siting analysis shall be an analysis of the impact of the affected facility on ambient air quality, visibility, soils, and vegetation.

(2) The analysis shall consider air pollution control alternatives that minimize, on a site-specific basis, to the maximum extent practicable, potential risks to the public health or the environment.

(3) The owner or operator shall make the siting analysis and final draft materials separation plan required by paragraph (a)(5) of this section available to the public as specified in paragraphs (b)(3)(i) and (b)(3)(ii) of this section.

(i) The owner or operator shall distribute the siting analysis and final draft materials separation plan to the principal public libraries in the area where the affected facility is to be constructed.

(ii) The owner or operator shall publish a notification of a public meeting in the principal newspaper(s) serving the area where the affected facility is to be constructed and where the waste treated by

the affected facility will primarily be collected. As a minimum, the notification shall include the information specified in paragraphs (b)(3)(ii)(A) through (b)(3)(ii)(D) of this section.

(A) The date, time, and location of the public meeting.

(B) The location of the public libraries where the siting analyses and final draft materials separation plan may be found, including normal business hours.

(C) An agenda of the issues to be discussed at the public meeting.

(D) The dates that the public comment period on the siting analyses and final draft materials separation plan begins and ends.

(4) The owner or operator shall conduct a public meeting and accept comments on the siting analysis and the final draft materials separation plan required under paragraph (a)(5) of this section. The public meeting shall be conducted in the county where the affected facility is to be located and shall be scheduled to occur 30 days or more after making the siting analysis available to the public as specified under paragraph (b)(3) of this section.

(5) The owner or operator shall prepare responses to the comments on the siting analysis and the final draft materials separation plan that are received at the public meeting.

40 CFR 60, SUBPART Eb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

(6) The owner or operator shall make the document summarizing responses to public comments available to the public (including distribution to all public libraries) in the service area where the affected facility is to be located.

(7) As required under Sec. 60.59b(b)(5), the owner or operator shall submit a copy of the notification of the public meeting, a transcript of the public meeting, the document summarizing responses to public comments, and the siting analysis as part of the initial notification of construction.

(c) The owner or operator of an affected facility for which construction is commenced after September 20, 1994 shall prepare a siting analysis in accordance with 40 CFR part 51, Subpart I, or part 52, as applicable, and shall submit the siting analysis as part of the initial notification of construction. Affected facilities subject to paragraphs (a) and (b) of this section are not subject to this paragraph. [60 FR 65419, Dec. 19, 1995, as amended at 62 FR 45126, Aug. 25, 1997]

Sec. 60.58b Compliance and performance testing.

(a) The provisions for startup, shutdown, and malfunction are provided in paragraphs (a)(1) and (a)(2) of this section.

(1) Except as provided by Sec. 60.56b, the standards under this subpart apply at all times except during periods of startup, shutdown, or malfunction. Duration of startup, shutdown, or malfunction periods are limited to 3 hours per occurrence, except as provided in paragraph (a)(1)(iii) of this section.

(i) The startup period commences when the affected facility begins the continuous burning of municipal solid waste and does not include any warmup 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.

(iii) For the purposes of compliance with the carbon monoxide emission limits in Sec. 60.53b(a), if a loss of a boiler water level control (e.g. boiler waterwall tube failure) or a loss of combustion air control (e.g. loss of combustion air fan, induced draft fan, combustion grate bar failure) is determined to be a malfunction, the duration of the malfunction period is limited to 15 hours per occurrence.

(2) The opacity limits for air curtain incinerators specified in Sec. 60.56b apply at all times as specified under Sec. 60.56b except during periods of malfunction. Duration of malfunction periods are limited to 3 hours per occurrence.

(b) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous emission monitoring system and record the output of the system for measuring the oxygen or carbon dioxide content of the flue gas at each location where carbon monoxide, sulfur dioxide, or nitrogen oxides emissions are monitored and shall comply with the test procedures and test methods specified in paragraphs

(b)(1) through (b)(7) of this section.

(1) The span value of the oxygen (or 20 percent carbon dioxide) monitor shall be 25 percent oxygen (or 20 percent carbon dioxide).

40 CFR 60, SUBPART Eb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

(2) The monitor shall be installed, evaluated, and operated in accordance with Sec. 60.13 of subpart A of this part.

(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 Sec. 60.8 of subpart A of this part.

(4) The monitor shall conform to Performance Specification 3 in appendix B of this part except for section 2.3 (relative accuracy requirement).

(5) The quality assurance procedures of appendix F of this part except for section 5.1.1 (relative accuracy test audit) shall apply to the monitor.

(6) If carbon dioxide is selected for use in diluent corrections, the relationship between oxygen and carbon dioxide levels shall be established during the initial performance test according to the procedures and methods specified in paragraphs (b)(6)(i) through (b)(6)(iv) of this section. 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 (b)(6) of this section 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.

(c) The procedures and test methods specified in paragraphs (c)(1) through (c)(11) of this section shall be used to determine compliance with the emission limits for particulate matter and opacity under Sec. 60.52b(a)(1) and (a)(2).

(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 (b)(6) of this section.

(5) As specified under Sec. 60.8 of subpart A of this part, 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 (c)(7) and (c)(11) of this section, EPA Reference Method 9 shall be used for determining compliance with the opacity limit except as provided under Sec. 60.11(e) of subpart A of this part.

(7) The owner or operator of an affected facility shall conduct an initial performance test for particulate matter emissions and opacity as required under Sec. 60.8 of subpart A of this part.

(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

40 CFR 60, SUBPART Eb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

specified in paragraphs (c)(8)(i) through (c)(8)(iv) of this section.

(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 Sec. 60.13 of subpart A of this part.

(iii) The continuous opacity monitoring system shall conform to Performance Specification 1 in appendix B of this part.

(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 Sec. 60.8 of subpart A of this part.

(9) Following the date that the initial performance test for particulate matter is completed or is required to be completed under Sec. 60.8 of subpart A of this part 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 Sec. 60.8 of subpart A of this part 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 (c)(6) of this section.

(d) The procedures and test methods specified in paragraphs (d)(1) and (d)(2) of this section shall be used to determine compliance with the emission limits for cadmium, lead, and mercury under Sec. 60.52b(a).

(1) The procedures and test methods specified in paragraphs (d)(1)(i) through (d)(1)(ix) of this section shall be used to determine compliance with the emission limits for cadmium and lead under Sec. 60.52b(a) (3) and (4).

(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 (d)(1)(iii) of this section.

(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 (b)(6) of this section.

(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 Sec. 60.8 of subpart A of this part, 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)-(ix) [Reserved]

NSPS SUBPART Eb

40 CFR 60, SUBPART Eb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

(2) The procedures and test methods specified in paragraphs (d)(2)(i) through (d)(2)(xi) of this section shall be used to determine compliance with the mercury emission limit under Sec. 60.52b(a)(5).

(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 (d)(2)(iii) of this section.

(v) The percent reduction in the potential mercury emissions (%PHg) is computed using equation 1:

$$(\%P_{Hg}) = \left(\frac{E_i - E_o}{E_i} \right) \times 100$$

where:

%P_{Hg} = percent reduction of the potential mercury emissions achieved.

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

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

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

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

(viii) The owner or operator of an affected facility shall conduct an initial performance test for mercury emissions as required under Sec. 60.8 of subpart A of this part.

(ix) Following the date that the initial performance test for mercury is completed or is required to be completed under Sec. 60.8 of subpart A of this part, the owner or operator of an affected facility shall conduct a performance test for mercury emissions on an 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 paragraph (m) of this section for measuring and calculating carbon usage.

(e) The procedures and test methods specified in paragraphs (e)(1) through (e)(14) of this section shall be used for determining compliance with the sulfur dioxide emission limit under Sec. 60.52b(b)(1).

(1) The EPA Reference Method 19, section 4.3, shall be used to calculate the daily geometric average sulfur dioxide emission concentration.

NSPS SUBPART Eb

40 CFR 60, SUBPART Eb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

(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 paragraph (b)(6) of this section.

(4) The owner or operator of an affected facility shall conduct an initial performance test for sulfur dioxide emissions as required under Sec. 60.8 of subpart A of this part. Compliance with the sulfur dioxide emission limit (concentration or percent reduction) shall be determined by using the continuous emission monitoring system specified in paragraph (e)(5) of this section to measure sulfur dioxide and calculating a 24-hour daily geometric average emission concentration or a 24-hour daily geometric average percent reduction using EPA Reference Method 19, sections 4.3 and 5.4, as applicable.

(5) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous emission monitoring system for measuring sulfur dioxide emissions discharged to the atmosphere and record the output of the system.

(6) Following the date that the initial performance test for sulfur dioxide is completed or is required to be completed under Sec. 60.8 of subpart A of this part, compliance with the sulfur dioxide emission limit shall be determined based on the 24-hour daily geometric average of the hourly arithmetic average emission concentrations using continuous emission monitoring system outlet data if compliance is based on an emission concentration, or continuous emission monitoring system inlet and outlet data if compliance is based on a percent reduction.

(7) At a minimum, valid continuous monitoring system hourly averages shall be obtained as specified in paragraphs (e)(7)(i) and (e)(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 (e)(6) of this section 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 Sec. 60.13(e)(2) of subpart A of this part.

(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 (e)(7) of this section are not met.

(10) The procedures under Sec. 60.13 of subpart A of this part 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 Sec. 60.8 of subpart A of this part.

NSPS SUBPART Eb

40 CFR 60, SUBPART Eb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

(12) The continuous emission monitoring system shall be operated according to Performance Specification 2 in appendix B of this part.

(i) During each relative accuracy test run of the continuous emission monitoring system required by Performance Specification 2 in appendix B of this part, 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 (e)(12)(i)(A) and (e)(12)(i)(B) of this section.

(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 this part.

(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.

(f) The procedures and test methods specified in paragraphs (f)(1) through (f)(8) of this section shall be used for determining compliance with the hydrogen chloride emission limit under Sec. 60.52b(b)(2).

(1) The EPA Reference Method 26 or 26A, as applicable, shall be used to determine the hydrogen chloride emission concentration. The minimum sampling time shall be 1 hour.

(2) An oxygen (or carbon dioxide) measurement shall be obtained simultaneously with each test run for hydrogen chloride required by paragraph (f)(1) of this section.

$$(\%P_{HCl}) = \left(\frac{E_i - E_o}{E_i} \right) \times 100$$

(3) The percent reduction in potential hydrogen chloride emissions (% P_{HCl}) is computed using 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_o = controlled hydrogen chloride emission concentration measured at the control device outlet, corrected to 7 percent oxygen (dry basis).

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

NSPS SUBPART Eb

40 CFR 60, SUBPART Eb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

(5) As specified under Sec. 60.8 of subpart A of this part, 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 Sec. 60.8 of subpart A of this part.

(7) Following the date that the initial performance test for hydrogen chloride is completed or is required to be completed under Sec. 60.8 of subpart A of this part, 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]

(g) The procedures and test methods specified in paragraphs (g)(1) through (g)(9) of this section shall be used to determine compliance with the limits for dioxin/furan emissions under Sec. 60.52b(c).

(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 (g)(3) of this section, as required under Sec. 60.8 of subpart A of this part.

(5) Following the date that the initial performance test for dioxins/furans is completed or is required to be completed under Sec. 60.8 of subpart A of this part, the owner or operator of an affected facility shall conduct performance tests for dioxin/furan emissions in accordance with paragraph (g)(3) of this section, according to one of the schedules specified in paragraphs (g)(5)(i) through (g)(5)(iii) of this section.

(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

NSPS SUBPART Eb

40 CFR 60, SUBPART Eb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

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 (g)(5)(iii) of this section shall follow the procedures specified in Sec. 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 Sec. 60.52b(c) or the dioxin/furan emission level specified in paragraph (g)(5)(iii) of this section shall follow the procedures specified in paragraph (m) of this section 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 paragraph (b)(6) of this section.

(9) As specified under Sec. 60.8 of subpart A of this part, 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

(h) The procedures and test methods specified in paragraphs (h)(1) through (h)(12) of this section shall be used to determine compliance with the nitrogen oxides emission limit for affected facilities under Sec. 60.52b(d).

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

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

(3) The owner or operator of an affected facility subject to the nitrogen oxides limit under Sec. 60.52b(d) shall conduct an initial performance test for nitrogen oxides as required under Sec. 60.8 of subpart A of this part. Compliance with the nitrogen oxides emission limit shall be determined by using the continuous emission monitoring system specified in paragraph (h)(4) of this section 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 limit under Sec. 60.52b(d) 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 Sec. 60.8 of subpart A of this part, compliance with the emission limit for nitrogen oxides required under Sec. 60.52b(d) shall be determined based on the 24-hour daily arithmetic average of the hourly emission concentrations using continuous emission monitoring system outlet data.

(6) At a minimum, valid continuous emission monitoring system hourly averages shall be obtained as specified in paragraphs (h)(6)(i) and (h)(6)(ii) of this section 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.

40 CFR 60, SUBPART Eb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

(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 (h)(5) of this section 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 Sec. 60.13(e)(2) of subpart A of this part.

(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 (h)(6) of this section are not met.

(9) The procedures under Sec. 60.13 of subpart A of this part 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 Sec. 60.8 of subpart A of this part.

(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 this part and shall follow the procedures and methods specified in paragraphs (h)(10)(i) and (h)(10)(ii) of this section.

(i) During each relative accuracy test run of the continuous emission monitoring system required by Performance Specification 2 of appendix B of this part, 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 (h)(10)(i)(A) and (h)(10)(i)(B) of this section.

(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 this part.

(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.

(i) The procedures specified in paragraphs (i)(1) through (i)(12) of this section shall be used for determining compliance with the operating requirements under Sec. 60.53b.

(1) Compliance with the carbon monoxide emission limits in Sec. 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 Sec. 60.53b(a) shall be determined using a 24-hour daily arithmetic average.

NSPS SUBPART Eb

40 CFR 60, SUBPART Eb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

(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)(3)(i) through (i)(3)(iii) of this section.

(i) The continuous emission monitoring system shall be operated according to Performance Specification 4A in appendix B of this part.

(ii) During each relative accuracy test run of the continuous emission monitoring system required by Performance Specification 4A in appendix B of this part, 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 (i)(3)(ii)(A) and (i)(3)(ii)(B) of this section.

(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 (i)(1) and (i)(2) of this section 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 paragraph (b)(6) of this section.

(6) The procedures specified in paragraphs (i)(6)(i) through (i)(6)(v) of this section shall be used to determine compliance with load level requirements under Sec. 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 Sec. 60.17 of subpart A of this part) shall be used for calculating the steam (or feedwater) flow required under paragraph (i)(6)(i) of this section. 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 Sec. 60.17 of subpart A of this part) shall be followed for design, construction, installation, calibration, and use of nozzles and orifices except as specified in (i)(6)(iii) of this section.

(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 Sec. 60.53b(c), the owner or operator of an affected facility shall install, calibrate,

NSPS SUBPART Eb

40 CFR 60, SUBPART Eb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

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 Sec. 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 Sec. 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)(10)(i) and (i)(10)(ii) of this section 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 paragraph (i) of this section even if the minimum data requirements of paragraph (i)(10) of this section 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 this part.

(j) The procedures specified in paragraphs (j)(1) and (j)(2) of this section shall be used for calculating municipal waste combustor unit capacity as defined under Sec. 60.51b.

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

NSPS SUBPART Eb

40 CFR 60, SUBPART Eb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

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

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

(2) For batch feed municipal waste combustor units, municipal waste combustor unit capacity shall be calculated as the maximum design amount of municipal solid waste that can be charged per batch multiplied by the maximum number of batches that could be processed in a 24-hour period. The maximum number of batches that could be processed in a 24-hour period is calculated as 24 hours divided by the design number of hours required to process one batch of municipal solid waste, and may include fractional batches (e.g., if one batch requires 16 hours, then 24/16, or 1.5 batches, could be combusted in a 24-hour period). For batch

combustors that are designed based on heat capacity, the design heating value of 12,800 kilojoules per kilogram for combustors firing refuse-derived fuel and a heating value of 10,500 kilojoules per kilogram for

combustors firing municipal solid waste that is not refuse-derived fuel shall be used in calculating the municipal waste combustor unit capacity in megagrams per day of municipal solid waste.

(k) The procedures specified in paragraphs (k)(1) through (k)(4) of this section shall be used for determining compliance with the fugitive ash emission limit under Sec. 60.55b.

(1) The EPA Reference Method 22 shall be used for determining compliance with the fugitive ash emission limit under Sec. 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 Sec. 60.55b.

(3) The owner or operator of an affected facility shall conduct an initial performance test for fugitive ash emissions as required under Sec. 60.8 of subpart A of this part.

(4) Following the date that the initial performance test for fugitive ash emissions is completed or is required to be completed under Sec. 60.8 of subpart A of this part 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).

(l) The procedures specified in paragraphs (l)(1) through (l)(3) of this section shall be used to determine compliance with the opacity limit for air curtain incinerators under Sec. 60.56b.

(1) The EPA Reference Method 9 shall be used for determining compliance with the opacity limit.

(2) The owner or operator of the air curtain incinerator shall conduct an initial performance test for opacity as required under Sec. 60.8 of subpart A of this part.

(3) Following the date that the initial performance test is completed or is required to be completed under Sec. 60.8 of subpart A of this part, the owner or operator of the air curtain incinerator shall conduct a performance test for opacity on an annual basis (no more than 12 calendar months following the previous performance test).

(m) The owner or operator of an affected facility where activated carbon injection is used to comply with the mercury emission limit under Sec. 60.52b(a)(5), or the dioxin/furan emission limits under Sec.

40 CFR 60, SUBPART Eb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

60.52(b)(c), or the dioxin/furan emission level specified in Sec. 60.58b(g)(5)(iii) shall follow the procedures specified in paragraphs (m)(1) through (m)(3) of this section.

(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 (m)(1)(i) and (m)(1)(ii) of this section.

(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 (m)(1)(i) and (m)(1)(ii) of this section.

(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 (m)(3)(i) and (m)(3)(ii) of this section.

(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 (m)(1) of this section, and sum the results for all affected facilities at the plant for the total number of hours of operation during the calendar quarter. [60 FR 65419, Dec. 19, 1995, as amended at 62 FR 45126, Aug. 25, 1997]

Sec. 60.59b Reporting and recordkeeping requirements.

(a) The owner or operator of an affected facility with a capacity to combust greater than 250 tons per day shall submit, on or before the date the application for a construction permit is submitted under 40 CFR part 51, subpart I, or part 52, as applicable, the items specified in paragraphs (a)(1) through (a)(4) of this section.

(1) The preliminary and final draft materials separation plans required by Sec. 60.57b(a)(1) and (a)(5).

(2) A copy of the notification of the public meeting required by Sec. 60.57b(a)(1)(ii).

(3) A transcript of the public meeting required by Sec. 60.57b(a)(2).

(4) A copy of the document summarizing responses to public comments required by Sec. 60.57b(a)(3).

(b) 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 (b)(1) through (b)(5) of this section.

(1) Intent to construct.

NSPS SUBPART Eb

40 CFR 60, SUBPART Eb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

- (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 Sec. 60.58b(j).
- (5) Documents associated with the siting requirements under Sec. 60.57b (a) and (b), as specified in paragraphs (b)(5)(i) through (b)(5)(v) of this section.
 - (i) The siting analysis required by Sec. 60.57b (b)(1) and (b)(2).
 - (ii) The final materials separation plan for the affected facility required by Sec. 60.57b(a)(10).
 - (iii) A copy of the notification of the public meeting required by Sec. 60.57b(b)(3)(ii).
 - (iv) A transcript of the public meeting required by Sec. 60.57b(b)(4).
 - (v) A copy of the document summarizing responses to public comments required by Sec. 60.57b (a)(9) and (b)(5).
- (c) The owner or operator of an air curtain incinerator subject to the opacity limit under Sec. 60.56b shall provide a notification of construction that includes the information specified in paragraphs (b)(1) through (b)(4) of this section.
- (d) The owner or operator of an affected facility subject to the standards under Secs. 60.52b, 60.53b, 60.54b, 60.55b, and 60.57b shall maintain records of the information specified in paragraphs (d)(1) through (d)(15) of this section, 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 (d)(2)(i) and (d)(2)(ii) of this section.
 - (i) The measurements specified in paragraphs (d)(2)(i)(A) through (d)(2)(i)(D) of this section 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 Sec. 60.58b(c).
 - (B) All 1-hour average sulfur dioxide emission concentrations as specified under Sec. 60.58b(e).
 - (C) All 1-hour average nitrogen oxides emission concentrations as specified under Sec. 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 Sec. 60.58b(i).
 - (ii) The average concentrations and percent reductions, as applicable, specified in paragraphs (d)(2)(ii)(A) through (d)(2)(ii)(D) of this section 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 Sec. 60.58b(e).
 - (B) All 24-hour daily arithmetic average nitrogen oxides emission concentrations as specified under Sec. 60.58b(h).
 - (C) All 4-hour block or 24-hour daily arithmetic average carbon monoxide emission concentrations, as applicable, as specified under Sec. 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 Sec. 60.58b(i).

40 CFR 60, SUBPART Eb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

(3) Identification of the calendar dates when any of the average emission concentrations, percent reductions, or operating parameters recorded under paragraphs (d)(2)(ii)(A) through (d)(2)(ii)(D) of this section, or the opacity levels recorded under paragraph (d)(2)(i)(A) of this section 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 (d)(4)(i) through (d)(4)(v) of this section.

(i) The average carbon mass feed rate (in kilograms per hour or pounds per hour) estimated as required under Sec. 60.58b(m)(1)(i) of this section 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 Sec. 60.58b(m)(1)(ii) of this section 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 Sec. 60.58b(m)(3)(ii) of this section, with supporting calculations.

(iv) The total carbon usage for each calendar quarter estimated as specified by paragraph 60.58b(m)(3) of this section, 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 (d)(6)(i) through (d)(6)(v) of this section 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 (d)(9)(i) and (d)(9)(ii) of this section 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 (d)(9)(i) of this section, the maximum demonstrated municipal waste

NSPS SUBPART Eb

40 CFR 60, SUBPART Eb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

combustor unit load and maximum demonstrated particulate matter control device temperature (for each particulate matter control device).

(10) [Reserved]

(11) For each affected facility subject to the siting provisions under Sec. 60.57b, the siting analysis, the final materials separation plan, a record of the location and date of the public meetings, and the documentation of the responses to public comments received at the public meetings.

(12) The records specified in paragraphs (d)(12)(i) through (d)(12)(iii) of this section.

(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 Sec. 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 Sec. 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 Sec. 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 Sec. 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 (d)(4)(iii) of this section were less than either of the hourly carbon feed rates estimated during performance tests for mercury or dioxin/furan emissions and recorded under paragraphs (d)(4)(i) and (d)(4)(ii) of this section, respectively, with reasons for such feed rates and a description of corrective actions taken.

(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 (d)(4)(v) of this section are below the level(s) estimated during the performance tests as specified in Sec. 60.58b(m)(1)(i) and Sec. 60.58b(m)(1)(ii) of this section, with reasons for such occurrences and a description of corrective actions taken.

(e) The owner or operator of an air curtain incinerator subject to the opacity limit under Sec. 60.56b shall maintain records of results of the initial opacity performance test and subsequent performance tests required by Sec. 60.58b(l) for a period of at least 5 years.

(f) The owner or operator of an affected facility shall submit the information specified in paragraphs (f)(1) through (f)(6) of this section in the initial performance test report.

(1) The initial performance test data as recorded under paragraphs (d)(2)(ii)(A) through (d)(2)(ii)(D) of this section 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.

40 CFR 60, SUBPART Eb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

(2) The test report documenting the initial performance test recorded under paragraph (d)(9) of this section 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 paragraph (d)(9) of this section.

(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 paragraph (d)(4)(i) of this section.

(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 paragraph (d)(4)(ii) of this section.

(g) 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 (g)(1) through (g)(4) of this section, 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 (g)(1)(i) through (g)(1)(v) of this section.

(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 paragraph (d)(9) of this section.

(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 paragraphs (d)(2)(ii)(A) through (d)(2)(ii)(D) of this section.

(iii) List the highest opacity level measured, based on the data recorded under paragraph (d)(2)(i)(A) of this section.

(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 paragraph (d)(6) of this section.

(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 paragraph (d)(7) of this section.

(2) The summary of data reported under paragraph (g)(1) of this section shall also provide the types of data specified in paragraphs (g)(1)(i) through (g)(1)(vi) of this section 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.

NSPS SUBPART Eb

40 CFR 60, SUBPART Eb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL WASTE COMBUSTORS

(3) The summary of data including the information specified in paragraphs (g)(1) and (g)(2) of this section 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 Sec. 60.58b(g)(5)(iii) of this section during the following calendar year.

(h) The owner or operator of an affected facility shall submit a semiannual report that includes the information specified in paragraphs (h)(1) through (h)(5) of this section 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 (h)(6) of this section.

(1) The semiannual report shall include information recorded under paragraph (d)(3) of this section 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 paragraph (d)(3) of this section and reported as required by paragraph (h)(1) of this section, 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 paragraphs (d)(2)(ii)(A) through (d)(2)(ii)(D) and (d)(2)(i)(A) of this section, as applicable.

(3) If the test reports recorded under paragraph (d)(9) of this section 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 paragraph (d)(15) of this section 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 (h)(4) of this section, the semiannual report shall include the carbon feed rate data recorded under paragraph (d)(4)(iii) of this section.

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

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

(i) The owner or operator of an air curtain incinerator subject to the opacity limit under Sec. 60.56b shall submit the results of the initial opacity performance test and all subsequent annual performance tests recorded under paragraph (e) of this section. Annual performance tests shall be submitted by February 1 of the year following the year of the performance test.

NSPS SUBPART Eb

**40 CFR 60, SUBPART Eb - STANDARDS OF PERFORMANCE FOR LARGE MUNICIPAL
WASTE COMBUSTORS**

(j) All reports specified under paragraphs (a), (b), (c), (f), (g), (h), and (i) of this section 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.

(k) All records specified under paragraphs (d) and (e) of this section shall be maintained onsite in either paper copy or computer-readable format, unless an alternative format is approved by the Administrator.

(l) If the owner or operator of an affected facility would prefer a different annual or semiannual date for submitting the periodic reports required by paragraphs (g), (h) and (i) of this section, then the dates may be changed by mutual agreement between the owner or operator and the Administrator according to the procedures specified in Sec. 60.19(c) of subpart A of this part. [60 FR 65419, Dec. 19, 1995, as amended at 62 FR 45121, 45127, Aug. 25, 1997]

APPINDIX RR

FACILITY-WIDE REPORTING REQUIREMENTS

(Version Dated 1/05/2011)

RR1. Reporting Schedule. This table summarizes information for convenience purposes only. It does not supersede any of the terms or conditions of this permit.

Report	Reporting Deadline(s)	Related Condition(s)
Plant Problems/Permit Deviations	Immediately upon occurrence (See RR2.d.)	RR2, RR3
Malfunction Excess Emissions Report	Quarterly (if requested)	RR3
Semi-Annual Monitoring Report	Every 6 months	RR4
Annual Operating Report	April 1	RR5
Annual Emissions Fee Form and Fee	March 1	RR6
Annual Statement of Compliance	Within 60 days after the end of each calendar year (or more frequently if specified by Rule 62-213.440(2), F.A.C., or by any other applicable requirement); and Within 60 days after submittal of a written agreement for transfer of responsibility, or Within 60 days after permanent shutdown.	RR7
Notification of Administrative Permit Corrections	As needed	RR8
Notification of Startup after Shutdown for More than One Year	Minimum of 60 days prior to the intended startup date or, if emergency startup, as soon as possible after the startup date is ascertained	RR9
Permit Renewal Application	225 days prior to the expiration date of permit	TV17
Test Reports	Maximum 45 days following compliance tests	TR8

{Permitting Note: See permit Section III. Emissions Units and Specific Conditions, for any additional Emission Unit-specific reporting requirements.}

RR2. Reports of Problems.

- a. **Plant Operation-Problems.** If the permittee is temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the permittee shall immediately notify the Department. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules.
- b. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - (1) A description of and cause of noncompliance; and
 - (2) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

APPENDIX RR

FACILITY-WIDE REPORTING REQUIREMENTS

(Version Dated 1/05/2011)

- c. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.
- d. "Immediately" shall mean the same day, if during a workday (i.e., 8:00 a.m. - 5:00 p.m.), or the first business day after the incident, excluding weekends and holidays; and, for purposes of Rule 62-4.160(15) and 40 CFR 70.6(a)(3)(iii)(B), "promptly" or "prompt" shall have the same meaning as "immediately".

[Rule 62-4.130, Rule 62-4.160(8), Rule 62-4.160(15), and Rule 62-213.440(1)(b), F.A.C.; 40 CFR 70.6(a)(3)(iii)(B)]

RR3. Reports of Deviations from Permit Requirements. The permittee shall report in accordance with the requirements of Rule 62-210.700(6), F.A.C. (below), and Rule 62-4.130, F.A.C. (condition RR2.), deviations from permit requirements, including those attributable to upset conditions as defined in the permit. Reports shall include the probable cause of such deviations, and any corrective actions or preventive measures taken.

Rule 62-210.700(6): In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. (See condition RR2.). A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.

[Rules 62-213.440(1)(b)3.b., and 62-210.700(6)F.A.C.]

RR4. Semi-Annual Monitoring Reports. The permittee shall submit reports of any required monitoring at least every six (6) months. All instances of deviations from permit requirements must be clearly identified in such reports. [Rule 62-213.440(1)(b)3.a., F.A.C.]

RR5. Annual Operating Report.

- a. The permittee shall submit to the Compliance Authority, each calendar year, on or before April 1, a completed DEP Form No 62-210.900(5), "Annual Operating Report for Air Pollutant Emitting Facility", for the preceding calendar year.
- b. Emissions shall be computed in accordance with the provisions of Rule 62-210.370(2), F.A.C. [Rules 62-210.370(2) & (3), and 62-213.440(3)(a)2., F.A.C.]

RR6. Annual Emissions Fee Form and Fee. Each Title V source permitted to operate in Florida must pay between January 15 and March 1 of each year, an annual emissions fee in an amount determined as set forth in Rule 62-213.205(1), F.A.C.

- a. If the Department has not received the fee by February 15 of the year following the calendar year for which the fee is calculated, the Department will send the primary responsible official of the Title V source a written warning of the consequences for failing to pay the fee by March 1. If the fee is not postmarked by March 1 of the year due, the Department shall impose, in addition to the fee, a penalty of 50 percent of the amount of the fee unpaid plus interest on such amount computed in accordance with Section 220.807, F.S. If the Department determines that a submitted fee was inaccurately calculated, the Department shall either refund to the permittee any amount overpaid or notify the permittee of any amount underpaid. The Department shall not impose a penalty or interest on any amount underpaid, provided that the permittee has timely remitted payment of at least 90 percent of the amount determined to be due and remits full payment within 60 days after receipt of notice of the amount underpaid. The Department shall waive the collection of underpayment and shall not refund overpayment of the fee, if the amount is less than 1 percent of the fee due, up to \$50.00. The Department shall make every effort to provide a timely assessment of the adequacy of the submitted fee. Failure to pay timely any required annual emissions fee, penalty, or interest constitutes grounds for permit revocation pursuant to Rule 62-4.100, F.A.C.

APPENDIX RR

FACILITY-WIDE REPORTING REQUIREMENTS

(Version Dated 1/05/2011)

- b. Any documentation of actual hours of operation, actual material or heat input, actual production amount, or actual emissions used to calculate the annual emissions fee shall be retained by the owner for a minimum of five (5) years and shall be made available to the Department upon request.
- c. A completed DEP Form 62-213.900(1), "Major Air Pollution Source Annual Emissions Fee Form", must be submitted by a responsible official with the annual emissions fee.
[Rules 62-213.205(1), (1)(g), (1)(i) & (1)(j), F.A.C.]

RR7. Annual Statement of Compliance.

- a. The permittee shall submit a Statement of Compliance with all terms and conditions of the permit that includes all the provisions of 40 CFR 70.6(c)(5)(iii), incorporated by reference at Rule 62-204.800, F.A.C., using DEP Form No. 62-213.900(7). Such statement shall be accompanied by a certification in accordance with Rule 62-213.420(4), F.A.C., for Title V requirements and with Rule 62-214.350, F.A.C., for Acid Rain requirements. Such statements shall be submitted (postmarked) to the Department and EPA:
 - (1) Annually, within 60 days after the end of each calendar year during which the Title V permit was effective, or more frequently if specified by Rule 62-213.440(2), F.A.C., or by any other applicable requirement; and
 - (2) Within 60 days after submittal of a written agreement for transfer of responsibility as required pursuant to 40 CFR 70.7(d)(1)(iv), adopted and incorporated by reference at Rule 62-204.800, F.A.C., or within 60 days after permanent shutdown of a facility permitted under Chapter 62-213, F.A.C.; provided that, in either such case, the reporting period shall be the portion of the calendar year the permit was effective up to the date of transfer of responsibility or permanent facility shutdown, as applicable.
- b. In lieu of individually identifying all applicable requirements and specifying times of compliance with, non-compliance with, and deviation from each, the responsible official may use DEP Form No. 62-213.900(7) as such statement of compliance so long as the responsible official identifies all reportable deviations from and all instances of non-compliance with any applicable requirements and includes all information required by the federal regulation relating to each reportable deviation and instance of non-compliance.
- c. The responsible official may treat compliance with all other applicable requirements as a surrogate for compliance with Rule 62-296.320(2), Objectionable Odor Prohibited.

[Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]

RR8. Notification of Administrative Permit Corrections.

A facility owner shall notify the Department by letter of minor corrections to information contained in a permit. Such notifications shall include:

- a. Typographical errors noted in the permit;
- b. Name, address or phone number change from that in the permit;
- c. A change requiring more frequent monitoring or reporting by the permittee;
- d. A change in ownership or operational control of a facility, subject to the following provisions:
 - (1) The Department determines that no other change in the permit is necessary;
 - (2) The permittee and proposed new permittee have submitted an Application for Transfer of Air Permit, and the Department has approved the transfer pursuant to Rule 62-210.300(7), F.A.C.; and
 - (3) The new permittee has notified the Department of the effective date of sale or legal transfer.
- e. Changes listed at 40 CFR 72.83(a)(1), (2), (6), (9) and (10), adopted and incorporated by reference at Rule 62-204.800, F.A.C., and changes made pursuant to Rules 62-214.340(1) and (2), F.A.C., to Title V sources subject to emissions limitations or reductions pursuant to 42 USC ss. 7651-7651o;

APPENDIX RR

FACILITY-WIDE REPORTING REQUIREMENTS

(Version Dated 1/05/2011)

f. Changes listed at 40 CFR 72.83(a)(11) and (12), adopted and incorporated by reference at Rule 62-204.800, F.A.C., to Title V sources subject to emissions limitations or reductions pursuant to 42 USC ss. 7651-7651o, provided the notification is accompanied by a copy of any EPA determination concerning the similarity of the change to those listed at Rule 62-210.360(1)(e), F.A.C.; and

g. Any other similar minor administrative change at the source.
[Rule 62-210.360, F.A.C.]

RR9. Notification of Startup. The owners or operator of any emissions unit or facility which has a valid air operation permit which has been shut down more than one year, shall notify the Department in writing of the intent to start up such emissions unit or facility, a minimum of 60 days prior to the intended startup date.

a. The notification shall include information as to the startup date, anticipated emission rates or pollutants released, changes to processes or control devices which will result in changes to emission rates, and any other conditions which may differ from the valid outstanding operation permit.

b. If, due to an emergency, a startup date is not known 60 days prior thereto, the owner shall notify the Department as soon as possible after the date of such startup is ascertained.

[Rule 62-210.300(5), F.A.C.]

RR10. Report Submission. The permittee shall submit all compliance related notifications and reports required of this permit to the Compliance Authority. {See front of permit for address and phone number.}

RR11. EPA Report Submission. Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to: Air, Pesticides & Toxics Management Division, United States Environmental Protection Agency, Region 4, Sam Nunn Atlanta Federal Center, 61 Forsyth Street SW, Atlanta, GA 30303-8960. Phone: 404/562-9077.

RR12. Acid Rain Report Submission. Acid Rain Program Information shall be submitted, as necessary, to: Department of Environmental Protection, 2600 Blair Stone Road, Mail Station #5510, Tallahassee, Florida 32399-2400. Phone: 850/488-6140. Fax: 850/922-6979.

RR13. Report Certification. All reports shall be accompanied by a certification by a responsible official, pursuant to Rule 62-213.420(4), F.A.C. [Rule 62-213.440(1)(b)3.c, F.A.C.]

RR14. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information. [Rule 62-213.420(4), F.A.C.]

RR15. Confidential Information. Whenever an applicant submits information under a claim of confidentiality pursuant to Section 403.111, F.S., the applicant shall also submit a copy of all such information and claim directly to EPA. Any permittee may claim confidentiality of any data or other information by complying with this procedure. [Rules 62-213.420(2), and 62-213.440(1)(d)6., F.A.C.]

APPENDIX RR

FACILITY-WIDE REPORTING REQUIREMENTS

(Version Dated 1/05/2011)

RR16. Forms and Instructions. The forms used by the Department in the Title V source operation program are adopted and incorporated by reference in Rule 62-213.900, F.A.C. The forms are listed by rule number, which is also the form number, and with the subject, title, and effective date. Copies of forms may be obtained by writing to the Department of Environmental Protection, Division of Air Resource Management, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, by contacting the appropriate permitting authority or by accessing the Department's web site at:

<http://www.dep.state.fl.us/air/rules/forms.htm>.

- a. Major Air Pollution Source Annual Emissions Fee Form (Effective 10/12/2008).
- b. Statement of Compliance Form (Effective 06/02/2002).
- c. Responsible Official Notification Form (Effective 06/02/2002).

[Rule 62-213.900, F.A.C.: Forms (1), (7) and (8)]

APPENDIX TR
FACILITY-WIDE TESTING REQUIREMENTS
(Version Dated 9/12/2008)

Unless otherwise specified in the permit, the following testing requirements apply to each emissions unit for which testing is required. The terms "stack" and "duct" are used interchangeably in this appendix.

- TR1. 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 two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(1), F.A.C.]
- TR2. Operating Rate During Testing.** Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. 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. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. [Rule 62-297.310(2), F.A.C.]
- TR3. Calculation of Emission Rate.** For each emissions performance test, 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.]
- TR4. 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.

APPENDIX TR

FACILITY-WIDE TESTING REQUIREMENTS

(Version Dated 9/12/2008)

- b. *Minimum Sample Volume.* Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet.
- c. *Required Flow Rate Range.* For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- d. *Calibration of Sampling Equipment.* Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C.

TABLE 297.310-1 CALIBRATION SCHEDULE			
ITEM	MINIMUM CALIBRATION FREQUENCY	REFERENCE INSTRUMENT	TOLERANCE
Liquid in glass thermometer	Annually	ASTM Hg in glass ref. thermometer or equivalent or thermometric points	+/-2%
Bimetallic thermometer	Quarterly	Calib. liq. in glass	5° F
Thermocouple	Annually	ASTM Hg in glass ref. thermometer, NBS calibrated reference and potentiometer	5° F
Barometer	Monthly	Hg barometer or NOAA station	+/-1% scale
Pitot Tube	When required or when damaged	By construction or measurements in wind tunnel D greater than 16" and standard pitot tube	See EPA Method 2, Fig. 2-2 & 2-3
Probe Nozzles	Before each test or when nicked, dented, or corroded	Micrometer	+/- 0.001" mean of at least three readings; Max. deviation between readings, 0.004"
Dry Gas Meter and Orifice Meter	1. Full Scale: When received, when 5% change observed, annually	Spirometer or calibrated wet test or dry gas test meter	2%
	2. One Point: Semiannually		
	3. Check after each test series	Comparison check	5%

- 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.]

APPENDIX TR

FACILITY-WIDE TESTING REQUIREMENTS

(Version Dated 9/12/2008)

TR5. 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.]

TR6. Sampling Facilities. Permittees that are required to sample mass emissions from point sources shall install stack sampling ports and provide sampling facilities that meet the requirements of this condition. Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. All stack sampling facilities must also comply with all applicable Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E.

- a. *Permanent Test Facilities.* The owner or operator of an emissions unit for which a compliance test, other than a visible emissions test, is required on at least an annual basis, shall install and maintain permanent stack sampling facilities.
- b. *Temporary Test Facilities.* The owner or operator of an emissions unit that is not required to conduct a compliance test on at least an annual basis may use permanent or temporary stack sampling facilities. If the owner chooses to use temporary sampling facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.
- c. *Sampling Ports.*
 - (1) All sampling ports shall have a minimum inside diameter of 3 inches.
 - (2) The ports shall be capable of being sealed when not in use.
 - (3) The sampling ports shall be located in the stack at least 2 stack diameters or equivalent diameters downstream and at least 0.5 stack diameter or equivalent diameter upstream from any fan, bend, constriction or other flow disturbance.
 - (4) For emissions units for which a complete application to construct has been filed prior to December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 15 feet or less. For stacks with a larger diameter, four sampling ports, each 90 degrees apart, shall be installed. For emissions units for which a complete application to construct is filed on or after December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 10 feet or less. For stacks with larger diameters, four sampling ports, each 90 degrees apart, shall be installed. On horizontal circular ducts, the ports shall be located so that the probe can enter the stack vertically, horizontally or at a 45 degree angle.
 - (5) On rectangular ducts, the cross sectional area shall be divided into the number of equal areas in accordance with EPA Method 1. Sampling ports shall be provided which allow access to each sampling point. The ports shall be located so that the probe can be inserted perpendicular to the gas flow.
- d. *Work Platforms.*
 - (1) Minimum size of the working platform shall be 24 square feet in area. Platforms shall be at least 3 feet wide.
 - (2) On circular stacks with 2 sampling ports, the platform shall extend at least 110 degrees around the stack.
 - (3) On circular stacks with more than two sampling ports, the work platform shall extend 360 degrees

APPENDIX TR

FACILITY-WIDE TESTING REQUIREMENTS

(Version Dated 9/12/2008)

- around the stack.
- (4) All platforms shall be equipped with an adequate safety rail (ropes are not acceptable), toe board, and hinged floor-opening cover if ladder access is used to reach the platform. The safety rail directly in line with the sampling ports shall be removable so that no obstruction exists in an area 14 inches below each sample port and 6 inches on either side of the sampling port.
- e. *Access to Work Platform.*
- (1) Ladders to the work platform exceeding 15 feet in length shall have safety cages or fall arresters with a minimum of 3 compatible safety belts available for use by sampling personnel.
- (2) Walkways over free-fall areas shall be equipped with safety rails and toe boards.
- f. *Electrical Power.*
- (1) A minimum of two 120-volt AC, 20-amp outlets shall be provided at the sampling platform within 20 feet of each sampling port.
- (2) If extension cords are used to provide the electrical power, they shall be kept on the plant's property and be available immediately upon request by sampling personnel.
- g. *Sampling Equipment Support.*
- (1) A three-quarter inch eyebolt and an angle bracket shall be attached directly above each port on vertical stacks and above each row of sampling ports on the sides of horizontal ducts.
- (a) The bracket shall be a standard 3 inch × 3 inch × one-quarter inch equal-legs bracket which is 1 and one-half inches wide. A hole that is one-half inch in diameter shall be drilled through the exact center of the horizontal portion of the bracket. The horizontal portion of the bracket shall be located 14 inches above the centerline of the sampling port.
- (b) A three-eighth inch bolt which protrudes 2 inches from the stack may be substituted for the required bracket. The bolt shall be located 15 and one-half inches above the centerline of the sampling port.
- (c) The three-quarter inch eyebolt shall be capable of supporting a 500 pound working load. For stacks that are less than 12 feet in diameter, the eyebolt shall be located 48 inches above the horizontal portion of the angle bracket. For stacks that are greater than or equal to 12 feet in diameter, the eyebolt shall be located 60 inches above the horizontal portion of the angle bracket. If the eyebolt is more than 120 inches above the platform, a length of chain shall be attached to it to bring the free end of the chain to within safe reach from the platform.
- (2) A complete monorail or dual rail arrangement may be substituted for the eyebolt and bracket.
- (3) When the sample ports are located in the top of a horizontal duct, a frame shall be provided above the port to allow the sample probe to be secured during the test.

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

TR7. 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.*

- (1) The owner or operator of a new or modified emissions unit that is subject to an emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining an operation permit for such emissions unit.
- (2) For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid and/or solid fuel for more than 400 hours other than during startup.
- (3) The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct

APPENDIX TR

FACILITY-WIDE TESTING REQUIREMENTS

(Version Dated 9/12/2008)

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 sub-subparagraph 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.
 - (6) For fossil fuel steam generators on a semi-annual particulate matter emission compliance testing schedule, a compliance test shall not be required for any six-month period in which liquid and/or solid fuel is not burned for more than 200 hours other than during startup.
 - (7) For emissions units electing to conduct particulate matter emission compliance testing quarterly pursuant to paragraph 62-296.405(2)(a), F.A.C., a compliance test shall not be required for any quarter in which liquid and/or solid fuel is not burned for more than 100 hours other than during startup.
 - (8) Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.
 - (9) The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
 - (10) An annual compliance test conducted for visible emissions shall not be required for units exempted from air permitting pursuant to subsection 62-210.300(3), F.A.C.; units determined to be insignificant pursuant to subparagraph 62-213.300(2)(a)1., A.C., or paragraph 62-213.430(6)(b), F.A.C.; or units permitted under the General Permit provisions in paragraph 62-210.300(4)(a) or Rule 62-213.300, F.A.C., unless the general permit specifically requires such testing.
- b. *Special Compliance Tests.* When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained 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.
 - 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 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

FACILITY-WIDE TESTING REQUIREMENTS

(Version Dated 9/12/2008)

compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of paragraph 62-297.310(7)(b), F.A.C., shall apply.

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

TR8. Test Reports.

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

APPENDIX TR

FACILITY-WIDE TESTING REQUIREMENTS

(Version Dated 9/12/2008)

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.]

APPENDIX TV

TITLE V GENERAL CONDITIONS

(Version Dated 11/01/2010)

Operation

- TV1. General Prohibition.** A permitted installation may only be operated, maintained, constructed, expanded or modified in a manner that is consistent with the terms of the permit. [Rule 62-4.030, Florida Administrative Code (F.A.C.)]
- TV2. Validity.** This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department. [Rule 62-4.160(2), F.A.C.]
- TV3. Proper Operation and Maintenance.** The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules. [Rule 62-4.160(6), F.A.C.]
- TV4. Not Federally Enforceable. Health, Safety and Welfare.** To ensure protection of public health, safety, and welfare, any construction, modification, or operation of an installation which may be a source of pollution, shall be in accordance with sound professional engineering practices pursuant to Chapter 471, F.S. [Rule 62-4.050(3), F.A.C.]
- TV5. Continued Operation.** An applicant making timely and complete application for permit, or for permit renewal, shall continue to operate the source under the authority and provisions of any existing valid permit or Florida Electrical Power Plant Siting Certification, and in accordance with applicable requirements of the Acid Rain Program and applicable requirements of the CAIR Program, until the conclusion of proceedings associated with its permit application or until the new permit becomes effective, whichever is later, provided the applicant complies with all the provisions of subparagraphs 62-213.420(1)(b)3., F.A.C. [Rules 62-213.420(1)(b)2., F.A.C.]
- TV6. Changes Without Permit Revision.** Title V sources having a valid permit issued pursuant to Chapter 62-213, F.A.C., may make the following changes without permit revision, provided that sources shall maintain source logs or records to verify periods of operation:
- a. Permitted sources may change among those alternative methods of operation allowed by the source's permit as provided by the terms of the permit;
 - b. A permitted source may implement operating changes, as defined in Rule 62-210.200, F.A.C., after the source submits any forms required by any applicable requirement and provides the Department and EPA with at least 7 days written notice prior to implementation. The source and the Department shall attach each notice to the relevant permit;
 - (1) The written notice shall include the date on which the change will occur, and a description of the change within the permitted source, the pollutants emitted and any change in emissions, and any term or condition becoming applicable or no longer applicable as a result of the change;
 - (2) The permit shield described in Rule 62-213.460, F.A.C., shall not apply to such changes;
 - c. Permitted sources may implement changes involving modes of operation only in accordance with Rule 62-213.415, F.A.C.
[Rule 62-213.410, F.A.C.]
- TV7. Circumvention.** No person shall circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly. [Rule 62-210.650, F.A.C.]

Compliance

- TV8. Compliance with Chapter 403, F.S., and Department Rules.** Except as provided at Rule 62-213.460, Permit Shield, F.A.C., the issuance of a permit does not relieve any person from complying with the requirements of Chapter 403, F.S., or Department rules. [Rule 62-4.070(7), F.A.C.]

APPENDIX TV

TITLE V GENERAL CONDITIONS

(Version Dated 11/01/2010)

- TV9. Compliance with Federal, State and Local Rules.** Except as provided at Rule 62-213.460, F.A.C., issuance of a permit does not relieve the owner or operator of a facility or an emissions unit from complying with any applicable requirements, any emission limiting standards or other requirements of the air pollution rules of the Department or any other such requirements under federal, state, or local law. [Rule 62-210.300, F.A.C.]
- TV10. Binding and enforceable.** The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions. [Rule 62-4.160(1), F.A.C.]
- TV11. Timely information.** When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly. [Rule 62-4.160(15), F.A.C.]
- TV12. Halting or reduction of source activity.** It shall not be a defense for a permittee in an enforcement action that maintaining compliance with any permit condition would necessitate halting of or reduction of the source activity. [Rule 62-213.440(1)(d)3., F.A.C.]
- TV13. Final permit action.** Any Title V source shall comply with all the terms and conditions of the existing permit until the Department has taken final action on any permit renewal or any requested permit revision, except as provided at Rule 62-213.412(2), F.A.C. [Rule 62-213.440(1)(d)4., F.A.C.]
- TV14. Sudden and unforeseeable events beyond the control of the source.** A situation arising from sudden and unforeseeable events beyond the control of the source which causes an exceedance of a technology-based emissions limitation because of unavoidable increases in emissions attributable to the situation and which requires immediate corrective action to restore normal operation, shall be an affirmative defense to an enforcement action in accordance with the provisions and requirements of 40 CFR 70.6(g)(2) and (3), hereby adopted and incorporated by reference. [Rule 62-213.440(1)(d)5., F.A.C.]
- TV15. Permit Shield.** Except as provided in Chapter 62-213, F.A.C., compliance with the terms and conditions of a permit issued pursuant to Chapter 62-213, F.A.C., shall, as of the effective date of the permit, be deemed compliance with any applicable requirements in effect, provided that the source included such applicable requirements in the permit application. Nothing in this condition or in any permit shall alter or affect the ability of EPA or the Department to deal with an emergency, the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance, or the requirements of the Federal Acid Rain Program or the CAIR Program. [Rule 62-213.460, F.A.C.]
- TV16. Compliance With Federal Rules.** A facility or emissions unit subject to any standard or requirement of 40 CFR, Part 60, 61, 63 or 65, adopted and incorporated by reference at Rule 62-204.800, F.A.C., shall comply with such standard or requirement. Nothing in this chapter shall relieve a facility or emissions unit from complying with such standard or requirement, provided, however, that where a facility or emissions unit is subject to a standard established in Rule 62-296, F.A.C., such standard shall also apply. [Rule 62-296.100(3), F.A.C.]

Permit Procedures

- TV17. Permit Revision Procedures.** The permittee shall revise its permit as required by Rules 62-213.400, 62-213.412, 62-213.420, 62-213.430 & 62-4.080, F.A.C.; and, in addition, the Department shall revise permits as provided in Rule 62-4.080, F.A.C. & 40 CFR 70.7(f).
- TV18. Permit Renewal.** The permittee shall renew its permit as required by Rules 62-4.090, 62.213.420(1) and 62-213.430(3), F.A.C. Permits being renewed are subject to the same requirements that apply to permit

APPENDIX TV

TITLE V GENERAL CONDITIONS

(Version Dated 11/01/2010)

issuance at the time of application for renewal. Permit renewal applications shall contain that information identified in Rules 62-210.900(1) [Application for Air Permit - Long Form], 62-213.420(3) [Required Information], 62-213.420(6) [CAIR Part Form], F.A.C. Unless a Title V source submits a timely and complete application for permit renewal in accordance with the requirements this rule, the existing permit shall expire and the source's right to operate shall terminate. For purposes of a permit renewal, a timely application is one that is submitted 225 days before the expiration of a permit that expires on or after June 1, 2009. No Title V permit will be issued for a new term except through the renewal process. [Rules 62-213.420 & 62-213.430, F.A.C.]

- TV19. Insignificant Emissions Units or Pollutant-Emitting Activities.** The permittee shall identify and evaluate insignificant emissions units and activities as set forth in Rule 62-213.430(6), F.A.C.
- TV20. Savings Clause.** If any portion of the final permit is invalidated, the remainder of the permit shall remain in effect. [Rule 62-213.440(1)(d)1., F.A.C.]
- TV21. Suspension and Revocation.**
- a. Permits shall be effective until suspended, revoked, surrendered, or expired and shall be subject to the provisions of Chapter 403, F.S., and rules of the Department.
 - b. Failure to comply with pollution control laws and rules shall be grounds for suspension or revocation.
 - c. A permit issued pursuant to Chapter 62-4, F.A.C., shall not become a vested property right in the permittee. The Department may revoke any permit issued by it if it finds that the permit holder or his agent:
 - (1) Submitted false or inaccurate information in his application or operational reports.
 - (2) Has violated law, Department orders, rules or permit conditions.
 - (3) Has failed to submit operational reports or other information required by Department rules.
 - (4) Has refused lawful inspection under Section 403.091, F.S.
 - d. No revocation shall become effective except after notice is served by personal services, certified mail, or newspaper notice pursuant to Section 120.60(5), F.S., upon the person or persons named therein and a hearing held if requested within the time specified in the notice. The notice shall specify the provision of the law, or rule alleged to be violated, or the permit condition or Department order alleged to be violated, and the facts alleged to constitute a violation thereof.
[Rule 62-4.100, F.A.C.]
- TV22. Not federally enforceable. Financial Responsibility.** The Department may require an applicant to submit proof of financial responsibility and may require the applicant to post an appropriate bond to guarantee compliance with the law and Department rules. [Rule 62-4.110, F.A.C.]
- TV23. Emissions Unit Reclassification.**
- a. Any emissions unit whose operation permit has been revoked as provided for in Chapter 62-4, F.A.C., shall be deemed permanently shut down for purposes of Rule 62-212.500, F.A.C. Any emissions unit whose permit to operate has expired without timely renewal or transfer may be deemed permanently shut down, provided, however, that no such emissions unit shall be deemed permanently shut down if, within 20 days after receipt of written notice from the Department, the emissions unit owner or operator demonstrates that the permit expiration resulted from inadvertent failure to comply with the requirements of Rule 62-4.090, F.A.C., and that the owner or operator intends to continue the emissions unit in operation, and either submits an application for an air operation permit or complies with permit transfer requirements, if applicable.
 - b. If the owner or operator of an emissions unit which is so permanently shut down, applies to the Department for a permit to reactivate or operate such emissions unit, the emissions unit will be reviewed and permitted as a new emissions unit.
[Rule 62-210.300(6), F.A.C.]
- TV24. Transfer of Permits.** Per Rule 62-4.160(11), F.A.C., this permit is transferable only upon Department approval in accordance with Rule 62-4.120, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department. The permittee

APPENDIX TV

TITLE V GENERAL CONDITIONS

(Version Dated 11/01/2010)

transferring the permit shall remain liable for corrective actions that may be required as a result of any violations occurring prior to the sale or legal transfer of the facility. The permittee shall also comply with the requirements of Rule 62-210.300(7), F.A.C., and use DEP Form No. 62-210.900(7). [Rules 62-4.160(11), 62-4.120, and 62-210.300(7), F.A.C.]

Rights, Title, Liability, and Agreements

TV25. Rights. As provided in Subsections 403.987(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit. [Rule 62-4.160(3), F.A.C.]

TV26. Title. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title. [Rule 62-4.160(4), (F.A.C.)]

TV27. Liability. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of F.S. and Department rules, unless specifically authorized by an order from the Department. [Rule 62-4.160(5), F.A.C.]

TV28. Agreements.

- a. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
 - (1) Have access to and copy any records that must be kept under conditions of the permit;
 - (2) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,
 - (3) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.
- b. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- c. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

[Rules 62-4.160(7), (9), and (10), F.A.C.]

Recordkeeping and Emissions Computation

TV29. Permit. The permittee shall keep this permit or a copy thereof at the work site of the permitted activity. [Rule 62-4.160(12), F.A.C.]

TV30. Recordkeeping.

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These

APPENDIX TV

TITLE V GENERAL CONDITIONS

(Version Dated 11/01/2010)

materials shall be retained at least five (5) years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

- c. Records of monitoring information shall include:
- (1) The date, exact place, and time of sampling or measurements, and the operating conditions at the time of sampling or measurement;
 - (2) The person responsible for performing the sampling or measurements;
 - (3) The dates analyses were performed;
 - (4) The person and company that performed the analyses;
 - (5) The analytical techniques or methods used;
 - (6) The results of such analyses.

[Rules 62-4.160(14) and 62-213.440(1)(b)2., F.A.C.]

TV31. Emissions Computation. Pursuant to Rule 62-210.370, F.A.C., the following required methodologies are to be used by the owner or operator of a facility for computing actual emissions, baseline actual emissions, and net emissions increase, as defined at Rule 62-210.200, F.A.C., and for computing emissions for purposes of the reporting requirements of subsection 62-210.370(3) and paragraph 62-212.300(1)(e), F.A.C., or of any permit condition that requires emissions be computed in accordance with Rule 62-210.370, F.A.C. Rule 62-210.370, F.A.C., is not intended to establish methodologies for determining compliance with the emission limitations of any air permit.

For any of the purposes specified above, the owner or operator of a facility shall compute emissions in accordance with the requirements set forth in this subsection.

- a. *Basic Approach.* The owner or operator shall employ, on a pollutant-specific basis, the most accurate of the approaches set forth below to compute the emissions of a pollutant from an emissions unit; provided, however, that nothing in this rule shall be construed to require installation and operation of any continuous emissions monitoring system (CEMS), continuous parameter monitoring system (CPMS), or predictive emissions monitoring system (PEMS) not otherwise required by rule or permit, nor shall anything in this rule be construed to require performance of any stack testing not otherwise required by rule or permit.
- (1) If the emissions unit is equipped with a CEMS meeting the requirements of paragraph 62-210.370(2)(b), F.A.C., the owner or operator shall use such CEMS to compute the emissions of the pollutant, unless the owner or operator demonstrates to the department that an alternative approach is more accurate because the CEMS represents still-emerging technology.
 - (2) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C., but emissions of the pollutant can be computed pursuant to the mass balance methodology of paragraph 62-210.370(2)(c), F.A.C., the owner or operator shall use such methodology, unless the owner or operator demonstrates to the department that an alternative approach is more accurate.
 - (3) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C., and emissions cannot be computed pursuant to the mass balance methodology, the owner or operator shall use an emission factor meeting the requirements of paragraph 62-210.370(2)(d), F.A.C., unless the owner or operator demonstrates to the department that an alternative approach is more accurate.
- b. *Continuous Emissions Monitoring System (CEMS).*
- (1) An owner or operator may use a CEMS to compute emissions of a pollutant for purposes of this rule provided:
 - (a) The CEMS complies with the applicable certification and quality assurance requirements of 40 CFR Part 60, Appendices B and F, or, for an acid rain unit, the certification and quality assurance requirements of 40 CFR Part 75, all adopted by reference at Rule 62-204.800, F.A.C.; or,
 - (b) The owner or operator demonstrates that the CEMS otherwise represents the most accurate means of computing emissions for purposes of this rule.
 - (2) Stack gas volumetric flow rates used with the CEMS to compute emissions shall be obtained by the most accurate of the following methods as demonstrated by the owner or operator:

APPENDIX TV

TITLE V GENERAL CONDITIONS

(Version Dated 11/01/2010)

- (a) A calibrated flowmeter that records data on a continuous basis, if available; or
 - (b) The average flow rate of all valid stack tests conducted during a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
 - (3) The owner or operator may use CEMS data in combination with an appropriate f-factor, heat input data, and any other necessary parameters to compute emissions if such method is demonstrated by the owner or operator to be more accurate than using a stack gas volumetric flow rate as set forth at subparagraph 62-210.370(2)(b)2., F.A.C., above.
- c. *Mass Balance Calculations.*
- (1) An owner or operator may use mass balance calculations to compute emissions of a pollutant for purposes of this rule provided the owner or operator:
 - (a) Demonstrates a means of validating the content of the pollutant that is contained in or created by all materials or fuels used in or at the emissions unit; and,
 - (b) Assumes that the emissions unit emits all of the pollutant that is contained in or created by any material or fuel used in or at the emissions unit if it cannot otherwise be accounted for in the process or in the capture and destruction of the pollutant by the unit's air pollution control equipment.
 - (2) Where the vendor of a raw material or fuel which is used in or at the emissions unit publishes a range of pollutant content from such material or fuel, the owner or operator shall use the highest value of the range to compute the emissions, unless the owner or operator demonstrates using site-specific data that another content within the range is more accurate.
 - (3) In the case of an emissions unit using coatings or solvents, the owner or operator shall document, through purchase receipts, records and sales receipts, the beginning and ending VOC inventories, the amount of VOC purchased during the computational period, and the amount of VOC disposed of in the liquid phase during such period.
- d. *Emission Factors.*
- (1) An owner or operator may use an emission factor to compute emissions of a pollutant for purposes of this rule provided the emission factor is based on site-specific data such as stack test data, where available, unless the owner or operator demonstrates to the department that an alternative emission factor is more accurate. An owner or operator using site-specific data to derive an emission factor, or set of factors, shall meet the following requirements.
 - (a) If stack test data are used, the emission factor shall be based on the average emissions per unit of input, output, or gas volume, whichever is appropriate, of all valid stack tests conducted during at least a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
 - (b) Multiple emission factors shall be used as necessary to account for variations in emission rate associated with variations in the emissions unit's operating rate or operating conditions during the period over which emissions are computed.
 - (c) The owner or operator shall compute emissions by multiplying the appropriate emission factor by the appropriate input, output or gas volume value for the period over which the emissions are computed. The owner or operator shall not compute emissions by converting an emission factor to pounds per hour and then multiplying by hours of operation, unless the owner or operator demonstrates that such computation is the most accurate method available.
 - (2) If site-specific data are not available to derive an emission factor, the owner or operator may use a published emission factor directly applicable to the process for which emissions are computed. If no directly-applicable emission factor is available, the owner or operator may use a factor based on a similar, but different, process.

APPENDIX TV

TITLE V GENERAL CONDITIONS

(Version Dated 11/01/2010)

- e. *Accounting for Emissions During Periods of Missing Data from CEMS, PEMS, or CPMS.* In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of missing data from CEMS, PEMS, or CPMS using other site-specific data to generate a reasonable estimate of such emissions.
- f. *Accounting for Emissions During Periods of Startup and Shutdown.* In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of startup and shutdown of the emissions unit.
- g. *Fugitive Emissions.* In computing the emissions of a pollutant from a facility or emissions unit, the owner or operator shall account for the fugitive emissions of the pollutant, to the extent quantifiable, associated with such facility or emissions unit.
- h. *Recordkeeping.* The owner or operator shall retain a copy of all records used to compute emissions pursuant to this rule for a period of five years from the date on which such emissions information is submitted to the department for any regulatory purpose.

[Rule 62-210.370(1) & (2), F.A.C.]

Responsible Official

TV32. Designation and Update. The permittee shall designate and update a responsible official as required by Rule 62-213.202, F.A.C.

Prohibitions and Restrictions

TV33. Asbestos. This permit does not authorize any demolition or renovation of the facility or its parts or components which involves asbestos removal. This permit does not constitute a waiver of any of the requirements of Chapter 62-257, F.A.C., and 40 CFR 61, Subpart M, National Emission Standard for Asbestos, adopted and incorporated by reference in Rule 62-204.800, F.A.C. Compliance with Chapter 62-257, F.A.C., and 40 CFR 61, Subpart M, Section 61.145, is required for any asbestos demolition or renovation at the source. [40 CFR 61; Rule 62-204.800, F.A.C.; and, Chapter 62-257, F.A.C.]

TV34. Refrigerant Requirements. Any facility having refrigeration equipment, including air conditioning equipment, which uses a Class I or II substance (listed at 40 CFR 82, Subpart A, Appendices A and B), and any facility which maintains, services, or repairs motor vehicles using a Class I or Class II substance as refrigerant must comply with all requirements of 40 CFR 82, Subparts B and F, and with Chapter 62-281, F.A.C.

TV35. Open Burning Prohibited. Open burning is prohibited unless performed in accordance with the provisions of Rule 62-296.320(3) or Chapter 62-256, F.A.C.

TV36. Heavy-Duty Vehicle Idling Reduction. The permittee shall only allow idling of heavy-duty diesel engine powered motor vehicles in accordance with the following provisions:

- a. *Applicability.* This rule applies to any heavy-duty diesel engine powered motor vehicle. For the purposes of this rule:
 - (1) Heavy-duty diesel engine powered motor vehicle means a motor vehicle:
 - (a) With a gross vehicle weight rating equal to or greater than 8,500 pounds;
 - (b) Used on roads for the transportation of passengers or freight; and
 - (c) Serving a commercial, governmental, or public purpose.
 - (2) Gross vehicle weight rating means the value specified by the manufacturer as the maximum design loaded weight of a single vehicle.
- b. *Requirement.* Owners or operators of heavy-duty diesel engine powered motor vehicles are prohibited from idling for more than five consecutive minutes. Idling is the continuous operation of a vehicle's main drive engine while the vehicle is stopped.
- c. *Exemptions.* The idling restriction of subsection 62-285.420(2), F.A.C., shall not apply:

APPENDIX TV

TITLE V GENERAL CONDITIONS

(Version Dated 11/01/2010)

- (1) To idling while stopped for traffic conditions over which the driver has no control, including being stopped for an official traffic control device or signal, in a line of traffic, at a railroad crossing, at a construction zone, or at the direction of law enforcement;
- (2) To idling of buses 10 minutes prior to passenger loading and when passengers are onboard if needed for passenger comfort;
- (3) To idling of an armored vehicle in which a person remains inside the vehicle while guarding the contents of the vehicle or while the vehicle is being loaded or unloaded.
- (4) If idling is necessary for a police, fire, ambulance, public safety, military, or other vehicle being used in an emergency or training capacity;
- (5) If idling is necessary to verify that the vehicle is in safe operating condition as required by law and that all equipment is in good working order, either as part of a daily vehicle inspection or as otherwise needed, provided that engine idling is mandatory for such verification;
- (6) If idling is necessary to accomplish work for which the vehicle was designed, other than propulsion, for example: collecting solid waste or recyclable material; controlling cargo temperature; or operating a lift, crane, pump, drill, hoist, mixer, or other auxiliary equipment other than a heater or air conditioner;
- (7) If idling is necessary to operate defrosters, heaters, air conditioners, or other equipment to prevent a safety or health emergency, but not solely for the comfort of the driver;
- (8) To idling while the driver is sleeping or resting in a sleeper berth. This exemption expires at midnight September 30, 2013.

[Rule 62-285.420, F.A.C.]

APPENDIX U

LIST OF UNREGULATED EMISSIONS UNITS AND/OR ACTIVITIES.

Unregulated Emissions Units and/or Activities. An emissions unit which emits no “emissions-limited pollutant” and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit-specific emissions or work practice standards.

The below listed emissions units and/or activities are neither ‘regulated emissions units’ nor ‘insignificant emissions unit

E.U. ID No.	Brief Description of Emissions Units and/or Activity
107	Cooling Tower

REFERENCED ATTACHMENTS.

The Following Attachments Are Included for Applicant Convenience:

The following attachments are included for convenient reference:

Figure 1, Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance (40 CFR 60, July, 1996).

Table H, Permit Summary.

Table 1, Summary of Air Pollutant Standards and Terms.

Table 2, Summary of Compliance Requirements.

FIGURE 1

SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE

[Note: This form is referenced in 40 CFR 60.7, Subpart A-General Provisions]

Pollutant (Circle One): SO₂ NO_x TRS H₂S CO Opacity

Reporting period dates: From _____ to _____

Company: _____

Emission Limitation: _____

Address: _____

Monitor Manufacturer: _____

Model No.: _____

Date of Latest CMS Certification or Audit: _____

Process Unit(s) Description: _____

Total source operating time in reporting period ¹: _____

Emission data summary ¹	CMS performance summary ¹
1. Duration of excess emissions in reporting period due to:	1. CMS downtime in reporting period due to:
a. Startup/shutdown	a. Monitor equipment malfunctions
b. Control equipment problems	b. Non-Monitor equipment malfunctions
c. Process problems	c. Quality assurance calibration
d. Other known causes	d. Other known causes
e. Unknown causes	e. Unknown causes
2. Total duration of excess emissions	2. Total CMS Downtime
3. Total duration of excess emissions x (100) / [Total source operating time] % ²	3. [Total CMS Downtime] x (100) / [Total source operating time] % ²

¹ For opacity, record all times in minutes. For gases, record all times in hours.

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

Note: On a separate page, describe any changes since the last in CMS, process or controls.

I certify that the information contained in this report is true, accurate, and complete.

Name: _____

Signature: _____ Date: _____

Title: _____

TABLE H
PERMIT HISTORY

Permit History (for tracking purposes):

E.U. ID No	Description	Permit No.	Issue Date	Expiration Date	Revised Date(s)
001	MSW Incinerator #1	PSD-FL-086 AC29-47277 AO29-206279	7/2/82 4/23/82 9/1/92	12/31/84 8/1/97	5/20/83, 11/7/86
002	MSW Incinerator #2	PSD-FL-086 AC29-47277 AO29-206279	7/2/82 4/23/82 9/1/92	12/31/84 8/1/97	5/20/83, 11/7/86
003	MSW Incinerator #3	PSD-FL-086 AC29-47277 AO29-206279	7/2/82 4/23/82 9/1/92	12/31/84 8/1/97	5/20/83, 11/7/86
004	MSW Incinerator #4	PSD-FL-086 AC29-47277 AO29-206279	7/2/82 4/23/82 9/1/92	12/31/84 8/1/97	5/20/83, 11/7/86
005	Fly Ash Silo	PSD-FL-086(A)	4/1/98	3/31/2003	
100	Ash Building & Handling System	PSD-FL-086(A)	4/1/98	3/31/2003	
101	Lime Storage Silo	PSD-FL-086(A)	4/1/98	3/31/2003	
102	Activated Carbon Storage Silo	PSD-FL-086(A)	4/1/98	3/31/2003	
103	MSW Combustor & Auxiliary Burner – Unit 1	PSD-FL-086(A)	4/1/98	3/31/2003	
104	MSW Combustor & Auxiliary Burner – Unit 2	PSD-FL-086(A)	4/1/98	3/31/2003	
105	MSW Combustor & Auxiliary Burner – Unit 3	PSD-FL-086(A)	4/1/98	3/31/2003	
106	MSW Combustor & Auxiliary Burner – Unit 4	PSD-FL-086(A)	4/1/98	3/31/2003	
	All of the above.	0570127-001-AV Initial Title V permit	7/9/01	7/8/06	
	All of the above.	0570127-004-AV Title V permit revision	3/1/05	7/8/06	
	All of the above.	0570127-006-AV Title V permit renewal			

TABLE 1

SUMMARY OF AIR POLLUTANT STANDARDS AND TERMS

This table summarizes information related to the emissions standards that apply to each municipal waste combustors unit for convenience purposes only. This table does not supersede any of the terms or conditions of this permit. The equivalent mass emission rates are based on an estimated exhaust flow rate 36,686 dry standard cubic feet per minute corrected to 7% oxygen.

E.U. ID No.	Brief Description	Fuel(s)	Hrs/Yr	Pollutant Name	Standard Allowable Emissions	Allowable Emissions*			Regulatory Citation(s)	See Permit Condition(s)
						lb/MMBtu Per unit	lbs/hr	TPY		
103, 104, 105 & 106	120 MMBtu/hr (max) Municipal Waste Combustor & Auxiliary Burner – Units. (Units 1, 2, 3 & 4)	MSW	8,760	VE	Not >10% (6-minute average)			40CFR60.33b(a)(1)(iii)	A.8.	
				SO ₂	29 ppmvd	N/A	N/A	460 ⁽¹⁾	40CFR60.33b(b)(3)(i)	A.9.
				NO _x	205 ppmvd	0.335	40.1	679 ⁽¹⁾	40CFR60.33b(d)	A.10.
				CO	100 ppmvd	0.0995	11.9	185 ⁽¹⁾	40CFR60.34b(a)	A.11.
				PM	25 mg/dscm	0.0213	2.55	11.17	40CFR60.33b(a)(1)(i)	A.12
					27 mg/dscm	0.0230	2.76	12.10	PSD-FL-086(A)	
				Cadmium	0.035 mg/dscm	0.000030	0.0036	0.0156	40CFR60.33b(a)(2)(i)	A.13.
				Lead	0.40 mg/dscm	0.00034	0.0408	0.179	40CFR60.33b(a)(4)	A.14.
				HCl	29 ppmvd	N/A	N/A	67.9	40CFR60.33b(b)(3)(ii)	A.15.
				D/F	30 nanograms/dscm	2.56E-08	3.07E-06	1.35E-05	40CFR60.33b(c)(1)(ii)	A.16.
				Fluoride		0.0125	1.5	6.57	PSD-FL-086(A)	A.17.
Mercury	0.050 mg/dscm	0.0000425	0.0051	0.0223	40AFR60.33b(a)(3)	A.18.				
100	Ash Building and Handling System	N/A		VE	No visible emissions in excess of 5% of the observation period		N/A	N/A	40CFR60.36b & 60.55b	B.4.
101	Lime Storage Silos			PM	0.015 gr/ dscm	0.154		0.68	PSD-FL-086(A)	C.5.
				VE	5% opacity			PSD-FL-086(A)	C.4.	
102	Two Activated Carbon Storage Silos			PM	0.015 gr/ dscm			0.68	PSD-FL-086(A)	D.5.
				VE	5% opacity			PSD-FL-086(A)	D.4.	

⁽¹⁾ Facility-wide cap in any consecutive 12-month period.
The allowable emissions are for each emissions unit, except as otherwise noted.

TABLE 2

SUMMARY OF COMPLIANCE REQUIREMENTS

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

E.U. ID No.	Brief Description	Fuel(s)	Pollutant Name	Emission Monitoring ¹	Emission Control	Compliance Method EPA Method	Testing Time Frequency	Frequency Base Date	Min. Compliance Test Duration	See Permit Condition(s)
103, 104, 105 & 106	120 MMBtu/hr (max) Municipal Waste Combustor & Auxiliary Burner – Units. (Units 1, 2, 3 & 4)	MSW	VE	COMS	Baghouse	Method 9	Annual	The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C., this date is to be established (TBE) by the initial compliance test.	30 min.	A.8. - A.18. & A.38. - A.44.
			SO ₂	CEMS	SDA Scrubber	Method 19 & 6, 6A or 6C			60 min.	
			NO _x	CEMS	SNCR	Method 19 & 7, 7A, 7C, 7D or 7E			60 min.	
			CO	CEMS	Good Combustion	Method 10, 10A or 10B			60 min.	
			PM	Stack Test	Baghouse	Method 5	Annual		60 min.	
			Cadmium	Stack Test	Baghouse	Method 29			60 min.	
			Lead	Stack Test	Baghouse	Method 29			60 min.	
			HCl	Stack Test	Scrubber	method 26 or 26A			60 min.	
			D/F	Stack Test	Good Combustion	Method 23			60 min.	
			Fluoride	Stack Test	Scrubber	Method 13 or 13A			60 min.	
			Mercury	Stack Test	Carbon Injection	Method 29			Annual	
100	Ash Building and Handling System	N/A	VE	Fugitive Test		Method 22	Annual	3 hr.	B.7.	
101	Lime Storage Silos		PM		Baghouse	Method 5 or 5B	Request	60 min.	C.8.	
			VE	Stack Test	Baghouse	Method 9	Annual	30 min.		
102	Two Activated Carbon Storage Silos		PM		Baghouse	Method 5 or 5B	Request	60 min.	D.8.	
		VE	Stack Test	Baghouse	Method 9	Annual	30 min.			

Notes:

CEMS [=] continuous monitoring system used for compliance in lieu of stack test if marked. (Acceptable as long as CMES is maintained and calibrated as required.)

Scearce, Lynn

From: Scearce, Lynn
Sent: Thursday, August 04, 2011 1:34 PM
To: 'steve.daignault@tampagov.net'
Cc: 'Lee@epchc.org'; 'hathaways@epchc.org'; 'ctilman@pirnie.com'; 'forney.kathleen@epa.gov'; 'oquendo.ana@epa.gov'; Attalla, Yousry; Holtom, Jonathan; 'Scearce, Lynn'; Friday, Barbara
Subject: 0570127-006-AV, McKay Bay Refuse to Energy Facility- Draft

Tracking:	Recipient	Delivery	Read
	'steve.daignault@tampagov.net'	✓	✓
	'Lee@epchc.org'	✓	✓
	'hathaways@epchc.org'	✓	✓
	'ctilman@pirnie.com'	✓	✓
	'forney.kathleen@epa.gov'		
	'oquendo.ana@epa.gov'		
	Attalla, Yousry	Delivered: 8/4/2011 1:34 PM	Read: 8/4/2011 1:38 PM
	Holtom, Jonathan	Delivered: 8/4/2011 1:34 PM	Read: 8/4/2011 1:36 PM
	'Scearce, Lynn'		Read: 8/4/2011 1:35 PM
	Friday, Barbara	Delivered: 8/4/2011 1:34 PM	Read: 8/4/2011 1:39 PM
	Scearce, Lynn	Delivered: 8/4/2011 1:34 PM	

Dear Mr. Daignault:

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

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

Owner/Company Name: CITY OF TAMPA
Facility Name: MCKAY BAY REFUSE-TO-ENERGY FACILITY
Project Number: 0570127-006-AV
Permit Status: DRAFT
Permit Activity: PERMIT RENEWAL
Facility County: HILLSBOROUGH

Click on the following link to access the permit project documents:
http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0570127.006.AV.D_pdf.zip

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

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

Note: The attached document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: <http://www.adobe.com/products/acrobat/readstep.html> .

Regards,

Lynn Searce

Office of Permitting and Compliance (OPC)

Division of Air Resources Management

850-717-9025

sent and again for response

Scearce, Lynn

From: Scearce, Lynn
Sent: Friday, August 05, 2011 2:40 PM
To: 'steve.daignault@tampagov.net'
Subject: FW: 0570127-006-AV, McKay Bay Refuse to Energy Facility- Draft
Attachments: 0570127-006-AV Draft Permit_signature page.pdf

Mr. Daignault,

I forgot to attach the signature page. Also, please let me know that you were able to access this attached document and able to open the zip file. Please confirm receipt by opening the attachment and sending a reply to me.

The Division of Air Resource Management is sending electronic versions of these documents rather than sending them Return Receipt Requested via the US Postal service. Your "receipt confirmation" reply serves the same purpose as tracking the receipt of the signed "Return Receipt" card from the US Postal Service.

Thank you,

Lynn Scearce
Permitting and Compliance Section
Division of Air Resource Management - DEP
2600 Blairstone Road, Mail Stop 5505
Phone: 850-717-9025

From: Scearce, Lynn
Sent: Thursday, August 04, 2011 1:34 PM
To: 'steve.daignault@tampagov.net'
Cc: 'Lee@epchc.org'; 'hathaways@epchc.org'; 'ctilman@pirnie.com'; 'forney.kathleen@epa.gov'; 'oquendo.ana@epa.gov'; Attalla, Yousry; Holtom, Jonathan; 'Scearce, Lynn'; Friday, Barbara
Subject: 0570127-006-AV, McKay Bay Refuse to Energy Facility- Draft

Dear Mr. Daignault:

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

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

Owner/Company Name: CITY OF TAMPA
Facility Name: MCKAY BAY REFUSE-TO-ENERGY FACILITY

Project Number: 0570127-006-AV
Permit Status: DRAFT
Permit Activity: PERMIT RENEWAL
Facility County: HILLSBOROUGH

Click on the following link to access the permit project documents:
http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0570127.006.AV.D_pdf.zip.

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

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

Note: The attached document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: <http://www.adobe.com/products/acrobat/readstep.html>.

Regards,
Lynn Searce
Office of Permitting and Compliance (OPC)
Division of Air Resources Management
850-717-9025

Scearce, Lynn

From: Microsoft Exchange
To: steve.daignault@tampagov.net
Sent: Thursday, August 04, 2011 1:35 PM
Subject: Relayed: 0570127-006-AV, McKay Bay Refuse to Energy Facility- Draft

Delivery to these recipients or distribution lists is complete, but delivery notification was not sent by the destination:

steve.daignault@tampagov.net

Subject: 0570127-006-AV, McKay Bay Refuse to Energy Facility- Draft

Sent by Microsoft Exchange Server 2007

Scearce, Lynn

From: Greig Grotecloss [Greig.Grotecloss@ci.tampa.fl.us]
Sent: Wednesday, August 10, 2011 11:24 AM
To: Scearce, Lynn
Cc: Daniel Fahey; Michele Miles; Nancy McCann; Tonja Brickhouse
Subject: Draft Permit 0570127-006-AV

Mr. Daignault received your e-mails regarding the draft permit referenced above and we were able to open the files. We are reviewing the permit and making arrangements for the public notification.
Thank you.

Scarce, Lynn

From: Microsoft Exchange
To: ctilman@pirnie.com
Sent: Thursday, August 04, 2011 1:35 PM
Subject: Relayed: 0570127-006-AV, McKay Bay Refuse to Energy Facility- Draft

Delivery to these recipients or distribution lists is complete, but delivery notification was not sent by the destination:

ctilman@pirnie.com

Subject: 0570127-006-AV, McKay Bay Refuse to Energy Facility- Draft

Sent by Microsoft Exchange Server 2007

Scearce, Lynn

From: Microsoft Exchange
To: Lee@epchc.org; hathaways@epchc.org
Sent: Thursday, August 04, 2011 1:35 PM
Subject: Relayed: 0570127-006-AV, McKay Bay Refuse to Energy Facility- Draft

Delivery to these recipients or distribution lists is complete, but delivery notification was not sent by the destination:

Lee@epchc.org

hathaways@epchc.org

Subject: 0570127-006-AV, McKay Bay Refuse to Energy Facility- Draft

Sent by Microsoft Exchange Server 2007

Scearce, Lynn

From: Hathaway, Stephen [hathaways@epchc.org]
To: Scearce, Lynn
Sent: Thursday, August 04, 2011 1:35 PM
Subject: Read: 0570127-006-AV, McKay Bay Refuse to Energy Facility- Draft

Your message was read on Thursday, August 04, 2011 1:34:40 PM (GMT-05:00) Eastern Time (US & Canada).

Scearce, Lynn

From: Lee, Diana [Lee@epchc.org]
To: Scearce, Lynn
Sent: Thursday, August 04, 2011 1:57 PM
Subject: Read: 0570127-006-AV, McKay Bay Refuse to Energy Facility- Draft

Your message was read on Thursday, August 04, 2011 1:56:57 PM (GMT-05:00) Eastern Time (US & Canada).

Scearce, Lynn

From: Tilman, Christopher [Christopher.Tilman@arcadis-us.com]
Sent: Thursday, August 04, 2011 2:07 PM
To: Scearce, Lynn
Subject: Read: 0570127-006-AV, McKay Bay Refuse to Energy Facility- Draft
Attachments: Read: 0570127-006-AV, McKay Bay Refuse to Energy Facility- Draft

NOTICE: This e-mail and any files transmitted with it are the property of ARCADIS U.S., Inc. and its affiliates. All rights, including without limitation copyright, are reserved. The proprietary information contained in this e-mail message, and any files transmitted with it, is intended for the use of the recipient(s) named above. If the reader of this e-mail is not the intended recipient, you are hereby notified that you have received this e-mail in error and that any review, distribution or copying of this e-mail or any files transmitted with it is strictly prohibited. If you have received this e-mail in error, please notify the sender immediately and delete the original message and any files transmitted. The unauthorized use of this e-mail or any files transmitted with it is prohibited and disclaimed by ARCADIS U.S., Inc. and its affiliates. Nothing herein is intended to constitute the offering or performance of services where otherwise restricted by law.