Memorandum

Florida Department of Environmental Protection

TO:

Jeff Koerner, Office of Permitting and Compliance

THROUGH:

Greg DeAngelo, Office of Permitting and Compliance

FROM:

Marilyn Koletzke, Office of Permitting and Compliance

DATE:

August 24, 2011

SUBJECT:

Final Air Construction Permit Modification No. 0090069-009-AC/ PSD-FL-378C

Final Title V Air Operation Permit No. 0090069-010-AV

Brevard County Solid Waste Management Central Disposal Facility Title V Air Operation Permit and Air Construction Permit Modification

The final permits for this project are attached for your approval and signature. Air construction permit No. 0090069-009-AC (PSD-FL-378C) and Title V air operation permit No. 0090069-010-AV are for the Brevard County Solid Waste Management Central Disposal Facility. The Technical Evaluation, Preliminary Determination, and Statement of Basis provide a summary of the project and the rationale for issuance.

This air construction permit modification revises the specific conditions of PSD-FL-378B for the emissions limits and compliance testing requirements for carbon monoxide (CO) and particulate matter with an aerodynamic diameter of less than 10 micrometers (PM₁₀) for the landfill gas-fired engines. The project revises the best available control technology (BACT) determinations for these pollutants based on current technological information.

The proposed work will be performed at the existing the Brevard County Solid Waste Management Central Disposal Facility which is located in Brevard County at 2250 Adamson Road, Cocoa, Brevard County. The project is not considered a new source review reform project.

The attached Final Determination summarizes the publication and comment process. There are no pending petitions for administrative hearings or extensions of time in which to file a petition for an administrative hearing. I recommend your approval of the attached final permit for this project.

Attachments

JFK/gpd/mk

NOTICE OF FINAL PERMIT

In the Matter of an Application for Permit by:

Brevard Energy, LLC 29261 Wall Street Wixom, Michigan 48393

Permit No. 0090069-010-AV Facility ID No. 0090069

Brevard County Solid Waste Management Central

Permit No. 0090069-009 AC (PSD-FL-378C),

Disposal Facility

Permit Limit Modification Brevard County, Florida

Responsible Official: Mr. Scott Salisbury, Managing Member

Enclosed is the final permit package to revise the Title V air operation permit for the Brevard County Solid Waste Management Central Disposal Facility. The existing facility is located in Brevard County at 2250 Adamson Road, Cocoa, Florida. This permit is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order 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.

Jeffery F. Koerner, Program Administrator Division of Air Resource Management

Date

JFK/gpd/mk

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final Permit and Final Determination), 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. Scott Salisbury, Brevard Energy, LLC. (scott.salisbury@landfillenergy.com)

Mr. Rob Harvey, P.E., Derenzo and Associates, Inc (rharvey@derenzo.com)

Mr. Euripides Rodriguez, Brevard Board of County Commissioners (euripides.rodriguez@brevardcounty.us)

Ms. Caroline Shine, Central District Office (caroline.shine@dep.state.fl.us)

Ms. Kathleen Forney, EPA Region 4 (forney.kathleen@epa.gov)

Ms. Heather Abrams, EPA Region 4 (abrams.heather@epa.gov)

Ms. Lynn Scearce, DEP OPC Reading File (lynn.scearce@dep.state.fl.us)

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.

(Clerk)

(Date)

29, 2011

PERMITTEE

Brevard Energy, LLC 29261 Wall Street Wixom, Michigan 48393

PERMITTING AUTHORITY

Florida Department of Environmental Protection (Department) Division of Air Resource Management Office of Permitting and Compliance 2600 Blair Stone Road, MS #5505 Tallahassee, Florida 32399-2400

PROJECT

Air Permit No. 0090069-009-AC Air Construction Permit (PSD-FL-378C), Air Permit No. 0090069-010-AV Brevard County Solid Waste Management Central Disposal Facility

This project authorizes the modification to Permit No. PSD-FL-378 to revise emissions limits and compliance testing requirements for carbon monoxide and particulate matter with an aerodynamic diameter of less than 10 micrometers for the landfill gas-fired engines.

NOTICE AND PUBLICATION

The Department issued the initial draft permit on June 21, 2011. The applicant published the Public Notice in the Florida Today on June 25, 2011. The Department received the proof of publication on July 8, 2011.

COMMENTS

No comments on the proposed permit were received from the public, the Northwest District Office, or the EPA Region 4 Office. Comments received from the Permittee requested that clarification be added to condition A14. "NESHAP Subpart ZZZZ" permit No. 0090069-009-AC and B2. "NSPS and NESHAP Requirements" permit No. 0090069-010-AV clarifying the implementation date of the rule. The following clarification is added:

Compliance with 40 CFR Part 63, Subpart ZZZZ emission limitations and operating limitations must occur no later than October 19, 2013.

CONCLUSION

The final action of the Department is to issue the permit with the minor clarification as described above.

STATEMENT OF BASIS

Brevard County Board of County Commissioners Central Disposal Facility Facility ID No. 0090069 Brevard County

Permit Project No. 0090069-010-AV

Revision of Title V Air Operation Permit 0090069-008-AV

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

This facility consists of a municipal solid waste landfill that has been in operation since 1972. The Central Disposal Facility serves the entire County's Class I disposal needs as well as the Class III disposal needs of the northern and central parts of the County. The site has a total area of 674 acres with the footprint of the landfill covering approximately 180 acres. An additional 482-acre area provides for the related solid waste management activities and buffers. The landfill is underlain by a naturally occurring clay layer that together with man-made clay slurry walls form a bowl in which the landfill sits. The landfill has a gas collection system installed in the sideslopes of the closed lower lift. The collection system has been in operation since 1994. The electrical generation system contains six electrical generators that are individually powered by landfill gas-fired, spark ignition, reciprocating internal combustion engines. The generation bypass system includes a flaring station that consists of three blowers and three candlestick flares

The subject of this permit 0090069-010-AV is the revision of Title V Air Operation Permit No. 0090069-008-AV for the purpose of incorporating the revised emissions limits and compliance testing requirements in the concurrent air construction permit No. 0090064-009-AC for the emissions of carbon monoxide (CO) and particulate matter with an aerodynamic diameter of less than 10 micrometers (PM₁₀) for the landfill gas-fired engines. The project revises the current Best Available Control Technology (BACT) determinations for these pollutants as further described in Permit No. 0090069-009-AC/PSD-FL-378C.

REVISED TITLE V PERMIT CONDITIONS

B2. NSPS and NESHAP Requirements: Emissions Units Nos. 004 – 009 are subject to 40 CFR 60 Subpart WWW and certain sections of 40 CFR 63 Subpart AAAA adopted by the Department at Rule 62 204.800(8)(b) and 62 204.800(11)(b), F.A.C. the following applicable New Source Performance Standards (NSPS) in Title 40, Part 60 of the Code of Federal Regulations (40 CFR 60): Subpart A (General Provisions) and Subpart WWW (MSW Landfills).

The facility operates units subject to the following applicable National Emissions Standards for Hazardous Air Pollutants (NESHAP) in Title 40, Part 63 of the Code of Federal Regulations (40 CFR 63): Subpart A (General Provisions), Subpart AAAA (MSW Landfills), and Subpart ZZZZ (Reciprocating Internal Combustion Engines).

[Rules 62-204.800 and 62-210.300, F.A.C.]

Compliance with 40 CFR Part 63, Subpart ZZZZ emission limitations and operating limitations must occur no later than October 19, 2013.

B13. Carbon Monoxide (CO): The emission rate of CO from each engine/generator set exhaust shall not exceed 2.75 3.50 g/bhp-hr and a maximum of 13.54 17.23 lb/hr and 59.30 75.3 TPY. [Rule 62-212.400(12), F.A.C. and Permit No. 0090069-009-AC/PSD-FL-378C]

- B14. Particulate matter emissions shall be controlled from each engine/generator set exhaust through the implementation of the following pretreatment and good combustion practices.
- Operate and maintain a landfill gas pretreatment system to dewater, filter and compress the landfill gas prior to combustion in the engines. During the final stage of pretreatment, the landfill gas shall pass through a coalescing filter of 1 micrometer or less to reduce particulate matter prior to combustion.
- Implement good combustion practices to minimize particulate matter emissions: lean-burn combustion design, efficient combustion through the air-fuel controller and preventive and periodic maintenance in accordance with the requirements of 40 CFR 63, Subpart ZZZZ.

{Permitting Note: Pretreatment and good combustion practices are expected to result in a maximum PM₁₀ emission rate of 0.24 g/bhp-hour, 1.18 lb/hr, and 5.17 TPY.}

Particulate Matter less than 10 microns (PM10): The emission rate of PM10 from each engine/generator-set exhaust shall not exceed 0.24 g/bhp hr and a maximum of 1.18 lb/hr and 5.17 TPY: [Rule 62-212.400(12), F.A.C. and Permit No. 0090069-009-AC/PSD-FL-378C]

B20. Performance Test Methods

Initial (I), Annual (A) and permit renewal (R) compliance tests shall be performed in accordance with the following reference methods as described in 40 CFR 60, Appendix A and 40 CFR 51 Appendix M, adopted by reference in Chapter 62-204.800, F.A.C. Initial, annual and renewal compliance tests shall be conducted on only one of the six engines. A different engine shall be tested each year such that all engines are tested during the six-year cycle.

- (a) EPA Method 7 or 7E Determination of NOx Emissions from Stationary Sources (I,A);
 - (b) EPA Method 9 Visual Determination of the Opacity of Emissions from Stationary Sources (I,A);
 - (c) EPA Method 10 Determination of CO Emissions from Stationary Sources (I,A);
 - (d) EPA Method 18, 25, 25A or 25C Measurement of Gaseous Organic Compounds Emissions (I,R);
 - (e) EPA Method 26 or 26A Determination of HCl Emissions from Stationary Sources (I,A);
 - (f) 201 or a combined Method 5/202 as an alternate test method Determinations of PM10 Emissions (I,A) (g)(f) EPA Reference Method 6, 6C or 19 Determinations of SO2 Emissions (I, A).

Brevard County Board of County Commissioners Brevard County Central Disposal Facility

Facility ID No.: 0090069 Brevard County

Title V Air Operation Permit Revision

Permit No. 0090069-010-AV

Permitting Authority:

State of Florida
Department of Environmental Protection
Division of Air Resource Management
Office of Permitting and Compliance

2600 Blair Stone Road Mail Station #5505 Tallahassee, Florida 32399-2400

Telephone: (850) 717-9000 Fax: (850) 717-9097

Compliance Authority:

Florida Department of Environmental Protection Central District Office 3319 Maguire Blvd., Suite 232 Orlando, Florida 32803 Telephone: (407) 894-7555

Fax: (407) 412-0455

Title V Air Operation Permit Revision

Permit No. 0090069-010-AV

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Permittee:

Secondary Responsible Official

(Energy Section):

Mr. Scott Salisbury, Managing Member

Permit No. 0090069-010-AV

Facility ID No. 0090069

SIC No(s): 49, 4953

Project: Brevard County Central Disposal Facility

Primary Responsible Official (Brevard County Solid Waste Management Central Disposal Facility):

Mr. Euripides Rodriguez, Director

Solid Waste Management Department – Brevard County

The purpose of this permit is to revise Title V Air Operation Permit No. 0090069-005-AV. This existing landfill facility is located at 2250 Adamson Road, Cocoa, Florida; UTM Coordinates: Zone 17, 516.75 kilometers (km) East and 3140.57 km North; and, Latitude: 28° 23' 50" North and Longitude: 80° 49' 45" West.

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

Referenced attachments made a part of this permit:

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

Appendix B, 40CFR60, Subpart WWW; 40CFR63 Subpart AAAA, Combined General Provisions

Appendix C, 40CFR60, Subpart WWW; 40CFR63 Subpart AAAA, Combined Standard Conditions

Appendix D-1, Definitions for Subpart WWW – Municipal Solid Waste Landfills

Appendix E, 40CFR60 and 61, Subpart A, Flares, General Provisions

Appendix F, Table 2d 40CFR63 Subpart ZZZZ

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

Appendix ICE Requirements for Internal Combustion Engines

APPENDIX TV-6, TITLE V CONDITIONS

Tables 1, 2, and 3, Summaries of Requirements for Municipal Solid Waste Landfills

Effective Date:

Renewal Application Due Date:

Expiration Date:

February 13, 2012

September 30, 2012

FLORIDA DEPARTMENT OF

ENVIRONMENTAL PROTECTION

Jeffery F. Koerner, Program Administrator

Office of Permitting and Compliance

Division of Air Resource Management

JFK/gpd/mk

Section I. Facility Information.

Subsection A. Facility Description.

This facility consists of slurry-walled municipal solid waste facility (landfill), identified as emission unit 003, with an active gas collection system. The collection system terminates in a flaring station consisting of three (3) blowers and three (3) candlestick flare destruction devices.

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

The facility also includes six (6) Caterpillar, Model G3520C, 2,233 bhp landfill gas-fired internal combustion engines for the generation of up to 9.6 total megawatts (nominal rating) of electricity (1.6 megawatts each).

Based on the Title V Air Operation Permit Revision Application received December 30, 2008, this facility is **not** a major source of hazardous air pollutants (HAPs).

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

E.U. ID No.	Brief Description
003	Municipal solid waste landfill with three flares
004 - 009	Six (6) Internal Combustion Engines

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: Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers Appendix H-1, Permit History Statement of Basis

These documents are on file with the permitting authority:

Initial Title V Air Operation Permit issued May 28, 1998

Renewal Title V Air Operation Permit issued June 23, 2003

Application for a Title V Air Operation Permit Renewal received March 29, 2002

Additional Information Request dated May 28, 2002

Additional Information Response received August 14, 2002

Additional Information Request dated September 11, 2002

Additional Information Response received October 21, 2002

Additional Information Request dated November 6, 2002

Additional Information Response received December 20, 2002

Application for a Title V Air Operation Permit Revision received June 4, 2004

Revision Title V Air Operation Permit Application received June 4, 2004

Title V Air Operation Permit Revision issued December 15, 2004

Application for a Title V Air Operation Permit Renewal received April 2, 2007

Title V Air Operation Permit Renewal issued September 26, 2007

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Brevard County Central Disposal Facility

Title V Air Operation Permit Renewal issued September 26, 2007 Application for a Title V Air Operation Permit Revision received December 30, 2008 Revision Title V Air Operation Permit Application received November 15, 2010

Subsection D. Miscellaneous.

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

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Brevard County Central Disposal Facility

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

- 1. APPENDIX TV-6, TITLE V CONDITIONS are a part of this permit.
- 2. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The permittee shall not 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). [Rule 62-296.320(4)(b)1., 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

- **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. <u>Insignificant Emissions Units and/or Activities.</u> Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit. [Rules 62-213.440(1), 62-213.430(6), and 62-4.040(1)(b), F.A.C.]
- 6. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, VOC or OS without applying known and existing vapor emission control devices or systems deemed necessary and

ordered by the Department. To comply, procedures to minimize pollutant emissions shall include the following:

- a. Tightly cover or close all VOC containers when they are not in use;
- b. Tightly cover, where possible, all open troughs, basins, baths, tanks, etc.;
- c. Maintain all piping, valves, fittings, etc. in good operating condition;
- d. Prevent excessive air turbulence across exposed VOC; and
- e. Immediately confine and clean up spills of VOC containing materials.

[Rule 62-296.320(1)(a), F.A.C.]

7. Emissions of Unconfined Particulate Matter. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

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Brevard County Central Disposal Facility

- a. Application of asphalt, water, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities;
- b. Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne;
- c. Landscaping or planting of vegetation; and
- d. Other techniques, as necessary.

[Rule 62-296.320(4)(c)2., F.A.C.]

- 8. When appropriate, any recordings, 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.]
- 9. The permittee shall submit all compliance related notifications and reports required of this permit to the air compliance section of this office:

Florida Department of Environmental Protection 3319 Maguire Blvd., Suite 232 Orlando, Florida 32803 Telephone: 407/893-3336

Fax: 407/897-5963

10. 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 & EPCRA Enforcement Branch, Air Enforcement Section 61 Forsyth Street Atlanta, Georgia 30303-8960 Telephone: 404/562-9155

Fax: 404/562-9163

11. Annual 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 air compliance section of this office and EPA within 60 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C.

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

{Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2. &3., F.A.C. (see Condition 51 of APPENDIX TV-6, TITLE V CONDITIONS)}

12. 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.]

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13. Annual Operating Report. The owner or operator shall complete DEP Form No. 62-210.900(5), F.A.C., "Annual Operating Report for Air Pollutant Emitting Facility," for each calendar year and submit it either electronically using the latest Department Annual Operating Report software or by hard copy to the air compliance section of this office by April 1 of the following year in accordance with Rule 62-210.370(3), F.A.C. The emissions shall be computed in accordance with the provisions of Rule 62-210.370(2), F.A.C., for the purposes of the annual operating report. [Rule 62-210.370(3), F.A.C.]

14. At least 225 days prior to the expiration date of this operation permit, the permittee shall submit to this office four copies of the air permit application, DEP Form No. 62-210.900(1). [Rule 62-4.090(1), F.A.C.]

Section III. Emissions Unit(s) and Conditions.

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

E.U. ID No. Brief Description

Municipal solid waste landfill with three flares

{Permitting Note: This emissions unit is regulated under: NSPS - 40 CFR 60, Subpart A, General Provisions, 40 CFR 60 Subpart WWW, Standards of Performance for Municipal Solid Waste Landfills; NESHAP - 40 CFR Part 63, Subpart A, General Provisions, and 40 CFR Part 63, Subpart AAAA, National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills adopted and incorporated by reference in Rule 62-204.800, F.A.C.}

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

Essential Potential to Emit (PTE) Parameters

A1. This emissions unit is allowed to operate continuously, i.e., 8,760 hours per year. [Rule 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

- A2. The flare control system shall be designed for and operated with no visible emissions except for periods not to exceed a total of five minutes during any two consecutive hours.

 [Rule 40 CFR 60.18(c)(1)]
- A3. The flare control system shall be operated with a flame present at all times, as determined by a thermocouple or any other equivalent device to detect the presence of a flame.

 [40 CFR 60.18(c)(2)]

Test Methods and Procedures; Monitoring

{Permitting Note: Table 3, Summary of Compliance Requirements for Municipal Solid Waste Landfills, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

- A4. Each flare must be tested for visible emissions in accordance with EPA Method 22 and including 40 CFR 60.18(d)(e)&(f). The test period is 2 hours. Testing shall be conducted annually. [Rules 62-4.070 and 62-297.401(22), F.A.C.]
- A5. The permittee shall notify the Central District Office of the DEP, in writing, at least 15 days prior to the date on which the formal compliance test is to begin. The notification shall include the date, time and place of each such test, as well as the name of the contact person who will be responsible for coordinating and having such tests conducted for the owner.

[Rule 62-297.310(7)(a)9., F.A.C.]

A6. 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. [Rule 62-297.310(8)(b), F.A.C.]

Brevard County
Brevard County Central Disposal Facility

- A7. The owner or operator of an emission 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. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weigh 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 be determined within 10 percent of its true value.

 [Rule 62-297.310(5), F.A.C.]
- A8. This emission unit is subject to the following requirements from title 40 of the CFR Part 60 (see attached Appendix B and C):

40 CFR 60.7	Notification and record keeping
40 CFR 60.8	Performance tests
40 CFR 60.11	Compliance with standards and maintenance requirements
40 CFR 60.13	Monitoring requirements
40 CFR 60.14	Modification
40 CFR 60.15	Reconstruction
40 CFR 60.752(b)	Standards for air emissions from municipal solid waste landfills
40 CFR 60.757	Reporting requirements
40 CFR 60.758(a)	Record keeping requirements

- A9. This emission unit is subject to the applicable requirements of 40 CFR 60, Subpart WWW (see attached Appendix B, C, and D-1); 40 CFR 63, Subpart AAAA (see attached Appendix B and C); and 40 CFR 60.18 (see attached Appendix E).
- A10. The source is required to submit a semi-annual compliance report by 40 CFR 63.1980(a) and included in attached Table 3.

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

E.U. ID No.

Brief Description

004 - 009

Six (6) Internal Combustion Engines – Caterpillar Model G3520C engines and electrical generators. Each engine has a power generation rating of 2,233 brake horsepower at 100% load. The generator has a power rating of 1,600 kw. The engines will be fueled exclusively with landfill gas (LFG) generated by and received from the Central Disposal Facility. The landfill gas will go through a gas treatment system prior to combustion in the engines.

{Permitting Note: The following specific conditions B1. through B30. are from air construction permit 0090069-004-AC and 0090069-006-AC}

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

Control Technology

B1. $\underline{H_2S}$ Continuous Monitoring System (CMS) Equipment: Within 30 days of startup of any new or replacement continuous $\underline{H_2S}$ monitoring unit performance evaluations shall be done using Performance Specification 7. EPA Methods 11,15,15A, or 16 shall be used for conducting the relative accuracy evaluations. The span value for this instrument is 1000 ppmv $\underline{H_2S}$. The CMS shall be calibrated, maintained, and operated according to the manufacturer specifications. The monitoring requirements are subject to 40 CFR 63.8 sections (c),(d), and(g).

[Design; Rules 62-210.200 (BACT) and 62-4.070(3), F.A.C.]

Fuel Specifications and Work Practices

B2. NSPS and NESHAP Requirements: Emissions Units Nos. 004 – 009 are subject to the following applicable New Source Performance Standards (NSPS) in Title 40, Part 60 of the Code of Federal Regulations (40 CFR 60): Subpart A (General Provisions) and Subpart WWW (MSW Landfills).

The facility operates units subject to the following applicable National Emissions Standards for Hazardous Air Pollutants (NESHAP) in Title 40, Part 63 of the Code of Federal Regulations (40 CFR 63): Subpart A (General Provisions), Subpart AAAA (MSW Landfills), and Subpart ZZZZ (Reciprocating Internal Combustion Engines).

[Rules 62-204.800 and 62-210.300, F.A.C.]

Compliance with 40 CFR Part 63, Subpart ZZZZ emission limitations and operating limitations must occur no later than October 19, 2013.

- **B3.** Each engine/generator set is allowed to operate continuously, i.e., 8,760 hours per year. [Rule 62-210.200(232), F.A.C.]
- **B4.** Fuel fired in the engines is limited to treated LFG generated by and received from the Central Disposal Facility. The use of any other fuel will require an amendment to this permit. [Rule 62-212.400, F.A.C.]
- **B5.** The permittee shall operate each engine at the air-to-fuel ratio that the tested engine demonstrated compliance during the most recent performance test. [Rule 62-212.400, F.A.C.]

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- **B6.** The permittee shall operate each engine within 0.5% of the O₂ content in the exhaust gas at the air-to-fuel ratio that the tested engine demonstrated compliance during the most recent performance test. [Rule 62-212.400, F.A.C.]
- **B7.** The permittee shall install and maintain an automatic fail-safe block valve on each engine. The fail-safe block valve must stop the flow of LFG in the event of an engine failure. [Rule 62-4.070, F.A.C.]
- **B8.** Excess LFG not used as fuel in an engine must be flared in accordance with the requirements of 40 CFR 60 Subpart WWW. [Rule 62-4.070, F.A.C.]
- **B9.** Unless otherwise indicated, the modification/construction and operation of the Caterpillar internal combustion engines shall be in accordance with the capacities and specifications stated in the application. [Rule 62-210.300, F.A.C.]
- **B10.** No person shall circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly. [Rule 62-210.650, F.A.C.]
- B11. The emissions units shall be subject to the following:
 - a. Excess emissions resulting from startup, shutdown or malfunction of any source shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700, F.A.C.]
 - b. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700, F.A.C.]
 - c. In case of excess emissions resulting from malfunctions, each source shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700, F.A.C.]

Emission and Performance Requirements

- **B12.** Nitrogen oxides (NOx): The emission rate of NOx from each engine/generator set exhaust shall not exceed 0.60 gram per brake horsepower hour (g/bhp-hr) and a maximum of 2.95 pounds per hour (lb/hr) and 12.94 tons per year (TPY). [Rule 62-212.400(12), F.A.C.]
- **B13.** Carbon Monoxide (CO): The emission rate of CO from each engine/generator set exhaust shall not exceed 3.50 g/bhp-hr and a maximum of 17.23 lb/hr and 75.3 TPY.

 [Rule 62-212.400(12), F.A.C. and Permit No. 0090069-009-AC/PSD-FL-378C]
- **B14.** Particulate matter emissions shall be controlled from each engine/generator set exhaust through the implementation of the following pretreatment and good combustion practices.
- Operate and maintain a landfill gas pretreatment system to dewater, filter and compress the landfill gas prior to combustion in the engines. During the final stage of pretreatment, the landfill gas shall pass through a coalescing filter of 1 micrometer or less to reduce particulate matter prior to combustion.

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• Implement good combustion practices to minimize particulate matter emissions: lean-burn combustion design, efficient combustion through the air-fuel controller and preventive and periodic maintenance in accordance with the requirements of 40 CFR 63, Subpart ZZZZ.

{Permitting Note: Pretreatment and good combustion practices are expected to result in a maximum PM_{10} emission rate of 0.24 g/bhp-hour, 1.18 lb/hr, and 5.17 TPY.}

[Rule 62-212.400(12), F.A.C. and Permit No. 0090069-009-AC/PSD-FL-378C]

B15. Volatile Organic Compounds (VOC): The emission rate of total VOC from each engine/generator set exhaust shall not exceed 0.28 g/bhp-hr and a maximum of 1.37 lb/hr and 5.99 TPY.

[Rule 62-212.400(12), F.A.C.]

{Permitting Note: Project avoids PSD review for VOC based on emission limits.}

B16. Hydrogen Chloride (HCl): The emission rate of HCl from each engine/generator set shall not exceed 10.9 lb/MMscf and 1.66 TPY.

[Rule 62-210.200(184), F.A.C.]

{Permitting Note: Facility remains a minor source of HAP emissions based on permit limits.}

B17. Sulfur Dioxide (SO₂): The emission rate of SO₂ from each engine/generator set shall not exceed 2.64 lbs/hr and 11.55 tons/year (TPY). The total SO₂ emissions from the six engines shall not exceed 69.3 TPY. [Rule 62-212.400, F.A.C.]

{Permitting Note: Project avoids PSD review based on emission limits.}

B18. Hydrogen Sulfide H_2S : The concentration of H_2S in the landfill gas used as fuel in the engines shall not exceed 455 ppmv on a weekly rolling average, calculated on a calendar day basis, nor shall it exceed 550 ppmv on a 24-hour rolling average basis, calculated on an hourly basis. The concentration of H_2S shall be measured by the continuous monitoring system.

[Rules 62-212.400 and 62-4.070(3), F.A.C.]

B19. Visible emissions from each engine/generator set exhaust shall not exceed 10% opacity. [Rule 62-212.400, F.A.C.]

Test Methods and Procedures

B20. Performance Test Methods

Initial (I), Annual (A) and permit renewal (R) compliance tests shall be performed in accordance with the following reference methods as described in 40 CFR 60, Appendix A and 40 CFR 51 Appendix M, adopted by reference in Chapter 62-204.800, F.A.C. Initial, annual and renewal compliance tests shall be conducted on only one of the six engines. A different engine shall be tested each year such that all engines are tested during the six-year cycle.

- (a) EPA Method 7 or 7E Determination of NOx Emissions from Stationary Sources (I,A);
- (b) EPA Method 9 Visual Determination of the Opacity of Emissions from Stationary Sources (I,A),
- (c) EPA Method 10 Determination of CO Emissions from Stationary Sources (I,A);
- (d) EPA Method 18, 25, 25A or 25C Measurement of Gaseous Organic Compounds Emissions (I.R):
- (e) EPA Method 26 or 26A Determination of HCl Emissions from Stationary Sources (I,A);
- (f) EPA Reference Method 6, 6C or 19 Determinations of SO₂ Emissions (I, A).

EPA Methods 1 through 4 shall be used as necessary to support other test methods. No other test methods may be used for compliance testing unless prior DEP approval is received, in writing, from the Department. [Rule 62-297.310(7), F.A.C. and FDEP Emissions Monitoring Section Memo dated February 4, 2008.]

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- **B21.** The permittee shall comply with the following requirements to monitor the sulfur and chlorine content of the landfill gas:
 - a. The permittee shall sample and analyze the landfill gas for H₂S and chlorine content. The gas sample collected for the analyses shall be a composite sample and collected under normal operating conditions (i.e., with valves open for all operating cells). The gas sample collection and analyses for chlorine content shall be done semi-annually. Landfill gas sulfur (as H₂S) sampling and analysis under this condition shall be required for one year period (two semi-annual analyses) once the CMS equipment specified by this permit is installed and operational. Based on the sampling results and Rule 62-297.310(7)(b), F.A.C., the Department may request additional gas sampling and analyses. Results shall be reported as SO₂ and HCl emission factors in terms of lb/MMscf (equivalent in ppmv) and lb/MMBtu of landfill gas.
 - b. During each required compliance test conducted for HCl, the permittee shall sample and analyze the landfill gas for the chlorine content. Results for the compliance test shall be reported in terms of HCl emissions in lb/hr and the sample analysis result shall be reported as HCl emission factor in terms of lb/MMscf of landfill gas.
 - c. Analysis of the chlorine content shall be used to track changes in the landfill gas. Based on the analysis, the Compliance Authority may require additional stack testing for HCl emissions to determine compliance with the emissions standard.
 - d. Compliance with the fuel sulfur specification shall be determined based on each analysis for the sulfur content of the landfill gas.

[Rules 62-210.200(184), 62-210.200(232) and 62-212.400(12), F.A.C.]

B22. Annually, the subject emissions units shall be tested for compliance with the applicable emission limits. For the duration of all tests the emission units shall be operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum operating rate allowed by the permit. If it is impracticable to test at permitted capacity, then the emission unit may be tested at less than permitted capacity (i.e., 90% of the maximum operating rate allowed by the permit); in this case, subsequent emission unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emission unit is so limited, then operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity in the permit.

[Rule 62-297.310(2), F.A.C.]

Recordkeeping, Reporting, and Monitoring Requirements

B23. Total landfill gas flow to the engines shall be continuously measured and recorded. [Rule 62-210.200 (232), F.A.C.]

B24. Gross electrical power generation (kw-hrs) shall be continuously measured and recorded for each engine individually and for the six engines combined. [Rule 62-210.200(232), F.A.C.]

B25. Each engine/generator set shall be equipped with a non-resetable elapsed time meter to indicate, in cumulative hours, the elapsed engine operating time. [Rule 62-210.200(232), F.A.C.]

B26. The permittee shall maintain the following records on a monthly basis:

- a. The hours of operation of each engine/generator set, including any start-up, shutdown or malfunction in the operations of the engine/generator set.
- b. The total landfill gas flow to each engine.

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- c. Gross electrical power generation in kw-hr for each engine and the six engines combined.
- d. Exceedances of the allowed H₂S ppmv concentrations:
 - The date the exceedance occurred;
 - An explanation of the exceedance;
 - A description of the action taken, if any.
 - For any periods for which monitoring data are not available, any changes made in operation of the CMS system during the period of data unavailability which could affect the ability of the system to meet the applicable H₂S limit. Operations of the CMS system and affected facility during periods of data unavailability are to be compared with operations of the CMS system and affected facility before and following the period of data unavailability.
 - A written statement, signed by a responsible official, certifying the accuracy and completeness of the information contained in the report.

[Rules 62-210.200(BACT), and 62-4.070(3), F.A.C.]

B27. The permittee shall submit the results and the corresponding data of the site-specific HCl emission factor and the SO₂ emission factor within 45 days of gas sampling to the Bureau of Air Regulation. The results shall also be submitted to the Central District Office.

[Rules 62-210.200(232) and 62-210.200(264), F.A.C.]

B28. The permittee shall notify the Central District Office of the DEP, in writing, at least 15 days prior to the date on which the formal compliance test is to begin. The notification shall include the date, time and place of each such test, as well as the name of the contact person who will be responsible for coordinating and having such tests conducted for the owner.

[Rule 62-297.310(7)(a)9., F.A.C.]

B29. 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. [Rule 62-297.310(8)(b), F.A.C.]

B30. In order to demonstrate compliance with condition number B12 through B18, the permittee shall maintain a log at the facility for a period of at least five years from the date the data is recorded. The log shall contain the monthly emission rates of the specified pollutants.

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

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

Abbreviations and Acronyms:

°F:

Degrees Fahrenheit

BACT:

Best Available Control Technology

CFR:

Code of Federal Regulations

DEP:

State of Florida, Department of Environmental Protection

DARM:

Division of Air Resource Management

EPA:

United States Environmental Protection Agency

F.A.C.:

Florida Administrative Code

F.S.:

Florida Statute

ISO:

International Standards Organization

LAT:

Latitude Longitude

LONG: MMBtu:

million British thermal units

Megawatt

MW:

Office of Regulatory Information Systems

ORIS: SOA:

Specific Operating Agreement

UTM:

Universal Transverse Mercator

Citations:

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

Code of Federal Regulations:

Example: [40 CFR 60.334]

Where:

40 reference to

Title 40

Part 60

CFR

reference to

Code of Federal Regulations

60

reference to

60.334 reference to Regulation 60.334

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

Example: [Rule 62-213, F.A.C.]

Where:

62

reference to

Title 62

62-213

reference to

Chapter 62-213

62-213.205

reference to

Rule 62-213.205, F.A.C.

ISO: International Standards Organization refers to those conditions at 288 degrees K, 60 percent relative humidity, and 101.3 kilopascals pressure.

Identification Numbers:

Facility Identification (ID) Number:

Example: Facility ID No.: 1050221

Where:

105 = 3-digit number code identifying the facility is located in Polk County

0221 = 4-digit number assigned by state database.

Permit Numbers:

Example: 1050221-002-AV, or

1050221-001-AC

Where:

AC = Air Construction Permit

AV = Air Operation Permit (Title V Source)

= 3-digit number code identifying the facility is located in Polk County

0221 = 4-digit number assigned by permit tracking database

001 or 002 = 3-digit sequential project number assigned by permit tracking database

Example: PSD-FL-185

PA95-01

AC53-208321

Where:

PSD = Prevention of Significant Deterioration Permit

PA = Power Plant Siting Act Permit

AC = old Air Construction Permit numbering

Appendix B

40 CFR Part 60, Subpart WWW and 40 CFR Part 63, Subpart AAAA Combined General Provisions

§ 60.1 Applicability.

- (a) Except as provided in 40 CFR 60 subparts B and C, the provisions of this part apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of any standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.
- (b) Any new or revised standard of performance promulgated pursuant to section 111(b) of the Act shall apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of such new or revised standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.
- (c) In addition to complying with the provisions of this part, the owner or operator of an affected facility may be required to obtain an operating permit issued to stationary sources by an authorized State air pollution control agency or by the Administrator of the U.S. Environmental Protection Agency (EPA) pursuant to Title V of the Clean Air Act (CAA) as amended November 15, 1990 (42 U.S.C. 7661).

 [40 CFR 60.1(a). (b) and (c)]

§ 63.1 Applicability.

- (a) General. Affected Sources are already subject to the provisions of paragraphs (a)(10)-(12) through the same provisions under 40 CFR, part 60 subpart A.
- (1) Terms used throughout this part are defined in § 63.2 or in the Clean Air Act (Act) as amended in 1990, except that individual subparts of this part may include specific definitions in addition to or that supersede definitions in § 63.2.
- (2) This part contains national emission standards for hazardous air pollutants (NESHAP) established pursuant to section 112 of the Act as amended November 15, 1990. These standards regulate specific categories of stationary sources that emit (or have the potential to emit) one or more hazardous air pollutants listed in this part pursuant to section 112(b) of the Act. This section explains the applicability of such standards to sources affected by them. The standards in this part are independent of NESHAP contained in 40 CFR part 61. The NESHAP in part 61 promulgated by signature of the Administrator before November 15, 1990 (i.e., the date of enactment of the Clean Air Act Amendments of 1990) remain in effect until they are amended, if appropriate, and added to this part.
- (3) No emission standard or other requirement established under this part shall be interpreted, construed, or applied to diminish or replace the requirements of a more stringent emission limitation or other applicable requirement established by the Administrator pursuant to other authority of the Act (section 111, part C or D or any other authority of this Act), or a standard issued under State authority. The Administrator may specify in a specific standard under this part that facilities subject to other provisions under the Act need only comply with the provisions of that standard.
- (4) (i) Each relevant standard in this part 63 must identify explicitly whether each provision in this subpart A is or is not included in such relevant standard.
- (ii) If a relevant part 63 standard incorporates the requirements of 40 CFR part 60, part 61, or other part 63 standards, the relevant part 63 standard must identify explicitly the applicability of each corresponding part 60 part 61, or other part 63 subpart \wedge (General) Provision.
- (iii) The General Provisions in this Subpart A do not apply to regulations developed pursuant to section 112(r) of the amended Act., unless otherwise specified in those regulations.
 - (5) [Reserved]
- (6) To obtain the most current list of categories of sources to be regulated under section 112 of the Act, or to obtain the most recent regulation promulgation schedule established pursuant to section 112(c) of the Act, contact the Office of the Director, Emission Standards Division, Office of Air Quality Planning and Standards, U.S. EPA (MD–13), Research Triangle Park, North Carolina 27711.

(7)-(14) [Reserved]

- (b) Initial applicability determination for this part.
 - (1) The provisions of this part apply to the owner or operator of any stationary source that
 - (i) Emits or has the potential to emit any hazardous air pollutant listed in or pursuant to section 112(b) of the

Act; and

- (ii) Is subject to any standard, limitation, prohibition, or other federally enforceable requirement established pursuant to this part.
 - (2) [Reserved]

- (3) An owner or operator of a stationary source who is in the relevant source category and who determines that the source is not subject to a relevant standard or other requirement established under this part, must keep a record as specified in § 63.10(b)(3).
- (c) Applicability of this part after a relevant standard has been set under this part. [Reserved]
- (d) [Reserved]
- (e) If the Administrator promulgates an emission standard under section 112(d) or (h) of the Act that is applicable to a source subject to an emission limitation by permit established under section 112(j) of the Act, and the requirements under the section 112(j) emission limitation are substantially as effective as the promulgated emission standard, the owner or operator may request the permitting authority to revise the source's title V permit to reflect that the emission limitation in the permit satisfies the requirements of the promulgated emission standard. The process by which the permitting authority determines whether the section 112(j) emission limitation is substantially as effective as the promulgated emission standard must include, consistent with part 70 or 71 of this chapter, the opportunity for full public, EPA, and affected State review (including the opportunity for EPA's objection) prior to the permit revision being finalized. A negative determination by the permitting authority constitutes final action for purposes of review and appeal under the applicable title V operating permit program.

§ 60.2 & §63.2 Definitions.

Act means the Clean Air Act (42 U.S.C. 7401 et seq., as amended by Pub. L. 101-549, 104 Stat. 2399).

Actual emissions is defined in subpart D of this part for the purpose of granting a compliance extension for an early reduction of hazardous air pollutants.

Administrator means the Administrator of the United States Environmental Protection Agency or his or her authorized representative (e.g., a State that has been delegated the authority to implement the provisions of this part).

Affected source, for the purposes of this part, means the collection of equipment, activities, or both within a single contiguous area and under common control that is included in a section 112(c) source category or subcategory for which a section 112(d) standard or other relevant standard is established pursuant to section 112 of the Act. Each relevant standard will define the "affected source," as defined in this paragraph unless a different definition is warranted based on a published justification as to why this definition would result in significant administrative, practical, or implementation problems and why the different definition would resolve those problems. The term "affected source," as used in this part, is separate and distinct from any other use of that term in EPA regulations such as those implementing title IV of the Act. Affected source may be defined differently for part 63 than affected facility and stationary source in parts 60 and 61, respectively. This definition of "affected source," and the procedures for adopting an alternative definition of "affected source," shall apply to each section 112(d) standard for which the initial proposed rule is signed by the Administrator after June 30, 2002.

Alternative emission limitation means conditions established pursuant to sections 112(i)(5) or 112(i)(6) of the Act by the Administrator or by a State with an approved permit program.

Alternative emission standard means an alternative means of emission limitation that, after notice and opportunity for public comment, has been demonstrated by an owner or operator to the Administrator's satisfaction to achieve a reduction in emissions of any air pollutant at least equivalent to the reduction in emissions of such pollutant achieved under a relevant design, equipment, work practice, or operational emission standard, or combination thereof, established under this part pursuant to section 112(h) of the Act.

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

Alternative test method means any method of sampling and analyzing for an air pollutant that is not a test method in this chapter and that has been demonstrated to the Administrator's satisfaction, using Method 301 in Appendix A of this part, to produce results adequate for the Administrator's determination that it may be used in place of a test method specified in this part.

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

Area source means any stationary source of hazardous air pollutants that is not a major source as defined in this part.

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

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

Commenced means, with respect to construction or reconstruction of an affected source, that an owner or operator has undertaken a continuous program of construction or reconstruction or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or reconstruction.

Compliance date means the date by which an affected source is required to be in compliance with a relevant standard, limitation, prohibition, or any federally enforceable requirement established by the Administrator (or a State with an approved permit program) pursuant to section 112 of the Act.

Compliance schedule means:

- (1) In the case of an affected source that is in compliance with all applicable requirements established under this part, a statement that the source will continue to comply with such requirements; or
- (2) In the case of an affected source that is required to comply with applicable requirements by a future date, a statement that the source will meet such requirements on a timely basis and, if required by an applicable requirement, a detailed schedule of the dates by which each step toward compliance will be reached: or
- (3) In the case of an affected source not in compliance with all applicable requirements established under this part, a schedule of remedial measures, including an enforceable sequence of actions or operations with milestones and a schedule for the submission of certified progress reports, where applicable, leading to compliance with a relevant standard, limitation, prohibition, or any federally enforceable requirement established pursuant to section 112 of the Act for which the affected source is not in compliance. This compliance schedule shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the source is subject. Any such schedule of compliance shall be supplemental to, and shall not sanction non-compliance with, the applicable requirements on which it is based.

Construction means the on-site fabrication, erection, or installation of an affected source. Construction does not include the removal of all equipment comprising an affected source from an existing location and reinstallation of such equipment at a new location. The owner or operator of an existing affected source that is relocated may elect not to reinstall minor ancillary equipment including, but not limited to, piping, ductwork, and valves. However, removal and reinstallation of an affected source will be constructed as reconstruction if it satisfies the criteria for reconstruction as defined in this section. The costs of replacing minor ancillary equipment must be considered in determining whether the existing affected source is reconstructed.

Continuous emission monitoring system (CEMS) means the total equipment that may be required to meet the data acquisition and availability requirements of this part, used to sample, condition (if applicable), analyze, and provide a record of emissions.

Continuous monitoring system (CMS) is a comprehensive term that may include, but is not limited to, continuous emission monitoring systems, continuous opacity monitoring systems, continuous parameter monitoring systems, or other manual or automatic monitoring that is used for demonstrating compliance with an applicable regulation on a continuous basis as defined by the regulation.

Continuous opacity monitoring system (COMS) means a continuous monitoring system that measures the opacity of emissions.

Continuous parameter monitoring system means the total equipment that may be required to meet the data acquisition and availability requirements of this part, used to sample, condition (if applicable), analyze, and provide a record of process or control system parameters.

Effective date means:

- (1) With regard to an emission standard established under this part, the date of promulgation in the FEDERAL REGISTER of such standard; or
- (2)With regard to an alternative emission limitation or equivalent emission limitation determined by the Administrator (or a State with an approved permit program), the date that the alternative emission limitation or equivalent emission limitation becomes effective according to the provisions of this part.

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

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Emission standard means a national standard, limitation, prohibition, or other regulation promulgated in a subpart of this part pursuant to sections 112(d), 112(h), or 112(f) of the Act.

Emissions averaging is a way to comply with the emission limitations specified in a relevant standard, whereby an affected source, if allowed under a subpart of this part, may create emission credits by reducing emissions from specific points to a level below that required by the relevant standard, and those credits are used to offset emissions from points that are not controlled to the level required by the relevant standard.

EPA means the United States Environmental Protection Agency.

Equivalent emission limitation means any maximum achievable control technology emission limitation or requirements which are applicable to a major source of hazardous air pollutants and are adopted by the Administrator (or a State with an approved permit program) on a case-by-case basis, pursuant to section 112(g) or (j) of the Act.

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

Excess emissions and continuous monitoring system performance report is a report that must be submitted periodically by an affected source in order to provide data on its compliance with relevant emission limits, operating parameters, and the performance of its continuous parameter monitoring systems.

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

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

Existing source means any affected source that is not a new source.

Federally enforceable means all limitations and conditions that are enforceable by the Administrator and citizens under the Act or that are enforceable under other statutes administered by the Administrator. Examples of federally enforceable limitations and conditions include, but are not limited to:

- (1) Emission standards, alternative emission standards, alternative emission limitations, and equivalent emission limitations established pursuant to section 112 of the Act as amended in 1990;
- (2) New source performance standards established pursuant to section 111 of the Act, and emission standards established pursuant to section 112 of the Act before it was amended in 1990;
- (3) All terms and conditions in a title V permit, including any provisions that limit a source's potential to emit, unless expressly designated as not federally enforceable;
- (4) Limitations and conditions that are part of an approved State Implementation Plan (SIP) or a Federal Implementation Plan (FIP);
- (5) Limitations and conditions that are part of a Federal construction permit issued under 40 CFR 52.21 or any construction permit issued under regulations approved by the EPA in accordance with 40 CFR part 51;
- (6) Limitations and conditions that are part of an operating permit where the permit and the permitting program pursuant to which it was issued meet all of the following criteria:
 - (i) The operating permit program has been submitted to and approved by EPA into a State implementation plan (SIP) under section 110 of the CAA;
 - (ii) The SIP imposes a legal obligation that operating permit holders adhere to the terms and limitations of such permits and provides that permits which do not conform to the operating permit program requirements and the requirements of EPA's underlying regulations may be deemed not "federally enforceable" by EPA;
 - (iii) The operating permit program requires that all emission limitations, controls, and other requirements imposed by such permits will be at least as stringent as any other applicable limitations and requirements contained in the SIP or enforceable under the SIP, and that the program may not issue permits that waive, or make less stringent, any limitations or requirements contained in or issued pursuant to the SIP, or that are otherwise "federally enforceable";

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- (iv) The limitations, controls, and requirements in the permit in question are permanent, quantifiable, and otherwise enforceable as a practical matter; and
- (v) The permit in question was issued only after adequate and timely notice and opportunity for comment for EPA and the public.
- (7) Limitations and conditions in a State rule or program that has been approved by the EPA under subpart E of this part for the purposes of implementing and enforcing section 112; and
 - (8) Individual consent agreements that the EPA has legal authority to create.

Fixed capital cost means the capital needed to provide all the depreciable components of an existing source.

Fugitive emissions means those emissions from a stationary source that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening. Under section 112 of the Act, all fugitive emissions are to be considered in determining whether a stationary source is a major source.

Hazardous air pollutant means any air pollutant listed in or pursuant to section 112(b) of the Act.

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

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

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

Major source means any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants, unless the Administrator establishes a lesser quantity, or in the case of radionuclides, different criteria from those specified in this sentence.

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

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

Monitoring means the collection and use of measurement data or other information to control the operation of a process or pollution control device or to verify a work practice standard relative to assuring compliance with applicable requirements. Monitoring is composed of four elements:

- (1) Indicator(s) of performance -- the parameter or parameters you measure or observe for demonstrating proper operation of the pollution control measures or compliance with the applicable emissions limitation or standard. Indicators of performance may include direct or predicted emissions measurements (including opacity), operational parametric values that correspond to process or control device (and capture system) efficiencies or emissions rates, and recorded findings of inspection of work practice activities, materials tracking, or design characteristics. Indicators may be expressed as a single maximum or minimum value, a function of process variables (for example, within a range of pressure drops), a particular operational or work practice status (for example, a damper position, completion of a waste recovery task, materials tracking), or an interdependency between two or among more than two variables.
- (2) Measurement techniques -- the means by which you gather and record information of or about the indicators of performance. The components of the measurement technique include the detector type, location and installation specifications, inspection procedures, and quality assurance and quality control measures. Examples of measurement techniques include continuous emission monitoring systems, continuous opacity monitoring systems, continuous parametric monitoring systems, and manual inspections that include making records of process conditions or work practices.

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- (3) Monitoring frequency -- the number of times you obtain and record monitoring data over a specified time interval. Examples of monitoring frequencies include at least four points equally spaced for each hour for continuous emissions or parametric monitoring systems, at least every 10 seconds for continuous opacity monitoring systems, and at least once per operating day (or week, month, etc.) for work practice or design inspections.
- (4) Averaging time -- the period over which you average and use data to verify proper operation of the pollution control approach or compliance with the emissions limitation or standard. Examples of averaging time include a 3-hour average in units of the emissions limitation, a 30-day rolling average emissions value, a daily average of a control device operational parametric range, and an instantaneous alarm.

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

New affected source means the collection of equipment, activities, or both within a single contiguous area and under common control that is included in a section 112(c) source category or subcategory that is subject to a section 112(d) or other relevant standard for new sources. This definition of "new affected source," and the criteria to be utilized in implementing it, shall apply to each section 112(d) standard for which the initial proposed rule is signed by the Administrator after June 30, 2002. Each relevant standard will define the term "new affected source," which will be the same as the "affected source" unless a different collection is warranted based on consideration of factors including:

- (1) Emission reduction impacts of controlling individual sources versus groups of sources;
- (2) Cost effectiveness of controlling individual equipment;
- (3) Flexibility to accommodate common control strategies;
- (4) Cost/benefits of emissions averaging:
- (5) Incentives for pollution prevention;
- (6) Feasibility and cost of controlling processes that share common equipment (e.g., product recovery devices);
 - (7) Feasibility and cost of monitoring; and
 - (8) Other relevant factors.

New source means any affected source the construction or reconstruction of which is commenced after the Administrator first proposes a relevant emission standard under this part establishing an emission standard applicable to such source.

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

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

Opacity means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background. For continuous opacity monitoring systems, opacity means the fraction of incident light that is attenuated by an optical medium.

Owner or operator means any person who owns, leases, operates, controls, or supervises a stationary source..

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

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

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Performance audit means a procedure to analyze blind samples, the content of which is known by the Administrator, simultaneously with the analysis of performance test samples in order to provide a measure of test data quality.

Performance evaluation means the conduct of relative accuracy testing, calibration error testing, and other measurements used in validating the continuous monitoring system data.

Performance test means the collection of data resulting from the execution of a test method (usually three emission test runs) used to demonstrate compliance with a relevant emission standard as specified in the performance test section of the relevant standard.

Permit modification means a change to a title V permit as defined in regulations codified in this chapter to implement title V of the Act (42 U.S.C. 7661).

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

Permit revision means any permit modification or administrative permit amendment to a title V permit as defined in regulations codified in this chapter to implement title V of the Act (42 U.S.C. 7661).

Permitting authority means:

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

Potential to emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable.

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

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

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

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

Reconstruction means the replacement of components of an affected or a previously unaffected stationary source to such an extent that:

- (1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new source; and
- (2) It is technologically and economically feasible for the reconstructed source to meet the relevant standard(s) established by the Administrator (or a State) pursuant to section 112 of the Act. Upon reconstruction, an affected source, or a stationary source that becomes an affected source, is subject to relevant standards for new sources, including compliance dates, irrespective of any change in emissions of hazardous air pollutants from that source.

Regulation promulgation schedule means the schedule for the promulgation of emission standards under this part, established by the Administrator pursuant to section 112(e) of the Act and published in the FEDERAL REGISTER.

Relevant standard means:

- (1) An emission standard;
- (2) An alternative emission standard;

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- (3) An alternative emission limitation: or
- (4) An equivalent emission limitation established pursuant to section 112 of the Act that applies to the collection of equipment, activities, or both regulated by such standard or limitation. A relevant standard may include or consist of a design, equipment, work practice, or operational requirement, or other measure, process, method, system, or technique (including prohibition of emissions) that the Administrator (or a State) establishes for new or existing sources to which such standard or limitation applies. Every relevant standard established pursuant to section 112 of the Act includes subpart A of this part, as provided by § 63.1(a)(4), and all applicable appendices of this part or of other parts of this chapter that are referenced in that standard.

Responsible official means one of the following:

- (1) For a corporation: A president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities and either:
- (i) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or
 - (ii) The delegation of authority to such representative is approved in advance by the Administrator.
 - (2) For a partnership or sole proprietorship: a general partner or the proprietor, respectively.
- (3) For a municipality, State, Federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of the EPA).
- (4) For affected sources (as defined in this part) applying for or subject to a title V permit: "responsible official" shall have the same meaning as defined in part 70 or Federal title V regulations in this chapter (42 U.S.C. 7661), whichever is applicable.

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

Run means one of a series of emission or other measurements needed to determine emissions for a representative operating period or cycle as specified in this part.

Shutdown means the cessation of operation of an affected source or portion of an affected source for any purpose. Six-minute period means, with respect to opacity determinations, any one of the 10 equal parts of a 1-hour period. Standard conditions means a temperature of 293 °K (68° F) and a pressure of 101.3 kilopascals (29.92 in. Hg). Startup means the setting in operation of an affected source for any purpose.

State means all non-Federal authorities, including local agencies, interstate associations, and State-wide programs, that have delegated authority to implement:

- (1) The provisions of this part and/or
- (2) the permit program established under part 70 of this chapter. The term State shall have its conventional meaning where clear from the context.

Stationary source means any building, structure, facility, or installation which emits or may emit any air pollutant. Test method means the validated procedure for sampling, preparing, and analyzing for an air pollutant specified in a relevant standard as the performance test procedure. The test method may include methods described in an appendix of this chapter, test methods incorporated by reference in this part, or methods validated for an application through procedures in Method 301 of appendix A of this part.

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

Visible emission means the observation of an emission of opacity or optical density above the threshold of vision.

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

Working day means any day on which Federal Government offices (or State government offices for a State that has obtained delegation under section 112(1)) are open for normal business. Saturdays, Sundays, and official Federal (or where delegated, State) holidays are not working days.

§ 60.3 Units and abbreviations.

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

(a) System International (SI) units of measure: A -- ampere g -- gram Hz -- hertz J -- joule °K -- degree Kelvin kg -- kilogram m -- meter m3 -- cubic meter mg -- milligram -- 10- 3 gram mm -- millimeter -- 10- 3 meter Mg -- megagram -- 10 6 gram mol -- mole N -- newton ng -- nanogram -- 10- 9 gram nm -- nanometer -- 10- 9 meter Pa -- pascal s -- second V -- volt W -- watt

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Ω -- ohm
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μg -- microgram -- 10⁻⁶ gram

(b) Other units of measure:

Btu -- British thermal unit

°C -- degree Celsius (centigrade)

cal -- calorie

cfm -- cubic feet per minute

cu ft -- cubic feet

dcf -- dry cubic feet

dcm -- dry cubic meter

dscf -- dry cubic feet at standard conditions

dscm -- dry cubic meter at standard conditions

eq -- equivalent

°F -- degree Fahrenheit

ft -- feet

gal -- gallon

gr -- grain

g-eq -- gram equivalent

hr -- hour

in -- inch

k -- 1,000

l -- liter

lpm -- liter per minute

lb -- pound

meq -- milliequivalent

min -- minute

ml -- milliliter

mol, wt. -- molecular weight

ppb -- parts per billion

ppm -- parts per million

psia -- pounds per square inch absolute

psig -- pounds per square inch gage

°R -- degree Rankine

scf -- cubic feet at standard conditions

softh -- cubic feet per hour at standard conditions

scm -- cubic meter at standard conditions

sec -- second

sq ft -- square feet

std -- at standard conditions

(c) Chemical nomenclature:

CdS -- cadmium sulfide

CO -- carbon monoxide

CO₂ -- carbon dioxide

HCl -- hydrochloric acid

Hg -- mercury

H₂O -- water

H₂S -- hydrogen sulfide

H₂SO₄ -- sulfuric acid

N₂ -- nitrogen

NO -- nitric oxide

NO₂ -- nitrogen dioxide

NOx -- nitrogen oxides

O₂ -- oxygen

SO₂ -- sulfur dioxide

SO₃ -- sulfur trioxide

SOx -- sulfur oxides

(d) Miscellaneous:

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

§ 63.4 Prohibited activities and circumvention.

Affected Sources are already subject to the provisions of paragraphs (b) through the same provisions under 40 CFR, part 60 subpart A.

- (a) Prohibited activities.
- (1) No owner or operator subject to the provisions of this part must operate any affected source in violation of the requirements of this part. Affected sources subject to and in compliance with either an extension of compliance or an exemption from compliance are not in violation of the requirements of this part. An extension of compliance can be granted by the Administrator under this part; by a State with an approved permit program; or by the President under section 112(i)(4) of the Act.
- (2) No owner or operator subject to the provisions of this part shall fail to keep records, notify, report, or revise reports as required under this part.
 - (3) [Reserved]
 - (4) [Reserved]
 - (5) [Reserved]
- (b) Circumvention. [Reserved]
- (c) Severability. Notwithstanding any requirement incorporated into a title V permit obtained

by an owner or operator subject to the provisions of this part, the provisions of this part are federally enforceable.

§ 60.12 Circumvention.

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

§ 60.5 Determination of construction or modification.

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

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§ 60.6 Review of plans.

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

§ 60.7 Notification and record keeping.

- (a) Any owner or operator subject to the provisions of this part shall furnish the Administrator written notification or, if acceptable to both the Administrator and the owner or operator of a source, electronic notification, as follows:
- 1. A notification of the <u>date construction</u> (or reconstruction as defined under § 60.15) of an affected facility is <u>commenced</u> postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form.
 - 2. Reserved.
 - 3. A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.
- 4. A notification of <u>any physical or operational change</u> to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in § 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.
- 5. A notification of the date upon which demonstration of the continuous monitoring system performance commences in accordance with 40 CFR 60.13(c). Notification shall be postmarked not less than 30 days prior to such date.
- 6. A notification of the anticipated date for conducting the opacity observations required by 40 CFR 60.11(e)(1) of this part. The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date.
- 7. A notification that continuous opacity monitoring system data results will be used to determine compliance with the applicable opacity standard during a performance test required by 40 CFR 60.8 in lieu of Method 9 observation data as allowed by 40 CFR 60.11(e)(5) of 40 CFR 60. This notification shall be postmarked not less than 30 days prior to the date of the performance test.
- (b) Any owner or operator subject to the provisions of this part shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- (c) Each owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form (see paragraph (d) of this section) to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each six-month period. Written reports of excess emissions shall include the following information:
- (1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
- (2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
- (3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

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- (4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.
- (d) The summary report form shall contain the information and be in the format shown in Figure 1 unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.
- (1) If the total duration of excess emissions for the reporting period is less than I percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.
- (2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

[See Attached Figure 1-Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance]

(e) (1) Notwithstanding the frequency of reporting requirements specified in paragraph (c) of this section, an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the

following conditions are met:

- (i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard:
- (ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in this subpart and the applicable standard; and
- (iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in paragraph (e)(2) of this section.
- (2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.
- (3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance re-port (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in paragraphs (e)(1) and (e)(2) of this section.
- (f) Any owner or operator subject to the provisions of this part shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:
- (1) This paragraph applies to owners or operators required to install a continuous emissions monitoring system (CEMS) where the CEMS installed is automated, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. An automated CEMS records and reduces the measured data to the form of the pollutant emission standard through the use of a computerized data acquisition system. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (f) of this section, the owner or operator shall retain the most recent consecutive three averaging periods of subhourly measurements and a file that contains a hard copy of the data acquisition system algorithm used to reduce the measured data into the reportable form of the standard.

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- (2) This paragraph applies to owners or operators required to install a CEMS where the measured data is manually reduced to obtain the reportable form of the standard, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (f) of this section, the owner or operator shall retain all subhourly measurements for the most recent reporting period. The subhourly measurements shall be retained for 120 days from the date of the most recent summary or excess emission report submitted to the Administrator.
- (3) The Administrator or delegated authority, upon notification to the source, may require the owner or operator to maintain all measurements as required by paragraph (f) of this section, if the Administrator or the delegated authority determines these records are required to more accurately assess the compliance status of the affected source.
- (g) If notification substantially similar to that in 40 CFR 60.7(a) is required by any other State or local agency, sending the Administrator a copy of that notification will satisfy the requirements of 40 CFR 60.7(a).
- (h) Individual subparts of this part may include specific provisions which clarify or make inapplicable the provisions set forth in this section.

§ 63.5 Preconstruction review and notification requirements.

(a) Applicability.

[Reserved]

- (b) Requirements for existing, newly constructed, and reconstructed sources.
 - (1) A new affected source for which construction commences after proposal of a relevant standard is subject to relevant standards for new affected sources, including compliance dates. An affected source for which reconstruction commences after proposal of a relevant standard is subject to relevant standards for new sources, including compliance dates, irrespective of any change in emissions of hazardous air pollutants from that source.
 - (2) [Reserved]
- (3) After the effective date of any relevant standard promulgated by the Administrator under this part, no person may, without obtaining written approval in advance from the Administrator in accordance with the procedures specified in paragraphs (d) and (e) of this section, do any of the following:
 - (i) Construct a new affected source that is major-emitting and subject to such standard;
 - (ii) Reconstruct an affected source that is major-emitting and subject to such standard; or
 - (iii) Reconstruct a major source such that the source becomes an affected source that is major-emitting and subject to the standard.
- (4) After the effective date of any relevant standard promulgated by the Administrator under this part, an owner or operator who constructs a new affected source that is not major-emitting or reconstructs an affected source that is not major-emitting that is subject to such standard, or reconstructs a source such that the source becomes an affected source subject to the standard, must notify the Administrator of the intended construction or reconstruction. The notification must be submitted in accordance with the procedures in § 63.9(b).
 - (5) [Reserved]
- (6) After the effective date of any relevant standard promulgated by the Administrator under this part, equipment added (or a process change) to an affected source that is within the scope of the definition of affected source under the relevant standard must be considered part of the affected source and subject to all provisions of the relevant standard established for that affected source.

(c)-(f) [Reserved]

§ 60.8 Performance tests.

(a) Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Administrator under section 114 of

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the Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s). [40 CFR 60.8(a)]

- (b) Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, (3) approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance, (4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or (5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in 40 CFR 60.8 shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.

 [40 CFR 60.8(b)(1), (2), (3), (4) & (5)]
- (c) Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

 [40 CFR 60.8(c)].
- (d) The owner or operator of an affected facility shall provide the Administrator at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the Administrator the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the administrator (or delegated State or local agency) as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Administrator (or delegated State or local agency) by mutual agreement.
- (e) The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:
 - (1) Sampling ports adequate for test methods applicable to such facility. This includes
- (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and
- (ii) providing a stack or duet free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.
 - (2) Safe sampling platform(s).
 - (3) Safe access to sampling platform(s).
 - (4) Utilities for sampling and testing equipment.

[40 CFR 60.8(e)].

(f) Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally

lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs.

[40 CFR 60.8(f)].

§ 60.9 Availability of information.

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

§ 60.10 and § 63.12 State authority and delegations.

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

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- (1) Adopting and enforcing any standard, limitation, prohibition, or other regulation applicable to an affected source subject to the requirements of this part, provided that such standard, limitation, prohibition, or regulation is not less stringent than any requirement applicable to such source established under this part;
- (2) Requiring the owner or operator of an affected source to obtain permits. licenses, or approvals prior to initiating construction, reconstruction, modification, or operation of such source; or
- (3) Requiring emission reductions in excess of those specified in subpart D of this part as a condition for granting the extension of compliance authorized by section 112(i)(5) of the Act.

§ 60.11 Compliance with standards and maintenance requirements.

- (a) Compliance with standards in this part, other than opacity standards, shall be determined only by performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard.
- (b) Compliance with opacity standards in this part shall be determined by conducting observations in accordance with Method 9 in appendix A of this part, any alternative method that is approved by the Administrator, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).
- (c) The opacity standards set forth in this part shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.
- (d) At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to. monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
- (1) For the purpose of demonstrating initial compliance, opacity observations shall be conducted concurrently with the (e) initial performance test required in 40 CFR 60.8 unless one of the following conditions apply. If no performance test under 40 CFR 60.8 is required, then opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. If visibility or other conditions prevent the opacity observations from being conducted concurrently with the initial performance test required under 40 CFR 60.8, the source owner or operator shall reschedule the opacity observations as soon after the initial performance test as possible, but not later than 30 days thereafter, and shall advise the Administrator of the rescheduled date. In these cases, the 30day prior notification to the Administrator required in 40 CFR 60.7(a)(6) shall be waived. The rescheduled opacity observations shall be conducted (to the extent possible) under the same operating conditions that existed during the initial performance test conducted under 40 CFR 60.8. The visible emissions observer shall determine whether visibility or other conditions prevent the opacity observations from being made concurrently with the initial performance test in accordance with procedures contained in Method 9 of appendix B of this part. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. The owner or operator of an affected facility shall make available, upon request by the Administrator, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. Except as provided in 40 CFR 60.11(e)(5), the results of continuous monitoring by transmissometer which indicate that the opacity at the time visual observations were made was not in excess of the standard are probative but not conclusive evidence of the actual opacity of an emission, provided that the source shall meet the burden of proving that the instrument used meets (at the time of the alleged violation) Performance Specification 1 in appendix B of 40 CFR 60, has been properly maintained and (at the time of the alleged violation) that the resulting data have not been altered in any way.
- (2) Except as provided in 40 CFR 60.11(e)(3), the owner or operator of an affected facility to which an opacity standard in this part applies shall conduct opacity observations in accordance with 40 CFR 60.11(b), shall record the opacity of emissions, and shall report to the Administrator the opacity results along with the results of the initial performance test required under 40 CFR 60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.
- (3) The owner or operator of an affected facility to which an opacity standard in this part applies may request the Administrator to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. The owner or operator of the affected facility shall report the opacity results. Any request to the Administrator to determine and to record the opacity of emissions from an affected facility shall be included in the notification required in 40 CFR 60.7(a)(6). If, for some reason, the Administrator cannot determine and record the opacity of emissions from the affected facility during the performance test, then the provisions of 40 CFR 60.7(e)(1) shall apply.
- (4) The owner or operator of an affected facility using a continuous opacity monitor (transmissometer) shall record the monitoring data produced during the initial performance test required by 40 CFR 60.8 and shall furnish the Administrator a written report of the monitoring results along with Method 9 and 40 CFR 60.8 performance test results.

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- (5) The owner or operator of an affected facility subject to an opacity standard may submit, for compliance purposes, continuous opacity monitoring system (COMS) data results produced during any performance test required under 40 CFR 60.8 in lieu of Method 9 observation data. If an owner or operator elects to submit COMS data for compliance with the opacity standard, he shall notify the Administrator of that decision, in writing, at least 30 days before any performance test required under 40 CFR 60.8 is conducted. Once the owner or operator of an affected facility has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests required under 40 CFR 60.8 until the owner or operator notifies the Administrator, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a performance test required under 40 CFR 60.8 using COMS data, the minimum total time of COMS data collection shall be averages of all 6-minute continuous periods within the duration of the mass emission performance test. Results of the COMS opacity determinations shall be submitted along with the results of the performance test required under 60.8. The owner or operator of an affected facility using a COMS for compliance purposes is responsible for demonstrating that the COMS meets the requirements specified in 40 CFR 60.13(c), that the COMS has been properly maintained and operated, and that the resulting data have not been altered in any way. If COMS data results are submitted for compliance with the opacity standard for a period of time during which Method 9 data indicates noncompliance, the Method 9 data will be used to determine compliance with the opacity standard.
- (6) Upon receipt from an owner or operator of the written reports of the results of the performance tests required by 40 CFR 60.8, the opacity observation results and observer certification required by 40 CFR 60.11(e)(1), and the COMS results, if applicable, the Administrator will make a finding concerning compliance with opacity and other applicable standards. If COMS data results are used to comply with an opacity standard, only those results are required to be submitted along with the performance test results required by 40 CFR 60.8. If the Administrator finds that an affected facility is in compliance with all applicable standards for which performance tests are conducted in accordance with 40 CFR 60.8 of this part but during the time such performance tests are being conducted fails to meet any applicable opacity standard, the shall notify the owner or operator and advise him that he may petition the Administrator within 10 days of receipt of notification to make appropriate adjustment to the opacity standard for the affected facility.
- (7) The Administrator will grant such a petition upon a demonstration by the owner or operator that the affected facility and associated air pollution control equipment was operated and maintained in a manner to minimize the opacity of emissions during the performance tests; that the performance tests were performed under the conditions established by the Administrator; and that the affected facility and associated air pollution control equipment were incapable of being adjusted or operated to meet the applicable opacity standard.
- (8) The Administrator will establish an opacity standard for the affected facility meeting the above requirements at a level at which the source will be able, as indicated by the performance and opacity tests, to meet the opacity standard at all times during which the source is meeting the mass or concentration emission standard. The Administrator will promulgate the new opacity standard in the Federal Register.
- (f) Special provisions set forth under an applicable subpart of 40 CFR 60 shall supersede any conflicting provisions of 40 CFR 60.11.

[40 CFR 60.11(a), (b), (c), (d), (e) and (f)]

§ 63.6 Compliance with standards and maintenance requirements.

(a)-(d) [Reserved]

- (e) Operation and maintenance requirements.
- (1) (i) At all times, including periods of startup, shutdown, and malfunction, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions to the levels required by the relevant standards, i.e., meet the emission standard or comply with the startup, shutdown, and malfunction plan. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan required in paragraph (e)(3) of this section), review of operation and maintenance records, and inspection of the source.
 - Malfunctions must be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown, and malfunction plan required in paragraph (e)(3) of this section. To the extent that an unexpected event arises during a startup, shutdown, or malfunction, an owner or operator must comply by minimizing emissions during such a startup, shutdown, and malfunction event consistent with safety and good air pollution control practices.
- (iii) Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable independent of emissions limitations or other requirements in relevant standards.
 - (2) [Reserved]
 - (3) Startup, shutdown, and malfunction plan.
- (i) The owner or operator of an affected source must develop and implement a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the source during periods of startup.

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shutdown, and malfunction; a program of corrective action for malfunctioning process: and air pollution control and monitoring equipment used to comply with the relevant standard. This plan must be developed by the owner or operator by the source's compliance date for that relevant standard. The purpose of the startup, shutdown, and malfunction plan is to --

- (A) Ensure that, at all times, the owner or operator operate and maintain affected sources, including associated air pollution control and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions to the levels required by the relevant standards:
- (B) Ensure that owners or operators are prepared to correct malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of hazardous air pollutants; and
- (C) Reduce the reporting burden associated with periods of startup, shutdown, and malfunction (including corrective action taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation).
- (ii) During periods of startup, shutdown, and malfunction, the owner or operator of an affected source must operate and maintain such source (including associated air pollution control and monitoring equipment) in accordance with the procedures specified in the startup, shutdown, and malfunction plan developed under paragraph (e)(3)(i) of this section.
- (iii) When actions taken by the owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) are consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, the owner or operator must keep records for that event which demonstrate that the procedures specified in the plan were followed. These records may take the form of a "checklist," or other effective form of recordkeeping that confirms conformance with the startup, shutdown, and malfunction plan for that event. In addition, the owner or operator must keep records of these events as specified in § 63.10(b), including records of the occurrence and duration of each startup, shutdown, or malfunction of operation and each malfunction of the air pollution control and monitoring equipment. Furthermore, the owner or operator shall confirm that actions taken during the relevant reporting period during periods of startup, shutdown, and malfunction were consistent with the affected source's startup, shutdown and malfunction plan in the semiannual (or more frequent) startup, shutdown, and malfunction report required in § 63.10(d)(5).
- (iv) If an action taken by the owner or operator during a startup, shutdown, or malfunction (including an action taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, and the source exceeds the relevant emission standard, then the owner or operator must record the actions taken for that event and must report such actions within 2 working days after commencing actions inconsistent with the plan, followed by a letter within 7 working days after the end of the event, in accordance with § 63.10(d)(5) (unless the owner or operator makes alternative reporting arrangements, in advance, with the Administrator).
- (v) The owner or operator must maintain at the affected source a current startup, shutdown, and malfunction plan and must make the plan available upon request for inspection and copying by the Administrator. In addition, if the startup, shutdown, and malfunction plan is subsequently revised as provided in paragraph (e)(3)(viii) of this section, the owner or operator must maintain at the affected source each previous (i.e., superseded) version of the startup, shutdown, and malfunction plan, and must make each such previous version available for inspection and copying by the Administrator for a period of 5 years after revision of the plan. If at any time after adoption of a startup, shutdown, and malfunction plan the affected source ceases operation or is otherwise no longer subject to the provisions of this part, the owner or operator must retain a copy of the most recent plan for 5 years from the date the source ceases operation or is no longer subject to this part and must make the plan available upon request for inspection and copying by the Administrator.
- (vi) To satisfy the requirements of this section to develop a startup, shutdown, and malfunction plan, the owner or operator may use the affected source's standard operating procedures (SOP) manual, or an Occupational Safety and Health Administration (OSHA) or other plan, provided the alternative plans meet all the requirements of this section and are made available for inspection when requested by the Administrator.
- (vii) Based on the results of a determination made under paragraph (e)(2) of this section, the Administrator may require that an owner or operator of an affected source make changes to the startup, shutdown, and malfunction plan for that source. The Administrator may require reasonable revisions to a startup, shutdown, and malfunction plan, if the Administrator finds that the plan:
 - (A) Does not address a startup, shutdown, or malfunction event that has occurred;
- (B) Fails to provide for the operation of the source (including associated air pollution control and monitoring equipment) during a startup, shutdown, or malfunction event in a manner consistent with safety and good air pollution control practices for minimizing emissions to the levels required by the relevant standards;
 - (C) Does not provide adequate procedures for correcting malfunctioning process and/or air pollution control and monitoring equipment as quickly as practicable; or
 - (D) Includes an event that does not meet the definition of startup, shutdown, or malfunction listed in § 63.2.

(viii) The owner or operator may periodically revise the startup, shutdown, and malfunction plan for the affected source as necessary to satisfy the requirements of this part or to reflect changes in equipment or procedures at the affected source. Unless the permitting authority provides otherwise, the owner or operator may make such revisions to the startup, shutdown, and malfunction plan without prior approval by the Administrator or the permitting authority. However, each such revision to a startup, shutdown, and malfunction plan must be reported in the semiannual report required by § 63.10(d)(5). If the startup, shutdown, and malfunction plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction but was not included in the startup, shutdown, and malfunction plan at the time the owner or operator developed

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the plan, the owner or operator must revise the startup, shutdown, and malfunction plan within 45 days after the event to include detailed procedures for operating and maintaining the source during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control and monitoring equipment. In the event that the owner or operator makes any revision to the startup, shutdown, and malfunction plan which alters the scope of the activities at the source which are deemed to be a startup, shutdown, malfunction, or otherwise modifies the applicability of any emission limit, work practice requirement, or other requirement in a standard established under this part, the revised plan shall not take effect until after the owner or operator has provided a written notice describing the revision to the permitting authority.

- (ix) The title V permit for an affected source must require that the owner or operator adopt a startup, shutdown, and malfunction plan which conforms to the provisions of this part, and that the owner or operator operate and maintain the source in accordance with the procedures specified in the current startup, shutdown, and malfunction plan. However, any revisions made to the startup, shutdown, and malfunction plan in accordance with the procedures established by this part shall not be deemed to constitute permit revisions under part 70 or part 71 of this chapter. Moreover, none of the procedures specified by the startup, shutdown, and malfunction plan for an affected source shall be deemed to fall within the permit shield provision in section 504(f) of the Act.
- (f) Compliance with nonopacity emission standards Affected Sources are already subject to the provisions of paragraphs (f)(1) and (2)(1) through the same provisions under 40 CFR, part 60 subpart A.
 - (1) Applicability. [Reserved]
 - (2) Methods for determining compliance.
 - (i) [Reserved]
- (ii) The Administrator will determine compliance with nonopacity emission standards in this part by evaluation of an owner or operator's conformance with operation and maintenance requirements, including the evaluation of monitoring data, as specified in § 63.6(e) and applicable subparts of this part.
- (iii) If an affected source conducts performance testing at startup to obtain an operating permit in the State in which the source is located, the results of such testing may be used to demonstrate compliance with a relevant standard if -
- (A) The performance test was conducted within a reasonable amount of time before an initial performance test is required to be conducted under the relevant standard;
 - (B) The performance test was conducted under representative operating conditions for the source;
- (C) The performance test was conducted and the resulting data were reduced using EPA-approved test methods and procedures, as specified in § 63.7(e) of this subpart; and
 - (D) The performance test was appropriately quality-assured, as specified in § 63.7(c).
- (iv) The Administrator will determine compliance with design, equipment, work practice, or operational emission standards in this part by review of records, inspection of the source, and other procedures specified in applicable subparts of this part.
- (v) The Administrator will determine compliance with design, equipment, work practice, or operational emission standards in this part by evaluation of an owner or operator's conformance with operation and maintenance requirements, as specified in paragraph (e) of this section and applicable subparts of this part.
- (3) Finding of compliance. The Administrator will make a finding concerning an affected source's compliance with a non-opacity emission standard, as specified in paragraphs (f)(1) and (2) of this section, upon obtaining all the compliance information required by the relevant standard (including the written reports of performance test results, monitoring results, and other information, if applicable), and information available to the Administrator pursuant to paragraph (e)(1)(i) of this section.

(g)-(j) [Reserved]

§ 60.13 Monitoring requirements.

- (a) For the purposes of this section, all continuous monitoring systems required under applicable subparts shall be subject to the provisions of this section upon promulgation of performance specifications for continuous monitoring systems under appendix B of 40 CFR 60 and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, appendix F to 40 CFR 60, unless otherwise specified in an applicable subpart or by the Administrator. Appendix F is applicable December 4, 1987.
- (b) All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests under 40 CFR 60.8. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device.
- (c) If the owner or operator of an affected facility elects to submit continuos opacity monitoring system (COMS) data for compliance with the opacity standard as provided under 40 CFR 60.11(e)(5), he/she shall conduct a performance evaluation of the COMS as specified in Performance Specification 1, appendix B, of 40 CFR 60 before the performance test required under 40

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CFR 60.8 is conducted. Otherwise, the owner or operator of an affected facility shall conduct a performance evaluation of the COMS or continuous emission monitoring system (CEMS) during any performance test required under 40 CFR 60.8 or within 30 days thereafter in accordance with the applicable performance specification in appendix B of 40 CFR 60. The owner or operator of an affected facility shall conduct COMS or CEMS performance evaluations at such other times as may be required by the Administrator under section 114 of the Act.

- (1) The owner or operator of an affected facility using a COMS to determine opacity compliance during any performance test required under 40 CFR 60.8 and as described in 40 CFR 60.11(e)(5), shall furnish the Administrator two or, upon request, more copies of a written report of the results of the COMS performance evaluation described in 40 CFR 60.13(c) at least 10 days before the performance test required under 40 CFR 60.8 is conducted.
- (2) Except as provided in 40 CFR 60.13(c)(1), the owner or operator of an affected facility shall furnish the Administrator within 60 days of completion two or, upon request, more copies of a written report of the results of the performance evaluation.
- (d) (1) Owners and operators of all continuous emission monitoring systems installed in accordance with the provisions of this part shall check the zero (or low-level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span shall, as a minimum, be adjusted whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications in appendix B. The system must allow the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified, whenever specified. For a COMS, the optical surfaces, exposed to the effluent gases, must be cleaned before performing the zero and upscale drift adjustments, except for systems using automatic zero adjustments. The optical surfaces must be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.
- (2) Unless otherwise approved by the Administrator, the following procedures shall be followed for continuous monitoring systems measuring opacity of emissions. Minimum procedures shall include a method for producing a simulated zero opacity condition and an upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. Such procedures shall provide a system check of the analyzer internal optical surfaces and
- all electronic circuitry including the lamp and photo detector assembly.

(g)

- (e) Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:
- (1) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.
- (2) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.
- (f) All continuous monitoring systems or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of appendix B of 40 CFR 60 shall be used.
 - facility (e.g. multiple breechings, multiple outlets), the owner or operator shall report the results as required from each continuous monitoring system. When the effluent from one affected facility is released to the atmosphere through more than one point, the owner or operator shall install an applicable continuous monitoring system on each separate effluent unless installation of fewer systems is approved by the Administrator.

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

(1) When more than one continuous monitoring system is used to measure the emissions from only one affected

- (3) When the effluents from two or more affected facilities subject to the same emissions standard, other than opacity, are combined before released to the atmosphere, the owner or operator may install applicable continuous monitoring systems on each effluent or on the combined effluent. When the affected facilities are not subject to the continuous monitoring standard, separate continuous monitoring systems shall be installed on each effluent and the owner or operator shall report as required for each affected facility.
- (h) Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to 6-minute averages and for continuous monitoring systems other than opacity to 1-hour averages for time periods as defined in 40 CFR 60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period. For continuous monitoring systems other than opacity. I-hour averages shall be computed from four or more data points equally

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spaced over each 1-hour period. Data recorded during periods of continuous system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. For owners or operators complying with the requirements in Sec. 60.7(f)(1) or (2), data averages must include any data recorded during periods of monitor breakdown or malfunction. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non reduced form (e.g., ppm pollutant and percent O₂ or ng or pollutant per J of heat input). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit (e.g., rounded to the nearest 1 percent opacity). [Rule 62-296.800, F.A.C.; 40 CFR 60.13(h)].

- (i) After receipt and consideration of written application, the Administrator may approve alternatives to any monitoring procedures or requirements of this part including, but not limited to the following:
- (1) Alternative monitoring requirements when installation of a continuous monitoring system or monitoring device specified by this part would not provide accurate measurements due to liquid water or other interferences caused by substances in the effluent gases.
 - (2) Alternative monitoring requirements when the affected facility is infrequently operated.
- (3) Alternative monitoring requirements to accommodate continuous monitoring systems that require additional measurements to correct for stack moisture conditions.
- (4) Alternative locations for installing continuous monitoring systems or monitoring devices when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements.
 - (5) Alternative methods of converting pollutant concentration measurements to units of the standards.
- (6) Alternative procedures for performing daily checks of zero and span drift that do not involve use of span gases or test cells.
 - (7) Alternatives to the A.S.T.M. test methods or sampling procedures specified by any subpart.
- (8) Alternative continuous monitoring systems that do not meet the design or performance requirements in Performance Specification 1, appendix B, but adequately demonstrate a definite and consistent relationship between its measurements and the measurements of opacity by a system complying with the requirements in Performance Specification 1. The Administrator may require that such demonstration be performed for each affected facility.
- (9) Alternative monitoring requirements when the effluent from a single affected facility or the combined effluent from two or more affected facilities is released to the atmosphere through more than one point. [Rule 62-296.800, F.A.C.; 40 CFR 60.13(i)].
- (j) An alternative to the relative accuracy (RA) test specified in Performance Specification 2 of appendix B may be requested as toftows:
- (1) An alternative to the reference method tests for determining RA is available for sources with emission rates demonstrated to be less than 50 percent of the applicable standard. A source owner or operator may petition the Administrator to waive the RA test in section 8.4 of Performance Specification 2 and substitute the procedures in section 16.0 if the results of a performance test conducted according to the requirements in 40 CFR 60.8 of this subpart or other tests performed following the criteria in 40 CFR 60.8 demonstrate that the emission rate of the pollutant of interest in the units of the applicable standard is less than 50 percent of the applicable standard. For sources subject to standards expressed as control efficiency levels, a source owner or operator may petition the Administrator to waive the RA test and substitute the procedures in section 16.0 of Performance Specification 2 if the control device exhaust emission rate is less than 50 percent of the level needed to meet the control efficiency requirement. The alternative procedures do not apply if the continuous emission monitoring system is used to determine compliance continuously with the applicable standard. The petition to waive the RA test shall include a detailed description of the procedures to be applied. Included shall be location and procedure for conducting the alternative, the concentration or response levels of the alternative RA materials, and the other equipment checks included in the alternative procedure. The Administrator will review the petition for completeness and applicability. The determination to grant a waiver will depend on the intended use of the CEMS data (e.g., data collection purposes other than NSPS) and may require specifications more stringent than in Performance Specification 2 (e.g., the applicable emission limit is more stringent than NSPS).
- (2) The waiver of a CEMS RA test will be reviewed and may be rescinded at such time, following successful completion of the alternative RA procedure that the CEMS data indicate the source emissions approaching the level. The criterion for reviewing the waiver is the collection of CEMS data showing that emissions have exceeded 70 percent of the applicable standard for seven, consecutive, averaging periods as specified by the applicable regulation(s). For sources subject to standards expressed as control efficiency levels, the criterion for reviewing the waiver is the collection of CEMS data showing that exhaust emissions have exceeded 70 percent of the level needed to meet the control efficiency requirement for seven, consecutive, averaging periods as specified by the applicable regulation(s) [e.g., 40 CFR 60.45(g)(2) and 40 CFR 60.45(g)(3), 40 CFR 60.73(e), and 40 CFR 60.84(e)]. It is the responsibility of the source operator to maintain records and determine the level of emissions relative to the criterion on the waiver of RA testing. If this criterion is exceeded, the owner or operator must notify the Administrator within 10 days of such occurrence and include a description of the nature and cause of the increasing emissions. The Administrator will review the notification and may rescind the waiver and require the owner or operator to conduct a RA test of the CEMS as specified in section 8.4 of Performance Specification 2.

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§ 60.14 Modification.

(a) Except as provided under 40 CFR 60.14(c) and 40 CFR 60.14(f), any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere.

[Rule 62-296.800, F.A.C.: 40 CFR 60.14(a)].

- (b) Emission rate shall be expressed as kg/hr (lbs./hour) of any pollutant discharged into the atmosphere for which a standard is applicable. The Administrator shall use the following to determine emission rate:
- (1) Emission factors as specified in the latest issue of "Compilation of Air Pollutant Emission Factors". EPA Publication No. AP-42, or other emission factors determined by the Administrator to be superior to AP-42 emission factors, in cases where utilization of emission factors demonstrates that the emission level resulting from the physical or operational change will either clearly increase or clearly not increase.
- (2) Material balances, continuous monitor data, or manual emission tests in cases where utilization of emission factors as referenced in 40 CFR 60.14(b)(1) does not demonstrate to the Administrator's satisfaction whether the emission level resulting from the physical or operational change will either clearly increase or clearly not increase, or where an owner or operator demonstrates to the Administrator's satisfaction that there are reasonable grounds to dispute the result obtained by the Administrator utilizing emission factors as referenced in 40 CFR 60.14(b)(1). When the emission rate is based on results from manual emission tests or continuous monitoring systems, the procedures specified in 40 CFR 60 appendix C of 40 CFR 60 shall be used to determine whether an increase in emission rate has occurred. Tests shall be conducted under such conditions as the Administrator shall specify to the owner or operator based on representative performance of the facility. At least three valid test runs must be conducted before and at least three after the physical or operational change. All operating parameters which may affect emissions must be held constant to the maximum feasible degree for all test runs.

 [Rule 62-296.800. F.A.C.; 40 CFR 60.14(b)].
- (c) The addition of an affected facility to a stationary source as an expansion to that source or as a replacement for an existing facility shall not by itself bring within the applicability of this part any other facility within that source. [Rule 62-296.800, F.A.C.; 40 CFR 60.14(c)].
- (d) [Reserved]
- (e) The following shall not, by themselves, be considered modifications under this part:
- (1) Maintenance, repair, and replacement which the Administrator determines to be routine for a source category, subject to the provisions of 40 CFR 60.14(c) and 40 CFR 60.15.
- (2) An increase in production rate of an existing facility, if that increase can be accomplished without a capital expenditure on that facility.
 - (3) An increase in the hours of operation.
- (4) Use of an alternative fuel or raw material if, prior to the date any standard under this part becomes applicable to that source type, as provided by 40 CFR 60.1, the existing facility was designed to accommodate that alternative use. A facility shall be considered to be designed to accommodate an alternative fuel or raw material if that use could be accomplished under the facility's construction specifications as amended prior to the change. Conversion to coal required for energy considerations, as specified in section 111(a)(8) of the Act, shall not be considered a modification.
- (5) The addition or use of any system or device whose primary function is the reduction of air pollutants, except when an emission control system is removed or is replaced by a system which the Administrator determines to be less environmentally beneficial.
- (6) The relocation or change in ownership of an existing facility. [Rule 62-296.800, F.A.C.; 40 CFR 60.14(e)].
- (f) Special provisions set forth under an applicable subpart of this part shall supersede any conflicting provisions of this section. [Rule 62-296.800, F.A.C.; 40 CFR 60.14(f)].
- (g) Within 180 days of the completion of any physical or operational change subject to the control measures specified in 40 CFR 60.14(a), compliance with all applicable standards must be achieved. [Rule 62-296.800, F.A.C.; 40 CFR 60.14(g)].
- (h) No physical change, or change in the method of operation, at an existing electric utility steam generating unit shall be treated as a modification for the purposes of this section provided that such change does not increase the maximum hourly emissions of

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any pollutant regulated under this section above the maximum hourly emissions achievable at that unit during the 5 years prior to the change.

- (i) Repowering projects that are awarded funding from the Department of Energy as permanent clean coal technology demonstration projects (or similar projects funded by EPA) are exempt from the requirements of this section provided that such change does not increase the maximum hourly emissions of any pollutant regulated under this section above the maximum hourly emissions achievable at that unit during the five years prior to the change.
- (j) (1) Repowering projects that qualify for an extension under section 409(b) of the Clean Air Act are exempt from the requirements of this section, provided that such change does not increase the actual hourly emissions of any pollutant regulated under this section above the actual hourly emissions achievable at that unit during the 5 years prior to the change.
 - (2) This exemption shall not apply to any new unit that:
 - (i) Is designated as a replacement for an existing unit;
- (ii) Qualifies under section 409(b) of the Clean Air Act for an extension of an emission limitation compliance date under section 405 of the Clean Air Act; and
 - (iii) Is located at a different site than the existing unit.
- (k) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project is exempt from the requirements of this section. A temporary clean coal control technology demonstration project, for the purposes of this section is a clean coal technology demonstration project that is operated for a period of 5 years or less, and which complies with the State implementation plan for the State in which the project is located and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.
- (l) The reactivation of a very clean coal-fired electric utility steam generating unit is exempt from the requirements of this section.

§ 60.15 Reconstruction.

- (a) An existing facility, upon reconstruction, becomes an affected facility, irrespective of any change in emission rate. [Rule 62-296.800, F.A.C.: 40 CFR 60.15(a)].
- (b) "Reconstruction" means the replacement of components of an existing facility to such an extent that:
- (1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, and
- (2) It is technologically and economically feasible to meet the applicable standards set forth in this part. [Rule 62-296.800, F.A.C.; 40 CFR 60.15(b)].
- (c) "Fixed capital cost" means the capital needed to provide all the depreciable components. [Rule 62-296.800, F.A.C.; 40 CFR 60.15(c)].
- (d) If an owner or operator of an existing facility proposes to replace components, and the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, he shall notify the Administrator of the proposed replacements. The notice must be postmarked 60 days (or as soon as practicable) before construction of the replacements is commenced and must include the following information:
 - (1) Name and address of the owner or operator.
 - (2) The location of the existing facility.
 - (3) A brief description of the existing facility and the components which are to be replaced.
 - (4) A description of the existing air pollution control equipment and the proposed air pollution control equipment.
 - (5) An estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new facility.
 - (6) The estimated life of the existing facility after the replacements.
- (7) A discussion of any economic or technical limitations the facility may have in complying with the applicable standards of performance after the proposed replacements. [Rule 62-296.800, F.A.C.; 40 CFR 60.15(d)].
- (e) The Administrator will determine, within 30 days of the receipt of the notice required by 40 CFR 60.15(d) and any additional information he may reasonably require, whether the proposed replacement constitutes reconstruction. [Rule 62-296.800, F.A.C.; 40 CFR 60.15(e)].
- (f) The Administrator's determination under 40 CFR 60.15(e) shall be based on:
- (1) The fixed capital cost of the replacements in comparison to the fixed capital cost that would be required to construct a comparable entirely new facility;
 - (2) The estimated life of the facility after the replacements compared to the life of a comparable entirely new facility;

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- (3) The extent to which the components being replaced cause or contribute to the emissions from the facility; and
- (4) Any economic or technical limitations on compliance with applicable standards of performance which are inherent in the proposed replacements.

[Rule 62-296.800, F.A.C.; 40 CFR 60.15(f)].

(g) Individual subparts of this part may include specific provisions which refine and delimit the concept of reconstruction set forth in this section.

[Rule 62-296.800, F.A.C.; 40 CFR 60.15(g)].

§ 60.18 General control device requirements.

- (a) *Introduction*. This section contains requirements for control devices used to comply with applicable subparts of parts 60 and 61. The requirements are placed here for administrative convenience and only apply to facilities covered by subparts referring to this section.
- (b) Flares. Paragraphs (c) through (f) apply to flares.
- (c) (1) Flares shall be designed for and operated with no visible emissions as determined by the methods specified in paragraph (f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
 - (2) Flares shall be operated with a flame present at all times, as determined by the methods specified in paragraph (f).
- (3) An owner/operator has the choice of adhering to either the heat content specifications in paragraph (c)(3)(ii) of this section and the maximum tip velocity specifications in paragraph (c)(4) of this section, or adhering to the requirements in paragraph (c)(3)(i) of this section.
 - (i) (A) Flares shall be used that have a diameter of 3 inches or greater, are nonassisted, have a hydrogen content of 8.0 percent (by volume), or greater, and are designed for and operated with an exit velocity less than 37.2 m/sec (122 fl/sec) and less than the velocity, V_{max} , as determined by the following equation:

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

Where:

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

K₁=Constant, 6.0 volume-percent hydrogen.

K₂=Constant, 3.9(m/sec)/volume-percent hydrogen.

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

- (B) The actual exit velocity of a flare shall be determined by the method specified in paragraph (f)(4) of this section.
- (ii) Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in paragraph (f)(3) of this section.
- (4) (i) Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4) of this section, less than 18.3 m/sec (60 ft/sec), except as provided in paragraphs (c)(4) (ii) and (iii) of this section.

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

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

Eq. 1

where:

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

K = Constant.

$$1.740 \times 10^{-7}$$
 $(\frac{1}{ppm})$ $(\frac{g \text{ mole}}{scm})$ $(\frac{MJ}{kcal})$

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

Eq. 2

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

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

- (4) The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate: by the unobstructed (free) cross sectional area of the flare tip.
- (5) The maximum permitted velocity, V_{max} for flares complying with paragraph (c)(4)(iii) shall be determined by the following equation. $l.og_{10}$ (V_{max})=(H_T +28.8)/31.7

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

28.8=Constant

31.7=Constant

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

(6) The maximum permitted velocity, Vmax, for air-assisted flares shall be determined by the following equation. V_{max} =8.706+0.7084 (HT)

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

8.706=Constant

0.7084=Constant

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

§ 60.19 General notification and reporting requirements.

- (a) For the purposes of this part, time periods specified in days shall be measured in calendar days, even if the word "calendar" is absent, unless otherwise specified in an applicable requirement.
- (b) For the purposes of this part, if an explicit postmark deadline is not specified in an applicable requirement for the submittal of a notification, application, report, or other written communication to the Administrator, the owner or operator shall postmark the submittal on or before the number of days specified in the applicable requirement. For example, if a notification must be submitted 15 days before a particular event is scheduled to take place, the notification shall be post-marked on or before 15 days preceding the event; likewise, if a notification must be submitted 15 days after a particular event takes place, the notification shall be delivered or postmarked on or before 15 days following the end of the event. The use of reliable non-Government mail carriers that provide indications of verifiable delivery of information required to be submitted to the Administrator, similar to the postmark provided by the U.S. Postal Service, or alternative means of delivery, including the use of electronic media, agreed to by the permitting authority, is acceptable.
- (c) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.
- (d) If an owner or operator of an affected facility in a State with delegated authority is required to submit periodic reports under this part to the State, and if the State has an established timeline for the submission of periodic reports that is consistent with the reporting frequency(ies) specified for such facility under this part, the owner or operator may change the dates by which periodic reports under this part shall be submitted (without changing the frequency of reporting) to be consistent with the State's schedule by mutual agreement between the owner or operator and the State. The allowance in the previous sentence applies in each State beginning I year after the affected facility is required to be in compliance with the applicable subpart in this part. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.

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- (e) If an owner or operator supervises one or more stationary sources affected by standards set under this part and standards set under part 61, part 63, or both such parts of this chapter, he/she may arrange by mutual agreement between the owner or operator and the Administrator (or the State with an approved permit program) a common schedule on which periodic reports required by each applicable standard shall be submitted throughout the year. The allowance in the previous sentence applies in each State beginning 1 year after the stationary source is required to be in compliance with the applicable subpart in this part, or 1 year after the stationary source is required to be in compliance with the applicable 40 CFR part 61 or part 63 of this chapter standard, whichever is latest. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.
- (f) (1) (i) Until an adjustment of a time period or postmark deadline has been approved by the Administrator under paragraphs (I)(2) and (f)(3) of this section, the owner or operator of an affected facility remains strictly subject to the requirements of this part.
- (ii) An owner or operator shall request the adjustment provided for in paragraphs (f)(2) and (f)(3) of this section each time he or she wishes to change an applicable time period or postmark deadline specified in this part.
- (2) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. An owner or operator who wishes to request a change in a time period or postmark deadline for a particular requirement shall request the adjustment in writing as soon as practicable before the subject activity is required to take place. The owner or operator shall include in the request whatever information he or she considers useful to convince the Administrator that an adjustment is warranted.
- (3) If, in the Administrator's judgment, an owner or operator's request for an adjustment to a particular time period or postmark deadline is warranted, the Administrator will approve the adjustment. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an adjustment within 15 calendar days of receiving sufficient information to evaluate the request.
- (4) If the Administrator is unable to meet a specified deadline, he or she will notify the owner or operator of any significant delay and inform the owner or operator of the amended schedule.

§ 63.10 Recordkeeping and reporting requirements.

(a)-(b) [Reserved]

- (2) The owner or operator of an affected source subject to the provisions of this part shall maintain relevant records for such source of -
 - (i) The occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., process

equipment):

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

equipment:

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

(vi)-(xiv) [Reserved]
(3) [Reserved]

(c) [Reserved]

(d) General reporting requirements.

(1)-(4) [Reserved]

(5) (i) Periodic startup, shutdown, and malfunction reports. If actions taken by an owner or operator during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan [see § 63.6(e)(3)], the owner or operator shall state such information in a startup, shutdown, and malfunction report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report shall consist of a letter, containing the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy, that shall be submitted to the Administrator semi-annually (or on a more frequent basis if specified

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otherwise in a relevant standard or as established otherwise by the permitting authority in the source's title V permit). The startup, shutdown, and malfunction report shall be delivered or postmarked by the 30th day following the end of each calendar half (or other calendar reporting period, as appropriate). If the owner or operator is required to submit excess emissions and continuous monitoring system performance (or other periodic) reports under this part, the startup, shutdown, and malfunction reports required under this paragraph may be submitted simultaneously with the excess emissions and continuous monitoring system performance (or other) reports. If startup, shutdown, and malfunction reports are submitted with excess emissions and continuous monitoring system performance (or other periodic) reports, and the owner or operator receives approval to reduce the frequency of reporting for the latter under paragraph (e) of this section, the frequency of reporting for the startup, shutdown, and malfunction reports also may be reduced if the Administrator does not object to the intended change. The procedures to implement the allowance in the preceding sentence shall be the same as the procedures specified in paragraph (e)(3) of this section.

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

(e) -(f) [Reserved]

§ 63.15 Availability of information and confidentiality.

(a) Availability of information.

- (1) With the exception of information protected through part 2 of this chapter, all reports, records, and other information collected by the Administrator under this part are available to the public. In addition, a copy of each permit application, compliance plan (including the schedule of compliance), notification of compliance status, excess emissions and continuous monitoring systems performance report, and title V permit is available to the public, consistent with protections recognized in section 503(e) of the Act.
- (2) The availability to the public of information provided to or otherwise obtained by the Administrator under this part shall be governed by part 2 of this chapter.

(b) Confidentiality.

- (1) If an owner or operator is required to submit information entitled to protection from disclosure under section 114(c) of the Act, the owner or operator may submit such information separately. The requirements of section 114(c) shall apply to such information
- (2) The contents of a title V permit shall not be entitled to protection under section 114(c) of the Act; however, information submitted as part of an application for a title V permit may be entitled to protection from disclosure.

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Appendix C

40 CFR Part 60, Subpart WWW and 40 CFR Part 63, Subpart AAAA Combined Standard Conditions

Subpart WWW--Standards of Performance for Municipal Solid Waste Landfills and Subpart AAAA--National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills

§ 60.750 Applicability, designation of affected facility, and delegation of authority.

- (a) The provisions of this subpart apply to each municipal solid waste landfill that commenced construction, reconstruction or modification on or after May 30, 1991. Physical or operational changes made to an existing MSW landfill solely to comply with Subpart Cc of this part are not considered construction, reconstruction, or modification for the purposes of this section.
- (b) The following authorities shall be retained by the Administrator and not transferred to the State: § 60.754(a)(5).
- (c) Activities required by or conducted pursuant to a CERCLA, RCRA, or State remedial action are not considered construction, reconstruction, or modification for purposes of this subpart.

§ 63.1930 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants for existing and new municipal solid waste (MSW) landfills. This subpart requires all landfills described in Sec. 63.1935 to meet the requirements of 40 CFR part 60. subpart Cc or WWW and requires timely control of bioreactors. This subpart also requires such landfills to meet the startup, shutdown, and malfunction (SSM) requirements of the general provisions of this part and provides that compliance with the operating conditions shall be demonstrated by parameter monitoring results that are within the specified ranges. It also includes additional reporting requirements.

§ 63.1935 Am I subject to this subpart?

You are subject to this subpart if you meet the criteria in paragraph (a) or (b) of this section.

- (a) You are subject to this subpart if you own or operate a MSW landfill that has accepted waste since November 8, 1987 or has additional capacity for waste deposition and meets any one of the three criteria in paragraphs (a)(1) through (3) of this section:
 - (1) Your MSW landfill is a major source as defined in 40 CFR 63.2 of subpart A.
 - (2) Your MSW landfill is collocated with a major source as defined in 40 CFR 63.2 of subpart A.
- (3) Your MSW landfill is an area source landfill that has a design capacity equal to or greater than 2.5 million megagrams (Mg) and 2.5 million cubic meters (m³) and has estimated uncontrolled emissions equal to or greater than 50 megagrams per year (Mg/yr) NMOC as calculated according to Sec. 60.754(a) of the MSW landfills new source performance standards in 40 CFR part 60, subpart WWW, the Federal plan, or an EPA approved and effective State or tribal plan that applies to your landfill.
- (b) You are subject to this subpart if you own or operate a MSW landfill that has accepted waste since November 8. 1987 or has additional capacity for waste deposition, that includes a bioreactor, as defined in Sec. 63.1990, and that meets any one of the criteria in paragraphs (b)(1) through (3) of this section:
 - (1) Your MSW landfill is a major source as defined in 40 CFR 63.2 of subpart A.
 - (2) Your MSW landfill is collocated with a major source as defined in 40 CFR 63.2 of subpart A.
- (3) Your MSW landfill is an area source landfill that has a design capacity equal to our greater than 2.5 million Mg and 2.5 million m³ and that is not permanently closed as of January 16, 2003.

§ 63.1940 What is the affected source of this subpart?

- (a) An affected source of this subpart is a MSW landfill, as defined in Sec. 63.1990, that meets the criteria in Sec. 63.1935(a) or (b). The affected source includes the entire disposal facility in a contiguous geographic space where household waste is placed in or on land, including any portion of the MSW landfill operated as a bioreactor.
- (b) A new affected source of this subpart is an affected source that commenced construction or reconstruction after November 7, 2000. An affected source is reconstructed if it meets the definition of reconstruction in 40 CFR 63.2 of subpart A.
- (c) An affected source of this subpart is existing if it is not new.

Sec. 63.1945 When do I have to comply with this subpart?

- (a) If your landfill is a new affected source, you must comply with this subpart by January 16, 2003 or at the time you begin operating, whichever is last.
- (b) If your landfill is an existing affected source, you must comply with this subpart by January 16, 2004.
- c) If your landfill is a new affected source and is a major source or is collocated with a major source, you must comply with the requirements in Sec. Sec. 63.1955(b) and 63.1960 through 63.1980 by the date your landfill is required to install a collection and control system by 40 CFR 60.752(b)(2) of subpart WWW.
- (d) If your landfill is an existing affected source and is a major source or is collocated with a major source, you must comply with the requirements in Sec. Sec. 63.1955(b) and 63.1960 through 63.1980 by the date your landfill is required to install a collection and control system by 40 CFR 60.752(b)(2) of subpart WWW, the Federal plan, or EPA approved and effective State or tribal plan that applies to your landfill or by January 13. 2004, whichever occurs later.
- (e) If your landfill is a new affected source and is an area source meeting the criteria in Sec. 63.1935(a)(3), you must comply with the requirements of Sec. Sec. 63.1955(b) and 63.1960 through 63.1980 by the date your landfill is required to install a collection and control system by 40 CFR 60.752(b)(2) of subpart WWW.
- (f) If your landfill is an existing affected source and is an area source meeting the criteria in Sec. 63.1935(a)(3), you must comply with the requirements in Sec. Sec. 63.1955(b) and 63.1960 through 63.1980 by the date your landfill is required to install a collection and control system by 40 CFR 60.752(b)(2) of subpart WWW, the Federal plan, or EPA approved and effective State or tribal plan that applies to your landfill or by January 16, 2004, whichever occurs later.

§ 63.1947 When do I have to comply with this subpart if I own or operate a bioreactor?

You must comply with this subpart by the dates specified in Sec. 63.1945(a) or (b) of this subpart. If you own or operate a bioreactor located at a landfill that is not permanently closed as of January 16, 2003 and has a design capacity equal to or greater than 2.5 million Mg and 2.5 million m³, then you must install and operate a collection and control system that meets the criteria in 40 CFR 60.752(b)(2)(v) of part 60, subpart WWW, the Federal plan, or EPA approved and effective State plan according to the schedule specified in paragraph (a). (b). or (c) of this section.

- (a) If your bioreactor is at a new affected source, then you must meet the requirements in paragraphs (a)(1) and (2) of this section:
 - (1) Install the gas collection and control system for the bioreactor before initiating liquids addition.
- (2) Begin operating the gas collection and control system within 180 days after initiating liquids addition or within 180 days after achieving a moisture content of 40 percent by weight, whichever is later. If you choose to begin gas collection and control system operation 180 days after achieving a 40 percent moisture content instead of 180 days after liquids addition, use the procedures in Sec. 63.1980(g) and (h) to determine when the bioreactor moisture content reaches 40 percent.
- (b) If your bioreactor is at an existing affected source, then you must install and begin operating the gas collection and control system for the bioreactor by January 17, 2006 or by the date your bioreactor is required to install a gas collection and control system under 40 CFR part 60, subpart WWW, the Federal plan, or EPA approved and effective State plan or tribal plan that applies to your landfill, whichever is earlier.
- (c) If your bioreactor is at an existing affected source and you do not initiate liquids addition to your bioreactor until later than January 17, 2006, then you must meet the requirements in paragraphs (c)(1) and (2) of this section:
 - (1) Install the gas collection and control system for the bioreactor before initiating liquids addition.
- (2) Begin operating the gas collection and control system within 180 days after initiating liquids addition or within 180 days after achieving a moisture content of 40 percent by weight, whichever is later. If you choose to begin gas collection and control system operation 180 days after achieving a 40 percent moisture content instead of 180 days after liquids addition, use the procedures in Sec. 63.1980(g) and (h) to determine when the bioreactor moisture content reaches 40 percent.

§ 63.1950 When am I no longer required to comply with this subpart?

You are no longer required to comply with the requirements of this subpart when you are no longer required to apply controls as specified in 40 CFR 60.752(b)(2)(v) of subpart WWW, or the Federal plan or EPA approved and effective State plan or tribal plan that implements 40 CFR part 60, subpart Cc, whichever applies to your landfill.

§ 63.1952 When am I no longer required to comply with the requirements of this subpart if I own or operate a bioreactor?

If you own or operate a landfill that includes a bioreactor, you are no longer required to comply with the requirements of this subpart for the bioreactor provided you meet the conditions of either paragraphs (a) or (b).

- (a) Your affected source meets the control system removal criteria in 40 CFR 60.752(b)(2)(v) of part 60, subpart WWW or the bioreactor meets the criteria for a nonproductive area of the landfill in 40 CFR 60.759(a)(3)(ii) of part 60, subpart WWW.
- (b) The bioreactor portion of the landfill is a closed landfill as defined in 40 CFR 60.751, subpart WWW, you have permanently ceased adding liquids to the bioreactor, and you have not added liquids to the bioreactor for at least 1 year. A closure report for the bioreactor must be submitted to the Administrator as provided in 40 CFR 60.757(d) of subpart WWW.
- (c) Compliance with the bioreactor control removal provisions in this section constitutes compliance with 40 CFR part 60, subpart WWW or the Federal plan, whichever applies to your bioreactor.

§ 63.1985 Who enforces this subpart?

- (a) This subpart can be implemented and enforced by the U.S. EPA, or a delegated authority such as the applicable State, local, or tribal agency. If the EPA Administrator has delegated authority to a State, local, or tribal agency, then that agency as well as the U.S. EPA has the authority to implement and enforce this subpart. Contact the applicable EPA Regional Office to find out if this subpart is delegated to a State, local, or tribal agency.
- (b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the EPA Administrator and are not transferred to the State, local, or tribal agency.
- (c) The authorities that will not be delegated to State, local, or tribal agencies are as follows. Approval of alternatives to the standards in Sec. 63.1955. Where these standards reference another subpart, the cited provisions will be delegated according to the delegation provisions of the referenced subpart.

§ 60.751 and 63.1990 Definitions.

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

Active collection system means a gas collection system that uses gas mover equipment.

Active landfill means a landfill in which solid waste is being placed or a landfill that is planned to accept waste in the future.

Bioreactor means a MSW landfill or portion of a MSW landfill where any liquid other than leachate (leachate includes landfill gas condensate) is added in a controlled fashion into the waste mass (often in combination with recirculating leachate) to reach a minimum average moisture content of at least 40 percent by weight to accelerate or enhance the anaerobic (without oxygen) biodegradation of the waste.

Closed landfill means a landfill in which solid waste is no longer being placed, and in which no additional solid wastes will be placed without first filing a notification of modification as prescribed under § 60.7(a)(4). Once a notification of modification has been filed, and additional solid waste is placed in the landfill, the landfill is no longer closed. A landfill is considered closed after meeting the criteria of § 258.60 of this title.

Closure means that point in time when a landfill becomes a closed landfill.

Commercial solid waste means all types of solid waste generated by stores, offices, restaurants, warehouses, and other nonmanufacturing activities, excluding residential and industrial wastes.

Controlled landfill means any landfill at which collection and control systems are required under this subpart as a result of the nonmethane organic compounds emission rate. The landfill is considered

controlled at the time a collection and control system design plan is submitted in compliance with § 60.752(b)(2)(i).

Design capacity means the maximum amount of solid waste a landfill can accept, as indicated in terms of volume or mass in the most recent permit issued by the State, local, or Tribal agency responsible for

regulating the landfill, plus any in-place waste not accounted for in the most recent permit. If the owner or operator chooses to convert the design capacity from volume to mass or from mass to volume to demonstrate its design capacity is less than 2.5 million megagrams or 2.5 million cubic meters, the calculation must include a site specific density, which must be recalculated annually.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

- (1) Fails to meet any requirement or obligation established by this subpart, including, but not limited to, any emissions limitation (including any operating limit) or work practice standard;
- (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or
- (3) Fails to meet any emission limitation, (including any operating limit), or work practice standard in this subpart during SSM, regardless of whether or not such failure is permitted by this subpart.

Disposal facility means all contiguous land and structures, other appurtenances, and improvements on the land used for the disposal of solid waste.

Emissions limit, opacity limit, operating limit, or visible emissions limit.

Emission rate cutoff means the threshold annual emission rate to which a landfill compares its estimated emission rate to determine if control under the regulation is required.

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Enclosed combustor means an enclosed firebox which maintains a relatively constant limited peak temperature generally using a limited supply of combustion air. An enclosed flare is considered an enclosed combustor.

Emissions limitation means any emission limit, opacity limit, operating limit, or visible emissions limit.

EPA approved State plan means a State plan that EPA has approved based on the requirements in 40 CFR part 60, subpart B to implement and enforce 40 CFR part 60, subpart Cc. An approved State plan becomes effective on the date specified in the notice published in the Federal Register announcing EPA's approval.

Federal plan means the EPA plan to implement 40 CFR part 60, subpart Cc for existing MSW landfills located in States and Indian country where State plans or tribal plans are not currently in effect. On the effective date of an EPA approved State or tribal plan, the Federal plan no longer applies. The Federal plan is found at 40 CFR part 62, subpart GGG.

Flare means an open combustor without enclosure or shroud.

Gas mover equipment means the equipment (i.e., fan, blower, compressor) used to transport landfill gas through the header system.

Household waste means any solid waste (including garbage, trash, and sanitary waste in septic tanks) derived from households (including, but not limited to, single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas).

Industrial solid waste means solid waste generated by manufacturing or industrial processes that is not a hazardous waste regulated under Subtitle C of the Resource Conservation and Recovery Act, parts 264 and 265 of this title. Such waste may include, but is not limited to, waste resulting from the following manufacturing processes: electric power generation; fertilizer/agricultural chemicals; food and related products/by-products; inorganic chemicals; iron and steel manufacturing; leather and leather products; nonferrous metals manufacturing/foundries; organic chemicals; plastics and resin manufacturing; pulp and paper industry; rubber and miscellaneous plastic products; stone, glass, clay, and concrete products; textile manufacturing; transportation equipment; and water treatment. This term does not include mining waste or oil and gas waste.

Interior well means any well or similar collection component located inside the perimeter of the landfill waste. A perimeter well located outside the landfilled waste is not an interior well.

Landfill means an area of land or an excavation in which wastes are placed for permanent disposal, and that is not a land application unit, surface impoundment, injection well, or waste pile as those terms are defined under § 257.2 of this title.

Lateral expansion means a horizontal expansion of the waste boundaries of an existing MSW landfill. A lateral expansion is not a modification unless it results in an increase in the design capacity of the landfill.

Modification means an increase in the permitted volume design capacity of the landfill by either horizontal or vertical expansion based on its permitted design capacity as of May 30, 1991. Modification does not occur until the owner or operator commences construction or the horizontal or vertical expansion.

Municipal solid waste landfill or MSW landfill means an entire disposal facility in a contiguous geographical space where household waste is placed in or on land. A municipal solid waste landfill may also receive other types of RCRA Subtitle D wastes (see Sec. 257.2 of this chapter) such as commercial solid waste, nonhazardous sludge, conditionally exempt small quantity generator waste, and industrial solid waste. Portions of a municipal solid waste landfill may be separated by access roads. A municipal solid waste landfill may be publicly or privately owned. A municipal solid waste landfill may be a new municipal solid waste landfill, an existing municipal solid waste landfill, or a lateral expansion.

Municipal solid waste landfill emissions or MSW landfill emissions means gas generated by the decomposition of organic waste deposited in an MSW landfill or derived from the evolution of organic compounds in the waste.

NMOC means nonmethane organic compounds, as measured according to the provisions of § 60.754.

Nondegradable waste means any waste that does not decompose through chemical breakdown or microbiological activity. Examples are, but are not limited to concrete, municipal waste combustor ash, and metals.

Passive collection system means a gas collection system that solely uses positive pressure within the landfill to move the gas rather than using gas mover equipment.

Sludge means any solid, semisolid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility, exclusive of the treated effluent from a wastewater treatment plant.

Solid waste means any garbage, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges that are point sources subject to permits under 33 U.S.C. 1342, or source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954, as amended (42 U.S.C 2011 et seq.).

Sufficient density means any number, spacing, and combination of collection system components, including vertical wells, horizontal collectors, and surface collectors, necessary to maintain emission and migration control as determined by measures of performance set forth in this part.

Sufficient extraction rate means a rate sufficient to maintain a negative pressure at all wellheads in the collection system without causing air infiltration, including any wellheads connected to the system as a result of expansion or excess surface emissions, for the life of the blower.

Tribal plan means a plan submitted by a tribal authority pursuant to 40 CFR parts 9, 35, 49, 50, and 81 to implement and enforce 40 CFR part 60, subpart Cc.

Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the Clean Air Act.

§ 60.752 Standards for air emissions from municipal solid waste landfills.

- (a) Each owner or operator of an MSW landfill having a design capacity less than 2.5 million megagrams by mass or 2.5 million cubic meters by volume shall submit an initial design capacity report to the Administrator as provided in § 60.757(a). The landfill may calculate design capacity in either megagrams or cubic meters for comparison with the exemption values. Any density conversions shall be documented and submitted with the report. Submittal of the initial design capacity report shall fulfill the requirements of this subpart except as provided for in paragraphs (a)(1) and (a)(2) of this section.
- (1) The owner or operator shall submit to the Administrator an amended design capacity report, as provided for in § 60.757(a)(3).
- (2) When an increase in the maximum design capacity of a landfill exempted from the provisions of § 60.752(b) through § 60.759 of this subpart on the basis of the design capacity exemption in paragraph
- (a) of this section results in a revised maximum design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters, the owner or operator shall comply with the provision of paragraph (b) of this section.
- (b) Each owner or operator of an MSW landfill having a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters, shall either comply with paragraph (b)(2) of this section or calculate an NMOC emission rate for the landfill using the procedures specified in § 60.754. The NMOC emission rate shall be recalculated annually, except as provided in § 60.757(b)(1)(ii) of this subpart. The owner or operator of an MSW landfill subject to this subpart with a design capacity greater than or equal to 2.5 million
- megagrams and 2.5 million cubic meters is subject to part 70 or 71 permitting requirements.
 - (1) If the calculated NMOC emission rate is less than 50 megagrams per year, the owner or operator shall:
 - (i) Submit an annual emission report to the Administrator, except as provided for in § 60.757(b)(1)(ii); and
- (ii) Recalculate the NMOC emission rate annually using the procedures specified in § 60.754(a)(1) until such time as the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, or the landfill is closed.
- (A) If the NMOC emission rate, upon recalculation required in paragraph (b)(1)(ii) of this section, is equal to or greater than 50 megagrams per year, the owner or operator shall install a collection and control system in compliance with paragraph (b)(2) of this section.
- (B) If the landfill is permanently closed, a closure notification shall be submitted to the Administrator as provided for in § 60.757(d).
 - (2) If the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, the owner or operator shall:
- (i) Submit a collection and control system design plan prepared by a professional engineer to the Administrator within I year:
- (A) The collection and control system as described in the plan shall meet the design requirements of paragraph (b)(2)(ii) of this section.
- (B) The collection and control system design plan shall include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions of §§ 60.753 through 60.758 proposed by the owner or operator.
- (C) The collection and control system design plan shall either conform with specifications for active collection systems in § 60.759 or include a demonstration to the Administrator's satisfaction of the sufficiency of the alternative provisions to § 60.759.
- (D) The Administrator shall review the information submitted under paragraphs (b)(2)(i) (A),(B) and (C) of this section and either approve it, disapprove it, or request that additional information be submitted. Because of the many site-specific factors involved with landfill gas system design, alternative systems may be necessary. A wide variety of system designs are possible, such as vertical wells, combination horizontal and vertical collection systems, or horizontal trenches only, leachate collection components, and passive systems.
- (ii) Install a collection and control system that captures the gas generated within the landfill as required by paragraphs (b)(2)(ii)(A) or (B) and (b)(2)(iii) of this section within 30 months after the first annual report in which the emission rate equals or exceeds 50 megagrams per year, unless Tier 2 or Tier 3 sampling demonstrates that the emission rate is less than 50 megagrams per year, as specified in § 60.757(c)(1) or (2).
 - (A) An active collection system shall:
- (1) Be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment;
 - (2) Collect gas from each area, cell, or group of cells in the landfill in which the initial solid

waste has been placed for a period of:

- (i) 5 years or more if active; or
- (ii) 2 years or more if closed or at final grade;
- (3) Collect gas at a sufficient extraction rate;
- (4) Be designed to minimize off-site migration of subsurface gas.

(B) A passive collection system shall:

(1) Comply with the provisions specified in paragraphs (b)(2)(ii)(A)(1), (2), and (2)(ii)(A)(4)

of this section.

- (2) Be installed with liners on the bottom and all sides in all areas in which gas is to be collected. The liners shall be installed as required under § 258.40 of this title.
- (iii) Route all the collected gas to a control system that complies with the requirements in either paragraph (b)(2)(iii) (A). (B) or (C) of this section.
 - (A) An open flare designed and operated in accordance with § 60.18;
- (B) A control system designed and operated to reduce NMOC by 98 weight-percent, or, when an enclosed combustion device is used for control, to either reduce NMOC by 98 weight percent or reduce the outlet NMOC concentration to less than 20 parts per million by volume. dry basis as hexane at 3 percent oxygen. The reduction efficiency or parts per million by volume shall be established by an initial

performance test to be completed no later than 180 days after the initial startup of the approved control system using the test methods specified in § 60.754(d).

- (1) If a boiler or process heater is used as the control device, the landfill gas stream shall be introduced into the flame zone.
- (2) The control device shall be operated within the parameter ranges established during the initial or most recent performance test. The operating parameters to be monitored are specified in § 60.756;
- (C) Route the collected gas to a treatment system that processes the collected gas for subsequent sale or use. All emissions from any atmospheric vent from the gas treatment system shall be subject to the requirements of paragraph (b)(2)(iii) (A) or (B) of this section.
- (iv) Operate the collection and control device installed to comply with this subpart in accordance with the provisions of § § 60.753, 60.755 and 60.756.
- (v) The collection and control system may be capped or removed provided that all the conditions of paragraphs (b)(2)(v) (A), (B), and (C) of this section are met:
- (A) The landfill shall be a closed landfill as defined in § 60.751 of this subpart. A closure report shall be submitted to the Administrator as provided in § 60.757(d):
 - (B) The collection and control system shall have been in operation a minimum of 15 years; and
- (C) Following the procedures specified in § 60.754(b) of this subpart, the calculated NMOC gas produced by the landfill shall be less than 50 megagrams per year on three successive test dates. The test dates shall be no less than 90 days apart, and no more than 180 days apart.
- (c) For purposes of obtaining an operating permit under title V of the Act, the owner or operator of a MSW landfill subject to this subpart with a design capacity less than 2.5 million megagrams or 2.5 million cubic meters is not subject to the requirement to obtain an operating permit for the landfill under part 70 or 71 of this chapter, unless the landfill is otherwise subject to either part 70 or 71. For purposes of submitting a timely application for an operating permit under part 70 or 71, the owner or operator of a MSW landfill subject to
- this subpart with a design capacity greater than or equal to 2.5 million megagrams and 2.5 million cubic meters, and not otherwise subject to either part 70 or 71, becomes subject to the requirements of §§ 70.5(a)(1)(i) or 71.5(a)(1)(i) of this chapter, regardless of when the design capacity report is actually submitted, no later than:
- (1) June 10, 1996 for MSW landfills that commenced construction, modification, or reconstruction on or after May 30, 1991 but before March 12, 1996;
- (2) Ninety days after the date of commenced construction, modification, or reconstruction for MSW landfills that commence construction, modification, or reconstruction on or after March 12, 1996.
- (d) When a MSW landfill subject to this subpart is closed, the owner or operator is no longer subject to the requirement to maintain an operating permit under part 70 or 71 of this chapter for the landfill if the landfill is not otherwise subject to the requirements of either part 70 or 71 and if either of the following conditions are met:
 - (1) The landfill was never subject to the requirement for a control system under paragraph (b)(2) of this section; or
 - (2) The owner or operator meets the conditions for control system removal specified in paragraph (b)(2)(v) of this section.

§ 63.1955 What requirements must I meet?

- (a) You must fulfill one of the requirements in paragraph (a)(1) or (2) of this section, whichever is applicable:
 - (1) Comply with the requirements of 40 CFR part 60, subpart WWW.
- (2) Comply with the requirements of the Federal plan or EPA approved and effective State plan or tribal plan that implements 40 CFR part 60, subpart Cc.
- (b) If you are required by 40 CFR 60.752(b)(2) of subpart WWW, the Federal plan, or an EPA approved and effective State or tribal plan to install a collection and control system, you must comply with the requirements in Sec. Sec. 63.1960 through 63.1985 and with the general provisions of this part specified in table 1 of this subpart.

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- (c) For approval of collection and control systems that include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions, you must follow the procedures in 40 CFR 60.752(b)(2). If alternatives have already been approved under 40 CFR part 60 subpart WWW or the Federal plan, or EPA approved and effective State or tribal plan, these alternatives can be used to comply with this subpart, except that all affected sources must comply with the SSM requirements in Subpart A of this part as specified in Table 1 of this subpart and all affected sources must submit compliance reports every 6 months as specified in Sec. 63.1980(a) and (b), including information on all deviations that occurred during the 6-month reporting period. Deviations for continuous emission monitors or numerical continuous parameter monitors must be determined using a 3 hour monitoring block average.
- (d) If you own or operate a bioreactor that is located at a MSW landfill that is not permanently closed and has a design capacity equal to or greater than 2.5 million Mg and 2.5 million m³, then you must meet the requirements of paragraph (a) and the additional requirements in paragraphs (d)(1) and (2) of this section.
- (1) You must comply with the general provisions specified in Table 1 of this subpart and Sec. Sec. 63.1960 through 63.1985 starting on the date you are required to install the gas collection and control system.
- (2) You must extend the collection and control system into each new cell or area of the bioreactor prior to initiating liquids addition in that area, instead of the schedule in 40 CFR 60.752(b)(2)(ii)(A)(2).

§ 60.753 Operational standards for collection and control systems.

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

- (a) Operate the collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which solid waste has been in place for:
 - (1) 5 years or more if active: or
 - (2) 2 years or more if closed or at final grade;
- (b) Operate the collection system with negative pressure at each wellhead except under the following conditions:
- (1) A fire or increased well temperature. The owner or operator shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in § 60.757(f)(1);
- (2) Use of a geomembrane or synthetic cover. The owner or operator shall develop acceptable pressure limits in the design plan;
- (3) A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the Administrator;
- (c) Operate each interior wellhead in the collection system with a landfill gas temperature less than 55° C and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The owner or operator may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens.
- (1) The nitrogen level shall be determined using Method 3C, unless an alternative test method is established as allowed by § 60.752(b)(2)(i) of this subpart.
- (2) Unless an alternative test method is established as allowed by § 60.752(b)(2)(i) of this subpart, the oxygen shall be determined by an oxygen meter using Method 3A or 3C except that:
 - (i) The span shall be set so that the regulatory limit is between 20 and 50 percent of the span:
 - (ii) A data recorder is not required;
 - (iii) Only two calibration gases are required, a zero and span, and ambient air may be used as the span;
 - (iv) A calibration error check is not required;
 - (v) The allowable sample bias, zero drift, and calibration drift are ±10 percent.
- (d) Operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. To determine if this level is exceeded, the owner or operator shall conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The owner or operator may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing.
- (e) Operate the system such that all collected gases are vented to a control system designed and operated in compliance with § 60.752(b)(2)(iii). In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour; and
- (f) Operate the control or treatment system at all times when the collected gas is routed to the system.

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

§ 60.754 Test methods and procedures.

- (a) (1) The landfill owner or operator shall calculate the NMOC emission rate using either the equation provided in paragraph (a)(1)(i) of this section or the equation provided in paragraph (a)(1)(ii) of this section. Both equations may be used if the actual year-to-year solid waste acceptance rate is known, as specified in paragraph (a)(1)(i), for part of the life of the landfill and the actual year-to-year solid waste acceptance rate is unknown, as specified in paragraph (a)(1)(ii), for part of the life of the landfill. The values to be used in both equations are 0.05 per year for k, 170 cubic meters per megagram for L_0 , and 4,000 parts per million by volume as hexane for the $C_{\rm NMOC}$. For landfills located in geographical areas with a thirty year annual average precipitation of less than 25 inches, as measured at the nearest representative official meteorologic site, the k value to be used is 0.02 per year.
 - (i) The following equation shall be used if the actual year-to-year solid waste acceptance rate is known.

$$M_{NMOC} = \sum_{i=1}^{n} 2kL_{o}M_{i}(e^{-kt}i)(C_{NMOC})(3.6X10^{-9})$$

where,

 M_{NMOC} = Total NMOC emission rate from the landfill, megagrams per year k = methane generation rate constant, year⁻¹

L₀ = methane generation potential, cubic meters per megagram solid waste

Mi = mass of solid waste in the ith section, megagrams

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

 C_{NMOC} = concentration of NMOC, parts per million by volume as hexane

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

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

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

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

where.

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

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

R = average annual acceptance rate, megagrams per year

k = methane generation rate constant, year

t = age of landfill, years

 C_{NMOC} = concentration of NMOC, parts per million by volume as hexane

c = time since closure, years. For active landfill c = O and e^{-kc} =1

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

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

- (2) Tier 1. The owner or operator shall compare the calculated NMOC mass emission rate to the standard of 50 megagrams per year.
- (i) If the NMOC emission rate calculated in paragraph (a)(1) of this section is less than 50 megagrams per year, then the landfill owner shall submit an emission rate report as provided in § 60.757(b)(1), and shall recalculate the NMOC mass emission rate annually as required under § 60.752(b)(1).
- (ii) If the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, then the landfill owner shall either comply with § 60.752(b)(2), or determine a site-specific NMOC concentration and recalculate the NMOC emission rate using the procedures provided in paragraph (a)(3) of this section.
- (3) Tier 2. The landfill owner or operator shall determine the NMOC concentration using the following sampling procedure. The landfill owner or operator shall install at least two sample probes per hectare of landfill surface that has retained waste for at least 2 years. If the landfill is larger than 25 hectares in area, only 50 samples are required. The sample probes should be located to avoid known areas of nondegradable solid waste. The owner or operator shall collect and analyze one sample of landfill gas from each probe to determine the NMOC concentration using Method 25 or 25C of Appendix A of this part. Method 18 of Appendix A of this part may be used to analyze the samples collected by the Method 25 or 25C sampling procedure. Taking composite samples from

different probes into a single cylinder is allowed: however, equal sample volumes must be taken from each probe. For each composite, the sampling rate, collection times, beginning and ending cylinder vacuums, or alternative volume measurements must be recorded to verify that composite volumes are equal. Composite sample volumes should not be less than one liter unless evidence can be provided to substantiate the accuracy of smaller volumes. Terminate compositing before the cylinder approaches ambient pressure where measurement accuracy diminishes. If using Method 18, the owner or operator must identify all compounds in the sample and, as a minimum, test for those compounds published in the most recent Compilation of Air Pollutant Emission Factors (AP-42), minus carbon monoxide, hydrogen sulfide, and mercury. As a minimum, the instrument must be calibrated for each of the compounds on the list. Convert the concentration of each Method 18 compound to CNMOC as hexane by multiplying by the ratio of its carbon atoms divided by six. If more than the required number of samples are taken, all samples must be used in the analysis. The landfill owner or operator must divide the NMOC concentration from Method 25 or 25C of Appendix A of this part by six to convert from CNMOC as carbon to CNMOC as hexane. If the landfill has an active or passive gas removal system in place, Method 25 or 25C samples may be collected from these systems instead of surface probes provided the removal system can be shown to provide sampling as representative as the two sampling probe per hectare requirement. For active collection systems, a minimum of three samples must be collected from the header pipe before the gas moving or condensate removal equipment. For these systems, a minimum of three samples must be collected from the header pipe.

- (i) The landfill owner or operator shall recalculate the NMOC mass emission rate using the equations provided in paragraph (a)(1)(i) or (a)(1)(ii) of this section and using the average NMOC concentration from the collected samples instead of the default value in the equation provided in paragraph (a)(1) of this section.
- (ii) If the resulting mass emission rate calculated using the site-specific NMOC concentration is equal to or greater than 50 megagrams per year, then the landfill owner or operator shall either comply with § 60.752(b)(2), or determine the site-specific methane generation rate constant and recalculate the NMOC emission rate using the site-specific methane generation rate using the procedure specified in paragraph (a)(4) of this section.
- (iii) If the resulting NMOC mass emission rate is less than 50 megagrams per year, the owner or operator shall submit a periodic estimate of the emission rate report as provided in § 60.757(b)(1) and retest the site-specific NMOC concentration every 5 years using the methods specified in this section.
- (4) Tier 3. The site-specific methane generation rate constant shall be determined using the procedures provided in Method 2E of appendix A of this part. The landfill owner or operator shall estimate the NMOC mass emission rate using equations in paragraph (a)(1)(i) or (a)(1)(ii) of this section and using a site-specific methane generation rate constant k, and the site-specific NMOC concentration as determined

in paragraph (a)(3) of this section instead of the default values provided in paragraph (a)(1) of this section. The landfill owner or operator shall compare the resulting NMOC mass emission rate to the standard of 50 megagrams per year.

- (i) If the NMOC mass emission rate as calculated using the site-specific methane generation rate and concentration of NMOC is equal to or greater than 50 megagrams per year, the owner or operator shall comply with § 60.752(b)(2).
- (ii) If the NMOC mass emission rate is less than 50 megagrams per year, then the owner or operator shall submit a periodic emission rate report as provided in § 60.757(b)(1) and shall recalculate the NMOC mass emission rate annually, as provided in § 60.757(b)(1) using the equations in paragraph (a)(1) of this section and using the site-specific methane generation rate constant and NMOC concentration obtained in paragraph (a)(3) of this section. The calculation of the methane generation rate constant is performed only once, and the value obtained from this test shall be used in all subsequent annual NMOC emission rate calculations.
- (5) The owner or operator may use other methods to determine the NMOC concentration or a site-specific k as an alternative to the methods required in paragraphs (a)(3) and (a)(4) of this section if the method has been approved by the Administrator.
- (b) After the installation of a collection and control system in compliance with \S 60.755, the owner or operator shall calculate the NMOC emission rate for purposes of determining when the system can be removed as provided in \S 60.752(b)(2)(v), using the following equation:

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

where,

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

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

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

- (1) The flow rate of landfill gas, QLFG, shall be determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control device using a gas flow measuring device calibrated according to the provisions of section 4 of Method 2E of appendix A of this part.
- (2) The average NMOC concentration, CNMOC, shall be determined by collecting and analyzing landfill gas sampled from the common header pipe before the gas moving or condensate removal equipment using the procedures in Method 25C or Method 18 of appendix A of this part. If using Method 18 of appendix A of this part, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The sample location on the common header pipe shall be before any condensate removal or other gas refining units. The landfill owner or operator shall divide the NMOC concentration from Method 25C of appendix A of this part by six to convert from C_{NMOC} as carbon to C_{NMOC} as hexane.

- (3) The owner or operator may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by the Administrator.
- (c) When calculating emissions for PSD purposes, the owner or operator of each MSW landfill subject to the provisions of this subpart shall estimate the NMOC emission rate for comparison to the PSD major source and significance levels in §§ 51.166 or 52.21 of this chapter using AP-42 or other approved measurement procedures.
- (d) For the performance test required in § 60.752(b)(2)(iii)(B), Method 25, 25C or Method 18 of appendix A of this part shall be used to determine compliance with 98 weight-percent efficiency or the 20 ppmv outlet concentration level, unless another method to demonstrate compliance has been approved by the Administrator as provided by § 60.752(b)(2)(i)(B). Method 3 or 3A shall be used to determine oxygen for correcting the NMOC concentration as hexane to 3 percent. In cases where the outlet concentration is less than 50 ppm NMOC as carbon (8ppm NMOC as Hexane), Method 25A should be used in place of Method 25. If using Method 18 of appendix A of this part, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The following equation shall be used to

Control Efficiency = $(NMOC_{in} - NMOC_{out})/(NMOC_{in})$

where.

calculate efficiency:

NMOC_{in} = mass of NMOC entering control device NMOC_{out} = mass of NMOC exiting control device

§ 60.755 Compliance provisions.

- (a) Except as provided in § 60.752(b)(2)(i)(B), the specified methods in paragraphs (a)(1) through (a)(6) of this section shall be used to determine whether the gas collection system is in compliance with § 60.752(b)(2)(ii).
- (1) For the purposes of calculating the maximum expected gas generation flow rate from the landfill to determine compliance with \S 60.752(b)(2)(ii)(A)(1), one of the following equations shall be used. The k and L_o kinetic factors should be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42) or other site specific values demonstrated to be appropriate and approved by the Administrator. If k has been determined as specified in \S 60.754(a)(4), the value of k determined from the test shall be used. A value of no more than 15 years shall be used for the intended use period of the gas mover equipment. The active life of the landfill is the age of the landfill plus the estimated number of years until
 - (i) For sites with unknown year-to-year solid waste acceptance rate:

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

where,

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

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

R = average annual acceptance rate, megagrams per year

k = methane generation rate constant, year

t = age of the landfill at equipment installation plus the time the owner or operator intends to use the gas mover equipment or active life of the landfill, whichever is less. If the equipment is installed after closure, t is the age of the landfill at installation, years c = time since closure, years (for an active landfill c = 0 and $e^{-kc} = 1$)

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

$$Q_{M} = \sum_{i=1}^{n} 2kLoMi(e^{-kt}i)$$

where,

 Q_{M} = maximum expected gas generation flow rate, cubic meters per year

k = methane generation rate constant, year⁻¹

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

M_i = mass of solid waste in the ith section, megagrams

t_i = age of the ith section, years

- (iii) If a collection and control system has been installed, actual flow data may be used to project the maximum expected gas generation flow rate instead of, or in conjunction with, the equations in paragraphs (a)(1) (i) and (ii) of this section. If the landfill is still accepting waste, the actual measured flow data will not equal the maximum expected gas generation rate, so calculations using the equations in paragraphs (a)(1) (i) or (ii) or other methods shall be used to predict the maximum expected gas generation rate over the intended period of use of the gas control system equipment.
- (2) For the purposes of determining sufficient density of gas collectors for compliance with § 60.752(b)(2)(ii)(A)(2), the owner or operator shall design a system of vertical wells, horizontal collectors, or other collection devices, satisfactory to the Administrator, capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards.
- (3) For the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with § 60.752(b)(2)(ii)(A)(3), the owner or operator shall measure gauge pressure in the gas collection header at each individual well. monthly. If a positive pressure exists, action shall be initiated to correct the exceedance within 5 calendar days, except for the three conditions allowed under § 60.753(b). If negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial measurement of positive pressure. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedence may be submitted to the Administrator for approval.
- (4) Owners or operators are not required to expand the system as required in paragraph (a)(3) of this section during the first 180 days after gas collection system startup.
- (5) For the purpose of identifying whether excess air infiltration into the landfill is occurring, the owner or operator shall monitor each well monthly for temperature and nitrogen or oxygen as provided in § 60.753(c). If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedence may be submitted to the Administrator for approval.
- (6) An owner or operator seeking to demonstrate compliance with § 60.752(b)(2)(ii)(A)(4) through the use of a collection system not conforming to the specifications provided in § 60.759 shall provide information satisfactory to the Administrator as specified in § 60.752(b)(2)(i)(C) demonstrating that off-site migration is being controlled.
- (b) For purposes of compliance with § 60.753(a), each owner or operator of a controlled landfill shall place each well or design component as specified in the approved design plan as provided in § 60.752(b)(2)(i). Each well shall be installed no later than 60 days after the date on which the initial solid waste has been in place for a period of:
 - (1) 5 years or more if active; or
 - (2) 2 years or more if closed or at final grade.
- (c) The following procedures shall be used for compliance with the surface methane operational standard as provided in § 60.753(d).
- (1) After installation of the collection system, the owner or operator shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals (or a site-specific established spacing) for each collection area on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in paragraph (d) of this section.
- (2) The background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells.
- (3) Surface emission monitoring shall be performed in accordance with section 4.3.1 of Method 21 of appendix A of this part, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.
- (4) Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the actions specified in paragraphs (c)(4) (i) through (v) of this section shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of § 60.753(d).
 - (i) The location of each monitored exceedance shall be marked and the location recorded.
- (ii) Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be re-monitored within 10 calendar days of detecting the exceedance.
- (iii) If the re-monitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the same location, the action specified in paragraph (c)(4)(v) of this section shall be taken, and no further monitoring of that location is required until the action specified in paragraph (c)(4)(v) has been taken.
- (iv) Any location that initially showed an exceedance but has a methane concentration less than 500 ppm methane above background at the 10-day re-monitoring specified in paragraph (c)(4) (ii) or (iii) of this section shall be re-monitored 1 month

from the initial exceedance. If the 1-month remonitoring shows a concentration less than 500 parts per million above background, no further monitoring of that location is

required until the next quarterly monitoring period. If the 1-month remonitoring shows an exceedance, the actions specified in paragraph (c)(4) (iii) or (v) shall be taken.

- (v) For any location where monitored methane concentration equals or exceeds 500 parts per million above background three times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the Administrator for approval.
- (5) The owner or operator shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.
- (d) Each owner or operator seeking to comply with the provisions in paragraph (c) of this section shall comply with the following instrumentation specifications and procedures for surface emission monitoring devices:
- (1) The portable analyzer shall meet the instrument specifications provided in section 3 of Method 21 of appendix A of this part, except that "methane" shall replace all references to VOC.
 - (2) The calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air.
- (3) To meet the performance evaluation requirements in section 3.1.3 of Method 21 of appendix A of this part, the instrument evaluation procedures of section 4.4 of Method 21 of appendix A of this part shall be used.
- (4) The calibration procedures provided in section 4.2 of Method 21 of appendix A of this part shall be followed immediately before commencing a surface monitoring survey.
- (e) The provisions of this subpart apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed 5 days for collection systems and shall not exceed 1 hour for treatment or control devices.

§ 63.1960 How is compliance determined?

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

§ 63.1965 What is a deviation?

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

- (a) A deviation occurs when the control device operating parameter boundaries described in 40 CFR 60.758(c)(1) of subpart WWW are exceeded.
- (b) A deviation occurs when I hour or more of the hours during the 3-hour block averaging period does not constitute a valid hour of data. A valid hour of data must have measured values for at least three 15-minute monitoring periods within the hour.
- (c) A deviation occurs when a SSM plan is not developed, implemented, or maintained on site.

§ 63.1975 How do I calculate the 3-hour block average used to demonstrate compliance?

Averages are calculated in the same way as they are calculated in 40 CFR part 60, subpart WWW, except that the data collected during the events listed in paragraphs (a), (b), (c), and (d) of this section are not to be included in any average computed under this subpart:

- (a) Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments.
- (b) Startups.
- (c) Shutdowns.
- (d) Malfunctions.

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§ 60.756 Monitoring of operations.

Except as provided in $\S 60.752(b)(2)(i)(B)$,

- (a) Each owner or operator seeking to comply with § 60.752(b)(2)(ii)(A) for an active gas collection system shall install a sampling port and a thermometer other temperature measuring device, or an access port for temperature measurements at each wellhead and:
 - (1) Measure the gauge pressure in the gas collection header on a monthly basis as provided in § 60.755(a)(3); and
 - (2) Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as provided in § 60.755(a)(5); and
 - (3) Monitor temperature of the landfill gas on a monthly basis as provided in § 60.755(a)(5).
- (b) Each owner or operator seeking to comply with § 60.752(b)(2)(iii) using an enclosed combustor shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment.
- (1) A temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of ± 1 percent of the temperature being measured expressed in degrees Celsius or ± 0.5 degrees C, whichever is greater. A temperature monitoring device is not required for boilers or process heaters with design heat input capacity equal to or greater than 44 megawatts.
 - (2) A device that records flow to or bypass of the control device. The owner or operator shall either:
- (i) Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or
- (ii) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.
- (c) Each owner or operator seeking to comply with § 60.752(b)(2)(iii) using an open flare shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:
- (1) A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame.
 - (2) A device that records flow to or bypass of the flare. The owner or operator shall either:
- (i) Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or
- (ii) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.
- (d) Each owner or operator seeking to demonstrate compliance with § 60.752(b)(2)(iii) using a device other than an open flare or an enclosed combustor shall provide information satisfactory to the

Administrator as provided in § 60.752(b)(2)(i)(B) describing the operation of the control device, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The

Administrator shall review the information and either approve it, or request that additional information be submitted. The Administrator may specify additional appropriate monitoring procedures.

- (e) Each owner or operator seeking to install a collection system that does not meet the specifications in § 60.759 or seeking to monitor alternative parameters to those required by § 60.753 through § 60.756 shall provide information satisfactory to the Administrator as provided in § 60.752(b)(2)(i) (B) and (C) describing the design and operation of the collection system, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The Administrator may specify additional appropriate monitoring procedures.
- (f) Each owner or operator seeking to demonstrate compliance with § 60.755(c), shall monitor surface concentrations of methane according to the instrument specifications and procedures provided in § 60.755(d). Any closed landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may skip to annual monitoring. Any methane reading of 500 ppm

or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring.

§ 60.757 Reporting requirements.

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

- (a) Each owner or operator subject to the requirements of this subpart shall submit an initial design capacity report to the Administrator.
- (1) The initial design capacity report shall fulfill the requirements of the notification of the date construction is commenced as required by $\S 60.7(a)(1)$ and shall be submitted no later than:
- (i) June 10, 1996, for landfills that commenced construction, modification, or reconstruction on or after May 30, 1991 but before March 12, 1996 or

- (ii) Ninety days after the date of commenced construction, modification, or reconstruction for landfills that commence construction, modification, or reconstruction on or after March 12, 1996.
 - (2) The initial design capacity report shall contain the following information:
- (i) A map or plot of the landfill, prroviding the size and location of the landfill, and identifying all areas where solid waste may be landfilled according to the permit issued by the State, local, or tribal agency responsible for regulating the landfill.
- (ii) The maximum design capacity of the landfill. Where the maximum design capacity is specified in the permit issued by the State, local, or tribal agency responsible for regulating the landfill, a copy of the permit specifying the maximum design capacity may be submitted as part of the report. If the maximum design capacity of the landfill is not specified in the permit, the maximum design capacity shall be
- calculated using good engineering practices. The calculations shall be provided, along with the relevant parameters as part of the report. The State, Tribal, local agency or Administrator may request other reasonable information as may be necessary to verify the maximum design capacity of the landfill.
- (3) An amended design capacity report shall be submitted to the Administrator providing notification of an increase in the design capacity of the landfill, within 90 days of an increase in the maximum design capacity of the landfill to or above 2.5 million megagrams and 2.5 million cubic meters. This increase in design capacity may result from an increase in the permitted volume of the landfill or an increase in the density as documented in the annual recalculation required in § 60.758(f).
- (b) Each owner or operator subject to the requirements of this subpart shall submit an NMOC emission rate report to the Administrator initially and annually thereafter, except as provided for in paragraphs (b)(1)(ii) or (b)(3) of this section. The Administrator may request such additional information as may be necessary to verify the reported NMOC emission rate.
- (1) The NMOC emission rate report shall contain an annual or 5-year estimate of the NMOC emission rate calculated using the formula and procedures provided in § 60.754(a) or (b), as applicable.
- (i) The initial NMOC emission rate reeport may be combined with the initial design capacity report required in paragraph (a) of this section and shall be submitted no later than indicated in paragraphs (b)(1)(i)(A) and (B) of this section. Subsequent NMOC emission rate reports shall be submitted annually thereafter, except as provided for in paragraphs (b)(1)(ii) and (b)(3) of this section.
- (A) June 10, 1996. for landfills that commenced construction, modification, or reconstruction on or after May 30, 1991, but before March 12, 1996, or
- (B) Ninety days after the date of commenced construction, modification, or reconstruction for landfills that commence construction, modification, or reconstruction on or after March 12, 1996.
- (ii) If the estimated NMOC emission rate as reported in the annual report to the Administrator is less than 50 megagrams per year in each of the next 5 consecutive years, the owner or operator may elect to submit an estimate of the NMOC emission rate for the next 5-year period in lieu of the annual report. This estimate shall include the current amount of solid waste-in-place and the estimated waste acceptance rate for each year of the 5 years for which an NMOC emission rate is estimated. All data and calculations upon which this estimate is based shall be provided to the Administrator. This estimate shall be revised
- at least once every 5 years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the 5-year estimate, a revised 5-year estimate shall be submitted to the Administrator. The revised estimate shall cover the 5-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate.
- (2) The NMOC emission rate report shall include all the data, calculations, sample reports and measurements used to estimate the annual or 5-year emissions.
- (3) Each owner or operator subject to the requirements of this subpart is exempted from the requirements of paragraphs (b)(1) and (2) of this section, after the installation of a collection and control system in compliance with § 60.752(b)(2), during such time as the collection and control system is in operation and in compliance with § § 60.753 and 60.755.
- (c) Each owner or operator subject to the provisions of § 60.752(b)(2)(i) shall submit a collection and control system design plan to the Administrator within 1 year of the first report required under paragraph (b) of this section, in which the emission rate exceeds 50 megagrams per year, except as follows:
- (1) If the owner or operator elects to recalculate the NMOC emission rate after Tier 2 NMOC sampling and analysis as provided in § 60.754(a)(3) and the resulting rate is less than 50 megagrams per year, annual periodic reporting shall be resumed, using the Tier 2 determined site-specific NMOC concentration, until the calculated emission rate is equal to or greater than 50 megagrams per year or the landfill is closed. The revised NMOC emission rate report, with the recalculated emission rate based on NMOC sampling and analysis, shall be submitted within 180 days of the first calculated exceedance of 50 megagrams per year.
- (2) If the owner or operator elects to recalculate the NMOC emission rate after determining a site-specific methane generation rate constant (k), as provided in Tier 3 in § 60.754(a)(4), and the resulting NMOC emission rate is less than 50 Mg/yr, annual periodic reporting shall be resumed. The resulting site-specific methane generation rate constant (k) shall be used in the emission rate calculation until such time as the emissions rate calculation results in an exceedance. The revised NMOC emission rate

report based on the provisions of § 60.754(a)(4) and the resulting site-specific methane generation rate constant (k) shall be submitted to the Administrator within 1 year of the first calculated emission rate exceeding 50 megagrams per year.

- (d) Each owner or operator of a controlled landfill shall submit a closure report to the Administrator within 30 days of waste acceptance cessation. The Administrator may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR 258.60. If a closure report has been submitted to the Administrator, no additional wastes may be placed into the landfill without filing a notification of modification as described under § 60.7(a)(4).
- (e) Each owner or operator of a controlled landfill shall submit an equipment removal report to the Administrator 30 days prior to removal or cessation of operation of the control equipment.
 - (1) The equipment removal report shall contain all of the following items:
 - (i) A copy of the closure report submitted in accordance with paragraph (d) of this section:
 - (ii) A copy of the initial performance test report demonstrating that the 15 year minimum control period has

expired; and

- (iii) Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 megagrams or greater of NMOC per year.
- (2) The Administrator may request such additional information as may be necessary to verify that all of the conditions for removal in § 60.752(b)(2)(v) have been met.
- (f) Each owner or operator of a landfill seeking to comply with § 60.752(b)(2) using an active collection system designed in accordance with § 60.752(b)(2)(ii) shall submit to the Administrator annual reports of the recorded information in (f)(1) through (f)(6) of this paragraph. The initial annual report* shall be submitted within 180 days of installation and start-up of the collection and control system, and shall include the initial performance test report required under § 60.8. For enclosed combustion devices and flares, reportable exceedances are defined under § 60.758(c). *§63.1980(a) states that you must submit the annual report described in §60.757(f) every 6 months.
 - (1) Value and length of time for exceedance of applicable parameters monitored under § 60.756(a), (b), (c), and (d).
- (2) Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under § 60.756.
- (3) Description and duration of all periods when the control device was not operating for a period exceeding 1 hour and length of time the control device was not operating.
 - (4) All periods when the collection system was not operating in excess of 5 days.
- (5) The location of each exceedance of the 500 parts per million methane concentration as provided in § 60.753(d) and the concentration recorded at each location for which an exceedance was recorded in the previous month.
- (6) The date of installation and the location of each well or collection system expansion added pursuant to paragraphs (a)(3), (b), and (c)(4) of § 60.755.
- (g) Each owner or operator seeking to comply with § 60.752(b)(2)(iii) shall include the following information with the initial performance test report required under § 60.8:
- (1) A diagram of the collection system showing collection system positioning including all wells, horizontal collectors, surface collectors, or other gas extraction devices, including the locations of any areas excluded from collection and the proposed sites for the future collection system expansion:
- (2) The data upon which the sufficient density of wells, horizontal collectors, surface collectors, or other gas extraction devices and the gas mover equipment sizing are based;
- (3) The documentation of the presence of asbestos or nondegradable material for each area from which collection wells have been excluded based on the presence of asbestos or nondegradable material:
- (4) The sum of the gas generation flow rates for all areas from which collection wells have been excluded based on nonproductivity and the calculations of gas generation flow rate for each excluded area; and
- (5) The provisions for increasing gas mover equipment capacity with increased gas generation flow rate, if the present gas mover equipment is inadequate to move the maximum flow rate expected over the life of the landfill; and
 - (6) The provisions for the control of off-site migration.

§ 60.758 Recordkeeping requirements.

- (a) Except as provided in § 60.752(b)(2)(i)(B), each owner or operator of an MSW landfill subject to the provisions of § 60.752(b) shall keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report which triggered § 60.752(b), the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.
- (b) Except as provided in § 60.752(b)(2)(i)(B), each owner or operator of a controlled landfill shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed in paragraphs (b)(1) through (b)(4) of this section as measured during the

initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removal.

- (1) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with § 60.752(b)(2)(ii):
- (i) The maximum expected gas generation flow rate as calculated in § 60.755(a)(1). The owner or operator may use another method to determine the maximum gas generation flow rate, if the method has been approved by the Administrator.
- (ii) The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in § 60.759(a)(1).
- (2) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with § 60.752(b)(2)(iii) through use of an enclosed combustion device other than a boiler or process heater with a design heat input capacity greater than 44 megawatts:
- (i) The average combustion temperature measured at least every 15 minutes and averaged over the same time period of the performance test.
- (ii) The percent reduction of NMOC determined as specified in § 60.752(b)(2)(iii)(B) achieved by the control device.
- (3) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with § 60.752(b)(2)(iii)(B)(1) through use of a boiler or process heater of any size: a description of the location at which the collected gas vent stream is introduced into the boiler or process heater over the same time period of the performance testing.
- (4) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with § 60.752(b)(2)(iii)(A) through use of an open flare, the flare type (i.e., steam-assisted, air-assisted, or nonassisted), all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in § 60.18; continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent.
- (c) Except as provided in § 60.752(b)(2)(i)(B), each owner or operator of a controlled landfill subject to the provisions of this subpart shall keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in § 60.756 as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.
 - (1) The following constitute exceedances that shall be recorded and reported under § 60.757(f):
- (i) For enclosed combustors except for boilers and process heaters with design heat input capacity of 44 megawatts (150 million British thermal unit per hour) or greater, all 3-hour periods of operation during which the average combustion temperature was more than 28 °C below the average combustion temperature during the most recent performance test at which compliance with § 60.752(b)(2)(iii) was determined.
- (ii) For boilers or process heaters, whenever there is a change in the location at which the vent stream is introduced into the flame zone as required under paragraph (b)(3) of this section.
- (2) Each owner or operator subject to the provisions of this subpart shall keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under § 60.756.
- (3) Each owner or operator subject to the provisions of this subpart who uses a boiler or process heater with a design heat input capacity of 44 megawatts or greater to comply with § 60.752(b)(2)(iii) shall keep an up-to-date, readily accessible record of all periods of operation of the boiler or process heater.
- (Examples of such records could include records of steam use, fuel use, or monitoring data collected pursuant to other State, local, Tribal, or Federal regulatory requirements.)
- (4) Each owner or operator seeking to comply with the provisions of this subpart by use of an open flare shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under § 60.756(c), and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent.
- (d) Except as provided in § 60.752(b)(2)(i)(B), each owner or operator subject to the provisions of this subpart shall keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.
- (1) Each owner or operator subject to the provisions of this subpart shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under § 60.755(b).
- (2) Each owner or operator subject to the provisions of this subpart shall keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection as provided in § 60.759(a)(3)(i) as well as any nonproductive areas excluded from collection as provided in § 60.759(a)(3)(ii).
- (e) Except as provided in § 60.752(b)(2)(i)(B), each owner or operator subject to the provisions of this subpart shall keep for at least 5 years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in § 60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.

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

§ 63.1980 What records and reports must I keep and submit?

- (a) Keep records and reports as specified in 40 CFR part 60, subpart WWW, or in the Federal plan, EPA approved State plan or tribal plan that implements 40 CFR part 60, subpart Cc. whichever applies to your landfill, with one exception: You must submit the annual report described in 40 CFR 60.757(f) every 6 months.
- (b) You must also keep records and reports as specified in the general provisions of 40 CFR part 60 and this part as shown in Table 1 of this subpart. Applicable records in the general provisions include items such as SSM plans and the SSM plan reports.
- (c) For bioreactors at new affected sources you must submit the initial semiannual compliance report and performance test results described in 40 CFR 60.757(f) within 180 days after the date you are required to begin operating the gas collection and control system by Sec. 63.1947(a)(2) of this subpart.
- (d) For bioreactors at existing affected sources, you must submit the initial semiannual compliance report and performance test results described in 40 CFR 60.757(f) within 180 days after the compliance date specified in Sec. 63.1947(b) of this subpart, unless you have previously submitted a compliance report for the bioreactor required by 40 CFR part 60, subpart WWW, the Federal plan, or an EPA approved and effective State plan or tribal plan.
- (e) For bioreactors that are located at existing affected sources, but do not initiate liquids addition until later than the compliance date in Sec. 63.1947(b) of this subpart, you must submit the initial semiannual compliance report and performance tests results described in 40 CFR 60.757(f) within 180 days after the date you are required to begin operating the gas collection and control system by Sec. 63.1947(c) of this subpart.
- (f) If you must submit a semiannual compliance report for a bioreactor as well as a semiannual compliance report for a conventional portion of the same landfill, you may delay submittal of a subsequent semiannual compliance report for the bioreactor according to paragraphs (f)(1) through (3) of this section so that the reports may be submitted on the same schedule.
- (1) After submittal of your initial semiannual compliance report and performance test results for the bioreactor, you may delay submittal of the subsequent semiannual compliance report for the bioreactor until the date the initial or subsequent semiannual compliance report is due for the conventional portion of your landfill.
- (2) You may delay submittal of your subsequent semiannual compliance report by no more than 12 months after the due date for submitting the initial semiannual compliance report and performance test results described in 40 CFR 60.757(f) for the bioreactor. The report shall cover the time period since the previous semiannual report for the bioreactor, which would be a period of at least 6 months and no more than 12 months.
- (3) After the delayed semiannual report, all subsequent semiannual reports for the bioreactor must be submitted every 6 months on the same date the semiannual report for the conventional portion of the landfill is due.
- (g) If you add any liquids other than leachate in a controlled fashion to the waste mass and do not comply with the bioreactor requirements in Sec. Sec. 63.1947, 63.1955(c) and 63.1980(c) through (f) of this subpart, you must keep a record of calculations showing that the percent moisture by weight expected in the waste mass to which liquid is added is less than 40 percent. The calculation must consider the waste mass, moisture content of the incoming waste, mass of water added to the waste including leachate recirculation and other liquids addition and precipitation, and the mass of water removed through leachate or other water losses. Moisture level sampling or mass balances calculations can be used. You must document the calculations and the basis of any assumptions. Keep the record of the calculations until you cease liquids addition.
- (h) If you calculate moisture content to establish the date your bioreactor is required to begin operating the collection and control system under Sec. 63.1947(a)(2) or (c)(2), keep a record of the calculations including the information specified in paragraph (g) of this section for 5 years. Within 90 days after the bioreactor achieves 40 percent moisture content, report the results of the calculation, the date the bioreactor achieved 40 percent moisture content by weight, and the date you plan to begin collection and control system operation.

§ 60.759 Specifications for active collection systems.

(a) Each owner or operator seeking to comply with § 60.752(b)(2)(i) shall site active collection wells, horizontal collectors, surface collectors, or other extraction devices at a sufficient density throughout all gas producing areas using the following procedures unless alternative procedures have been approved

by the Administrator as provided in § 60.752(b)(2)(i)(C) and (D):

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- (1) The collection devices within the interior and along the perimeter areas shall be certified to achieve comprehensive control of surface gas emissions by a professional engineer. The following issues shall be addressed in the design: depths of refuse, refuse gas generation rates and flow characteristics, cover properties, gas system expandibility, leachate and condensate management, accessibility, compatibility with filling operations, integration with closure end use, air intrusion control, corrosion resistance. fill settlement, and resistance to the refuse decomposition heat.
- (2) The sufficient density of gas collection devices determined in paragraph (a)(1) of this section shall address landfill gas migration issues and augmentation of the collection system through the use of active or passive systems at the landfill perimeter or exterior.
- (3) The placement of gas collection devices determined in paragraph (a)(1) of this section shall control all gas producing areas, except as provided by paragraphs (a)(3)(i) and (a)(3)(ii) of this section.
- (i) Any segregated area of asbestos or nondegradable material may be excluded from collection if documented as provided under § 60.758(d). The documentation shall provide the nature, date of deposition, location and amount of asbestos or nondegradable material deposited in the area, and shall be provided to the Administrator upon request.
- (ii) Any nonproductive area of the landfill may be excluded from control, provided that the total of all excluded areas can be shown to contribute less than I percent of the total amount of NMOC emissions from the landfill. The amount, location, and age of the material shall be documented and provided to the Administrator upon request. A separate NMOC emissions estimate shall be made for each section proposed for exclusion, and the sum of all such sections shall be compared to the NMOC emissions estimate for the entire landfill. Emissions from each section shall be computed using the following equation:

$$Q_i = 2 \text{ k L}_o M_i (e^{-kt}i) (C_{NMOC}) (3.6 \times 10^{-9})$$

where.

Q_i = NMOC emission rate from the ith section, megagrams per year k = methane generation rate constant, vear⁻¹L_o = methane generation potential, cubic meters per megagram solid waste M_i = mass of the degradable solid waste in the ith section, megagram

t = age of the solid waste in the ith section, years

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

 3.6×10^{-9} = conversion factor

- (iii) The values for k and C_{NMOC} determined in field testing shall be used if field testing has been performed in determining the NMOC emission rate or the radii of influence (the distance from the well center to a point in the landfill where the pressure gradient applied by the blower or compressor approaches zero). If field testing has not been performed, the default values for k, L₀ and C_{NMOC} provided in § 60.754(a)(1) or the alternative values from § 60.754(a)(5) shall be used. The mass of nondegradable solid waste contained within the given section may be subtracted from the total mass of the section when estimating emissions provided the nature, location, age, and amount of the nondegradable material is documented as provided in paragraph (a)(3)(i) of this
- (b) Each owner or operator seeking to comply with § 60.752(b)(2)(i)(A) shall construct the gas collection devices using the following equipment or procedures:
- (1) The landfill gas extraction components shall be constructed of polyvinyl chloride (PVC), high density polyethylene (HDPE) pipe, fiberglass, stainless steel, or other nonporous corrosion resistant material of suitable dimensions to: convey projected amounts of gases; withstand installation, static, and settlement forces; and withstand planned overburden or traffic loads. The collection system shall extend as necessary to comply with emission and migration standards. Collection devices such as wells and horizontal collectors shall be perforated to allow gas entry without head loss sufficient to impair performance across the intended extent of control. Perforations shall be situated with regard to the need to prevent excessive air
- (2) Vertical wells shall be placed so as not to endanger underlying liners and shall address the occurrence of water within the landfill. Holes and trenches constructed for piped wells and horizontal collectors shall be of sufficient cross-section so as to allow for their proper construction and completion including, for example, centering of pipes and placement of gravel backfill. Collection devices shall be designed so as not to allow indirect short circuiting of air into the cover or refuse into the collection system or gas into the air. Any gravel used around pipe perforations should be of a dimension so as not to penetrate or block perforations.
- (3) Collection devices may be connected to the collection header pipes below or above the landfill surface. The connector assembly shall include a positive closing throttle valve, any necessary seals and couplings, access couplings and at least one sampling port. The collection devices shall be constructed of PVC, HDPE, fiberglass, stainless steel, or other nonporous material of suitable thickness.
- (c) Each owner or operator seeking to comply with § 60.752(b)(2)(i)(A) shall convey the landfill gas to a control system in compliance with § 60.752(b)(2)(iii) through the collection header pipe(s). The gas mover equipment shall be sized to handle the maximum gas generation flow rate expected over the intended use period of the gas moving equipment using the following procedures:

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

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

Appendix D-1

Definitions for Subpart WWW - Municipal Solid Waste Landfills

Active collection system means a gas collection system that uses gas mover equipment.

Active landfill means a landfill in which solid waste is being placed or a landfill that is planned to accept waste in the future.

Closed landfill means a landfill in which solid waste is no longer being placed, and in which no additional solid wastes will be placed without first filing a notification of modification as prescribed under Sec. 60.7(a)(4). Once a notification of modification has been filed, and additional solid waste is placed in the landfill, the landfill is no longer closed. A landfill is considered closed after meeting the criteria of Sec. 258.60 of this title.

Closure means that point in time when a landfill becomes a closed landfill.

Commercial solid waste means all types of solid waste generated by stores, offices, restaurants, warehouses, and other nonmanufacturing activities, excluding residential and industrial wastes.

Controlled landfill means any landfill at which collection and control systems are required under this subpart as a result of the nonmethane organic compounds emission rate. The landfill is considered controlled at the time either (1) A notification of intent to install a collection and control system or (2) A collection and control system design plan is submitted in compliance with Sec. 60.752(b)(2)(i).

Design capacity means the maximum amount of solid waste a landfill can accept, as specified in the construction or operating permit issued by the State, local, or Tribal agency responsible for regulating the landfill.

Disposal facility means all contiguous land and structures, other appurtenances, and improvements on the land used for the disposal of solid waste.

Emission rate cutoff means the threshold annual emission rate to which a landfill compares its estimated emission rate to determine if control under the regulation is required.

Enclosed combustor means an enclosed firebox which maintains a relatively constant limited peak temperature generally using a limited supply of combustion air. An enclosed flare is considered an enclosed combustor.

Flare means an open combustor without enclosure or shroud.

Gas mover equipment means the equipment (i.e., fan, blower, compressor) used to transport landfill gas through the header system.

Household waste means any solid waste (including garbage, trash, and sanitary waste in septic tanks) derived from households (including, but not limited to, single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas).

Industrial solid waste means solid waste generated by manufacturing or industrial processes that is not a hazardous waste regulated under Subtitle C of the Resource Conservation and Recovery Act, parts 264 and 265 of this title. Such waste may include, but is not limited to, waste resulting from the following manufacturing processes: electric power generation; fertilizer/agricultural chemicals; food and related products/by-products; inorganic chemicals; iron and steel manufacturing; leather and leather products; nonferrous metals manufacturing/foundries; organic chemicals; plastics and resins manufacturing; pulp and paper industry; rubber and miscellaneous plastic products; stone, glass, clay, and concrete products; textile manufacturing; transportation equipment; and water treatment. This term does not include mining waste or oil and gas waste.

Interior well means any well or similar collection component located inside the perimeter of the landfill. A perimeter well located outside the landfilled waste is not an interior well.

Landfill means an area of land or an excavation in which wastes are placed for permanent disposal, and that is not a land application unit, surface impoundment, injection well, or waste pile as those terms are defined under Sec. 257.2 of this title.

Lateral expansion means a horizontal expansion of the waste boundaries of an existing MSW landfill. A lateral expansion is not a modification unless it results in an increase in the design capacity of the landfill.

Municipal solid waste landfill or MSW landfill means an entire disposal facility in a contiguous geographical space where household waste is placed in or on land. An MSW landfill may also receive other types of RCRA Subtitle D wastes (Sec. 257.2 of this title) such as commercial solid waste, nonhazardous sludge, conditionally exempt small quantity generator waste, and industrial solid waste. Portions of an MSW landfill may be separated by access roads. An MSW landfill may be publicly or privately owned. An MSW landfill may be a new MSW landfill, an existing MSW landfill, or a lateral expansion.

Municipal solid waste landfill emissions or MSW landfill emissions means gas generated by the decomposition of organic waste deposited in an MSW landfill or derived from the evolution of organic compounds in the waste.

NMOC means nonmethane organic compounds, as measured according to the provisions of Sec. 60.754.

Nondegradable waste means any waste that does not decompose through chemical breakdown or microbiological activity. Examples are, but are not limited to, concrete, municipal waste combustor ash, and metals.

Passive collection system means a gas collection system that solely uses positive pressure within the landfill to move the gas rather than using gas mover equipment.

Sludge means any solid, semisolid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility, exclusive of the treated effluent from a wastewater treatment plant.

Solid waste means any garbage, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges that are point sources subject to permits under 33 U.S.C. 1342, or source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954, as amended (42 U.S.C 2011 et seq.).

Sufficient density means any number, spacing, and combination of collection system components, including vertical wells, horizontal collectors, and surface collectors, necessary to maintain emission and migration control as determined by measures of performance set forth in this part.

Sufficient extraction rate means a rate sufficient to maintain a negative pressure at all wellheads in the collection system without causing air infiltration, including any wellheads connected to the system as a result of expansion or excess surface emissions, for the life of the blower.

Appendix E

Subpart A-General Provisions

40 CFR 60.18 General control device requirements. (Flares)

Introduction. This section contains requirements for control devices used to comply with applicable subparts of parts 40 CFR 60 and 40 CFR 61. The requirements are placed here for administrative convenience and only apply to facilities covered by subparts referring to this section.

- 1. Flares shall be designed for and operated with no visible emissions as determined by the methods specified in 40 CFR 60.18(f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. [Rule 62-296.800, F.A.C.; 40 CFR 60.18(c)(1)].
- 2. Flares shall be operated with a flame present at all times, as determined by the methods specified in 40 CFR 60.18(f). [Rule 62-296.800, F.A.C.; 40 CFR 60.18(c)(2)].
- 3. Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is non assisted. The net heating value of the gas being combusted shall be determined by the methods specified in 40 CFR 60.18(f). [Rule 62-296.800, F.A.C.; 40 CFR 60.18(c)(3)].
- 4. (i) Steam-assisted and non assisted flares shall be designed for and operated with an exit velocity, as determined by the methods specified in 40 CFR 60.18(f)(4), less than 18.3 m/sec (60 ft/sec), except as provided in 40 CFR 60.18(c)(4)(ii) and 40 CFR 60.18(c)(4)(iii).
- (ii) Steam-assisted and non assisted flares designed for and operated with an exit velocity, as determined by the methods specified in 40 CFR 60.18(f)(4), equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec) are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).
- (iii) Steam-assisted and non assisted flares designed for and operated with an exit velocity, as determined by the methods specified in 40 CFR 60.18(f)(4), less than the velocity, Vmax, as determined by the method specified in 40 CFR 60.18(f)(5), and less than 122 m/sec (400 ft/sec) are allowed.

[Rule 62-296.800, F.A.C.; 40 CFR 60.18(c)(4)].

- 5. Air-assisted flares shall be designed and operated with an exit velocity less than the velocity, Vmax, as determined by the method specified in 40 CFR 60.18(f)(6). [Rule 62-296.800, F.A.C.; 40 CFR 60.18(c)(5)].
- 6. Flares used to comply with this section shall be steam-assisted, air-assisted, or non assisted.

[Rule 62-296.800, F.A.C.; 40 CFR 60.18(c)(6)].

- 7. Owners or operators of flares used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how owners or operators of flares shall monitor these control devices. [Rule 62-296.800, F.A.C.; 40 CFR 60.18(d)].
- 8. Flares used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them. [Rule 62-296.800, F.A.C.; 40 CFR 60.18(e)].
- 9. (1) Reference Method 22 shall be used to determine the compliance of flares with the visible emission provisions of this subpart. The observation period is 2 hours and shall be used according to Method 22.
- (2) The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.
- (3) The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H = K \sum_{i=1}^{n} CiHi$$

where:

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

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

Ci=Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946-77 (Incorporated by reference as specified in 40 CFR 60.17); and Hi=Net heat of combustion of sample component i, kcal/g mole at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 (incorporated by reference as specified in 40 CFR 60.17) if published values are not available or cannot be calculated.

- (4) The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip.
- (5) The maximum permitted velocity, Vmax, for flares complying with 40 CFR 60.18(c)(4)(iii) shall be determined by the following equation.

$$Log10 (Vmax) = (HT + 28.8)/31.7$$

Vmax=Maximum permitted velocity, M/sec

28.8=Constant

31.7=Constant

HT=The net heating value as determined in 40 CFR 60.18(f)(3).

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

```
Vmax=8.706+0.7084 (HT)
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Vmax=Maximum permitted velocity, m/sec

8.706=Constant

0.7084=Constant

HT=The net heating value as determined in 40 CFR 60.18(f)(3).

[Rule 62-296.800, F.A.C.; 40 CFR 60.18(f)].

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Appendix F - 40 CFR 63 Subpart ZZZZ (August 20, 2010) Table 2d Landfill or Digester Gas-Fired Stationary RICE

For each	You must meet the following requirement, except during periods of startup	During periods of startup you must	
1. Non-Emergency, non-black start CI stationary RICE ≤ 300 HP.	a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first; (1) b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	Minimize the engine's time spent at idle and minimize th engine's startup time at startu to a period needed for	
2. Non-Emergency, non-black start CI stationary RICE 300 <hp≤ 500.<="" td=""><td>a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd at 15 percent O2; or b. Reduce CO emissions by 70 percent or more.</td><td>appropriate and safe loading of the engine, not to exceed 30</td></hp≤>	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd at 15 percent O2; or b. Reduce CO emissions by 70 percent or more.	appropriate and safe loading of the engine, not to exceed 30	
3. Non-Emergency, non-black start CI stationary RICE > 500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O2; or b. Reduce CO emissions by 70 percent or more.	minutes, after which time the non-startup emission limitations apply.	
Emergency stationary CI RICE and black start stationary CI RICE. (2)	a. Change oil and filter every 500 hours of operation or annually, whichever comes first, (1) b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	immatons appry.	
5. Emergency stationary S1 RICE; black start stationary S1 RICE; non-emergency, nonblack start 4SLB stationary RICE > 500 HP that operate 24 hours or less per calendar year; non-emergency, non-black start 4SRB stationary RICE > 500 HP that operate 24 hours or less per calendar year. (2)	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; (1) b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.		
6. Non-emergency, non-black start 2SLB stationary RICE.	a. Change oil and filter every 4,320 hours of operation or annually, whichever comes first; (1) b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first; and c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.		
7. Non-emergency, non-black start 4SLB stationary RICE ≤ 500 HP.	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; (1) b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first; and c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.		
8. Non-emergency, non-black start 4SLB stationary RICE > 500 HP.	a. Limit concentration of CO in the stationary RICE exhaust to 47 ppmvd at 15 percent O2; or b. Reduce CO emissions by 93 percent or more.		
 Non-emergency, non-black start 4SRB stationary RICE ≤ 500 HP. 	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; (1) b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first; and c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	·	
 Non-emergency, non-black start 4SRB stationary RICE > 500 HP. 	a. Limit concentration of formaldehyde in the stationary RICE exhaust to 2.7 ppmvd at 15 percent O2; or b. Reduce formaldehyde emissions by 76 percent or more.		
11. Non-emergency, non-black start landfill or digester gas-fired stationary RICE.	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; (1) b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first; and c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.		

Appendix F - 40 CFR 63 Subpart ZZZZ (August 20, 2010) Table 2d Landfill or Digester Gas-Fired Stationary RICE

- (1) Sources have the option to utilize an oil analysis program as described in § 63.6625(i) in order to extend the specified oil change requirement in Table 2d of this subpart.
- (2) If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

As stated in §§ 63.6603 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions

Appendix H-1: Permit History

Brevard County Board of County Commissioners Brevard County Central Disposal Facility

FINAL Permit No.: 0090069-008-AV

Facility ID No.: 0090069

E.U. ID No.	Description	Permit No.	Effective Date	Expiration Date	Project Type
-003 (All)	Facility	0090069-001-AV	5/28/98	9/30/02	Initial
	Facility	0090069-002-AV	6/23/03	8/30/07	Renewal
	Facility	0090069-003-AV	12/09/04	9/30/07	Revision
	Facility	0090069-005-AV	9/25/07	9/30/12	Renewal
-004,5,6,7,8,9	Six I.C. Engines	0090069-004-AC	3/6/07	10/1/08	Construction
-004,5,6,7,8,9	Six I.C. Engines	0090069-006-AC	3/17/09	3/1/10	Revision
-004,5,6,7,8,9	Six I.C. Engines	0090069-007-AC	10/1/08	4/1/09	Revision
All	Facility	0090069-008-AV	6/21/09	10/30/12	Revision

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

Brevard County Board of County Commissioners Brevard County Central Disposal Facility FINAL Permit No.: 0090069-008-AV

Facility I.D. No.: 0090069

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.

Brief Description of Emissions Units and/or Activities

- 1) Maintenance Building: The truck repair area is in this metal building. Several lubricant types and used oil are inside the building.
- 2) Covered Open-Face Storage Building: This area is a concrete prevention area that stores antifreeze (<100 gallons), recycled coolant (<100 gallons), kerosene (<1000 gallons), hydraulic oil (~1000 gallons), diesel fuel (<100 gallons), and a 5-foot high metal storage cabinet for 'flammables'.
- 3) Blue Storage Shed: This metal shed is used for storage by transportation department of items such as bags of fertilizer, grass seed, and absorbent.
- 4) Lawn Mower Shed: This shed contains lawn equipment and is used for storage of cleaning fluid.
- 5) Fuel Station: One 12,000-gallon aboveground diesel tank; one 5,200-gallon aboveground gasoline tank; two diesel pumps, one gas pump. Tanks are double-wall steel tanks. Throughput at the station is 390,000 gallons of diesel.
- 6) Citizens drop off area: In this area, citizens unload their solid waste which is then loaded into off-road dump trucks with a front end loader by the County. The dump trucks then haul the waste to the working face of the landfill.
- 7) Household Hazardous Waste Center: In this area, there is temporary staging of typical household hazardous waste, including: kerosene, gasoline, paints, non-oil based paint thinner, oil, used oil, propane, adhesives, and pesticides.
- 8) Leachate Holding Tank: This is an open-top 16' deep metal upright 126'-6" diameter tank that discharges into the County sewer system.
- 9) Yard Trash Tub-Grinders: Two large tub-grinders usually operate in this area. Due to the location of the grinding operation on the property, unconfined particulate matter emissions are negligible at the property lines. Additionally, wooded area surrounding the property act as buffers/filters.
- 10) Air Curtain Incinerator: This incinerator is used only for emergency situations such as processing hurricane and storm debris. Operation of this incinerator is less than 400 hours per year.
- Roadways: Unconfined particulate matter emissions from unpaved landfill roadways are typically reduced by the use of water trucks. However, the majority of the CDF roadways have been paved.

APPENDIX ICE

REQUIREMENTS FOR INTERNAL COMBUSTION ENGINES

This Title V facility contains stationary internal combustion engines that have been exempted from the requirement to obtain an air construction permit because they qualify for one of the categorical exemptions listed in Rule 62-210.300(3)(a), Florida Administrative Code (F.A.C.). However, they are included in this permit as regulated emissions units because they are subject to one or more of the following federal rules:

• 40 CFR 63, Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

The below listed engines are subject to the specified federal rules.

E.U. ID No.	Brief Description of Engine	Manufacture Date	<u>Horsepower</u>	Rule Applicability
004-009	Caterpillar Model G3520C	≤ 2007	2233 bhp @ 100% load	ZZZZ

The engines listed above are currently demonstrating compliance with the emissions limitations of the applicable federal rule through the retention of a manufacturer's certification statement. So long as that certification is able to be retained, no additional compliance demonstration is required. At such time that the manufacturer's certification is no longer valid (i.e. due to operation or maintenance practices that are inconsistent with the manufacturer's recommendations), the permittee shall begin demonstrating compliance with the standards listed in the applicable federal rule (included in the appendices as an enforceable part of this permit) in a manner that is prescribed by that rule.

[Note: This attachment includes "canned conditions" developed from the "Title V Core List."]

{Permitting note: APPENDIX TV-6, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided one copy when requested or otherwise appropriate.}

Chapter 62-4, F.A.C.

1. Not federally enforceable. General Prohibition. Any stationary installation which will reasonably be expected to be a source of pollution shall not be operated, maintained, constructed, expanded, or modified without the appropriate and valid permits issued by the Department, unless the source is exempted by Department rule. The Department may issue a permit only after it receives reasonable assurance that the installation will not cause pollution in violation of any of the provisions of Chapter 403, F.S., or the rules promulgated thereunder. A permitted installation may only be operated, maintained, constructed, expanded or modified in a manner that is consistent with the terms of the permit.

[Rule 62-4.030, Florida Administrative Code (F.A.C.); and. Section 403.087, Florida Statute (F.S.)]

- 2. Not federally enforceable. Procedures to Obtain Permits and Other Authorizations; Applications.
- (1) Any person desiring to obtain a permit from the Department shall apply on forms prescribed by the Department and shall submit such additional information as the Department by law may require.
- (2) All applications and supporting documents shall be filed in quadruplicate with the Department.
- (3) To ensure protection of public health, safety, and welfare, any construction, modification, or operation of an installation which may be a source of pollution, shall be in accordance with sound professional engineering practices pursuant to Chapter 471, F.S. All applications for a Department permit shall be certified by a professional engineer registered in the State of Florida except, when the application is for renewal of an air pollution operation permit at a non-Title V source as defined in Rule 62-210.200, F.A.C., or where professional engineering is not required by Chapter 471, F.S. Where required by Chapter 471 or 492, F.S., applicable portions of permit applications and supporting documents which are submitted to the Department for public record shall be signed and sealed by the professional(s) who prepared or approved them.
- (4) Processing fees for air construction permits shall be in accordance with Rule 62-4.050(4). F.A.C.
- (5)(a) To be considered by the Department, each application must be accompanied by the proper processing fee. The fee shall be paid by check, payable to the Department of Environmental Protection. The fee is non-refundable except as provided in Section 120.60, F.S., and in this section.
 - (b) When an application is received without the required fee, the Department shall acknowledge receipt of the application and shall immediately notify the applicant by certified mail that the required fee was not received and advise the applicant of the correct fee. The Department shall take no further action until the correct fee is received. If a fee was received by the Department which is less than the amount required, the Department shall return the fee along with the written notification.
 - (c) Upon receipt of the proper application fee, the permit processing time requirements of Sections 120.60(2) and 403.0876, F.S., shall begin.
 - (d) If the applicant does not submit the required fee within ten days of receipt of written notification, the Department shall either return the unprocessed application or arrange with the applicant for the pick up of the application.
 - (e) If an applicant submits an application fee in excess of the required fee, the permit processing time requirements of Sections 120.60(2) and 403.0876, F.S., shall begin upon receipt, and the Department shall refund to the applicant the amount received in excess of the required fee.
- (6) Any substantial modification to a complete application shall require an additional processing fee determined pursuant to the schedule set forth in Rule 62-4.050, F.A.C., and shall restart the time requirements of Sections 120.60 and 403.0876, F.S. For purposes of this subsection, the term "substantial modification" shall mean a modification which is reasonably expected to lead to substantially different environmental impacts which require a detailed review.
- (7) Modifications to existing permits proposed by the permittee which require substantial changes in the existing permit or require substantial evaluation by the Department of potential impacts of the proposed modifications shall require the same fee as a new application for the same time duration except for modification under Chapter 62-45, F.A.C. [Rule 62-4.050, F.A.C.]

3. <u>Standards for Issuing or Denying Permits</u>. Except as provided at Rule 62-213.460, F.A.C., the issuance of a permit does not relieve any person from complying with the requirements of Chapter 403, F.S., or Department rules. [Rule 62-4.070(7), F.A.C.]

4. Modification of Permit Conditions.

- (1) For good cause and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions and on application of the permittee the Department may grant additional time. For the purpose of this section, good cause shall include, but not be limited to, any of the following: (also, see Condition No. 38.)
 - (a) A showing that an improvement in effluent or emission quality or quantity can be accomplished because of technological advances without unreasonable hardship.
 - (b) A showing that a higher degree of treatment is necessary to effect the intent and purpose of Chapter 403, F.S.
 - (c) A showing of any change in the environment or surrounding conditions that requires a modification to conform to applicable air or water quality standards.
 - (e) Adoption or revision of Florida Statutes, rules, or standards which require the modification of a permit condition for compliance.
- (2) A permittee may request a modification of a permit by applying to the Department.
- (3) A permittee may request that a permit be extended as a modification of the permit. Such a request must be submitted to the Department in writing before the expiration of the permit. Upon timely submittal of a request for extension, unless the permit automatically expires by statute or rule, the permit will remain in effect until final agency action is taken on the request. For construction permits, an extension shall be granted if the applicant can demonstrate reasonable assurances that, upon completion, the extended permit will comply with the standards and conditions required by applicable regulation. For all other permits, an extension shall be granted if the applicant can demonstrate reasonable assurances that the extended permit will comply with the standards and conditions applicable to the original permit. A permit for which the permit application fee was prorated in accordance with Rule 62-4.050(4)(v), F.A.C., shall not be extended. In no event shall a permit be extended or remain in effect longer than the time limits established by statute or rule.

[Rule 62-4.080, F.A.C.]

5. Renewals. Prior to 180 days before the expiration of a permit issued pursuant to Chapter 62-213, F.A.C., the permittee shall apply for a renewal of a permit using forms incorporated by reference in the specific rule chapter for that kind of permit. A renewal application shall be timely and sufficient. If the application is submitted prior to 180 days before expiration of the permit, it will be considered timely and sufficient. If the renewal application is submitted at a later date, it will not be considered timely and sufficient unless it is submitted and made complete prior to the expiration of the operation permit. When the application for renewal is timely and sufficient, the existing permit shall remain in effect until the renewal application has been finally acted upon by the Department or, if there is court review of the Department's final agency action, until a later date is required by Section 120.60, F.S., provided that, for renewal of a permit issued pursuant to Chapter 62-213, F.A.C., the applicant complies with the requirements of Rules 62-213.420(1)(b)3. and 4., F.A.C.

[Rule 62-4.090, F.A.C.]

Suspension and Revocation.

- (1) Permits shall be effective until suspended, revoked, surrendered, or expired and shall be subject to the provisions of Chapter 403, F.S., and rules of the Department.
- (2) Failure to comply with pollution control laws and rules shall be grounds for suspension or revocation.
- (3) A permit issued pursuant to Chapter 62-4, F.A.C., shall not become a vested property right in the permittee. The Department may revoke any permit issued by it if it finds that the permit holder or his agent:
 - (a) Submitted false or inaccurate information in his application or operational reports.
 - (b) Has violated law, Department orders, rules or permit conditions.
 - (c) Has failed to submit operational reports or other information required by Department rules.
 - (d) Has refused lawful inspection under Section 403.091, F.S.
- (4) No revocation shall become effective except after notice is served by personal services, certified mail, or newspaper notice pursuant to Section 120.60(7), F.S., upon the person or persons named therein and a hearing held if requested within the time specified in the notice. The notice shall specify the provision of the law, or rule alleged to be violated, or the permit condition of Department order alleged to be violated, and the facts alleged to constitute a violation thereof.

[Rule 62-4.100, F.A.C.]

7. **Not federally enforceable.** <u>Financial Responsibility</u>. The Department may require an applicant to submit proof of financial responsibility and may require the applicant to post an appropriate bond to guarantee compliance with the law and Department rules. [Rule 62-4.110, F.A.C.]

8. Transfer of Permits

- (1) Within 30 days after the sale or legal transfer of a permitted facility, an "Application for Transfer of Permit" (DEP Form 62-1.201(1)) must be submitted to the Department. This form must be completed with the notarized signatures of both the permittee and the proposed new permittee. For air permits, an "Application for Transfer of Air Permit" (DEP Form 62-210.900(7)) shall be submitted.
- (2) The Department shall approve the transfer of a permit unless it determines that the proposed new permittee cannot provide reasonable assurances that conditions of the permit will be met. The determination shall be limited solely to the ability of the new permittee to comply with the conditions of the existing permit, and it shall not concern the adequacy of these permit conditions. If the Department proposes to deny the transfer, it shall provide both the permittee and the proposed new permittee a written objection to such transfer together with notice of a right to request a Chapter 120, F.S., proceeding on such determination.
- (3) Within 30 days of receiving a properly completed Application for Transfer of Permit form, the Department shall issue a final determination. The Department may toll the time for making a determination on the transfer by notifying both the permittee and the proposed new permittee that additional information is required to adequately review the transfer request. Such notification shall be served within 30 days of receipt of an Application for Transfer of Permit form, completed pursuant to Rule 62-4.120(1), F.A.C. If the Department fails to take action to approve or deny the transfer within 30 days of receipt of the completed Application for Transfer of Permit form, or within 30 days of receipt of the last item of timely requested additional information, the transfer shall be deemed approved.
- (4) The permittee is encouraged to apply for a permit transfer prior to the sale or legal transfer of a permitted facility. However, the transfer shall not be effective prior to the sale or legal transfer.
- (5) Until this transfer is approved by the Department, the permittee and any other person constructing, operating, or maintaining the permitted facility shall be liable for compliance with the terms of the permit. The permittee transferring the permit shall remain liable for corrective actions that may be required as a result of any violations occurring prior to the sale or legal transfer of the facility. [Rule 62-4.120, F.A.C.]
- 9. <u>Plant Operation-Problems</u>. If the permittee is temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the permittee shall immediately notify the Department. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules. (also, see Condition No. 10.)

[Rule 62-4.130, F.A.C.]

- 10. For purposes of notification to the Department pursuant to Condition No. 9., Condition No. 12.(8), and Rule 62-4.130, F.A.C., Plant Operation-Problems, "immediately" shall mean the same day, if during a workday (i.e., 8:00 a.m. 5:00 p.m.), or the first business day after the incident, excluding weekends and holidays; and, for purposes of 40 CFR 70.6(a)(3)(iii)(B), "prompt" shall have the same meaning as "immediately". [also, see Conditions Nos. 9. and 12.(8).]
 [40 CFR 70.6(a)(3)(iii)(B)]
- 11. Not federally enforceable. Review. Failure to request a hearing within 14 days of receipt of notice of proposed or final agency action on a permit application or as otherwise required in Chapter 62-103, F.A.C., shall be deemed a waiver of the right to an administrative hearing.

 [Rule 62-4.150, F.A.C.]
- 12. Permit Conditions. All permits issued by the Department shall include the following general conditions:
- (1) The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

- (2) This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- (3) As provided in Subsections 403.987(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.
- (4) This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- (5) This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of F.S. and Department rules, unless specifically authorized by an order from the Department.
- (6) The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- (7) The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
 - (a) Have access to and copy any records that must be kept under conditions of the permit;
 - (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
 - (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.
- (8) If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information: (also, see Condition No. 10.)
 - (a) A description of and cause of noncompliance; and
 - (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.
- (9) In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- (10) The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
- (11) This permit is transferable only upon Department approval in accordance with Rule 62-4.120, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- (12) This permit or a copy thereof shall be kept at the work site of the permitted activity.
- (14) The permittee shall comply with the following:
 - (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least five (5) years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - (c) Records of monitoring information shall include:
 - 1. The date, exact place, and time of sampling or measurements;
 - 2. The person responsible for performing the sampling or measurements;
 - 3. The dates analyses were performed;
 - 4. The person responsible for performing the analyses;

- 5. The analytical techniques or methods used;
- 6. The results of such analyses.
- (15) When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly. [Rules 62-4.160 and 62-213.440(1)(b), F.A.C.]

13. Construction Permits

- (1) No person shall construct any installation or facility which will reasonably be expected to be a source of air or-water-pollution without first applying for and receiving a construction permit from the Department unless exempted by statute or Department rule. In addition to the requirements of Chapter 62-4, F.A.C., applicants for a Department Construction Permit shall submit the following as applicable:
 - (a) A completed application on forms furnished by the Department.
 - (b) An engineering report covering:
 - 1. Plant description and operations,
 - 2. Types and quantities of all waste material to be generated whether liquid, gaseous or solid,
 - 3. Proposed waste control facilities,
 - 4. The treatment objectives.
 - 5. The design criteria on which the control facilities are based, and
 - 6. Other information deemed relevant.

Design criteria submitted pursuant to Rule 62-4.210(1)(b)5., F.A.C., shall be based on the results of laboratory and pilot-plant scale studies whenever such studies are warranted. The design efficiencies of the proposed waste treatment facilities and the quantities and types of pollutants in the treated effluents or emissions shall be indicated. Work of this nature shall be subject to the requirements of Chapter 471, F.S. Where confidential records are involved, certain information may be kept confidential pursuant to Section 403.111, F.S.

- (c) The owners' written guarantee to meet the design criteria as accepted by the Department and to abide by Chapter 403, F.S., and the rules of the Department as to the quantities and types of materials to be discharged from the installation. The owner may be required to post an appropriate bond or other equivalent evidence of financial responsibility to guarantee compliance with such conditions in instances where the owner's financial resources are inadequate or proposed control facilities are experimental in nature.
- (2) The construction permit may contain conditions and an expiration date as determined by the Secretary or the Secretary's designee.
- (3) When the Department issues a permit to construct, the permittee shall be allowed a period of time, specified in the permit, to construct, and to operate and test to determine compliance with Chapter 403, F.S., and the rules of the Department and, where applicable, to apply for and receive an operation permit. The Department may require tests and evaluations of the treatment facilities by the permittee at his/her expense.

[Rule 62-4.210, F.A.C.]

14. Not federally enforceable. Operation Permit for New Sources. To properly apply for an operation permit for new sources the applicant shall submit the appropriate fee and certification that construction was completed, noting any deviations from the conditions in the construction permit and test results where appropriate.

[Rule 62-4.220, F.A.C.]

Chapters 28-106 and 62-110, F.A.C.

- 15. <u>Public Notice, Public Participation, and Proposed Agency Action.</u> The permittee shall comply with all of the requirements for public notice, public participation, and proposed agency action pursuant to Rules 62-110.106 and 62-210.350, F.A.C. [Rules 62-110.106, 62-210.350 and 62-213.430(1)(b), F.A.C.]
- 16. Administrative Hearing. The permittee shall comply with all of the requirements for a petition for administrative hearing or waiver of right to administrative proceeding pursuant to Rules 28-106.201, 28-106.301 and 62-110.106, F.A.C. [Rules 28-106.201, 28-106.301 and 62-110.106, F.A.C.]

Chapter 62-204, F.A.C.

17. <u>Asbestos.</u> This permit does not authorize any demolition or renovation of the facility or its parts or components which involves asbestos removal. This permit does not constitute a waiver of any of the requirements of Chapter 62-257, F.A.C., and 40 CFR 61. Subpart M, National Emission Standard for Asbestos, adopted and incorporated by reference in Rule 62-204.800, F.A.C. Compliance with Chapter 62-257, F.A.C., and 40 CFR 61, Subpart M, Section 61.145, is required for any asbestos demolition or renovation at the source.

[40 CFR 61; Rule 62-204.800, F.A.C.; and, Chapter 62-257, F.A.C.]

Chapter 62-210, F.A.C.

- 18. Permits Required. Unless exempted from permitting pursuant to Rule 62-210.300(3)(a) or (b), F.A.C., or Rule 62-4.040, F.A.C., or unless specifically authorized by provision of Rule 62-210.300(4), F.A.C., or Rule 62-213.300, F.A.C., the owner or operator of any facility or emissions unit which emits or can reasonably be expected to emit any air pollutant shall obtain an appropriate permit from the Department prior to beginning construction, reconstruction pursuant to 40 CFR 60.15 or 63.2, modification, or the addition of pollution control equipment; or to authorize initial or continued operation of the emissions unit; or to establish a PAL or Air Emissions Bubble. All emissions limitations, controls, and other requirements imposed by such permits shall be at least as stringent as any applicable limitations and requirements contained in or enforceable under the State Implementation Plan (SIP) or that are otherwise federally enforceable. Except as provided at Rule 62-213.460, F.A.C., issuance of a permit does not relieve the owner or operator of a facility or an emissions unit from complying with any applicable requirements, any emission limiting standards or other requirements of the air pollution rules of the Department or any other such requirements under federal, state, or local law.

 (1) Air Construction Permits.
 - (a) Unless exempt from permitting pursuant to Rule 62-210.300(3)(a) or (b), F.A.C., or Rule 62-4.040, F.A.C., an air construction permit shall be obtained by the owner or operator of any proposed new, reconstructed, or modified facility or emissions unit, or any new pollution control equipment prior to the beginning of construction, reconstruction pursuant to 40 CFR 60,15 or 63.2, or modification of the facility or emissions unit or addition of the pollution control equipment; or to establish a PAL; in accordance with all applicable provisions of Chapter 62-210, F.A.C., Chapter 62-212, F.A.C., and Chapter 62-4, F.A.C. Except as provided under Rule 62-213.415, F.A.C., the owner or operator of any facility seeking to create or change an air emissions bubble shall obtain an air construction permit in accordance with all the applicable provisions of Chapter 62-210, F.A.C., Chapters 62-212 and 62-4, F.A.C. The construction permit shall be issued for a period of time sufficient to allow construction, reconstruction or modification of the facility or emissions unit or addition of the air pollution control equipment: and operation while the owner or operator of the new, reconstructed or modified facility or emissions unit or the new pollution control equipment is conducting tests or otherwise demonstrating initial compliance with the conditions of the construction permit.
 - (b) Notwithstanding the expiration of an air construction permit, all limitations and requirements of such permit that are applicable to the design and operation of the permitted facility or emissions unit shall remain in effect until the facility or emissions unit is permanently shut down, except for any such limitation or requirement that is obsolete by its nature (such as a requirement for initial compliance testing) or any such limitation or requirement that is changed in accordance with the provisions of Rule 62-210.300(1)(b)1., F.A.C. Either the applicant or the Department can propose that certain conditions be considered obsolete. Any conditions or language in an air construction permit that are included for informational purposes only, if they are transferred to the air operation permit, shall be transferred for informational purposes only and shall not become enforceable conditions unless voluntarily agreed to by the permittee or otherwise required under Department rules.
 - 1. Except for those limitations or requirements that are obsolete, all limitations and requirements of an air construction permit shall be included and identified in any air operation permit for the facility or emissions unit. The limitations and requirements included in the air operation permit can be changed, and thereby superseded, through the issuance of an air construction permit, federally enforceable state air operation permit, federally enforceable air general permit, or Title V air operation permit; provided, however, that:
 - a. Any change that would constitute an administrative correction may be made pursuant to Rule 62-210.360, F.A.C.;
 b. Any change that would constitute a modification, as defined at Rule 62-210.200, F.A.C., shall be accomplished only through the issuance of an air construction permit; and
 - c. Any change in a permit limitation or requirement that originates from a permit issued pursuant to 40 CFR 52.21, Rule 62-204.800(11)(d)2., F.A.C., Rule 62-212.400, F.A.C., Rule 62-212.500, F.A.C., or any former codification of Rule 62-212.400 or Rule 62-212.500, F.A.C., shall be accomplished only through the issuance of a new or revised air construction permit under Rule 62-204.800(11)(d)2., Rule 62-212.400 or Rule 62-212.500, F.A.C., as appropriate.
 - 2. The force and effect of any change in a permit limitation or requirement made in accordance with the provisions of Rule 62-210.300(1)(b)1., F.A.C., shall be the same as if such change were made to the original air construction permit.
 - 3. Nothing in Rule 62-210.300(1)(b), F.A.C., shall be construed as to allow operation of a facility or emissions unit without a valid air operation permit.
- (2) <u>Air Operation Permits</u>. Upon expiration of the air operation permit for any existing facility or emissions unit, subsequent to construction or modification, or subsequent to the creation of or change to a bubble, and demonstration of compliance with the conditions of the construction permit for any new or modified facility or emissions unit, any air emissions bubble, or as otherwise provided in Chapter 62-210, F.A.C., or Chapter 62-213, F.A.C., the owner or operator of such facility or emissions unit shall obtain a

renewal air operation permit, an initial air operation permit or air general permit, or an administrative correction or revision of an existing air operation permit, whichever is appropriate, in accordance with all applicable provisions of Chapter 62-210, F.A.C., Chapter 62-213, F.A.C., and Chapter 62-4, F.A.C.

- (a) Minimum Requirements for All Air Operation Permits. At a minimum, a permit issued pursuant to this subsection shall:
 - 1. Specify the manner, nature, volume and frequency of the emissions permitted, and the applicable emission limiting standards or performance standards, if any;
 - 2. Require proper operation and maintenance of any pollution control equipment by qualified personnel, where applicable in accordance with the provisions of any operation and maintenance plan required by the air pollution rules of the Department.
 - 3. Contain an effective date stated in the permit which shall not be earlier than the date final action is taken on the application and be issued for a period, beginning on the effective date, as provided below.
 - a. The operation permit for an emissions unit which is in compliance with all applicable rules and in operational condition, and which the owner or operator intends to continue operating, shall be issued or renewed for a five-year period, except that, for Title V sources subject to Rule 62-213.420(1)(a)1., F.A.C., operation permits shall be extended until 60 days after the due date for submittal of the facility's Title V permit application as specified in Rule 62-213.420(1)(a)1., F.A.C.
 - b. Except as provided in Rule 62-210.300(2)(a)3.d., F.A.C., the operation permit for an emissions unit which has been shut down for six months or more prior to the expiration date of the current operation permit, shall be renewed for a period not to exceed five years from the date of shutdown, even if the emissions unit is not maintained in operational condition, provided:
 - (i) the owner or operator of the emissions unit demonstrates to the Department that the emissions unit may need to be reactivated and used, or that it is the owner's or operator's intent to apply to the Department for a permit to construct a new emissions unit at the facility before the end of the extension period; and
 - (ii) the owner or operator of the emissions unit agrees to and is legally prohibited from providing the allowable emission permitted by the renewed permit as an emissions offset to any other person under Rule 62-212.500, F.A.C.; and
 - (iii) the emissions unit was operating in compliance with all applicable rules as of the time the source was shut down.
 - c. Except as provided in Rule 62-210.300(2)(a)3.d., F.A.C., the operation permit for an emissions unit which has been shut down for five years or more prior to the expiration date of the current operation permit shall be renewed for a maximum period not to exceed ten years from the date of shutdown, even if the emissions unit is not maintained in operational condition, provided the conditions given in Rule 62-210.300(2)(a)3.b., F.A.C., are met and the owner or operator demonstrates to the Department that failure to renew the permit would constitute a hardship, which may include economic hardship.
 - d. The operation permit for an electric utility generating unit on cold standby or long-term reserve shutdown shall be renewed for a five-year period, and additional five-year periods, even if the unit is not maintained in operational condition, provided the conditions given in Rules 62-210.300(2)(a)3.b.(i) through (iii), F.A.C., are met.
 - 4. In the case of an emissions unit permitted pursuant to Rules 62-210.300(2)(a)3.b., c., and d., F.A.C., include reasonable notification and compliance testing requirements for reactivation of such emissions unit and provide that the owner or operator demonstrate to the Department prior to reactivation that such reactivation would not constitute reconstruction pursuant to Rule 62-204.800(8), F.A.C.

[Rules 62-210.300(1) & (2). F.A.C.]

- 19. Not federally enforceable. Notification of Startup. The owners or operator of any emissions unit or facility which has a valid air operation permit which has been shut down more than one year, shall notify the Department in writing of the intent to start up such emissions unit or facility, a minimum of 60 days prior to the intended startup date.
 - (a) The notification shall include information as to the startup date, anticipated emission rates or pollutants released, changes to processes or control devices which will result in changes to emission rates, and any other conditions which may differ from the valid outstanding operation permit.
 - (b) If, due to an emergency, a startup date is not known 60 days prior thereto, the owner shall notify the Department as soon as possible after the date of such startup is ascertained.

[Rule 62-210.300(5), F.A.C.]

20. Emissions Unit Reclassification.

- (a) Any emissions unit whose operation permit has been revoked as provided for in Chapter 62-4, F.A.C., shall be deemed permanently shut down for purposes of Rule 62-212.500, F.A.C. Any emissions unit whose permit to operate has expired without timely renewal or transfer may be deemed permanently shut down, provided, however, that no such emissions unit shall be deemed permanently shut down if, within 20 days after receipt of written notice from the Department, the emissions unit owner or operator demonstrates that the permit expiration resulted from inadvertent failure to comply with the requirements of Rule 62-4.090, F.A.C., and that the owner or operator intends to continue the emissions unit in operation, and either submits an application for an air operation permit or complies with permit transfer requirements, if applicable.
- (b) If the owner or operator of an emissions unit which is so permanently shut down, applies to the Department for a permit to reactivate or operate such emissions unit, the emissions unit will be reviewed and permitted as a new emissions unit. [Rule 62-210.300(6), F.A.C.]

21. Transfer of Air Permits.

- (a) An air permit is transferable only after submission of an Application for Transfer of Air Permit (DEP Form 62-210.900(7)) and Department approval in accordance with Rule 62-4.120, F.A.C. For Title V permit transfers only, a complete application for transfer of air permit shall include the requirements of 40 CFR 70.7(d)(1)(iv), adopted and incorporated by reference at Rule 62-204.800, F.A.C. Within 30 days after approval of the transfer of permit, the Department shall update the permit by an administrative permit correction pursuant to Rule 62-210.360, F.A.C.
- (b) For an air general permit, the provision of Rules 62-210.300(7)(a) and 62-4.120, F.A.C., do not apply. Thirty (30) days before using an air general permit, the new owner must submit an air general permit notification to the Department in accordance with Rule 62-210.300(4), F.A.C., or Rule 62-213.300(2)(b), F.A.C. [Rule 62-210.300(7), F.A.C.]

22. Public Notice and Comment.

- (1) Public Notice of Proposed Agency Action.
 - (a) A notice of proposed agency action on permit application, where the proposed agency action is to issue the permit, shall be published by any applicant for:
 - 1. An air construction permit;
 - 2. An air operation permit, permit renewal or permit revision subject to Rule 62-210.300(2)(b), F.A.C., (i.e., a FESOP), except as provided in Rule 62-210.300(2)(b)l.b., F.A.C.; or
 - 3. An air operation permit, permit renewal, or permit revision subject to Chapter 62-213, F.A.C., except Title V air general permits or those permit revisions meeting the requirements of Rule 62-213.412(1), F.A.C.
 - (b) The notice required by Rule 62-210.350(1)(a), F.A.C., shall be published in accordance with all otherwise applicable provisions of Rule 62-110.106, F.A.C. A public notice under Rule 62-210.350(1)(a)1., F.A.C., for an air construction permit may be combined with any required public notice under Rule 62-210.350(1)(a)2. or 3., F.A.C., for air operation permits. If such notices are combined, the public notice must comply with the requirements for both notices.
 - (c) Except as otherwise provided at Rules 62-210.350(2), (5), and (6), F.A.C., each notice of intent to issue an air construction permit shall provide a 14-day period for submittal of public comments.
- (2) Additional Public Notice Requirements for Emissions Units Subject to Prevention of Significant Deterioration or Nonattainment Area Preconstruction Review.
 - (a) Before taking final agency action on a construction permit application for any proposed new or modified facility or emissions unit subject to the preconstruction review requirements of Rule 62-212.400 or 62-212.500, F.A.C., the Department shall comply with all applicable provisions of Rule 62-110.106, F.A.C., and provide an opportunity for public comment which shall include as a minimum the following:
 - 1. A complete file available for public inspection in at least one location in the district affected which includes the information submitted by the owner or operator, exclusive of confidential records under Section 403.111, F.S., and the Department's analysis of the effect of the proposed construction or modification on ambient air quality, including the Department's preliminary determination of whether the permit should be approved or disapproved;
 - 2. A 30-day period for submittal of public comments; and
 - 3. A notice, by advertisement in a newspaper of general circulation in the county affected, specifying the nature and location of the proposed facility or emissions unit, whether BACT or LAER has been determined, the degree of PSD increment consumption expected, if applicable, and the location of the information specified in paragraph 1. above; and notifying the public of the opportunity for submitting comments and requesting a public hearing.

- (b) The notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall be prepared by the Department and published by the applicant in accordance with all applicable provisions of Rule 62-110.106, F.A.C., except that the applicant shall cause the notice to be published no later than thirty (30) days prior to final agency action.
- (c) A copy of the notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall also be sent by the Department to the Regional Office of the U. S. Environmental Protection Agency and to all other state and local officials or agencies having cognizance over the location of such new or modified facility or emissions unit, including local air pollution control agencies, chief executives of city or county government, regional land use planning agencies, and any other state, Federal Land Manager, or Indian Governing Body whose lands may be affected by emissions from the new or modified facility or emissions unit.
- (d) A copy of the notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall be displayed in the appropriate district, branch and local program offices.
- (e) An opportunity for public hearing shall be provided in accordance with Chapter 120, F.S., and Rule 62-110.106, F.A.C.
- (f) Any public comments received shall be made available for public inspection in the location where the information specified in Rule 62-210.350(2)(a)1., F.A.C., is available and shall be considered by the Department in making a final determination to approve or deny the permit.
- (g) The final determination shall be made available for public inspection at the same location where the information specified in Rule 62-210.350(2)(a)1., F.A.C., was made available.
- (h) For a proposed new or modified emissions unit which would be located within 100 kilometers of any Federal Class I area or whose emissions may affect any Federal Class I area, and which would be subject to the preconstruction review requirements of Rule 62-212.400 or 62-212.500, F.A.C.:
 - 1. The Department shall mail or transmit to the Administrator a copy of the initial application for an air construction permit and notice of every action related to the consideration of the permit application.
 - 2. The Department shall mail or transmit to the Federal Land Manager of each affected Class I area a copy of any written notice of intent to apply for an air construction permit; the initial application for an air construction permit, including all required analyses and demonstrations; any subsequently submitted information related to the application; the preliminary determination and notice of proposed agency action on the permit application; and any petition for an administrative hearing regarding the application or the Department's proposed action. Each such document shall be mailed or transmitted to the Federal Land Manager within fourteen (14) days after its receipt by the Department.
- (3) Additional Public Notice Requirements for Facilities Subject to Operation Permits for Title V Sources.
 - (a) Before taking final agency action to issue a new, renewed, or revised air operation permit subject to Chapter 62-213. F.A.C., the Department shall comply with all applicable provisions of Rule 62-110.106, F.A.C., and provide an opportunity for public comment which shall include as a minimum the following:
 - 1. A complete file available for public inspection in at least one location in the district affected which includes the information submitted by the owner or operator, exclusive of confidential records under Section 403.111, F.S.; and
 - 2. A 30-day period for submittal of public comments.
 - (b) The notice provided for in Rule 62-210.350(3)(a), F.A.C., shall be prepared by the Department and published by the applicant in accordance with all applicable provisions of Rule 62-110.106. F.A.C., except that the applicant shall cause the notice to be published no later than thirty (30) days prior to final agency action. If written comments received during the 30-day comment period on a draft permit result in the Department's issuance of a revised draft permit in accordance with Rule 62-213.430(1), F.A.C., the Department shall require the applicant to publish another public notice in accordance with Rule 62-210.350(1)(a). F.A.C.
 - (c) The notice shall identify:
 - 1. The facility,
 - 2. The name and address of the office at which processing of the permit occurs;
 - 3. The activity or activities involved in the permit action;
 - 4. The emissions change involved in any permit revision;
 - 5. The name, address, and telephone number of a Department representative from whom interested persons may obtain additional information, including copies of the permit draft, the application, and all relevant supporting materials, including any permit application, compliance plan, permit, monitoring report, and compliance statement required pursuant to Chapter 62-213, F.A.C. (except for information entitled to confidential treatment pursuant to Section 403.111, F.S.), and all other materials available to the Department that are relevant to the permit decision;
 - 6. A brief description of the comment procedures required by Rule 62-210.350(3), F.A.C.;
 - The time and place of any hearing that may be held, including a statement of procedure to request a hearing (unless a hearing has already been scheduled); and

8. The procedures by which persons may petition the Administrator to object to the issuance of the proposed permit after expiration of the Administrator's 45-day review period.

[Rules 62-210.350(1) thru (3), F.A.C.]

- 23. Administrative Permit Corrections.
- (1) A facility owner shall notify the Department by letter of minor corrections to information contained in a permit. Such notifications shall include:
 - (a) Typographical errors noted in the permit;
 - (b) Name, address or phone number change from that in the permit;
 - (c) A change requiring more frequent monitoring or reporting by the permittee;
 - (d) A change in ownership or operational control of a facility, subject to the following provisions:
 - 1. The Department determines that no other change in the permit is necessary;
 - 2. The permittee and proposed new permittee have submitted an Application for Transfer of Air Permit, and the Department has approved the transfer pursuant to Rule 62-210.300(7), F.A.C.; and
 - 3. The new permittee has notified the Department of the effective date of sale or legal transfer.
 - (c) Changes listed at 40 CFR 72.83(a)(1), (2), (6), (9) and (10), adopted and incorporated by reference at Rule 62-204.800, F.A.C., and changes made pursuant to Rules 62-214.340(1) and (2), F.A.C., to Title V sources subject to emissions limitations or reductions pursuant to 42 USC ss. 7651-76510;
 - (f) Changes listed at 40 CFR 72.83(a)(11) and (12), adopted and incorporated by reference at Rule 62-204.800, F.A.C., to Title V sources subject to emissions limitations or reductions pursuant to 42 USC ss. 7651-76510, provided the notification is accompanied by a copy of any EPA determination concerning the similarity of the change to those listed at Rule 62-210.360(1)(e), F.A.C.; and
 - (g) Any other similar minor administrative change at the source
- (2) Upon receipt of any such notification, the Department shall within 60 days correct the permit and provide a corrected copy to the owner.
- (3) After first notifying the owner, the Department shall correct any permit in which it discovers errors of the types listed at Rules 62-
- 210,360(1)(a) and (b), F.A.C., and provide a corrected copy to the owner.
- (4) For Title V source permits, other than general permits, a copy of the corrected permit shall be provided to EPA and any approved local air program in the county where the facility or any part of the facility is located.

[Rule 62-210.360, F.A.C.]

- 24. Emissions Computation and Reportsing.
- (1) Applicability. This rule sets forth required methodologies to be used by the owner or operator of a facility for computing actual emissions, baseline actual emissions, and net emissions increase, as defined at Rule 62-210.200, F.A.C., and for computing emissions for purposes of the reporting requirements of subsection 62-210.370(3) and paragraph 62-212.300(1)(e). F.A.C., or of any permit condition that requires emissions be computed in accordance with this rule. This rule is not intended to establish methodologies for determining compliance with the emission limitations of any air permit.
- (2) Computation of Emissions. For any of the purposes set forth in subsection 62-210.370(1), F.A.C., the owner or operator of a facility shall compute emissions in accordance with the requirements set forth in this subsection.
 - (a) Basic Approach. The owner or operator shall employ, on a pollutant-specific basis, the most accurate of the approaches set forth below to compute the emissions of a pollutant from an emissions unit; provided, however, that nothing in this rule shall be construed to require installation and operation of any continuous emissions monitoring system (CEMS), continuous parameter monitoring system (CPMS), or predictive emissions monitoring system (PEMS) not otherwise required by rule or permit, nor shall anything in this rule be construed to require performance of any stack testing not otherwise required by rule or permit.
 - 1. If the emissions unit is equipped with a CEMS meeting the requirements of paragraph 62-210.370(2)(b), F.A.C., the owner or operator shall use such CEMS to compute the emissions of the pollutant, unless the owner or operator demonstrates to the department that an alternative approach is more accurate because the CEMS represents still-emerging technology.
 - 2. If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C, but emissions of the pollutant can be computed pursuant to the mass balance methodology of paragraph 62-210.370(2)(c). F.A.C., the owner or operator shall use such methodology, unless the owner or operator demonstrates to the department that an alternative approach is more accurate.
 - 3. If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C., and emissions cannot be computed pursuant to the mass balance methodology, the owner or operator shall use an emission factor meeting the requirements of paragraph 62-210.370(2)(d), F.A.C., unless the owner or operator demonstrates to the department that an alternative approach is more accurate.
 - (b) Continuous Emissions Monitoring System (CEMS).
 - 1. An owner or operator may use a CEMS to compute emissions of a pollutant for purposes of this rule provided:
 - a. The CEMS complies with the applicable certification and quality assurance requirements of 40 CFR Part 60, Appendices B and F, or, for an acid rain unit, the certification and quality assurance requirements of 40 CFR Part 75, all adopted by reference at Rule 62-204.800, F.A.C.; or
 - b. The owner or operator demonstrates that the CEMS otherwise represents the most accurate means of computing emissions for purposes of this rule.
 - 2. Stack gas volumetric flow rates used with the CEMS to compute emissions shall be obtained by the most accurate of the following methods as demonstrated by the owner or operator:
 - a. A calibrated flowmeter that records data on a continuous basis, if available; or

- b. The average flow rate of all valid stack tests conducted during a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
- 3. The owner or operator may use CEMS data in combination with an appropriate f-factor, heat input data, and any other necessary parameters to compute emissions if such method is demonstrated by the owner or operator to be more accurate than using a stack gas volumetric flow rate as set forth at subparagraph 62-210.370(2)(b)2., F.A.C., above.
- (c) Mass Balance Calculations.
 - 1. An owner or operator may use mass balance calculations to compute emissions of a pollutant for purposes of this rule provided the owner or operator:
 - a. Demonstrates a means of validating the content of the pollutant that is contained in or created by all materials or fuels used in or at the emissions unit; and
- b. Assumes that the emissions unit emits all of the pollutant that is contained in or created by any material or fuel used in or at the emissions unit if it cannot otherwise be accounted for in the process or in the capture and destruction of the pollutant by the unit's air pollution control equipment.
 - 2. Where the vendor of a raw material or fuel which is used in or at the emissions unit publishes a range of pollutant content from such material or fuel, the owner or operator shall use the highest value of the range to compute the emissions, unless the owner or operator demonstrates using site-specific data that another content within the range is more accurate.
 - 3. In the case of an emissions unit using coatings or solvents, the owner or operator shall document, through purchase receipts, records and sales receipts, the beginning and ending VOC inventories, the amount of VOC purchased during the computational period, and the amount of VOC disposed of in the liquid phase during such period.
 - (d) Emission Factors.
 - 1. An owner or operator may use an emission factor to compute emissions of a pollutant for purposes of this rule provided the emission factor is based on site-specific data such as stack test data, where available, unless the owner or operator demonstrates to the department that an alternative emission factor is more accurate. An owner or operator using site-specific data to derive an emission factor, or set of factors, shall meet the following requirements.
 - a. If stack test data are used, the emission factor shall be based on the average emissions per unit of input, output, or gas volume, whichever is appropriate, of all valid stack tests conducted during at least a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
 - b. Multiple emission factors shall be used as necessary to account for variations in emission rate associated with variations in the emissions unit's operating rate or operating conditions during the period over which emissions are computed
 - c. The owner or operator shall compute emissions by multiplying the appropriate emission factor by the appropriate input, output or gas volume value for the period over which the emissions are computed. The owner or operator shall not compute emissions by converting an emission factor to pounds per hour and then multiplying by hours of operation, unless the owner or operator demonstrates that such computation is the most accurate method available.
 - 2. If site-specific data are not available to derive an emission factor, the owner or operator may use a published emission factor directly applicable to the process for which emissions are computed. If no directly-applicable emission factor is available, the owner or operator may use a factor based on a similar, but different, process.
 - (e) Accounting for Emissions During Periods of Missing Data from CEMS, PEMS, or CPMS. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of missing data from CEMS, PEMS, or CPMS using other site-specific data to generate a reasonable estimate of such emissions.
 - (f) Accounting for Emissions During Periods of Startup and Shutdown. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of startup and shutdown of the emissions unit.
 - (g) Fugitive Emissions. In computing the emissions of a pollutant from a facility or emissions unit, the owner or operator shall account for the fugitive emissions of the pollutant, to the extent quantifiable, associated with such facility or emissions unit.
 - (h) Recordkeeping. The owner or operator shall retain a copy of all records used to compute emissions pursuant to this rule for a period of five years from the date on which such emissions information is submitted to the department for any regulatory purpose.
- (3) Annual Operating Report for Air Pollutant Emitting Facility.
 - (a) The Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) shall be completed each year.
 - (c) The annual operating report shall be submitted to the appropriate Department of Environmental Protection (DEP) division, district or DEP-approved local air pollution control program office by March 1 of the following year.
 - (d) Beginning with 2007 annual emissions, emissions shall be computed in accordance with the provisions of Rule 62-
 - 210.370(2), F.A.C., for purposes of the annual operating report.

[Rules 62-210.370(1), (2) and (3)(a), (c) & (d), F.A.C.]

- 25. <u>Circumvention</u>. No person shall circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly. [Rule 62-210.650, F.A.C.]
- 26. Forms and Instructions. The forms used by the Department in the stationary source control program are adopted and incorporated by reference in this section. The forms are listed by rule number, which is also the form number, with the subject, title and effective date. Copies of forms may be obtained by writing to the Department of Environmental Protection, Division of Air Resource Management, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, or by accessing the Division's website at www.dep.state.fl.us/air. The requirement of Rule 62-4.050(2), F.A.C., to file application forms in quadruplicate is waived if an air permit application is submitted using the Department's electronic application form.
- (1) Application for Air Permit Long Form, Form and Instructions (Effective 02-02-2006).
 - (a) Acid Rain Part, Form and Instructions (Effective 06-16-2003).
 - 1. Repowering Extension Plan, Form and Instructions (Effective 07/01/1995).
 - 2. New Unit Exemption, Form and Instructions (Effective 04/16/2001).
 - 3. Retired Unit Exemption, Form and Instructions (Effective 04/16/2001)
 - 4. Phase II NOx Compliance Plan, Form and Instructions (Effective 01/06/1998).
 - 5. Phase II NOx Averaging Plan, Form (Effective 01/06/1998).
 - (b) Reserved.
- (5) Annual Operating Report for Air Pollutant Emitting Facility, Form and Instructions (Effective 02/11/1999).
- (7) Application for Transfer of Air Permit Title V Source, (Effective 04/16/2001).

[Rule 62-210.900, F.A.C.]

Chapter 62-213, F.A.C.

27. Responsible Official.

- (1) Each Title V source must identify a responsible official on each application for Title V permit, permit revision, and permit renewal. For sources with only one responsible official, this is how the Title V source designates the responsible official.
- (2) Each Title V source may designate more than one responsible official, provided a primary responsible official is designated as responsible for the certifications of all other designated responsible officials. Any action taken by the primary responsible official shall take precedence over any action taken by any other designated responsible official.
- (3) Any facility initially designating more than one responsible official or changing the list of responsible officials must submit a Responsible Official Notification Form (DEP Form No. 62-213.900(8)) designating all responsible officials for a Title V source, stating which responsible official is the primary responsible official, and providing an effective date for any changes to the list of responsible officials. Each individual listed on the Responsible Official Notification Form must meet the definition of responsible official given at Rule 62-210.200, F.A.C.
- (4) A Title V source with only one responsible official shall submit DEP Form No. 62-213.900(8) for a change in responsible official.
- (5) No person shall take any action as a responsible official at a Title V source unless designated a responsible official as required by this rule, except that the existing responsible official of any Title V source which has a change in responsible official during the term of the permit and before the effective date of this rule may continue to act as a responsible official until the first submittal of DEP Form No. 62-213.900(8) or the next application for Title V permit, permit revision or permit renewal, whichever comes first. [Rules 62-213.202(1) thru (5), F.A.C.]
- 28. Annual Emissions Fee. Each Title V source permitted to operate in Florida must pay between January 15 and March 1 of each year, upon written notice from the Department, an annual emissions fee in an amount determined as set forth in Rule 62-213.205(1), F A C
- (1)(g) If the Department has not received the fee by February 15 of the year following the calendar year for which the fee is calculated, the Department will send the primary responsible official of the Title V source a written warning of the consequences for failing to pay the fee by March 1. If the fee is not postmarked by March 1 of the year due, the Department shall impose, in addition to the fee, a penalty of 50 percent of the amount of the fee unpaid plus interest on such amount computed in accordance with Section 220.807, F.S. If the Department determines that a submitted fee was inaccurately calculated, the Department shall either refund to the permittee any amount overpaid or notify the permittee of any amount underpaid. The Department shall not impose a penalty or interest on any amount underpaid, provided that the permittee has timely remitted payment of at least 90 percent of the amount determined to be due and remits full payment within 60 days after receipt of notice of the amount underpaid. The Department shall waive the collection of underpayment and shall not refund overpayment of the fee, if the amount is less than 1 percent of the fee due, up to \$50.00. The Department shall make every effort to provide a timely assessment of the adequacy of the submitted fee. Failure to pay timely any required annual emissions fee, penalty, or interest constitutes grounds for permit revocation pursuant to Rule 62-4.100, F.A.C.

- (1)(i) Any documentation of actual hours of operation, actual material or heat input, actual production amount, or actual emissions used to calculate the annual emissions fee shall be retained by the owner for a minimum of five (5) years and shall be made available to the Department upon request.
- (1)(j) A completed DEP Form 62-213.900(1), "Major Air Pollution Source Annual Emissions Fee Form", must be submitted by a responsible official with the annual emissions fee.

[Rules 62-213.205. (1)(g), (1)(i) & (1)(j), F.A.C.]

- 29. Reserved.
- 30. Reserved.
- 31. <u>Air Operation Permit Fees.</u> No permit application processing fee, renewal fee, modification fee or amendment fee is required for an operation permit for a Title V source.

[Rule 62-213.205(4), F.A.C.]

- 32. <u>Permits and Permit Revisions Required</u>. All Title V sources are subject to the permit requirements of Chapter 62-213, F.A.C., except those Title V sources permittable pursuant to Rule 62-213,300, F.A.C., Title V Air General Permits.
- (1) No Title V source may operate except in compliance with Chapter 62-213, F.A.C.
- (2) Except as provided in Rule 62-213.410, F.A.C., no source with a permit issued under the provisions of Chapter 62-213, F.A.C., shall make any changes in its operation without first applying for and receiving a permit revision if the change meets any of the following:
 - (a) Constitutes a modification;
 - (b) Violates any applicable requirement;
 - (c) Exceeds the allowable emissions of any air pollutant from any unit within the source;
 - (d) Contravenes any permit term or condition for monitoring, testing, recordkeeping, reporting or of a compliance certification requirement;
 - (e) Requires a case-by-case determination of an emission limitation or other standard or a source specific determination of ambient impacts, or a visibility or increment analysis under the provisions of Chapter 62-212 or 62-296, F.A.C.;
 - (f) Violates a permit term or condition which the source has assumed for which there is no corresponding underlying applicable requirement to which the source would otherwise be subject;
 - (g) Results in the trading of emissions among units within a source except as specifically authorized pursuant to Rule 62-213.415, F.A.C.:
 - (h) Results in the change of location of any relocatable facility identified as a Title V source pursuant to paragraph (a)-(c). (g) or (h) of the definition of "major source of air pollution" at Rule 62-210.200, F.A.C.;
 - (i) Constitutes a change at an Acid Rain Source under the provisions of 40 CFR 72.81(a)(1), (2), or (3), (b)(1) or (b)(3), hereby incorporated by reference:
 - (j) Constitutes a change in a repowering plan, nitrogen oxides averaging plan, or nitrogen oxides compliance deadline extension at an Acid Rain Source;

[Rules 62-213.400(1) & (2), F.A.C.]

- 33. <u>Changes Without Permit Revision</u>. Title V sources having a valid permit issued pursuant to Chapter 62-213, F.A.C., may make the following changes without permit revision, provided that sources shall maintain source logs or records to verify periods of operation:
- (1) Permitted sources may change among those alternative methods of operation;
- (2) A permitted source may implement operating changes, as defined in Rule 62-210.200, F.A.C., after the source submits any forms required by any applicable requirement and provides the Department and EPA with at least 7 days written notice prior to implementation. The source and the Department shall attach each notice to the relevant permit;
 - (a) The written notice shall include the date on which the change will occur, and a description of the change within the permitted source, the pollutants emitted and any change in emissions, and any term or condition becoming applicable or no longer applicable as a result of the change;
 - (b) The permit shield described in Rule 62-213.460, F.A.C., shall not apply to such changes;
- (3) Permitted sources may implement changes involving modes of operation only in accordance with Rule 62-213.415, F.A.C. [Rule 62-213.410, F.A.C.]

34. Immediate Implementation Pending Revision Process.

- (1) Those permitted Title V sources making any change that constitutes a modification pursuant to the definition of modification at Rule 62-210.200, F.A.C., but which would not constitute a modification pursuant to 42 USC 7412(a) or to 40 CFR 52.01, 60.2, or 61.15, adopted and incorporated by reference at Rule 62-204.800, F.A.C., may implement such change prior to final issuance of a permit revision, provided the change:
 - (a) Does not violate any applicable requirement:
 - (b) Does not contravene any permit term or condition for monitoring, testing, recordkeeping or reporting, or any compliance certification requirement;
 - (c) Does not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis under the provisions of Chapter 62-212 or 62-296, F.A.C.;
 - (d) Does not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and which the source has assumed to avoid an applicable requirement to which the source would otherwise be subject including any federally enforceable emissions cap or federally enforceable alternative emissions limit.
- (2) A Title V source may immediately implement such changes after they have been incorporated into the terms and conditions of a new or revised construction permit issued pursuant to Chapter 62-212, F.A.C., and after the source provides to EPA, the Department, each affected state and any approved local air program having geographic jurisdiction over the source, a copy of the source's application for operation permit revision. The Title V source may conform its application for construction permit to include all information required by Rule 62-213.420, F.A.C., in licu of submitting separate application forms.
- (3) The Department shall process the application for operation permit revision in accordance with the provisions of Chapter 62-213, F.A.C., except that the Department shall issue a draft permit revision or a determination to deny the revision within 60 days of receipt of a complete application for operation permit revision or, if the Title V source has submitted a construction permit application conforming to the requirements of Rule 62-213.420, F.A.C., the Department shall issue a draft permit or a determination to deny the revision at the same time the Department issues its determination on issuance or denial of the construction permit application. The Department shall not take final action on the operation permit revision application until all the requirements of Rules 62-213.430(1)(a), (c), (d), and (e), F.A.C., have been complied with.
- (4) Pending final action on the operation permit revision application, the source shall implement the changes in accordance with the terms and conditions of the source's new or revised construction permit. If any terms and conditions of the new or revised construction permit have not been complied with prior to the issuance of the draft operation permit revision, the operation permit shall include a compliance plan in accordance with the provisions of Rule 62-213.440(2), F.A.C.
- (5) The permit shield described in Rule 62-213.460, F.A.C., shall not apply to such changes until after the Department takes final action to issue the operation permit revision.
- (6) If the Department denies the source's application for operation permit revision, the source shall cease implementation of the proposed changes.

[Rule 62-213.412, F.A.C.]

Permit Applications.

- (1) Duty to Apply. For each Title V source, the owner or operator shall submit a timely and complete permit application in compliance with the requirements of Rules 62-213.420, F.A.C., and Rules 62-4.050(1) through (3), F.A.C.
 - (a) Timely Application.
 - 3. For purposes of permit renewal, a timely application is one that is submitted in accordance with Rule 62-4.090, F.A.C.
 - (b) Complete Application.
 - 1. Any applicant for a Title V permit, permit revision or permit renewal must submit an application on DEP Form No. 62-210.900(1), which must include all the information specified by Rule 62-213.420(3), F.A.C., except that an application for permit revision must contain only that information related to the proposed change(s) from the currently effective Title V permit and any other requirements that become applicable at the time of application. The applicant shall include information concerning fugitive emissions and stack emissions in the application. Each application for permit, permit revision or permit renewal shall be certified by a responsible official in accordance with Rule 62-213.420(4), F.A.C.
 - 2. For those applicants submitting initial permit applications pursuant to Rule 62-213.420(1)(a)1.. F.A.C., a complete application shall be an application that substantially addresses all the information required by the application form number 62-210.900(1), and such applications shall be deemed complete within sixty days of receipt of a signed and certified application unless the Department notifies the applicant of incompleteness within that time. For all other applicants, the applications shall be deemed complete sixty days after receipt, unless the Department, within sixty days after receipt of a signed application for permit, permit revision or permit renewal, requests additional documentation or information needed to process the application. An applicant making timely and complete application for permit, or timely application for

permit renewal as described by Rule 62-4.090(1), F.A.C., shall continue to operate the source under the authority and provisions of any existing valid permit or Florida Electrical Power Plant Siting Certification, and in accordance with applicable requirements of the Acid Rain Program, until the conclusion of proceedings associated with its permit application or until the new permit becomes effective, whichever is later, provided the applicant complies with all the provisions of Rules 62-213.420(1)(b)3. and 4., F.A.C. Failure of the Department to request additional information within sixty days of receipt of a properly signed application shall not impair the Department's ability to request additional information pursuant to Rules 62-213.420(1)(b)3. and 4., F.A.C.

- 3. For those permit applications submitted pursuant to the provisions of Rule 62-213.420(1)(a)1., F.A.C., the Department shall notify the applicant if the Department becomes aware at any time during processing of the application that the application contains incorrect or incomplete information. The applicant shall submit the corrected or supplementary information to the Department within ninety days unless the applicant has requested and been granted additional time to submit the information. Failure of an applicant to submit corrected or supplementary information requested by the Department within ninety days or such additional time as requested and granted shall render the application incomplete.
- 4. For all applications other than those addressed at Rule 62-213.420(1)(b)3., F.A.C., should the Department become aware, during processing of any application that the application contains incorrect information, or should the Department become aware, as a result of comment from an affected State, an approved local air program, EPA, or the public that additional information is needed to evaluate the application, the Department shall notify the applicant within 30 days. When an applicant becomes aware that an application contains incorrect or incomplete information, the applicant shall submit the corrected or supplementary information to the Department. If the Department notifies an applicant that corrected or supplementary information is necessary to process the permit, and requests a response, the applicant shall provide the information to the Department within ninety days of the Department request unless the applicant has requested and been granted additional time to submit the information or, the applicant shall, within ninety days, submit a written request that the Department process the application without the information. Failure of an applicant to submit corrected or supplementary information requested by the Department within ninety days, or such additional time as requested and granted, or to demand in writing within ninety days that the application be processed without the information shall render the application incomplete. Nothing in this section shall limit any other remedies available to the Department.

[Rules 62-213.420(1)(a)3. and 62-213.420(1)(b)1., 2., 3. & 4., F.A.C.]

- 36. <u>Confidential Information</u>. Whenever an applicant submits information under a claim of confidentiality pursuant to Section 403.111, F.S., the applicant shall also submit a copy of all such information and claim directly to EPA. (also, see Condition No. 50.) [Rule 62-213.420(2), F.A.C.]
- 37. <u>Standard Application Form and Required Information</u>. Applications shall be submitted under Chapter 62-213, F.A.C., on forms provided by the Department and adopted by reference in Rule 62-210.900(1), F.A.C. The information as described in Rule 62-210.900(1), F.A.C., shall be included for the Title V source and each emissions unit. An application must include information sufficient to determine all applicable requirements for the Title V source and each emissions unit and to evaluate a fee amount pursuant to Rule 62-213.205. F.A.C.

 [Rule 62-213.420(3), F.A.C.]
- 38. a. <u>Permit Renewal and Expiration</u>. Permits being renewed are subject to the same requirements that apply to permit issuance at the time of application for renewal. Permit renewal applications shall contain that information identified in Rules 62-210.900(1) and 62-213.420(3), F.A.C. Unless a Title V source submits a timely application for permit renewal in accordance with the requirements of Rule 62-4.090(1), F.A.C., the existing permit shall expire and the source's right to operate shall terminate. No Title V permit will be issued for a new term except through the renewal process.
- b. <u>Permit Revision Procedures.</u> Permit revisions shall meet all requirements of Chapter 62-213, F.A.C., including those for content of applications, public participation, review by approved local programs and affected states, and review by EPA, as they apply to permit issuance and permit renewal, except that permit revisions for those activities implemented pursuant to Rule 62-213.412, F.A.C., need not meet the requirements of Rule 62-213.430(1)(b), F.A.C. The Department shall require permit revision in accordance with the provisions of Rule 62-4.080, F.A.C., and 40 CFR 70.7(f), whenever any source becomes subject to any condition listed at 40

CFR 70.7(f)(1), hereby adopted and incorporated by reference. The below requirements from 40 CFR 70.7(f) are adopted and incorporated by reference in Rule 62-213.430(4), F.A.C.:

- o 40 CFR 70.7(f): Reopening for Cause. (also, see Condition No. 4.)
- (1) This section contains provisions from 40 CFR 70.7(f) that specify the conditions under which a Title V permit shall be reopened prior to the expiration of the permit. A Title V permit shall be reopened and revised under any of the following circumstances:
 - (i) Additional applicable requirements under the Act become applicable to a major Part 70 source with a remaining permit term of 3 or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii).
 - (ii) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approved by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
 - (iii) The permitting authority or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - (iv) The Administrator or the permitting authority determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- (2) Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.
- (3) Reopenings under 40 CFR 70.7(f)(1) shall not be initiated before a notice of such intent is provided to the Part 70 source by the permitting authority at least 30 days in advance of the date that the permit is to be reopened, except that the permitting authority may provide a shorter time period in the case of an emergency.

[Rules 62-213.430(3) & (4), F.A.C.; and, 40 CFR 70.7(f)]

- 39. Insignificant Emissions Units or Pollutant-Emitting Activities.
- (a) All requests for determination of insignificant emissions units or activities made pursuant to Rule 62-213.420(3)(n), F.A.C., shall be processed in conjunction with the permit, permit renewal or permit revision application submitted pursuant to Chapter 62-213. F.A.C. Insignificant emissions units or activities shall be approved by the Department consistent with the provisions of Rule 62-4.040(1)(b), F.A.C. Emissions units or activities which are added to a Title V source after issuance of a permit under Chapter 62-213. F.A.C., shall be incorporated into the permit at its next renewal, provided such emissions units or activities have been exempted from the requirement to obtain an air construction permit and also qualify as insignificant pursuant to Rule 62-213.430(6), F.A.C.
- (b) An emissions unit or activity shall be considered insignificant if all of the following criteria are met:
 - 1. Such unit or activity would be subject to no unit-specific applicable requirement;
 - 2. Such unit or activity, in combination with other units or activities proposed as insignificant, would not cause the facility to exceed any major source threshold(s) as defined in Rule 62-213.420(3)(c)1., F.A.C., unless it is acknowledged in the permit application that such units or activities would cause the facility to exceed such threshold(s);
 - 3. Such unit or activity would not emit or have the potential to emit:
 - a. 500 pounds per year or more of lead and lead compounds expressed as lead;
 - b. 1,000 pounds per year or more of any hazardous air pollutant:
 - c. 2,500 pounds per year or more of total hazardous air pollutants; or
 - d. 5.0 tons per year or more of any other regulated pollutant.

[Rule 62-213.430(6), F.A.C.]

- 40. <u>Permit Duration</u>. Permits for sources subject to the Federal Acid Rain Program shall be issued for terms of five years, provided that the initial Acid Rain Part may be issued for a term less than five years where necessary to coordinate the term of such part with the term of a Title V permit to be issued to the source. Operation permits for Title V sources may not be extended as provided in Rule 62-4.080(3), F.A.C., if such extension will result in a permit term greater than five years. [Rule 62-213.440(1)(a), F.A.C.]
- 41. <u>Monitoring Information</u>. All records of monitoring information shall specify the date, place, and time of sampling or measurement and the operating conditions at the time of sampling or measurement, the date(s) analyses were performed, the company or entity that performed the analyses, the analytical techniques or methods used, and the results of such analyses. [Rule 62-213.440(1)(b)2.a., F.A.C.]

42. <u>Retention of Records.</u> Retention of records of all monitoring data and support information shall be for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

[Rule 62-213.440(1)(b)2.b., F.A.C.]

- 43. Monitoring Reports. The permittee shall submit reports of any required monitoring at least every six (6) months. All instances of deviations from permit requirements must be clearly identified in such reports.

 [Rule 62-213,440(1)(b)3.a., F.A.C.]
- 44. <u>Deviation from Permit Requirements Reports</u>. The permittee shall report in accordance with the requirements of Rules 62-210.700(6) and 62-4.130, F.A.C., deviations from permit requirements, including those attributable to upset conditions as defined in the permit. Reports shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. [Rule 62-213.440(1)(b)3.b., F.A.C.]
- 45. Reports. All reports shall be accompanied by a certification by a responsible official, pursuant to Rule 62-213.420(4), F.A.C. [Rule 62-213.440(1)(b)3.c. F.A.C.]
- 46. If any portion of the final permit is invalidated, the remainder of the permit shall remain in effect. [Rule 62-213.440(1)(d)1., F.A.C.]
- 47. It shall not be a defense for a permittee in an enforcement action that maintaining compliance with any permit condition would necessitate halting of or reduction of the source activity.

 [Rule 62-213.440(1)(d)3., F.A.C.]
- 48. Any Title V source shall comply with all the terms and conditions of the existing permit until the Department has taken final action on any permit renewal or any requested permit revision, except as provided at Rule 62-213.412(2), F.A.C. [Rule 62-213.440(1)(d)4., F.A.C.]
- 49. A situation arising from sudden and unforesceable events beyond the control of the source which causes an exceedance of a technology-based emissions limitation because of unavoidable increases in emissions attributable to the situation and which requires immediate corrective action to restore normal operation, shall be an affirmative defense to an enforcement action in accordance with the provisions and requirements of 40 CFR 70.6(g)(2) and (3), hereby adopted and incorporated by reference. [Rule 62-213.440(1)(d)5., F.A.C.]
- 50. <u>Confidentiality Claims.</u> Any permittee may claim confidentiality of any data or other information by complying with Rule 62-213.420(2), F.A.C. (also, see Condition No. 36.) [Rule 62-213.440(1)(d)6., F.A.C.]
- 51. Statement of Compliance. (a)2. The permittee shall submit a Statement of Compliance with all terms and conditions of the permit that includes all the provisions of 40 CFR 70.6(c)(5)(iii), incorporated by reference at Rule 62-204.800, F.A.C., using DEP Form No. 62-213.900(7). Such statement shall be accompanied by a certification in accordance with Rule 62-213.420(4), F.A.C., for Title V requirements and with Rule 62-214.350, F.A.C., for Acid Rain requirements. Such statements shall be submitted (postmarked) to the Department and EPA:
 - a. Annually, within 60 days after the end of each calendar year during which the Title V permit was effective, or more frequently if specified by Rule 62-213.440(2), F.A.C., or by any other applicable requirement; and
 - b. Within 60 days after submittal of a written agreement for transfer of responsibility as required pursuant to 40 CFR 70.7(d)(1)(iv), adopted and incorporated by reference at Rule 62-204.800, F.A.C., or within 60 days after permanent shutdown of a facility permitted under Chapter 62-213, F.A.C.; provided that, in either such case, the reporting period shall be the portion of the calendar year the permit was effective up to the date of transfer of responsibility or permanent facility shutdown, as applicable.
- 3. In lieu of individually identifying all applicable requirements and specifying times of compliance with, non-compliance with, and deviation from each, the responsible official may use DEP Form No. 62-213.900(7) as such statement of compliance so long as the responsible official identifies all reportable deviations from and all instances of non-compliance with any applicable requirements and includes all information required by the federal regulation relating to each reportable deviation and instance of non-compliance.

 (b) The responsible official may treat compliance with all other applicable requirements as a surrogate for compliance with Rule 62-296.320(2), Objectionable Odor Prohibited.

[Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]

52. Permit Shield. Except as provided in Chapter 62-213, F.A.C., compliance with the terms and conditions of a permit issued pursuant to Chapter 62-213, F.A.C., shall, as of the effective date of the permit, be deemed compliance with any applicable requirements in effect, provided that the source included such applicable requirements in the permit application. Nothing in Rule 62-213.460, F.A.C., or in any permit shall alter or affect the ability of EPA or the Department to deal with an emergency, the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance, or the requirements of the Federal Acid Rain Program.

[Rule 62-213.460, F.A.C.]

- 53. Forms and Instructions. The forms used by the Department in the Title V source operation program are adopted and incorporated by reference in Rule 62-213.900, F.A.C. The form is listed by rule number, which is also the form number, and with the subject, title, and effective date. Copies of forms may be obtained by writing to the Department of Environmental Protection, Division of Air Resource Management, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, or by contacting the appropriate permitting authority.
- (1) Major Air Pollution Source Annual Emissions Fee Form. (Effective 01/03/2001)
- (7) Statement of Compliance Form. (Effective 06/02/2002)
- (8) Responsible Official Notification Form. (Effective 06/02/2002)

[Rule 62-213.900, F.A.C.: Forms (1), (7) and (8)]

Chapter 62-256, F.A.C.

54. Not federally enforceable. Open Burning. This permit does not authorize any open burning nor does it constitute any waiver of the requirements of Chapter 62-256, F.A.C. Source shall comply with Chapter 62-256, F.A.C., for any open burning at the source. [Chapter 62-256, F.A.C.]

Chapter 62-281, F.A.C.

- 55. <u>Refrigerant Requirements</u>. Any facility having refrigeration equipment, including air conditioning equipment, which uses a Class I or II substance (listed at 40 CFR 82, Subpart A. Appendices A and B), and any facility which maintains, services, or repairs motor vehicles using a Class I or Class II substance as refrigerant must comply with all requirements of 40 CFR 82, Subparts B and F, and with Rule 62-281.100, F.A.C. Those requirements include the following restrictions:
- (1) Any facility having any refrigeration equipment normally containing 50 (fifty) pounds of refrigerant, or more, must keep servicing records documenting the date and type of all service and the quantity of any refrigerant added pursuant to 40 CFR 82.166;
- (2) No person repairing or servicing a motor vehicle may perform any service on a motor vehicle air conditioner (MVAC) involving the refrigerant for such air conditioner unless the person has been properly trained and certified as provided at 40 CFR 82.34 and 40 CFR 82.40, and properly uses equipment approved pursuant to 40 CFR 82.36 and 40 CFR 82.38, and complies with 40 CFR 82.42;
- (3) No person may sell or distribute, or offer for sale or distribution, any substance listed as a Class I or Class II substance at 40 CFR 82, Subpart A, Appendices A and B, except in compliance with Rule 62-281.100, F.A.C., and 40 CFR 82.34(b), 40 CFR 82.42, and/or 40 CFR 82.166:
- (4) No person maintaining, servicing, repairing, or disposing of appliances may knowingly vent or otherwise release into the atmosphere any Class I or Class II substance used as a refrigerant in such equipment and no other person may open appliances (except MVACs as defined at 40 CFR 82.152) for service, maintenance or repair unless the person has been properly trained and certified pursuant to 40 CFR 82.161 and unless the person uses equipment certified for that type of appliance pursuant to 40 CFR 82.158 and unless the person observes the practices set forth at 40 CFR 82.156 and 40 CFR 82.166;
- (5) No person may dispose of appliances (except small appliances, as defined at 40 CFR 82.152) without using equipment certified for that type of appliance pursuant to 40 CFR 82.158 and without observing the practices set forth at 40 CFR 82.156 and 40 CFR 82.166;
- (6) No person may recover refrigerant from small appliances, MVACs and MVAC-like appliances (as defined at 40 CFR 82.152), except in compliance with the requirements of 40 CFR 82, Subpart F.

[40 CFR 82; and, Chapter 62-281, F.A.C. (Chapter 62-281, F.A.C., is not federally enforceable)]

Chapter 62-296, F.A.C.

- 56. <u>Industrial, Commercial, and Municipal Open Burning Prohibited</u>. Open burning in connection with industrial, commercial, or municipal operations is prohibited, except when:
 - (a) Open burning is determined by the Department to be the only feasible method of operation and is authorized by an air permit issued pursuant to Chapter 62-210 or 62-213, F.A.C.; or
 - (b) An emergency exists which requires immediate action to protect human health and safety; or
 - (c) A county or municipality would use a portable air curtain incinerator to burn yard trash generated by a hurricane, tornado. fire or other disaster and the air curtain incinerator would otherwise be operated in accordance with the permitting exemption criteria of Rule 62-210.300(3), F.A.C.

[Rule 62-296.320(3), F.A.C.]

57. Unconfined Emissions of Particulate Matter.

(4)(c)1. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction; alteration; demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions.

- 3. Reasonable precautions include the following:
 - a. Paving and maintenance of roads, parking areas and yards.
 - b. Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
 - c. Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
 - d. Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne.
 - e. Landscaping or planting of vegetation.
 - f. Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
 - g. Confining abrasive blasting where possible.
 - h. Enclosure or covering of conveyor systems.
- 4. In determining what constitutes reasonable precautions for a particular facility, the Department shall consider the cost of the control technique or work practice, the environmental impacts of the technique or practice, and the degree of reduction of emissions expected from a particular technique or practice.

[Rules 62-296.320(4)(c)1., 3., & 4, F.A.C.]

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40 CFR 60 Subpart WWW and 40 CFR 63 Subpart AAAA (7/10/03)

TABLE 1. SUMMARY OF MONITORING REQUIREMENTS FOR MSW LANDFILLS

Equipment	Monitoring Action	Schedule	Reference
Gas Collection System	Monitor gauge pressure within each gas extraction well.	Monthly	§60.756(a)(1)
	A negative value indicates a well is operating with a sufficient gas extraction rate.		·
	Monitor nitrogen concentration using Method 3C or oxygen concentration using Method 3A.	Monthly	§60.756(a)(2)
	Nitrogen concentration values <20 percent or oxygen concentration values < 5 percent indicate well extraction rates are not causing excessive air infiltration into the landfill.		
	Monitor LFG temperature in extraction well, should be <55°C (131°F), unless otherwise demonstrated that a higher temperature is appropriate.	Monthly	§60.756(a)(3)
	An elevated LFG temperature is an indicator of subsurface fires and aerobic conditions within the landfill.		
	Monitor methane concentration at the landfill surface.	Quarterly OR	§60.755(c) and
	Values <500 ppm above background indicate well extraction rates are sufficient to minimize the amount of LFG seeping out of the landfill.	Skip Method ^a	§60.756(f)
	For an alternative gas collection system design, the owner/operator must submit appropriate monitoring requirements to the implementing agency for approval.	To Be Determined	§60.756(e)
Gas Control System	Record gas flow from collection system to enclosed combustion device (unless bypass line valves are secured in a closed position with car-seal or lock-and-key type configuration).	At least once every 15 minutes	§60.756(b)(2)
	This requirement identifies periods when gas flow has been diverted from the control device.	OR Monthly inspections of bypass line seals	
	Monitor gas flow from collection system to open flare (unless bypass line valves are secured in a closed position with car-seal or lock-and-key type configuration).	At least once every 15 minutes	§60.756(c)(2)
	This requirement identifies periods when gas flow has been diverted from the control device.	OR Monthly inspections of bypass line seals	·
	Monitor combustion temperature of the enclosed combustion device with a temperature monitoring device equipped with a continuous recorder. (Temperature monitoring is not required for a boiler or process heater >44 megawatts)	Continuous	§60.756(b)(1)
	This requirement identifies operational and performance status of control device.		
	Monitor the continuous presence of a pilot flame or the flare flame for an open flare.	Continuous	§60.756(c)(1)
	This requirement confirms operational status of control device.		
	For an alternative control device, the owner/operator must submit appropriate monitoring requirements to the implementing agency for approval.	To Be Determined	§60.756(d)

^a When monitoring of methane concentration for a closed landfill shows no exceedances for three consecutive quarterly monitoring periods, then monitoring can be "skipped" to annual monitoring. Any exceedance of the 500 ppm methane standard returns the landfill to quarterly monitoring.

40 CFR 60 Subpart WWW and 40 CFR 63 Subpart AAAA (7/10/03)

TABLE 2. SUMMARY OF RECORDKEEPING REQUIREMENTS FOR MSW LANDFILLS

Operation	Recordkeeping Item	Reference
Landfill Design	If Design Capacity was converted from mass to volume or volume to mass to demonstrate that design capacity is <2.5 million Mg	§60.758(f)
Capacity	or 2.5 million m ³ , records of annual recalculation of site-specific density, design capacity, and supporting documentation.	460,000
Landfill and	Current maximum design capacity, current amount of refuse-in-place, and year-by-year refuse accumulation rates	§60.758(a)
Control System Design	Plot map showing each existing and planned well in the gas collection system. Provide unique identifying labels for each well. Installation date and location of all newly installed wells per §60.755(b).	§60.758(d)
	Description, location, amount, and placement date of all nondegradable refuse including asbestos and demolition refuse placed in landfill areas which are excluded from LFG collection and control.	§60.758(d)(1) §60.758(d)(2)
Monitored	(1) Gauge pressure in each extraction well,	§60.756(a)(1)
Operating	(2) Nitrogen or oxygen concentration in extracted LFG.	§60.756(a)(2)
Parameters for	(3) Temperature of extracted LFG.	§60.756(a)(3)
Gas Collection	(4) Methane concentrations along landfill surface.	§60.756(f)
and Control	(5) Gas flow from collection system to the BDT control device (or seal bypass lines and inspect seals.	§60.756(b)(2)(i) &(ii)
Systems	(6) Combustion temperature of an enclosed combustion device or the continuous presence of a pilot flame for an open flare.	§60.756(c)
	(7) Operating parameters for alternative collection and control system designs, which are	§60.756(e)
	specified by the landfill and approved by the implementing agency.	C/A 750/L\/1\/\\
Collection and	Maximum expected gas generation flow rate	§60.758(b)(1)(i)
Control System	Density of wells, horizontal collectors, surface collectors, or other gas extraction devices. For open flares:	§60.758(b)(1)(ii)
Design and Measurements	(1) Type of flare (steam-, air-, or non-assisted),	
From	(2) All visible emission readings,	
Initial	(3) Heat content determination,	
Performance Test	(4) Gas flow rate or bypass measurements,	§60.758(b)(4)
	(5) Exit velocity determinations,	3
	(6) Continuous pilot flame or flare flame monitoring, and	
	(7) All periods when pilot flame or flare flame is absent.	
	For enclosed combustion devices (except for boilers/process heaters with a heat input ≥ 44	
	Megawatts [150 million Btu/hr]	§60.758(b)(2)(i)
}	(1) Average combustion temperature measured at least every 15 minutes and averaged over the performance test duration	
İ	(2) Percent reduction of NMOC's by the control device.	§60.758(b)(2)(ii)
	For boilers/process heaters (of any size)	#CO 750(L)(2)
Con Control	Describe Location where LFG is introduced into the boiler flame zone.	§60.758(b)(3)
Gas Control System:	For an open flare: Record all pilot flame or flare flame monitoring data and all periods when pilot flame or	\$60.759(a)(4)
Periods When	Flare flame was absent.	§60.758(c)(4)
Operating	For enclosed combustion devices (except for boilers/process heaters with a heat input ≥ 44	§60.758(c)(1)(i)
Parameters	Megawatts [150 million Btu/hr]	30000(1)()(.)
Exceeded Limits	Record all 3-hour periods in which the average combustion temperature was more than	
Set by Most	28degrees C (50 degrees F) below the average combustion temperature measured during	
Recent	the most recent performance test.	
Performance Test	For boilers/process heaters with a heat input ≥44 Megawatts {150 Million Btu/hr]	§60.758(c)(3)
	Document all periods of operation by recording parameters, such as steam use, fuel use,	•
	Or other specified parameters required by other regulatory agencies.	
	For boilers/process heaters	§60.758(c)(1)(ii)
	Document any changes to the location where collected LFG is introduced in the boiler Flame zone.	\$60.759(2)(2)
	Records of continuous flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines.	§60.758(c)(2)
-	Records of continuous flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or	§60.758(c)(2)
	lock-and-key configurations used to seal bypass lines.	300.730(C)(Z)
Gas Collection	Record all values which exceed the operational standards specified in §60.753. Also include the operating value from the next	
and Control	monitoring period and the location of each exceedance:	§60.758(e)
System:	(1) New well installation,	, ,
	(2) Pressure in each extraction well,	
Exceedances of	(3) Nitrogen concentration or oxygen concentration in extracted LFG.	
operational	(4) Temperature of extracted LFG,	
standards	(5) Methane concentrations along landfill surface,	
	(6) Collected LFG is routed to control device at all times, note periods when the collection system and/or	
	control device were not operational.	#CO 10(1)(0)
0	Occurrence and duration of each SSM of operation (i.e. process equipment)	§63.10(b)(2)(i)
Startup Shutdown	Oppurement and direction of each CCM of a control of a control of the control of	
Startup Shutdown and Malfunction	Occurrence and duration of each SSM of required air pollution control and monitoring equipment	§63.10(b)(2)(ii)
	All required maintenance performed on the air pollution control and monitoring equipment	§63.10(b)(2)(iii)

40 CFR 60 Subpart WWW and 40 CFR 63 Subpart AAAA (7/10/03)

TABLE 3. SUMMARY OF COMPLIANCE REPORTING REQUIREMENTS FOR MSW LANDFILLS

Report or Action	Schedule	Reference
Initial Design Capacity Report	Submit report no later than (1) June 10, 1996 for landfills that commenced construction, modification, or reconstruction on or after May 30, 1991 but before March 12, 1996, or (2) 90 days after the date the landfill commenced construction, modification, or reconstruction on or after March 12, 1996.	§60.757(a)(1) §60.757(a)(2)
Amended Design Capacity Report	If design capacity is increased to a value that equals or exceeds 2.5 million Mg, the landfill must submit an Amended Design Capacity Report. Submit report 90 days of an increase in the maximum design capacity of the landfill to or above the 2.5 million Mg and 2.5 million m ³ size exemption	§60.757(a)(3)
Annual <u>OR</u> Five-Year ^a NMOC Emission Rate Report (Tier 1)	Submit initial report no later than: (1) June 10, 1996 for landfills that commenced construction, modification, or reconstruction on or after May 30, 1991 but before March 12, 1996, or (2) 90 days after the date the landfill commenced construction, modification, or reconstruction on or after March 12, 1996. May submit with Initial Design Capacity Report. Repeat either once a year OR once every 5 years.	§60.757(b)
Revised NMOC Emission Rate Report (Tier 2)	If Tier 1 analysis results in NMOC emissions ≥50 Mg/yr, a revised NMOC emission rate report using data gathered from Tier 2 analysis can be submitted within 180 days of the initial calculated exceedance.	§60.757(c)(1)
Revised NMOC Emission Rate Report (Tier 3)	If Tier 2 analysis results in NMOC emissions \(\square\) 50 Mg/yr, a revised NMOC Emission Rate Report using data gathered from Tier 3 analysis can be submitted within 1 year of the initial calculated exceedance.	§60.757(c)(2)
Collection and Control System Design Plan	Within 1 year after submitting NMOC Emission Report with a value ≥ 50 Mg/yr. Plańs must gain Agency approval prior to installation.	§60.757(c)
Emission Control System Start-up	Control system based on approved design will startup within 30 months after submitting NMOC Emission Rate Report with a value ≥50 Mg/yr.	§60.752(b)(2)(ii)
Initial Control System Performance Test Report	Submit report within 180 days of emission collection and control system start- up per §60.8. Results can be included in the initial Annual Report.	§60.757(g)
Annual Compliance Report	Submit initial report within 180 days of emission collection and control system start-	§60.757(f)
	Report once every 6 months. [Required semi-annually by 40 CFR 63 Subpart AAAA.]	§63.1980(a)
Landfill Closure Report	When landfill is no longer accepting refuse and the landfill is considered closed. Submit report within 30 days of refuse acceptance cessation.	§60.757(d)
	Submit report within 50 days of refuse acceptance cossation.	
Control Equipment Removal Report	Submit report within 30 days prior to removal or cessation of control system operations. Controls can be removed after meeting all of these criteria: (1) Landfill Closure Report has been submitted, (2) Control system was operated for at least 15 years, and (3) Three consecutive NMOC Emission Rate Reports with values <50 Mg/yr achieved.	§60.757(e)
	Submit report within 30 days prior to removal or cessation of control system operations. Controls can be removed after meeting all of these criteria: (1) Landfill Closure Report has been submitted, (2) Control system was operated for at least 15 years, and (3) Three consecutive NMOC Emission Rate Reports with values <50 Mg/yr	§60.757(e)
Removal Report Startup, Shutdown. and	Submit report within 30 days prior to removal or cessation of control system operations. Controls can be removed after meeting all of these criteria: (1) Landfill Closure Report has been submitted, (2) Control system was operated for at least 15 years, and (3) Three consecutive NMOC Emission Rate Reports with values <50 Mg/yr achieved. Plan shall be developed by the owner or operator and submitted by January 16,	, ,

From:

Scearce, Lynn

Sent:

Monday, August 29, 2011 1:38 PM

To: Cc: 'scott.salisbury@landfillenergy.com' 'rharvey@derenzo.com'; 'euripides.rodriguez@brevardcounty.us'; 'Shine, Caroline';

'forney kathleen@epa.gov'; 'abrams heather@epa.gov'; Koletzke, Marilyn; DeAngelo,

Gregory; 'lynn.scearce@dep.state.fl.us'; Friday, Barbara

Subject: Attachments: 0090069-009-AC-PSD-FL-378C and 0090069-010-AV, Brevard Energy, Final Permit 0090069-009-AC-PSD-FL-378C, Brevard Energy signature page pdf; 0090069-010-AV,

Brevard Energy signature page pdf

Tracking:

Delivery Recipient

'scott.salisbury@landfillenergy.com'

'rharvey@derenzo.com'

'euripides.rodriguez@brevardcounty.u-

'Shine, Caroline'

Delivered: 8/29/2011 1:38 PM

'forney.kathleen@epa.gov'

'abrams.heather@epa.gov'

Koletzke, Marilyn

Delivered: 8/29/2011 1:38 PM

DeAngelo, Gregory

Delivered: 8/29/2011 1:38 PM Delivered: 8/29/2011 1:38 PM

'lynn.scearce@dep.state.fl.us' Friday, Barbara

Delivered: 8/29/2011 1:38 PM

Read: 8/29/2011 1:38 PM

Scearce, Lynn

Read: 8/29/2011 1:41 PM

Dear Mr. Salisbury:

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 email transmissions to verify accessibility of the document(s).

Attention: Marilyn Koletzke

Owner/Company Name: BREVARD CO BOARD OF COUNTY COMMISSIONERS

Facility Name: BREVARD CO CENTRAL DISPOSAL FACILITY

Project Number: 0090069-009-AC / 0090069-010-AV

Permit Status: FINAL

Permit Activity: CONSTRUCTION / PERMIT REVISION

Facility County: BREVARD

Click on the following link to access the permit project documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf permit zip files/0090069.009.AC.F pdf.zip http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf permit zip files/0090069.010.AV.F pdf.zip

The Office of Permitting and Compliance is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to

From: Sent: Robert Harvey [rharvey@derenzo.com] Monday, August 29, 2011 1:51 PM

To:

Scearce, Lynn

Subject:

RE: 0090069-009-AC-PSD-FL-378C and 0090069-010-AV, Brevard Energy, Final Permit

I was able to download and view the documents, thank you.

Rob Harvey
Derenzo and Associates, Inc.
RHarvey@derenzo.com
(517) 324-1880

From: Scearce, Lynn [mailto:Lynn.Scearce@dep.state.fl.us]

Sent: Monday, August 29, 2011 1:38 PM **To:** scott.salisbury@landfillenergy.com

Cc: rharvey@derenzo.com; euripides.rodriquez@brevardcounty.us; Shine, Caroline; forney.kathleen@epa.gov;

<u>abrams.heather@epa.gov</u>; Koletzke, Marilyn; DeAngelo, Gregory; Scearce, Lynn; Friday, Barbara **Subject:** 0090069-009-AC-PSD-FL-378C and 0090069-010-AV, Brevard Energy, Final Permit

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Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Attention: Marilyn Koletzke

Owner/Company Name: BREVARD CO BOARD OF COUNTY COMMISSIONERS

Facility Name: BREVARD CO CENTRAL DISPOSAL FACILITY

Project Number: 0090069-009-AC / 0090069-010-AV

Permit Status: FINAL

Permit Activity: CONSTRUCTION / PERMIT REVISION

Facility County: BREVARD

From:

Scott Salisbury [Scott.salisbury@landfillenergy.com]

To:

Scearce, Lynn

Sent:

Subject:

Monday, August 29, 2011 6:02 PM Read: 0090069-009-AC-PSD-FL-378C and 0090069-010-AV, Brevard Energy, Final Permit

Your message was read on Monday, August 29, 2011 6:01:40 PM (GMT-05:00) Eastern Time (US & Canada).

From:

Microsoft Exchange

To: Sent: scott.salisbury@landfillenergy.com Monday, August 29, 2011 1:38 PM

Subject:

Relayed: 0090069-009-AC-PSD-FL-378C and 0090069-010-AV, Brevard Energy, Final Permit

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

scott.salisbury@landfillenergy.com

Subject: 0090069-009-AC-PSD-FL-378C and 0090069-010-AV, Brevard Energy, Final Permit

Sent by Microsoft Exchange Server 2007

From:

Microsoft Exchange

To:

rharvey@derenzo.com

Sent:

Monday, August 29, 2011 1:38 PM

Subject:

Relayed: 0090069-009-AC-PSD-FL-378C and 0090069-010-AV, Brevard Energy, Final Permit

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

rharvey@derenzo.com

Subject: 0090069-009-AC-PSD-FL-378C and 0090069-010-AV, Brevard Energy, Final Permit

Sent by Microsoft Exchange Server 2007

From:

Microsoft Exchange

To:

Koletzke, Marilyn, Friday, Barbara, Shine, Caroline

Sent:

Monday, August 29, 2011 1:38 PM

Subject:

Delivered: 0090069-009-AC-PSD-FL-378C and 0090069-010-AV, Brevard Energy, Final

Permit

Your message has been delivered to the following recipients:

Koletzke, Marilyn

Friday, Barbara

Shine, Caroline

Subject: 0090069-009-AC-PSD-FL-378C and 0090069-010-AV, Brevard Energy, Final Permit

Sent by Microsoft Exchange Server 2007