Memorandum

Florida Department of Environmental Protection

TO: Joseph Kahn, Division of Air Resource Management

THROUGH: Trina L. Vielhauer, Chief, Bureau of Air Regulation
Jon Holtom, P.E., Title V Section

FROM: Scott M. Sheplak, P.E., Title V Section

DATE: September 2, 2010

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

Title V Air Operation Permit Revision
Final Permit No. 0990234-016-AV

Permitting Clock: ARMS Day 55 was August 30

The final permit for this project is attached for your approval and signature. This Title V air operation permit revision is to incorporate the applicable specific terms and conditions from a previously issued air construction (AC) permit, Permit No. 0990234-006-AC/PSD-FL-108F, which authorized the construction of a 675 wet tons per day of sludge (wtpd, at 20% solids) Biosolids Pelletization Facility (BPF).

Department initiated changes were made in this permitting action. The May 10, 2006, federal municipal waste combustor (MWC) regulation amendments were added to the permit; the amendments apply to the Municipal Solid Waste Boiler Nos. 1 and 2 (Emissions Units -001 and -002). Also, several previously issued separate Title V permitting actions were merged with this project to produce one current permit.

The attached final determination identifies issuance of the permit, summarizes the publication process, and provides the Department's response(s) to comment(s) (if any) on the draft permit. There are no pending petitions for administrative hearings or extensions of time to file a petition for an administrative hearing.

I recommend your approval of the attached final permit for this project.

TLV/jkh/sms

Attachments

NOTICE OF FINAL PERMIT

In the Matter of an
Application for Permit by:

Solid Waste Authority of Palm Beach County
7501 North Jog Road
West Palm Beach, Florida 33412

Responsible Official:
Mr. Mark Hammond, Executive Director

Final Permit No. 0990234-016-AV
North County Regional Resource Recovery Facility

Title V Air Operation Permit Revision
Palm Beach County

Enclosed is the final permit package to revise the Title V air operation permit for the North County Regional Resource Recovery Facility. This existing facility is located at 7501 North Jog Road, West Palm Beach in Palm Beach County, Florida. This permit is issued pursuant to Chapter 403, Florida Statutes.

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

Executed in Tallahassee, Florida.

Trina L. Vielhauer, Chief
Bureau of Air Regulation

TLV/jkh/sms

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final Determination, the Statement of Basis and the Final Permit), or a link to these documents available electronically on a publicly accessible server, was sent by electronic mail with received receipt requested to the persons listed below:

Mr. Mark Hammond, SWA: mhammond@swa.org
Ms. Marybeth Morrison, SWA: mmorrison@swa.org
Mr. Manuel Hernandez, P.E., CDM: hernandezmj@cdm.com
Mr. Christopher Tilman, P.E.: ctilman@pirnie.com
Mr. Lennon Anderson, P.E., DEP Southeast District Office: lennon.anderson@dep.state.fl.us
Mr. James Stormer, PBCHD: james_stormer@doh.state.fl.us
Mr. Michael Halpin, P.E., DEP Siting Office: michael.halpin@dep.state.fl.us
Ms. Katy R. Forney, U.S. EPA Region 4: forney.kathleen@epa.gov
Ms. Ana Oquendo-Vazquez, U.S. EPA Region 4: oquendo.ana@epa.gov
Ms. Barbara Friday, DEP BAR: barbara.friday@dep.state.fl.us (for posting with U.S. EPA, Region 4)
Ms. Victoria Gibson, DEP BAR: victoria.gibson@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.

Barbara J. Friday (Clerk) 9/14/10 (Date)

PERMITTEE

Solid Waste Authority of Palm Beach County
North County Regional Resource Recovery Facility
7501 North Jog Road
West Palm Beach, Florida 33412

PERMITTING AUTHORITY

Florida Department of Environmental Protection (Department)
Division of Air Resource Management
Bureau of Air Regulation, Title V Section
2600 Blair Stone Road, MS #5505
Tallahassee, Florida 32399-2400

PROJECT

Final Permit No. 0990234-016-AV
North County Regional Resource Recovery Facility

The purpose of this project is to revise the Title V air operation permit for the North County Regional Resource Recovery Facility.

This permit was processed using a parallel review.

PUBLIC NOTICE

A Written Notice of Intent to Issue Permit to the Solid Waste Authority of Palm Beach County for the North County Regional Resource Recovery Facility located in Palm Beach County at 7501 North Jog Road, West Palm Beach, Florida, was clerked on June 30, 2010. The Public Notice of Intent to Issue Permits was published in the Palm Beach Post on July 6, 2010. The draft/proposed Title V air operation permit was available for public inspection at the permitting authority's office in Tallahassee. Proof of publication of the Public Notice of Intent to Issue Permit was received on July 19, 2010.

COMMENTS

On June 30, 2010, the Department informed US EPA Region 4 that this permit was being processed using a parallel review. US EPA Region 4 was notified of the publication date of the Public Notice on July 19, 2010. No comments on the draft/proposed permit were received from the US EPA Region 4 Office.

No comments were received from the public during the 30 day public comment period; however, comments were received from the Applicant. The comments were not considered significant enough to reissue the draft/proposed Title V air operation permit and require another Public Notice, therefore, the draft/proposed Title V air operation permit was changed. The comments are addressed below. Additions to the permit are indicated below by double underline. Deletions from the permit are indicated below by ~~strike through~~.

Letter from CDM, consultant representing the Applicant, dated August 3, 2010 and received via e-mail on August 4, 2010

Applicant Comments

1. Title V Air Operation Permit – Section I. Facility Information. Page I.-2, Second Paragraph: The first sentence mentions the capacity of the BPF. We suggest that the word *"approximately"* be added in front of 20% solids.

***Response*:** This comment is on the same point raised in a subsequent comment (see comment 11.). The reference in the draft/proposed permit to the permitted capacity is verbatim from the Prevention of Significant Deterioration (PSD)/air construction (AC) permit, PSD-FL-108F/0990234-006-AC. The cited 337.5 wet tons of sludge per day (wtpd) for each dryer train is at a reference value of 20% solids. The wtpd can be adjusted based on other solid contents, however the capacity of the dryer shall not exceed its design value as proposed in the original PSD/AC permit. No change to the permit is made.

2. Title V Air Operation Permit – Section I. Facility Information. Page I.-2, Second Paragraph. Revise the forth sentence as follows: *"Each dryer train at the BPF combusts landfill gas generated from the nearby landfill and/or natural gas in a rotary drum dryer to dry sewage sludge, and then screens the dried sludge into marketable fertilizer pellets."*

***Response*:** This comment is on the same point raised in a subsequent comments (see comments 3., 4., 7., 8., 9., 12. and 19.). As proposed in the original PSD/AC permit application the dryers are fired by landfill gas and/or natural gas with landfill gas intended to be the primary fuel as described in the PSD/AC permit.

Specific condition A.2. from PSD-FL-108F/0990234-006-AC is very specific on this point. Specific condition A.2. reads as follows:

> *"**A.2.** Methods of Operation - Fuels. The dryers shall be fired primarily by landfill gas with natural gas used as an alternate fuel.*
> *[Rules 62-4.160(2) and 62-210.228(PTE), F.A.C.]"*

No change to the permit is made.

3. Title V Air Operation Permit – Section I. Facility Information. Page I.-2, Second Paragraph. Delete the fifth sentence which says that natural gas is used as an alternate fuel.

***Response*:** See the response to comment 2.

4. Title V Air Operation Permit – Section I. Facility Information. Page I.-2, Second Paragraph. Revise the sixth sentence statement "{for either landfill or natural gas}" with "*{for landfill gas and/or natural gas}.*"

***Response*:** See the response to comment 2.

5. Title V Air Operation Permit – Section III. Emissions Units and Specific Conditions. Page III.A.-1, Item A.1.0. We would like to clarify that the permitted capacity is defined by steam flow rate of 324,000 lb/hr (4-hour block average) and not heat input.

***Response*:** The heat input specified is the maximum design heat input rating originating from PSD-FL-108A issued on January 13, 1992. No change to the permit is made at this time.

6. Title V Air Operation Permit – Section III. Emissions Units and Specific Conditions. Page III.A.-5, Item A.6. Please change CO 400 ppmvd 1-hour block average to a "*4-hour block average.*"

***Response*:** This specifically requested change was being made in this revision. This change originates from PSD-FL-108H/0990234-015-AC. The new averaging time for the 400 ppmvd CO emissions standard was reflected in the draft/proposed permit for specific condition A.19., changing it from a 1-hour block average to a 4-hour block average. The Department concurs with the comment; the necessary change was missed in specific condition A.6. Specific condition A.6. is changed to read as follows:

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

Pollutant	PSD-FL-108A Permit Limit [a]	Federal Emission Guidelines [a]
Particulate Matter[b]	0.015 grains/dscf	27 mg/dscm
NOx [b]	0.48 lb/MMBtu (24 hr block avg)	250 ppmvd (24 hr block avg)
Carbon Monoxide[b]	400 ppmvd (~~1~~4-hr block avg)/ 200 ppmvd (24 hr block avg)	200 ppmvd (24 hr block avg)

...

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

7. Title V Air Operation Permit – Section III. Emissions Units and Specific Conditions. Page III.D.-1, First Paragraph. The third sentence states "Each dryer train at the BPF combusts landfill gas generated from the nearby landfill in a rotary drum dryer to dry sewage sludge, and then screens the dried sludge into marketable fertilizer pellets." The BPF dryers run on landfill gas and/or natural gas. We suggest that this sentence be revised as follows: *"Each dryer at the BPF combust landfill gas generated from the nearby landfill and/or natural gas in a rotary drum dryer to dry sewage sludge, and then screen the dried sludge into marketable fertilizer pellets."*

***Response*:** See the response to comment 2.

8. Title V Air Operation Permit – Section III. Emissions Units and Specific Conditions. Page III.D.-1, First Paragraph. Delete the forth sentence: "Natural gas is used as an alternate fuel."

***Response*:** See the response to comment 2.

9. Title V Air Operation Permit – Section III. Emissions Units and Specific Conditions. Page III.D.-1, First Paragraph. Revise the fifth sentence statement "{for either landfill or natural gas}" with *{for landfill gas and/or natural gas}*.

***Response*:** See the response to comment 2.

10. Title V Air Operation Permit – Section III. Emissions Units and Specific Conditions. Page III.D.-1, Fourth Paragraph. Add the following sentence after the third sentence: *"Compliance with the visible emissions limit for the recycle bin fabric filter exhaust is determined at the building odor control scrubber exhaust."*

***Response*:** The Department understands that the recycle bin fabric filter exhausts inside the building. A VE test at the point described is satisfactory. The requested clarification is more appropriately made in the testing condition, specific condition D.15. Specific condition D.15. is therefore changed to read as follows:

"**D.15.** Annual Compliance Test. Unless otherwise specified by this permit, during each federal fiscal year (October 1st to September 30th), Emissions Unit ID Nos. -010 and -011 (Sludge Dryer Train #1 and #2) and -012 and -014 (Recycle Material Bins & Pellet Storage Silos for Sludge Dryer Train #1 and #2) shall be tested to demonstrate compliance with the emission limitations and standards for VE. Compliance with the visible emissions limit for the recycle bin fabric filter exhaust is determined at the building odor control scrubber exhaust. [Rule 62-297.310(7), F.A.C.]"

11. Title V Air Operation Permit – Section III. Emissions Units and Specific Conditions. Page III.D.-1, Item D.1. Permitted Capacity. The first and second sentences make reference to the percent solids of the permitted capacity in wet tons of sludge per day, i.e. "(wtpd, at 20% solids)." Due to the variable nature of the incoming sludge, we request that the word approximately be added when making reference to the percent solids, i.e. *(wtpd, at approximately 20% solids)*.

***Response*:** See the response to comment 1.

12. Title V Air Operation Permit – Section III. Emissions Units and Specific Conditions. Page III.D.-2, Item D.2. Methods of Operations – Fuels. Revise the first sentence to say: *The dryers shall be fired by landfill gas and/or natural gas.*

***Response*:** See the response to comment 2.

13. Title V Air Operation Permit – Section III. Emissions Units and Specific Conditions. Page III.D.-2, Item D.6. Revise the first sentence with: "*The owner or operator shall operate and maintain fabric filters on each material recycle bin exhaust to control PM emissions from the material recycle bin and the pellet storage silo.*"

***Response*:** Each dryer system has one fabric filter mounted to the recycle bin that serves the recycle material recycle bin and the pellet storage silo. Specific condition D.6. is corrected to read as follows:

"**D.6.** ~~The owner or operator shall operate and maintain fabric filters on each material recycle bin exhaust and each pellet storage silo exhaust to control PM emissions.~~ The owner or operator shall operate and maintain fabric filters on each material recycle bin exhaust to control PM emissions from the material recycle bin and the pellet storage silo. [BACT Determination; and, Permit No. 0990234-006-AC/PSD-FL-108F.]"

14. Title V Air Operation Permit – Section III. Emissions Units and Specific Conditions. Page III.D.-4, Item D.14. Compliance Testing. In the summary of the test methods, we request that Method 7E be added as an alternate to Method 7 for the Determination of Nitrogen Oxides (revise with: *Method 7 or Method 7E Determination of Nitrogen Oxides Emissions*), and that Method 25A be added as an alternate to Method 25 (revise with: *Method 25 or Method 25A Determination of Volatile Organic Compound Emissions (I)*).

***Response*:** These requested test methods are adopted by reference as approved test methods in Chapter 62-297, F.A.C. The Department agrees with the comment. Specific condition D.14. is therefore changed to read as follows:

"**D.14.** Compliance Testing. This facility shall comply with all applicable requirements of Rule 62-297.310, F.A.C., General Compliance Test Requirements and 40 CFR 60.8. Performance Tests. Compliance with the emission limitations and standards shall be determined by using the following reference methods as described in 40 CFR 60, Appendix A and 40 CFR 61, Appendix B adopted by reference in Chapter 62-204, F.A.C. Tests for each pollutant shall be conducted at such other times as may be required by the Department or the EPA. The test methods are summarized below.

Method 5 Determination of Particulate Matter Emissions
Method 6C Determination of Sulfur Dioxide Emissions
Method 9 Visual Determination of the Opacity of Emissions
Method 7 or 7E Determination of Nitrogen Oxides Emissions
Method 10 Determination of Carbon Monoxide Emissions (I)
Method 25 or 25A Determination of Volatile Organic Compound Emissions (I)
..."

15. Title V Air Operation Permit – Section III. Emissions Units and Specific Conditions. Page III.D.-4, Item D.15. Annual Compliance Test. We request that the wording for the Annual Compliance Test be revised to make it clear that the only annual compliance test required is for VEs.

***Response*:** Specific condition D.15. in the draft/proposed permit specifies the air pollutants for which annual tests are required. Annual testing for VE is only required from the specified emissions units. Specific condition D.16. in the draft/proposed permit describes the air pollutants for which renewal (every 5 year) tests are required. Renewal (every 5 year) testing is required for VE, NOx, PM/PM_{10}, Hg and SO_2 from the specified emissions units.

The Department understands that specific condition D.15. could be misread to include annual testing for all "emission limitations" in addition to VE. This was not the intent. Specific condition D.15. is therefore clarified to read as follows:

> "**D.15.** Annual Compliance Test. Unless otherwise specified by this permit, during each federal fiscal year (October 1st to September 30th), Emissions Unit ID Nos. -010 and -011 (Sludge Dryer Train #1 and #2) and -012 and -014 (Recycle Material Bins & Pellet Storage Silos for Sludge Dryer Train #1 and #2) shall be tested to demonstrate compliance with the emission limitations ~~and~~ /standards for VE. [Rule 62-297.310(7), F.A.C.]"

16. Title V Air Operation Permit – Table AP-1. Summary of Air Pollutants. Under the PM/PM10 & Opacity columns, the hours for the emergency generator should be 500 hours instead of 8760 hours.

***Response*:** The Department agrees with the comment; the hours of operation for the emergency generator are in fact limited to 500 hours/year. The typographical error for the hours shown in Table AP-1 for the emergency generator are corrected from 8760 to 500.

17. Title V Air Operation Permit – Table AP-1. Summary of Air Pollutants. Under the PM/PM10 & Opacity columns, can the Cooling Tower be removed from the table as these have been identified as "insignificant" in the body of the permit?

***Response*:** The cooling tower is considered to be an insignificant emissions unit/activity and is listed as such in Appendix I-1. The cooling tower was included in the Table AP-1 attached to and part of the PSD/AC permit, PSD-FL-108F/0990234-006-AC. As the footnote in the table indicates there are no specific emission standards or limits for the cooling tower. No change to the permit is made.

18. Title V Air Operation Permit – Table AP-1. Summary of Air Pollutants. Under the Regulatory Citations(s) column, BACT should be replaced with Tier 3 for the emergency generator.

Response: Further review of the BACT determination dated February 2, 2006 indicates that the regulatory reason for the limitations on the emergency generator should be based on the EPA Tier 3 certification and not BACT. The regulatory citation in the Table AP-1 is changed from "BACT" to "EPA Tier 3 certification." This is consistent with specific condition D.23. of the Title V air operation permit revision.

19. Title V Air Operation Permit – Table AP-1. Summary of Air Pollutants. Revise Footnote 3 to say "*landfill gas and/or natural gas.*"

***Response*:** See the response to comment 2.

CONCLUSION

The draft/proposed Title V air operation permit was changed. The final action of the Department is to issue the final permit with the changes noted above.

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

Title V Air Operation Permit Revision
Final Permit No. 0990234-016-AV

APPLICANT

The applicant for this project is the Solid Waste Authority of Palm Beach County. The applicant's responsible official and mailing address are: Mr. Mark Hammond, Executive Director, Solid Waste Authority of Palm Beach, 501 North Jog Road, West Palm Beach, Florida 33412.

FACILITY DESCRIPTION

The applicant operates the North County Regional Resource Recovery Facility, which is located in Palm Beach County at 7501 North Jog Road, West Palm Beach, Florida.

This existing facility consists of a municipal waste combustor plant designed to process 2,000 tons per day (TPD) of municipal solid waste (MSW). This existing facility includes two boilers and two landfills, a Class I Landfill and a Class III Landfill, each with its own gas collection system and flare. Additional facilities include storage and handling facilities for RDF (refuse derived fuel) as well as storage and handling facilities for ash and ash treatment. Also at the facility are miscellaneous unregulated/insignificant emissions units and/or activities.

PROJECT DESCRIPTION

The purpose of this permitting project is for the revision of the existing Title V air operation permit for the above referenced facility. The Title V air operation permit revision is to incorporate the applicable specific terms and conditions from a previously issued air construction (AC) permit, Permit No. 0990234-006-AC/PSD-FL-108F, which authorized the construction of a 675 wet tons per day of sludge (wtpd, at 20% solids) Biosolids Pelletization Facility (BPF).

This permit is for the initial operation of the BPF. Compliance with all of the terms and conditions of the AC permit was demonstrated. Initial testing demonstrated compliance with the emission standards and limitations specified in the AC permit. A complete summary of the initial compliance test results are provided in the permit application. More details on the revision are shown below under Project Review.

PROCESSING SCHEDULE AND RELATED DOCUMENTS

Application for a Title V Air Operation Permit Revision received via Electronic Permit Submittal and Processing System (EPSAP) on November 19, 2009.
Additional Information Request dated and sent via e-mail on January 14, 2010.
Additional Information Responses received on April 13 and 23, 2010.
Additional Information received on June 15, 2010 re: Engine.
Application for a Title V Air Operation Permit Revision dated June 14, 2010 received via hard copy on June 15, 2010.
Additional Information dated June 17, 2010, received on June 17, 2010 re: Revised Request and Request to Merge Processing.

Draft/Proposed Title V Air Operation Permit Revision posted onto web site on June 30, 2010.
Public Notice published on July 6, 2010.
Notification to U.S. EPA Region 4 of Publication of Public Notice on July 19, 2010.

PRIMARY REGULATORY REQUIREMENTS

Title III: This facility is a major source of hazardous air pollutants (HAP), based on the Title V air operation permit renewal application received May 2, 2005.

Title IV: This facility does not operate units subject to the acid rain provisions of the Clean Air Act.

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

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

NSPS: This facility operates units subject to the Standards of Performance for New Stationary Sources (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.

Siting: Several of the emissions units were originally certified [PA84-20] pursuant to the power plant siting provisions of Chapter 62-17, F.A.C.

CAM: Compliance Assurance Monitoring (CAM) does apply to units at this facility.

PROJECT REVIEW

This project review summarizes the changes made in this Title V air operation permit revision.

The changes made in the draft/proposed permit documents are specifically shown as follows: deletions are noted in ~~strikethrough~~ and additions are noted in doubleunderline. The changes will not be shown in the final permit documents.

Application for a Title V Air Operation Permit Revision received via Electronic Permit Submittal and Processing System (EPSAP) on November 19, 2009.

Permit

- Incorporated the applicable specific terms and conditions from the previously issued air construction permit No. 0990234-006-AC/PSD-FL-108F, Biosolids Pelletization Facility. A new Subsection III.D. was added to the permit.
- The Cooling Towers for the Trains #1 and #2 at the Biosolids Pelletization Facility were reclassified as insignificant activities, in Appendix I-1, List of Insignificant Emissions Units and/or Activities.

Application for a Title V Air Operation Permit Revision dated June 14, 2010 received via hard copy on June 15, 2010.

Permit

- Permit No. 0990234-015-AC/PSD-FL-108H, Municipal Solid Waste Boiler Nos. 1 and 2 Refurbishment Project, issued on September 18, 2009, contained revisions to a previously issued PSD permit {see pages 8 and 9 from permit No. 0990234-015-AC/PSD-FL-108H}. Several of the revisions are reflected in this permitting action. Two of the revisions are independent of the refurbishment project and are reflected in this permitting action. The third revision pertains to the existing scrubber being replaced under the refurbishment project. The two changes reflected in this permitting action were:
    - Revised several heat input related values for the Municipal Solid Waste Boiler Nos. 1 and 2 (Emissions Units -001 and -002) which are stated in the Facility Description (Subsection I.A.) and the Emissions Units Description (Subsection III.A.) of the permit, and specific condition No. A.1.0. Changed the stated heat input values from: 412.5 MMBtu/hr to: 427.5 MMBtu/hr.

Added the 24-hour averaging period on heat input. Changed the reference heating value from: 5,500 Btu/lb. to: 5,700 Btu/lb.

- Changed the averaging period for the Municipal Solid Waste Boiler Nos. 1 and 2 CO emission limits contained in specific condition Nos. A.6. and A.19. from: 400 ppmvd 1-hour block average to: 400 ppmvd 4-hour block average.

Department Initiated Changes to Permit

- Added the May 10, 2006, federal municipal waste combustor (MWC) regulation amendments to the permit. Specific condition M.5. in Subsection III.A. of the permit incorporates all of 40 CFR 60, Subpart Cb, as **Appendix 40 CFR 60, Subpart Cb**. The amendments apply to the Municipal Solid Waste Boiler Nos. 1 and 2 (Emissions Units -001 and -002).
- Merged several previously issued separate Title V permitting actions with this project to produce one current permit. The following projects shown below were combined:
  - Permit No. 0990234-010-AV, Renewal, effective on July 2, 2006.
  - Permit No. 0990234-013-AV, Revision, effective on December 12, 2008 for: Changes made to flares at the landfills in Subsection III.B. (Emissions Units -003, -004, -008 and -020) of the permit: and, the addition of one emergency generator, an engine, at the new operations building in Subsection III.C. (Emissions Unit -021) of the permit.
- The address and telephone number for the Risk Management Plan (RMP) Reporting Center was updated in Specific condition 4.a. in Section II.

CONCLUSION

This project revises Title V air operation permit No. 0990234-010-AV, which was effective July 2, 2006. This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statues (F.S.), and Chapters 62-4, 62-210, 62-213 and 62-214, Florida Administrative Code (F.A.C.).

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

Title V Air Operation Permit Revision
(2nd Revision to Permit No. 0990234-010-AV)

Final Permit No. 0990234-016-AV

Permitting Authority:
State of Florida
Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
Title V Section
Mail Station #5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
Telephone: 850/488-0114
Fax: 850/921-9533

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

September 2, 2010

Title V Air Operation Permit Revision
Final Permit No. 0990234-016-AV

Table of Contents

Section **Page Number**

Placard Page. 1

I. Facility Information. I.2
A. Facility Description.
B. Summary of Emissions Unit ID No(s). and Brief Description(s).
C. Relevant Documents.

II. Facility-wide Conditions. II.1

III. Emissions Units and Conditions.
A. E.U. ID No(s). -001, -002 & -019:
Municipal Solid Waste Boiler No. 1.
Municipal Solid Waste Boiler No. 2.
Ash Building and Handling System. III.A.1
B. E.U. ID No(s). -003, -004, -008 & -020:
Class I Landfill (1,800 scfm Flare Removed).
Class III Landfill and Existing (*Derated*) Flare-1,800 scfm.
Class I Landfill and *New* Flare-3,500 scfm.
Class III Landfill Existing Flare-1,800 (*Backup use only* at the Class III Landfill). III.B.1
C. E.U. ID No(s). -021:
New Engine (Emergency Generator). III.C.1
D. E.U. ID No(s). -010, -011, -012, -014 & -016:
Biosolids Pelletization Facility (BPF).
Sludge Dryer Train #1.
Sludge Dryer Train #2.
Recycle Material Bin and Pellet Storage Silo for Sludge Dryer Train #1.
Recycle Material Bin and Pellet Storage Silo for Sludge Dryer Train #2.
Emergency Generator (EPA Tier 3 certified). III.D.1

IV. Appendices. IV.1

Referenced Attachments. ..... At End

Florida Department of Environmental Protection

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

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

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

Final Permit No. 0990234-016-AV
Facility ID No. 0990234
SIC Nos. 49, 4953
Project: Title V Air Operation Permit Revision

This project is for a permit to revise Title V air operation permit, Permit No. 0990234-010-AV, to incorporate the applicable specific terms and conditions from a previously issued air construction (AC) permit, Permit No. 0990234-006-AC/PSD-FL-108F, which authorized the construction of a 675 wet tons per day of sludge (wtpd, at 20% solids) Biosolids Pelletization Facility (BPF).

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

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

0990234-010-AV Effective Date: July 2, 2006
0990234-013-AV Revision Effective Date: December 12, 2008
0990234-016-AV Revision Effective Date: August 30, 2010
Renewal Application Due Date: November 19, 2010
Expiration Date: July 2, 2011

Joseph Kahn, Director
Division of Air Resource Management

JK/tlv/jkh/sms

Subsection A. Facility Description.

This facility consists of a municipal waste combustor plant designed to process 2,000 tons per day (TPD) of municipal solid waste (MSW). The facility burns processed MSW that is called "refuse derived fuel" (RDF). The RDF plant is equipped with three MSW processing lines, any two of which can handle the 2,000 TPD of incoming MSW. The boiler plant includes two Babcock & Wilcox (B&W) boilers, each designed to operate up to a maximum heat input of 427.5 MMBtu/hr with a steam flow rating of 324,000 lbs./hr. At a reference heating value of 5,700 Btu/lb., this is equivalent to 900 TPD of RDF per boiler. Emissions from each boiler are controlled by a B&W spray dryer followed by a B&W/BSH Krefield 4-field electrostatic precipitator (ESP). Each precipitator has a gas flow rating of 198,000 acfm and is designed to operate with three of the four fields in service. The turbine-generator rating of 62 MW matches the full output of the boilers.

The facility also contains a new Biosolids Pelletization Facility (BPF) with a nominal capacity of 675 wet tons of sludge per day (wtpd, at 20% solids). The BPF has two 337.5 wtpd process trains and related appurtenances. The BPF is located adjacent to the existing landfill. Each dryer train at the BPF combusts landfill gas generated from the nearby landfill in a rotary drum dryer to dry sewage sludge, and then screens the dried sludge into marketable fertilizer pellets. Natural gas is used as an alternate fuel. Each dryer has a rated capacity of 40 MMBtu/hr heat input {for either landfill or natural gas} plus an additional 2 MMBtu/hr heat input from each regenerative thermal oxidizer (RTO) for a total rated capacity of 84 MMBtu/hr heat input from the dryers and the RTO.

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

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

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

E.U. ID Nos.	Brief Description
Regulated Emissions Units and/or Activities.	
001	Municipal Solid Waste Boiler No. 1
002	Municipal Solid Waste Boiler No. 2
019	Ash Building and Handling System
-003	Class I Landfill (1,800 scfm Flare Removed)
-004	Class III Landfill and Existing (*De-rated*) Flare-1,800 scfm manufactured by Parnell Biogas.
-008	Class I Landfill and *New Replacement* Flare-3,500 scfm, manufactured by Shaw LFG Specialties, model number CF1238I10.
-020	Class III Landfill Existing Flare-1,800 scfm (*Backup use only* at the Class III Landfill) manufactured by LFG Specialties.
-021	*New* engine (emergency generator, < 500 hours/year) - ~220 brake HP (125 kW) manufactured by Caterpillar® (EPA Tier 3 certified), located at the new

	operations building.
	Biosolids Pelletization Facility (BPF)
-010	Sludge Dryer Train #1
-011	Sludge Dryer Train #2
-012	Recycle Material Bin and Pellet Storage Silo for Sludge Dryer Train #1
-014	Recycle Material Bin and Pellet Storage Silo for Sludge Dryer Train #2
-016	Emergency Generator (EPA Tier 3 certified)
Unregulated Emissions Units and/or Activities.	
-005	RDF Storage
-006	RDF Processing Lines
-007	Oversized Bulk Waste Processing Line
-017	Woody Waste Facility Diesel Engine
-018	Cooling Tower

Please reference the Permit No., Facility ID No., and Appropriate Emissions Unit(s) ID No(s). on all correspondence, test report submittals, Applications, etc.

Subsection C. Relevant Documents.

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

These documents are provided to the permittee for information purposes only:
Table 1-1, Summary of Air Pollutant Standards and Terms.
Table 1-2, Summary of Compliance Requirements.

Table 1. Summary of Monitoring Requirements for MSW Landfills.
Table 2. Summary of Recordkeeping Requirements for MSW Landfills.
Table 3. Summary of Compliance Reporting Requirements for MSW Landfills.

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers (version dated 2/05/97).
Appendix H-1, Permit History/ID Number Changes.
Appendix BW, Biomedical Waste Definitions.

Statement of Basis

These documents are on file with the permitting authority:
PROPOSED Permit posted on web site on May 8, 2006.
DRAFT Permit clerked on January 4, 2006.
Application for a Title V Air Operation Permit Renewal and After-the-fact Air Construction Permit received May 2, 2005 via EPSAP.
Additional Information Request dated June 29, 2005.
Additional Information Response received September 16, 2005
Additional Information Request dated October 5, 2005.
Additional Information Response received December 5, 2005.

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

DEP Order Approving Request dated January 25, 2006.

Request for Changes to Testing Methodology of EPA Method 26.
DEP Order Approving Request dated March 10, 2006.

Landfill documents on file:

Request for Alternative Testing under General Flare Provisions of 40 CFR 60.18 received May 2, 2005.
Transmittal of Request for Alternative Testing under General Flare Provisions of 40 CFR 60.18 to USEPA dated July 12, 2005.
USEPA Approval of Request for Alternative Testing under General Flare Provisions of 40 CFR 60.18 dated August 10, 2005.

Class I and Class III Landfill Gas Well Inactivation Plan received September 19, 2005.
DEP Approval of Request dated December 13, 2005.

Request for an Alternative Timeline to Correct an Exceedance When Bringing Online New Landfill Gas System received on June 27, 2005.
DEP Approval of Request dated August 11, 2005.

Requests for Higher Wellhead Operating Temperature dated September 1 & October 20, 2005.
DEP Approval of Request dated October 25, 2005.

Section II. Facility-wide Specific Conditions.

The following Specific Conditions apply facility-wide:

1. APPENDIX TV-5, TITLE V CONDITIONS, is a part of this permit.
{Permitting note: APPENDIX TV-5, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}

2. **Not federally enforceable.** General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. No person shall cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.
[Rule 62-296.320(2), F.A.C.]

3. General Particulate Emission Limiting Standards. General Visible Emissions Standard.
Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.
[Rules 62-296.320(4)(b)1. & 4., F.A.C.]

4. Prevention of Accidental Releases (Section 112(r) of CAA).
a. The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center
Post Office Box 10162
Fairfax, VA 22038
Telephone: 703/227-7650

and,
b. The permittee shall submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.
[40 CFR 68]

5. Unregulated Emissions Units and/or Activities. Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit.
[Rule 62-213.440(1), F.A.C.]

6. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.
[Rules 62-213.440(1), 62-213.430(6) and 62-4.040(1)(b), F.A.C.]

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

8. Emissions of Unconfined Particulate Matter. Pursuant to Rules 62-296.320(4)(c)1., 3. & 4., F.A.C., reasonable precautions to prevent emissions of unconfined particulate matter at this facility include the following requirements (see Condition 57. of APPENDIX TV-5, TITLE V CONDITIONS):
a. Chemical or water application to unpaved road and unpaved yard and landfill areas;
b. Paving and maintenance of roads, parking areas and yards;
c. Landscaping or planting of vegetation;
d. Confining abrasive blasting where possible and appropriate;
e.(1) Unpaved roads and active unpaved areas are sprayed with a water truck;
e.(2) Landfill areas that are closed are promptly re-vegetated;
f. Ash is quenched with water prior to landfilling; and,
g. Waste transfer trucks are tarped.
[Rule 62-296.320(4)(c)2., F.A.C.; and, items a., e., f., and g. proposed by the applicant in the initial and renewal Title V permit applications.]

9. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.
[Rule 62-213.440, F.A.C.]

10. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted to the Department and EPA within 60 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C.
{Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2. & 3., F.A.C. (see Condition 51. of APPENDIX TV-5, TITLE V CONDITIONS)}
[Rules 62-213.440(3) and 62-213.900, F.A.C.]

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

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

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

United States Environmental Protection Agency, Region 4
Air, Pesticides & Toxics Management Division
Air and EPCRA Enforcement Branch
Air Enforcement Section
61 Forsyth Street
Atlanta, Georgia 30303-8960
Telephone: 404/562-9155; Fax: 404/562-9163

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

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

E.U. ID No.	Brief Description
-001	Municipal Solid Waste Boiler No. 1
-002	Municipal Solid Waste Boiler No. 2
-019	Ash Building and Handling System

These emission units are solid waste combustors and are designated as Boiler Nos. 1 and 2. The boilers are B&W Sterling Power Boilers, and each is rated at a heat input of 427.5 MMBtu./hr. at a steam flow rating of 324,000 lbs./hr. At a reference heating value of 5700 Btu/lb., this is equivalent to 900 TPD of RDF (75,000 lbs./hr. or 816 megagrams/day) per boiler. The facility is designed to process 2,000 TPD of mixed municipal solid waste with an annual throughput of 624,000 tons. Emissions from the boilers are controlled by spray dryer absorbers and electrostatic precipitators. The boilers have individual flues contained in a single stack casing. The facility began commercial operation in 1989.

{Permitting note(s). These emissions units are regulated under NSPS - 40 CFR 60, Subpart Cb, Emissions Guidelines and Compliance Times for Large Municipal Waste Combustors That Are Constructed on or Before September 20, 1994, adopted and incorporated by reference, subject to provisions, in Rule 62-204.800(8)(b), F.A.C.; Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT). Also, please note that conditions in 40 CFR 60, Subpart Cb, are contained in 40 CFR 60, Subpart Eb. These emissions units are also subject to Compliance Assurance Monitoring (CAM), adopted and incorporated by reference in Rule 62-204.800, F.A.C.}

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

Essential Potential to Emit (PTE) Parameters

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

E.U. ID No.	Steam Flow Rate [a]	Heat Input Rate [b]	Fuel Type
001	324,000 lb/hour	427.5 MMBtu/hour	RDF
002	324,000 lb/hour	427.5 MMBtu/hour	RDF

Notes:
[a] 4 hour block average {See Specific Condition **R.19.**}
[b] Maximum heat input rate (24-hour average) is based upon a reference heating value of 5700 BTU/lb. of RDF. Actual heating values range from 4500 to 6200 BTU/lb.

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

[Rules 62-4.160(2) and 62-210.228(PTE), F.A.C.; PSD-FL-108A and 0990234-015-AC/PSD-FL-108H]

A.1.1. Capacity. The procedures specified below shall be used for calculating municipal waste combustor unit capacity as defined under 40 CFR 60.51b.

[PSD-FL-108A]

Emission Limitations and Standards

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

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

Pollutant	PSD-FL-108A Permit Limit [a]	Federal Emission Guidelines [a]
Particulate Matter[b]	0.015 grains/dscf	27 mg/dscm
NOx[b]	0.48 lb/MMBtu (24 hr block avg)	250 ppmvd (24 hr block avg)
Carbon Monoxide[b]	400 ppmvd (4-hr block avg)/ 200 ppmvd (24 hr block avg)	200 ppmvd (24 hr block avg)
Lead[b]	4.0 x 10-4 lb/MMBtu	0.440 mg/dscm
Mercury[b]	2.4 x 10-4 lb/MMBtu	0.070 mg/dscm
Beryllium	7.3 x 10-7 lb/MMBtu	
Fluoride	3.2 x 10-3 lb/MMBtu	
VOC	1.6 x 10-2 lb/MMBtu	
SO2[b]	70% removal or 30 ppmvd	75% removal or 29 ppmvd
Hydrogen Chloride[b]	90% removal or 25 ppmvd	95% removal or 29 ppmvd
Dioxins/Furans[b]	60 ng/dscm	60 ng/dscm
Opacity	10% (6 minute avg)	10% (6 minute avg)
Cadmium[b]		0.040 mg/dscm

Notes: [a] the more stringent limit/guideline applies.
[b] corrected to 7% O_2.
[40 CFR 60, Subpart Cb; Rule 62-296.416(3)(b)1.b., F.A.C.; PSD-FL-108A; and, PSD-FL-108H]

Particulate Matter

A.7. The emission limit for particulate matter contained in the gases discharged to the atmosphere is 27 milligrams per dry standard cubic meter, corrected to 7 percent oxygen.
[40 CFR 60.33b(a)(1)(i)]

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

Visible Emissions

A.8. The emission limit for opacity exhibited by the gases discharged to the atmosphere is 10 percent (6-minute average). CEM readings when the process is not operating shall be excluded from averaging calculations.
[40 CFR 60.33b(a)(1)(iii)]

Cadmium

A.9. The emission limit for cadmium contained in the gases discharged to the atmosphere is 0.040 milligrams per dry standard cubic meter, corrected to 7 percent oxygen.
[40 CFR 60.33b(a)(2)(i)]

Carbon Monoxide

A.19. The emission limit for carbon monoxide contained in the gases discharged to the atmosphere is 200 parts per million by volume dry (ppmvd) (24-hour block average) and 400 ppmvd (4-hour block average), measured at the combustor outlet in conjunction with a measurement or calculation of oxygen concentration, corrected to 7 percent oxygen, dry basis. Calculated as an arithmetic average.
[40 CFR 60.34b(a); PSD-FL-108A; and 0990234-015-AC/PSD-FL-108H]

Volatile Organic Compounds

A.20. Volatile organic compound (VOC) emissions shall not exceed 1.6×10^{-2} lb/MMBTU.
[PSD-FL-108A]

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

Beryllium

A.21. Beryllium emissions shall not exceed 7.3×10^{-7} lb/MMBTU.
[PSD-FL-108A]

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

Fluoride

A.22. Fluoride emissions shall not exceed 3.2×10^{-3} lb/MMBTU.
[PSD-FL-108A]

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

Fugitive Ash Emissions

A.23. Fugitive Ash Emissions
(a) On and after the date on which the initial performance test is completed or is required to be completed under 40 CFR 60.8 of Subpart A, no owner or operator of an affected facility shall cause to be discharged to the atmosphere visible emissions of combustion ash from an ash conveying system (including conveyor transfer points) in excess of 5 percent of the observation period (i.e., 9 minutes per 3-hour period), as determined by EPA Reference Method 22 observations as specified in 40 CFR 60.58b(k), except as provided in paragraphs (b) and (c). See Specific Condition **T.10.**
(b) The emission limit specified in paragraph (a) does not cover visible emissions discharged inside buildings or enclosures of ash conveying systems; however, the emission limit specified in paragraph (a) does cover visible emissions discharged to the atmosphere from buildings or enclosures of ash conveying systems.
(c) The provisions of paragraph (a) do not apply during maintenance and repair of ash conveying systems.
[40 CFR 60.36b and 40 CFR 60.55b]

Excess Emissions

reference in Rule 62-204.800(9), F.A.C., shall be controlling over other standards in the air pollution rules of the Department except that any emissions limiting standard contained in or determined pursuant to the air pollution rules of the Department which is more stringent than one contained in a Standard of Performance, an Emission Guideline, or a National Emission Standard, or which regulates emissions of pollutants or emissions units not regulated by an applicable Standard of Performance, Emission Guideline, or National Emission Standard, shall apply.
[Rules 62-204.800(7)(c), (8)(a)1., and (9)(c), F.A.C.]

M.4. Acid Rain Program Application. For any unit which was a solid waste incinerator, burning less than 20 percent fossil fuel as described in 40 CFR 72.6(b)(7), adopted and incorporated by reference at Rule 62-204.800, F.A.C., the designated representative of the source containing the unit shall submit a complete Acid Rain Program application governing such unit to the Department before the later of January 1, 1998, or March 1 of the year following the three calendar year period in which the incinerator consumed 20 percent or more fossil fuel on a British thermal unit (BTU) basis.
[Chapter 62-214.320(1)(h), F.A.C.]

M.5. Emission Guidelines, 40 CFR 60 Subpart Cb. 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 That Are Constructed on or Before September 20, 1994, which are incorporated within this revision. These emissions units shall comply with Appendix 40 CFR 60, Subpart Cb attached to 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.]

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

E.U. ID No.	Brief Description
-003	Class I Landfill (1,800 scfm Flare Removed)
-004	Class III Landfill and Existing (*De-rated*) Flare-1,800 scfm manufactured by Parnell Biogas.
-008	Class I Landfill and *New Replacement* Flare-3,500 scfm, manufactured by Shaw LFG Specialties, model number CF1238I10.
-020	Class III Landfill Existing Flare-1,800 scfm (*Backup use only* at the Class III Landfill) manufactured by LFG Specialties.

The facility currently has two flares with one located at each landfill, Class I and Class III. Under Permit Nos. 0990234-012-AC/-013-AV the facility will continue to have two flares, one permanently located at each landfill. The older flare currently in use at the Class III landfill will be kept on-site and used as a backup flare only at the Class III Landfill. Each flare is rated based on a maximum heat content of 550 BTU/scfm. The gas flow rates from the Class I and Class III landfill flares are 1,839.6 million ft3/year and 946.08 million ft3/year, respectively.

Permit No. 0990234-012-AC is primarily for changes being made to the flares at the landfills, specifically: (1) the replacement of an existing flare; (2) the de-ration & relocation of an existing flare; and, (3) the conversion of one of the existing flares to back up use only.

The existing Class I Landfill Flare, a 3,500 scfm flare (Emissions Unit ID No.-008) manufactured by Parnell Biogas will be replaced in its entirety with a new similar 3,500 scfm flare manufactured by Shaw LFG Specialties, model number CF1238I10 (kept under E.U. ID No. -008).

The existing Class I Landfill Flare (formerly under Emissions Unit ID No.-008), which had begun operations in 2004 will be de-rated to a 1,800 scfm flare (now under Emissions Unit ID No. -004). This de-rated flare will be relocated and used at the Class III landfill in place of the existing Class III flare. The applicant is required to follow a de-ration schedule (see Compliance Plan).

The existing 1,800 scfm Class III Landfill Flare (formerly under E.U. ID No. -004, now under E.U. ID No. -020), which began operations in 1999, will be used as a backup only.

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

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

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

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

E.U. ID No.	Brief Description
-021	*New* engine (emergency generator, < 500 hours/year) - ~220 brake HP (125 kW) manufactured by Caterpillar® (EPA Tier 3 certified), located at the new operations building.

This engine is approximately a 220 brake horsepower (HP) large bore diesel engine, equipped with a 2.5 megawatt generator, Model TBGZHJ, with a displacement of 6 L (liters). The unit is proposed to be constructed in 2008. The generator provides peak demand reduction and emergency standby power. This engine uses low sulfur diesel fuel only.

This engine is a 'new' compression ignition (CI) stationary RICE unit under the RICE MACT contained at 40 CFR 63 Subpart ZZZZ. Therefore, this MACT does apply.

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

Essential Potential to Emit (PTE) Parameters

C.1. Capacity. This permit authorizes the operation of a new engine, an emergency generator, operating less than 500 hours/year, at the new operations building.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, Permit No. 0990234-012-AC]

NSPS & RICE MACT Requirements

C.2. The emergency generator, an engine, shall comply with the newly promulgated 40 CFR 63 Subpart ZZZZ, otherwise referred to as the "RICE MACT," adopted and incorporated by reference in Rules 62-204.800(11) & (8), F.A.C., attached as **Appendix 40 CFR 63, Subpart ZZZZ,** to this permit. Pursuant to 40 CFR 63.6590(c), the unit has elected to comply with the RICE MACT by meeting the requirements of the newly promulgated NSPS 40 CFR 60, Subpart IIII, attached as **Appendix 40 CFR 60 Subpart IIII** "set G," to this permit. Pursuant to 40 CFR 63.6590(c), no further requirements apply to the engine under 40 CFR 63 Subpart ZZZZ.
[Rules 62-204.800(11) & (8), F.A.C.]

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

E.U. ID No.	Brief Description
	Biosolids Pelletization Facility (BPF)
-010	Sludge Dryer Train #1
-011	Sludge Dryer Train #2
-012	Recycle Material Bin and Pellet Storage Silo for Sludge Dryer Train #1
-014	Recycle Material Bin and Pellet Storage Silo for Sludge Dryer Train #2
-016	Emergency Generator (EPA Tier 3 certified)

The BPF has two 337.5 wtpd {67.5 dry tpd} sludge drying trains, Dryer Train #1 and #2, and related appurtenances. The sludge dryer trains were manufactured by Baker Rullman Drum Assembly, Model No. SD-125-42. Each dryer train at the BPF combusts landfill gas generated from the nearby landfill in a rotary drum dryer to dry sewage sludge, and then screens the dried sludge into marketable fertilizer pellets. Natural gas is used as an alternate fuel. Each dryer has a rated capacity of 40 MMBtu/hr heat input {for either landfill or natural gas} plus an additional 2 MMBtu/hr heat input from each regenerative thermal oxidizer (RTO) for a total rated capacity of 84 MMBtu/hr heat input from the dryers and the RTOs.

Dry low NOx burners and acid addition in the tray/condenser scrubber shall be used to control NOx emissions from each dryer's exhaust. A tray/condenser scrubber and a venturi scrubber shall be used to control PM emissions from each dryer's exhaust. The BPF shall also use a regenerative thermal oxidizer (RTO) on each dryer exhaust to control VOC emissions with an efficiency of 98%. The RTO also minimizes odors. VOC's are also combusted in the dryer burners with an estimated efficiency of 98%. CO emissions are controlled by good combustion in the dryer and in the RTO. Each dryer RTO train has its own flue within a shared single stack.

The stack parameters are: height, 138 feet; diameter, 2.5 feet; exit temperature, 194 degrees F; and, actual stack gas flow rate, 15,000 acfm. The sludge dryer trains began operation on May 22, 2009.

Each biosolids dryer train has the following additional air emissions sources: exhaust vent on one recycle material bin exhaust from one fertilizer pellet storage silo, and one cooling tower. All of these are potential sources of PM emissions. Each of two recycle material bins is ventilated through a fugitive dust control baghouse and then through a building odor scrubber. Dusty air resulting from silo filling operations is ducted to the recycle bin baghouses, mentioned above. Emissions from the cooling towers and emergency generator are uncontrolled.

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

Essential Potential to Emit (PTE) Parameters

D.1. Permitted Capacity. The maximum process rate for each dryer train shall be 337.5 wet tons of sludge per day (wtpd, at 20% solids) or 67.5 dry tpd. The maximum process rate for the Biosolids Pelletization Facility (BPF) shall be 675 wet tons of sludge per day (wtpd, at 20% solids) or 135 dry tpd. The maximum heat input rate for each dryer and RTO are as follows:

E.U. ID No.		Landfill or Natural Gas
-010	Sludge Dryer Train #1	42 MMBtu/hour
-011	Sludge Dryer Train #2	42 MMBtu/hour

[Rules 62-4.160(2) and 62-210 (Definitions - Potential to Emit (PTE)), F.A.C.; and, Permit No. 0990234-006-AC/PSD-FL-108F.]

D.2. Methods of Operation - Fuels. The dryers shall be fired primarily by landfill gas with natural gas used as an alternate fuel. [Rules 62-4.160(2) and 62-210.200 (PTE), F.A.C.; and, Permit No. 0990234-006-AC/PSD-FL-108F.]

D.3. Hours of Operation. These emissions units may operate continuously, i.e., 8,760 hours/year. [Rules 62-4.160(2) and 62-210.200 (PTE), F.A.C.; and, Permit No. 0990234-006-AC/PSD-FL-108F.]

Monitoring of Operations

D.4. The owner or operator shall monitor and record daily the sludge process rate for each dryer train. [Rule 62-4.070(1)&(3), F.A.C.; and, Permit No. 0990234-006-AC/PSD-FL-108F.]

Air Pollution Control Technologies

D.5. The owner or operator shall operate and maintain the selected air pollution control technologies, e.g., dry low NOx burners, exhaust gas recirculation system, tray scrubber/condenser scrubber, venturi scrubbers and RTOs. [BACT Determination; and, Permit No. 0990234-006-AC/PSD-FL-108F.]

D.6. The owner or operator shall operate and maintain fabric filters on each material recycle bin exhaust to control PM emissions from the material recycle bin and the pellet storage silo. [BACT Determination; and, Permit No. 0990234-006-AC/PSD-FL-108F.]

Operation and Maintenance Plans

D.7. The owner or operator shall follow the manufacturers' Operation and Maintenance Manuals for the selected air pollution control technologies, e.g., dry low NOx burners, exhaust gas recirculation system, tray scrubber/condenser scrubber, venturi scrubber, RTOs and fabric filters. [BACT Determination; and, Permit No. 0990234-006-AC/PSD-FL-108F.]

Emission Limitations and Standards

D.8. Emissions from these emissions units shall not exceed the specific emission limitations and standards in **Table AP-1 Summary of Air Pollutants** attached to this permit. [BACT Determination; Rule 62-4.070(1)&(3), F.A.C. and Rule 62-212.400(2)(g), F.A.C.; and, Permit No. 0990234-006-AC/PSD-FL-108F.]

D.9. Unconfined Particulate Matter Emissions. Pursuant to Rules 62-296.320(4)(c)1., 3. and 4., F.A.C., reasonable precautions to prevent emissions of unconfined particulate matter at the BPF include the following requirements consistent with current practices by the Solid Waste Authority:

a. Pave all parking lots and permanent drives;
b. Street sweep paved areas on a regular basis; and,
c. Use a water truck to spray water on unpaved roads and active unpaved areas.

[Rule 62-296.320(4)(c)2., F.A.C.; and, Permit No. 0990234-006-AC/PSD-FL-108F.]]

40 CFR 61 Subpart E, NESHAP for Mercury

D.10. NESHAP 40 CFR 61 Requirements - Subpart E. The dryers shall comply with all applicable requirements of 40 CFR 61, Subpart E, National Emission Standards for Hazardous Air Pollutants for Mercury, which have been adopted by reference in Rule 62-204.800(10)(b)3., F.A.C., except that the term "Administrator," when used in any provision of 40 CFR Part 61 that is delegated to the Department by the U.S. Environmental Protection

Agency, shall mean the Secretary or the Secretary's designee. The dryers shall comply with **Appendix 40 CFR 61 Subpart E - NESHAP for Mercury** included with this permit. [Rule 62-204.800(10)(a) and (b)3., F.A.C.]

D.11. Mercury emissions from each dryer RTO train shall not exceed 2.2 E-02 lb/24-hour period. {The Hg emissions standard under the NESHAP is 3.2 kg (7.1 lb)/24-hour period. The applicant proposed a limit which is much lower than the NESHAP standard.} [Rule 62-4.070(1)&(3), F.A.C. and Rule 62-212.400(2)(g), F.A.C.; and, Permit No. 0990234-006-AC/PSD-FL-108F.]

40 CFR 61 Subpart A - NESHAP General Provisions

D.12. NESHAP 40 CFR 61 Requirements - Subpart A. The dryers shall comply with all applicable requirements of 40 CFR 61, Subpart A, General Provisions, which have been adopted by reference in Rule 62-204.800(10)(d), F.A.C., except for 40 CFR 61.08 and except that the Secretary is not the Administrator for the purposes of 40 CFR 61.04, 40 CFR 61.11, and 40 CFR 61.18. In lieu of the process set forth in 40 CFR 61.08, the Department will follow the permit processing procedures of Rule 62-4.055, F.A.C. The dryers shall comply with **Appendix 40 CFR 61 Subpart A - General Provisions** included with this permit. [Rule 62-204.800(10)(d), F.A.C.]

Test Methods and Procedures

D.13. Minor PM Particulate Source Test Methods. The maximum permitted allowable particulate matter emission rate (gr/dscf) from the silos and material recycling bins are stated in Table AP-1. Because of the expense and complexity of conducting a stack test on minor sources of particulate matter, and because these sources are equipped with a baghouse, the Department pursuant to the authority granted under Rule 62-297.620(4), F.A.C., hereby establishes a visible emission limitation not to exceed an opacity of 5% in lieu of a particulate stack test. In accordance with Rule 62-297.620(4), minor particulate sources equipped with baghouses with visible emissions that are greater than or equal to 5 percent opacity may result in the permittee being required to perform a stack test in accordance with approved methods to verify compliance with the gr/dscf emission limits. The visible emissions test shall be conducted by a certified observer using Method 9 and the procedures in 40 CFR. 60.11 and Rule 62-297.320, F.A.C. [Rule 62-297.620(4), F.A.C.; and, Permit No. 0990234-006-AC/PSD-FL-108F.]

Common Conditions

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

E.U. ID Nos.	Brief Description
	Biosolids Pelletization Facility (BPF)
-010	Sludge Dryer Train #1
-011	Sludge Dryer Train #2
-012	Recycle Material Bin and Pellet Storage Silo for Sludge Dryer Train #1
-014	Recycle Material Bin and Pellet Storage Silo for Sludge Dryer Train #2

Test Methods and Procedures

D.14. Compliance Testing. This facility shall comply with all applicable requirements of Rule 62-297.310, F.A.C., General Compliance Test Requirements and 40 CFR 60.8. Performance Tests. Compliance with the emission limitations and standards shall be determined by using the following reference methods as described in 40 CFR 60, Appendix A and 40 CFR 61, Appendix B adopted by reference in Chapter 62-204, F.A.C. Tests for

each pollutant shall be conducted at such other times as may be required by the Department or the EPA. The test methods are summarized below.

Method 5 Determination of Particulate Matter Emissions
Method 6C Determination of Sulfur Dioxide Emissions
Method 9 Visual Determination of the Opacity of Emissions
Method 7 or 7E Determination of Nitrogen Oxides Emissions
Method 10 Determination of Carbon Monoxide Emissions (I)
Method 25 or 25A Determination of Volatile Organic Compound Emissions (I)
Method 101A Determination of Particulate and Gaseous Mercury Emissions from Sewage Sludge Incinerators or Method 105 Determination of Mercury in Wastewater Treatment Plant Sewage Sludge. The specific testing and sampling conditions as outlined in 40 CFR 61.53 and 61.54 shall be followed as described.

Note: "(I)" refers to an initial test only. The testing frequency for VOC and CO emissions is an initial demonstration only; no subsequent testing is required for VOC and CO because the lb/hr emission rates stated in Table AP-1 were achieved in the initial test {see Rule 62-297.310(7)(a)4., F.A.C.} In lieu of frequent testing for VOC and CO emissions, the owner or operator shall follow the Operation and Maintenance Manuals for the dry low NOx burners and the RTOs.
[Chapter 297, F.A.C., Stationary Sources - Emissions Monitoring; and 40 CFR 60 Subpart A, and 40 CFR 61, Subpart A, General Provisions; and, Permit No. 0990234-006-AC/PSD-FL-108F.]

D.15. Annual Compliance Test. Unless otherwise specified by this permit, during each federal fiscal year (October 1st to September 30th), Emissions Unit ID Nos. -010 and -011 (Sludge Dryer Train #1 and #2) and -012 and -014 (Recycle Material Bins & Pellet Storage Silos for Sludge Dryer Train #1 and #2) shall be tested to demonstrate compliance with the emission limitations/standards for VE. Compliance with the visible emissions limit for the recycle bin fabric filter exhaust is determined at the building odor control scrubber exhaust. [Rule 62-297.310(7), F.A.C.]

D.16. Compliance Test Prior To Renewal. Prior to permit renewal, Emissions Unit ID Nos. -010 and -011 (Sludge Dryer Train #1 and #2) shall be tested to demonstrate compliance with the emission limitations and standards for VE, NOx, PM/PM_{10}, Hg and SO_2. [Rule 62-297.310(7)(a)3., F.A.C.]

D.17. Test Notification. The owner or operator shall notify the Department, at least 30 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. [Rule 62-297.310(7)9., F.A.C. and 40 CFR 61.13(c)]

D.18. Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in **Appendix SS-1, Stack Sampling Facilities**, attached to this permit. [Rule 62-297.310(6), F.A.C.]

D.19. Determination of Process Variables.
(a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and

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

D.20. Test Reports.
(a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
(b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
(c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
1. The type, location, and designation of the emissions unit tested.
2. The facility at which the emissions unit is located.
3. The owner or operator of the emissions unit.
4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports,
including the distance to any upstream and downstream bends or other flow disturbances.
8. The date, starting time and duration of each sampling run.
9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
10. The number of points sampled and configuration and location of the sampling plane.
11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
12. The type, manufacturer and configuration of the sampling equipment used.
13. Data related to the required calibration of the test equipment.
14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct.
When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.
[Rule 62-297.310(8), F.A.C.]

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

E.U. ID Nos.	Brief Description
	Biosolids Pelletization Facility (BPF)
-016	Emergency Generator (EPA Tier 3 certified)

This emergency generator is an engine manufactured in 2007, a Kohler® Model No. 350REOZDD, with approximately 550 brake horsepower (HP), equipped with a 410 kilowatt (kW) generator and with a displacement of 14.0 L (liters). The unit began operation on May 19, 2009. The generator provides emergency standby power. This engine uses low sulfur diesel fuel only. Air pollutant emissions from the engine are uncontrolled. The engine is U.S. EPA Tier 3 certified.

This engine is a 'new' compression ignition (CI) stationary RICE unit under the RICE MACT contained at 40 CFR 63, Subpart ZZZZ. Therefore, this MACT does apply.

{Permitting note(s): This emissions unit is regulated under 40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE) also referred to as the "RICE Maximum Achievable Control Technology (MACT)" adopted in Rule 62-204.800(11)(b), F.A.C.

This engine is classified as an emergency generator according to 40 CFR 63.6675:

"Emergency stationary RICE means any stationary RICE that operates in an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc. Emergency stationary RICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer, the vendor, or the insurance company associated with the engine. Required testing of such units should be minimized, but there is no time limit on the use of emergency stationary RICE in emergency situations and for routine testing and maintenance. Emergency stationary RICE may also operate an additional 50 hours per year in non-emergency situations."}

These specific conditions apply to the emissions unit listed above:

Essential Potential to Emit (PTE) Parameters

D.21. Hours of Operation. The engine is allowed to operate for no more than 500 hours per year in accordance with Rule 62-210.200, F.A.C. [Rule 62-210.200 (Definitions - Emergency Generator, F.A.C.)]

D.22. Hours of Operation. The engine excluding emergency conditions is allowed to operate for no more than 100 hours per year (approximately two hours per week) for routine testing and maintenance purposes. [Rule 62-204.800(11)(b), F.A.C.; and, 40 CFR 63.6675 (Definitions - Emergency Stationary RICE).]

Emission Limitations and Standards

D.23. The engine shall be EPA Tier 3 certified as required by Table 1 of 40 CFR 89.112. The applicable emission standards from Table 1 are:

NOx	Hydrocarbons (HC)	Non-methane HC (NMHC) + NOx	CO	PM
-	-	4.0 grams/kW-hour	3.5 grams/kW-hour	0.2 grams/kW-hour
		{equivalent to 3.6 lbs/hour}	{equivalent to 3.2 lbs/hour}	{equivalent to 0.18 lbs/hour}

[Rule 62-204.800(11) & (8), F.A.C.; and, Table 1 of 40 CFR 89.112]

D.24. The engine shall use low-sulfur diesel fuel, as required by 40 CFR 63, Subpart ZZZZ and 40 CFR 60, Subpart IIII, which reference the requirements in 40 CFR 80.510(a) (40 CFR 60.4207) (adopted by reference in Rule 62-204.800(11) & (8), F.A.C.): "(a) Beginning June 1, 2007. Except as otherwise specifically provided in this subpart, all NRLM (nonroad locomotive or marine) diesel fuel is subject to the following per-gallon standards: (1) Sulfur content. 500 parts per million (ppm) maximum. (2) Cetane index or aromatic content, as follows: (i) A minimum cetane index of 40; or (ii) A maximum aromatic content of 35 volume percent." [Rule 62-204.800(11) & (8), F.A.C.; and, 40 CFR 60.4207]

NESHAP 40 CFR 63, Subpart ZZZZ a.k.a. "RICE MACT" & NSPS 40 CFR 60, Subpart IIII a.k.a. "4-I" Requirements

D.25. The emergency generator, an engine, shall comply with the newly promulgated 40 CFR 63 Subpart ZZZZ, otherwise referred to as the "RICE MACT," adopted and incorporated by reference in Rules 62-204.800(11) & (8), F.A.C., attached as **Appendix 40 CFR 63, Subpart ZZZZ**, to this permit. Pursuant to 40 CFR 63.6590(c), the unit has elected to comply with the RICE MACT by meeting the requirements of the newly promulgated NSPS 40 CFR 60, Subpart IIII, attached as **Appendix 40 CFR 60, Subpart IIII** "set F," to this permit. Pursuant to 40 CFR 63.6590(c), no further requirements apply to the engine under 40 CFR 63, Subpart ZZZZ. [Rules 62-204.800(11) & (8), F.A.C.; and, 40 CFR 63.6590(c)]

NESHAP 40 CFR 63 Reporting and Recordkeeping Requirements

D.26. Notification Requirements. In accordance with 40 CFR 63.6590(b) the engine is subject to the notification requirements of this Subpart. New stationary RICE that operate exclusively as emergency units are subject only to initial notification requirements. [Rule 62-204.800(11), F.A.C.; and, 40 CFR 63.6590(b)]

D.27. Recordkeeping Requirement for Applicability Determinations. In accordance with 40 CFR 63.10 (b)(3) the owner or operator must keep a record of each applicability determination on site at the source for a period of five (5) years after the determination, or until the source changes its operations to become an affected source subject to the relevant standards, whichever comes first. [Rule 62-204.800(11), F.A.C.; and, 40 CFR 63.10(b)(3)]

SECTION IV. APPENDICES.

The Following Appendices Are Enforceable Parts of This Permit:

Appendix 40 CFR 60, Subpart A - General Provisions (version dated 10/09/08)
Appendix 40 CFR 60, Subpart Cb (version dated 03/24/2010)
Appendix 40 CFR 60, Subpart IIII "set F" (version dated 07/11/06)
Appendix 40 CFR 60, Subpart IIII "set G" (version dated 07/11/06)
Appendix 40 CFR 61, Subpart A - NESHAP General Provisions (version dated 05/06/04)
Appendix 40 CFR 61, Subpart E - NESHAP for Mercury (version dated 03/20/03)
Appendix 40 CFR 63, Subpart ZZZZ (version dated 01/18/08)

Appendix CAM with CAM Plan
Appendix CP-1, Compliance Plan for Permit No. 0990234-012-AC
Appendix I-1, List of Insignificant Emissions Units and/or Activities
APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96)
APPENDIX TV-5, TITLE V CONDITIONS (version dated 03/28/05)
Appendix U-1, List of Unregulated Emissions Units and/or Activities
Appendix WWW, Definitions for Subpart WWW - MSW Landfills

FIGURE 1 - SUMMARY REPORT-GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE REPORT (version dated 7/96)
Order Granting Variance dated August 25, 1997

TABLE 297.310-1, CALIBRATION SCHEDULE
Table AP-1 Summary of Air Pollutants

E.U. ID No.	Brief Description
-001	Municipal Solid Waste Boiler No. 1
-002	Municipal Solid Waste Boiler No. 2

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.

Index

40 CFR 60.30b Scope and delegation of authority.
40 CFR 60.31b Definitions.
40 CFR 60.32b Designated facilities.
40 CFR 60.33b Emission guidelines for municipal waste combustor metals, acid gases, organics, and nitrogen oxides.
40 CFR 60.34b Emission guidelines for municipal waste combustor operating practices.
40 CFR 60.35b Emission guidelines for municipal waste combustor operator training and certification.
40 CFR 60.36b Emission guidelines for municipal waste combustor fugitive ash emissions.
40 CFR 60.37b Emission guidelines for air curtain incinerators.
40 CFR 60.38b Compliance and performance testing.
40 CFR 60.39b Reporting and recordkeeping guidelines and compliance schedules.

End of Index

§ 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]

§ 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 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 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.

(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.

$$NO_{X_{24-hr}} = \frac{\sum_{i=1}^{k}\left(NO_{X_i}\right)\left(S_i\right)}{\sum_{i=1}^{k}\left(S_i\right)} \qquad (1)$$

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.

(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.

(*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 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 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.

(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]

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.

[a]Corrected 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

[a]Mass burn refractory municipal waste combustors and other MWC technologies not listed above may not be included in an emissions averaging plan.

[b]Corrected to 7 percent oxygen, dry basis.

[71 FR 27334, May 10, 2006]

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	[c]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	[c]24
Spreader stoker fixed floor refuse-derived fuel-fired combustor/100 percent coal capable	250	[c]24

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

[b]Averaging times are 4-hour or 24-hour block averages.

[c]24-hour block average, geometric mean.

[71 FR 27334, May 10, 2006]

E.U. ID Nos.	Brief Description
	Biosolids Pelletization Facility (BPF)
-016	Emergency Generator (EPA Tier 3 certified)

{Source: Federal Register Dated 7/11/06}

Subpart IIII--Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

[These conditions were customized internally as "Set F" for an owner/operator of a 2007 and later model year, non-fire pump emergency, greater than or equal to 10L and less than 30L per cylinder]

What This Subpart Covers
60.4200 Am I subject to this subpart?

Emission Standards for Manufacturers
Sec. 60.4201 – 60.4203 [Reserved.]

Emission Standards for Owners and Operators
60.4204 [Reserved.]
60.4205 What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?
60.4206 How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?

Fuel Requirements for Owners and Operators
60.4207 What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?

Other Requirements for Owners and Operators
60.4208 What is the deadline for importing and installing stationary CI ICE produced in the previous model year?
60.4209 What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

Compliance Requirements
60.4210 [Reserved.]
60.4211 What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

Testing Requirements for Owners and Operators
60.4212 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder?
[Alternative.] 60.4213 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of greater than or equal to 30 liters per cylinder?

Notification, Reports, and Records for Owners and Operators

60.4214 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?

Special Requirements
60.4215 - 60.4216 [Reserved.]
60.4217 What emission standards must I meet if I am an owner or operator of a stationary internal combustion engine using special fuels?

General Provisions
60.4218 What parts of the General Provisions apply?

Definitions
60.4219 What definitions apply to this subpart?

Tables to Subpart IIII of Part 60
Tables 1 – 4 [Reserved.]
Table 5 to Subpart IIII of Part 60 - Labeling and Recordkeeping Requirements for New Stationary Emergency Engines
Table 6 [Reserved.]
[Alternative.] Table 7 to Subpart IIII of Part 60 - Requirements for Performance Tests for Stationary CI ICE with a displacement of >=30 liters per cylinder
Table 8 to Subpart IIII of Part 60 - Applicability of General Provisions to Subpart IIII

What This Subpart Covers

Sec. 60.4200 Am I subject to this subpart?

(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (3) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

(1) [Reserved.]

(2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005 where the stationary CI ICE are:

(i) Manufactured after April 1, 2006 and are not fire pump engines, or

(ii) [Reserved.]

(3) Owners and operators of stationary CI ICE that modify or reconstruct their stationary CI ICE after July 11, 2005.

(b) The provisions of this subpart are not applicable to stationary CI ICE being tested at a stationary CI ICE test cell/stand.

(c) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a [Title V] permit under 40 CFR part 70 or 40 CFR part 71, provided you are not required to obtain a {Title V] permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.

(d) Stationary CI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C (or the exemptions described in 40 CFR part 89,

subpart J and 40 CFR part 94, subpart J, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.

Emission Standards for Manufacturers

Sec. 60.4201 [Reserved.]

Sec. 60.4202 What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufacturer?

(a) - (b) [Reserved.]

(c) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that are not fire pump engines to the certification emission standards for new marine CI engines in **40 CFR 94.8**, as applicable, for all pollutants, for the same displacement and maximum engine power.

[40 CFR § 94.8 Exhaust emission standards.

(a) The Tier 1 standards of paragraph (a)(1) of this section apply until replaced by the standards of paragraph (a)(2) of this section.

(1) Tier 1 standards. NO_X emissions from model year 2004 and later engines with displacement of 2.5 or more liters per cylinder may not exceed the following values:

(i) 17.0 g/kW-hr when maximum test speed is less than 130 rpm.

(ii) $45.0 \times N^{-0.20}$ when maximum test speed is at least 130 but less than 2000 rpm, where N is the maximum test speed of the engine in revolutions per minute. (Note: Round speed-dependent standards to the nearest 0.1 g/kW-hr.)

(iii) 9.8 g/kW-hr when maximum test speed is 2000 rpm or more.

(2) Tier 2 standards.

(i) Exhaust emissions from marine compression-ignition engines shall not exceed the applicable Tier 2 exhaust emission standards contained in Table A–1 as follows:

Table A-1_Primary Tier 2 Exhaust Emission Standards (g/kW-hr)

Engine Size liters/cylinder, rated power	Category	Model year[a]	THC+NO_x g/kW-hr	CO g/kW-hr	PM g/kW-hr
disp. <0.9 and power >=37 kW...	Cat.1, Commercial...	2005	7.5	5.0	0.40
	Cat.1, Recreational.	2007	7.5	5.0	0.40
0.9[le] disp.<1.2 all power levels.	Cat.1, Commercial...	2004	7.2	5.0	0.30
	Cat.1, Recreational.	2006	7.2	5.0	0.30
1.2[le] disp.<2.5 all power levels..	Cat.1, Commercial...	2004	7.2	5.0	0.20
	Cat.1, Recreational.	2006	7.2	5.0	0.20
2.5[le] disp.<5.0 all power levels..	Cat.1, Commercial...	2007	7.2	5.0	0.20
	Cat.1, Recreational.	2009	7.2	5.0	0.20
5.0[le] disp.<15.0 all power levels.	Cat.2.....	2007	7.8	5.0	0.27
15.0[le] disp.<20.0 power <3300 kW..	Cat.2.....	2007	8.7	5.0	0.50
15.0[le] disp.<20.0 power >=3300 kW.	Cat.2.....	2007	9.8	5.0	0.50
20.0[le] disp.<25.0 all power levels.	Cat.2.....	2007	9.8	5.0	0.50
25.0[le] disp.<30.0 all power levels.	Cat.2.....	2007	11.0	5.0	0.50
disp. >=30.0 all power levels.....	Cat.3.....	See paragraph (a)(2)(ii) of this section.			

[a]The model years listed indicate the model years for which the specified standards start.

(ii) EPA has not finalized Tier 2 standards for Category 3 engines. EPA will promulgate final Tier 2 standards for Category 3 engines on or before April 27, 2007.

(b) Exhaust emissions of oxides of nitrogen, carbon monoxide, hydrocarbon, and particulate matter (and other compounds, as applicable) shall be measured using the procedures set forth in subpart B of this part.

(c) In lieu of the THC+NO_X standards, and PM standards specified in paragraph (a) of this section, manufacturers may elect to include engine families in the averaging, banking, and trading program, the provisions of which are specified in subpart D of this part. The manufacturer shall then set a family emission limit (FEL) which will serve as the standard for that engine family. The ABT provisions of subpart D of this part do not apply for Category 3 engines.

(d) (1) Naturally aspirated engines subject to the standards of this section shall not discharge crankcase emissions into the ambient atmosphere.

(2) For engines using turbochargers, pumps, blowers, or superchargers for air induction, if the engine discharges crankcase emissions into the ambient atmosphere in use, these crankcase emissions shall be included in all exhaust emission measurements. This requirement applies only for engines subject to hydrocarbon standards (e.g., THC standards, NMHC standards, or THC+NO_X standards).

(3) The crankcase requirements of this paragraph (d) do not apply for Tier 1 engines.

(e) Exhaust emissions from Category 1 and Category 2 propulsion engines subject to the standards (or FELs) in paragraph (a), (c), or (f) of this section shall not exceed:

(1) Commercial marine engines.

(i) 1.20 times the applicable standards (or FELs) when tested in accordance with the supplemental test procedures specified in §94.106 at loads greater than or equal to 45 percent of the maximum power at rated speed or 1.50 times the applicable standards (or FELs) at loads less than 45 percent of the maximum power at rated speed.

(ii) As an option, the manufacturer may choose to comply with limits of 1.25 times the applicable standards (or FELs) when tested over the whole power range in accordance with the supplemental test procedures specified in §94.106, instead of the limits in paragraph (e)(1)(i) of this section.

(2) Recreational marine engines.

(i) 1.20 times the applicable standards (or FELs) when tested in accordance with the supplemental test procedures specified in §94.106 at loads greater than or equal to 45 percent of the maximum power at rated speed and speeds less than 95 percent of maximum test speed, or 1.50 times the applicable standards (or FELs) at loads less than 45 percent of the maximum power at rated speed, or 1.50 times the applicable standards (or FELs) at any loads for speeds greater than or equal to 95 percent of the maximum test speed.

(ii) As an option, the manufacturer may choose to comply with limits of 1.25 times the applicable standards (or FELs) when tested over the whole power range in accordance with the supplemental test procedures specified in §94.106, instead of the limits in paragraph 94.8(e)(2)(i).

(f) The following define the requirements for low-emitting Blue Sky Series engines:

(1) Voluntary standards.

(i) Category 1 and Category 2 engines may be designated "Blue Sky Series" engines by meeting the voluntary standards listed in Table A–2, which apply to all certification and in-use testing:

Table A-2_Voluntary Emission Standards [g/kW-hr]

Rated brake power (kW)	THC+NOX	PM
Power >= 37 kW, and displ. < 0.9.....	4.0	0.24
0.9 [le] displ. < 1.2.....	4.0	0.18
1.2 [le] displ. < 2.5.....	4.0	0.12
2.5 [le] displ. < 5.....	5.0	0.12
5 [le] displ. < 15.....	5.0	0.16
15 [le] disp. < 20, and power < 3300 kW..	5.2	0.30
15 [le] disp. < 20, and power >= 3300 kW..	5.9	0.30
20 [le] disp. < 25.....	5.9	0.30
25 [le] disp. < 30.....	6.6	0.30

(ii) Category 3 engines may be designated "Blue Sky Series" engines by meeting these voluntary standards that would apply to all certification and in-use testing:

(A) A NO_X standard of $9.0 \times N^{-0.20}$ where N = the maximum test speed of the engine in revolutions per minute (or 4.8 g/kW-hr for engines with maximum test speeds less than 130 rpm). (Note: Round speed-dependent standards to the nearest 0.1 g/kW-hr.)

(B) An HC standard of 0.4 g/kW-hr.

(C) A CO standard of 3.0 g/kW-hr.

(2) Additional standards. Blue Sky Series engines are subject to all provisions that would otherwise apply under this part.

(3) Test procedures. Manufacturers may use an alternate procedure to demonstrate the desired level of emission control if approved in advance by the Administrator.

(g) Standards for alternative fuels. The standards described in this section apply to compression-ignition engines, irrespective of fuel, with the following two exceptions for Category 1 and Category 2 engines:

(1) Engines fueled with natural gas shall comply with $NMHC+NO_X$ standards that are numerically equivalent to the $THC+NO_X$ described in paragraph (a) of this section; and

(2) Engines fueled with alcohol fuel shall comply with $THCE+NO_X$ standards that are numerically equivalent to the $THC+NO_X$ described in paragraph 94.8 (a).]

(d) [Reserved.]

Sec. 60.4203 [Reserved.]

Emission Standards for Owners and Operators

Sec. 60.4204 [Reserved.]

Sec. 60.4205 What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(a) [Reserved.]

(b) Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in Sec. 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.

(c) – (d) [Reserved.]

Sec. 60.4206 How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?

Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in Sec. 60.4205 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.

Fuel Requirements for Owners and Operators

Sec. 60.4207 What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?

(a) Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).

> ***(40 CFR § 80.510 What are the standards and marker requirements for NRLM [nonroad locomotive or marine] diesel fuel?***
> *(a) Beginning June 1, 2007. Except as otherwise specifically provided in 40 CFR 80 Subpart I, all NRLM diesel fuel is subject to the following per-gallon standards:*
> *(1) Sulfur content. 500 parts per million (ppm) maximum.*
> *(2) Cetane index or aromatic content, as follows:*
> *(i) A minimum cetane index of 40; or*
> *(ii) A maximum aromatic content of 35 volume percent.)*

(b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.

> ***(40 CFR § 80.510 What are the standards and marker requirements for NRLM [nonroad locomotive or marine] diesel fuel?***
> *(b) Beginning June 1, 2010. Except as otherwise specifically provided in CFR 80 Subpart I, all NR and LM diesel fuel is subject to the following per-gallon standards:*
> *(1) Sulfur content.*
> *(i) 15 ppm maximum for NR diesel fuel.*
> *(ii) 500 ppm maximum for LM diesel fuel.*
> *(2) Cetane index or aromatic content, as follows:*
> *(i) A minimum cetane index of 40; or*
> *(ii) A maximum aromatic content of 35 volume percent.)*

(c) Owners and operators of pre-2011 model year stationary CI ICE subject to this subpart may petition the Administrator for approval to use remaining non-compliant fuel that does not meet the fuel requirements of paragraphs (a) and (b) of this section beyond the dates required for the purpose of using up existing fuel inventories. If approved, the petition will be valid for a period of up to 6 months. If additional time is needed, the owner or operator is required to submit a new petition to the Administrator.

(d) [Reserved.]

(e) Stationary CI ICE that have a national security exemption under Sec. 60.4200(d) are also exempt from the fuel requirements in this section.

Other Requirements for Owners and Operators

Sec. 60.4208 What is the deadline for importing or installing stationary CI ICE produced in the previous model year?

(a) After December 31, 2008, owners and operators may not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines.

(b) After December 31, 2009, owners and operators may not install stationary CI ICE with a maximum engine power of less than 19 KW (25 HP) (excluding fire pump engines) that do not meet the applicable requirements for 2008 model year engines.

(c) – (f)

(g) In addition to the requirements specified in Sections 60.4202 and 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements specified in paragraphs (a) through (f) of this section after the dates specified in paragraphs (a) through (f) of this section.

(h) The requirements of this section do not apply to owners or operators of stationary CI ICE that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location.

Sec. 60.4209 What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

If you are an owner or operator, you must meet the monitoring requirements of this section. In addition, you must also meet the monitoring requirements specified in Sec. 60.4211.

(a) If you are an owner or operator of an emergency stationary CI internal combustion engine, you must install a non-resettable hour meter prior to startup of the engine.

(b) [Reserved.]

Compliance Requirements

Sec. 60.4210 [Reserved.]

Sec. 60.4211 What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. **You must also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.**

(b) [Reserved.]

(c) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in Sec. 60.4205(b), you must comply by purchasing an engine certified to the emission standards in Sec. 60.4205(b) for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.

(d) [Reserved.]

(e) Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. Anyone may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. For owners and operators of emergency engines meeting standards under Sec. 60.4205 but not Sec. 60.4204, any operation other than emergency operation, and maintenance and testing as permitted in this section, is prohibited.

Testing Requirements for Owners and Operators

Sec. 60.4212 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder?

Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to this subpart must do so according to paragraphs (a) through (d) of this section.

(a) The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F.

(b) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the **not-to-exceed (NTE)** standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039.

(c) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8, as applicable, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112 or 40 CFR 94.8, as applicable, determined from the following equation:

$$\text{NTE requirement for each pollutant} = (1.25) \times (\text{STD}) \qquad \text{(Eq. 1)}$$

Where:

STD = The standard specified for that pollutant in 40 CFR 89.112 or 40 CFR 94.8, as applicable.

Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8 may follow the testing procedures specified in Sec. 60.4213 of this subpart, as appropriate.

(d) [Reserved.]

[Alternative.] Sec. 60.4213 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of greater than or equal to 30 liters per cylinder?

Owners and operators of stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must conduct performance tests according to paragraphs (a) through (d) of this section.

(a) Each performance test must be conducted according to the requirements in Sec. 60.8 and under the specific conditions that this subpart specifies in table 7. The test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load.

(b) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in Sec. 60.8(c).

(c) You must conduct three separate test runs for each performance test required in this section, as specified in Sec. 60.8(f). Each test run must last at least 1 hour.

(d) To determine compliance with the percent reduction requirement, you must follow the requirements as specified in paragraphs (d)(1) through (3) of this section.

(1) You must use Equation 2 of this section to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \qquad \text{(Eq. 2)}$$

Where:
C_i = concentration of NO_X or PM at the control device inlet,
C_o = concentration of NO_X or PM at the control device outlet, and
R = percent reduction of NO_X or PM emissions.

(2) You must normalize the NO_X or PM concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen (O_2) using Equation 3 of this section, or an

equivalent percent carbon dioxide (CO_2) using the procedures described in paragraph (d)(3) of this section.

$$C_{adj} = C_d \frac{5.9}{20.9 - \%\ O_2} \qquad \text{(Eq. 3)}$$

Where:
C_{adj} = Calculated NO_X or PM concentration adjusted to 15 percent O_2.
C_d = Measured concentration of NO_X or PM, uncorrected.
5.9 = 20.9 percent O_2-15 percent O_2, the defined O_2 correction value, percent.
$\%O_2$ = Measured O_2 concentration, dry basis, percent.

(3) If pollutant concentrations are to be corrected to 15 percent O_2 and CO_2 concentration is measured in lieu of O_2 concentration measurement, a CO_2 correction factor is needed. Calculate the CO_2 correction factor as described in paragraphs (d)(3)(i) through (iii) of this section.

(i) Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

$$F_o = \frac{0.209_{F_d}}{F_c} \qquad \text{(Eq. 4)}$$

Where:
F_o = Fuel factor based on the ratio of O_2 volume to the ultimate CO_2 volume produced by the fuel at zero percent excess air.
0.209 = Fraction of air that is O_2, percent/100.
F_d = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm^3/J ($dscf/10^6$ Btu).
F_c = Ratio of the volume of CO_2 produced to the gross calorific value of the fuel from Method 19, dsm^3/J ($dscf/10^6$ Btu).

(ii) Calculate the CO_2 correction factor for correcting measurement data to 15 percent O_2, as follows:

$$X_{CO_2} = \frac{5.9}{F_o} \qquad \text{(Eq. 5)}$$

Where:

X_{CO2} = CO_2 correction factor, percent.
5.9 = 20.9 percent O_2-15 percent O_2, the defined O_2 correction value, percent.

(iii) Calculate the NO_X and PM gas concentrations adjusted to 15 percent O_2 using CO_2 as follows:

$$C_{adj} = C_d \frac{X_{CO_2}}{\%CO_2} \qquad \text{(Eq. 6)}$$

Where:
C_{adj} = Calculated NO_X or PM concentration adjusted to 15 percent O_2.
C_d = Measured concentration of NO_X or PM, uncorrected.
$\%CO_2$ = Measured CO_2 concentration, dry basis, percent.

(e) To determine compliance with the NO_X mass per unit output emission limitation, convert the concentration of NO_X in the engine exhaust using Equation 7 of this section:

$$ER = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{\text{KW-hour}} \qquad \text{(Eq. 7)}$$

Where:

ER = Emission rate in grams per KW-hour.
C_d = Measured NO_X concentration in ppm.
1.912×10^{-3} = Conversion constant for ppm NO_X to grams per standard cubic meter at 25 degrees Celsius.
Q = Stack gas volumetric flow rate, in standard cubic meter per hour.
T = Time of test run, in hours.
KW-hour = Brake work of the engine, in KW-hour.

(f) To determine compliance with the PM mass per unit output emission limitation, convert the concentration of PM in the engine exhaust using Equation 8 of this section:

$$ER = \frac{C_{adj} \times Q \times T}{\text{KW-hour}} \qquad \text{(Eq. 8)}$$

Where:
ER = Emission rate in grams per KW-hour.
C_{adj} = Calculated PM concentration in grams per standard cubic meter.
Q = Stack gas volumetric flow rate, in standard cubic meter per hour.
T = Time of test run, in hours.
KW-hour = Energy output of the engine, in KW.

Notification, Reports, and Records for Owners and Operators

Sec. 60.4214 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) [Reserved.]

(b) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

(c) If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.

Special Requirements

60.4215 - 60.4216 [Reserved.]

Sec. 60.4217 What emission standards must I meet if I am an owner or operator of a stationary internal combustion engine using special fuels?

(a) Owners and operators of stationary CI ICE that do not use diesel fuel, or who have been given authority by the Administrator under Sec. 60.4207(d) of this subpart to use fuels that do not meet the fuel requirements of paragraphs (a) and (b) of Sec. 60.4207, may petition the Administrator for approval of alternative emission standards, if they can demonstrate that they use a fuel that is not the fuel on which the manufacturer of the engine certified the engine and that the engine cannot meet the applicable standards required in Sec. 60.4202 or Sec. 60.4203 using such fuels.

(b) [Reserved]

General Provisions

Sec. 60.4218 What parts of the General Provisions apply?

Table 8 to this subpart shows which parts of the General Provisions in Sections 60.1 through 60.19 apply to you.

Definitions

Sec. 60.4219 What definitions apply to this subpart?

As used in this subpart, all terms not defined herein shall have the meaning given them in the CAA and in subpart A of this part.

Combustion turbine means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and sub-components comprising any simple cycle combustion turbine, any regenerative/recuperative cycle combustion turbine, the combustion turbine portion of any cogeneration cycle combustion system, or the combustion turbine portion of any combined cycle steam/electric generating system.

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is number 2 distillate oil.

Diesel particulate filter means an emission control technology that reduces PM emissions by trapping the particles in a flow filter substrate and periodically removes the collected particles by either physical action or by oxidizing (burning off) the particles in a process called regeneration.

Emergency stationary internal combustion engine means any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary ICE used to produce power for critical networks or

equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc. Stationary CI ICE used to supply power to an electric grid or that supply power as part of a financial arrangement with another entity are not considered to be emergency engines.

Engine manufacturer means the manufacturer of the engine. See the definition of ``manufacturer'' in this section.

Fire pump engine means an emergency stationary internal combustion engine certified to NFPA requirements that is used to provide power to pump water for fire suppression or protection.

Manufacturer has the meaning given in section 216(1) of the Act. In general, this term includes any person who manufactures a stationary engine for sale in the United States or otherwise introduces a new stationary engine into commerce in the United States. This includes importers who import stationary engines for sale or resale.

Maximum engine power means maximum engine power as defined in 40 CFR 1039.801.

Model year means either:

(1) The calendar year in which the engine was originally produced, or

(2) The annual new model production period of the engine manufacturer if it is different than the calendar year. This must include January 1 of the calendar year for which the model year is named. It may not begin before January 2 of the previous calendar year and it must end by December 31 of the named calendar year. For an engine that is converted to a stationary engine after being placed into service as a nonroad or other non-stationary engine, model year means the calendar year or new model production period in which the engine was originally produced.

Other internal combustion engine means any internal combustion engine, except combustion turbines, which is not a reciprocating internal combustion engine or rotary internal combustion engine.

Reciprocating internal combustion engine means any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work.

Rotary internal combustion engine means any internal combustion engine which uses rotary motion to convert heat energy into mechanical work.

Spark ignition means relating to a gasoline, natural gas, or liquefied petroleum gas fueled engine or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

Stationary internal combustion engine means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

Subpart means 40 CFR part 60, subpart IIII.

Useful life means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for useful life for stationary CI ICE with a displacement of less than 10 liters per cylinder are given in 40 CFR

1039.101(g). The values for useful life for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder are given in 40 CFR 94.9(a).

Tables to Subpart IIII of Part 60

TABLES 1 – 4 [Reserved.]

TABLE 5 TO SUBPART IIII OF PART 60.—LABELING AND RECORDKEEPING REQUIREMENTS FOR NEW STATIONARYEMERGENCY ENGINES

[You must comply with the labeling requirements in § 60.4210(f) and the recordkeeping requirements in § 60.4214(b) for new emergency stationary CI ICE beginning in the following model years:]

Engine Power	Starting Model Year
19≤KW<56 (25≤HP<75)	2013
56≤KW<130 (75≤HP<175)	2012
KW≥130 (HP≥175)	2011

TABLE 6 [Reserved.]

[Alternative.] TABLE 7 TO SUBPART IIII OF PART 60.—REQUIREMENTS FOR PERFORMANCE TESTS FOR STATIONARY CI ICE WITH A DISPLACEMENT OF ≥30 LITERS PER CYLINDER

[As stated in § 60.4213, you must comply with the following requirements for performance tests for stationary CI ICE with a displacement of ≥30 liters per cylinder:]

For Each	Complying with the requirement to	You must	Using	According to the following requirements
1. Stationary CI internal combustion engine with a displacement of ≥30 liters per cylinder.	a. Reduce NO_X emissions by 90 percent or more.	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A.	(a) Sampling sites must be located at the inlet and outlet of the control device.
		ii. Measure O_2 at the inlet and outlet of the control device;	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A.	(b) Measurements to determine O_2 concentration must be made at the same time as the measurements for NO_X concentration.
		iii. If necessary, measure moisture content at the inlet and outlet of the control device; and,	(3) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, see § 60.17).	(c) Measurements to determine moisture content must be made at the same time as the measurements for NO_X concentration.
		iv. Measure NO_X at the inlet and outlet of the control device.	(4) Method 7E of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, see § 60.17).	(d) NO_X concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	b. Limit the concentration of NO_X in the stationary CI internal combustion engine exhaust.	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, Appendix A.	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O_2 concentration of the stationary internal combustion engine exhaust at the sampling port location; and,	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A.	(b) Measurements to determine O_2 concentration must be made at the same time as the measurement for NO_X concentration.
		iii. If necessary,	(3) Method 4 of 40	(c) Measurements to

		measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and,	CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, see § 60.17).	determine moisture content must be made at the same time as the measurement for NO_X concentration.
		iv. Measure NO_X at the exhaust of the stationary internal combustion engine.	(4) Method 7E of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03 (incorporated by reference, see § 60.17).	(d) NO_X concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	c. Reduce PM emissions by 60 percent or more.	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A.	(a) Sampling sites must be located at the inlet and outlet of the control device.
		ii. Measure O_2 at the inlet and outlet of the control device;	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A.	(b) Measurements to determine O_2 concentration must be made at the same time as the measurements for PM concentration.
		iii. If necessary, measure moisture content at the inlet and outlet of the control device; and	(3) Method 4 of 40 CFR part 60, appendix A.	(c) Measurements to determine and moisture content must be made at the same time as the measurements for PM concentration.
		iv. Measure PM at the inlet and outlet of the control device.	(4) Method 5 of 40 CFR part 60, appendix A.	(d) PM concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	d. Limit the concentration of PM in the stationary CI internal combustion engine exhaust.	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, Appendix A.	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O_2 concentration of the stationary internal combustion engine exhaust at the sampling port location; and	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A.	(b) Measurements to determine O_2 concentration must be made at the same time as the measurements for PM concentration.
		iii. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(3) Method 4 of 40 CFR part 60, appendix A.	(c) Measurements to determine moisture content must be made at the same time as the measurements for PM concentration.
		iv. Measure PM at the exhaust of the stationary internal combustion engine.	(4) Method 5 of 40 CFR part 60, appendix A.	(d) PM concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

TABLE 8 TO SUBPART IIII OF PART 60.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART IIII

[As stated in § 60.4218, you must comply with the following applicable General Provisions:]

General Provisions citation	Subject of citation	Applies to subpart	Explanation
§ 60.1	General applicability of the General Provisions	yes	
§ 60.2	Definitions	yes	Additional terms defined in § 60.4219.
§ 60.3	Units and abbreviations	yes	
§ 60.4	Address	yes	
§ 60.5	Determination of construction or modification	yes	
§ 60.6	Review of plans	yes	
§ 60.7	Notification and Recordkeeping	yes	Except that § 60.7 only applies as specified in § 60.4214(a).
§ 60.8	Performance tests	yes	Except that § 60.8 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder and engines that are not certified.
§ 60.9	Availability of information	yes	
§ 60.10	State Authority	yes	
§ 60.11	Compliance with standards and maintenance requirements.	no	Requirements are specified in subpart IIII.
§ 60.12	Circumvention	yes	
§ 60.13	Monitoring requirements	yes	Except that § 60.13 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder.
§ 60.14	Modification	yes	
§ 60.15	Reconstruction	yes	
§ 60.16	Priority list	yes	
§ 60.17	Incorporations by reference	yes	
§ 60.18	General control device requirements	no	
§ 60.19	General notification and reporting requirements	yes	

E.U. ID No.	Brief Description
-021	*New* engine (emergency generator, < 500 hours/year) - ~220 brake HP (125 kW) manufactured by Caterpillar® (EPA Tier 3 certified), located at the new operations building.

{Source: Federal Register Dated 7/11/06}

Subpart IIII--Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

[These conditions were customized internally as "Set G" for an owner/operator of a 2007 and later model, non-fire pump emergency engine, less than 10 L per cylinder.]

What This Subpart Covers
60.4200 Am I subject to this subpart?

Emission Standards for Manufacturers
60.4202 What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufacturer?

Emission Standards for Owners and Operators
60.4205 What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?
60.4206 How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?

Fuel Requirements for Owners and Operators
60.4207 What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?

Other Requirements for Owners and Operators
60.4208 What is the deadline for importing and installing stationary CI ICE produced in the previous model year?
60.4209 What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

Compliance Requirements
60.4211 What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

Testing Requirements for Owners and Operators
60.4212 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder?
60.4213 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of greater than or equal to 30 liters per cylinder?

Notification, Reports, and Records for Owners and Operators

60.4214 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?

Special Requirements
60.4215 What requirements must I meet for engines used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands?
60.4216 What requirements must I meet for engines used in Alaska?
60.4217 What emission standards must I meet if I am an owner or operator of a stationary internal combustion engine using special fuels?

General Provisions
60.4218 What parts of the General Provisions apply to me?

Definitions
60.4219 What definitions apply to this subpart?

Tables to Subpart IIII of Part 60
Table 1 to Subpart IIII of Part 60--Emission Standards for Stationary Pre-2007 Model Year Engines with a displacement of < 10 liters per cylinder and 2007-2010 Model Year Engines >2,237 KW (3,000 HP) and with a displacement of < 10 liters per cylinder
Table 2 to Subpart IIII of Part 60--Emission Standards for 2008 Model Year and Later Emergency Stationary CI ICE < 37 KW (50 HP) and with a Displacement of < 10 liters per cylinder
Table 3 to Subpart IIII of Part 60--Certification Requirements for Stationary Fire Pump Engines
Table 4 to Subpart IIII of Part 60--Emission Standards for Stationary Fire Pump Engines
Table 5 to Subpart IIII of Part 60--Labeling and Recordkeeping Requirements for New Stationary Emergency Engines
Table 6 to Subpart IIII of Part 60--Optional 3-Mode Test Cycle for Stationary Fire Pump Engines
Table 7 to Subpart IIII of Part 60--Requirements for Performance Tests for Stationary CI ICE with a displacement of >=30 liters per cylinder
Table 8 to Subpart IIII of Part 60--Applicability of General Provisions to Subpart IIII

Sec. 60.4200 Am I subject to this subpart?

(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (3) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

(1) Manufacturers of stationary CI ICE with a displacement of less than 30 liters per cylinder where the model year is:

(i) 2007 or later, for engines that are not fire pump engines,

(ii) The model year listed in table 3 to this subpart or later model year, for fire pump engines.

(2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005 where the stationary CI ICE are:

(i) Manufactured after April 1, 2006 and are not fire pump engines, or

(ii) Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.

(3) Owners and operators of stationary CI ICE that modify or reconstruct their stationary CI ICE after July 11, 2005.

(b) The provisions of this subpart are not applicable to stationary CI ICE being tested at a stationary CI ICE test cell/stand.

(c) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.

(d) Stationary CI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C (or the exemptions described in 40 CFR part 89, subpart J and 40 CFR part 94, subpart J, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.

Sec. 60.4202 What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (a)(1) through (2) of this section.

(1) For engines with a maximum engine power less than 37 KW (50 HP):

(i) The certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants for model year 2007 engines, and

(ii) The certification emission standards for new nonroad CI engines in 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, 40 CFR 1039.115, and table 2 to this subpart, for 2008 model year and later engines.

(2) For engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new nonroad CI engines for the same model year and

maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007.

(b) – (d) [Reserved.]

Sec. 60.4205 What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(a) [Reserved.]

(b) Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in Sec. 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.

(c) – (d) [Reserved.]

Sec. 60.4206 How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?

Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in Sec. 60.4205 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.

Sec. 60.4207 What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?

(a) Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).

> ***(§ 80.510 What are the standards and marker requirements for NRLM [nonroad locomotive or marine] diesel fuel?***
> *(a) Beginning June 1, 2007. Except as otherwise specifically provided in 40 CFR 80 Subpart I, all NRLM diesel fuel is subject to the following per-gallon standards:*
> *(1) Sulfur content. 500 parts per million (ppm) maximum.*
> *(2) Cetane index or aromatic content, as follows:*
> *(i) A minimum cetane index of 40; or*
> *(ii) A maximum aromatic content of 35 volume percent.)*

(b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.

> ***(§ 80.510 What are the standards and marker requirements for NRLM [nonroad locomotive or marine] diesel fuel?***
> *(b) Beginning June 1, 2010. Except as otherwise specifically provided in CFR 80 Subpart I, all NR and LM diesel fuel is subject to the following per-gallon standards:*
> *(1) Sulfur content.*
> *(i) 15 ppm maximum for NR diesel fuel.*
> *(ii) 500 ppm maximum for LM diesel fuel.*

(2) Cetane index or aromatic content, as follows:
(i) A minimum cetane index of 40; or
(ii) A maximum aromatic content of 35 volume percent.)

(c) Owners and operators of pre-2011 model year stationary CI ICE subject to this subpart may petition the Administrator for approval to use remaining non-compliant fuel that does not meet the fuel requirements of paragraphs (a) and (b) of this section beyond the dates required for the purpose of using up existing fuel inventories. If approved, the petition will be valid for a period of up to 6 months. If additional time is needed, the owner or operator is required to submit a new petition to the Administrator.

(d) [Reserved.]

(e) Stationary CI ICE that have a national security exemption under Sec. 60.4200(d) are also exempt from the fuel requirements in this section.

Sec. 60.4208 What is the deadline for importing or installing stationary CI ICE produced in the previous model year?

(a) After December 31, 2008, owners and operators may not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines.

(b) After December 31, 2009, owners and operators may not install stationary CI ICE with a maximum engine power of less than 19 KW (25 HP) (excluding fire pump engines) that do not meet the applicable requirements for 2008 model year engines.

(c) After December 31, 2014, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 19 KW (25 HP) and less than 56 KW (75 HP) that do not meet the applicable requirements for 2013 model year non-emergency engines.

(d) After December 31, 2013, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 56 KW (75 HP) and less than 130 KW (175 HP) that do not meet the applicable requirements for 2012 model year non-emergency engines.

(e) After December 31, 2012, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 130 KW (175 HP), including those above 560 KW (750 HP), that do not meet the applicable requirements for 2011 model year non-emergency engines.

(f) After December 31, 2016, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 560 KW (750 HP) that do not meet the applicable requirements for 2015 model year non-emergency engines.

(g) In addition to the requirements specified in Sec. 60.4202 and Sec. 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements specified in paragraphs (a) through (f) of this section after the dates specified in paragraphs (a) through (f) of this section.

(h) The requirements of this section do not apply to owners or operators of stationary CI ICE that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location.

Sec. 60.4209 What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

If you are an owner or operator, you must meet the monitoring requirements of this section. In addition, you must also meet the monitoring requirements specified in Sec. 60.4211.

(a) If you are an owner or operator of an emergency stationary CI internal combustion engine, you must install a non-resettable hour meter prior to startup of the engine.

(b) If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in Sec. 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

Sec. 60.4211 What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. You must also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

(b) [Reserved.]

(c) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in Sec. 60.4205(b), you must comply by purchasing an engine certified to the emission standards in Sec. 60.4204(b), or Sec. 60.4205(b), as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.

(d) [Reserved.]

(e) Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. Anyone may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. For owners and operators of emergency engines meeting standards under Sec. 60.4205 but not Sec. 60.4204, any operation other than emergency operation, and maintenance and testing as permitted in this section, is prohibited.

Sec. 60.4212 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder?

Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to this subpart must do so according to paragraphs (a) through (d) of this section.

(a) The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F.

(b) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039.

(c) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8, as applicable, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112 or 40 CFR 94.8, as applicable, determined from the following equation:

$$\text{NTE requirement for each pollutant} = (1.25) \times (\text{STD}) \qquad \text{(Eq. 1)}$$

Where:

STD = The standard specified for that pollutant in 40 CFR 89.112 or 40 CFR 94.8, as applicable.

Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8 may follow the testing procedures specified in Sec. 60.4213 of this subpart, as appropriate.

(d) [Reserved.]

Sec. 60.4214 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) [Reserved.]

(b) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

(c) If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.

Sec. 60.4217 What emission standards must I meet if I am an owner or operator of a stationary internal combustion engine using special fuels?

(a) Owners and operators of stationary CI ICE that do not use diesel fuel, or who have been given authority by the Administrator under Sec. 60.4207(d) of this subpart to use fuels that do not meet the fuel requirements of paragraphs (a) and (b) of Sec. 60.4207, may petition the Administrator for approval of alternative emission standards, if they can demonstrate that they use a fuel that is not the fuel on which the manufacturer of the engine certified the engine and that the engine cannot meet the applicable standards required in Sec. 60.4202 using such fuels.

(b) [Reserved]

Sec. 60.4218 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in Sec. Sec. 60.1 through 60.19 apply to you.

Sec. 60.4219 What definitions apply to this subpart?

As used in this subpart, all terms not defined herein shall have the meaning given them in the CAA and in subpart A of this part.

Combustion turbine means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and sub-components comprising any simple cycle combustion turbine, any regenerative/recuperative cycle combustion turbine, the combustion turbine portion of any cogeneration cycle combustion system, or the combustion turbine portion of any combined cycle steam/electric generating system.

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is number 2 distillate oil.

Diesel particulate filter means an emission control technology that reduces PM emissions by trapping the particles in a flow filter substrate and periodically removes the collected particles by either physical action or by oxidizing (burning off) the particles in a process called regeneration.

Emergency stationary internal combustion engine means any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc. Stationary CI ICE used to supply power to an electric grid or that supply power as part of a financial arrangement with another entity are not considered to be emergency engines.

Engine manufacturer means the manufacturer of the engine. See the definition of ``manufacturer'' in this section.

Fire pump engine means an emergency stationary internal combustion engine certified to NFPA requirements that is used to provide power to pump water for fire suppression or protection.

Manufacturer has the meaning given in section 216(1) of the Act. In general, this term includes any person who manufactures a stationary engine for sale in the United States or otherwise introduces a new stationary engine into commerce in the United States. This includes importers who import stationary engines for sale or resale.

Maximum engine power means maximum engine power as defined in 40 CFR 1039.801.

Model year means either:

(1) The calendar year in which the engine was originally produced, or

(2) The annual new model production period of the engine manufacturer if it is different than the calendar year. This must include January 1 of the calendar year for which the model year is named. It may not begin before January 2 of the previous calendar year and it must end by December 31 of the named calendar year. For an engine that is converted to a stationary engine after being placed into service as a nonroad or other non-stationary engine, model year means the calendar year or new model production period in which the engine was originally produced.

Other internal combustion engine means any internal combustion engine, except combustion turbines, which is not a reciprocating internal combustion engine or rotary internal combustion engine.

Reciprocating internal combustion engine means any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work.

Rotary internal combustion engine means any internal combustion engine which uses rotary motion to convert heat energy into mechanical work.

Spark ignition means relating to a gasoline, natural gas, or liquefied petroleum gas fueled engine or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

Stationary internal combustion engine means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

Subpart means 40 CFR part 60, subpart IIII.

Useful life means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for useful life for stationary CI ICE with a displacement of less than 10 liters per cylinder are given in 40 CFR 1039.101(g). The values for useful life for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder are given in 40 CFR 94.9(a).

Tables to Subpart IIII of Part 60

TABLE 1 [Reserved.]

TABLE 2 TO SUBPART IIII OF PART 60.—EMISSION STANDARDS FOR 2008 MODEL YEAR AND LATER EMERGENCYSTATIONARY CI ICE <37 KW (50 HP) WITH A DISPLACEMENT OF <10 LITERS PER CYLINDER

[As stated in § 60.4202(a)(1), you must comply with the following emission standards]

Engine power	Emission standards for 2008 model year and later emergency stationary CI ICE <37 KW (50 HP) with a displacement of <10 liters per cylinder in g/KW-hr (g/ HP-hr)			
	Model year(s)	NOX + NMHC	CO	PM
KW<8 (HP<11)	2008+	7.5 (5.6)	8.0 (6.0)	0.40 (0.30)
8≤KW<19 (11≤HP<25)	2008+	7.5 (5.6)	6.6 (4.9)	0.40 (0.30)
19≤KW<37 (25≤HP<50)	2008+	7.5 (5.6)	5.5 (4.1)	0.30 (0.22)

TABLES 3 -- 4 [Reserved.]

TABLE 5 TO SUBPART IIII OF PART 60.—LABELING AND RECORDKEEPING REQUIREMENTS FOR NEW STATIONARYEMERGENCY ENGINES

[You must comply with the labeling requirements in § 60.4210(f) and the recordkeeping requirements in § 60.4214(b) for new emergency stationary CI ICE beginning in the following model years:]

Engine Power	Starting Model Year
19≤KW<56 (25≤HP<75)	2013
56≤KW<130 (75≤HP<175)	2012
KW≥130 (HP≥175)	2011

E.U. ID No.	Brief Description
	Biosolids Pelletization Facility (BPF)
-010	Sludge Dryer Train #1
-011	Sludge Dryer Train #2

Prohibited Activities.
(a) After the effective date of any standard, no owner or operator shall construct or modify any stationary source subject to that standard without first obtaining written approval from the Administrator in accordance with this subpart, except under
an exemption granted by the President under section 112(c)(2) of the Act. Sources, the construction or modification of which commenced after the publication date of the standards proposed to be applicable to the sources, are subject to this prohibition.

(b) After the effective date of any standard, no owner or operator shall operate a new stationary source subject to that standard in violation of the standard, except under an exemption granted by the President under section 112(c)(2) of the Act.

(c) Ninety days after the effective date of any standard, no owner or operator shall operate any existing source subject to that standard in violation of the standard, except under a waiver granted by the Administrator under this part or under an exemption granted by the President under section 112(c)(2) of the Act.

(d) No owner or operator subject to the provisions of this part shall fail to report, revise reports, or report source test results as required under this part.
[40 CFR 61.05]

Notification of Startup.
(a) The owner or operator of each stationary source which has an initial startup after the effective date of a standard shall furnish the Administrator with written notification as follows:
(1) A notification of the anticipated date of initial startup of the source not more than 60 days nor less than 30 days before that date.
(2) A notification of the actual date of initial startup of the source within 15 days after that date.

(b) If any State or local agency requires a notice which contains all the information required in the notification in 40 CFR 61.09(a), sending the Administrator a copy of that notification will satisfy 40 CFR 61.09(a).
[40 CFR 61.09]

Compliance with Standards and Maintenance Requirements.
(a) Compliance with numerical emission limits shall be determined by emission tests established in 40 CFR 61.13 unless otherwise specified in an individual subpart.

(b) Compliance with design, equipment, work practice or operational standards shall be determined as specified in an individual subpart.

(c) The owner or operator of each stationary source shall maintain and operate the source, including associated equipment for air pollution control, 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, review of operating and maintenance procedures, and inspection of the source.

(d) (1) If, in the Administrator's judgment, an alternative means of emission limitation will achieve a reduction in emissions of a pollutant from a source at least equivalent to the reduction in emissions of that pollutant from that source achieved under any design, equipment, work practice or operational standard, the Administrator will publish in the Federal Register a notice permitting the use of the alternative means for purposes of
compliance with the standard. The notice will restrict the permission to the source(s) or category(ies) of sources on which the alternative means will achieve equivalent emission reductions. The notice may condition permission on requirements related to the operation and maintenance of the alternative means.

(2) Any notice under 40 CFR 61.12(d)(1) shall be published only after notice and an opportunity for a hearing.

(3) Any person seeking permission under this subsection shall, unless otherwise specified in the applicable subpart, submit a proposed test plan or the results of testing and monitoring, a description of the procedures followed in testing or monitoring,
and a description of pertinent conditions during testing or monitoring.

(e) 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 had been performed.
[40 CFR 61.12]

Emission Tests and Waiver of Emission Tests.

(a) If required to do emission testing by an applicable subpart and unless a waiver of emission testing is obtained under this section, the owner or operator shall test emissions from the source-

(1) Within 90 days after the effective date, for an existing source or a new source which has an initial startup date before the effective date; or

(2) Within 90 days after initial startup, for a new source which has an initial startup date after the effective date.

(b) The Administrator may require an owner or operator to test emissions from the source at any other time when the action is authorized by section 114 of the Act.

(c) The owner or operator shall notify the Administrator of the emission test at least 30 days before the emission test to allow the Administrator the opportunity to have an observer present during the test.

(d) If required to do emission testing, the owner or operator of each new source and, at the request of the Administrator, the owner or operator of each existing source shall provide emission testing facilities as follows:

(1) Sampling ports adequate for test methods applicable to each source.
(2) Safe sampling platform(s).
(3) Safe access to sampling platform(s).
(4) Utilities for sampling and testing equipment.
(5) Any other facilities that the Administrator needs to safely and properly test a source.

(e) Each emission test shall be conducted under such conditions as the Administrator shall specify based on design and operational characteristics of the source.

(f) Unless otherwise specified in an applicable subpart, samples shall be analyzed and emissions determined within 30 days after each emission test has been completed. The owner or operator shall report the determinations of the emission test to the
Administrator by a registered letter sent before the close of business on the 31st day following the completion of the emission test.

(g) The owner or operator shall retain at the source and make available, upon request, for inspection by the Administrator, for a minimum of 2 years, records of emission test results and other data needed to determine emissions.

(h) (1) Emission tests shall be conducted as set forth in this section, the applicable subpart and appendix B unless the Administrator-

(i) Specifies or approves the use of a reference method with minor changes in methodology; or

(ii) Approves the use of an alternative method; or

(iii) Waives the requirement for emission testing because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the source is in compliance with the standard.

(2) If the Administrator finds reasonable grounds to dispute the results obtained by an alternative method, he may require the use of a reference method. If the results of the reference and alternative methods do not agree, the results obtained by the reference method prevail.

(3) The owner or operator may request approval for the use of an alternative method at any time, except-

(i) For an existing source or a new source that had an initial startup before the effective date, any request for use of an alternative method during the initial emission test shall be submitted to the Administrator within 30 days after the effective date, or with the request for a waiver of compliance if one is submitted under 40 CFR 60.10(b); or

(ii) For a new source that has an initial startup after the effective date, any request for use of an alternative method during the initial emission test shall be submitted to the Administrator no later than with the notification of anticipated startup required under 40 CFR 60.09.

(i) (1) Emission tests may be waived upon written application to the Administrator if, in the Administrator's judgment, the source is meeting the standard, or the source is being operated under a waiver or compliance, or the owner or operator has requested
a waiver of compliance and the Administrator is still considering that request.

(2) If application for waiver of the emission test is made, the application shall accompany the information required by 40 CFR 61.10 or the notification of startup required by 40 CFR 61.09, whichever is applicable. A possible format is contained in appendix A to this part.

(3) Approval of any waiver granted under this section shall not abrogate the Administrator's authority under the Act or in any way prohibit the Administrator from later cancelling the waiver. The cancellation will be made only after notice is given to the owner or operator of the source.
[40 CFR 61.13]

Monitoring Requirements.

(a) Unless otherwise specified, this section applies to each monitoring system required under each subpart which requires monitoring.

(b) Each owner or operator shall maintain and operate each monitoring system as specified in the applicable subpart and in a manner consistent with good air pollution control practice for minimizing emissions. Any unavoidable breakdown or malfunction
of the monitoring system should be repaired or adjusted as soon as practicable after its occurrence. The Administrator's determination of whether acceptable operating and maintenance procedures are being used will be based on information which may include, but not be limited to, review of operating and maintenance procedures,
manufacturer recommendations and specifications, and inspection of the monitoring system.

(c) When required by the applicable subpart, and at any other time the Administrator may require, the owner or operator of a source being monitored shall conduct a performance evaluation of the monitoring system and furnish the Administrator with

a copy of a written report of the results within 60 days of the evaluation. Such a performance evaluation shall be conducted according to the applicable specifications and procedures described in the applicable subpart. The owner or operator of the source
shall furnish the Administrator with written notification of the date of the performance evaluation at least 30 days before the evaluation is to begin.

(d) When the effluents from a single source, or from two or more sources subject to the same emission standards, are combined before being released to the atmosphere, the owner or operator shall install a monitoring system on each effluent or on the
combined effluent. If two or more sources are not subject to the same emission standards, the owner or operator shall install a separate monitoring system on each effluent, unless otherwise specified. If the applicable standard is a mass emission standard and the effluent from one source is released to the atmosphere through more than one point, the owner or operator shall install a monitoring system at each emission point unless the installation of fewer systems is approved by the Administrator.

(e) The owner or operator of each monitoring system shall reduce the monitoring data as specified in each applicable subpart. Monitoring data recorded during periods of unavoidable monitoring system breakdowns, repairs, calibration checks, and zero and
span adjustments shall not be included in any data average.

(f) The owner or operator shall maintain records of monitoring data, monitoring system calibration checks, and the occurrence and duration of any period during which the monitoring system is malfunctioning or inoperative. These records shall be maintained
at the source for a minimum of 2 years and made available, upon request, for inspection by the Administrator.

(g) (1) Monitoring shall be conducted as set forth in this section and the applicable subpart unless the Administrator-

(i) Specifies or approves the use of the specified monitoring requirements and procedures with minor changes in methodology;
or

(ii) Approves the use of alternatives to any monitoring requirements or procedures.

(2) If the Administrator finds reasonable grounds to dispute the results obtained by an alternative monitoring method, the Administrator may require the monitoring Requirements and procedures specified in this part.
[40 CFR 61.14]

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.
[40 CFR 61.16]

State Authority.

(a) This part shall not be construed to preclude any State or political subdivision thereof from --

(1) Adopting and enforcing any emission limiting regulation applicable to a stationary source, provided that such emission limiting regulation is not less stringent than the standards prescribed under this part; or

(2) Requiring the owner or operator of a stationary source to obtain permits, licenses, or approvals prior to initiating construction, modification, or operation of the source.
[40 CFR 61.17]

Circumvention.

No owner or operator shall build, erect, install, or use any article machine, equipment, process, or method, 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 dilutants to achieve compliance with a visible emissions standard, and the piecemeal carrying out of an operation to avoid coverage by a standard that applies only to operations larger than a specified size.
[40 CFR 61.19]

E.U. ID No.	Brief Description
	Biosolids Pelletization Facility (BPF)
-010	Sludge Dryer Train #1
-011	Sludge Dryer Train #2

Emission Standard for Mercury.
(b) Emissions to the atmosphere from sludge drying plants that process wastewater treatment plant sludges shall not exceed 3.2 kg (7.1 lb) of mercury per 24-hour period.
[40 CFR 61.52]

Stack Sampling.
(d) Sludge incineration and drying plants (1)Unless a waiver of emission testing is obtained under 40 CFR 61.13, each owner or operator of a source subject to the standard in 61.52(b) shall test emissions from that source. Such tests shall be conducted in accordance with the procedures set forth either in 51.53(d) or in 61.54.

(2) Method 101A in appendix B to this part shall be used to test emissions as follows:

(i) The test shall be performed within 90 days of the effective date of these regulations in the case of an existing source or a new source which has an initial startup date preceding the effective date.

(ii) The test shall be performed within 90 days of startup in the case of a new source which did not have an initial startup date preceding the effective date.

(3)The Administrator/Department shall be notified in writing at least 30 days prior to an emission test, so that he may at his option observe the test.

(4)Samples shall be taken over such a period or periods as are necessary to determine accurately the maximum emissions which will occur in a 24-hour period. No changes shall be made in the operation which would potentially increase emissions above the level determined by the most recent stack test, until the new emission level has been estimated by calculation and the results reported to the Administrator.

(5)All samples shall be analyzed and mercury emissions shall be determined within 30 days after the stack test. Each determination shall be reported to the Administrator by a registered letter dispatched within 15 calendar days following the date such determination
is completed.

(6)Records of emission test results and other data needed to determine total emissions shall be retained at the source and shall be made available, for inspection by the Administrator, for a minimum of 2 years.
[40 CFR 61.53]

Sludge Sampling.
(a)As an alternative means for demonstrating compliance with 40 CFR 61.52(b), an owner or operator may use Method 105 of 40 CFR 61 Appendix B and the procedures specified in this section.

(1)A sludge test shall be conducted within 90 days of the effective date of these regulations in the case of an existing source or a new source which has an initial startup date preceding the effective date, or;

(2)A sludge test shall be conducted within 90 days of startup in the case of a new source which did not have an initial startup date preceding the effective date.

(b)The Administrator shall be notified at least 30 days prior to a sludge sampling test, so that he may at his option observe the test.

(c) Sludge shall be sampled according to paragraph (c)(1), sludge charging rate for the plant shall be determined according to paragraph (c)(2), and the sludge analysis shall be performed according to paragraph (c)(3) of this section.

(1) The sludge shall be sampled according to Method 105-Determination of Mercury in Wastewater Treatment Plant Sewage Sludges. A total of three composite samples shall be obtained within an operating period of 24 hours. When the 24-hour operating period is not continuous, the total sampling

period shall not exceed 72 hours after the first grab sample is obtained. Samples shall not be exposed to any condition that may result in mercury contamination or loss.

(2)The maximum 24-hour period sludge incineration or drying rate shall be determined by use of a flow rate measurement device that can measure the mass rate of sludge charged to the incinerator or dryer with an accuracy of ±5 percent over its operating range. Other methods of measuring sludge mass charging rates may be used if they have received prior approval by the Administrator.

(3) The sampling, handling, preparation, and analysis of sludge samples shall be accomplished according to Method 105 in 40 CFR 61 Appendix B of this part.

(d) The mercury emissions shall be determined by use of the following equation:

$$EHg = MQ\ Fsm(avg)/1000$$

where:
EHg=Mercury emissions, g/day.
M=Mercury concentration of sludge on a dry solids basis, μg/g.
Q=Sludge changing rate, kg/day.
Fsm=Weight fraction of solids in the collected sludge after mixing.
1000=Conversion factor, kg $\mu g/g^2$.

(e) No changes in the operation of a plant shall be made after a sludge test has been conducted which would potentially increase emissions above the level determined by the most recent sludge test, until the new emission level has been estimated by calculation and the results reported to the Administrator.

(f) All sludge samples shall be analyzed for mercury content within 30 days after the sludge sample is collected. Each determination shall be reported to the Administrator by a registered letter dispatched within 15 calendar days following the date such determination is completed.

(g) Records of sludge sampling, charging rate determination and other data needed to determine mercury content of wastewater treatment plant sludges shall be retained at the source and made available, for inspection by the Administrator, for a minimum of 2 years.
[40 CFR 61.54]

Monitoring of Emissions and Operations.
(a) Wastewater treatment plant sludge incineration and drying plants. All the sources for which mercury emissions exceed 1.6 kg (3.5 lb) per 24-hour period, demonstrated either by stack sampling according to Sec. 61.53 or sludge sampling according to Sec. 61.54, shall monitor mercury emissions at intervals of at least once per year by use of Method 105 of Appendix B or the procedures specified in Sec. 61.53(d) (2) and (4). The results of monitoring shall be reported and retained according to Sec. 61.53(d)(5) and (6) or Sec. 61.54(f) and (g).

(c) As an alternative to the monitoring, recordkeeping, and reporting requirements in paragraphs (b)(2) through (8) of this section, an owner or operator may develop and submit for the Administrator's review and approval a plant-specific monitoring plan. To be approved, such a plan must ensure not only compliance with the emission limits of § 61.52(a) but also proper operation and maintenance of emissions control systems. Any site-specific monitoring plan submitted must, at a minimum, include the following:

(1) Identification of the critical parameter or parameters for the hydrogen stream and for the end-box ventilation stream that are to be monitored and an explanation of why the critical parameter(s) selected is the best indicator of proper control system performance and of mercury emission rates.

(2) Identification of the maximum or minimum value of each parameter (e.g., degrees temperature, concentration of mercury) that is not to be exceeded. The level(s) is to be directly correlated to the results of a performance test, conducted no more than 180 days prior to submittal of the plan, when the facility was in compliance with the emission limits of § 61.52(a).

(3) Designation of the frequency for recording the parameter measurements, with justification if the frequency is less than hourly. A longer recording frequency must be justified on the basis of the amount of time that could elapse during periods of process or control system upsets before the emission limits

would be exceeded, and consideration is to be given to the time that would be necessary to repair the failure.

(4) Designation of the immediate actions to be taken in the event of an excursion beyond the value of the parameter established in paragraph (c)(2) of this section.

(5) Provisions for reporting, semiannually, parameter excursions and the corrective actions taken, and provisions for reporting within 10 days any significant excursion.

(6) Identification of the accuracy of the monitoring device(s) or of the readings obtained.

(7) Recordkeeping requirements for certifications and calibrations.

[40 CFR 61.55]

Delegation of Authority of NESHAP 40 CFR 61 Subpart E.

(a) In delegating implementation and enforcement authority to a State under section 112(d) of the Act, the authorities contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.

(b) Authorities which will not be delegated to States: Sections 61.53(c)(4) and 61.55(d). The authorities not delegated to States listed are in addition to the authorities in the General Provisions, Subpart A of 40 CFR Part 61, that will not be delegated to States: Sections 61.04(b), 61.12(d)(1), and 61.13(h)(1)(ii).

[40 CFR 61.56]

E.U. ID Nos.	Brief Description
	Biosolids Pelletization Facility (BPF)
-016	Emergency Generator (EPA Tier 3 certified)

Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

[These conditions were customized internally for an owner/operator of an engine subject to 40 CFR 63 Subpart ZZZZ electing to meet 40 CFR 60 Subpart IIII.]

Source: 69 FR 33506, June 15, 2004, unless otherwise noted.

What This Subpart Covers

§ 63.6580 What is the purpose of subpart ZZZZ?

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

[73 FR 3603, Jan. 18, 2008]

§ 63.6585 Am I subject to this subpart?

You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

(a) A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

(b) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.

(c) An area source of HAP emissions is a source that is not a major source.

(d) If you are an owner or operator of an area source subject to this subpart, your status as an entity subject to a standard or other requirements under this subpart does not subject you to the obligation to obtain a permit under 40 CFR part 70 or 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable.

(e) If you are an owner or operator of a stationary RICE used for national security purposes, you may be eligible to request an exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3603, Jan. 18, 2008]

§ 63.6590 What parts of my plant does this subpart cover?

This subpart applies to each affected source.

(a) *Affected source.* An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

(1) *Existing stationary RICE.*

(i) For stationary RICE with a site rating of more than 500 brake horsepower (HP) located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002.

(ii) For stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iv) A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.

(2) *New stationary RICE.* (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after December 19, 2002.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(iii) A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(3) *Reconstructed stationary RICE.* (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after December 19, 2002.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.

(iii) A stationary RICE located at an area source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.

(b) *Stationary RICE subject to limited requirements.* (1) An affected source which meets either of the criteria in paragraph (b)(1)(i) through (ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(h).

(i) The stationary RICE is a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions; or

(ii) The stationary RICE is a new or reconstructed limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(2) A new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis must meet the initial notification requirements of §63.6645(h) and the requirements of §§63.6625(c), 63.6650(g), and 63.6655(c). These stationary RICE do not have to meet the emission limitations and operating limitations of this subpart.

(3) A stationary RICE which is an existing spark ignition 4 stroke rich burn (4SRB) stationary RICE located at an area source, an existing spark ignition 4SRB stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source, an existing spark ignition 2 stroke lean burn (2SLB) stationary RICE, an existing spark ignition 4 stroke lean burn (4SLB) stationary RICE, an existing compression ignition (CI) stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, does not have to meet the requirements of this subpart and of subpart A of this part. No initial notification is necessary.

(c) *Stationary RICE subject to Regulations under 40 CFR Part 60.* An affected source that is a new or reconstructed stationary RICE located at an area source, or is a new or reconstructed stationary RICE located at a major source of HAP emissions and is a spark ignition 2 stroke lean burn (2SLB) stationary RICE with a site rating of less than 500 brake HP, a spark ignition 4 stroke lean burn (4SLB) stationary RICE with a site rating of less than 250 brake HP, or a 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake HP, a stationary RICE with a site rating of less than or equal to 500 brake HP which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP, or a compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP, must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008]

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.

Description
Fly Ash Storage Silos
Lime Storage Silos
Ash Treatment Chemical Storage Silo
Composting Facility
Ferrous processing facility
Materials recycling facility
Woody waste recycling facility
Auto spray booth

The below activities are listed by location.

Location	Activity
Resource Recovery Facility	Emergency Diesel Generator
	Diesel Fire Water Pump
Utilities Facility	Emergency Diesel Generator
Household Hazardous Waste	Laboratory Hood
Trash Processing, Wood Waste	Grinder, Fugitive Dust From
Mulch Processing, Yard Waste	Grinder, Fugitive Dust From
Tire Cutting Operations	Diesel Generator for Segmentizer
Biosolids Pelletization Facility (BPF)	Cooling Tower Train #1
	Cooling Tower Train #2
	{The cooling towers do no not use chromium-based water treatment chemicals.}
	Purge Valves

Table AP-1. Summary of Air Pollutants

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

Final Permit No.: 0990234-016-AV

				Emission Limitations and Standards [1]			Equivalent Emissions		
Emissions Unit	Pollutant(s)	Fuel(s) [3]	Hours	Standard(s)	lb/hr	TPY	lb/hr	TPY	Regulatory Citation(s)
	NOx								
Sludge Dryer Train #1		landfill gas	8760	-	5.60	24.55	5.60	24.55	BACT
Sludge Dryer Train #2		landfill gas	8760	-	5.60	24.55	5.60	24.55	BACT
				{subtotal		49.1		49.1}	BACT
Emergency Generator			500	-	-	-	-	3.4	EPA Tier 3 certification
								52.5	BACT
	PM/PM_{10} & Opacity								
Sludge Dryer Train #1		landfill gas	8760	5% opacity; except 20% for up to 3-minutes in 1-hour	2.42	10.6	2.42	10.6	BACT
Sludge Dryer Train #2		landfill gas	8760	5% opacity; except 20% for up to 3-minutes in 1-hour	2.42	10.6	2.42	10.6	BACT
				{subtotal		21.2		21.2}	BACT
Emergency Generator			500	0.697 g/bhp-hr [2]	-	-	-	0.2	EPA Tier 3 certification
Material Bins & Silos		-	8760	0.010 gr/dscf, 5% opacity	-	-	-	0.6	BACT
Cooling Tower		-	8760	3333 ppm in drift [2]	-	-	0.06	0.274	BACT
								22.3	BACT
	SO_2								
Sludge Dryer Train #1		landfill gas	8760	190 ppmvd sulfur content [2]	4.45	19.5	4.45	19.5	and Rule 62-212.400(2)(g), F.A.C.
Sludge Dryer Train #2		landfill gas	8760	190 ppmvd sulfur content [2]	4.45	19.5	4.45	19.5	"
					8.9	39	8.9	39	"
	CO								
Sludge Dryer Train #1		landfill gas	8760	-	3.37	14.75	3.37	14.75	Rule 62-4.070(1)&(3), F.A.C. and Rule 62-212.400(2)(g),
Sludge Dryer Train #2		landfill gas	8760	-	3.37	14.75	3.37	14.75	"
					6.74	29.5	6.74	29.5	"
	VOC								
Sludge Dryer Train #1		landfill gas	8760	-	1	4.4	1	4.4	Rule 62-4.070(1)&(3), F.A.C. and Rule 62-212.400(2)(g),
Sludge Dryer Train #2		landfill gas	8760	-	1	4.4	1	4.4	"
					2	8.8	2	8.8	"
	Hg								
Sludge Dryer Train #1		landfill gas	8760	2.2 E-02 lb/24-hour period			9.22 E-04	4.04 E-03	Applicant Request, Rule 62-4.070(1)&(3), F.A.C. and Rule 62-212.400(2)(g), F.A.C.
Sludge Dryer Train #2		landfill gas	8760	2.2 E-02 lb/24-hour period			9.22 E-04	4.04 E-03	"
								8.08 E-03	"

[1] standard unless otherwise noted.
[2] not a standard; a basis for a standard.
[3] natural gas is used as an alternate fuel.

REFERENCED ATTACHMENTS.

The Following Attachments Are Included for Applicant Convenience:

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers (version dated 2/05/97).
Appendix BW, Biomedical Waste Definitions.
Appendix H-1, Permit History/ID Number Changes.

Statement of Basis

Table 1-1, Summary of Air Pollutant Standards and Terms.
Table 1-2, Summary of Compliance Requirements.

Table 1. Summary of Monitoring Requirements for MSW Landfills.
Table 2. Summary of Recordkeeping Requirements for MSW Landfills.
Table 3. Summary of Compliance Reporting Requirements for MSW Landfills.

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

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

Final Permit No. 0990234-016-AV
Facility ID No. 0990234

Permit History (for tracking purposes):

E.U. ID No(s).	Project Description	Permit No.	Effective Date	Expiration Date
All	Renewed Title V Permit	0990234-010-AV[1]	07/02/2006	07/02/2011
-004, -008-, -020, & -021	Air Construction Permit	0990234-012-AC	10/24/2008	12/31/2010
-004, -008-, -020, & -021	Title V Permit Revision	0990234-013-AV	12/12/2008	-
-010-016	Air Construction Permit	0990234-006-AC/ PSD-FL-108F	02/03/2006	03/31/2008
-010-016	Extension of project -006-AC	0990234-011-AC	04/28/2008	03/31/2009
-010-016	Extension of project -006-AC	0990234-014-AC	04/27/2009	03/31/2010
-001 & -002	Refurbishment Project for Municipal Solid Waste Boiler Nos. 1 & 2	0990234-015-AC/ PSD-FL-108H	09/18/2009	12/31/2011
-010-016	Title V Permit Revision to include project -006-AC	0990234-016-AV	08/30/2010	-

[1] the most recently posted Title V permit on the web site.

Friday, Barbara

To: mhammond@swa.org
Cc: mmorrison@swa.org; hernandezmj@cdm.com; ctilman@pirnie.com; Anderson, Lennon; 'James_Stormer@doh.state.fl.us'; Halpin, Mike; 'Forney.Kathleen@epamail.epa.gov'; Oquendo.Ana@epamail.epa.gov; Gibson, Victoria; Sheplak, Scott; Holtom, Jonathan
Subject: SOLID WASTE AUTHORITY OF PALM BEACH COUNTY/NORTH COUNTY RESOURCE RECOVERY FACILITY; 0990234-016-AV
Attachments: 0990234-016-AVSignedNoticeofFinalPermit.pdf

Dear Sir/ Madam:

Attached is the official **Notice of Final 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

Attention: Scott Sheplak

Owner/Company Name: SOLID WASTE AUTHORITY OF PALM BEACH COUNTY
Facility Name: NORTH COUNTY REGIONAL RESOURCE RECOVERY
Project Number: 0990234-016-AV
Permit Status: FINAL
Permit Activity: PERMIT REVISION
Facility County: PALM BEACH

Click on the following link to access the permit project documents:
http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0990234.016.AV.F_pdf.zip

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

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

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

Friday, Barbara

From: Mark Hammond [mhammond@swa.org]
To: Friday, Barbara
Sent: Tuesday, September 14, 2010 11:58 AM
Subject: Read: SOLID WASTE AUTHORITY OF PALM BEACH COUNTY/NORTH COUNTY RESOURCE RECOVERY FACILITY; 0990234-016-AV

Your message was read on Tuesday, September 14, 2010 11:57:39 AM (GMT-05:00) Eastern Time (US & Canada).

Friday, Barbara

From: Mark Hammond [mhammond@swa.org]
Sent: Wednesday, September 15, 2010 10:08 AM
To: Friday, Barbara
Subject: RE: SOLID WASTE AUTHORITY OF PALM BEACH COUNTY/NORTH COUNTY RESOURCE RECOVERY FACILITY; 0990234-016-AV

Dear Barbara,

I have received the documents.

Regards,
Mark Hammond

From: Friday, Barbara [mailto:Barbara.Friday@dep.state.fl.us]
Sent: Tuesday, September 14, 2010 11:44 AM
To: Mark Hammond
Cc: Marybeth Morrison; hernandezmj@cdm.com; ctilman@pirnie.com; Anderson, Lennon; James_Stormer@doh.state.fl.us; Halpin, Mike; Forney.Kathleen@epamail.epa.gov; Oquendo.Ana@epamail.epa.gov; Gibson, Victoria; Sheplak, Scott; Holtom, Jonathan
Subject: SOLID WASTE AUTHORITY OF PALM BEACH COUNTY/NORTH COUNTY RESOURCE RECOVERY FACILITY; 0990234-016-AV

Dear Sir/ Madam:

Attached is the official **Notice of Final 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

Attention: Scott Sheplak

Owner/Company Name: SOLID WASTE AUTHORITY OF PALM BEACH COUNTY
Facility Name: NORTH COUNTY REGIONAL RESOURCE RECOVERY
Project Number: 0990234-016-AV
Permit Status: FINAL
Permit Activity: PERMIT REVISION
Facility County: PALM BEACH

Click on the following link to access the permit project documents:
http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0990234.016.AV.F_pdf.zip

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other

project documents using the "*Air Permit Documents Search*" website at http://www.dep.state.fl.us/air/emission/apds/default.asp ."

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

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

Friday, Barbara

From: Microsoft Exchange
To: hernandezmj@cdm.com
Sent: Tuesday, September 14, 2010 11:44 AM
Subject: Relayed: SOLID WASTE AUTHORITY OF PALM BEACH COUNTY/NORTH COUNTY RESOURCE RECOVERY FACILITY; 0990234-016-AV

Delivery to these recipients or distribution lists is complete, but delivery notification was not sent by the destination:

hernandezmj@cdm.com

Subject: SOLID WASTE AUTHORITY OF PALM BEACH COUNTY/NORTH COUNTY RESOURCE RECOVERY FACILITY; 0990234-016-AV

Sent by Microsoft Exchange Server 2007

Friday, Barbara

From: Microsoft Exchange
To: ctilman@pirnie.com
Sent: Tuesday, September 14, 2010 11:44 AM
Subject: Relayed: SOLID WASTE AUTHORITY OF PALM BEACH COUNTY/NORTH COUNTY RESOURCE RECOVERY FACILITY; 0990234-016-AV

Delivery to these recipients or distribution lists is complete, but delivery notification was not sent by the destination:

ctilman@pirnie.com

Subject: SOLID WASTE AUTHORITY OF PALM BEACH COUNTY/NORTH COUNTY RESOURCE RECOVERY FACILITY; 0990234-016-AV

Sent by Microsoft Exchange Server 2007

Friday, Barbara

From: Tilman, Christopher [CTilman@PIRNIE.COM]
To: Friday, Barbara
Sent: Tuesday, September 14, 2010 12:37 PM
Subject: Read: SOLID WASTE AUTHORITY OF PALM BEACH COUNTY/NORTH COUNTY RESOURCE RECOVERY FACILITY; 0990234-016-AV

Your message was read on Tuesday, September 14, 2010 12:36:38 PM (GMT-05:00) Eastern Time (US & Canada).

Friday, Barbara

From: Microsoft Exchange
To: 'James_Stormer@doh.state.fl.us'
Sent: Tuesday, September 14, 2010 11:44 AM
Subject: Relayed: SOLID WASTE AUTHORITY OF PALM BEACH COUNTY/NORTH COUNTY RESOURCE RECOVERY FACILITY; 0990234-016-AV

Delivery to these recipients or distribution lists is complete, but delivery notification was not sent by the destination:

'James_Stormer@doh.state.fl.us'

Subject: SOLID WASTE AUTHORITY OF PALM BEACH COUNTY/NORTH COUNTY RESOURCE RECOVERY FACILITY; 0990234-016-AV

Sent by Microsoft Exchange Server 2007

Friday, Barbara

From: James_Stormer@doh.state.fl.us
To: Friday, Barbara
Sent: Tuesday, September 14, 2010 12:08 PM
Subject: Read: SOLID WASTE AUTHORITY OF PALM BEACH COUNTY/NORTH COUNTY RESOURCE RECOVERY FACILITY; 0990234-016-AV

Your message was read on Tuesday, September 14, 2010 12:08:01 PM (GMT-05:00) Eastern Time (US & Canada).

Friday, Barbara

From: Microsoft Exchange
To: Halpin, Mike; Holtom, Jonathan; Gibson, Victoria; Anderson, Lennon
Sent: Tuesday, September 14, 2010 11:44 AM
Subject: Delivered: SOLID WASTE AUTHORITY OF PALM BEACH COUNTY/NORTH COUNTY RESOURCE RECOVERY FACILITY; 0990234-016-AV

Your message has been delivered to the following recipients:

Halpin, Mike

Holtom, Jonathan

Gibson, Victoria

Anderson, Lennon

Subject: SOLID WASTE AUTHORITY OF PALM BEACH COUNTY/NORTH COUNTY RESOURCE RECOVERY FACILITY; 0990234-016-AV

Sent by Microsoft Exchange Server 2007

Friday, Barbara

From: Halpin, Mike
Sent: Tuesday, September 14, 2010 11:46 AM
To: Friday, Barbara
Subject: Delivered: SOLID WASTE AUTHORITY OF PALM BEACH COUNTY/NORTH COUNTY RESOURCERECOVERY FACILITY; 0990234-016-AV
Attachments: ATT00001

Your message was delivered to the recipient.

Friday, Barbara

From: Holtom, Jonathan
To: Friday, Barbara
Sent: Tuesday, September 14, 2010 11:56 AM
Subject: Read: SOLID WASTE AUTHORITY OF PALM BEACH COUNTY/NORTH COUNTY RESOURCE RECOVERY FACILITY; 0990234-016-AV

Your message was read on Tuesday, September 14, 2010 11:55:33 AM (GMT-05:00) Eastern Time (US & Canada).

Friday, Barbara

From: Gibson, Victoria
To: Friday, Barbara
Sent: Tuesday, September 14, 2010 3:28 PM
Subject: Read: SOLID WASTE AUTHORITY OF PALM BEACH COUNTY/NORTH COUNTY RESOURCE RECOVERY FACILITY; 0990234-016-AV

Your message was read on Tuesday, September 14, 2010 3:27:32 PM (GMT-05:00) Eastern Time (US & Canada).

Friday, Barbara

From: Anderson, Lennon
To: Friday, Barbara
Sent: Tuesday, September 14, 2010 12:25 PM
Subject: Read: SOLID WASTE AUTHORITY OF PALM BEACH COUNTY/NORTH COUNTY RESOURCE RECOVERY FACILITY; 0990234-016-AV

Your message was read on Tuesday, September 14, 2010 12:24:30 PM (GMT-05:00) Eastern Time (US & Canada).

Friday, Barbara

From: Mail Delivery System [MAILER-DAEMON@mseive01.rtp.epa.gov]
To: Forney.Kathleen@epamail.epa.gov; Oquendo.Ana@epamail.epa.gov
Sent: Tuesday, September 14, 2010 11:46 AM
Subject: Relayed: SOLID WASTE AUTHORITY OF PALM BEACH COUNTY/NORTH COUNTY RESOURCE RECOVERY FACILITY; 0990234-016-AV

Delivery to these recipients or distribution lists is complete, but delivery notification was not sent by the destination:

Forney.Kathleen@epamail.epa.gov

Oquendo.Ana@epamail.epa.gov

Subject: SOLID WASTE AUTHORITY OF PALM BEACH COUNTY/NORTH COUNTY RESOURCE RECOVERY FACILITY; 0990234-016-AV

Friday, Barbara

From: Microsoft Exchange
To: Sheplak, Scott
Sent: Tuesday, September 14, 2010 11:44 AM
Subject: Delivered: SOLID WASTE AUTHORITY OF PALM BEACH COUNTY/NORTH COUNTY RESOURCE RECOVERY FACILITY; 0990234-016-AV

Your message has been delivered to the following recipients:

Sheplak, Scott

Subject: SOLID WASTE AUTHORITY OF PALM BEACH COUNTY/NORTH COUNTY RESOURCE RECOVERY FACILITY; 0990234-016-AV

Sent by Microsoft Exchange Server 2007

Friday, Barbara

From: Sheplak, Scott
To: Friday, Barbara
Sent: Tuesday, September 14, 2010 11:44 AM
Subject: Read: SOLID WASTE AUTHORITY OF PALM BEACH COUNTY/NORTH COUNTY RESOURCE RECOVERY FACILITY; 0990234-016-AV

Your message was read on Tuesday, September 14, 2010 11:44:13 AM (GMT-05:00) Eastern Time (US & Canada).