City of Jacksonville JEA
Buckman Water Reclamation Facility

Facility ID No.: 0310166
Duval County

Title V Air Operation Permit Revision

Permit No.: 0310166-015-AV
Revision of Title V Air Operation Permit No.: 0310166-011-AV

Permitting Authority:

State of Florida
Department of Environmental Protection

Northeast District Office
Waste and Air Resource Management Program
8800 Baymeadows Way West, Suite 100
Jacksonville, Florida 32256
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Title V Air Operation Permit Revision
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FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

NORTHEAST DISTRICT
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SECRETARY

Permittee:
City of Jacksonville, JEA
Buckman Water Reclamation Facility
735 East Bay Street
Jacksonville, Florida 32202

Permit No.: 0310166-015-AV
Facility ID No.: 0310166
Title V Air Operation Permit Revision

The purpose of this permit is to revise the Title V Air Operation Permit No. 0310166-011-AV to incorporate the terms and conditions of Construction Permit No. 0310166-013-AC issued on January 27, 2012, and extended until April 30, 2014.

This permit is for the operation of the City of Jacksonville, JEA, Buckman Water Reclamation Facility, located at 2221 Buckman Street, Jacksonville, Duval County, FL.; UTM Coordinates: Zone 17, 439.380 km East and 3357.690 km North; Latitude: 30º 21' 08" North and Longitude: 81º 37' 42" 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, 62-213. The above named permittee is hereby authorized to operate the facility in accordance with the terms and conditions of this permit.

Effective Date:	**January 9, 2011**
Revision Effective Date:	**April 22, 2014**
Renewal Application Due Date:	**May 20, 2015**
Expiration Date:	**December 31, 2015**

Richard S. Rachal III, P.G.
Program Administrator
Waste and Air Resource Management Program

RSR: rfs

Subsection A. Facility Description

This facility is a municipal wastewater treatment plant with a maximum wastewater treatment capacity of 52.5 million gallons per day.

Raw waste water from the sanitary sewer collection system is junctioned to an influent pump station, from which it enters the waste water treatment train consisting of the following major process units; Aerated Grit Chamber, Primary Clarifiers, Aeration Basins, Secondary Clarifiers, and the Chlorination and Sulfur Dioxide Contact Chambers.

Treated effluent is discharged to the St. Johns River. Odorous gases from the influent junction box, wet well and pump station prior to the Aerated Grit Chamber are collected and treated in Odor Control System No. 1. Odorous gas from the Biosolids Building will be treated in the Odor Control System No. 2. Odorous gases from the Raw Sludge Storage Tank will be collected and treated in the Odor Control System No. 2A.

The sludge drying system is equipped with a Venturi scrubber followed in series by a Regenerative Thermal Oxidizer (RTO) for the control of air pollutant emissions. Particulate matter emissions generated by the handling (pelletizing and crushing operations) of dry sludge pellets (generated by the sludge dryer) are controlled by a Flex-Kleen baghouse dust collector which is vented in series to the Odor Control System No.2 (EU 004) to the atmosphere. The facility operates three anaerobic digesters for wastewater treatment and the production of bio-gas. Three hot water boilers produce hot water and heat for the bio-solids treatment process. There are two sludge holding tanks with one operating as a raw sludge holding tank and the other operating as a digested sludge holding tank equipped with a membrane cover providing low pressure digester gas storage. An internal combustion engine generator generates electricity. A flare combusts bio-gas as a back-up to the sludge drum dryer. The sludge drum dryer, and the hot water boilers are each capable of firing either natural gas, digester gas, or a blend of both gases. The internal combustion engine generator is capable of firing digester gas only.

Air pollution sources will include the following: sludge drum dryer, product storage and truck loading operation, three hot water boilers, digester gas flare (back-up), and an internal combustion engine. The facility also includes two internal combustions engines that are operated on an emergency use basis. The bio-solids process emits the air pollutants particulate matter, particulate matter equal to or less than 10 microns in aerodynamic diameter, volatile organic compounds, oxides of nitrogen, carbon monoxide, and sulfur dioxide.

Subsection B. Summary of Emissions Units

E.U. ID No.	Brief Description
003	Odor Control System No. 1
004	Odor Control System No. 2
007	Sludge Drum Dryer System
010	Truck Loading Operation No. 1
011	Truck Loading Operation No. 2
013	Boiler No. 2
014	Boiler No. 3
015	Caterpillar Internal Combustion Engine with Generator
016	Open Air Flare

017	Dry Sludge Silo Nos. 1 and 2
018	Boiler No. 1
019	Odor Control Unit No. 2A
020	300 kW Emergency IC Engine/Generator
021	80 kW Emergency IC Engine/Generator

Subsection C. Applicable Regulations.

Based on the Title V air operation permit revision application received January 30, 2014, this facility is not a major source of hazardous air pollutants (HAP.) The existing facility is not a PSD major source of air pollutants in accordance with Rule 62-212.400, F.A.C. A summary of applicable regulations is shown in the following table.

Regulation	**EU No (s).**
City of Jacksonville Ordinance Code, Title X, Chapter 360 [Environmental Regulation], Chapter 362 [Air and Water Pollution], Chapter 376 [Odor Control], JEPB Rule 1 [Final Rules with Respect to Organization, Procedure, and Practice]; JEPB Rule 2, Parts I through VII, and Parts IX through XIV	All
40 CFR 61 Subpart E- Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units,	007
40 CFR 61, Subpart A, General Provisions	007
40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	021
40 CFR 60, Subpart A, General Provisions	021
40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	015, 020, 021
40 CFR 63, Subpart A, General Provisions	015, 020, 021
Stipulation for Consent Agreement dated May 7, 1980,	003, 004, 019
Rules 62-296.700(3), 62-296.700(4), 62-296.700(5), 62-296.700(6), FAC	004, 007, 010, 011, 017
Rule 62-296.711, F.A.C.	010, 011, 017
Rule 62-296.712, F.A.C.	004, 007
Rule 62-212.300, F.A.C.	016

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.]

FW2. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.

[Rule 62-213.440, F.A.C.; and Rule 2.501, JEPB]

FW3. The facility shall be subject to the City of Jacksonville Ordinance Code, Title X, Chapter 360 [Environmental Regulation], Chapter 362 [Air and Water Pollution], Chapter 376 [Odor Control], and JEPB Rule 1 [Final Rules with Respect to Organization, Procedure, and Practice].

FW4. The facility shall be subject to JEPB Rule 2, Parts I through VII, and Parts IX through XIV.

Emissions and Controls

FW5. 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.; and Rule 2.1101, JEPB; Permit No. 0310166-003-AC; Permit No. 0310166-009-AC; Permit No. 0310166-013-AC]

FW6. 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. and Rule 2.1101, JEPB]

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

FW7. 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. and 4., F.A.C., and Rule 2.1101, JEBP]

FW8. 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 include the following requirements:

a. Paving and maintenance of roads, parking areas and yards.
b. Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.

c. Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
d. Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne.
e. Landscaping or planting of vegetation.
f. Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
g. Confining abrasive blasting where possible.
h. Enclosure or covering of conveyor systems.

[Rule 62-296.320(4)(c), F.A.C. and Rule 2.1101, JEPB]

Annual Reports and Fees

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

FW9. 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 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); and Rule 2.301, JEPB; Rule 2.501, JEPB]

{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.****}*

FW10. 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.; and Rule 2.501, JEPB]

FW11. Prevention of Accidental Releases (Section 112(r) of CAA). If, and when, the facility becomes subject to 112(r), the permittee shall:

a. Submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent 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://www.epa.gov/osweroe1/content/rmp/index.htm. The RMP Reporting Center can be contacted at: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: (703) 227-7650.

b. Submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.

[40 CFR 68]

FW12. Excess emissions resulting from startup, shutdown, or malfunction of any emission unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Permitting Authority for longer duration. 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. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Permitting Authority in accordance with Rule 62-4.130, FAC and Rule 2.1401, JEPB. A full written report on the malfunctions shall be submitted to the Permitting Authority in a quarterly report, if requested by the Permitting Authority.

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

[Rule 62-210.700(1), (4), and (6), FAC, and Rule 2.201, JEPB]

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

EU No.	Brief Description
003	Odor Control System No. 1. Collects off gases from the influent junction box, wet well, and pump station Odorous gas control device: Gas collection duct work, gas blowers, humidifier, and 12 ft diameter bioscrubber.

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. The process airflow rate is 15,000 cfm (nominal).

[Rule 62-210.200, FAC, and Rule 2.301, JEPB; Permit No. 0310166-013-AC]

A.2. Hours of Operation. This emissions unit shall be allowed to operate continuously, i.e., 8,760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and Rule 2.301, JEPB; Permit No. 0310166-013-AC]

Emission Limitations and Standards

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

Unless otherwise specified, the averaging times for Specific Conditions **A.3. – A.6.** are based on the specified averaging time of the applicable test method.

A.3. Hydrogen Sulfide (H_2S) emissions. H_2S emissions shall be limited to 5 ppm (v/v).

[Stipulation for Consent Agreement dated May 7, 1980, Permit AO16-139973; Permit No. 0310166-013-AC]

A.4. Dimethyl Sulfide (DMS) emissions. DMS emissions shall be limited to 1 ppm (v/v).

[Stipulation for Consent Agreement dated May 7, 1980, Permit AO16-139973; Permit No. 0310166-013-AC]

A.5. Dimethyl disulfide (DMDS) emissions. DMDS emission shall be limited to 1 ppm (v/v).

[Stipulation for Consent Agreement dated May 7, 1980, Permit AO16-139973; Permit No. 0310166-013-AC]

A.6. Methyl Mercaptan (MM) emissions. MM emission shall be limited to 1 ppm (v/v).

[Stipulation for Consent Agreement dated May 7, 1980, Permit AO16-139973; Permit No. 0310166-013-AC]

Test Methods and Procedures

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

A.7. **H_2S, DMS, DMDS, and MM Emissions- Test Method**. Testing to demonstrate compliance shall be conducted in accordance with EPA Reference Method 16 (as described in 40 CFR 60, Appendix A) for the determination of the emissions of H_2S, DMS, DMDS, and MM.

[Stipulation for Consent Agreement dated May 7, 1980, Permit AO16-139973; Permit No. 0310166-013-AC]

A.8. **H_2S, DMS, DMDS, and MM Emissions - Test Frequency.** EPA Reference Method 16 shall be conducted upon request of the Permitting Authority

[Rule 62-4.070(3), FAC, and Rule 2.1401, JEPB]

Recordkeeping and Reporting Requirements

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

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

EU No.	Brief Description
004	Odor Control System No. 2. Collects off gases from the Biosolids Building. In addition, the emissions from the Flex-Kleen baghouse dust collector (particulate matter emissions control device for the pelletizing and crusher operation at the Sludge Drying System (EU 007)), is vented this emissions unit then to the atmosphere. Odorous gas control device: Gas collection duct work, gas blowers, humidifier, and 12 ft diameter bioscrubber.

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity. The process airflow rate is 15,500 cfm (nominal).

[Rule 62-210.200, FAC, and Rule 2.301, JEPB; Permit No. 0310166-013-AC]

B.2. Hours of Operation. This emissions unit shall be allowed to operate continuously, i.e., 8,760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and Rule 2.301, JEPB; Permit No. 0310166-013-AC]

Emission Limitations and Standards

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

Unless otherwise specified, the averaging times for Specific Conditions **B.3. – B.8.** are based on the specified averaging time of the applicable test method.

B.3. Hydrogen Sulfide (H_2S) emissions. H_2S emissions shall be limited to 5 ppm (v/v).

[Stipulation for Consent Agreement dated May 7, 1980, Permit AO16-139973; Permit No. 0310166-013-AC]

B.4. Dimethyl Sulfide (DMS) emissions. DMS emissions shall be limited to 1 ppm (v/v).

[Stipulation for Consent Agreement dated May 7, 1980, Permit AO16-139973; Permit No. 0310166-013-AC]

B.5. Dimethyl disulfide (DMDS) emissions. DMDS emission shall be limited to 1 ppm (v/v).

[Stipulation for Consent Agreement dated May 7, 1980, Permit AO16-139973; Permit No. 0310166-013-AC]

B.6. Methyl Mercaptan (MM) emissions. MM emission shall be limited to 1 ppm (v/v).

[Stipulation for Consent Agreement dated May 7, 1980, Permit AO16-139973; Permit No. 0310166-013-AC]

B.7. Particulate Matter Emissions. Particulate matter (PM) emissions shall be limited to 0.03 gr/dscf [equivalent to 3.98 pounds per hour (lbs/hr) and 17.46 tons per year (TPY) at estimated maximum air flow].

Note: *The PM standard is applicable due to this emissions unit being the discharge point of the Flex-Kleen baghouse from EU 007.*

[Rule 62-296.712, FAC, and Rule 2.1101, JEPB; Permit No. 0310166-003-AC; Permit No. 0310166-009-AC]

B.8. Visible Emissions. Visible emissions (VE) shall be limited to five (5) percent (%) opacity.

Note: *The Opacity standard is applicable due to this emissions unit being the discharge point of the Flex-Kleen baghouse from EU 007.*

[Rule 62-296.712, FAC, and Rule 2.1101, JEPB; Permit No. 0310166-003-AC; Permit No. 0310166-009-AC]

Test Methods and Procedures

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

B.9. H_2S, DMS, DMDS, and MM Emissions- Test Method. Testing to demonstrate compliance shall be conducted in accordance with EPA Reference Method 16 (as described in 40 CFR 60, Appendix A) for the determination of the emissions of H_2S, DMS, DMDS, and MM.

[Rule 62-4.070(3), FAC, and Rule 2.1401, JEPB; Permit No. 0310166-013-AC]

B.10. H_2S, DMS, DMDS, and MM Emissions - Test Frequency. EPA Reference Method 16 shall be conducted upon request of the Permitting Authority.

[Rule 62-4.070(3), FAC, and Rule 2.1401, JEPB]

B.11. Particulate Matter Emissions- Test Method and Test Frequency. Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method 5 (as described in 40 CFR 60, Appendix A), for the determination of the PM concentration at the emission discharge point. The minimum sample volume shall be 30 dry standard cubic feet. PM testing shall be conducted upon request of the Permitting Authority.

Note: *The PM standard is applicable due to this emissions unit being the discharge point of the Flex-Kleen baghouse from EU 007.*

[Rule 62-296.712, FAC, and Rule 2.1101, JEPB; Permit No. 0310166-003-AC; Permit No. 0310166-009-AC]

B.12. <u>Visible Emissions- Test Method</u>. Testing for demonstration of compliance shall be performed in accordance with EPA RM 9 (as described in 40 CFR 60, Appendix A) for the visual determination of opacity. Testing shall be conducted during each federal fiscal year (October 1 - September 30). VE testing shall be conducted for a minimum period of 30 minutes.

Note: *The Opacity standard is applicable due to this emissions unit being the discharge point of the Flex-Kleen baghouse from EU 007.*

[Rule 62-296.712, FAC, Rule 62-297.310(7)(a)4.a., FAC, Rule 2.1101, JEPB, and Rule 2.1201, JEPB; Permit No. 0310166-003-AC; Permit No. 0310166-009-AC]

Recordkeeping and Reporting Requirements

B.13. <u>Operation and Maintenance Plan Records</u>. The permittee shall maintain records as required by the Operation and Maintenance Plan (O&M) on file with the applicant. Records shall be maintained for a minimum period of five (5) years. Records shall be provided upon request of the Permitting Authority.

[Rule 62-4.070, FAC, Rule 62-213.440(1)(b)2.b., FAC, Rule 62-296.700(6), FAC, Rule 2.1401, JEPB, Rule 2.501, JEPB, and Rule 2.1101, JEPB]

B.14. <u>Other Reporting Requirements</u>. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

This section addresses the following emissions unit.

Emissions Unit Number	Brief Description
007	An Andritz DDS 70 sludge drying system will be used to produce one to four millimeter sludge pellets that will meet class A bio-solids requirements. The rotary drum sludge dryer processes sludge at approximately 25% to 30% solids and thermally dries it to produce pellets at approximately 95% solids. The dryer shall be fired by bio-gas, natural gas, or a combination of both. Particulate matter emissions from the rotary drum sludge dryer are controlled by a Venturi scrubber followed in series by a Regenerative Thermal Oxidizer (RTO). The estimated maximum airflow from the RTO is 7109 dscfm. Particulate matter emissions generated by the handling (crushing and pelletizing) of dry sludge pellets (generated by the sludge dryer) are controlled by a Flex-Kleen baghouse dust collector followed in series by the Odor Control System No. 2 (EU 004) to the atmosphere. Estimated maximum airflow from the baghouse is 3818 dscfm Air emissions generated by the sludge drying process are controlled by the following air pollution control devices: Control Devices: Pre-separator (similar to impingement plate scrubber) Polycyclone (similar to a single cyclone) Tray Condenser (similar to a spray tower) Venturi Scrubber FlexKleen baghouse dust collector Regenerative Thermal Oxidizer [RTO (similar to a direct flame afterburner with heat exchanger)]

Essential Potential to Emit (PTE) Parameters

D.1. Maximum Charging Rate. The maximum charging rate of dry sludge (95 % solids) shall be limited to 83.7 tons per day (TPD) and 25,221.5 tons per year (TPY).

[Permit No. 0310166-003-AC; Permit No. 0310166-009-AC, Rule 62-212.300, FAC and Rule 2.401, JEPB]

D.2. Maximum Heat Input. The maximum heat input for the sludge dryer shall be limited to 25.47 MM Btu per hour and 223,117.2 MM Btu per year.

[Rule 62-296.700(4), FAC and Rule 2.1101, JEPB; Permit No. 0310166-003-AC; Permit No. 0310166-009-AC]

D.3. Method of Operation. This emissions unit is authorized to fire bio-gas, natural gas, or a combination of both fuels.

[Rule 62-296.700(4), FAC and Rule 2.1101, JEPB; Permit No. 0310166-003-AC; Permit No. 0310166-009-AC]

D.4. Hours of Operation. This emissions unit shall be allowed to operate continuously, i.e., 8,760 hours/year.

[Rule 62-210.200, FAC, and Rule 2.301, JEPB; Permit No. 0310166-003-AC; Permit No. 0310166-009-AC]

Control Equipment Systems

D.5. Air Pollution Collection and Control Systems. The permittee shall operate and maintain the air pollution collection and control systems in accordance with the manufacturer's instructions.

[Rule 62-4.070, FAC and Rule 2.1401, JEPB; Permit No. 0310166-003-AC]

Emission Limitations and Standards

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

Unless otherwise specified, the averaging times for Specific Conditions **D.8.-D.10.** are based on the specified averaging time of the applicable test method.

D.6. Reasonably Available Control Technology (RACT) requirements including Specific RACT Emission Limiting Standards for Stationary Emission Units [Rule 62-296.700(3), FAC, and Rule 2.1101, JEPB]; Maximum Allowable Emission Rates [Rule 62-296.700(4), FAC, and Rule 2.1101, JEPB]; Circumvention [Rule 62-296.700(5), FAC, and Rule 2.1101, JEPB], and Operation and Maintenance Plan [Rule 62-296.700(6), FAC, and Rule 2.1101 JEPB] shall apply to this emission unit.

[Rule 62-296.712(2), FAC, and Rule 2.1101, JEPB; Permit No. 0310166-003-AC; Permit No. 0310166-009-AC]

D.7. 40 CFR, Part 61, Subpart E, National Emission Standard for Mercury, and 40 CFR Part 61, Subpart A, General Provisions, shall apply to this emission unit.

[40 CFR 61.50]

D.8. Particulate Matter Emissions. Particulate matter (PM) emissions shall be limited to 0.03 gr/dscf [equivalent to 1.83 pounds per hour (lbs/hr) and 8.01 tons per year (TPY) at estimated maximum air flow].

Note: *The PM standard applies to both the RTO and the Flex-Kleen baghouse (which is discharged through the Odor Control System No. 2). The PM emissions from each discharge point shall be limited to 0.03 gr/dscf. The limitations for the Flex-Kleen baghouse are stated in the Subsection for the Odor Control System No. 2.*

[Rule 62-296.712, FAC, and Rule 2.1101, JEPB; Permit No. 0310166-003-AC; Permit No. 0310166-009-AC]

D.9. Mercury Emissions. Emissions of mercury shall not exceed 3200 grams per 24-hour period. Note: This is the maximum emission rate from the sludge dryer.

[40 CFR 61.52(b), Rule 62-204.800, FAC, and Rule 2.201, JEPB; Permit No. 0310166-009-AC]

D.10. Visible Emissions. Visible emissions (VE) shall be limited to five (5) percent (%) opacity from each emission discharge point.

Note: *The Opacity standard applies to both the RTO and the Flex-Kleen baghouse (which is discharged through Odor Control System No. 2). VE emissions from each discharge point shall be limited to 5% opacity. The limitations for the Flex-Kleen baghouse are stated in the Subsection for the Odor Control System No. 2.*

[Rule 62-296.712, FAC, and Rule 2.1101, JEPB; Permit No. 0310166-003-AC; Permit No. 0310166-009-AC]

Test Methods and Procedures

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

D.11. Particulate Matter Emissions- Test Method and Test Frequency. Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method 5 (as described in 40 CFR 60, Appendix A), for the determination of the PM concentration at the RTO emission discharge point. The minimum sample volume shall be 30 dry standard cubic feet. PM testing shall be conducted upon request of the Permitting Authority.

Note: *The limitations for the Flex-Kleen baghouse are stated in the Subsection for the Odor Control System No. 2.*

[Rule 62-296.712, FAC, and Rule 2.1101, JEPB; Permit No. 0310166-003-AC; Permit No. 0310166-009-AC]

D.12. Mercury Emissions- Test Method. Testing for demonstration of compliance shall be performed in accordance with the terms of this Condition. As an alternative to stack testing, testing for mercury emissions by sludge sampling may be conducted in accordance with the terms of Condition D.13.

a. Method 101A of 40 CFR 61 Appendix B shall be the test method.

b. The Permittee shall notify the Compliance Authority in writing at least 30 days prior to an emission test, so that he may at his option observe the test.

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

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

e. Records of emission test results and other data needed to determine total emissions shall be retained at the source and shall be made available, for inspection by the Compliance Authority, for a minimum of 2 years.

[40 CFR 61.53(d), 40 CFR 61.54, Rule 62-204.800(7), FAC, and Rule 2.201, JEPB; Permit No. 0310166-009-AC]

D.13. <u>Mercury Emissions- Sludge Sampling</u>. As an alternative means for demonstrating compliance with the standard in Condition D.9., the Method 105 of 40 CFR 61 Appendix B and the procedures specified in this Condition shall be used:

a. The Compliance Authority shall be notified in writing at least 30 days prior to a sludge sampling test, so that he may at his option observe the test.

b. <u>Sampling</u>: The sludge shall be sampled according to Method 105-Determination of Mercury in Wastewater Treatment Plant Sewage Sludges. A total of three composite samples shall be obtained within an operating period of 24 hours. When the 24-hour operating period is not continuous, the total sampling period shall not exceed 72 hours after the first grab sample is obtained. Samples shall not be exposed to any condition that may result in mercury contamination or loss.

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

d. <u>Sludge Analysis</u>: The sampling, handling, preparation, and analysis of sludge samples shall be accomplished according to Method 105 of 40 CFR 61 Appendix B.

e. The mercury emissions shall be determined by use of the following equation:

$E_{Hg} = MQ\ F_{sm(avg)}/1000$

where:

E_{Hg} = Mercury emissions, g/day.

M = Mercury concentration of sludge on a dry solids basis, μg/g.

Q = Sludge changing rate, kg/day.

F_{sm} = Weight fraction of solids in the collected sludge after mixing.

1000 = Conversion factor, kg $\mu g/g^2$.

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

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

h. Records of sludge sampling, charging rate determination and other data needed to determine mercury content of wastewater treatment plant sludges shall be retained at the source and made available, for inspection by the Compliance Authority, for a minimum of 2 years.

[40 CFR 61.54]

D.14. Mercury Emissions- Test Frequency. Testing shall be conducted at least 270 days prior to permit expiration and the test results shall be submitted with the renewal application. If mercury emissions, as demonstrated by referenced test methods, exceed 1600 gm/24 hours (facility) then testing shall be performed once annually in accordance with the approved test methods in Condition D.12. above.

[40 CFR 61.55(a), Rule 62-204.800(7), FAC, and Rule 2.201, JEPB]

D.15. Visible Emissions- Test Method and Test Frequency. Testing for demonstration of compliance shall be performed in accordance with EPA RM 9 (as described in 40 CFR 60, Appendix A) for the visual determination of opacity. Testing shall be conducted during each federal fiscal year (October 1 - September 30) at the RTO. VE testing shall be conducted for a minimum period of 30

Note: *The limitations for the Flex-Kleen baghouse are stated in the Subsection for the Odor Control System No. 2.*

[Rule 62-296.712, FAC, Rule 62-297.310(7)(a)4.a., FAC, Rule 2.1101, JEPB, and Rule 2.1201, JEPB; Permit No. 0310166-003-AC; Permit No. 0310166-009-AC]

D.16. Sludge Charging Rate Determination. Direct measurement or material balance using good engineering practice shall be used to determine the sludge charging rate during the compliance test.

[Permit No. 0310166-003-AC, Rule 62-212.300, FAC and Rule 2.401, JEPB; Permit No. 0310166-003-AC; Permit No. 0310166-009-AC]

Recordkeeping and Reporting Requirements

D.17. Operation and Maintenance Plan Records. The permittee shall maintain records as required by the Operation and Maintenance Plan (O&M) on file with the applicant. Records shall be maintained for a minimum period of five (5) years. Records shall be provided upon request of the Permitting Authority.

[Rule 62-4.070, FAC, Rule 62-213.440(1)(b)2.b., FAC, Rule 62-296.700(6), FAC, Rule 2.1401, JEPB, Rule 2.501, JEPB, and Rule 2.1101, JEPB; Permit No. 0310166-003-AC; Permit No. 0310166-009-AC]

D.18. Records. The permittee shall maintain the following records:

a. Heat input to the sludge dryer on a daily basis

b. Sludge charging rate to the sludge dryer on a daily basis

c. Fuel firing rate to the sludge dryer on a daily basis

d. Type of fuel fired on a daily basis

e. Operating hours of the sludge dryer on a daily basis

Records shall be maintained for a minimum period of five (5) years and shall be made available to the Permitting Authority upon request.

[Rule 62-296.700(4), FAC, and Rule 2.1101, JEPB; Permit No. 0310166-003-AC; Permit No. 0310166-009-AC]

D.19. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

Common Condition Requirements

D.20. This emissions unit is also subject to the requirements in Common Condition Subsection I.

Subsection E. Emissions Unit Nos. 010 -Truck Loading Operation No. 1, 011-Truck Loading Operation No. 2, and 017- Dry Sludge Silo Nos. 1 and 2

This section addresses the following emissions unit.

E.U. ID No.	Brief Description
010	Truck Loading Operation No. 1. Pelletized sludge is loaded into trucks through dual walled loading spouts which capture displaced air at the spout and route it back to the Dry Sludge Silos' common baghouse. Displaced air which is not captured by the collection system is vented to the atmosphere. *Note: The loading spout is designated as EU No. 010.*
011	Truck Loading Operation No. 2. Pelletized sludge is loaded into trucks through dual walled loading spouts which capture displaced air at the spout and route it back to the Dry Sludge Silos' common baghouse. Displaced air which is not captured by the collection system is vented to the atmosphere. *Note: The loading spout is designated as EU No. 011.*
017	Dry Sludge Silo Nos. 1 and 2. Pelletized dry sludge is pneumatically conveyed to the two product storage silos (storage capacity approximately 200 tons each) for storage. The silos are vented through a common baghouse for particulate matter emissions control.

Essential Potential to Emit (PTE) Parameters

E.1. Permitted Capacity. The maximum pellet charging rate shall be limited to 83.7 tons per day.

[Rule 62-296.700(4), FAC and Rule 2.1101, JEPB]

E.2. Volumetric Flow Rate. The estimated maximum airflow from the baghouse is 3800 dscfm.

[Rule 62-296.700(4), FAC and Rule 2.1101, JEPB; Permit No. 0310166-009-AC]

E.3. Hours of Operation. This emissions unit shall be allowed to operate continuously, i.e., 8,760 hours/year.

[Rule 62-210.200(PTE), FAC and Rule 2.301, JEPB; Permit No. 0310166-009-AC]

Control Equipment Systems

E.4. Air Pollution Collection and Control Systems. The permittee shall operate and maintain the dust collection capture and control system in accordance with the manufacturer's instructions.

[Permit No. 0310166-009-AC, Rule 62-212.300, FAC and Rule 2.401, JEPB]

Emission Limitations and Standards

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

*Unless otherwise specified, the averaging times for Specific Conditions **E.6.-E.7.**are based on the specified averaging time of the applicable test method.*

E.5. Reasonably Available Control Technology (RACT) requirements including Specific RACT Emission Limiting Standards for Stationary Emission Units [Rule 62-296.700(3), FAC, and Rule 2.1101, JEPB]; Maximum Allowable Emission Rates [Rule 62-296.700(4), FAC, and Rule 2.1101, JEPB]; Circumvention [Rule 62-296.700(5), FAC, and Rule 2.1101, JEPB], and Operation and Maintenance Plan [Rule 62-296.700(6), FAC, and Rule 2.1101 JEPB] shall apply to this emission unit.

[Permit No. 0310166-009-AC]

E.6. Particulate Matter Emissions. PM emissions from the common dust collector shall be limited to 0.03 gr/dscf [equivalent emissions of 0.98 lbs/hr and 4.28 TPY at estimated maximum air flow rate].

[Rule 62-296.711, FAC, and Rule 2.1101, JEPB; Permit No. 0310166-009-AC]

E.7. Visible emissions. VE emissions shall be limited to 5 % opacity from the common baghouse and from each truck loading spout.

[Rule 62-296.711, FAC, and Rule 2.1101, JEPB; Permit No. 0310166-009-AC]

Test Methods and Procedures

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

E.8. Particulate Matter Emissions- Test Method and Test Frequency. Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method 5 (as described in 40 CFR 60, Appendix A), for the determination of the PM concentration. The minimum sample volume shall be 30 dry standard cubic feet. PM Testing shall be conducted upon request of the Permitting Authority.

[Rule 62-296.711, FAC, Rule 62-297.310(7)(b), FAC, Rule 2.1101, JEPB, and Rule 2.1201, JEPB; Permit No. 0310166-009-AC]

E.9. Visible Emissions- Test Method. Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method 9 (as described in 40 CFR 60, Appendix A) for the visual determination of opacity. VE testing on each emission point (common baghouse and each truck loading spout) shall be conducted for a minimum period of 30 minutes.

[Rule 62-296.711, FAC, and Rule 2.1101, JEPB; Permit No. 0310166-009-AC]

E.10. Visible Emissions- Test Frequency. VE testing on each emissions point (common baghouse, and each truck loading spout) shall be conducted during each federal fiscal year (October 1 - September 30).

[Rule 62-297.310(7)(a)4.a., FAC, and Rule 2.1201, JEPB]

E.11. Pelletized Sludge Charging Rate Determination. Direct measurement or material balance using good engineering practice shall be used to determine the pelletized sludge charging rate during the compliance test.

[Permit No. 0310166-009-AC, Rule 62-212.300, FAC and Rule 2.401, JEPB; Permit No. 0310166-009-AC]

Recordkeeping and Reporting Requirements

E.12. Operation and Maintenance Plan Records. The permittee shall maintain records as required by the Operation and Maintenance Plan (O&M) on file with the applicant. Records shall be maintained for a minimum period of five (5) years. Records shall be provided upon request of the Permitting Authority.

[Rule 62-4.070, FAC, Rule 62-213.440(1)(b)2.b., FAC, Rule 62-296.700(6), FAC, Rule 2.1401, JEPB, Rule 2.501, JEPB, and Rule 2.1101, JEPB; Permit No. 0310166-009-AC]

E.13. Records. The permittee shall maintain the following records:

a. Pellet charging rate to the handling system on a daily basis

b. Operating hours of the handling system on a daily basis

Records shall be maintained for a minimum period of five (5) years and shall be made available to the Permitting Authority upon request.

[Rule 62-296.700(4), FAC, and Rule 2.1101, JEPB; Permit No. 0310166-009-AC]

E.14. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

This section addresses the following emissions unit.

E.U. ID No.	Brief Description
013	Boiler No. 2. Hot Water and Heat Boiler
014	Boiler No. 3. Hot Water and Heat Boiler.
018	Boiler No. 1. Hot Water and Heat Boiler

Essential Potential to Emit (PTE) Parameters

F.1. Permitted Capacity- Boiler No. 2. The boiler heat input shall be limited to 3.8 MMBtu per hour when firing natural gas, bio-gas, or a combination of both fuels.

[Rule 62-210.200(PTE), FAC, and Rule 2.301, JEPB; Permit No. 0310166-009-AC; Permit No. 0310166-013-AC]

F.2. Permitted Capacity- Boiler No. 3. The boiler heat input shall be limited to 3.8 MMBtu per hour when firing natural gas, bio-gas, or a combination of both fuels.

[Rule 62-210.200(PTE), FAC, and Rule 2.301, JEPB; Permit No. 0310166-009-AC; Permit No. 0310166-013-AC]

F.3. Permitted Capacity- Boiler No. 1. The boiler heat input shall be limited to 3.8 MMBtu per hour when firing natural gas, bio-gas, or a combination of both fuels.

[Rule 62-210.200(PTE), FAC, and Rule 2.301, JEPB; Permit No. 0310166-013-AC]

F.4. Fuels – Boilers 2, 3, and 1. Fuels which may be fired are natural gas, bio-gas, or a combination of both fuels.

[Rule 62-210.200(PTE), FAC, and Rule 2.301JEPB; Permit No. 0310166-009-AC; Permit No. 0310166-013-AC]

F.5. Hours of Operation- Boilers 2, 3, and 1. This emissions unit shall be allowed to operate continuously, i.e., 8,760 hours/year.

[Rule 62-210.200(PTE), FAC and Rule 2.301, JEPB; Permit No. 0310166-009-AC; Permit No. 0310166-013-AC]

Emission Limitations and Standards

F.6. Sulfur dioxide emissions. Sulfur dioxide emissions from these emissions units shall be in compliance with the emissions cap stated in Condition 4 of Subsection I.

[Permit No. 0310166-013-AC]

F.7. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

Common Condition Requirements

F.8. These emissions units are also subject to the requirements in Common Condition Subsection I.

This section addresses the following emissions units.

E.U. ID No.	Brief Description
015	A generator set (Caterpillar Model **G3516 LE**) comprised of a four-stroke cycle, turbocharged, 16-cylinder, spark ignition, natural gas engine with a total displacement of 67.4 liters. The engine is rated at 1040 kW of electrical output and 1071 brake horsepower mechanical output at 100 percent load. It is estimated that the engine installed in October 2002.

{Permitting note: This emissions unit is regulated under: NESHAP – 40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines adopted and incorporated by reference in Rule 62-204.800, F.A.C. This permit section addresses "existing" stationary SI RICE greater than 500 HP that is located at an area source of HAP and that has 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 JJJJ, will not apply.***

The following table provides important details for this emissions unit:

Engine Brake HP	Generator kW	Date of Construction	Model Year	Primary Fuel	Type of Engine	Displacement liters/cylinder (l/c)	Serial #	Date of last mod. or reconst.
1071	1040	2002	---	Bio-Gas	Non-Emergency	4.2	---	N/A

G.1 **NESHAP, 40 CFR 63 Subpart ZZZZ Applicability**: This diesel engine is classified as existing, stationary Reciprocating Internal Combustion Engines (RICE) and shall comply with applicable provisions of 40 CFR 63 Subpart ZZZZ. This engine classified as a Non- Emergency stationary RICE.

[40 CFR 63.6675(def); 40 CFR 63.6585(a) & (c); 40 CFR 60.6590(a)(1)(iii)]

G.2. **40 CFR 63, Subpart A-General Provision**: The owner or operator shall comply with the following applicable requirements of 40 CFR 63 Subpart A - General Provisions, which have been adopted by reference in Rule 62-204.800(11)(d)1., F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 63.5(e), 40 CFR 63.5(f), 40 CFR 63.6(g), 40 CFR 63.6(h)(9), 40 CFR 63.6(j), 40 CFR 63.13, and 40 CFR 63.14. 40 CFR 60, Subpart A- General Provisions is an Appendix.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.1	General applicability of the General Provisions	Yes.	

§63.2	Definitions	Yes	Additional terms defined in §63.6675.
§63.3	Units and abbreviations	Yes.	
§63.4	Prohibited activities and circumvention	Yes.	
§63.5	Construction and reconstruction	Yes.	
§63.6(a)	Applicability	Yes.	
§63.6(b)(1)-(4)	Compliance dates for new and reconstructed sources	Yes.	
§63.6(b)(5)	Notification	Yes.	
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
§63.6(c)(1)-(2)	Compliance dates for existing sources	Yes.	
§63.6(c)(3)-(4)	[Reserved]		
§63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§63.6(d)	[Reserved]		
§63.6(e)	Operation and maintenance	No.	
§63.6(f)(1)	Applicability of standards	No.	
§63.6(f)(2)	Methods for determining compliance	Yes.	
§63.6(f)(3)	Finding of compliance	Yes.	
§63.6(g)(1)-(3)	Use of alternate standard	Yes.	
§63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.
§63.6(i)	Compliance extension procedures and criteria	Yes.	
§63.6(j)	Presidential compliance exemption	Yes.	
§63.7(a)(1)-(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at §§63.6610, 63.6611, and 63.6612.
§63.7(a)(3)	CAA section 114 authority	Yes.	

§63.7(b)(1)	Notification of performance test	Yes	Except that §63.7(b)(1) only applies as specified in §63.6645.
§63.7(b)(2)	Notification of rescheduling	Yes	Except that §63.7(b)(2) only applies as specified in §63.6645.
§63.7(c)	Quality assurance/test plan	Yes	Except that §63.7(c) only applies as specified in §63.6645.
§63.7(d)	Testing facilities	Yes.	
§63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at §63.6620.
§63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at §63.6620.
§63.7(e)(3)	Test run duration	Yes.	
§63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
§63.7(f)	Alternative test method provisions	Yes.	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§63.7(h)	Waiver of tests	Yes.	
§63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at §63.6625.
§63.8(a)(2)	Performance specifications	Yes.	
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring for control devices	No.	
§63.8(b)(1)	Monitoring	Yes.	
§63.8(b)(2)-(3)	Multiple effluents and multiple monitoring systems	Yes.	
§63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§63.8(c)(1)(i)	Routine and predictable SSM	No	
§63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	No	
§63.8(c)(2)-(3)	Monitoring system installation	Yes.	

§63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.
§63.8(c)(6)-(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§63.8(d)	CMS quality control	Yes.	
§63.8(e)	CMS performance evaluation	Yes	Except for §63.8(e)(5)(ii), which applies to COMS.
		Except that §63.8(e) only applies as specified in §63.6645.	
§63.8(f)(1)-(5)	Alternative monitoring method	Yes	Except that §63.8(f)(4) only applies as specified in §63.6645.
§63.8(f)(6)	Alternative to relative accuracy test	Yes	Except that §63.8(f)(6) only applies as specified in §63.6645.
§63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at §§63.6635 and 63.6640.
§63.9(a)	Applicability and State delegation of notification requirements	Yes.	
§63.9(b)(1)-(5)	Initial notifications	Yes	Except that §63.9(b)(3) is reserved.
		Except that §63.9(b) only applies as specified in §63.6645.	
§63.9(c)	Request for compliance extension	Yes	Except that §63.9(c) only applies as specified in §63.6645.
§63.9(d)	Notification of special compliance requirements for new sources	Yes	Except that §63.9(d) only applies as specified in §63.6645.
§63.9(e)	Notification of performance test	Yes	Except that §63.9(e) only applies as specified in §63.6645.
§63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.

§63.9(g)(1)	Notification of performance evaluation	Yes	Except that §63.9(g) only applies as specified in §63.6645.
§63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.
		Except that §63.9(g) only applies as specified in §63.6645.	
§63.9(h)(1)-(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. §63.9(h)(4) is reserved.
			Except that §63.9(h) only applies as specified in §63.6645.
§63.9(i)	Adjustment of submittal deadlines	Yes.	
§63.9(j)	Change in previous information	Yes.	
§63.10(a)	Administrative provisions for recordkeeping/reporting	Yes.	
§63.10(b)(1)	Record retention	Yes	Except that the most recent 2 years of data do not have to be retained on site.
§63.10(b)(2)(i)-(v)	Records related to SSM	No.	
§63.10(b)(2)(vi)-(xi)	Records	Yes.	
§63.10(b)(2)(xii)	Record when under waiver	Yes.	
§63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.
§63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
§63.10(b)(3)	Records of applicability determination	Yes.	
§63.10(c)	Additional records for sources using CEMS	Yes	Except that §63.10(c)(2)-(4) and (9) are reserved.
§63.10(d)(1)	General reporting requirements	Yes.	
§63.10(d)(2)	Report of performance test results	Yes.	

§63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.10(d)(4)	Progress reports	Yes.	
§63.10(d)(5)	Startup, shutdown, and malfunction reports	No.	
§63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	
§63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§63.10(e)(3)	Excess emission and parameter exceedances reports	Yes.	Except that §63.10(e)(3)(i) (C) is reserved.
§63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§63.11	Flares	No.	
§63.12	State authority and delegations	Yes.	
§63.13	Addresses	Yes.	
§63.14	Incorporation by reference	Yes.	
§63.15	Availability of information	Yes.	

[40 CFR 63.6665 and Table 8 of 40 CFR 63 Subpart ZZZZ]

G.3. **Compliance Date:** The owner or operator shall comply with the applicable emission limitations and operating limitations of 40 CFR 63 Subpart ZZZZ no later than October 19, 2013.

[40 CFR 63.6595(a)(1)]

PERFORMANCE RESTRICTIONS

Essential Potential to Emit (PTE) Parameters

G.4. **Permitted Capacity**. The maximum heat input of bio-gas shall be limited to 9 x 10^6 Btu per hour.

[Rule 62-210.200(PTE), FAC, and Rule 2.301, JEPB; Permit No. 0310166-009-AC]

G.5. **Fuels.** This emissions unit is authorized to fire bio-gas.

[Rule 62-210.200(PTE), FAC, and Rule 2.301, JEPB; Permit No. 0310166-009-AC]

G.6. **Hours of Operation.** This emissions unit shall be allowed to operate continuously, i.e., 8,760 hours/year.

[Rule 62-210.200(PTE), FAC and Rule 2.301, JEPB; Permit No. 0310166-009-AC]

Emission Limitations and Standards

G.7. The engine shall comply with the following standards:

a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first[1];
b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first; and
c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.

[1]Sources have the option to utilize an oil analysis program as described in Condition G.8. in order to extend the specified oil change requirement.

[40 CFR 63.6603(a), Table 2d.13., Table 2d Footnote 1]

G.8. **Oil Analysis Program Option**. The owner or operator has the option of utilizing an oil analysis program in order to extend the specified oil change requirement stated in Condition G.7. The oil analysis must be performed at the same frequency specified for changing the oil in Condition G.7. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid 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 business 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 business 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(j)]

General compliance requirements

G.9. **Continuous Compliance**. The unit shall be in compliance with the emission limitations and operating limitations in 40 CFR 63 Subpart ZZZZ that apply at all times.

[40 CFR 63.6605(a)]

G.10. **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. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[40 CFR 63.6605(b)]

G.11. **Operation and Maintenance**. The stationary RICE and after-treatment control device (if any) shall be operated and maintained according to the manufacturer's emission-related written instructions or your own maintenance plan be developed 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)(6)]

G.12. **Engine 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, after which time the emission standards applicable to all times other than startup in 40 CFR 63 Subpart ZZZZ Table 2d apply (Condition G.7).

[40 CFR 63.6625(h)]

Monitoring of Operations

G.13. **Continuous Compliance**. The unit must demonstrate continuous compliance with each operating limitation in Condition G.7. according to methods specified below:

a. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or

ii. 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 63.6640(a), Table 6, No. 9.a.i. & ii.]

Recordkeeping and Reporting Requirements

G.14. **Records**. The owner/operator shall maintain monthly records of the following:

a. Quantity of fuel used by the caterpillar engine by fuel type

b. Operating hours of the caterpillar engine

c. Heat input to the engine

Records shall be maintained for a minimum period of five (5) years and shall be made available to the Permitting Authority upon request.

[Rule 62-4.070, FAC, and Rule 2.1401, JEPB; Permit No. 0310166-009-AC]

G.15. The following records in paragraphs (a)(1)-(a)(5), (b)(1)-(b)(3) shall be kept:

(a)(1) A copy of each notification and report that the owner or operator submitted to comply with 40 CFR 63 Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that the owner or operator submitted, according to the requirement in §63.10(b)(2)(xiv).

(2) Records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment.

(3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).

(4) Records of all required maintenance performed on the air pollution control and monitoring equipment.

(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

(b) For each CEMS or CPMS, you must keep the records listed in paragraphs (b)(1) through (3) of this section.

(1) Records described in §63.10(b)(2)(vi) through (xi).

(2) Previous (*i.e.*, superseded) versions of the performance evaluation plan as required in §63.8(d)(3).

(3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in §63.8(f)(6)(i), if applicable.

[40 CFR 63.6655(a),(b)]

G.16. The records required in Condition G.13. shall be kept to show continuous compliance with each emission or operating limitation in Condition K.6.

[40 CFR 63.6655(d), Table 6, No. 9.a.i. & ii.]

G.17. Records of the maintenance conducted on the stationary RICE shall be kept in order to demonstrate that the stationary RICE and after-treatment control device (if any) is operated and maintained according to the owner or operator's own maintenance plan.

[40 CFR 63.6655(e),(e)(3)]

G.18. Records: Records shall meet the following:

(a) Records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), each record shall be kept for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) Each record shall be kept 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, according to §63.10(b)(1).

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

G.19.a. Each instance shall be reported in which each operating limitation in Condition G.7. is not met. These instances are deviations from the operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650.

[40 CFR 63.6640(b)]

b. You must also report each instance in which you did not meet the requirements in Table 8 of 40 CFR 63 Subpart ZZZZ that apply to you.

[40 CFR 63.6640(e)]

G.20. **Other Reporting Requirements**. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

Common Condition Requirements

G.21. This emissions unit is also subject to the requirements in Common Condition Subsection I.

Subsection H. Emissions Unit No. 016 Open Air Flare

This section addresses the following emissions units.

E.U. ID No.	Brief Description
016	Open Air Flare. Flare for the combustion of bio-gas during emergency situations when the bio-gas cannot be combusted in the sludge dryer, Caterpillar Engine (EU015) or the boiler(s) and for operational flexibility. The estimated maximum combustion capacity of the flare is 438 million cubic feet per year.

Essential Potential to Emit (PTE) Parameters

H.1. Permitted Capacity. The maximum heat input of bio-gas to the flare shall be limited to 30.0 x 10^6 Btu per hour (at approximately 600 Btu/cubic foot of bio-gas).

[Rule 62-210.200(PTE), FAC, and Rule 2.301, JEPB; Permit No. 0310166-009-AC]

H.2. Hours of Operation. This emissions unit shall be allowed to operate continuously, i.e., 8,760 hours/year.

[Rule 62-210.200(PTE), FAC, and Rule 2.301, JEPB; Permit No. 0310166-009-AC]

Emission Limitations and Standards

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

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

H.3. Smoke Emissions. Smoke emissions shall be limited to less than 5 total minutes per two hour observation period.

[Permit No. 0310166-003-AC, Permit No. 0310166-009-AC ; Rule 62-212.300, FAC and Rule 2.401, JEPB]

Test Methods and Procedures

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

H.4. Smoke Emissions- Test Method. Testing for demonstration of compliance shall be performed in accordance with EPA RM 22 (as described in 40 CFR 60, Appendix A) for the determination of smoke emissions from flares.

[Permit No. 0310166-009-AC]

H.5. Smoke Emissions- Test Frequency. Smoke emissions compliance testing shall be conducted at least 270 days prior to permit expiration and the test results shall be submitted with the renewal application.

[Permit No. 0310166-003-AC, Rule 62-212.300, FAC, and Rule 2.401, JEPB]

Recordkeeping and Reporting Requirements

H.6. Records. The owner/operator shall maintain monthly records of the following:

a. Operating hours of the flare

b. Maintenance performed on the flare

c. Quantity of bio-gas combusted in the flare

d. Heat input of bio-gas into the flare

Records shall be maintained for a minimum period of five (5) years and shall be made available to the Permitting Authority upon request.

[Rule 62-4.070, FAC, and Rule 2.1401, JEPB; Permit No. 0310166-009-AC]

H.7. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

Common Condition Requirements

H.8. This emissions unit is also subject to the requirements in Common Condition Subsection I.

Subsection I. Common Conditions for EU Nos. 007, 013, 014, 015, 016, 018

This section addresses the following emissions units.

E.U. ID No.	Brief Description
007	Sludge Drum Dryer System
013	Boiler No. 2
014	Boiler No. 3
015	Caterpillar Internal Combustion Engine with Generator
016	Open Air Flare
018	Boiler No. 1

I.1. In order to provide reasonable assurance that applicable PSD significant levels and sulfur dioxide ambient air concentration standards are not exceeded with the installation and operation of the bio-solids process, restrictions have been placed on the quantity and quality of the bio-gas which may be combusted in the sludge dryer, caterpillar engine, boilers, and the flare. The sulfide content of the bio-gas (as hydrogen sulfide) which may be combusted shall be limited to a maximum of 12,500 ppm by volume based on a weekly test. Testing shall be performed on the bio-gas in accordance with one of the following test methods:

D 5504-98
D 1072-80
D 3031-81
D 4084-82
D 3246-81

The test method most appropriate for the sulfide content range of the bio-gas fuel shall be used. Updated versions of the referenced test methods may also be used upon approval of the Permitting Authority.

Bio-gas fuel consumption shall be limited using the following equations:

Daily fuel consumption (DFC) = $1.215 \times 10^{10}/C$

DFC is in terms of standard cubic feet per day (scf/day), C is in terms of bio-gas sulfides (as hydrogen sulfide) concentration in parts per million by volume (ppmv)

Annual fuel consumption (AFC) = $2.036 \times 10^{6}/C$

AFC is in terms of million standard cubic feet per year (mmscf/yr), C is in terms of bio-gas sulfides (as hydrogen sulfide) concentration in parts per million by volume (ppmv)

In no case shall the AFC of bio-gas exceed 438 mmscf. Annual refers to a calendar year basis.

[Rule 62-4.070, FAC, and Rule 2.1401, JEPB; Permit No. 0310166-009-AC; Permit No. 0310166-013-AC]

I.2. The permittee shall maintain records of the quantity and quality of the bio-gas produced at the facility on a semi-annually basis. Direct measurement using acceptable engineering measurement methods shall be used to determine the quantity of bio-gas produced. The quality (sulfide content) of the bio-gas produced shall be determined in accordance with above referenced method(s) on at least a weekly basis. The permittee shall calculate the sulfur dioxide emissions on a semi-annual basis using information required by this permit. This information shall be recorded and summarized in a log.

[Permit No. 0310166-009-AC; Permit No. 0310166-013-AC]

Subsection I. Common Conditions for EU Nos. 007, 013, 014, 015, 016, 018

I.3. Semi-annual reports of the quantity and quality of bio-gas produced [including the weekly gas analysis test reports (only submit semi-annually)], and the calculated sulfur dioxide emissions on a semi-annual basis shall be submitted to the Compliance Authority. These reports are due no later than 60 days following completion of each six month period (i.e.: JAN-JUN reporting period due August 31, JUL-DEC reporting period due March 1/2).

[Permit No. 0310166-009-AC; Permit No. 0310166-013-AC]

I.4. Facility sulfur dioxide emissions shall be capped at 175 tons per year based upon a calendar year.

[Permit No. 0310166-009-AC; Permit No. 0310166-013-AC]

Subsection J. Emissions Unit No. 019 Odor Control System No. 2A

This section addresses the following emissions units.

E.U. ID No.	Brief Description
019	Odor Control System No. 2A. Collects off gases from the Raw Sludge Storage Tank. Odorous gas control device: Gas collection duct work, gas blowers, humidifier, and 8 foot diameter bioscrubber.

Essential Potential to Emit (PTE) Parameters

J.1. Volumetric Flow Rate. The process airflow rate is 4,000 cfm.

[Rule 62-210.200, FAC, and Rule 2.301, JEPB; Permit No. 0310166-013-AC]

J.2. Hours of Operation. This emissions unit shall be allowed to operate continuously, i.e., 8,760 hours/year.

[Rule 62-210.200(PTE), FAC and Rule 2.301, JEPB; Permit No. 0310166-013-AC]

Emission Limitations and Standards

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

Unless otherwise specified, the averaging times for Specific Conditions **J.3.-J.6.** are based on the specified averaging time of the applicable test method.

J.3. Hydrogen Sulfide (H_2S) emissions. H_2S emissions shall be limited to 5 ppm (v/v).

[Stipulation for Consent Agreement dated May 7, 1980, Permit AO16-139973; Permit No. 0310166-013-AC]

J.4. Dimethyl Sulfide (DMS) emissions. DMS emissions shall be limited to 1 ppm (v/v).

[Stipulation for Consent Agreement dated May 7, 1980, Permit AO16-139973; Permit No. 0310166-013-AC]

J.5. Dimethyl disulfide (DMDS) emissions. DMDS emission shall be limited to 1 ppm (v/v).

[Stipulation for Consent Agreement dated May 7, 1980, Permit AO16-139973; Permit No. 0310166-013-AC]

J.6. Methyl Mercaptan (MM) emissions. MM emission shall be limited to 1 ppm (v/v).

[Stipulation for Consent Agreement dated May 7, 1980, Permit AO16-139973; Permit No. 0310166-013-AC]

Test Methods and Procedures

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

J.7. **H_2S, DMS, DMDS, and MM Emissions- Test Method**. Testing to demonstrate compliance shall be conducted in accordance with EPA Reference Method 16 (as described in 40 CFR 60, Appendix A) for the determination of the emissions of H_2S, DMS, DMDS, and MM.

[Rule 62-4.070(3), FAC, and Rule 2.1401, JEPB; Permit No. 0310166-013-AC]

J.8. **H_2S, DMS, DMDS, and MM Emissions - Test Frequency.** EPA Reference Method 16 shall be conducted upon request of the Permitting Authority.

[Rule 62-4.070(3), FAC, and Rule 2.1401, JEPB]

Recordkeeping and Reporting Requirements

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

Subsection K. Emissions Unit No. 020 -300 kW IC Engine and Generator

This section addresses the following emissions units.

E.U. ID No.	Brief Description
020	A generator set (Cummins/Onan Model **300DFCB**) comprised of a four-stroke cycle, turbocharged, in-line, 6-cylinder, compression ignition, diesel engine with a total displacement of 14.0 liters. The engine is rated at 300kW of electrical output and 465.0 brake horsepower mechanical output at 100 percent load. It is estimated that the engine was manufactured in 2004 and installed in 2005.

{Permitting note: This emissions unit is regulated under: NESHAP – 40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines adopted and incorporated by reference in Rule 62-204.800, F.A.C. 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 following table provides important details for this emissions unit:

Engine Brake HP	Generator kW	Date of Construction	Model Year	Primary Fuel	Type of Engine	Displacement liters/cylinder (l/c)	Serial #	Date of last mod. or reconst.
465	300	2005	2004	Diesel	Emergency	2.33	---	N/A

K.1 **<u>NESHAP, 40 CFR 63 Subpart ZZZZ Applicability</u>**: This diesel engine is classified as existing, stationary Reciprocating Internal Combustion Engines (RICE) and shall comply with applicable provisions of 40 CFR 63 Subpart ZZZZ. This engine classified as a Emergency stationary RICE.

[40 CFR 63.6675(def); 40 CFR 63.6585(a) & (c); 40 CFR 63.6590(a)(1)(iii); Rule 62-204.800(8), FAC and Rule 2.201, JEPB]

K.2. **<u>40 CFR 63, Subpart A-General Provision</u>**: The owner or operator shall comply with the following applicable requirements of 40 CFR 63 Subpart A - General Provisions, which have been adopted by reference in Rule 62-204.800(11)(d)1., F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 63.5(e), 40 CFR 63.5(f), 40 CFR 63.6(g), 40 CFR 63.6(h)(9), 40 CFR 63.6(j), 40 CFR 63.13, and 40 CFR 63.14. 40 CFR 63, Subpart A- General Provisions is an Appendix.

General provisions citation	Subject of citation	Applies to subpart	Explanation
§63.1	General applicability of the General Provisions	Yes.	
§63.2	Definitions	Yes	Additional terms defined in §63.6675.

§63.3	Units and abbreviations	Yes.	
§63.4	Prohibited activities and circumvention	Yes.	
§63.5	Construction and reconstruction	Yes.	
§63.6(a)	Applicability	Yes.	
§63.6(b)(1)-(4)	Compliance dates for new and reconstructed sources	Yes.	
§63.6(b)(5)	Notification	Yes.	
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
§63.6(c)(1)-(2)	Compliance dates for existing sources	Yes.	
§63.6(c)(3)-(4)	[Reserved]		
§63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§63.6(d)	[Reserved]		
§63.6(e)	Operation and maintenance	No.	
§63.6(f)(1)	Applicability of standards	No.	
§63.6(f)(2)	Methods for determining compliance	Yes.	
§63.6(f)(3)	Finding of compliance	Yes.	
§63.6(g)(1)-(3)	Use of alternate standard	Yes.	
§63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.
§63.6(i)	Compliance extension procedures and criteria	Yes.	
§63.6(j)	Presidential compliance exemption	Yes.	
§63.7(a)(1)-(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at §§63.6610, 63.6611, and 63.6612.
§63.7(a)(3)	CAA section 114 authority	Yes.	
§63.7(b)(1)	Notification of performance test	Yes	Except that §63.7(b)(1) only applies as specified in §63.6645.

§63.7(b)(2)	Notification of rescheduling	Yes	Except that §63.7(b)(2) only applies as specified in §63.6645.
§63.7(c)	Quality assurance/test plan	Yes	Except that §63.7(c) only applies as specified in §63.6645.
§63.7(d)	Testing facilities	Yes.	
§63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at §63.6620.
§63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at §63.6620.
§63.7(e)(3)	Test run duration	Yes.	
§63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
§63.7(f)	Alternative test method provisions	Yes.	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§63.7(h)	Waiver of tests	Yes.	
§63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at §63.6625.
§63.8(a)(2)	Performance specifications	Yes.	
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring for control devices	No.	
§63.8(b)(1)	Monitoring	Yes.	
§63.8(b)(2)-(3)	Multiple effluents and multiple monitoring systems	Yes.	
§63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§63.8(c)(1)(i)	Routine and predictable SSM	No	
§63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	No	
§63.8(c)(2)-(3)	Monitoring system installation	Yes.	

§63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.
§63.8(c)(6)-(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§63.8(d)	CMS quality control	Yes.	
§63.8(e)	CMS performance evaluation	Yes	Except for §63.8(e)(5)(ii), which applies to COMS.
		Except that §63.8(e) only applies as specified in §63.6645.	
§63.8(f)(1)-(5)	Alternative monitoring method	Yes	Except that §63.8(f)(4) only applies as specified in §63.6645.
§63.8(f)(6)	Alternative to relative accuracy test	Yes	Except that §63.8(f)(6) only applies as specified in §63.6645.
§63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at §§63.6635 and 63.6640.
§63.9(a)	Applicability and State delegation of notification requirements	Yes.	
§63.9(b)(1)-(5)	Initial notifications	Yes	Except that §63.9(b)(3) is reserved.
		Except that §63.9(b) only applies as specified in §63.6645.	
§63.9(c)	Request for compliance extension	Yes	Except that §63.9(c) only applies as specified in §63.6645.
§63.9(d)	Notification of special compliance requirements for new sources	Yes	Except that §63.9(d) only applies as specified in §63.6645.
§63.9(e)	Notification of performance test	Yes	Except that §63.9(e) only applies as specified in §63.6645.
§63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.

§63.9(g)(1)	Notification of performance evaluation	Yes	Except that §63.9(g) only applies as specified in §63.6645.
§63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.
		Except that §63.9(g) only applies as specified in §63.6645.	
§63.9(h)(1)-(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. §63.9(h)(4) is reserved.
			Except that §63.9(h) only applies as specified in §63.6645.
§63.9(i)	Adjustment of submittal deadlines	Yes.	
§63.9(j)	Change in previous information	Yes.	
§63.10(a)	Administrative provisions for recordkeeping/reporting	Yes.	
§63.10(b)(1)	Record retention	Yes	Except that the most recent 2 years of data do not have to be retained on site.
§63.10(b)(2)(i)-(v)	Records related to SSM	No.	
§63.10(b)(2)(vi)-(xi)	Records	Yes.	
§63.10(b)(2)(xii)	Record when under waiver	Yes.	
§63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.
§63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
§63.10(b)(3)	Records of applicability determination	Yes.	
§63.10(c)	Additional records for sources using CEMS	Yes	Except that §63.10(c)(2)-(4) and (9) are reserved.
§63.10(d)(1)	General reporting requirements	Yes.	
§63.10(d)(2)	Report of performance test results	Yes.	
§63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.

§63.10(d)(4)	Progress reports	Yes.	
§63.10(d)(5)	Startup, shutdown, and malfunction reports	No.	
§63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	
§63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§63.10(e)(3)	Excess emission and parameter exceedances reports	Yes.	Except that §63.10(e)(3)(i) (C) is reserved.
§63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§63.11	Flares	No.	
§63.12	State authority and delegations	Yes.	
§63.13	Addresses	Yes.	
§63.14	Incorporation by reference	Yes.	
§63.15	Availability of information	Yes.	

[40 CFR 63.6665; Rule 62-204.800(8), FAC and Rule 2.201, JEPB]

K.3. **Compliance Date**: The owner or operator shall comply with the applicable emission limitations and operating limitations of 40 CFR 63 Subpart ZZZZ no later than May 3, 2013.

[40 CFR 63.6595(a)(1); Rule 62-204.800(8), FAC and Rule 2.201, JEPB]

PERFORMANCE RESTRICTIONS

Essential Potential to Emit (PTE) Parameters

K.4. **Authorized Fuel**:

a. The engine shall be fired with diesel fuel only.

[Rule 62-210.200(PTE), F.A.C.; Application No. 0310166-015-AV]

b. Beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in §63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR

80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

[63.6604(b); Rule 62-204.800(8), FAC and Rule 2.201, JEPB]

K.5. **Method of Operation - Emergency Stationary RICE**: The emergency stationary RICE shall be operated according to the requirements in paragraphs (1) through (4) of this Condition. In order for the engine to be considered an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (1) through (4) of this Condition, is prohibited.

If the engine is not operated according to the requirements in paragraphs (1) through (4) of this Condition, the engine will not be considered an emergency engine under 40 CFR 63 Subpart ZZZZ and must meet all requirements for non-emergency engines.

(1) *Emergency Situations*. There is no time limit on the use of emergency stationary RICE in emergency situations.

(2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs (2)(i) through (iii) of this Condition for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (3) and (4) of this Condition counts as part of the 100 hours per calendar year allowed by this paragraph (2).

(i) *Maintenance and Testing.* Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. 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 calendar year.

(ii) *Emergency Demand Response*. Emergency stationary 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 §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.

(iii) *Deviation of Voltage or Frequency.* 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.

(3) N/A – engine is not located at a major source of HAP

(4) *Non-Emergency Situations.* Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency 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 (2) of this Condition. Except as provided in paragraphs (4)(i) and (ii) of this Condition, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system.

(ii) 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:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

(B) 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.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) 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)(1), (f)(2)(i) - (f)(2)(iii), (f)(4); Rule 62-204.800(8), FAC and Rule 2.201, JEPB]

Emission standards

K.6. Each engine shall comply with the following standards:

d. Change oil and filter every 500 hours of operation or annually, whichever comes first[1];
e. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and
f. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.[2]

[1]Sources have the option to utilize an oil analysis program as described in Condition K.7. in order to extend the specified oil change requirement.

[2]If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

[40 CFR 63.6603(a), Table 2d.4., Table 2d Footnotes 1 and 2; Rule 62-204.800(8), FAC and Rule 2.201, JEPB]

K.7. **Oil Analysis Program Option**. The owner or operator has the option of utilizing an oil analysis program in order to extend the specified oil change requirement stated in Condition K.6. The oil analysis must be performed at the same frequency specified for changing the oil in Condition K.6. 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); Rule 62-204.800(8), FAC and Rule 2.201, JEPB]

General compliance requirements

K.8. **Continuous Compliance**. You must be in compliance with the emission limitations and operating limitations in 40 CFR 63 Subpart ZZZZ that applies at all times.

[40 CFR 63.6605(a); Rule 2.201 JEPB]

K.9. **Operation and Maintenance of Equipment**. At all times you 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. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[40 CFR 63.6605(b); Rule 62-204.800(8), FAC and Rule 2.201, JEPB]

K.10. **Operation and Maintenance**. The stationary RICE and after-treatment control device (if any) shall be operated and maintained according to the manufacturer's emission-related written instructions or your own maintenance plan be developed 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)(3); Rule 2.201 JEPB]

K.11 **Hour Meter**. The owner or operator must install a non-resettable hour meter if one is not already installed.

[40 CFR 63.6625(f); Rule 62-204.800(8), FAC and Rule 2.201, JEPB]

K.12. **Engine 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, after which time the emission standards applicable to all times other than startup in 40 CFR 63 Subpart ZZZZ Table 2d apply (Condition K.6.).

[40 CFR 63.6625(h); Rule 62-204.800(8), FAC and Rule 2.201, JEPB]

Monitoring requirements

K.13. **Continuous Compliance**. You must demonstrate continuous compliance with each operating limitation in Condition K.6. according to methods specified below:

b. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or

ii. 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 63.6640(a), Table 6, No. 9.a.i. & ii.; Rule 62-204.800(8), FAC and Rule 2.201, JEPB]

Recordkeeping requirements

K.14. The following records in paragraphs (a)(1)-(a)(5), (b)(1)-(b)(3) shall be kept:

(a)(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv).

(2) Records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment.

(3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).

(4) Records of all required maintenance performed on the air pollution control and monitoring equipment.

(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

(b) For each CEMS or CPMS, you must keep the records listed in paragraphs (b)(1) through (3) of this section.

(1) Records described in §63.10(b)(2)(vi) through (xi).

(2) Previous (*i.e.*, superseded) versions of the performance evaluation plan as required in §63.8(d)(3).

(3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in §63.8(f)(6)(i), if applicable.

[40 CFR 63.6655(a),(b); Rule 62-204.800(8), FAC and Rule 2.201, JEPB]

K.15. The records required in Condition K.13. shall be kept to show continuous compliance with each emission or operating limitation in Condition K.6.

[40 CFR 63.6655(d), Table 6, No. 9.a.i. & ii.; Rule 62-204.800(8), FAC and Rule 2.201, JEPB]

K.16. Records of the maintenance conducted on the stationary RICE shall be kept in order to demonstrate that the stationary RICE and after-treatment control device (if any) is operated and maintained according to the owner or operator's own maintenance plan.

[40 CFR 63.6655(e),(e)(2),(e)(3); Rule 62-204.800(8), FAC and Rule 2.201, JEPB]

K.17. Records of the hours of operation of the engine shall be kept 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 the purposes specified in Condition K.5.(2)(ii) or (iii) or (4)(ii), 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), (f)(2); Rule 62-204.800(8), FAC and Rule 2.201, JEPB]

K.18. **Records:** Records shall meet the following:

(a) Records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), each record shall be kept for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) Each record shall be kept 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, according to §63.10(b)(1).

[40 CFR 63.6660; Rule 62-204.800(8), FAC and Rule 2.201, JEPB]

Reporting requirements

K.19.a. Each instance shall be reported in which each operating limitation in Condition K.6. is not met. These instances are deviations from the operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650.

[40 CFR 63.6640(b)]

b. You must also report each instance in which you did not meet the requirements in Table 8 of 40 CFR 63 Subpart ZZZZ that apply to you.

[40 CFR 63.6640(e); Rule 62-204.800(8), FAC and Rule 2.201, JEPB]

K.20.a. Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 7 of 40 CFR 63 Subpart ZZZZ and according to the requirements in paragraphs **a.**(1) through (4) of this Condition.

(1) For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on December 31.

(2) For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in §63.6595.

(3) For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

(4) For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

b. The Compliance report must contain the information in paragraphs **b.**(1) through (6) of this Condition.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction.

(5) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

(6) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.

c. For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in this subpart, the Compliance report must contain the information in paragraphs **b.**(1) through (4) of this Condition and the information in paragraphs **c.**(1) and (2) of this Condition.

(1) The total operating time of the stationary RICE at which the deviation occurred during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

d. For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this subpart, you must include information in paragraphs **b.**(1) through (4) and **d.**(1) through (12) of this Condition.

(1) The date and time that each malfunction started and stopped.

(2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out-of-control, including the information in §63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.

(5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.

(8) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.

(9) A brief description of the stationary RICE.

(10) A brief description of the CMS.

(11) The date of the latest CMS certification or audit.

(12) A description of any changes in CMS, processes, or controls since the last reporting period.

e. Each affected source that has obtained a Title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in 40 CFR 63 Subpart ZZZZ in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of 40 CFR 63 Subpart ZZZZ along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

f. If you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in §63.6640(f)(4)(ii), you must submit an annual report according to the requirements in paragraphs **f.**(1) through (3) of this Condition.

(1) The report must contain the following information:

(i) Company name and address where the engine is located.

(ii) Date of the report and beginning and ending dates of the reporting period.

(iii) Engine site rating and model year.

(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

(v) Hours operated for the purposes specified in §63.6640(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in §63.6640(f)(2)(ii) and (iii).

(vi) Number of hours the engine is contractually obligated to be available for the purposes specified in §63.6640(f)(2)(ii) and (iii).

(vii) Hours spent for operation for the purpose specified in §63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in §63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

(viii) If there were no deviations from the fuel requirements in §63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.

(ix) If there were deviations from the fuel requirements in §63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (*www.epa.gov/cdx*). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §63.13.

[40 CFR 63.6650(a), (b)(6),(7),(8)(9),(c), (d), (e), (f), (h), Table7, 4.a.i.; Rule 62-204.800(8), FAC and Rule 2.201, JEPB]

K.21. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

Notification requirements

K.22. The applicable notification requirements in §63.6645 and in 40 CFR Part 63, Subpart A shall be met. Pursuant to 40 CFR 63.6645(a)(5), the notification requirements of §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) are not applicable to existing stationary emergency RICE.

[40 CFR 63.6595(c), 40 CFR 63.6645(a) & (a)(5); Rule 62-204.800(8), FAC and Rule 2.201, JEPB]

Subsection L. Emissions Unit No. 021 80 kW Emergency IC Engine/Generator

This section addresses the following emissions units.

E.U. ID No.	Brief Description
021	A generator set (Caterpillar Model **D80-6**) comprised of a four-stroke cycle, in-line, 4-cylinder, compression ignition, diesel engine with a total displacement of 4.4 liters. The engine is rated at 80kW of electrical output and 107 brake horsepower mechanical output at 100 percent load. The engine was installed in October 2012.

*{Permitting note: This emissions unit is regulated under: NSPS -40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines**,** NESHAP – 40 CFR 63, Subpart ZZZZ**,** National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines adopted and incorporated by reference in Rule 62-204.800, F.A.C. Compliance with the requirements of 40 CFR 63, Subpart ZZZZ is met by meeting the requirements of 40 CFR 60, Subpart IIII. No further requirements of 40 CFR 63, Subpart ZZZZ apply for this engine.*

*This permit section addresses a new, emergency stationary compression ignition (CI) reciprocating internal combustion engine (RICE) manufactured after June 12, 2006 with an engine displacement of less than 30 liters per cylinder located at an area source of HAP emissions***.**

The following table provides important details for this emissions unit:

Engine Brake HP	Generator kW	Date of Construction	Model Year	Primary Fuel	Type of Engine	Displacement liters/cylinder (l/c)	Serial #	Date of last mod. or reconst.
107	80	2012	2012	Diesel	Emergency	1.10	---	N/A

L.1 **<u>NESHAP, 40 CFR 63 Subpart ZZZZ Applicability</u>**: This diesel engine is classified as new, stationary Reciprocating Internal Combustion Engines (RICE). In accordance with 40 CFR 63.6590(c)(1), the unit must meet the requirements of 40 CFR 63 Subpart ZZZZ by complying with the 40 CFR 60 Subpart IIII standards. No further 40 CFR 63 Subpart ZZZZ standards shall apply to this engine.

[40 CFR 63.6675(def); 40 CFR 63.6585(a) & (c); 40 CFR 63.6590(a)(2)(iii); 40 CFR 63.6590(c)(1), Rule 62-204.800(8), FAC and Rule 2.201, JEPB]

L.2. **<u>NSPS, 40 CFR 60, Subpart IIII Applicability</u>**: This engine is classified as an emergency stationary internal compression ignition (CI) engine and is subject to the standards of 40 CFR 60 Subpart IIII.

[40 CFR 60.4200(a)(2)(i); Rule 62-204.800(8), FAC and Rule 2.201, JEPB]

L.3. The owner or operator shall comply with the following applicable requirements of 40 CFR 63 Subpart A - General Provisions, which have been adopted by reference in Rule 62-204.800(8)(b)80., F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 60.4201, 40 CFR 60.4202, 40 CFR 60.4203, 40 CFR 60.4210 and 40 CFR 60.4215 and 40 CFR 60.4216. 40 CFR 60, Subpart A- General Provisions is an Appendix.

General Provisions citation	Subject of citation	Applies to subpart	Explanation
§60.1	General applicability of the General Provisions	Yes	
§60.2	Definitions	Yes	Additional terms defined in §60.4219.
§60.3	Units and abbreviations	Yes	
§60.4	Address	Yes	
§60.5	Determination of construction or modification	Yes	
§60.6	Review of plans	Yes	
§60.7	Notification and Recordkeeping	Yes	Except that §60.7 only applies as specified in §60.4214(a).
§60.9	Availability of information	Yes	
§60.10	State Authority	Yes	
§60.11	Compliance with standards and maintenance requirements	No	Requirements are specified in subpart IIII.
§60.12	Circumvention	Yes	
§60.13	Monitoring requirements	Yes	Except that §60.13 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder.
§60.14	Modification	Yes	
§60.15	Reconstruction	Yes	
§60.16	Priority list	Yes	
§60.17	Incorporations by reference	Yes	
§60.18	General control device requirements	No	
§60.19	General notification and reporting requirements	Yes	

[40 CFR 60.4218; Table 8 to 40 CFR 60 Subpart IIII, Rule 62-204.800(8), FAC and Rule 2.201, JEPB]

PERFORMANCE RESTRICTIONS

Essential Potential to Emit (PTE) Parameters

L.4.a. Authorized Fuel: The engine shall be fired with diesel fuel only.

[Rule 62-210.200(PTE), F.A.C.; Application No. 0310166-015-AV]

b. Beginning October 1, 2010, owners and operators of stationary CI ICE subject to 40 CFR 60 Subpart IIII with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.

(1) Sulfur content.

(i) 15 ppm maximum for NR diesel fuel.

(ii) 500 ppm maximum for LM diesel fuel.

(2) Cetane index or aromatic content, as follows:

(i) A minimum cetane index of 40; or

(ii) A maximum aromatic content of 35 volume percent.

[40 CFR 60.4207(b); 40 CFR 80.510(b); Rule 62-204.800(8), FAC and Rule 2.201, JEPB]

Emission standards

L.5. The engine shall not exceed the following standards of non-methane (NM) hydrocarbons + nitrogen oxides (NO_X), carbon monoxide (CO), particulate matter (PM), and smoke emissions. The owner or operator shall comply with these emission standards over the entire life of the engine.

Engine	NM Hydrocarbons + NO_x	CO	PM	Exhaust Opacity
75≤kW<130, Tier 3	4.0 g/kW-hr	5.0 g/kW-hr	0.30 g/kW-hr	≤ 20 percent during the acceleration mode;
				15 percent during the lugging mode;
				50 percent during the peaks

				in either the acceleration or lugging modes

[40 CFR 60.4202(a)(2); 40 CFR 60.4205(b); 40 CFR 60.4206; 40 CFR 89.112(a) Table 1, 40 CFR 89.113(a); Rule 62-204.800, F.A.C.and Rule 2.201, JEPB]

L.6. Method of Operation - Emergency Stationary ICE: The emergency stationary ICE shall be operated according to the requirements in paragraphs (1) through (3) of this Condition. In order for the engine to be considered an emergency stationary ICE under 40 CFR 60 Subpart IIII, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (1) through (3) of this Condition, is prohibited.

If the engine is not operated according to the requirements in paragraphs (1) through (3) of this Condition, the engine will not be considered an emergency engine under 40 CFR 60 Subpart IIII and must meet all requirements for non-emergency engines.

(1) *Emergency Situations*. There is no time limit on the use of emergency stationary ICE in emergency situations.

(2) You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (2)(i) through (iii) of this Condition for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (3) of this Condition counts as part of the 100 hours per calendar year allowed by this paragraph (2).

(i) *Maintenance and Testing.* Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. 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 ICE beyond 100 hours per calendar year.

(ii) *Emergency Demand Response*. Emergency stationary ICE 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 §60.17), 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.

(iii) *Deviation of Voltage or Frequency.* Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) *Non-Emergency Situations.* Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency 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 (2) of this Condition. Except as provided in paragraph (3)(i) of this Condition, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) 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:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

(B) 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.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) 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.

(ii) [Reserved]

[40 CFR 60.4211(f); Rule 62-204.800(8), FAC and Rule 2.201, JEPB]

Operation and Maintenance

L.7. The owner or operator shall operate the stationary compression ignition engine and control devices according to the manufacturer's emission-related written instructions.

[40 CFR 60.4211(a)(1), Rule 62-204.800, FAC and Rule 2.201, JEPB]

L.8. The owner or operator shall only change those emission-related settings that are permitted by the manufacturer.

[40 CFR 60.4211(a)(2), Rule 62-204.800, FAC and Rule 2.201, JEPB]

L.9. The owner or operator shall meet the requirements 40 CFR 89.112(a) Table 1 and 40 CFR 89.113(a) as specified in Condition L.5.

[40 CFR 60.4211(a)(3), Rule 62-204.800, FAC and Rule 2.201, JEPB]

Monitoring Requirements

L.10. The owner or operator of an emergency stationary compression ignition engine that does not meet the standards applicable to non-emergency engines shall install a non-resettable hour meter prior to startup of the engine.

[40 CFR 60.4209(a), Rule 62-204.800, FAC and Rule 2.201, JEPB]

Compliance Requirements

L.11. The owner or operator of this emissions unit has demonstrated compliance by purchasing an engine certified to the emission standards for new nonroad CI engines as specified in Condition L.5. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in Condition L.12.

[40 CFR 60.4211(c), Rule 62-204.800, FAC and Rule 2.201, JEPB]

L.12. If the owner or operator does not install, configure, operate and maintain the emergency stationary compression ignition ICE and control device according to the manufacturer's emission-related written instructions, or changes emission-related settings in a way that is not permitted by the manufacturer, the owner or operator shall demonstrate compliance as follows:

a. Keep a maintenance plan and records of conducted maintenance.

b. Maintain and operate the engine in a manner consistent with good air pollution control practices for minimizing emissions.

c. Conduct an initial performance test to demonstrate compliance with the applicable emission standards:

   (i) Within 1 year of startup or

   (ii) Within 1 year after an engine and control device is no longer installed, configured, operated and maintained in accordance with the manufacturer's emission-related written instructions or

   (iii) Within 1 year after the emission-related settings are changed in a way that is not permitted by the manufacturer.

d. Conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

[40 CFR 60.4211(g)(2), Rule 62-204.800(8), FAC and Rule 2.201, JEPB]

Performance Testing Requirements

L.13. Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to 40 CFR 60 Subpart IIII must do so according to the following paragraphs of this Condition:

(a) The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F, for stationary CI ICE with a displacement of less than 10 liters per cylinder, and according to 40 CFR part 1042, subpart F, for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder.

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

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

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

Where:

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

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

(d) Exhaust emissions from stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a), §60.4205(a), or §60.4205(c) must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in §60.4204(a), §60.4205(a), or §60.4205(c), determined from the equation in paragraph (c) of this section.

Where:

STD = The standard specified for that pollutant in §60.4204(a), §60.4205(a), or §60.4205(c).

Alternatively, stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a), §60.4205(a), or §60.4205(c) may follow the testing procedures specified in §60.4213, as appropriate.

(e) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1042 must not exceed the NTE standards for the same model year and maximum engine power as required in 40 CFR 1042.101(c).

[40 CFR 60.4212, Rule 62-204.800(8), FAC and Rule 2.201, JEPB]

Recordkeeping and Reporting Requirements

L.14. Records shall be kept of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

[40 CFR 60.4214(b), Rule 62-204.800, FAC and Rule 2.201, JEPB]

L.15. Diesel Particulate Filter. If the stationary RICE is equipped with a diesel particulate filter, the owner or operator shall keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.

[40 CFR 60.4214(c), Rule 62-204.800(8), FAC and Rule 2.201, JEPB]

L.16. If the emergency stationary CI ICE operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in Condition L.6.(2)(ii) and (iii) or that operates for the purposes specified in Condition L.6.(3)(i), an annual report shall be submitted according to the requirements in paragraphs (1) through (3) of this Condition.

(1) The report must contain the following information:

(i) Company name and address where the engine is located.

(ii) Date of the report and beginning and ending dates of the reporting period.

(iii) Engine site rating and model year.

(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

(v) Hours operated for the purposes specified in §60.4211(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in §60.4211(f)(2)(ii) and (iii).

(vi) Number of hours the engine is contractually obligated to be available for the purposes specified in §60.4211(f)(2)(ii) and (iii).

(vii) Hours spent for operation for the purposes specified in §60.4211(f)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in §60.4211(f)(3)(i). The report

must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (*www.epa.gov/cdx*). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §60.4.

[40 CFR 60.4214(d), Rule 62-204.800(8), FAC and Rule 2.201, JEPB]

L.17. <u>Other Reporting Requirements</u>. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.