Florida Department of Environmental Protection

South District
Post Office Box 2549
Fort Myers, Florida 33902-2549
SouthDistrict@dep.state.fl.us

Rick Scott
Governor

Carlos Lopez-Cantera
Lt. Governor

Jonathan P. Steverson
Secretary

ELECTRONIC MAIL RECEIVED RECEIPT REQUESTED

PERMITTEE
Breitburn Florida, LLC
P.O. Box 3236
Immokalee, Florida 34143

Authorized Representative:
Ed Blake, Superintendent

Air Permit No. 0210031-033-AC
Permit Expires: July 6, 2017
Minor Air Construction Permit

Raccoon Point Facility

Revision of Minor Source Air Construction Permit No. 0210031-032-AC to replace (RICE) 3,600 bhp engine with a 1,500 bhp Engine/Generator Set for Pad 5

NOTICE OF PERMIT REVISION

PROJECT

This is a revision to air construction permit Permit No. 0210031-032-AC. This revision changes (EU-33) from the original intended re-constructed 20 cylinder 3,600 bhp RICE/generator set (Genertek EMD 20/645F4b) to one new, smaller 12 cylinder 1,500 bhp RICE/Generator set (Genertek EMD 12/645E4bg). **The new engine is smaller and produces less pollutants.** Genertek EMD 20/645F4b will be removed.

Although the Equipment Supply Proposal from Genertek dated 01/11/16 submitted by the permittee describes providing two generator sets and two EMD 12/645/E4bg engines, only one such generator set and one such engine was requested by the permittee in its letter dated 01/15/2016. Only one such generator set and one such engine is authorized. A second such generator set and engine will require a new air construction permit.

The Engine/Generator set is located at the facility to provide all of the required electrical power for production Pad No. 5. The "NEW" engine is subject to stationary RICE, (NESHAPS) Subpart ZZZZ and New Source Performance Standard (NSPS) Subpart IIII. The emissions will meet Tier 4 standards.

STATEMENT OF BASIS

This air pollution construction permit revision is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality. **A copy of this permit revision shall be filed with the referenced permit and shall become part of the permit.**

Petitions. A person whose substantial interests are affected by the proposed decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Department's Office of General Counsel, MS #35,

3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, Agency_Clerk@dep.state.fl.us. Petitions filed by the applicant or any of the parties listed below must be filed within 14 days of receipt of this notice. Petitions filed by any other person must be filed within 14 days of receipt of this proposed action. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when each petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and, (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the permitting authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the permitting authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available in this proceeding.

Effective Date: This permitting decision is final and effective on the date filed with the clerk of the Permitting Authority unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition pursuant to Rule 62-110.106, F.A.C., and the petition conforms to the content requirements of Rules 28-106.201 and 28-106.301, F.A.C. Upon timely filing of a petition or a request for extension of time, this action will not be effective until further order of the Permitting Authority.

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

Executed in Fort Myers, Florida.

Jon M. Iglehart
Director of
District Management

February 18, 2016
Date

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Permit Revision package (including a Technical Evaluation and Final Determination and a Revised Permit) was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on February 18, 2016, to the persons listed below.

Mr. Ed Blake, Superintendent (ed.blake@breitburn.com)
Mr. Andrew D. Bass, P.E. (andrewbass08@gmail.com)
Mr. Carter B. Endsley, P.E. (Carter.Endsley@DEP.STATE.FL.US)
Ms. Barbara Friday, DEP OPC: (barbara.friday@dep.state.fl.us)
Ms. Lynn Scearce, DEP OPC: (lynn.scearce@dep.state.fl.us)

Clerk Stamp

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

_____ February 18, 2016
(Clerk) (Date)

FACILITY DESCRIPTION

The existing facility is a crude oil and natural gas production facility. The facility consists of five well pads, three of which are active. Each well pad currently has three (3) to four (4) oil production wells [Eleven (11) total]. With the exception of three (3) wells which are equipped with a hydraulic lift system. Submersible electrical pumps are used for the production of most wells. The electricity supplied to the pumps is furnished by a gas turbine and/or engine driven generator sets. The existing facility consists of fourteen reciprocating internal combustion engines (RICE) [ten spark ignition (SI), four compression ignition (CI)] and one (1) gas turbine. Four engines are equipped with non-selective catalytic reduction (NSCR) three way catalyst. Three (3) engines are equipped with an oxidation catalytic converter, and one engine is equipped with both an oxidation catalyst and a selective catalytic reduction (SCR).The facility has six crude oil storage tanks and a flare which burns excess produced gas or excess vapors from the storage tanks. The produced crude oil/natural gas is routed to free water knockout vessels, treaters, then to storage tanks. The facility includes a vapor recovery system which collects vapors from the storage tanks. The facility has a natural gas treatment system that consists of two (2) SulfaTreat adsorption beds which operate in series to remove H_2S from the produced natural gas. The treatment system has a design H_2S removal efficiency of 99.6%. The facility demonstrated that the produced natural gas does meet the definition of natural gas per Subpart GG.

The engines are subject to 40 CFR 63 Subparts A and ZZZZ, General Provisions and National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, respectively. One existing engine is also subject to 40 CFR 60 Subpart A and IIII, General Provisions and Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. The gas turbine is subject to 40 CFR 60 Subparts A and GG, General Provisions and Standards of Performance for Stationary Gas Turbines, respectively.

FACILITY REGULATORY CLASSIFICATION

- The facility is not a major source of hazardous air pollutants (HAP).
- The facility does not operate units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is a Title V major source of air pollution in accordance with Chapter 62-213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.

PROJECT

This project is to revise Air Construction permit No. 0210031-032-AC to change (EU-33) from the original intended re-constructed 20 cylinder 3,600 bhp RICE/generator set (Genertek EMD 20/645F4bg) to a new, smaller 12 cylinder 1,500 bhp RICE/Generator set (Genertek EMD 12/645E4b). The new engine is smaller and produces less pollutants. Genertek EMD 20/645F4b will be removed.

Although the Equipment Supply Proposal from Genertek dated 01/11/16 submitted by the permittee describes providing two generator sets and two EMD 12/645/E4bg engines, only one such generator set and one such engine was requested by the permittee in its letter dated 01/15/2016. Only one such generator set and one such engine is authorized. A second such generator set and engine will require a new air construction permit.

The Engine/Generator set is located at the facility to provide all of the required electrical power for production Pad No. 5. The “NEW” engine is subject to stationary RICE, (NESHAPS) Subpart ZZZZ and New Source Performance Standard (NSPS) Subpart IIII. The emissions will meet Tier 4 standards. The engine will be fired by Ultra-Low Sulfur Diesel (ULSD) fuel oil. The engine will be equipped with selective catalytic reduction (SCR) and Diesel Oxidation Catalyst (DOC) control technologies to control Nitrogen Oxides (NOx) and Carbon Monoxide (CO).

Permit Being Modified: Permit No. 0210031-032-AC

The permit expiration date is changed from July 6, 2016, to July 6, 2017.

Affected Emissions Unit: EU033

Section 1, First Paragraph on Page 1 of 11: **This paragraph is changed as follows:**

From:

This is the final air construction permit, which authorizes Breitburn Florida, LLC to install an additional RICE/generator set (Genertek EMD 20/645F4b) on the facility to provide all of the required electrical power for production Pad No. 5. The generator is rated at 2.5 MW and the diesel powered engine is rated at 3,600 brake horsepower (bhp). The proposed work will be conducted at the Raccoon Point Facility, which is a crude oil production facility (Standard Industrial Classification No. 1311). The facility is located in Collier County 60 miles southeast of Naples and 11 miles north of U.S. 41, Southeast of Naples, Florida. The UTM coordinates are Zone 17, 509.6 km East, and 2,873.4 km North. Latitude 25° 58' 46" N. Longitude 80° 54' 15" W. As noted in the Final Determination provided with this final permit, only minor changes and clarifications were made to the draft permit.

To:

This is a revision to air construction permit No. 0210031-032-AC. This permit revision authorizes Breitburn Florida, LLC to remove Genertek EMD 20/645F4b and install a new RICE/generator set (Genertek EMD 12/645E4b) on the facility to provide all of the required electrical power for production Pad No. 5. The generator is rated at 1500/1650 kW and the diesel powered engine is rated at 1,500 brake horsepower (bhp). The proposed work will be conducted at the Raccoon Point Facility, which is a crude oil production facility (Standard Industrial Classification No. 1311). The facility is located in Collier County 60 miles southeast of Naples and 11 miles north of U.S. 41, Southeast of Naples, Florida. The UTM coordinates are Zone 17, 509.6 km East, and 2,873.4 km North. Latitude 25° 58' 46" N. Longitude 80° 54' 15" W.

Section 2, Administrative Requirements, Proposed Project, Page 4 of 11: **This description is changed as follows:**

From:

ID No.	Emission Unit Description
033	One 3,600 bhp CI Rice Engine/Generator Set. (Genertek EMD 20/645F4b).

To:

ID No.	Emission Unit Description
033	One 1,500 bhp CI Rice Engine/Generator Set. (Genertek EMD 12/645E4bg). [Genertek EMD 20/645F4b will be removed from the facility].

Section 3, Emission Unit Specific Conditions, Page 6 of 11 – A. EU 033 Description; Equipment Description:

This description is changed as follows:

From:

ID No.	Emission Unit Description
033	One 3,600 bhp CI Rice Engine/Generator Set. (Genertek EMD 20/645F4b).

To:

ID No.	Emission Unit Description
033	One 1,500 bhp CI Rice Engine/Generator Set. (Genertek EMD 12/645E4bg). [Genertek EMD 20/645F4b will be removed from the facility].

Section 3, Page 6 of 11 – EQUIPMENT. The first two paragraphs of the Equipment Description (Specific Condition No. 1) are changed as follows:

From:

The permittee is authorized to install a RICE/generator set (Genertek EMD 20/645F4b) at the facility to provide all of the required electrical power for production Pad No. 5. This emission unit (No. 033) has a 20 cylinder, 645 cubic inch engine at appx. 10.57 liters per cylinder. The unit has a stack with the following specifications: 30' height, 1.83' diameter, 740 degree F exit temperature, and 21,350 acfm flow rate.

The generator is rated at 2.5 MW and the diesel powered engine is rated at 3,600 brake horsepower (bhp). This engine has been reconstructed with reconstruction commenced after June 12, 2006.

To:

The permittee is authorized to install a RICE/generator set (Genertek EMD 12/645E4bg) at the facility to provide all of the required electrical power for production Pad No. 5. This emission unit (No. 033) has a 12 cylinder, at appx. 10.57 liters per cylinder. The unit has a stack with the following specifications: 30' height, 1.83' diameter,

The generator is rated at 1650 kW and the diesel powered engine is rated at 1,500 brake horsepower (bhp). This engine is NEW.

Section 3, Page 7 of 11 – Performance Restrictions, Specific Condition Number 2, is changed as follows:

From:

Permitted Capacity: Maximum heat input rate shall not exceed 25.22 MM Btu/hr. [Rule 62-210.200 (PTE). F.A.C.]

To:

Permitted Capacity: Maximum heat input rate shall not exceed 15.25 MM Btu/hr. [Rule 62-210.200 (PTE). F.A.C.]

All other language and specific conditions of Air Permit No. 0210031-032-AC are unchanged. A copy of this permit revision shall be filed with the referenced permit and shall become part of the permit.

Florida Department of Environmental Protection

South District
Post Office Box 2549
Fort Myers, Florida 33902-2549
SouthDistrict@dep.state.fl.us

Rick Scott
Governor

Carlos Lopez-Cantera
Lt. Governor

Jonathan P. Steverson
Secretary

***** FINAL REVISED PERMIT *****

Electronic Mail Received Receipt Requested

PERMITTEE:

Breitburn Florida, LLC
P.O. Box 3236
Immokalee, Florida 34143

Authorized Representative:
Ed Blake, Superintendent

Air Permit No. 0210031-033-AC
Permit Expires: July 6, 2017

Raccoon Point Facility

Revision of Minor Source Air Construction Permit No. 0210031-032-AC to replace (RICE) 3,600 bhp engine with a 1,500 bhp Engine/Generator Set for Pad 5

This is a revision to air construction permit No. 0210031-032-AC. This permit revision authorizes Breitburn Florida, LLC to remove Genertek EMD 20/645F4b and install a new RICE/generator set (Genertek EMD 12/645E4b) on the facility to provide all of the required electrical power for production Pad No. 5. The generator is rated at 1500/1650 kW and the diesel powered engine is rated at 1,500 brake horsepower (bhp). The proposed work will be conducted at the Raccoon Point Facility, which is a crude oil production facility (Standard Industrial Classification No. 1311). The facility is located in Collier County 60 miles southeast of Naples and 11 miles north of U.S. 41, Southeast of Naples, Florida. The UTM coordinates are Zone 17, 509.6 km East, and 2,873.4 km North. Latitude 25° 58' 46" N. Longitude 80° 54' 15" W.

This final permit is organized by the following sections.

Section 1. General Information
Section 2. Administrative Requirements
Section 3. Emissions Unit Specific Conditions
Section 4. Appendices

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Executed in Fort Myers, Florida.

Jon M. Iglehart
Director of District Management

February 18, 2016
Date

FACILITY AND PROJECT DESCRIPTION

Existing Facility

The existing facility is a crude oil and natural gas production facility. The facility consists of five well pads, three of which are active. Each well pad currently has three (3) to four (4) oil production wells [Eleven (11) total]. With the exception of three (3) wells which are equipped with a hydraulic lift system. Submersible electrical pumps are used for the production of most wells. The electricity supplied to the pumps is furnished by a gas turbine and/or engine driven generator sets. The existing facility consists of fourteen reciprocating internal combustion engines (RICE) [ten spark ignition (SI), four compression ignition (CI)] and one (1) gas turbine. Four engines are equipped with non-selective catalytic reduction (NSCR) three way catalyst. Three (3) engines are equipped with an oxidation catalytic converter, and one engine is equipped with both an oxidation catalyst and a selective catalytic reduction (SCR).The facility has six crude oil storage tanks and a flare which burns excess produced gas or excess vapors from the storage tanks. The produced crude oil/natural gas is routed to free water knockout vessels, treaters, then to storage tanks. The facility includes a vapor recovery system which collects vapors from the storage tanks. The facility has a natural gas treatment system that consists of two (2) SulfaTreat adsorption beds which operate in series to remove H_2S from the produced natural gas. The treatment system has a design H_2S removal efficiency of 99.6%. The facility demonstrated that the produced natural gas does meet the definition of natural gas per Subpart GG.

The engines are subject to 40 CFR 63 Subparts A and ZZZZ, General Provisions and National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, respectively. One existing engine is also subject to 40 CFR 60 Subpart A and IIII, General Provisions and Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. The gas turbine is subject to 40 CFR 60 Subparts A and GG, General Provisions and Standards of Performance for Stationary Gas Turbines, respectively.

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

Subsection B. Summary of Emissions Units.

EU No.	Description of Emission Units
Regulated Emissions Units	
001	One Flare
002	Crude Oil Storage Tanks
004	One 80 HP SI RICE
008	Two 108 HP SI RICE (One is standby only)
009	Two 221 HP SI RICE (One is standby only)
012	Two 295 HP SI RICE
013	One 800 kW Gas Turbine
020	One 625 HP SI RICE
023	One 600 HP SI RICE
024	One 980 HP CI ICE
029	One 1,764 HP CI ICE
030	One 939 HP CI ICE
031	One 1,818 bhp SI RICE.
032	One 3,000 bhp CI RICE

Proposed Project

This project will add the following emissions unit.

Facility ID No. 0210031	
ID No.	**Emission Unit Description**
033	One 1,500 bhp CI Rice Engine/Generator Set. (Genertek EMD 12/645E4bg). [Genertek EMD 20/645F4b will be removed from the facility].

FACILITY REGULATORY CLASSIFICATION

- The facility is not a major source of hazardous air pollutants (HAP).
- The facility has no units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400 (PSD), F.A.C.

1. Permitting Authority: The permitting authority for this project is the South District Engineering and Permitting Section, Florida Department of Environmental Protection (Department). The South District's mailing address is P.O. Box 2549, Fort Myers, Florida 33902-2549 and the electronic mailing address is SouthDistrict@dep.state.fl.us. All documents related to applications for permits to operate an emissions unit shall be submitted to the South District.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the South District Office. The mailing address, electronic mailing address, and phone number of the South District Office are: P.O. Box 2549, Fort Myers, Florida 33902-2549, SouthDistrict@dep.state.fl.us and (239) 344-5600.

3. Appendices: The following Appendices are attached as part of this permit:

   Appendix A. Citation Formats and Glossary of Common Terms;
   Appendix B. General Conditions;
   Appendix C. Common Conditions; and
   Appendix D. Common Testing Requirements.

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297. For Stationary "Reciprocating Internal Combustion Engines" (RICE) rules, F.A.C. Federal and State Rule Citations include the following: (See Section 3, Para.1 for related links to these rules).

   NSPS, Subpart A
   NSPS, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
   NESHAP, Subpart A – General Provisions
   NESHAP, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

   Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.

5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

7. Source Obligation:

   At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

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

8. Application for Title V Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A REVISED Title V air operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V air operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a revised Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority with copies to the Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]

9. Actual Emissions Reporting: Rule 62-212.300(1)(e) is not applicable since this rule only applies to projects that relied upon projected actual emissions to avoid PSD review. Note that actual annual CO, NOx, PM and VOC emission rates for EU-033 will be reported each year on the Annual Operating Reports.

   [Application 0210031-032-AC; and Rules 62-212.300(1)(e) and 62-210.370, F.A.C.]

A. EU 033 Description

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
033	One 1,500 bhp CI Rice Engine/Generator Set. (Genertek EMD 12/645E4bg). [Genertek EMD 20/645F4b will be removed from the facility].

EQUIPMENT

1. Equipment Description:

The permittee is authorized to install a RICE/generator set (Genertek EMD 12/645E4bg) at the facility to provide all of the required electrical power for production Pad No. 5. This emission unit (No. 033) has a 12 cylinder, at appx. 10.57 liters per cylinder. The unit has a stack with the following specifications: 30' height, 1.83' diameter,

The generator is rated at 1650 kW and the diesel powered engine is rated at 1,500 brake horsepower (bhp). This engine is NEW.

The unit shall burn only Ultra-Low-Sulfur Diesel (ULSD) fuel oil which has a maximum sulfur content of 15 parts per million (ppm) (0.0015 percent by weight). ULSD must also have a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.

[Rule 62-213.410, F.A.C., 40 CFR 60.4207(b) and 40 CFR 80.510(b)].

The engine shall be equipped with selective catalytic reduction (SCR) and Diesel Oxidation Catalyst (DOC) control technologies to control Nitrogen Oxides (NOx) and Carbon Monoxide (CO). The engine is subject to stationary RICE, (NESHAPS) Subpart ZZZZ and NSPS Subpart IIII. The emissions will meet Tier 4 standards.

APPLICABLE REGULATIONS
Federal Rule Citations
40 CFR 63, Subpart ZZZZ, NESHAP, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), as amended February 27, 2014, 79 FR 11227.
40 CFR 63, Subpart A, Subpart A, NESHAP General Provisions, as amended March 27, 2014, 79 FR 17339.
40 CFR Part 60, Subpart IIII NSPS, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, as amended February 27, 2014, 79 FR 11227.
State Rule Citations
Rule 62-4, F.A.C. (Permitting Requirements)
Rule 62-204, F.A.C. (Federal Regulations Adopted by Reference)
Rule 62-210, F.A.C. (Permits Required, Public Notice, Reports, Stack Height Policy, Circumvention, Excess Emissions, and Forms)
Rule 62-213, F.A.C. (Title V Air Operation Permits for Major Sources of Air Pollution)
Rule 62-296, F.A.C. (Emission Limiting Standards)
Rule 62-297, F.A.C. (Test Methods and Procedures, Continuous Monitoring Specifications, and Alternate Sampling Procedures)

PERFORMANCE RESTRICTIONS

2. Permitted Capacity: Maximum heat input rate shall not exceed 15.25 MM Btu/hr. [Rule 62-210.200(PTE), F.A.C.]

3. Authorized Fuel: This Stationary RICE must use diesel fuel that meets the following requirements for non-road diesel fuel:

   The engine must burn Ultra-Low-Sulfur Diesel (ULSD) diesel fuel:

   a. *Sulfur Content*. The sulfur content shall not exceed 15 ppm (0.0015% by weight).
   b. *Cetane and Aromatic*. The fuel must have a minimum cetane index of 40 or must have a maximum aromatic content of 35 volume percent.

   [Rule 62-213.410, F.A.C., 40 CFR 60.4207(b) and 40 CFR 80.510(b)]

4. Restricted Operation: The hours of operation are not limited (8760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

5. Emissions Unit Relocations. The emissions units that are skid mounted may be relocated within the Raccoon Point Facility as necessary in response to production requirements. [Rule 62-4.070(3), F.A.C.]

6. Nameplates Required. The owner or operator shall always maintain nameplates on each engine/generator that includes the serial number, make/model, and horsepower (hp) of the engine. [Rule 62-4.070(3), F.A.C.]

7. Temporary Use Replacement Rental IC Engines. The owner or operator may temporarily use replacement rental IC engines that are equal to or smaller in size to the engine being temporarily replaced if the following conditions are met:

   a. *Notification of Rental Engine Installation or Relocation*. Verbal or e-mail notification shall be provided to the Department as soon as possible but no later than one (1) business day after installing or relocating a temporary replacement rental engine at the Raccoon Point facility.

   b. *Written Notification of Rental Engine Installation or Relocation*. Written notification shall be provided to the Department no later than seven (7) after installing or relocating a temporary replacement rental engine on site. Written notification shall include the following information:

      i. Identification of the engine being replaced (emission unit number and current facility location);
      ii. Identification of the temporary rental engine including make/model, maximum heat input, HP and maximum kW;
      iii. Date the temporary rental engine was brought on-site or relocated and started operating at the facility; and
      iv. Expected period of time the temporary rental engine will be operated at the facility.

c. *Written Notification of Rental Engine Removal*. Written notification shall be provided to the Department with the date the rental engine is removed from site.

   [Rule 62-4.070(3), F.A.C.]

EMISSIONS STANDARDS

8. Emissions Standards:

   a. General Visible Emissions (VE). 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. [Rule 62-296.320(4)(b)1, F.A.C.]

b. Carbon Monoxide (CO) Emissions. CO emissions shall not exceed 5.0 g/kW-hr. [40 CFR 63.6590(c)(1), 40 CFR 60.4204(e) and (b), 40 CFR 60.4201(e), and 40 CFR 1042.101].

c. NOx Emissions: NOx emissions shall not exceed 1.40 g/kW-hr [Applicant Requested]

{Permitting note: Compliance with this limit demonstrates compliance with the Tier 4 emission limit of 1.80 g/kw-hr according to 40 CFR 1042.101,Table 3}.

d. PM Emissions: PM emissions shall not exceed 0.04 g/kW-hr. [40 CFR 63.6590(c)(1), 40 CFR 60.4204(e) and (b), 40 CFR 60.4201(e), and 40 CFR 1042.101 Table 3].

e. Hydrocarbon (HC) Emissions: HC emissions shall not exceed 0.19 g/kW-hr. [40 CFR 63.6590(c)(1), 40 CFR 60.4204(e) and (b), 40 CFR 60.4201(e), and 40 CFR 1042.101 Table 3].

CONTROL TECHNOLOGY

9. The engine shall be equipped with selective catalytic reduction (SCR) and Diesel Oxidation Catalyst (DOC) control technologies to control Nitrogen Oxides (NOx) and Carbon Monoxide (CO) emissions. [Applicant Requested].

COMPLIANCE REQUIREMENTS

10. Continuous Compliance. Each unit shall be operated and maintained according to the manufacturer's emission related instructions. Only changes to the emission related settings allowed by the manufacturer's emissions related instructions are permitted. {40 CFR 60.4211(a)(1&2)].

TESTING REQUIREMENTS

11. Performance Tests: Performance tests for CO, NOx, PM, and HC must be conducted according to the in-use testing procedures in 40 CFR Part 1042, Subpart F. [40 CFR 60.4212(a)]

12. Initial Compliance Tests: The emissions unit shall be tested to demonstrate initial compliance with the emissions standards for CO,Nitrogen Oxide (NOx) Particulate Matter (PM), Hydrocarbons (HC) and Visual Emissions (VE). The initial tests shall be conducted within 60 days after the engine commences operation. [Rules: 40 CFR 60.4211(e)(2), 62-4.070(3) and 62-297.310(7)(a)1, F.A.C.]

13. Compliance Tests Prior to Renewal: Compliance tests shall be performed for CO, NOx, PM, HC and VE once every 5 years. The tests shall occur prior to obtaining a renewed operating permit. [Rules 62-210.300(2)(a) and 62- 297.310(7)(a), F.A.C.]

14. Test Requirements: The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62-297.310(7)(a)9, F.A.C.]

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

Method	Description of Method and Comments
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources (The method shall be based on a continuous sampling train).
25	Gaseous Nonmethane Organic Emissions

The above methods are described in Appendix A of 40 CFR 60 and are adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-204.800 and 62-297.100, F.A.C.; and Appendix A of 40 CFR 60]

RECORDS AND REPORTS

16. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62-297.310(8), F.A.C.]

17. Construction Start-up Notification. The owner and operator must submit to the South District office a notification of the date construction is commenced no later than 30 days after such date. The notification shall include the following:

    a. Name and address of the owner or operator;
    b. The address of the affected source;
    c. Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
    d. Emission control equipment; and
    e. Fuel used.

    [Rule 62-4.070(3), F.A.C.]

18. Fuel Recordkeeping The permittee shall maintain records of fuel oil sulfur content and oil consumption for EU033. These records are to demonstrate that each shipment of fuel oil is "Ultra Low Diesel (ULSD) fuel oil at 0.0015% percent or less sulfur and that the sulfur content was determined by ASTM methods ASTM D4057-88 and ASTM D129-91, ASTM D2622-94 or ASTM D4294-90, adopted and incorporated by reference in subsection 62-297.440(1), F.A.C. [Rule 62-4.070(3), F.A.C.]

19. Identification of Emissions Units in Compliance Reports and AORs. The owner or operator shall identify all emissions units by the emissions unit's ID and the corresponding number serial number in all compliance reports and AORs. [Rule 62-4.070(3), F.A.C.]

20. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit. The initial test report shall include a copy of compliance tests documenting that the engine meets the emission standards required in 40 CFR 60 Subpart IIII. [Rule 62-297.310(8), F.A.C., 40 CFR 60.4214]

21. Annual Operating Reports (AOR). The owner shall use CO site specific emission factor(s) determined from the initial (and annual thereafter) CO compliance demonstration test(s) to calculate the actual annual emissions. The owner or operator shall report CO emissions in units of lbs/mmBtu in the AOR.

22. Actual Emissions Reporting: Rule 62-212.300(1)(e) is not applicable since this rule only applies to projects that relied upon projected actual emissions to avoid PSD review. Note that actual annual CO and NOx emission rates for EU-033 will be reported each year on the Annual Operating Reports.

23. Notification Requirements: The permitee's application for Air Construction permit satisfies the initial notification requirements in 40 CFR 60.4214 (a) (12) when the engine serial number is furnished.

24. Operational Records: The permittee shall maintain the following records onsite for at least five (5) years:

    a. All notifications submitted to comply with NSPS Subpart IIII and all documentation supporting any notification.
    b. Maintenance conducted on the engine.
    c. Documentation the engine meets the emission standards in NSPS Subpart IIII.

FEDERAL REQUIREMENTS

25. NESHAP Subpart ZZZZ. Meeting the requirements of NSPS Subpart IIII meets all of the requirements of NESHAP Subpart ZZZZ. No further requirements under NESHAP are applicable. [40 CFR 63.6590 (c)].

26. Federal Rule Requirements. This emissions unit is subject to the requirements in 40 CFR 60 Subparts A and IIII (General Provisions and Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, respectively), NESHAP, Subpart A – General Provisions. And NESHAP, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

Contents

Appendix A. Citation Formats and Glossary of Common Terms
Appendix B. General Conditions
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Appendix D. Common Testing Requirements

CITATION FORMATS

The following illustrate the formats used in the permit to identify applicable requirements from permits and regulations.

Old Permit Numbers

Example: Permit No. AC50-123456 or Permit No. AO50-123456

Where: "AC" identifies the permit as an Air Construction Permit
"AO" identifies the permit as an Air Operation Permit
"123456" identifies the specific permit project number

New Permit Numbers

Example: Permit Nos. 099-2222-001-AC, 099-2222-001-AF, 099-2222-001-AO, or 099-2222-001-AV

Where: "099" represents the specific county ID number in which the project is located

"2222" represents the specific facility ID number for that county

"001" identifies the specific permit project number

"AC" identifies the permit as an air construction permit

"AF" identifies the permit as a minor source federally enforceable state operation permit

"AO" identifies the permit as a minor source air operation permit

"AV" identifies the permit as a major Title V air operation permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: "PSD" means issued pursuant to the preconstruction review requirements of the Prevention of Significant Deterioration of Air Quality

"FL" means that the permit was issued by the State of Florida

"317" identifies the specific permit project number

Florida Administrative Code (F.A.C.)

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

Means: Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

Code of Federal Regulations (CFR)

Example: [40 CFR 60.7]

Means: Title 40, Part 60, Section 7

GLOSSARY OF COMMON TERMS

° F: degrees Fahrenheit

AAQS: Ambient Air Quality Standard

acf: actual cubic feet

acfm: actual cubic feet per minute

ARMS: Air Resource Management System (DEP database)

BACT: best available control technology

bhp: brake horsepower

Btu: British thermal units

CAM: compliance assurance monitoring

CEMS: continuous emissions monitoring system

cfm: cubic feet per minute

CFR: Code of Federal Regulations

CAA: Clean Air Act

CMS: continuous monitoring system

CO: carbon monoxide

CO_2: carbon dioxide

COMS: continuous opacity monitoring system

DARM: Division of Air Resource Management

DEP: Department of Environmental Protection

Department: Department of Environmental Protection

dscf: dry standard cubic feet

dscfm: dry standard cubic feet per minute

EPA: Environmental Protection Agency

ESP: electrostatic precipitator (control system for reducing particulate matter)

EU: emissions unit

F.A.C.: Florida Administrative Code

F.A.W.: Florida Administrative Weekly

F.D.: forced draft

F.S.: Florida Statutes

FGD: flue gas desulfurization

FGR: flue gas recirculation

Fl: fluoride

ft^2: square feet

ft^3: cubic feet

gpm: gallons per minute

gr: grains

HAP: hazardous air pollutant

Hg: mercury

I.D.: induced draft

ID: identification

kPa: kilopascals

lb: pound

MACT: maximum achievable technology

MMBtu: million British thermal units

MSDS: material safety data sheets

MW: megawatt

NESHAP: National Emissions Standards for Hazardous Air Pollutants

NO_X: nitrogen oxides

NSPS: New Source Performance Standards

O&M: operation and maintenance

O_2: oxygen

Pb: lead

PM: particulate matter

PM_{10}: particulate matter with a mean aerodynamic diameter of 10 microns or less

ppm: parts per million

ppmv: parts per million by volume

ppmvd: parts per million by volume, dry basis

QA: quality assurance

QC: quality control

PSD: prevention of significant deterioration

psi: pounds per square inch

PTE: potential to emit

RACT: reasonably available control technology

RATA: relative accuracy test audit

RBLC: EPA's RACT/BACT/LAER Clearinghouse

SAM: sulfuric acid mist

scf: standard cubic feet

scfm: standard cubic feet per minute

SIC: standard industrial classification code

SIP: State Implementation Plan

SNCR: selective non-catalytic reduction (control system used for reducing emissions of nitrogen oxides)

SO_2: sulfur dioxide

TPD: tons/day

TPH: tons per hour

TPY: tons per year

TRS: total reduced sulfur

UTM: Universal Transverse Mercator coordinate system

VE: visible emissions

VOC: volatile organic compounds

General Conditions

The permittee shall comply with the following general conditions from Rule 62-4.160, F.A.C.

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in subsections 403.987(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in this permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
   a. Have access to and copy any records that must be kept under conditions of the permit;
   b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
   c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.
8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
   a. A description of and cause of noncompliance; and
   b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.
9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards

addressed in Rule 62-302.500, F.A.C., shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.

11. This permit is transferable only upon Department approval in accordance with Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

    a. Determination of Best Available Control Technology (not applicable);
    b. Determination of Prevention of Significant Deterioration (not applicable); and
    c. Compliance with New Source Performance Standards (applicable).

14. The permittee shall comply with the following:

    a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

    b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

    c. Records of monitoring information shall include:

        (1) The date, exact place, and time of sampling or measurements;

        (2) The person responsible for performing the sampling or measurements;

        (3) The dates analyses were performed;

        (4) The person responsible for performing the analyses;

        (5) The analytical techniques or methods used;

        (6) The results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

Common Conditions

Unless otherwise specified in the permit, the following conditions apply to all emissions units and activities at the facility.

EMISSIONS AND CONTROLS

1. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]

2. Circumvention: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]

3. Excess Emissions Allowed: Excess emissions resulting from startup, shutdown or malfunction of any emissions 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 2 hours in any 24-hour period unless specifically authorized by the Department for longer duration. Pursuant to Rule 62-210.700(5), F.A.C., the permit subsection may specify more or less stringent requirements for periods of excess emissions. Rule 62-210-700(Excess Emissions), F.A.C., cannot vary or supersede any federal NSPS or NESHAP provision. [Rule 62-210.700(1), F.A.C.]

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

5. Excess Emissions - Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Compliance Authority in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

6. VOC or OS Emissions: No person shall store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) 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.]

7. 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. [Rules 62-296.320(2) and 62-210.200(Definitions), F.A.C.]

8. 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. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]

9. Unconfined Particulate Emissions: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

RECORDS AND REPORTS

10. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least 5 years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rule 62-213.440(1)(b)2, F.A.C.]

11. Emissions Computation and Reporting:

    a. *Applicability*. This rule sets forth required methodologies to be used by the owner or operator of a facility for computing actual emissions, baseline actual emissions, and net emissions increase, as defined at Rule 62-210.200, F.A.C., and for computing emissions for purposes of the reporting requirements of subsection 62-210.370(3) and paragraph 62-212.300(1)(e), F.A.C., or of any permit condition that requires emissions be computed in accordance with this rule. This rule is not intended to establish methodologies for determining compliance with the emission limitations of any air permit. [Rule 62-210.370(1), F.A.C.]

b. *Computation of Emissions*. For any of the purposes set forth in subsection 62-210.370(1), F.A.C., the owner or operator of a facility shall compute emissions in accordance with the requirements set forth in this subsection.

(1) Basic Approach. The owner or operator shall employ, on a pollutant-specific basis, the most accurate of the approaches set forth below to compute the emissions of a pollutant from an emissions unit; provided, however, that nothing in this rule shall be construed to require installation and operation of any continuous emissions monitoring system (CEMS), continuous parameter monitoring system (CPMS), or predictive emissions monitoring system (PEMS) not otherwise required by rule or permit, nor shall anything in this rule be construed to require performance of any stack testing not otherwise required by rule or permit.

(a) If the emissions unit is equipped with a CEMS meeting the requirements of paragraph 62-210.370(2)(b), F.A.C., the owner or operator shall use such CEMS to compute the emissions of the pollutant, unless the owner or operator demonstrates to the department that an alternative approach is more accurate because the CEMS represents still-emerging technology.

(b) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C, but emissions of the pollutant can be computed pursuant to the mass balance methodology of paragraph 62-210.370(2)(c), F.A.C., the owner or operator shall use such methodology, unless the owner or operator demonstrates to the department that an alternative approach is more accurate.

(c) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C., and emissions cannot be computed pursuant to the mass balance methodology, the owner or operator shall use an emission factor meeting the requirements of paragraph 62-210.370(2)(d), F.A.C., unless the owner or operator demonstrates to the department that an alternative approach is more accurate.

(2) Continuous Emissions Monitoring System (CEMS).

(a) An owner or operator may use a CEMS to compute emissions of a pollutant for purposes of this rule provided:

1) The CEMS complies with the applicable certification and quality assurance requirements of 40 CFR Part 60, Appendices B and F, or, for an acid rain unit, the certification and quality assurance requirements of 40 CFR Part 75, all adopted by reference at Rule 62-204.800, F.A.C.; or

2) The owner or operator demonstrates that the CEMS otherwise represents the most accurate means of computing emissions for purposes of this rule.

(b) Stack gas volumetric flow rates used with the CEMS to compute emissions shall be obtained by the most accurate of the following methods as demonstrated by the owner or operator:

1) A calibrated flow meter that records data on a continuous basis, if available; or

2) The average flow rate of all valid stack tests conducted during a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.

(c) The owner or operator may use CEMS data in combination with an appropriate f-factor, heat input data, and any other necessary parameters to compute emissions if such method is demonstrated by the owner or operator to be more accurate than using a stack gas volumetric flow rate as set forth at subparagraph 62-210.370(2)(b)2., F.A.C., above.

(3) Mass Balance Calculations.

(a) An owner or operator may use mass balance calculations to compute emissions of a pollutant for purposes of this rule provided the owner or operator:

1) Demonstrates a means of validating the content of the pollutant that is contained in or created by all materials or fuels used in or at the emissions unit; and

2) Assumes that the emissions unit emits all of the pollutant that is contained in or created by any material or fuel used in or at the emissions unit if it cannot otherwise be accounted for in the process or in the capture and destruction of the pollutant by the unit's air pollution control equipment.

(b) Where the vendor of a raw material or fuel which is used in or at the emissions unit publishes a range of pollutant content from such material or fuel, the owner or operator shall use the highest value of the range to compute the emissions, unless the owner or operator demonstrates using site-specific data that another content within the range is more accurate.

(c) In the case of an emissions unit using coatings or solvents, the owner or operator shall document, through purchase receipts, records and sales receipts, the beginning and ending VOC inventories, the amount of VOC purchased during the computational period, and the amount of VOC disposed of in the liquid phase during such period.

(4) Emission Factors.

a. An owner or operator may use an emission factor to compute emissions of a pollutant for purposes of this rule provided the emission factor is based on site-specific data such as stack test data, where available, unless the owner or operator demonstrates to the department that an alternative emission factor is more accurate. An owner or operator using site-specific data to derive an emission factor, or set of factors, shall meet the following requirements.

1) If stack test data are used, the emission factor shall be based on the average emissions per unit of input, output, or gas volume, whichever is appropriate, of all valid stack tests conducted during at least a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.

2) Multiple emission factors shall be used as necessary to account for variations in emission rate associated with variations in the emissions unit's operating rate or operating conditions during the period over which emissions are computed.

3) The owner or operator shall compute emissions by multiplying the appropriate emission factor by the appropriate input, output or gas volume value for the period over which the emissions are computed. The owner or operator shall not compute emissions by converting an emission factor to pounds per hour and then multiplying by hours of operation, unless the owner or operator demonstrates that such computation is the most accurate method available.

b. If site-specific data are not available to derive an emission factor, the owner or operator may use a published emission factor directly applicable to the process for which emissions are computed. If no directly-applicable emission factor is available, the owner or operator may use a factor based on a similar, but different, process.

(5) Accounting for Emissions During Periods of Missing Data from CEMS, PEMS, or CPMS. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of missing data from CEMS, PEMS, or CPMS using other site-specific data to generate a reasonable estimate of such emissions.

(6) Accounting for Emissions During Periods of Startup and Shutdown. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of startup and shutdown of the emissions unit.

(7) Fugitive Emissions. In computing the emissions of a pollutant from a facility or emissions unit, the owner or operator shall account for the fugitive emissions of the pollutant, to the extent quantifiable, associated with such facility or emissions unit.

(8) Recordkeeping. The owner or operator shall retain a copy of all records used to compute emissions pursuant to this rule for a period of five years from the date on which such emissions information is submitted to the department for any regulatory purpose.

[Rule 62-210.370(2), F.A.C.]

c. *Annual Operating Report for Air Pollutant Emitting Facility*

(1) The Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) shall be completed each year for the following facilities:

a. All Title V sources.

b. All synthetic non-Title V sources.

c. All facilities with the potential to emit ten (10) tons per year or more of volatile organic compounds or twenty-five (25) tons per year or more of nitrogen oxides and located in an ozone nonattainment area or ozone air quality maintenance area.

d. All facilities for which an annual operating report is required by rule or permit.

(2) Notwithstanding paragraph 62-210.370(3)(a), F.A.C., no annual operating report shall be required for any facility operating under an air general permit.

(3) The annual operating report shall be submitted to the appropriate Department of Environmental Protection (DEP) division, district or DEP-approved local air pollution control program office by April 1 of the following year. If the report is submitted using the Department's electronic annual operating report software, there is no requirement to submit a copy to any DEP or local air program office.

(4) Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C., for purposes of the annual operating report.

(5) Facility Relocation. Unless otherwise provided by rule or more stringent permit condition, the owner or operator of a relocatable facility must submit a Facility Relocation Notification Form (DEP Form No. 62-210.900(6)) to the Department at least 30 days prior to the relocation. A separate form shall be submitted for each facility in the case of the relocation of multiple facilities which are jointly owned or operated.

[Rule 62-210.370(3), F.A.C.]

Common Testing Requirements

Unless otherwise specified in the permit, the following testing requirements apply to all emissions units at the facility.

EMISSIONS TESTING REQUIREMENTS

1. Applicability: Unless otherwise stated in a specific rule, permit, or other order, the general requirements set forth in subsections 62-297.310(2) through (10), F.A.C., shall be used for regulated stationary sources' emissions tests for comparison with air pollution emission-limiting standards that are enforceable under state law. An emissions test is an emissions rate test, a concentration test, or an opacity test. [Rule 62-297.310(1), F.A.C.]

2. Required Number of Test Runs: For emission rate or concentration limitations, an emissions test shall consist of three valid test runs to determine the total air pollutant emission rate or concentration through the test section of the stack or duct. A valid test run is a test run that meets all requirements of the applicable test method. An emissions test shall also consist of three distinct determinations of any applicable process parameters corresponding to the three distinct test run time periods during which the emission rate or concentration was measured when such data are needed in conjunction with emissions data to compare the emissions test results with the applicable emission limiting standards. Such data shall be obtained pursuant to subsection 62-297.310(6), F.A.C. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, results of the two valid runs shall be accepted, provided that the arithmetic mean of the results of the two valid runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(2), F.A.C.]

3. Operating Conditions During Emissions Testing: Testing of emissions shall be conducted with the emissions unit operating at the testing capacity as defined below. If it is impracticable to test at the testing capacity, an emissions unit may be tested at less than the testing capacity. If an emissions unit is tested at less than the testing capacity, another emissions test shall be conducted and completed no later than 60 days after the emissions unit operation exceeds 110% of the capacity at which its most recent emissions test was conducted.

   (a) Combustion Turbines. (Reserved)

   (b) All Other Sources. Testing capacity is defined as at least 90 percent of the maximum operation rate specified by the permit.

   [Rule 62-297.310(3), F.A.C.]

4. Calculation of Emission Rate or Concentration: The emission rate or concentration used for comparison with the relevant standard shall be the arithmetic average of the emission rate or concentration determined by each of the three valid test runs unless otherwise specified in an applicable rule or test method. Data collected during periods of soot blowing shall not be excluded from any calculation of emission rate or concentration. [Rule 62-297.310(4), F.A.C.]

5. Required Sampling Times and Observation Periods: Unless otherwise specified in an applicable test method, rule, permit, or other order, the owner or operator shall conduct emissions tests in accordance with the following procedures:

   (a) Emission Rate or Concentration Tests. The required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes, except that for operations that are typically completed within less than the minimum required sampling time, the duration of each test run shall include each occurrence of the operation during the minimum required sampling time. The test period shall include the period of typical operation during which the highest representative emissions are expected to occur.

   (b) Opacity Tests. When EPA Method 9 or is specified as the applicable opacity test method, the required minimum period of observation for a visible emissions test shall be 60 minutes for emissions units that are subject to a multiple-valued opacity standard, and 30 minutes for all other emissions units, except that for batch, cyclical processes, or other operations that are typically completed within less than the minimum observation period, the period of observation shall include each occurrence of the operation during the minimum observation period. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur.

   [Rule 62-297.310(5), F.A.C.]

6. Determination of Process Parameters:

   (a) Required Process Equipment. The owner or operator of an emissions unit for which emissions tests are required shall install, operate, and maintain equipment or instruments necessary to determine process parameters, when such data are

needed in conjunction with emissions data to compare emissions test results with applicable emission limiting standards.

(b) Accuracy of Process Measurement Equipment. Equipment or instruments used to directly or indirectly determine process parameters shall be calibrated and adjusted so as to determine the value of the process parameter to within 10 percent of its true value.

[Rule 62-297.310(6), F.A.C.]

7. Required Emissions Testing Facilities:

(a) The owner or operator of an emissions unit, for which an emissions test other than a visible emissions test is required, shall provide emissions testing facilities that meet the requirements of 40 CFR 60.8(e), adopted and incorporated in Rule 62-204.800, F.A.C.

(b) Permanent Emissions Testing Facilities. The owner or operator of an emissions unit, for which an emissions test other than a visible emissions test is required on at least an annual basis, shall install and maintain permanent emissions testing facilities.

(c) Temporary Emissions Testing Facilities. The owner or operator of an emissions unit that is not required to conduct an emissions test on at least an annual basis may use permanent or temporary emissions testing facilities. If the owner or operator chooses to use temporary emissions testing facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.

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

8. Frequency of Emissions Tests: The following provisions apply only to those emissions units that are subject to an emissions-limiting standard for which emissions testing is required.

(a) Annual Emissions Tests Required.

1. Where used in Rules 62-210.310, 62-297.310, or Chapter 62-296, F.A.C., to refer to frequency of required emissions tests, the terms “annual,” “annually,” and “annually thereafter” shall mean no less frequently than once every calendar year (January 1 – December 31).

2. Unless exempted by subparagraph 62-297.310(8)(a)5., F.A.C., the owner or operator shall have an emissions unit tested annually for each of the following pollutants that has an emissions-limiting standard for which emissions testing is required:

a. Each hazardous air pollutant regulated by 40 CFR Part 61, adopted and incorporated by reference at Rule 62-204.800, F.A.C.; and

b. Any other regulated air pollutant, as defined at Rule 62-210.200, F.A.C., or a pollutant designated as a surrogate to a regulated air pollutant by an applicable rule or order, if allowable emissions equal or exceed 100 tons per year.

3. Unless exempted by subparagraph 62-297.310(8)(a)5., F.A.C., the owner or operator shall have an emissions unit tested annually for visible emissions, if there is an applicable standard other than the general opacity standard of subparagraph 62-296.320(4)(b)1., F.A.C.

4. Unless exempted by subparagraph 62-297.310(8)(a)5., F.A.C., the owner or operator shall have an emissions unit tested annually if a rule, permit or other order issued after March 9, 2015, requires an initial emissions test but is silent as to the frequency of additional testing. A rule, permit, or other order that states that no further testing is required after an initial test, or which expressly lists or describes the tests that shall be conducted annually, is not considered silent as to the frequency of additional testing. Annual testing is not required where a permit or other order issued prior to March 9, 2015, is silent as to the frequency of additional testing.

5. Exemptions from subparagraphs 62-297.310(8)(a)2., 3., and 4., F.A.C.

a. An annual emissions test shall not be required for any pollutant for which a rule, permit, or other order requires emissions testing at some other specific frequency. If multiple applicable rules, permits, or other orders, other than subparagraphs 62-297.310(8)(a)2., 3., and 4., F.A.C., require different testing frequencies, testing must comply with the frequency requirements of each such rule, permit, or order.

b. An annual emissions test shall not be required for any pollutant for which a rule, permit, or other order requires that the pollutant emissions be measured by a continuous emission monitoring system and, either that system meets the performance specifications and quality assurance and quality control measures of 40 CFR part 60, adopted and incorporated in Rule 62-204.800, F.A.C., or that system meets the performance specifications and quality assurance and quality control measures of 40 CFR part 75, adopted and incorporated in Rule 62-204.800, F.A.C.

c. An annual emissions test shall not be required for visible emissions for which a rule, permit, or other order requires that emissions be measured by a continuous opacity monitoring system, and that system meets the performance specifications and quality assurance and quality control measures of 40 CFR part 60, adopted and incorporated in Rule 62-204.800, F.A.C., and the manufacturer's recommended quality assurance and quality control measures.

d. An annual emissions test shall not be required for any emissions unit that operated for 400 hours or less (including during startup and shutdown) during the calendar year. If an emission unit operates for more than 400 hours during the calendar year, an emissions test shall be completed no later than 60 days after the emissions unit's annual operation exceeds 400 hours, or by the end of the calendar year, whichever is later.

e. An annual emissions test shall not be required for any emissions unit with emissions generated solely from the combustion of fuel, provided that the emissions unit does not burn any liquid fuel or solid fuel or fuel blend for more than 400 hours combined, other than during startup, during the calendar year. If an emissions unit's liquid fuel or solid fuel or fuel blend burning exceeds 400 hours combined during the calendar year, other than during startup, an emissions test shall be completed no later than 60 days after the emissions unit's liquid fuel or solid fuel or fuel blend burning exceeds 400 hours combined, or by the end of the calendar year, whichever is later.

f. An annual emissions test shall not be required for each fuel-specific emissions limit, provided the fuel or fuel blend subject to a fuel-specific limit was not burned for more than 400 hours, other than during startup, during the calendar year. If an emissions unit burns a fuel or fuel blend subject to a fuel-specific emission limit for more than 400 hours, other than during startup, during the calendar year, an emissions test for that fuel or fuel blend shall be completed no later than 60 days after the unit's burning of that fuel or fuel blend exceeds 400 hours, or by the end of the calendar year, whichever is later.

g. An emissions unit shall not be required to start up for the sole purpose of conducting an emissions test to meet the frequency requirements of subsection 62-297.310(8), F.A.C. In such a case, an emissions test shall be completed no later than 60 days after the emissions unit next starts up.

h. An emissions unit permitted to burn multiple fuels or fuel blends shall not be required to switch fuels for the sole purpose of conducting an annual emissions test to meet the frequency requirements of subsection 62-297.310(8), F.A.C. In such a case, an emissions test shall be completed no later than 60 days after a switch is made to burn the fuel or fuel blend for which testing is required.

i. An annual emissions test for visible emissions shall not be required for emissions units exempted from air permitting pursuant to paragraphs 62-210.300(3)(a) or (b), F.A.C.; emissions units determined to be insignificant pursuant to paragraph 62-213.430(6)(b), F.A.C.; or emissions units authorized pursuant to the general permit provisions in subsection 62-210.300(4), F.A.C., unless the general permit specifically requires such testing.

(b) Emissions Tests Prior to Obtaining an Air Operation Permit.

1. Unless exempted by subparagraph 62-297.310(8)(b)3., F.A.C., prior to obtaining an initial or renewal air operation permit for any emissions unit that is subject to any emission-limiting standard, the owner or operator shall have an emissions test conducted for each such standard to assist in providing reasonable assurance, per Rule 62-4.070, F.A.C., that the emission-limiting standard can be met and shall submit the test report as specified in subsection 62-297.310(10), F.A.C. For an emissions unit at a Title V source, such prior emissions testing is not required provided that an emissions testing compliance plan is included in the Title V permit.

2. For the purpose of renewal of an air operation permit, the owner or operator may satisfy the requirements of subparagraph 62-297.310(8)(b)1., F.A.C., for any emissions unit by submitting the most recent emissions test, as

specified in subsection 62-297.310(10), F.A.C., provided such test occurred within the term of the current operating permit.

3. Exemptions from subparagraph 62-297.310(8)(b)1., F.A.C.

   a. An emissions test shall not be required for any pollutant for which a rule, permit, or other order requires that the emissions be measured by a continuous emission monitoring system and, either that system meets the performance specifications and quality assurance and quality control measures of 40 CFR part 60, adopted and incorporated in Rule 62-204.800, F.A.C., or that system meets the performance specifications and quality assurance and quality control measures of 40 CFR part 75, adopted and incorporated in Rule 62-204.800, F.A.C.

   b. An emissions test shall not be required for visible emissions for which a rule, permit, or other order requires that emissions be measured by a continuous opacity monitoring system, and that system meets the performance specifications and quality assurance and quality control measures of 40 CFR part 60, adopted and incorporated in Rule 62-204.800, F.A.C., and the manufacturer's recommended quality assurance and quality control measures.

   c. For the purpose of renewal of an air operation permit, an emissions test shall not be required for any emissions unit that, in the previous five-year period of permitted operation, operated for 400 hours or less (including during startup and shutdown) during each calendar year included in the five-year period of permitted operation. The first time an emissions unit subsequently exceeds 400 hours of operation during a calendar year, emissions must be tested no later than 60 days after 400 hours of operation is exceeded in that calendar year, or by the end of that calendar year, whichever is later.

   d. For the purpose of renewal of an air operation permit, an emissions test shall not be required for any emissions unit with emissions generated solely from the combustion of fuel provided that, in the previous five-year period of permitted operation, the emissions unit did not burn any liquid fuel or solid fuel or fuel blend for more than 400 hours combined, other than during startup, during each calendar year included in the five-year period of permitted operation. The first time an emissions unit subsequently burns any liquid fuel or solid fuel or fuel blend for more than 400 hours combined during a calendar year, emissions must be tested no later than 60 days after the emissions unit's combined burning of any liquid fuel or solid fuel or fuel blend exceeds 400 hours in that calendar year, or by the end of that calendar year, whichever is later.

   e. An emissions test shall not be required for each fuel-specific emissions limit prior to the renewal of an air operation permit for an emissions unit provided that, in the previous five-year period of permitted operation, the fuel or fuel blend subject to a fuel-specific limit was not burned for more than 400 hours, other than during startup, during each calendar year included in the five-year period of permitted operation. The first time an emissions unit subsequently burns a fuel or fuel blend subject to a fuel-specific emission limit for more than 400 hours, other than during startup, during any calendar year, an emissions test for that fuel or fuel blend must be completed no later than 60 days after the emissions unit's burning of that fuel or fuel blend exceeds 400 hours in that calendar year, or by the end of that calendar year, whichever is later.

   f. An emissions unit shall not be required to start up for the sole purpose of conducting an emissions test to meet the frequency requirements of subsection 62-297.310(8), F.A.C. In such a case, an emissions test shall be completed no later than 60 days after the emissions unit starts up.

   g. An emissions unit permitted to burn multiple fuels or fuel blends shall not be required to switch fuels for the sole purpose of conducting the emissions test to meet the frequency requirements of subsection 62-297.310(8), F.A.C. In such a case, an emissions test shall be completed no later than 60 days after a switch is made to burn the fuel or fuel blend for which testing is required.

   h. An emissions test for visible emissions shall not be required for emissions units exempted from air permitting pursuant to paragraphs 62-210.300(3)(a) or (b), F.A.C.; emissions units determined to be insignificant pursuant to paragraph 62-213.430(6)(b), F.A.C.; or emissions units authorized pursuant to the general permit provisions in subsection 62-210.300(4), F.A.C., unless the general permit specifically requires such testing.

(c) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner

or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit, unless the Department obtains other information sufficient to demonstrate compliance. The owner or operator of the emissions unit shall provide a report on the results of said tests to the Department in accordance with the provisions of subsection 62-297.310(10), F.A.C.

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

9. Scheduling and Notification: At least 15 days prior to the date on which each required emissions test is to begin, the owner or operator shall notify the air compliance program identified by permit, unless shorter notice is agreed to by the appropriate air compliance program. The notification shall include the date, time, place of each such test, Facility ID Number, Emission Unit ID Number(s) and description(s), Emission Point Number(s) and description(s), test method(s), pollutant(s) to be tested, along with the name and telephone number of the person who will be responsible for conducting such test(s) for the owner or operator. If a scheduled emissions test needs to be re-scheduled, the owner or operator shall submit to the appropriate air compliance program a revised notification at least seven days prior to the re-scheduled emissions test date or arrange a re-scheduled test date with the appropriate air compliance program by mutual agreement. [Rule 62-297.310(9), F.A.C.]

TEST REPORTS

10. The owner or owner's authorized agent of an emissions unit for which an emissions test is required shall submit a written test report to the compliance authority specified by permit, on the results of each such test as soon as practicable but no later than 45 days after the last run of each test is completed. Test reports may be submitted electronically.

11. If the owner or owner's authorized agent of an emissions unit for which an emissions test is required submits the results of each such test electronically using the EPA Electronic Reporting Tool (ERT), the written report specified in paragraph 62-297.310(10)(a), F.A.C., need not be submitted, provided the conditions of subparagraphs 62-297.310(10)(b)1. through 3., F.A.C., are met:

    (a) The owner or owner's authorized agent shall submit the test information using the ERT as soon as practicable but no later than 45 days after the last run of each test is completed;

    (b) The test information shall provide, as a minimum, the information specified in subparagraphs 62-297.310(10)(c)1. through 24., F.A.C.; and

    (c) The compliance authority specified by permit must receive written notification, no later than 45 days after the last run of each test is completed, of the date that the test data was submitted using the ERT.

12. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA Method 9 test, shall provide the following information:

    (a) The type, location, and identification number of the emissions unit tested.

    (b) The facility at which the emissions unit is located.

    (c) The owner and, if other than the owner, operator of the emissions unit.

    (d) The type and amount of fuels and materials typically used and processed, and the actual types and amounts of fuels used and material processed during each test run.

    (e) If necessary in order to compare the emissions test results with an applicable emission limiting standard, the means, raw data, and computations used to determine the amount of fuels used and materials processed.

    (f) The type of air pollution control devices installed on the emissions unit, their general condition, their typical operating parameters, and their actual operating parameters during each test run.

    (g) A diagram of the sampling location, including the distance to any upstream and downstream bends or other flow disturbances.

    (h) The date, starting time, and duration of each sampling run.

    (i) The test procedures, including any authorized alternative procedures, used.

    (j) The number of points sampled, and the configuration and location of the sampling plane.

(k) For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack or duct, temperatures, average meter temperatures, and sample time per point.

(l) The type, manufacturer, and configuration of the sampling equipment used.

(m) Data related to the required calibration of the test equipment.

(n) Data on the identification, processing, and weights of all filters used.

(o) Data on the types and amounts of any chemical solutions used.

(p) For each sampling run, data on the amount of pollutant collected from each sampling probe.

(q) For each sampling run, data on the amount of pollutant collected from the filters.

(r) For each sampling run, data on the amount of pollutant collected from the impingers.

(s) The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.

(t) All measured and calculated data required to be determined by each applicable test procedure for each run.

(u) The detailed calculations for one run that relate the collected data to the calculated emission rate or concentration, as applicable.

(v) The applicable emission standard, and the resulting maximum allowable emission rate or concentration for the emissions unit, as applicable, plus the test result in the same form and unit of measure.

(w) When an emissions test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or owner's authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his or her knowledge.

(x) For non-Title V sources, a certification by the owner or owner's authorized agent that, to his or her knowledge, all data submitted are true and correct.

(y) Any report submitted for a Title V source shall contain certification by a responsible official. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[Rule 62-297.310(10), F.A.C.]

TECHNICAL EVALUATION
&
FINAL DETERMINATION

APPLICANT

Breitburn Florida, LLC
P.O. Box 3236
Immokalee, Florida 34143

Raccoon Point Facility
Facility ID No. 0210031

PROJECT

Project No. 0210031-033-AC

Application for a Minor Source Air Construction Permit revision to permit No. 0210031-032-AC. (Replace the 3,600 BHP "RICE" Engine/Generator Set (Emission Unit No. EU-033), with a 1,500 BHP "RICE" Engine/Generator Set for Pad 5)

COUNTY

Collier, Florida

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Engineering and Permitting Section
South District Office
2295 Victoria Avenue
Fort Myers, FL 33901
SouthDistrict@dep.state.fl.us

February18, 2016

1. GENERAL PROJECT INFORMATION

Air Pollution Regulations

Projects at stationary sources with the potential to emit air pollution are subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The statutes authorize the Department of Environmental Protection (Department) to establish regulations regarding air quality as part of the Florida Administrative Code (F.A.C.), which includes the following applicable chapters: 62-4 (Permits); 62-204 (Air Pollution Control – General Provisions); 62-210 (Stationary Sources – General Requirements); 62-212 (Stationary Sources – Preconstruction Review); 62-213 (Operation Permits for Major Sources of Air Pollution); 62-296 (Stationary Sources - Emission Standards); and 62-297 (Stationary Sources – Emissions Monitoring). Specifically, air construction permits are required pursuant to Rules 62-4, 62-210 and 62-212, F.A.C.

In addition, the U. S. Environmental Protection Agency (EPA) establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 specifies New Source Performance Standards (NSPS) for numerous industrial categories. Part 61 specifies National Emission Standards for Hazardous Air Pollutants (NESHAP) based on specific pollutants. Part 63 specifies NESHAP based on the Maximum Achievable Control Technology (MACT) for numerous industrial categories. The Department adopts these federal regulations on a quarterly basis in Rule 62-204.800, F.A.C.

Glossary of Common Terms

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of this permit.

Facility Description and Location

Breitburn Florida, LLC is an existing crude petroleum production facility, which is categorized under Standard Industrial Classification Code No. 1311. The facility is located in Collier County, 60 miles SE of Naples, Florida and 11 miles N of U.S. 41. The UTM coordinates of the existing facility are Zone 17, 509.6 km East, and 2,873.4 km North. This site is in an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to state and federal Ambient Air Quality Standards (AAQS).

Facility Regulatory Categories

- The facility is not a major source of hazardous air pollutants (HAP).
- The facility has no units subject to the acid rain provisions of the Clean Air Act.
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Project Description

The project is to revise Air Construction permit No. 0210031-032-AC to change (EU-33) from the original intended re-constructed 20 cylinder 3,600 bhp RICE/generator set (Genertek EMD 20/645F4b) to a new, smaller 12 cylinder 1,500 bhp RICE/Generator set (Genertek EMD 12/645E4b). The new engine is smaller and produces less pollutants. Genertek EMD 20/645F4b will be removed.

Although the Equipment Supply Proposal from Genertek dated 01/11/16 submitted by the permittee describes providing two generator sets and two EMD 12/645/E4bg engines, only one such generator set and one such engine was requested by the permittee in its letter dated 01/15/2016. Only one such generator set and one such engine is authorized. A second such generator set and engine will require a new air construction permit.

The Engine/Generator set is located at the facility to provide all of the required electrical power for production Pad No. 5. The "NEW" engine is subject to stationary RICE, (NESHAPS) Subpart ZZZZ and New Source Performance Standard (NSPS) Subpart IIII. The emissions will meet Tier 4 standards. The engine will be fired by Ultra-Low Sulfur Diesel (ULSD) fuel oil. The engine will be equipped with selective catalytic reduction (SCR) and Diesel Oxidation Catalyst (DOC) control technologies to control Nitrogen Oxides (NOx) with potential emissions of 25.01 Tons per Year (tpy) and Carbon Monoxide (CO) with potential emissions of 9.29 Tons per Year (tpy).

Processing Schedule

January 15, 2016. Received the application for the revision of minor source air pollution construction permit No. 0210031-032-AC.

2. PSD APPLICABILITY

General PSD Applicability

For areas currently in attainment with the state and federal AAQS or areas otherwise designated as unclassifiable, the Department regulates major stationary sources of air pollution in accordance with Florida's PSD preconstruction review program as defined in Rule 62-212.400, F.A.C. Under preconstruction review, the Department first must determine if a project is subject to the PSD requirements ("PSD applicability review") and, if so, must conduct a PSD preconstruction review. A PSD applicability review is required for projects at new and existing major stationary sources. In addition, proposed projects at existing minor sources are subject to a PSD applicability review to determine whether potential emissions *from the proposed project itself* will exceed the PSD major stationary source thresholds. A facility is considered a major stationary source with respect to PSD if it emits or has the potential to emit:

- 250 tons per year or more of any regulated air pollutant; or
- 100 tons per year or more of any regulated air pollutant and the facility belongs to one of the following 28 PSD-major facility categories: fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), Kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants, fossil fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants and charcoal production plants.

Once it is determined that a project is subject to PSD preconstruction review, the project emissions are compared to the "significant emission rates" defined in Rule 62-210.200, F.A.C. for the following pollutants: carbon monoxide (CO); nitrogen oxides (NO_X); sulfur dioxide (SO_2); particulate matter (PM); particulate matter with a mean particle diameter of 10 microns or less (PM_{10}); volatile organic compounds (VOC); lead (Pb); fluorides (Fl); sulfuric acid mist (SAM); hydrogen sulfide (H_2S); total reduced sulfur (TRS), including H_2S; reduced sulfur compounds, including H_2S; municipal waste combustor organics measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans; municipal waste combustor metals measured as particulate matter; municipal waste combustor acid gases measured as SO_2 and hydrogen chloride (HCl); municipal solid waste landfills emissions measured as non-methane organic compounds (NMOC); and mercury (Hg). In addition, significant emissions rate also means any emissions rate or any net emissions increase associated with a major stationary source or major modification which would construct within 10 kilometers of a Class I area and have an impact on such area equal to or greater than 1 $\mu g/m^3$, 24-hour average.

If the potential emission exceeds the defined significant emissions rate of a PSD pollutant, the project is considered "significant" for the pollutant and the applicant must employ the Best Available Control Technology (BACT) to minimize the emissions and evaluate the air quality impacts. Although a facility or project may be *major* with respect to PSD for only one regulated pollutant, it may be required to install BACT controls for several "significant" regulated pollutants.

PSD Applicability for Project

The generator set diesel powered engine is rated at 1,500 brake horsepower (bhp). This is a RICE/generator set Genertek 12/645E4b). The "NEW" engine is subject to stationary RICE, NESHAP Subpart ZZZZ and NSPS Subpart IIII. The emissions will meet Tier 4 standards. The engine will be fired by Ultra-Low Sulfur Diesel (ULSD) fuel oil. The engine will be equipped with selective catalytic reduction (SCR) and Diesel Oxidation Catalyst (DOC) control technologies to control Nitrogen Oxides (NOx) with potential Emissions of 25.01 Tons per Year (tpy) and Carbon Monoxide (CO) with potential emissions of 9.29 Tons per Year (tpy).

As provided in the application, the following table summarizes potential emissions and PSD applicability for the project.

Table A. Potential Emissions (Tons/Year) and PSD Applicability

Pollutant	**Project Potential Emissions (TPY)**	**Significant Emissions Rate (TPY)**	**Subject To PSD?**
CO	9.29	100	No
NO_X	25.01	40	No
PM/PM_{10}	0.71	25/15	No
SO_2	0.12	40	No
VOC	2.45	40	No
SAM	0.01	7	No

As shown in the above table, total project emissions will not exceed the PSD significant emissions rates; therefore, the project is not subject to PSD preconstruction review.

3. APPLICATION REVIEW

Discussion of Emissions

This permit revision replaces emission unit EU033, 3,600 bhp RICE engine with a smaller 1,500 bhp/1650 kW Stationery Power Unit (RICE engine) that produces less pollutants. The engine is subject to 40 CFR 63, Subpart ZZZZ. The 3,600 bhp RICE engine will be removed.

Although the Equipment Supply Proposal from Genertek dated 01/11/16 submitted by the permittee describes providing two generator sets and two EMD 12/645/E4bg engines, only one such generator set and one such engine was requested by the permittee in its letter dated 01/15/2016. Only one such generator set and one such engine is authorized. A second such generator set and engine will require a new air construction permit.

The 1,500 bhp engine will be equipped with selective catalytic reduction (SCR) and Diesel Oxidation Catalyst (DOC) control technologies to control Nitrogen Oxides (NOx) with potential emissions of 25.01 Tons per Year (tpy) and Carbon Monoxide (CO) with potential emissions of 9.29 Tons per Year (tpy). (See Table 1).

The emissions will meet Tier 4 standards. Although the engine can burn duel fuel of oil or gas, it will be fired by Ultra-Low Sulfur Diesel (ULSD) fuel oil.

(NOTE: Previous permit No. 0210031-032-AC produced emissions from original proposed 3,600 bhp engine at CO @ 14.73 tpy, Nox @ 36.3 tpy, PM @ 1.04 tpy. SO2 @ 0.7 tpy VOC @ 3.62 tpy and SAM @ 0.01 tpy). Therefore this revision to a smaller 1,500 bhp engine produces lower emissions.

Table 1. Potential to Emit Emissions for Genertek EMD 12/645E4bg RICE (1,500 bhp)

Pollutant	Emission Factor	Units	Emission Factor Reference	Hourly Emissions (lb/hr)	Potential to Emit (TPY)
CO	0.52	g/kw-hr	Manufacturer's Certification	2.12	9.29
NO_x	1.40	g/kw-hr	Tier 4 emission standards from 40 CFR §1042.101, Table 3.	5.71	25.01
$PM/PM_{10}/PM_{2.5}$	0.04	g/kw-hr	Tier 4 emission standards from 40 CFR §1042.101, Table 3.	0.16	0.71
SO_2	0.03	lb/hr	SO2 emissions calculated by using the sulfur content in the fuel and the fuel usage rate of the engine. SO2 (lb/hr) = Fuel usage (lb/hr) * sulfur content (%) * lb SO2/lb S (64/32)	0.03	0.12
VOC	0.56	lb/hr	AP-42, Table 3.4-1. 0.83 lb/hr = 0.09 lb/MMBtu * 91% (nonmethane) * 17.10 MMBtu/hr (heat input) * 40% control from device	0.560	2.45
SAM	0.0029	lb/hr	SAM emissions calculated by using assuming a conversion rate of SO2 to SAM. SAM = SO2 to H2SO4 conversion rate (%) * lb H2SO4 / lb SO2 (98/64)	SAM emissions calculated by using assuming a conversion rate of SO2 to SAM. SAM = SO2 to H2SO4 conversion rate (%) * lb H2SO4 / lb SO2 (98/64)	0.01

Federal NSPS Provisions

NSPS Subpart IIII

Federal NESHAP Provision

NESHAPS 40 CFR 63, Subpart ZZZZ. National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), as amended January 20, 2016.

4. FINAL DETERMINATION

The Department makes a final determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the revised permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the permit revision. Carter B. Endsley, P.E. is the project engineer responsible for reviewing the application and drafting the permit revision. Additional details of this analysis may be obtained by contacting the project engineer at the Department's South District Office at 2295 Victoria Avenue, Suite 364, Fort Myers, Florida 33902.

The applicant submitted the request on January 15, 2016, to revise Air Construction permit No. 0210031-032-AC

(Issued on July 6, 2015). This revision is to change the planned 20 cylinder, 3,600 bhp RICE engine/generator set (Genertek EMD 20/645F4b) (Emission Unit EU-033) with a smaller 12 cylinder, 1,500 bhp (Genertek EMD 12/645E4bg) RICE engine/generator set. Genertek EMD 20/645F4b will be removed.

Although the Equipment Supply Proposal from Genertek dated 01/11/16 submitted by the permittee describes providing two generator sets and two EMD 12/645/E4bg engines, only one such generator set and one such engine was requested by the permittee in its letter dated 01/15/2016. Only one such generator set and one such engine is authorized. A second such generator set and engine will require a new air construction permit.

This new 12 cylinder, 1,500 bhp engine/generator set is to be installed at the facility to provide all of the required electrical power for production Pad No. 5.

Since this is a revision to permit No. 0210031-032-AC, to change from a larger 3,600 bhp RICE engine to a smaller 1,500 bhp Rice engine that produces less pollutant emissions, no Intent to Issue and Draft permit is required. No public notification is determined to be required.

CONCLUSION

The final action of the Department is to issue the permit revision, project No. 0210031-033-AC.