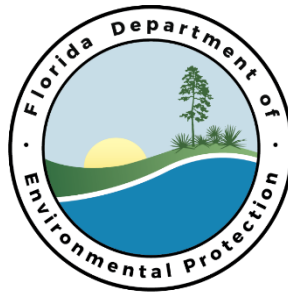


Waste Management, Inc. of Florida
Collier County Landfill

Facility ID No. 0210051
Collier County

Title V Air Operation Permit Revision

Permit No. 0210051-025-AV
(1st Revision to Permit No. 0210051-022-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:

State of Florida
Department of Environmental Protection
Air Resource Management, South District
2295 Victoria Avenue, Suite 364
Fort Myers, Florida 33901-2549
Telephone: (239) 344-5600
Fax: (850) 412-0590

Title V Air Operation Permit Revision

Permit No. 0210051-025-AV

Table of Contents

<u>Section</u>	<u>Page Number</u>
I. Facility Information.	
A. Facility Description.	2
B. Summary of Emissions Units.	2
C. Applicable Regulations.	3
II. Facility-wide Conditions.	5
III. Emissions Units and Conditions.	
A. Landfill.	8
B. One 3,000 scfm Flare.....	15
C. Relocatable Crusher.	17
D. Five Reciprocating Internal Combustion Engines (RICE).	20
E. Two 1,200 scfm Flares.	26
F. Compression Ignition (CI) RICE (Back-up engine).....	28
G. CI RICE (6 inch Water Pump) (EU 018).	33
H. Emergency Generator (EU 019).	33
I. CI RICE (PosiShell Silo) (EU 020).	37
IV. Appendices.	41
Appendix A, Glossary.	
Appendix G, Approved NSPS Alternate Procedures.	
Appendix I, List of Insignificant Emissions Units and/or Activities.	
Appendix NESHAP, Subpart A – General Provisions.	
Appendix NESHAP, Subpart M – National Emission Standards for Asbestos.	
Appendix NESHAP, Subpart AAAA – National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills.	
Appendix NESHAP, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	
Appendix NSPS, Subpart A – General Provisions.	
Appendix NSPS, Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants	
Appendix NSPS, Subpart WWW – Standards of Performance for Municipal Solid Waste Landfills.	
Appendix NSPS, Subpart IIII. - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.	
Appendix NSPS, Subpart JJJJ. - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.	
Appendix RR, Facility-wide Reporting Requirements.	
Appendix TR, Facility-wide Testing Requirements.	
Appendix TV, Title V General Conditions.	
Appendix U, List of Unregulated Emissions Units and/or Activities.	
Referenced Attachments.	At End
Figure 1, Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance (40 CFR 60, July, 1996).	



Florida Department of Environmental Protection

Rick Scott
Governor

Carlos Lopez-Cantera
Lt. Governor

Noah Valenstein
Secretary

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

PERMITTEE:

Waste Management, Inc. of Florida
3750 White Lake Boulevard
Naples, Florida 34117

Permit No. 0210051-025-AV

Collier County Landfill

Facility ID No. 0210051

Title V Air Operation Permit Revision

The purpose of this permit is to revise the Title V air operation permit for the above referenced facility to incorporate Permit No. 0210051-024-AC. The existing Collier County Landfill is located in Collier County at 3750 White Lake Boulevard, Naples, Florida 34117. UTM Coordinates are: Zone 17, 433.92 East and 2893.22 North. Latitude is: 26/09/30 North; and Longitude is: 81/39/30 West.

The Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-213. The above named permittee is hereby authorized to operate the facility in accordance with the terms and conditions of this permit.

0210051-022-AV Effective Date: April 7, 2016

0210051-025-AV Effective Date: December 12, 2017

Renewal Application Due Date: August 25, 2020

Expiration Date: April 7, 2021

For:

Syed Arif, P.E., Program Administrator
Office of Permitting and Compliance
Division of Air Resource Management

SA/dlr/pks

[Table of Contents](#)

SECTION I. FACILITY INFORMATION.

Subsection A. Facility Description.

The existing facility is a Class I municipal solid waste landfill. The landfill has an active gas collection and control system with a 3,000 scfm open flare. The facility includes five 0.8 MW spark ignition reciprocating internal combustion engines, a gas treatment system, and two 1,200 standard cubic foot per minute (scfm) flares (single skid) as part of a renewable energy project which converts landfill methane gas to energy. A relocatable concrete crusher is authorized to operate on the site. Note: Three (3) of the internal combustion engines No. 6, No. 7, and No. 8 are not anticipated to be constructed any time in the future due to projected landfill gas flow rates and the authorization to construct these three engines has been revoked.

Prior to the recent solid waste permit expansion, the Collier County Landfill had a design capacity of 14.1 million megagrams (Mg) by volume. The landfill commenced construction and started receiving waste in 1976. The landfill was modified or reconstructed in 1996, 2001 and 2003. The landfill contains an active asbestos waste disposal site. The landfill does not contain a bioreactor. The gas collection and control system commenced operation on January 24, 1997. The non-methane organic compounds (NMOC) emissions are calculated to be greater than 50 Mg per year.

Collier County Landfill received a modified solid waste permit in February, 2012, for a vertical expansion to increase the volumetric capacity from 18,487,720 cubic yards to 27,930,800 cubic yards. Please note this volume accounts for burial of degradable and non-degradable wastes as well as cover soils; therefore, for modeling purposes the assumed total degradable volume is estimated at 22, 906,160 tons.

The landfill consists of active cells and closed cells. Active cells are A1, A2, A3 and phase 3 of cell 6. Cell 6 is broken into three phases. Closed cells are phase 1 and 2 of cell 6 (closed in 2000) and cells 3 and 4 closed in 1995. Cells A1, A2, and A3 began accepting waste in 2005, 2007 and 2009, respectively. Cells 3 and 4 began accepting waste in 1979. Cell 6 began accepting waste in 1988.

The facility is subject to 40 CFR 60 Subpart A, General Provisions, 40 CFR 60 Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants, 40 CFR 60 Subpart WWW, Standards of Performance for Municipal Solid Waste Landfills, 40 CFR 60 Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, 40 CFR 60 Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 CFR 61 Subpart M, National Emissions Standards for Asbestos, 40 CFR 63 Subpart A, General Provisions, 40 CFR 63 Subpart AAAA, National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills and 40 CFR 63 Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

Air construction permit revision No. 0210051-021-AC reclassified the facility as a minor source for PSD by limiting carbon monoxide (CO) emissions from the facility to 242 tons per year. Any subsequent new construction at this facility will trigger PSD review.

Subsection B. Summary of Emissions Units.

EU No.	Brief Description
<i>Regulated Emissions Units</i>	
002	Landfill
003	3,000 scfm Open Flare
005	Crusher
006	Reciprocating Internal Combustion Engine (RICE) No. 1
007	RICE No. 2
008	RICE No. 3
009	RICE No. 4

SECTION I. FACILITY INFORMATION.

010	RICE No. 5
014	1,200 scfm Flare
015	1,200 scfm Flare
016	CI RICE (backup diesel generator)
018	CI RICE (6 inch Water Pump)
019	Emergency Generator
020	CI RICE (PosiShell Silo)

Subsection C. Applicable Regulations.

Based on the Title V air operation permit revision application received October 12, 2015, this facility is not a major source of hazardous air pollutants (HAP). A summary of applicable regulations is shown in the following table.

Regulation	EU No(s).
40 CFR 60 Subpart A, General Provisions	002, 003, 005, 006, 007, 008, 009, 010, 014, 015
40 CFR 60 Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants	005
40 CFR 60 Subpart WWW, Standards of Performance for Municipal Solid Waste Landfills	002, 003, 014, 015
40 CFR 60 Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	020
40 CFR 60 Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	006, 007, 008, 009, 010
40 CFR 61 Subpart M, National Emissions Standard for Asbestos	002
40 CFR 63, Subpart A, General Provisions	002, 006, 007, 008, 009, 010, 016, 018, 019, 020
40 CFR 63, Subpart AAAA, National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills	002, 003, 016, 014, 015
40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	006, 007, 008, 009, 010, 016, 018, 019, 020
62-296.320, F.A.C.	002, 003, 005, 006, 007, 008, 009, 010, 014, 015, 016, 018, 019, 020
62-296.370, F.A.C.	002, 003, 005, 006, 007, 008, 009, 010, 014, 015, 016, 018, 019, 020
62-213.440, F.A.C.	002, 003, 005, 006, 007, 008, 009, 010, 014, 015, 016, 018, 019, 020
62-213.205, F.A.C.	002, 003, 005, 006, 007, 008, 009, 010, 014, 015, 016, 018, 019, 020
62-210.370, F.A.C.	002, 003, 005, 006, 007, 008, 009, 010, 014, 015, 016, 018, 019, 020
62-210.300, F.A.C.	002, 003, 005, 006, 007, 008, 009, 010, 014, 015, 016, 018, 019, 020
62-213.420, F.A.C.	002, 003, 005, 006, 007, 008, 009, 010, 014, 015, 016, 018, 019, 020

SECTION I. FACILITY INFORMATION.

62-297.310, F.A.C.	002, 003, 005, 006, 007, 008, 009, 010, 014, 015, 016, 018, 019, 020
62-4.160, F.A.C.	002, 003, 005, 006, 007, 008, 009, 010, 014, 015, 016, 018, 019, 020
62-296.100, F.A.C.	002, 003, 005, 006, 007, 008, 009, 010, 014, 015, 016, 018, 019, 020
62-213.410, F.A.C.	002, 003, 005, 006, 007, 008, 009, 010, 014, 015, 016, 018, 019, 020

[Table of Contents](#)

SECTION II. FACILITY-WIDE CONDITIONS.

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

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

Emissions and Controls

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

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

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

FW4. General Visible Emissions. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]

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

- a. Speed limits posted at the facility.
- b. Maintaining paved roadways.
- c. Watering unpaved roads.
- d. Sweeping paved roads.
- e. Vegetate areas of final and intermediate cover in accordance with solid waste rules.

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

Annual Reports and Fees

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

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

FW7. Electronic Annual Operating Report and Title V Annual Emissions Fees. The information required by the Annual Operating Report for Air Pollutant Emitting Facility [Including Title V Source Emissions Fee Calculation] (DEP Form No. 62-210.900(5)) shall be submitted by April 1 of each year, for the previous calendar year, to the Department of Environmental Protection’s Division of Air Resource Management. Each Title V source shall submit the annual operating report using the DEP’s Electronic Annual Operating Report (EAOR) software, unless the Title V source claims a technical or financial hardship by submitting DEP Form No. 62-210.900(5) to the DEP Division of Air Resource Management instead of using the reporting software. Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C. Each Title V source must pay between January 15 and April 1 of each year an annual emissions fee in an amount determined as set forth in subsection 62-213.205(1), F.A.C. The annual fee shall only apply to those regulated pollutants, except carbon monoxide and greenhouse gases, for which an allowable numeric emission-limiting standard is specified in the source’s most recent construction permit or operation permit. Upon completing the required EAOR entries, the EAOR Title V

SECTION II. FACILITY-WIDE CONDITIONS.

Fee Invoice can be printed by the source showing which of the reported emissions are subject to the fee and the total Title V Annual Emissions Fee that is due. The submission of the annual Title V emissions fee payment is also due (postmarked) by April 1st of each year. A copy of the system-generated EAOR Title V Annual Emissions Fee Invoice and the indicated total fee shall be submitted to: **Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070**. Additional information is available by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site:

<http://www.dep.state.fl.us/air/emission/tvfee.htm>. [Rules 62-210.370(3), 62-210.900 & 62-213.205, F.A.C.; and, §403.0872(11), Florida Statutes (2013)]

{Permitting Note: Resources to help you complete your AOR are available on the electronic AOR (EAOR) website at: <http://www.dep.state.fl.us/air/emission/eaor>. If you have questions or need assistance after reviewing the information posted on the EAOR website, please contact the Department by phone at (850) 717-9000 or email at eaor@dep.state.fl.us.}

{Permitting Note: The Title V Annual Emissions Fee form (DEP Form No. 62-213.900(1)) has been repealed. A separate Annual Emissions Fee form is no longer required to be submitted by March 1st each year.}

FW8. Annual Statement of Compliance. The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit within 60 days after the end of each calendar year during which the Title V permit was effective. [Rules 62-213.440(3)(a)2. & 3. and (3)(b), F.A.C.]

FW9. Prevention of Accidental Releases (Section 112(r) of CAA). If, and when, the facility becomes subject to 112(r), the permittee shall:

- Submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent electronically through EPA's Central Data Exchange system at the following address: <https://cdx.epa.gov>. Information on electronically submitting risk management plans using the Central Data Exchange system is available at: <http://www2.epa.gov/rmp>. The RMP Reporting Center can be contacted at: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: (703) 227-7650.
- 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]

FW10. Carbon Monoxide Limit. Air construction permit revision No. 0210051-021-AC reclassified the facility as a minor source for PSD by limiting carbon monoxide (CO) emissions from the facility to 242 tons per year. Control devices may operate in any scenario, whether individually or in combination, as long as CO emissions remain below 242 tons per year (see below). An estimate of facility wide CO emissions utilizing appropriate emission factors, gas flow rates (landfill gas and natural gas) and diesel fuel usage shall be reported to the Compliance Authority on an annual basis. [0210051-021-AC, Specific Condition 2.]

Maximum Potential Air Emissions Summary for Flares and LFG fired Engines

	No. of Operating Engines	Total Flare Flow (scfm)	CO PTE (tpy)
Scenario 1	0	4900	238.1
Scenario 2	1	4250	237.8
Scenario 3	2	3650	239.8
Scenario 4	3	3050	241.8
Scenario 5	4	2450	242.1
Scenario 6	5	1800	240.2

FW11. Semi-Annual Monitoring Reports. The permittee shall monitor compliance with the terms and conditions of this permit and shall submit reports of any deviations from the requirements of these conditions at least every six (6)

SECTION II. FACILITY-WIDE CONDITIONS.

months. All instances of deviations from permit requirements must be clearly identified in such reports, including reference to the specific requirement and the duration of such deviation. All reports shall be accompanied by a certification by a responsible official, pursuant to subsection 62-213.420(4), F.A.C. (See also Conditions RR2. – RR4. of Appendix RR, Facility-wide Reporting Requirements, for additional reporting requirements related to deviations.) [Rule 62-213.440(1)(b)3.a., F.A.C.]

{Permitting Note: EPA has clarified that, pursuant to 40 CFR 70.6(a)(3), the word “monitoring” is used in a broad sense and means monitoring (i.e., paying attention to) the compliance of the source with all emissions limitations, standards, and work practices specified in the permit.}

[Table of Contents](#)

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit 002

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

EU No.	Brief Description
002	Landfill

Prior to the recent solid waste permit expansion, Emission Unit 002 was a municipal solid waste landfill with a design capacity of 14.1 million megagrams (Mg) by volume. The landfill commenced construction and started receiving waste in 1976. The landfill has an active gas collection and control system in both active and closed cells. Collection and control of landfill gas (LFG) emissions began on January 24, 1997. The landfill was modified or reconstructed in 1996, 2001 and 2003. The non-methane organic compounds (NMOC) emissions are calculated to be greater than 50 Mg per year.

Collier County Landfill received a modified solid waste permit in February, 2012, for a vertical expansion to increase the volumetric capacity from 18,487,720 cubic yards to 27,930,800 cubic yards. Therefore, as part of this renewal permit, the total design capacity is being increased to 27,930,800 cubic yards (23,741,180 tons). Please note this volume accounts for burial of degradable and non-degradable wastes as well as cover soils; therefore, for modeling purposes the assumed total degradable volume is estimated at 22, 906,160 tons.

{Permitting Note: This emissions unit is subject to 40 CFR 60 Subpart A, General Provisions, 40 CFR 60 Subpart WWW, Standards of Performance for Municipal Solid Waste Landfills, 40 CFR 61 Subpart M, National Emissions Standards for Asbestos, 40 CFR 63 Subpart A, General Provisions and 40 CFR 63 AAAA, National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills.}

Essential Potential to Emit (PTE) Parameters

- A.1. Hours of Operation.** This emissions unit may operate continuously (8760 hours per year). [Rule 62-210.200(PTE), F.A.C.]
- A.2. Emissions Unit Operating Rate Limitation After Testing.** See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(3), F.A.C.]
- A.3. Gas Collection and Control System (GCCS).** The owner or operator shall install and operate an active collection system and control devices that meet the requirements of 40 CFR 60.752(b)(2)(i)(A), 40 CFR 60.752(b)(2)(iii), and 40 CFR 60.752(b)(2)(iv) and 40 CFR 60.759 unless alternative procedures have been approved by the permitting authority as provided by 40 CFR 60.752(b)(2)(i)(C) and (D). 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 5 year or more if active, or 2 years or more if closed or at final grade.
[40 CFR 60.759 and 60.752(b)(2)]
- A.4. Removal of GCCS.** The collection and control system may be removed if the following requirements are met:
- Definition of Closed Landfill.** The landfill shall be a closed landfill as defined in 40 CFR 60.751 of Subpart WWW.
 - Closure Report.** A closure report shall be submitted to the South District as provided in 40 CFR 60.757 of Subpart WWW;
 - Minimum Years of Operation.** The collection and control system shall have been in operation minimum of 15 years; and
 - NMOC.** The calculated NMOC produced by the landfill shall be less than 50 megagrams per year on three (3) successive test dates and following the procedures specified in 40 CFR 60.754(b) of Subpart WWW. The test dates shall be not less than 90 days apart, and no more than 180 days apart.
[40 CFR 60.752(b)(2)(v)]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit 002

Emission Limitations and Standards

- A.5. Methane Concentration.** The owner or operator shall operate the system so that the methane concentration is less than 500 ppm above background at the surface of the landfill. [40 CFR 60.753(d)]
- A.6. Sulfur Content.** The sulfur content of the landfill gas shall not exceed 1000 parts per million by volume (ppm) based upon an annual test. [Permit No. 0210051-014-AC, Specific Condition 1, 0210051-021-AC, Specific Condition 3.]
- A.7. NMOC Emission Calculations for Removal of GCCS.** The owner or operator shall calculate the NMOC emission rate for purposes of determining when the systems can be removed in accordance with 40 CFR 60.754(b). [40 CFR 60.754(b)]
- A.8. Start, Shutdown and Malfunction Plan.** In accordance with 40 CFR 63.1960, 40 CFR 63.1965 and 40 CFR 63.1990 of Subpart AAAAA, the owner or operator must develop a written start, shutdown and malfunction (SSM) plan according to the provisions in 40 CFR 63.6(e)(3) if a deviation occurs. A deviation means any instance in which the facility or the owner or operator of the facility:
- Fails to meet any requirement or obligation established in 40 CFR 63, Subpart AAAAA, including but not limited to, any emissions limitations (including any operating limit) or work practice standard;
 - Fails to meet any term or condition that is adopted to implement an applicable requirement in 40 CFR 63 Subpart AAAAA and that is included in the operating permit for the facility;
 - Fails to meet any emission limitation (including any operating limit) or work practice standard in 40 CFR 63 during SSM, regardless of whether or not such failure is permitted by 40 CFR 63 Subpart AAAAA.

Deviations include:

- When the control device operating parameter boundaries described in 40 CFR 60.758(c)(1) of subpart WWW are exceeded.
- When 1 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. The 3-hour block average used to demonstrate compliance shall be calculated in accordance with 40 CFR 63.1975.
- When a SSM plan is not developed or maintained on site.

[40 CFR 63.1960, 40 CFR 63.1965, 40 CFR 63.1990, 40 CFR 63.1975]

- A.9. 40 CFR 63 Subpart AAAAA Compliance.** The owner or operator shall comply with the requirements of 40 CFR 63.1955 in Subpart AAAAA. [40 CFR 63.1955]

Excess Emissions

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

- A.10. Excess Emissions Prohibited.** The regulations of 40 CFR 60 Subpart WWW shall 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 consecutive days for collection systems and shall not exceed 1 hour for treatment or control devices. [40 CFR 60.755(e)]

Monitoring of Operations

- A.11. Operational Standards.** The owner or operator shall comply with the following operational standards for collection and control system in accordance with 40 CFR 60.753:
- Operation of Collection System.* 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:
 - 5 years or more if active; or

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit 002

- ii. 2 years or more if closed or at final grade.
- b. *Negative Pressure*. Operate the collection system with negative pressure at each wellhead except under the following conditions:
 - i. 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 40 CFR 60.757(f)(1);
 - ii. Use of a geomembrane or synthetic cover. The owner or operator shall develop acceptable pressure limits in the design plan;
 - iii. 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. *Interior Wellhead Operating Parameters*. 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.
 - i. The nitrogen level shall be determined using Method 3C, unless an alternative test method is established as allowed by §60.752(b)(2)(i).
 - ii. 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:
 - 1. The span shall be set so that the regulatory limit is between 20 and 50 percent of the span;
 - 2. A data recorder is not required;
 - 3. Only two calibration gases are required, a zero and span, and ambient air may be used as the span;
 - 4. A calibration error check is not required;
 - 5. The allowable sample bias, zero drift, and calibration drift are ± 10 percent.
- d. *Methane Concentration Above Background*. 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. *Venting of Gases to Control System*. Operate the system such that all collected gases are vented to a control system designed and operated in compliance with 40 CFR 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. *Frequency of Operation*. Operate the control or treatment system at all times when the collected gas is routed to the system.
- g. *Corrective Actions*. If monitoring demonstrates that the operational requirements in sub-paragraphs (b), (c), or (d) of this condition are not met, corrective action shall be taken as specified in 40 CFR 60.755(a)(3) through (5) or 60.755(c) of Subpart WWW. If corrective actions are taken as specified in 40 CFR 60.755, the monitored exceedance is not a violation of the operational requirements in this section.

[40 CFR 753]

- A.12. Net Heating Value.** The owner or operator shall sample and analyze the landfill gas for the net heating value at least annually. The results shall be included in the annual operating report. Net heat content may be calculated based on methane concentration readings obtained from calibrated handheld field instruments. [Permit No. 0210051-004-AC; 0210051-021-AC, Specific Condition 7.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit 002

- A.13. Monthly Measurements.** In accordance with 40 CFR 60.755(a)(3) and (5) and 40 CFR 753, the owner or operator shall install a sampling port and a thermometer, other measuring device, or an access port for temperature measurements at each wellhead and
- Gauge Pressure.* Measure the gauge pressure in the gas collection header on a monthly basis, and
 - Nitrogen or Oxygen Concentration.* Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis, and
 - Temperature.* Monitor temperature of the landfill gas on a monthly basis.
[40 CFR 60.755 and 40 CFR 60.756(a)]
- A.14. Open Flare Operating Requirements.** Each owner or operator using an open flare to comply with 60.752(b)(2)(iii) shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:
- Heat Sensing Device.* 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.
 - Instrument to Record Flow or Bypass of Flare.* A device that records flow to or bypass of the flare. The owner or operator shall either:
 - 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
 - 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.
[40 CFR 60.756(c)]
- A.15. Alternative GCCS Specifications or Monitoring Parameters.** Each owner or operator seeking to install a collection system that does not meet the specifications in 40 CFR 60.759 or seeking to monitor alternative parameters to those required by 40 CFR 60.753 through 60.756 shall provide information satisfactory to the Administrator as provided in 40 CFR 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 Permitting Authority may specify additional appropriate monitoring procedures. [40 CFR 60.756(e)]
- A.16. Methane Surface Concentration Monitoring.** Each owner or operator seeking to demonstrate compliance with 40 CFR 60.753(d) and 40 CFR 60.755(c), shall monitor surface concentrations of methane according to the procedures in 40 CFR 60.755(c) and according to the instrument specifications and procedures provided in 40 CFR 60.755(d). Any closed landfill that has no monitored exceedances of the operational standard in three (3) 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. [40 CFR 60.756(f)]

Test Methods and Procedures

- A.17. Test Methods.** Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
2E	Determination of Landfill Gas; Gas Production Flow Rate
3C	Determination of Carbon Monoxide, Methane, Nitrogen, and Oxygen for Stationary Sources
16	Semicontinuous Determination of Sulfur Emissions from Stationary Sources

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit 002

Method	Description of Method and Comments
18	Measurement of Gaseous Organic Compound Emissions by Gas Chromatography
21	Determination of Volatile Organic Compound Leaks
25C	Determination of Nonmethane Organic Compound (NMOC) in Municipal Solid Waste Landfill Gases

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [40 CFR 60 Subpart WWW]

A.18. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

A.19. Sulfur Analysis.

- Frequency.** The owner or operator shall sample and analyze the LFG for site specific sulfur content (total reduced sulfur content) at least once annually.
- Testing Methods.** Compliance with the sulfur content shall be demonstrated using EPA Method 16. The gas sample shall be collected from the gas collection system header pipe at a location before all flares and engines. The gas sample collected for the analyses shall be a composite sample and collected under normal operating conditions (i.e., with all valves open for all operating cells). Based on the sampling results and Rule 62-297.310(8), F.A.C., the Department may request additional gas sampling and analyses.

[Permit No. 0210051-014-AC, Specific Condition 1., 0210051-021-AC, Specific Condition 3.]

A.20. Test Requirements. The owner or operator shall notify the Compliance Authority by telephone, email, fax or in writing at least 5 days prior to the annual sampling tests. [Permit No. 0210051-014-AC, Specific Condition 3.3.]

A.22. Surface Methane Testing. The owner or operator shall monitor the surface concentrations of methane in accordance with the procedures described in 40 CFR 60.753(d) and 40 CFR 60.755(c). The owner or operator shall comply with the instrumentation specifications and procedures for surface emission monitoring devices in accordance with 40 CFR 60.755(d). [40 CFR 60.753 and 60.755]

A.23. GCCS Compliance Determination. The specified methods in Specific Condition **A.11.** shall be used to determine whether the gas collection system is in compliance with the specification for an active collection system as required by 40 CFR 60.752(b)(2)(ii). [40 CFR 60.755(a)]

Recordkeeping and Reporting Requirements

A.24. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Condition(s)
NMOC Emission Rate Report	Annually (See exemption criteria Specific Condition A.18.)	A.30.
Closure Report	With 30 days of waste acceptance cessation	A.31.
Equipment Removal Report	30 days prior to removal or cessation of operation of control equipment	A.32.
Semi-Annual Reports	Semi-annual	A.33.
Total Reduced Sulfur Report	Annual	A.26.
SO ₂ Emissions Reporting	Annual	A.27.

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

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit 002

- A.25. Other Reporting Requirements.** See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.
- A.26. Test Reports/Reporting.** The owner or operator shall prepare and submit a report for the LFG TRS content test results to the South District Department in accordance with Appendix D, (Common Testing Requirements). Test results shall report the results on the total reduced sulfur content in ppmv as sulfur (S). Test reports and results shall be submitted with the facility's annual operating reports. [Permit No. 0210051-014-AC; Rule 62-4.070(3), F.A.C.]
- A.27. Annual SO₂ Reporting.** Annual SO₂ emissions shall be based on the annual LFG sulfur content analysis results, and shall be included in the annual operating report. [Permit No. 0210051-014-AC, Specific Condition 6., 0210051-021-AC, Specific Condition 3.]
- A.28. Deposited Solid Waste Records.** The owner or operator shall keep for a least 5 years up-to-date, readily accessible, on-site records of the current amount of solid waste in -place, and the year by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable. [40 CFR 60.758(a)]
- A.29. Control Equipment Records.** The owner or operator shall keep up-to-date, readily accessible records for the life of the control equipment of the following data 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.
- The maximum expected gas generation flow rate as calculated in 40 CFR 60.755(a)(1).
 - The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in 40 CFR 60.759(a)(1).
 - The flare type.
 - All visible emission readings.
 - Heat content determination.
 - Flow rate or bypass flow rate measurements.
 - Exit velocity determinations made through the performance tests.
 - Continuous records of pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent.
 - Continuous records of the equipment operating parameters specified to be monitored in 40 CFR 60.756.
 - Up-to-date readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.
 - 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 (see 40 CFR 60.756.).
 - Continuous records of the flame or flare pilot flame monitoring specified under 40 CFR 60.756(c) and up-to-date, readily accessible records of all periods of operation in which the flame of flare pilot flame is absent.
 - Plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.
 - Records of the installation date and location of all newly installed collectors as specified under 40 CFR 60.755(b).
 - Documentation of the nature, date of deposition, amount, and location of asbestos-containing or non-degradable waste excluded from collection as provided in 40 CFR 60.759(a)(3)(i) as well as any nonproductive areas excluded from collection as provided in 40 CFR 60.759(a)(3)(ii).
 - Records of all collection and control 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. [40 CFR 60.758(b)]
- A.30. NMOC Emission Rate Reports.** The owner or operator shall submit an NMOC emission rate report to the South District office annually in accordance with 40 CFR 60.757(b). The owner or operation is exempt from submitting

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Unit 002

an annual report during such time as the collection and control system is in operation and in compliance with 40 CFR 60.753 and 60.755. [40 CFR 60.757(b)]

{Permitting Note: The facility has a collection and control system in operation. As long as the collection and control system is in compliance with 40 CFR 60.753 and 60.755, an annual NMOC emission rate report is not required to be submitted.}

A.31. Closure Report. The owner or operator shall submit a closure report to the South District office within 30 days of waste acceptance cessation. [40 CFR 60.757(d)]

A.32. Equipment Removal Report. The owner or operator shall submit an equipment removal report to the South District office 30 days prior to removal or cessation of operation of the control equipment. The equipment removal report shall contain all of the following information in a. through d. below. The South District may request such additional information as may be necessary to verify that all of the conditions for removal in 40 CFR 60.752(b)(2)(v) have been met.

- a. *Closure Report.* A copy of the closure report submitted in accordance with Specific Condition **A.31**.
- b. *Initial Performance Test Report.* A copy of the initial performance test report demonstrating that the 15 year minimum control period has expired
- c. *NMOC Emission Rate Reports.* Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 Mg or greater of NMOC per year
[40 CFR 60.757(e)]

A.33. Semi-Annual Reports. The owner or operator shall submit semi-annual reports in accordance with 40 CFR 60.757(f) of the following recorded information:

- a. *Exceedance Value and Time Period.* Value and length of time for exceedance of applicable parameters monitored under 40 CFR 60.756(a), (b), (c), and (d).
- b. *Diversion of Gas Stream.* 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 in 40 CFR 60.756.
- c. *Non-Operational Control Devices.* 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.
- d. *Non-Operational Collection System.* All period when the collection system was not operating in excess of 5 days.
- e. *Methane Exceedances.* The location of each exceedance of the 500 parts per million methane concentration and the concentration recorded at each location for which an exceedance was recorded the previous month.
- f. The date of install and the location of each well or collection system expansion added pursuant 40 CFR 60.755.
[40 CFR 63.1980(a), 40 CFR 60.757(f)]

{Permitting Note: 40 CFR 63 Subpart AAAA requires semi-annual reporting which more stringent than 60 CFR 60 Subpart WWW which requires annual reporting.}

A.34. Other Records and Reports. The owner or operator must keep records and reports specified in the general provisions of 40 CFR 60 and as shown in Table 1 of 40 CFR 63 Subpart AAAA. [40 CFR 63.1980(b)]

Other Requirements

A.35. Federal Rule Requirements. In addition to the specific conditions listed above, this emissions unit is also subject to the requirements contained in 40 CFR 60, Subpart A – General Provisions, 40 CFR 60 Subpart WWW - Standards of Performance for Municipal Solid Waste Landfills, 40 CFR 61 Subpart M – National Emissions Standards for Asbestos, 40 CFR 63, Subpart A – General Provisions and 40 CFR 63, and Subpart AAAA, National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills, attached to this permit. [Rule 62-213.440, F.A.C.]

[Table of Contents](#)

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection B. Emissions Unit 003

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

EU No.	Brief Description
003	Flare

Emissions unit 003 is a LFG Specialties, LLC (model number CF122810) 3,000 scfm open flare. The flare has a stack height of 72 feet (68 foot flare and 4 foot foundation), a combustion temperature of 1,400°F that occurs beyond the tip of the flare, and an exit diameter of 1 ft. The flare commenced operation in June 2001.

{Permitting Note: This emissions unit is subject to 40 CFR 60 Subpart A, General Provisions and 40 CFR 60 Subpart WWW, Standards of Performance for Municipal Solid Waste Landfills}

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity. The process rate shall not exceed 3000 SCFM of landfill gas. The maximum heat input rate shall not exceed 91 MMBtu/hr. [Permit Nos. 0210051-004-AC and 0210051-006-AC; Rules 62-4.160(2), 62-204.800, 62-210.200(PTE)]

{Permitting Note: Air construction permit revision No. 0210051-021-AC reclassified the facility as a minor source for PSD by limiting carbon monoxide (CO) emissions from the facility to 242 tons per year. Control devices may operate in any scenario, whether individually or in combination, as long as CO emissions remain below 242 tons per year (see condition FW 10). An estimate of facility wide CO emissions utilizing appropriate emission factors, gas flow rates (landfill gas and natural gas) shall be reported to the Compliance Authority on an annual basis. [0210051-021-AC, Specific Condition 2.]}

B.2. Methods of Operation. The operation of the flare shall comply with the requirements of 40 CFR 60.18 of Subpart A. [Rule 62-213.410, F.A.C.; and, Permit Nos. 0210051-004-AC and 0210051-006-AC]

B.3. Hours of Operation. This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE), F.A.C.]

B.4. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(3), F.A.C.]

B.5. Flare Height. The height of the flare shall be 22 meters (72 feet) above grade, including the foundation. [Permit Nos. 0210051-004-AC and 0210051-006-AC]

Emission Limitations and Standards

Unless otherwise specified, the averaging time for Specific Condition **B.6** is based on the specified averaging time of the applicable test method.

B.6. Visible Emissions. The flare shall be operated with no visible emissions, except for periods not to exceed a total of five minutes during any two consecutive hours. [40 CFR 60.18(c)]

Excess Emissions

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

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

Monitoring of Operations

B.8. Gas Flow. The landfill gas flow to the flare shall be measured by an integrating flow meter. [Permit Nos. 0210051-004-AC and 0210051-006-AC]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection B. Emissions Unit 003

Test Methods and Procedures

B.9. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
22	Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares. EPA ADI (ALT 042) allows for 30 minute duration for flares.

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Permit Nos. 0210051-004-AC and 0210051-006-AC, 40 CFR 60 Subpart A]

B.10. Common Testing Requirements. The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310(9), F.A.C.; 40 CFR 60.18]

B.11. Annual Compliance Tests Required. During each calendar year (January 1st to December 31st), the EU shall be tested to demonstrate compliance with the emissions standards for **VE**. [Rule 62-297.310(8), F.A.C. and Permit Nos. 0210051-004-AC and 0210051-006-AC]

Recordkeeping and Reporting Requirements

B.12. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

B.13. Flow Meter Recordings. Readings of the landfill gas integrating flow meter shall be monitored and recorded in a logbook on a daily basis as a reasonable assurance that compliance with the flare process rate limit and that compliance with 40 CFR 60.756(c) is being achieved. [Permit Nos. 0210051-004-AC and 0210051-006-AC]

{Permitting Note: EU003, 3000 scfm flare, is equipped with a continuous chart recorder. These charts are acceptable instead of a separate logbook as long as they meet the requirement of 40 CFR 60.756(c)(2)(i).}

Other Requirements

B.14. Federal Rule Requirements. In addition to the specific conditions listed above, this emissions unit is also subject to the requirements contained in 40 CFR 60, Subpart A – General Provisions and 40 CFR 60 Subpart WWW - Standards of Performance for Municipal Solid Waste Landfills, attached to this permit. [Rule 62-213.440, F.A.C.]

[Table of Contents](#)

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection C. Emissions Unit 005

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

EU No.	Brief Description
005	Relocatable Crusher

Emission unit 005 is a relocatable crusher.

{Permitting Note: This emissions unit may be subject to 40 CFR 60 Subpart A, General Provisions and 40 CFR 60 Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants.}

Essential Potential to Emit (PTE) Parameters

C.1. Hours of Operation. This emissions unit may operate continuously (8760 hours per year). [Permit No. 0210051-008-AC]

C.2. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(3), F.A.C.]

C.3. Authorized Portable Crushers. Only a crusher that is authorized to operate under a current air general permit may operate at the facility. [Permit No. 0210051-008-AC]

{Permitting Note: Once the crusher is located on the site of the landfill, the owner or operator of the landfill is solely responsible for demonstration of compliance with all state and federal regulations. The general permit is not effective when the crusher is located and operating on the Collier County Landfill site.}

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Specific Condition **C.5.** is based on the specified averaging time of the applicable test method.

C.4. Applicable 40 CFR Subpart OOO Emissions Limitations. If the rated capacity of the portable crusher is 150 tons per hour (TPH) or greater, the crusher is subject to the emission limitations and requirements of 40 CFR 60 Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants. [40 CFR 60 Subpart OOO, Permit No. 0210051-008-AC]

C.5. PM and VE Emissions.

a. *Crusher With Capture System.* If the crusher is equipped with a capture system used to capture and transport PM to a control device and subject to Subpart OOO the following emissions limits shall not be exceeded:

i. For crushers that commenced construction, modification or reconstruction after August 31, 1983 but before April 22, 2008:

1. PM Limit. The PM limit shall not exceed 0.05 g/dscm 90.022 gr/dscf)
2. VE limit. The opacity shall not exceed 7 percent for dry control devices.

ii. For crushers that commenced construction, modification or reconstruction after on or after April 22, 2008:

1. PM Limit. The PM limit shall not exceed 0.032 g/dscm (0.014 gr/dscf)
2. VE limit. VE shall not exceed 7 percent opacity for dry control devices on individual enclosed storage bins

b. *Crusher Without Capture System and for Fugitive Emissions from Capture System.* If the crusher is not equipped with a capture system and for fugitive emissions escaping from capture systems and subject to Subpart OOO the following emissions limits shall not be exceeded:

- i. For crushers that commenced construction, modification or reconstruction after August 31, 1983 but before April 22, 2008:
 1. VE limit.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection C. Emissions Unit 005

- a. VE shall not exceed 10 percent opacity for grinding mill, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins enclosed truck or railcar loading stations or from any other affected facility.
 - b. Visible emissions shall not exceed 15% opacity for the crusher.
- ii. For crushers that commenced construction, modification or reconstruction on or after April 22, 2008:
- a. VE shall not exceed 7 percent opacity for grinding mill, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins enclosed truck or railcar loading stations or from any other affected facility.
 - b. Visible emissions shall not exceed 12% opacity for the crusher.

[40 CFR 60.672]

C.6. Unconfined Emissions. Pursuant to Rule 62-296.320, F.A.C., the following reasonable precautions shall be employed to control unconfined emissions of particulate matter.

- a. *From Nonmetallic Mineral Processing Plants.* Unconfined emissions from all relocatable nonmetallic mineral processing plants, except those located at mines or quarries and processing only material from onsite natural deposits, and all stationary nonmetallic mineral processing plants that process dry material shall be controlled by using a water suppression system with spray bars located wherever unconfined emissions occur at the feeder(s), the entrance and exit of the crusher(s), the classifier screens, and the conveyor drop points.
- b. *From Vehicular Traffic or Wind.* Unconfined emissions generated by vehicular traffic or wind shall be controlled by applying water (by water trucks equipped with spray bars) or effective dust suppressant(s) on a regular basis to all stockpiles, roadways and work yards where the nonmetallic mineral processing plant is located.

[Permit No. 0210051-008-AC]

C.7. Visible Emissions (VE). Visible emissions from any crusher, grinding mill, screening operation, bucket elevator, transfer point on belt conveyors, bagging operation, storage bin, enclosed truck or railcar loading station, or any other affected emission point at a nonmetallic mineral processing plant not subject to 40 CFR Part 60, Subpart OOO, shall be less than twenty percent (20%) opacity, pursuant to Rule 62-296.320, F.A.C. [Permit No. 0210051-008-AC]

Test Methods and Procedures

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

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
5	Method for Determining Particulate Matter Emissions (All PM is assumed to be PM ₁₀ .)
9	Visual Determination of the Opacity of Emissions from Stationary Sources
17	Determination of Particulate Matter Emissions from Stationary Sources
22	Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [40 CFR 60 Subpart OOO, Permit No. 0210051-008-AC]

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

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection C. Emissions Unit 005

- C.10. Annual Compliance Tests Required.** During each calendar year (~~October~~ January 1st to December 31st), each crusher that is subject to OOO shall be tested to demonstrate compliance with the emissions standards for **VE** and **PM**. Compliance with this condition may be demonstrated by obtaining and maintaining a copy of the annual **VE** and **PM** compliance testing from the crusher owner. The PM and VE test report must have been conducted and satisfactorily demonstrated to show compliance with the PM and VE emission limits in Specific Conditions C.4., C.5. and C.7. within the prior 12 months. [Rule 62-297.310(8), F.A.C. and Permit No. 0210051-008-AC]
- C.11. Performance Test Methods.** The annual visible emissions performance tests shall be conducted in accordance with the test methods and procedures set forth at Subpart OOO. All test results shall be reported to the Department in accordance with the provisions of Rule 62-297.310, F.A.C. [Rule 62-210.310(5)(e)3.e., F.A.C.]
- C.12. Additional Compliance Test Requirements.** Unless otherwise stated in this permit, test procedures shall be in accordance with 40 CFR 60.675. [40 CFR 60.675]

Recordkeeping and Reporting Requirements

- C.13. Other Reporting Requirements.** See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.
- C.14. Notification of Crusher On-Site.** The owner or operator shall submit notification to the South District of the initial startup of each crusher within three (3) days of initial startup of operations at the facility. [Permit No. 0210051-008-AC]
- C.15. Recordkeeping.** The owner or operator shall maintain on site for a period of five (5) years the following records:
- The start date and the end date for each crusher that operates at the facility
 - The make and model of each crusher,
 - The capacity of each crusher,
 - The daily hours of operation of each crusher, and
 - The fuel type and usage.
 - Copy of PM and VE compliance demonstration testing for each crusher that is located onto the landfill site.
- [Permit No. 0210051-008-AC]

Other Requirements

- C.16. Federal Rule Requirements.** In addition to the specific conditions listed above, this emissions unit is also subject to the applicable requirements contained in 40 CFR 60, Subpart A – General Provisions and 40 CFR 60 Subpart OOO– Standards or Performance for Nonmetallic Mineral Processing Plants. [Rule 62-213.440, F.A.C.]

[Table of Contents](#)

SECTION 4. EMISSIONS UNIT SPECIFIC CONDITIONS

Subsection D. Emissions Units 006 thru 010

This section of the permit addresses the following emissions units.

EU No.	Emission Unit Description
006	Reciprocating Internal Combustion Engine (RICE) No. 1
007	RICE No. 2
008	RICE No. 3
009	RICE No. 4
010	RICE No. 5

Each emissions unit is a 0.8 megawatt (MW) spark ignition reciprocating internal combustion engine (RICE). Each engine has a power output of 1,148 brake horsepower (bhp). A gas treatment system consisting of gas dewatering, gas compressor and blowers, air-to-gas coolers, and filtration (particulate removal via 10 micron filters) will be used to clean the landfill gas before it is burned in the engines. The gas treatment system will not be equipped with atmospheric vents. Each engine has a stack height of 37 feet 8 inches (including silencer), an exit diameter of 1.33 feet, an exit temperature of approximately 847 °F, and an actual volumetric flow rate of approximately 6,035 scfm. The engines were manufactured in 2008 and ordered by the facility on October 4, 2010. Construction/installation commenced late December 2010/early January 2011. Initial start-up on the engines was May 3, 2011. These emissions units are not certified by the manufacturer to meet emission standards in 40 CFR 60 Subpart JJJJ, Standards of Performance for Spark Ignition Internal Combustion Engines.

{Permitting Note: These emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required, 62-212.400 Prevention of Significant Deterioration (PSD) for PSD Avoidance (This project avoids PSD Review by limiting the total gas flow to the combined units EU006 through EU015 and carbon monoxide (CO) emissions from units EU003 through EU015), 40 CFR 60 - Subpart A – General Provisions, 40 CFR 60, Subpart JJJJ – Standards of Performance for Spark Ignition Internal Combustion Engines, 40 CFR 63 Subpart A – General Provisions and 40 CFR 63 - Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engine.}

Essential Potential to Emit (PTE) Parameters

D.1. Permitted Capacity (Heat Input). The maximum heat input rate for each engine shall not exceed 9.16 MMBtu/hr.

[Rules 62-210.200(PTE) and 62-212.400(212), F.A.C. (PSD Avoidance); and Permit No. 0210051-024-AC]

*{Permitting Note: Air construction permit revision No. 0210051-021-AC reclassified the facility as a minor source for PSD by limiting carbon monoxide (CO) emissions from the facility to 242 tons per year. Control devices may operate in any scenario, whether individually or in combination, as long as CO emissions remain below 242 tons per year (see condition FW 10). An estimate of facility wide CO emissions utilizing appropriate emission factors, gas flow rates (landfill gas and natural gas) shall be reported to the Compliance Authority on an annual basis. [0210051-021-AC, Specific Condition 2.] Compliance with the maximum heat input rate of 9.16 MMBtu/hr shall be demonstrated in accordance with **Specific Condition D.16** below.}*

D.2. Authorized Fuel. The only fuel authorized to be burned is landfill gas (LFG). The use of any other fuel will require a modification to this permit. [Permit No. 0210051-014-AC and Rule 62-210.200(PTE), F.A.C.]

D.3. Restricted Operation. The hours of operation of are not limited (8760 hours per year). [Permit No. 0210051-014-AC and Rule 62-210.200(PTE), F.A.C.]

D.4. Air to Fuel Ratio. The owner or operator shall operate each engine at the manufacturer's recommended air-to-fuel ratio. [Permit No. 0210051-014-AC]

SECTION 4. EMISSIONS UNIT SPECIFIC CONDITIONS

Subsection D. Emissions Units 006 thru 010

- D.5. Fail-Safe Block Valve.** The owner or operator shall install and maintain an automatic fail-safe block valve on each emission unit. The fail-safe block valve must stop the flow of the LFG to the engines in the event of an engine failure. [Permit No. 0210051-014-AC]
- D.6. Elapsed Time Meters.** The owner or operator shall equip each emission unit with a non-resettable elapsed time meter to indicate, in cumulative hours, the elapsed engine operating time. [Permit No. 0210051-014-AC]
- D.7. Excess LFG from Engine.** Excess LFG not used as fuel in the engines must be flared in accordance with the requirements of 40 CFR 60 Subpart WWW and in accordance with the conditions of this permit. [Permit No. 0210051-014-AC]
- D.8. Treatment System Filtration.** The owner or operator shall install, operate and maintain PM filters that are specified to remove PM not to exceed 10 micron as part of the LFG fuel pretreatment process. [Permit No. 0210051-014-AC]
- D.9. Serial Numbers.** The owner or operator shall always maintain nameplates on each engine that includes the serial numbers of the engine. [Permit No. 0210051-014-AC]
- D.10. Emissions Unit Operating Rate Limitation After Testing.** See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(3), F.A.C.]

Emissions Standards

Unless otherwise specified, the averaging times for Specific Conditions **D.11 – D.18.** are based on the specified averaging time of the applicable test method.

- D.11. Carbon Monoxide (CO).** The CO emissions from each individual engine shall not exceed any of the following:
- 6.84 pounds per hour (lbs/hr),
 - 29.93 TPY, and
 - 2.7g/hp-hr.
- [Rule 62-212.400(12), F.A.C.; and Permit No. 0210051-014-AC]

*{Permitting Note: This facility is subject to the 5.0 g/bhp-hr CO emissions limitation in 40 CFR 60 Subpart JJJJ [60.4233(e) and Table 1, landfill/digester gas lean burn $500 \leq HP < 1,350$], however, the permittee requested the more stringent CO emissions limitations in Specific Condition **D.11.c.**}*

{Permitting Note: Air construction permit revision No. 0210051-021-AC reclassified the facility as a minor source for PSD by limiting carbon monoxide (CO) emissions from the facility to 242 tons per year. Control devices may operate in any scenario, whether individually or in combination, as long as CO emissions remain below 242 tons per year (see Specific Condition FW10). An estimate of facility wide CO emissions utilizing appropriate emission factors, gas flow rates (landfill gas and natural gas) and diesel fuel usage shall be reported to the Compliance Authority on an annual basis. [0210051-021-AC, Specific Condition 2.]}

- D.12. Nitrogen Oxides (NO_x).** NO_x emissions from each individual engine shall not exceed any of the following:
- 3.8 lbs/hr,
 - 16.63 TPY, and
 - 1.5 g/hp-hr.
- [Rule 62-212.400(12), F.A.C.; and Permit No. 0210051-014-AC]

*{Permitting Note: This facility is subject to the 3.0 g/bhp-hr NO_x emissions limitation of 40 CFR 60 Subpart JJJJ [60.4233(e)] and Table 1, landfill/digester gas lean burn $500 \leq HP < 1,350$], however, the permittee requested the more stringent NO_x emissions limitations in Specific Condition **D.12.c.**}*

- D.13. Volatile Organic Compounds (VOC).** VOC emissions from each individual engine shall not exceed any of the following:
- 0.53 lbs/hr,
 - 2.34 TPY, and

SECTION 4. EMISSIONS UNIT SPECIFIC CONDITIONS

Subsection D. Emissions Units 006 thru 010

c. 0.41 g/hp-hr.

[Rule 62-212.400(12), F.A.C.; and Permit No. 0210051-014-AC]

{Permitting Note: This facility is subject to the 1.0 g/bhp-hr VOC emissions limitation of 40 CFR 60 Subpart JJJJ [60.4233(e)] and Table 1, landfill/digester gas lean burn $500 \leq HP < 1,350$], however, the permittee requested the more stringent VOC emissions limitations in Specific Condition D.13.c.}

D.14. Visible Emissions (VE). Visible emissions shall not exceed 10% opacity. [Permit No. 0210051-014-AC]

D.15. Methane Content. The methane content of the landfill gas shall not be less than 44.5%. [Permit No. 0210051-014-AC]

D.16. Heat Input Compliance. Compliance with the permitted heat input shall be demonstrated monthly by comparing the 12-month rolling average to the permitted limit of 9.16 MMBtu/hr. [Permit No. 0210051-024-AC]

Monitoring of Operations

D.17. Gas Flow. The LFG flow to the emissions units at the facility shall be continuously monitored. The owner or operator shall install, operate and maintain a LFG flow meter to continuously measure the total LFG flow to the five engines. The flow meter shall be installed such that it does not include LFG flow to the new flares (EU014 and EU015) or to the existing flare (EU003). The flow rate for each engine shall be calculated each month by dividing the measured monthly total LFG flow (from flow meter) to all engines by each engine's hours of operation during the month (as determined by the elapsed time meters). [Permit No. 0210051-014-AC]

{Permitting Note: This facility shall be equipped with four LFG flow meters: one for the five engines, one for each flare (EU003, EU014 and EU015). Each flow meter shall only measure flow to its designated emissions unit(s).}

Testing Requirements

D.18. Test Methods. Required tests shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments
1	Sample and Velocity Traverses for Stationary Sources.
1A	Sample and Velocity Traverses for Stationary Sources with Small Stacks.
2	Determination of Stack Gas Velocity and Volumetric Flow Rate.
3	Gas analysis for Carbon Dioxide, Oxygen, Excess Air, and Dry Molecular Weight.
3A	Determination of Oxygen and Carbon Dioxide Concentrations in Emissions from Stationary Sources.
3B	Gas Analysis for The Determination of Emission Rate Correction Factor or Excess Air.
4	Determination of Moisture Content in Stack Gases.
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources.
9	Visual Determination of the Opacity of Emissions from Stationary Sources.
10	Determination of Carbon Monoxide Emissions from Stationary Sources.
18	Measurement of Gaseous Organic Compound Emissions by Gas Chromatography.
19	Determination of Sulfur Dioxide removal Efficiency and Particulate, Sulfur Dioxide and Nitrogen Oxides Emission Rates.
25A	Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer.

SECTION 4. EMISSIONS UNIT SPECIFIC CONDITIONS

Subsection D. Emissions Units 006 thru 010

Method	Description of Method and Comments
320	Measurement of Vapor Phase Organic and Inorganic Emissions by Extractive Fourier Transform Infrared (FTIR) Spectroscopy.
ATM Method D6522-00(2005)	Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers.
ASTM D6348-03	Standard Test Method for Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform Infrared (FTIR) Spectroscopy.

The above methods are described in Appendix A of 40 CFR 60 and are adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-204.800, F.A.C.; and Appendix A of 40 CFR 60, 40 CFR 60 Subpart JJJJ, Permit No. 0210051-014-AC]

D.19. Common Testing Requirements. The owner or operator shall notify the Compliance Authority in writing at least 30 days prior to any required tests. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

D.20. Annual Compliance Tests. At least half of all emission units that operate for more than 400 hours (including startup and shutdown) during each calendar year (January 1st to December 31st) shall be tested to demonstrate compliance with the emissions standards for CO, NOx, VOC and VE. Those emission units will not require testing the following year. Any emission units that operate more than 400 hours (including startup and shutdown) that were not tested during a given year will be tested the following year. This will result in each emission unit that operates more than 400 hours being tested biannually (once every two years), with approximately half being tested in a given year. An annual emissions test shall not be required for any emissions unit that operated for 400 hours or less (including during startup and shutdown) during the calendar year; however, any such emissions units shall be tested to demonstrate compliance with the emissions standards for CO, NOX, VOC and VE every 8760 hours or every three years, whichever comes first. All compliance tests for CO, NOX and VOC shall meet the testing requirements in accordance with 40 CFR 60 Subpart JJJJ. [Rules 62-4.070(3), 62-212.400(212) (PSD Avoidance), & 62-297.310, F.A.C.; 40 CFR 60, subpart JJJJ; and Application No. 0210051-024-AC.]

D.20. Testing Requirements. Tests shall be conducted in accordance with the requirements of 40 CFR 60, Subpart JJJJ. Tests must be conducted within 10 percent of 100 percent peak (or highest achievable) load and according to the requirements in 40 CFR 60.8 and under the specific conditions specified in 40 CFR 60 Subpart JJJJ, Table 2. [40 CFR 60.4244 and 60.4243(b)(2)(ii), Permit No. 0210051-014-AC]

D.23. Methane Content. The owner or operator shall analyze the LFG for the methane concentration by the fifteenth day of each month. The methane concentration readings may be obtained from calibrated handheld field instruments. [Permit No. 0210051-014-AC, Specific Condition 4.A.22.]

Records and Reports

D.24. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

D.25. Required Information in Test Reports. The serial numbers shall be recorded for each emissions unit test and shall be submitted with each engine's test report. The test report for CO emissions shall also include an estimate of SO₂ emissions in lbs/hr using the gas flow rate that was used during the CO test and the annual value for sulfur content. [Rule 62-297.310(8), F.A.C. and Permit No. 0210051-014-AC]

{Permitting Note: The required SO₂ emissions estimate in D.25. refers to SO₂ emissions from each engine. The value for the sulfur content is the annual value (total reduced sulfur content) measurement results.}

SECTION 4. EMISSIONS UNIT SPECIFIC CONDITIONS

Subsection D. Emissions Units 006 thru 010

- D.26. Continuous Monitoring and Recordkeeping.** The owner or operator shall continuously measure, record and maintain the following:
- Gas Flow.* Total LFG flow to the engines.
 - Power Generation.* Gross electrical power generation for each engine.
- [Permit No. 0210051-014-AC]
- D.27. Engine Operating Time.** The owner or operator shall record and maintain each engine's daily elapsed engine operating time. [Permit No. 0210051-014-AC]
- D.28. Monthly Records.** The owner or operator shall maintain the following records on a monthly basis:
- Operating Hours.* The monthly hours of operation of each engine.
 - Gas Flow.* The monthly LFG flow to each engine and the LFG flow 12 month rolling average to each engine.
 - Power Generation.* The monthly gross electrical power generation for each engine.
 - Methane Content.* Each month's methane concentration.
- [Permit No. 0210051-014-AC]
- D.29. Federal Rule Requirements.** The owner or operator shall comply with all applicable notification, reporting, and recordkeeping requirements in 40 CFR 60 Subpart JJJJ. [Permit No. 0210051-014-AC]

Other Requirements

- D.30. Federal Rule Requirements.** In addition to the specific conditions listed in this subsection, these emissions units are also subject to the requirements contained in 40 CFR 60, Subpart A – General Provisions, 40 CFR 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, and 40 CFR 63, Subpart A – General Provisions and 40 CFR 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines attached to this permit. [Rule 62-213.440, F.A.C. and Permit No. 0210051-014-AC]
- D.31. Alternative Method of Operation.**
- Authorized Engine Replacements.* At the time that any of the emissions units (EU006 through EU010) need to be replaced, the owner or operator may permanently replace the emissions unit with an engine that shall be the identical make, model, and maximum heat input. All replacement engines shall be owned by Waste Management. All replacement engines shall meet the applicable requirements of 40 CFR 60 Subpart JJJJ and/or 40 CFR 63 Subpart ZZZZ and the conditions of this permit.
 - Notifications.*
 - At least 15 days prior to installation of the replacement engine the owner or operator shall provide written notification to the Department's South District office. The notification shall contain the following information:
 - Emission unit number that is being replaced.
 - Replacement engine's information including make, model, year of manufacturer, serial number, maximum engine power, maximum heat input, maximum gas flow, and engine displacement.
 - Date of commencement of installation.
 - Documentation that the engine does or does not meet the definition of "reconstruction." *Reconstruction* is defined as the replacement of components of an affected or a previously non-affected source to such an extent that 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.
 - Applicable requirements and regulations.
 - The notification shall be signed by the facility's responsible official.
 - The owner or operator shall provide written notification to the Department's South District office within seven days after placing the replacement engine into operation.
 - Testing Requirements.*
 - Within 30 days after the replacement is placed into operation at the Collier County Landfill the owner or operator shall conduct initial performance and compliance testing for CO, NO_x, VOC and VE to demonstrate

SECTION 4. EMISSIONS UNIT SPECIFIC CONDITIONS

Subsection D. Emissions Units 006 thru 010

compliance with the emissions standards. Performance and compliance testing shall be in accordance with Specific Condition **D.22.** of this subsection. The owner or operator may request for approval of an extension of time up to an additional 30 days to conduct the required testing. The request for approval of an extension of time must be submitted in writing to the South District office.

ii. If the replacement engine's performance/compliance test result in emissions of any pollutant greater than 249 TPY for all combined emission units (EU003 and EU006 through EU015) then the facility shall submit an air construction permit for the replacement engine and preconstruction review requirements pursuant to Rule 62-212.400, F.A.C., as if construction of these emissions units had not yet begun will be applicable.

d. *Recordkeeping.* In accordance with 40 CFR 60.4245(a)(1), records of all maintenance conducted on the replacement engine shall be kept and maintained on site at the facility.

e. *Removal of Emission Unit.* The engine that is being replaced shall be removed from the facility site.

f. *Other Requirements.* The replacement engine shall be subject to all conditions of this permit.

[Permit No. 0210051-014-AC, 40 CFR 60 Subpart JJJJ, 40 CFR 63 Subpart ZZZZ]

[Table of Contents](#)

SECTION 4. EMISSIONS UNIT SPECIFIC CONDITIONS

Subsection E. Emissions Units 014 and 015

This section of the permit addresses the following emissions units.

EU No.	Emission Unit Description
014	1,200 scfm Flare
015	1,200 scfm Flare

Emissions units EU014 and EU015 are each a Parnel Biogas (Model 10-094) 1,200 scfm flare on a single skid. The two flares operate independently of each other. The maximum gas flow to both flares is 2,400 scfm. Each flare has a stack height of 42 feet, a combustion temperature of 1,400°F and an exit diameter of 0.67 feet. Construction of the flares commenced March 7, 2011 and initial start-up was June 17, 2011.

{Permitting Note: These emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required, 62-212.400 Prevention of Significant Deterioration (PSD) for PSD Avoidance (project, 0210051-014-AC, avoided PSD Review by limiting the total gas flow to the combined units EU006 through EU015), 40 CFR 60, Subpart A – General Provisions, 40 CFR 60 Subpart WWW, Standards of Performance for Municipal Solid Waste Landfills. Project 0210051-021-AC limited carbon monoxide emissions from units EU003 and EU006 through EU015.}

Essential Potential to Emit (PTE) Parameters

E.1. Permitted Capacity. The process rate for each Parnel Biogas flare shall not exceed 1,200 scfm of LFG based on a twelve month rolling average. [Rule 62-210.200(PTE), F.A.C. and 62-212.400(212), F.A.C. for PSD Avoidance, Permit No. 0210051-024-AC]

{Permitting Note: Air construction permit revision No. 0210051-021-AC reclassified the facility as a minor source for PSD by limiting carbon monoxide (CO) emissions from the facility to 242 tons per year. Control devices may operate in any scenario, whether individually or in combination, as long as CO emissions remain below 242 tons per year (see Specific Condition FW10). An estimate of facility wide CO emissions utilizing appropriate emission factors, gas flow rates (landfill gas and natural gas) and diesel fuel usage shall be reported to the Compliance Authority on an annual basis. [0210051-021-AC, Specific Condition 2.]}

E.2. Restricted Operation. The hours of operation of are not limited (8760 hours per year). [Rule 62-210.200(PTE), F.A.C.]

E.3. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(3), F.A.C.]

Emissions Standards

Unless otherwise specified, the averaging time for Specific Condition **E.4.** is based on the specified averaging time of the applicable test method.

E.4. Visible Emissions. The flare shall be operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. [40 CFR 60.18(c), Permit No. 0210051-014-AC]

Monitoring of Operations

E.5. Gas Flow. The total LFG flow to each flare shall be continuously monitored. The permittee shall install, operate and maintain LFG flow meters to continuously measure the total LFG flow to each flare. The flow meters shall be installed to not include LFG flow to the engines (EU006, EU007, EU008, EU009, EU010) or the 3,000 scfm flare (EU003). [Permit No. 0210051-014-AC]

SECTION 4. EMISSIONS UNIT SPECIFIC CONDITIONS

Subsection E. Emissions Units 014 and 015

Testing Requirements

E.6. Test Methods. Required tests shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments
22	Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares. EPA ADI (ALT 042) allows for 30 minute duration for open flares.

The above methods are described in Appendix A of 40 CFR 60 and are adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-204.800, F.A.C.; and Appendix A of 40 CFR 60, Permit No. 0210051-014-AC]

E.7. Common Testing Requirements. The owner or operator shall notify the Compliance Authority in writing at least 15 days prior to any required tests. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

E.8. Annual Compliance Tests Required. During each calendar year (January 1st to December 31st), the emissions unit shall be tested to demonstrate compliance with the emissions standards for **VE**. [Rule 62-297.310(8), F.A.C., Permit No. 0210051-014-AC]

Records and Reports

E.9. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

E.11. Federal Rule Requirements. In addition to the specific conditions listed above, this emissions unit is also subject to the applicable requirements contained in 40 CFR 60, Subpart A – General Provisions, Subpart A – General Provisions and attached to this permit as Appendix NSPS A, respectively. [Rule 62-213.440, F.A.C., Permit No. 0210051-014-AC]

[Table of Contents](#)

SECTION 4. EMISSIONS UNIT SPECIFIC CONDITIONS

Subsection F. Emissions Unit 016

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

E.U. No.	Brief Description
016	CI RICE (backup diesel generator)

EU016 is an existing 159.8 HP (6.6 L displacement) CI back-up diesel electric generator. The manufacturer is Superior Power Systems, model No. is 100R161. The manufacturer date was June 2001 and the date the engine commenced construction (was ordered) was February 2001. This engine operates on diesel fuel. This engine operates less than 100 hours per year for emergency power use and less than 100 hours per year for testing. Per 40 CFR 63 Subpart ZZZZ, this engine is an emergency engine.

The following table provides important details for this emissions unit:

E.U. ID No.	Engine Brake HP	Date of Construction	Model Year	Primary Fuel	Type of Engine
016	159.8	02/2001	06/2001	Diesel	Emergency

{Permitting Note: This emissions unit, EU016, is regulated under 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE adopted in Rule 62.204.800(11)(b), F.A.C. This RICE is not used for fire pumps. This permit section addresses "existing" stationary CI RICE less than or equal to 500 HP that are located at an area source of HAP and that have not been modified or reconstructed after 6/12/2006. Unless the RICE is modified or reconstructed after 7/11/2005, NSPS 40 CFR 60, Subpart IIII, will not apply. The permittee shall comply with the following emissions and operating limitations no later than May 3, 2013.}

Essential Potential to Emit (PTE) Parameters

F.1. Hours of Operation

- Emergency Situations.* There is no time limit on the use of emergency stationary RICE in emergency situations. [40 CFR 63.6640(f)(1)]
- Maintenance and Testing.* Each RICE is authorized to operate for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. [40 CFR 63.6640(f)(1)]
- Non-emergency Situations.* Each RICE is authorized to operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. [40 CFR 63.6640(f)(1)]
- Other Situations.* Each RICE cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph, as long as the power provided by the financial arrangement is limited to emergency power. [40 CFR 63.6640(f)(1)]
- Engine Startup.* During periods of startup the owner or operator must minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for the appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 CFR 63.6625(h)]

SECTION 4. EMISSIONS UNIT SPECIFIC CONDITIONS

Subsection F. Emissions Unit 016

Emission Limitations and Operating Requirements

F.2. Work or Management Practice Standards

- a. *Oil.* Change oil and filter every 500 hours of operation or annually, whichever comes first. [40 CFR 63 Table 2c(1)(a)]
- b. *Air Cleaner.* Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first. [40 CFR 63 Table 2c(1)(b)]
- c. *Hoses and Belts.* Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63 Table 2c(1)(c)]
- d. *Operation and Maintenance.* Operate and maintain the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions or develop and follow your own maintenance plan which must provide, to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution, control practice for minimizing emissions. [40 CFR 63.6625(e)]
- e. *Oil Analysis.* The owner or operator has the option of using oil analysis to extend the change requirement. The oil analysis must be performed at the same frequency specified for changing the oil in **F.3.a.** The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent of water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent of water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63.6625(i)]

Monitoring of Operations

- F.3.** Hour Meter. The owner or operator must install a non-resettable hour meter if one is not already installed. [40 CFR 63.6625(f)]

Compliance

- F.4.** Continuous Compliance. Each unit shall be in compliance with the emission limitations and operating standards in this section at all times. [40 CFR 63.6605(a)]
- F.5.** Operation and Maintenance of Equipment. At all times 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. Determination of whether such operation and maintenance procedures are being used will be based on information available to the compliance authority which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b)]

Recordkeeping Requirements

F.6. Notification, Performance and Compliance Records.

- a. A copy of each notification and report that the owner or operator submitted to comply with this section, including all documentation supporting any Initial Notification or Notification of Compliance Status that the owner or operator submitted.
- b. The owner or operator must keep the records required in specific condition **F.3.(d)** of this section to show continuous compliance with each emission limitation or operating requirement.

SECTION 4. EMISSIONS UNIT SPECIFIC CONDITIONS

Subsection F. Emissions Unit 016

- c. The owner or operator must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.

[40 CFR 63.6655]

F.7. Malfunction Records.

- a. Records of the occurrence and duration of each malfunction of operation (i.e. process equipment) or the air pollution control and monitoring equipment.
- b. Records of actions taken during periods of malfunction to minimize emissions in accordance with specific condition **F.8.** of this section including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[40 CFR 63.6655]

F.8. Maintenance Records.

- a. Records of all required maintenance performed on the air pollution control and monitoring equipment.
- b. The owner or operator must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the stationary RICE and after-treatment control device (if any) are operated and maintained according to its own maintenance plan.

[40 CFR 63.6655]

F.9. Record Retention.

- a. The owner or operator must keep records in a suitable and readily available form for expeditious reviews.
- b. The owner or operator must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[40 CFR 63.6660 and 40 CFR 63.10(b)(1)]

Reporting Requirements

- F.10. Emergency Situation.** If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in specific condition **F.3.** of this section, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work 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 work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable. [40 CFR 63 Table 2c, footnote 1]

General Provisions

- F.11. General Provisions.** The owner or operator must comply with the general provisions in 40 CFR 63 Subpart A. [40 CFR 63.6665]

Other Requirements

- F.12. Federal Rule Requirements.** In addition to the specific conditions listed in this subsection, the owner or operator must comply with requirements contained in 40 CFR 63, Subpart A – General Provisions and 40 CFR 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines attached to this permit. [Rule 62-213.440, F.A.C., 40 CFR 63 Subparts A and ZZZZ]

Table of Contents

SECTION 4. EMISSIONS UNIT SPECIFIC CONDITIONS

Subsection G. Emissions Unit 018

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

E.U. No.	Brief Description
018	CI RICE (6 inch Water Pump)

This section describes the following generator:

- Stationary Diesel-Fueled Water Pump (14 HP)

Unit Manufacturer: Thompson; Unit Model No.: 904016; Engine Manufacturer: Perkins; Engine Model No.: 3TNV88; Engine Fuel: diesel; Installation Date: 2005; Manufacture Date: 2005; Stationary; HP: 14; Use (Hrs/Yr): 500; located on site, but not in service; existing RICE; not subject to 40 CFR 60 Subpart III.

{Permitting Note: This compression ignition reciprocating internal combustion engine (CI RICE) is regulated under 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE adopted in Rule 62.204.800, F.A.C. This RICE is not used for a fire pump. This RICE is exempted from regulations under 40 CFR 60, Subpart III - New Source Performance for Stationary Internal Combustion Engines (ICE) based on the manufacturer date. This is an "existing" stationary CI RICE less than or equal to 500 HP, with a displacement of less than 10 liters per cylinder that is located at an area source of HAP and that has not been modified or reconstructed after 6/12/2006.}

Equipment Specifications

G.1. Equipment. The permittee is authorized to operate and maintain one 14 HP generator. [Rule 62-210.200(PTE), F.A.C.; 0210051-021-AC, Specific Condition 6.]

Work Practice Standards

G.2. Work or Management Practice Standards.

- Oil.* Change oil and filter every 500 hours of operation or annually, whichever comes first. [40 CFR 63.6603 & Table 2d.]
- Air Cleaner.* Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first and replace as necessary. [40 CFR 63.6603 & Table 2d.]
- Hoses and Belts.* Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63.6603 & Table 2d.]
- Operation and Maintenance.* Operate and maintain the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions or develop and follow the permittee's own maintenance plan which must provide, to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution, control practice for minimizing emissions. [40 CFR 63.6625(e), 63.6640(a) & Table 6.9.a.]
- Engine Startup.* During periods of startup the owner or operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63.6625(h)]
- Oil Analysis.* The owner or operator has the option of using an oil analysis program to extend the oil change requirement. The oil analysis must be performed at the same frequency specified for changing the oil in paragraph a., above. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator

SECTION 4. EMISSIONS UNIT SPECIFIC CONDITIONS

Subsection G. Emissions Unit 018

must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63.6625(i)]

Compliance

G.3. Continuous Compliance. Each unit shall be in compliance with the emission limitations and operating standards in this section at all times. [40 CFR 63.6605(a)]

G.4. Operation and Maintenance of Equipment. At all times 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. Determination of whether such operation and maintenance procedures are being used will be based on information available to the compliance authority which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b)]

Recordkeeping Requirements

G.5. Notification, Performance and Compliance Records. The owner or operator must keep:

- a. A copy of each notification and report that the owner or operator submitted to comply with this section, including all documentation supporting any Initial Notification or Notification of Compliance Status that the owner or operator submitted.
- b. Records of the occurrence and duration of each malfunction of operation.
- c. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunctioning process and monitoring equipment to its normal or usual manner of operation.
- d. Records of the actions required to show continuous compliance with each emission limitation or operating requirement.
- e. Records of the Work or Management Practice Standards.
- f. Records of the maintenance conducted in order to demonstrate that the RICE was operated and maintained according to your own maintenance plan.

[40 CFR 63.6655]

G.6. Record Retention.

- a. The owner or operator must keep records in a suitable and readily available form for expeditious reviews.
- b. The owner or operator must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[40 CFR 63.6660]

Other Requirements

G.7. Federal Rule Requirements. In addition to the specific conditions listed in this subsection, the owner or operator must comply with requirements contained in 40 CFR 63, Subpart A – General Provisions and 40 CFR 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines attached to this permit. [Rule 62-213.440, F.A.C., 40 CFR 63 Subparts A and ZZZZ; 40 CFR 63.6665]

[Table of Contents](#)

SECTION 4. EMISSIONS UNIT SPECIFIC CONDITIONS

Subsection H. Emissions Unit 019

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

E.U. No.	Brief Description
019	Emergency Generator

This section describes the following emergency generator:

- Stationary Emergency Generator at Scale House (107 HP)
 - Unit Manufacturer: Superior; Perkins; Unit Model No.: 2428/1800; diesel; Installation Date: 06/2001; Stationary; HP: 107; KW: 80; Use (Hrs/Yr): 138; Existing RICE; Not Subject to 40 CFR 60 Subpart IIII.

{Permitting Note: This compression ignition reciprocating internal combustion engine (CI RICE) is regulated under 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE adopted in Rule 62.204.800, F.A.C. This RICE is not used for a fire pump. This RICE is exempted from regulations under 40 CFR 60, Subpart IIII - New Source Performance for Stationary Internal Combustion Engines (ICE) based on the manufacturer date. This is an "existing" stationary emergency CI RICE less than or equal to 500 HP, with a displacement of less than 10 liters per cylinder that is located at an area source of HAP and that has not been modified or reconstructed after 6/12/2006.}

Essential Potential to Emit (PTE) Parameters

H.1. Hours of Operation.

- a. Emergency Situations. There is no time limit on the use of emergency stationary RICE in emergency situations. [40 CFR 63.6640(f)(1)]
- b. Other Situations. The permittee may operate your emergency stationary RICE for any combination of the purposes specified in Conditions **H.1.b.(1)** through **(3)** for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by Condition **H.1.c.** of this section counts as part of the 100 hours per calendar year allowed by this Condition **H.1.b.**
 - (1) Maintenance and Testing. Each RICE is authorized to operate for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year. [40 CFR 63.6640(f)(2)(i)]
 - (2) Emergency Demand Response. Each RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see 40 CFR 63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3. [40 CFR 63.6640(f)(2)(ii)]
 - (3) Voltage or Frequency Deviations. Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. [40 CFR 63.6640(f)(2)(iii)]
- c. Non-emergency Situations. These RICE may be operated for up to 50 hours per calendar year in nonemergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph b., above. Except as provided in paragraphs below, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to

SECTION 4. EMISSIONS UNIT SPECIFIC CONDITIONS

Subsection H. Emissions Unit 019

generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

- The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
 - The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
 - The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
 - The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
 - The power is provided only to the facility itself or to support the local transmission and distribution system.
 - The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[40 CFR 63.6640(f)(4)]

H.2. Work or Management Practice Standards.

- a. *Oil.* Change oil and filter every 500 hours of operation or annually, whichever comes first. [40 CFR 63.6603 & Table 2d.]
- b. *Air Cleaner.* Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first and replace as necessary. [40 CFR 63.6603 & Table 2d.]
- c. *Hoses and Belts.* Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63.6603 & Table 2d.]
- d. *Operation and Maintenance.* Operate and maintain the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions or develop and follow the permittee's own maintenance plan which must provide, to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution, control practice for minimizing emissions. [40 CFR 63.6625(e), 63.6640(a) & Table 6.9.a.]
- e. *Engine Startup.* During periods of startup the owner or operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63.6625(h)]
- f. *Oil Analysis.* The owner or operator has the option of using an oil analysis program to extend the oil change requirement. The oil analysis must be performed at the same frequency specified for changing the oil in paragraph a., above. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63.6625(i)]

SECTION 4. EMISSIONS UNIT SPECIFIC CONDITIONS

Subsection H. Emissions Unit 019

Monitoring of Operations

H.3. Hour Meter. The owner or operator must install a non-resettable hour meter if one is not already installed.
[40 CFR 63.6625(f)]

Compliance

H.4. Continuous Compliance. Each unit shall be in compliance with the emission limitations and operating standards in this section at all times. [40 CFR 63.6605(a)]

H.5. Operation and Maintenance of Equipment. At all times 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. Determination of whether such operation and maintenance procedures are being used will be based on information available to the compliance authority which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b)]

Recordkeeping Requirements

H.6. Notification, Performance and Compliance Records. The owner or operator must keep:

- a. A copy of each notification and report that the owner or operator submitted to comply with this section, including all documentation supporting any Initial Notification or Notification of Compliance Status that the owner or operator submitted.
- b. Records of the occurrence and duration of each malfunction of operation.
- c. Records of all required maintenance performed on the hour meter.
- d. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunctioning process and monitoring equipment to its normal or usual manner of operation.
- e. Records of the actions required to show continuous compliance with each emission limitation or operating requirement.
- f. Records of the Work or Management Practice Standards.
- g. Records of the maintenance conducted in order to demonstrate that the RICE was operated and maintained according to your own maintenance plan.
- h. Records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for emergency demand response operation or for periods of voltage or frequency deviations, the owner or operator must keep records of the notification of the emergency situation, and the time of engine operation for these purposes.
[40 CFR 63.6655]

H.7. Record Retention.

- a. The owner or operator must keep records in a suitable and readily available form for expeditious reviews.
- b. The owner or operator must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[40 CFR 63.6660]

Reporting Requirements

H.8. Delay of Performing Work Practice Requirements. 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

SECTION 4. EMISSIONS UNIT SPECIFIC CONDITIONS

Subsection H. Emissions Unit 019

requirements on the schedule required., 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. [40 CFR 63, Subpart ZZZZ, Table 2d, footnote 2]

Other Requirements

H.9. Federal Rule Requirements. In addition to the specific conditions listed in this subsection, the owner or operator must comply with requirements contained in 40 CFR 63, Subpart A – General Provisions and 40 CFR 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines attached to this permit. [Rule 62-213.440, F.A.C., 40 CFR 63 Subparts A and ZZZZ; 40 CFR 63.6665]

[Table of Contents](#)

SECTION 4. EMISSIONS UNIT SPECIFIC CONDITIONS

Subsection I. Emissions Unit 020

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

E.U. No.	Brief Description
020	CI RICE (PosiShell Silo)

This section describes the following generator:

- Stationary Diesel-Fueled Engine at Posi-Shell mixing silo (34 HP)
 - Unit Manufacturer: Perkins; Model No.: 403D15; diesel; 2008; stationary; HP: 33.6; KW: 25.1; Use (Hrs/Yr): 160; new RICE; subject to 40 CFR 60 Subpart IIII.

{Permitting Note: This emissions unit, one compression ignition (CI) engine, is regulated under 40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines(RICE) adopted in Rule 62.204.800, F.A.C., and 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. Pursuant to 40 CFR 63.6590(c), this engine complies with the requirements of 40 CFR 63, Subpart ZZZZ, by complying with the applicable requirements contained in 40 CFR 60, Subpart IIII. This permit section addresses a “new” stationary CI RICE less than 750 HP, with a displacement less than 10 liters per cylinder, that is located at an Area source of HAPs, that commenced construction after 07/11/2005, and has a post-2007 model year.}

General

- I.1. NSPS Subpart IIII Applicability.** This generator is a Stationary Compression Ignition Internal Combustion Engine (Stationary ICE) and shall comply with applicable provisions of 40 CFR 60, Subpart IIII, including emission testing or certification. [40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.]
- I.2. NESHAPS Subpart ZZZZ Applicability.** This generator is a Liquid Fueled Reciprocating Internal Combustion Engine (RICE) and shall comply with applicable provisions of 40 CFR 63, Subpart ZZZZ. Pursuant to 40 CFR 63.6590(c) the generator must meet the requirements of Subpart ZZZZ by meeting the requirements of 40 CFR 60, Subpart IIII. [40 CFR 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE).]

Equipment Specifications

- I.3. Equipment.** The permittee is authorized to operate, and maintain one 25.1 kW generator. [Rule 62-210.200(PTE), F.A.C.; 0210051-021-AC, Specific Condition 6.]

Essential Potential to Emit (PTE) Parameters

- I.4. Allowable Fuel.** This engine must use diesel fuel that meets the following requirements for non-road diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.
- Sulfur Content.** The sulfur content shall not exceed 15 ppm (0.0015% weight).
 - Cetane and Aromatic.** The fuel must have a minimum cetane index of 40 or must have a maximum aromatic content of 35 volume percent.

[40 CFR 60.4207(b) and 80.510(b)]

Emission Limitations and Operation Requirements

- I.5. Emissions Limits.** Each generator shall comply with the following emission limits and demonstrate compliance in accordance with the procedures given in 40 CFR 60, Subpart IIII. Manufacturer certification can be provided to the Department in lieu of actual stack testing.

SECTION 4. EMISSIONS UNIT SPECIFIC CONDITIONS

Subsection I. Emissions Unit 020

Source (model year)	CO (g/hp-hr)	PM (g/hp-hr)	Hydrocarbons (g/hp-hr)	NO _x (g/hp-hr)
Subpart IIII (2008)	4.1	0.4	5.6 (NMHC ^a +NO _x)	

- a. NMHC means Non-Methane Hydrocarbons.

[40 CFR 60, Subpart IIII and Rule 62-4.070(3), F.A.C.]

I.6. NMHC + NO_x Emissions. Non-Methane Hydrocarbons and Nitrogen oxide emissions shall not exceed 7.5 g/KW-hr. [40 CFR 60.4204(b), 60.4201(a) & 89.112, Table 1]

I.7. CO Emissions. Carbon monoxide emissions shall not exceed 5.5 g/KW-hr. [40 CFR 60.4204(b), 60.4201(a) & 89.112, Table 1]

I.8. PM emissions. Particulate matter emissions shall not exceed 0.60 g/KW-hr. [40 CFR 60.4204(b), 60.4201(a) & 89.112, Table 1]

Compliance Requirements

I.9. Operation and Maintenance. Except as provided in Specific Condition **I.12.**, the owner or operator must:

- Operate and maintain the stationary CI internal combustion engine according to the manufacturer's written instructions. [40 CFR 60.4211(a)]
- Change only those emissions-related settings that are permitted by the manufacturer. [40 CFR 60.4211(a)]
- Operate and maintain this unit to achieve the emission standards specified in Specific Conditions **I.6. – .9.** over the entire life of the engine. [40 CFR 60.4206]

I.10. Demonstration of Compliance. The owner or operator must demonstrate compliance according to one of the methods below:

- Retain Manufacturer's Certification.* Have purchased an engine certified to the emissions standards in Specific Conditions **I.5. – I.9.**, and operate and maintain the engine according to the manufacturer's emission-related written instructions. [40 CFR 60.4211(c)]
- Loss of Manufacturer's Certification.* If you do not operate and maintain your engine according to the manufacturer's emission-related written instructions, or you change emissions-related settings in a way not permitted by the manufacturer, then:
 - (1) you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if you do not install and configure the engine and control device according to the manufacturer's emission-related written instructions, or you change the emission-related settings in a way that is not permitted by the manufacturer, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.
[40 CFR 60.4211(g)(1)]

Testing Requirements

I.11. Performance Tests. If performance tests are required pursuant to Specific Condition **I.10.**, then:

- Performance tests must be conducted according to the in-use testing procedures in 40 CFR Part 1039, Subpart F. [40 CFR 4212(a)]
- Exhaust emissions must not exceed the not to exceed (NTE) numerical requirements, rounded to the same number of decimal places as the applicable standard (STD - see Specific Conditions **I.5. – I.9.**) determined from the following equation: NTE requirement for each pollutant = (1.25) x (STD). [40 CFR 60.4212(c)]

SECTION 4. EMISSIONS UNIT SPECIFIC CONDITIONS

Subsection I. Emissions Unit 020

- I.12. Common Testing Requirements.** Unless otherwise specified and if required, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

Recordkeeping and Reporting Requirements

- I.13. Notification, Recordkeeping and Reporting Requirements.** The permittee shall maintain records of the amount of fuel oil used in the generator and shall comply with the notification, recordkeeping and reporting requirements pursuant to 40 CFR 60.4214 and 40 CFR 60.7. These records shall be submitted to the Compliance Authority on an annual basis or upon request.
[Rule 62-4.070(3), F.A.C.; 40 CFR 60, Subparts A and III.]
- I.14. Maintenance Records.** To demonstrate conformance with the manufacturer's written instructions for maintaining the certified engine and to document when compliance testing must be performed pursuant to Specific Condition **I.10.**, the owner or operator must keep the following records:
- Engine manufacturer documentation and certification indicating compliance with the standards.
 - A copy of the manufacturer's written instructions for operation and maintenance of the certified engine or procedures developed by the owner or operator that are approved by the engine manufacturer.
 - A written maintenance log detailing the date and type of maintenance performed on the engine, as well as any deviations from the manufacturer's written instructions.
- [Rule 62-213.440(1), F.A.C.]
- I.15. Testing Notification.** At such time that the requirements of Specific Condition **I.10.** become applicable, the owner or operator shall notify the compliance authority of the date by which the initial compliance test must be performed. [Rule 62-213.440(1)]
- I.16. Other Reporting Requirements.** See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

General Provisions

- I.17. 40 CFR 60 Subpart A, General Provisions.** The owner or operator shall comply with the following applicable requirements of 40 CFR 60 Subpart A, General Provisions, which have been adopted by reference in Rule 62-204.800(11)(d)1., F.A.C. (see Appendix NSPS, Subpart A – General Provisions): [Link to 40 CFR 60, Subpart A - General Provisions](#).

General Provisions Citation	Subject of Citation
§ 60.1	General applicability of the General Provisions
§ 60.2	Definitions (see also § 60.4219)
§ 60.3	Units and abbreviations
§ 60.4	Address
§ 60.5	Determination of construction or modification
§ 60.6	Review of plans
§ 60.7	Notification and Recordkeeping (as specified in § 60.4214(a))
§ 60.8	Performance tests (if required)
§ 60.9	Availability of information
§ 60.10	State Authority
§ 60.12	Circumvention
§ 60.14	Modification
§ 60.15	Reconstruction
§ 60.16	Priority list
§ 60.17	Incorporations by reference
§ 60.18	General control device requirements

SECTION 4. EMISSIONS UNIT SPECIFIC CONDITIONS

Subsection I. Emissions Unit 020

General Provisions Citation	Subject of Citation
§ 60.19	General notification and reporting requirements

[40 CFR 60.4218 and Table 8 to 40 CFR 60, Subpart IIII]

[Table of Contents](#)

SECTION IV. APPENDICES.

The Following Appendices Are Enforceable Parts of This Permit:

Appendix A, Glossary.

Appendix G, Approved NSPS Alternate Procedures.

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

Appendix NESHAP, Subpart A – General Provisions.

Appendix NESHAP, Subpart M – National Emission Standards for Asbestos.

Appendix NESHAP, Subpart AAAA – National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills.

Appendix NESHAP, Subpart ZZZZ, - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

Appendix NSPS, Subpart A – General Provisions.

Appendix NSPS, Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants

Appendix NSPS, Subpart WWW – Standards of Performance for Municipal Solid Waste Landfills

Appendix NSPS, Subpart IIII. - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

Appendix NSPS, Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.

Appendix RR, Facility-wide Reporting Requirements.

Appendix TR, Facility-wide Testing Requirements.

Appendix TV, Title V General Conditions.

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

Figure 1, Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance (40 CFR 60, July, 1996)

[Table of Contents](#)