FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

NORTHEAST DISTRICT
8800 BAYMEADOWS WAY WEST, SUITE 100
JACKSONVILLE, FLORIDA 32256

RICK SCOTT
GOVERNOR

HERSCHEL T. VINYARD JR.
SECRETARY

PERMITTEE

Live Oak Heat & Power, LLC
19470 US Highway 90
Live Oak, FL 32060

Air Permit No. 1210472-001-AC
Issuance Date:
Expiration Date:

Authorized Representative:

Mr. Ray Lundberg, Vice President of Operations
Live Oak Heat & Power, LLC

Live Oak Heat & Power, LLC,
a project developed by Blue Earth, Inc.

9.34 MW Cogeneration Plant

PROJECT AND LOCATION

The construction permit authorizes the construction of a 9.34 megawatt (MW) cogeneration (combined heat and power) facility. The facility will include a natural gas-fired engine and a natural gas-fired boiler that will be used as a backup to the engine when it is not in operation. The proposed work will be conducted at the new Live Oak Heat & Power, LLC, a project developed by Blue Earth, Inc. facility, which is categorized under Standard Industrial Classification No. 4911. The facility will be is located in Suwannee County at 19470 US Highway 90, Live Oak, Florida. This location is adjacent to the existing Pilgrim's Pride Corporation of Georgia, Inc., Live Oak Florida Processing Facility. The UTM coordinates are Zone 17: 292.7 km East; 3361.8 km North.

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.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard,

DRAFT

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 Jacksonville, Florida

Draft

_____

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

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final 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 _____, to the persons listed below.

Mr. Thomas Sweat, P.E. (tsweat@envplanning.com)
Mr. Ray Lundberg, Vice President of Operations, Live Oak Heat & Power, LLC (Rlundberg@blueearthinc.com)

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

Draft

_____ _____
(Clerk) (Date)

FACILITY AND PROJECT DESCRIPTION

Facility

This facility consists of one nominal 9.34 megawatt (MW) cogeneration (combined heat and power) facility and a back-up steam boiler. The generator is manufactured by Wartsila, Model No. 20V34SG, and consists of a spark-ignition, four-stroke, lean-burn, natural gas fired internal combustion engine. The engine is rated at 9.34 MW electrical output and 12,864 brake horsepower mechanical output at 100 percent load.

The hot water and steam generated will be sent directly to Pilgrim's Pride Corporation of Georgia, Inc., Live Oak Florida Processing Facility located adjacent to this facility. A portion of the electricity generated will be sent directly to the Pilgrim's Pride facility while the remainder is to be sold to the local electric utility.

Emissions of nitrogen oxides (NO_X) will be minimized through the use of the lean burn technology and electronic tuning of the engine. Compliance will be demonstrated by performance testing.

Carbon Monoxide (CO), Volatile Organic Compounds (VOCs), and organic Hazardous Air Pollutant (HAP) emissions will be controlled through the use of an oxidation catalyst. The oxidation catalyst will be either a ceramic or metallic substrate coated with a layer that increases its surface area (washcoat) and a catalytically active material (e.g. platinum or palladium) is added onto the washcoat. It is estimated that the control efficiency of the oxidation catalyst is 94% for CO emissions and 80% for emissions of VOC and organic HAPs.

The facility also consists of one natural gas fired boiler with a maximum design heat input of 20.92 MMBtu/hr (24-hr average). The boiler will used as a backup source of steam when the engine is not in operation, and has a separate exhaust stack. The boiler is manufactured by Cleaver Brooks (CBEX Premium Boiler Model ELG-210, 500 hp or equivalent).

The facility will consist of the following emissions units.

E.U. ID No.	Brief Description
-001	20.92 MMBtu/hr natural gas fired boiler
-002	12,864 brake horsepower natural gas fired spark ignition engine

Proposed Project

This project authorizes the construction permit authorizes the construction of a 9.34 megawatt (MW) cogeneration (combined heat and power) facility. The facility will include a 12,864 brake horsepower natural gas-fired engine and a 500 hp natural gas-fired boiler that will be used as a backup to the engine when it is not in operation.

The engine is subject to 40 CFR Part 60 Subpart JJJJ – *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines* and also 40 CFR 63, Subpart ZZZZ, *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)*. However, 40 CFR 63.6590(c) and (1) states: (c) *Stationary RICE subject to Regulations under 40 CFR Part 60.* An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part. (1) A new or reconstructed stationary RICE located at an area source. Therefore for this project, compliance with subpart JJJJ satisfies subpart ZZZZ requirements.

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.
- The facility is not a Title V major source of air pollution in accordance with Chapter 213, F.A.C. *(This classification is contingent upon the Pilgrim's Pride Corporation of Georgia, Inc., Live Oak Florida Processing Facility modifying its operations as stated in draft permit No. 1210018-014-AC)*
- The facility is not a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the Florida Department of Environmental Protection (Department), Northeast District Office, Waste and Air Resource Management. The Northeast District Office's mailing address is 8800 Baymeadows Way West, Suite 100, Jacksonville, Florida 32256-7590. All documents related to applications for permits to operate an emissions unit shall be submitted to the Northeast District.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Northeast District Office, Compliance Assurance. The mailing address and phone number of the District Office is: 8800 Baymeadows Way West, Suite 100, Jacksonville, Florida 32256. The Compliance Authority's telephone number is 904/256-1700.

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

   a. Appendix A. Citation Formats and Glossary of Common Terms;

   b. Appendix B. General Conditions;

   c. Appendix C. Common Conditions

   d. Appendix D. Common Testing Requirements

   e. Appendix E. 40 CFR 63 Subpart A – General Provision.

   f. Appendix F. 40 CFR 63 Subpart ZZZZ

   g. Appendix G. 40 CFR 60 Subpart A – General Provisions

   h. Appendix H. 40 CFR 60 Subpart JJJJ

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, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the owner or operator from compliance with any applicable federal, state, or local permitting or regulations.

   [Rule 62-210.300, F.A.C.]

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:

   a. 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 virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, 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.

   b. 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.]

9. Application for Operation Permit: This permit authorizes construction of the permitted emissions units and initial operation. The permittee shall apply for an air operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation of the emissions unit in accordance with the authorizations of this construction permit. To apply for an operation permit, the applicant shall submit the appropriate application form, compliance test results (if required), and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority.

   [Rules 62-4.030, 62-4.050, and Chapter 62-210, F.A.C.]

1. Nitrogen Oxides (NO_x) Emissions Caps:

   a. Live Oak Heat & Power, LLC, a project developed by Blue Earth, Inc.: The total maximum allowable site wide NO_x emissions from all operations at the Live Oak Heat & Power, LLC site (Emissions Units 001 and 002) shall not exceed 57.0 tons per any consecutive 12-month rolling period. This limitation is requested by the applicant.

   Compliance with the NO_x emissions cap shall be demonstrated from actual emissions determined on a 12-month rolling basis using the following equation:

   $[(EF_{boiler})\ \text{lbs}\ NO_x/\text{MMscf})(Boiler_{Natural\ Gas})] + [(EF_{engine})(\text{lb}/454)(\text{ton}/2000\ \text{lb})(Engine1_{bhp\text{-}hours})] \leq 57.0\ \text{TPY}, NO_x$

   Where:

   $Boiler_{Natural\ Gas}$ = Rolling 12-month total of natural gas fired in the boiler (EU-001), million scf (MMscf)

   EF_{boiler} = NO_x emission rate from most recent annual performance test, lbs/MMscf

   EF_{engine} = NO_x emission rate from most recent annual performance test, g/bhp-hour

   $Engine_{bhp\text{-}hours}$ = Rolling 12-month total of operating bhp-hours for the engine (EU-002)

   If necessary, the permittee shall adjust engine operation to comply with the NO_x emissions cap.

   [Application No. 1210472-001-AC; Applicant Requested Emission Limitation; Title V Major Source Applicability Avoidance; Rule 62-4.070(3), F.A.C; Rule 62-210.200, F.A.C.(PTE)]

   b. Live Oak Heat & Power, LLC, a project developed by Blue Earth, Inc. and Pilgrim's Pride Corporation of Georgia, Inc. Live Oak, Florida Processing facility (AIRS ID #1210018): The total maximum allowable facility wide NO_x emissions from all operations at the Live Oak Heat & Power, LLC site and the Pilgrim's Pride Corporation of Georgia, Inc. Live Oak, Florida Processing facility (AIRS ID #1210018) combined shall not exceed 99.0 tons per any consecutive 12-month rolling period. This limitation is requested by the applicant to escape being classified as a Title V Major source when emissions are totaled with the Pilgrim's Pride Corporation of Georgia, Inc. Live Oak, Florida Processing facility (AIRS ID #1210018).

   Compliance with this NO_x emissions cap shall be demonstrated from actual emissions determined from the Blue Earth, Inc site as stated in Facility-Wide Condition 1.a. and actual emissions determined from the Pilgrim's Pride site as specified within the air permit for the facility.

   [Application No. 1210472-001-AC; Applicant Requested Emission Limitation; Title V Major Source Applicability Avoidance; Rule 62-4.070(3), F.A.C; Rule 62-210.200, F.A.C.(PTE)]

2. Live Oak Heat & Power, LLC, a project developed by Blue Earth, Inc. Carbon Monoxide (CO) Emissions Cap: The total maximum allowable site wide CO emissions from all operations at the Live Oak Heat & Power LLC site (Emissions Units 001 and 002) shall not exceed 20.0 tons per any consecutive 12-month rolling period. This limitation is requested by the applicant.

   Compliance with the CO emissions cap shall be demonstrated from actual emissions determined on a 12-month rolling basis using the following equation:

   $[(84\ \text{lbs CO/MMscf})(Boiler_{Natural\ Gas})] + [(EF_{engine})(\text{lb}/454)(\text{ton}/2000\ \text{lb})(Engine1_{bhp\text{-}hours})] \leq 20.0\ \text{TPY, CO}$

   Where:

   $Boiler_{Natural\ Gas}$ = Rolling 12-month total of natural gas fired in the boiler (EU-001), million scf (MMscf)

   EF_{engine} = CO emission rate from most recent annual performance test, g/bhp-hour

Facility-Wide Condition 2. Continued:

$Engine_{bhp\text{-}hours}$ = Rolling 12-month total of operating bhp-hours for the engine (EU-002)

If necessary, the permittee shall adjust engine operation to comply with the CO emissions cap.

[Application No. 1210472-001-AC; Applicant Requested Emission Limitation; Rule 62-4.070(3), F.A.C; Rule 62-210.200(PTE), F.A.C.]

3. Live Oak Heat & Power, LLC, a project developed by Blue Earth, Inc. Volatile Organic Compounds (VOC) Emissions Cap: The total maximum allowable site wide VOC emissions from all operations at the Live Oak Heat & Power, LLC site (Emissions Units 001 and 002) shall not exceed 20.0 tons per any consecutive 12-month rolling period. This limitation is requested by the applicant.

   Compliance with the VOC emissions cap shall be demonstrated from actual emissions determined on a 12-month rolling basis using the following equation:

   $[(5.5 \text{ lbs VOC/MMscf})(Boiler_{Natural\ Gas})] + [(EF_{engine})(lb/454)(ton/2000\ lb)(Engine1_{bhp\text{-}hours})] \leq 20.0 \text{ TPY,VOC}$

   Where:

   $Boiler_{Natural\ Gas}$ = Rolling 12-month total of natural gas fired in the boiler (EU-001), million scf (MMscf)

   EF_{engine} = VOC emission rate from most recent annual performance test, g/bhp-hour

   $Engine_{bhp\text{-}hours}$ = Rolling 12-month total of operating bhp-hours for the engine (EU-002)

   If necessary, the permittee shall adjust engine operation to comply with the VOC emissions cap..

   [Application No. 1210472-001-AC; Applicant Requested Emission Limitation; Rule 62-4.070(3), F.A.C; Rule 62-210.200, F.A.C.(PTE)]

4. Facility Wide NO_x, CO, and VOC Emissions Caps -Recordkeeping: The owner or operator shall maintain a record of the site wide NO_x, CO, and VOC emissions, and the facility-wide NO_x emissions as specified in Facility-Wide Conditions 1,2, and 3, on monthly basis and a 12 month rolling basis.

   All supporting information, documentation, and records used to compute emissions shall be maintained onsite at the facility in a permanent form suitable for Department inspection for at least five years from the date the data is recorded. This includes, but it not limited to performance test results, emission unit hours of operation, methods, calculations, and formulas. These records and materials shall be made available to the Department or federal air pollution agency upon request.

   [Rule 62-4.070(3), F.A.C., Rule 62-4.160(14)(b), F.A.C., Rule 62-210.370(1),F.A.C.]

5. Annual Operating Report. The Permittee shall submit an annual report, as specified in Appendix C – Common Conditions of this permit, which summarizes the actual operating rates and emissions from this facility. The Annual Operating Report for Air Pollutant Emitting Facility (DEP form number 62-210.900(5)) shall be completed each year and shall be submitted to the Compliance Authority by April 1 of the following year.

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

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
001	One Cleaver Brooks BCEX Premium Boiler, Model ELG-210 (or equivalent) 500 hp boiler that produces steam for usage in the Pilgrim's Pride Corporation of Georgia, Inc., Live Oak Florida Processing Facility manufacturing process. The total maximum design heat input of this emissions unit is 20.92 MMBtu/hr (24-hr average), based on firing 20,920 cubic feet of natural gas per hour. The boiler is authorized to be only used as a back-up source of steam. This unit is authorized to fire natural gas only. Exhaust gas exits at approximately 150°F through a single stack that is approximately 2 feet in diameter and 55 feet above ground level.

{Permitting note: This emissions unit is regulated under: Rule 62-296.406, F.A.C. – Fossil Fuel Steam Generators with Less Than 250 Million Btu Per Hour Heat Input, New and Existing Sources; NSPS - 40 CFR 60, Subpart Dc, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, adopted and incorporated by reference in Rule 62-204.800, F.A.C. A Best Available Control Technology (BACT) determination is part of the review required by Rule 62-296.406, F.A.C. – BACT Determination.

EQUIPMENT

A.1. Steam Boiler: The permittee is authorized to construct, operate and maintain a 500 hp Cleaver Brooks BCEX Premium Boiler, Model ELG-210 (or equivalent).

[Application No. 1210472-001-AC]

PERFORMANCE RESTRICTIONS

Essential Potential to Emit (PTE) Parameters

A.2. Permitted Capacity. The maximum design heat input rate for the steam boiler is 20.92 MMBtu/hour (equivalent to 20,920 cubic feet of natural gas per hour).

[Rule 62-204.800, 62-212.200(PTE), F.A.C., Application No. 1210472-001-AC]

A.3. Restricted Operation: The hours of operation of this emissions unit is not limited (8,760 hours per year). However, this boiler may be operated only as a backup unit to provide a source of steam in the event the natural gas fired engine (EU 002) is unavailable/inoperable.

[Rules 62-4.070(3), 62-210.200(PTE), F.A.C.; Application No. 1210472-001-AC]

A.4. Methods of Operation- Authorized Fuel. Fuels shall be limited to natural gas in this boiler.

[Application No. 1210472-001-AC; Rules 62-4.070, 62-210.200(PTE), 62-204.800, 62-296.406, F.A.C., BACT Determination]

EMISSION LIMITING STANDARDS

{Permitting Note: Unless otherwise specified, the averaging time for Conditions A.7. is based on the specified averaging time of the applicable test method.}

A.5. Particulate Matter (PM) Emissions: The Boiler is subject to a Best Available Control Technology Determination for particulate matter emissions. PM Emissions shall be limited by the firing of natural gas. See attached BACT Determination.

[Rule 62-296.406(2), F.A.C.; BACT Determination; Application No. 1210472-001-AC]

A.6. Sulfur Dioxide (SO_2) Emissions: Boiler is subject to a Best Available Control Technology Determination for sulfur dioxide emissions. SO_2 Emissions shall be limited by the firing of natural gas. See attached BACT Determination.

[Rule 62-296.406(3), F.A.C.; BACT Determination; Application No. 1210472-001-AC]

A.7. Nitrogen Oxides (NO_x) Emissions: This emissions unit shall comply with Emissions Cap stated in Section 3. Facility-Wide Conditions, Condition No. 1. of this permit.

[Application No. 1210472-001-AC; Applicant Requested Emission Limitation; Title V Major Source Applicability Avoidance; Rule 62-4.070, F.A.C.; Rule 62-210.200(PTE), F.A.C.]

A.8. Carbon Monoxide (CO) Emissions. This emissions unit shall comply with Emissions Cap stated in Section 3. Facility-Wide Conditions, Condition No. 2. of this permit.

[Application No. 1210472-001-AC; Applicant Requested Emission Limitation; Rule 62-4.070, F.A.C.; Rule 62-210.200(PTE), F.A.C.]

A.9. Volatile Organic Compounds (VOC) Emissions. This emissions unit shall comply with Emissions Cap stated in Section 3. Facility-Wide Conditions, Condition No. 3. of this permit.

[Application No. 1210472-001-AC; Applicant Requested Emission Limitation; Rule 62-4.070, F.A.C.; Rule 62-210.200(PTE), F.A.C.]

A.10. Visible Emissions: Visible emissions shall not exceed 20 percent opacity except for one six- minute period per hour during which opacity shall not exceed 27 percent.

[Rule 62-296.406(1), F.A.C.]

A.11. NSPS, 40 CFR 60, Subpart Dc Applicability: This boiler is classified as a steam generating unit for which construction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 10 MMBtu/hr or more, but less than 100 MMBtu/hr. The boiler is subject to the standards of 40 CFR 60 Subpart Dc.

[40 CFR 60.40c(a)]

A.12. 40 CFR 60, Subpart A-General Provision: The permittee shall comply with the applicable requirements of 40 CFR Part 60, Subpart A – General Provisions. *Refer to Appendix* .

SPECIFIC TESTING REQUIREMENTS

A.13. Visible Emissions: The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C.

The test shall be conducted by an observer certified in accordance with the requirements of Rule 62-297.320, F.A.C. – Standards for Persons Engaged in Visible Emissions Observations.

a. Initial Testing: An initial performance test for visible emissions shall be conducted within 60 days after the maximum operation rate has been achieved, but not later than 180 days after the initial startup of the emissions unit.

b. Subsequent Testing: A visible emissions performance test shall be conducted once every five years prior to obtaining a renewed operation permit.

[Rules 62-4.070(3), F.A.C., 62-297.401(9)(c), F.A.C., 62-297.310(7)(a)4.a., F.A.C.]

A.14. EPA Method 9- Required Sampling Time: For initial and subsequent testing, the required minimum period of observation for each compliance test shall be sixty (60) minutes. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur.

[Rules 62-204.800,F.A.C., 62-296.406, F.A.C., 62-297.310(4)(a)2., F.A.C.]

A.15. Sulfur Dioxide and Particulate Matter Emissions: Compliance with the PM and SO_2 limitations in Condition Nos. A.5 and A.6., shall be demonstrated by the permittee certification that only fuel fired in the boiler is natural gas for the term of the permit.

[Rule 62-4.070, F.A.C.]

A.16. NO_x Emissions: An initial performance test using EPA Method 7, 7A, 7E of 40 CFR 60 Appendix A, or other approved reference methods shall be conducted within 60 days after the maximum operation rate has been achieved, but not later than 180 days after the initial startup of the emissions unit. Subsequent performance tests shall be conducted upon Department request in accordance with Rule 62-297.310(7)(b), F.A.C.

[Rule 62-4.070, F.A.C.; Title V Major Source Applicability Avoidance]

NOTIFCATION, RECORDKEEPING AND REPORTING REQUIREMENTS

A.17. a. Notification of Boiler Construction and Startup: The owner or operator of shall submit notification of the date of construction and actual startup, as provided by 40 CFR 60.7. This notification shall include:

(1) The design heat input capacity of the boiler and identification of fuels to be combusted in the boiler.

[Requirement satisfied by Application No. 1210472-001-AC]

(2) N/A-not a federally enforceable requirement that limits the annual capacity factor for any fuel

(3) N/A only natural gas permitted as fuel

(4) N/A- no emerging technology will be used to control SO_2 emissions.

[40 CFR 60.48c(a), Rule 62-204.800, F.A.C.]

b. Any owner or operator subject to the provisions of this part shall furnish the Department written notification or, if acceptable to both the Department and the owner or operator of a source, electronic notification, as follows:

(1) A notification of the date construction is commenced postmarked no later than 30 days after such date. *This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form.*

(2) A notification of the actual date of initial startup of the boiler postmarked within 15 days after such date.

[40 CFR 60.7(a)(1),(3), Rule 62-204.800, F.A.C.]

c. The owner or operator shall record and maintain records of the total amount of natural gas combusted in the boiler during each calendar month.

[40 CFR 60.48c(g)(2), Rule 62-204.800, F.A.C.]

Condition A.17. Continued:

d. The owner or operator shall record and maintain records of the daily hours of operation of the boiler.

[Rule 62-4.070, F.A.C.]

e. All records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

[40 CFR 60.48c(i), Rule 62-204.800, F.A.C.]

A.18. Test Requirements: The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required performance 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.]

A.19. 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.]

A.20. Other Applicable Requirements. In addition to the specific conditions listed above, this emissions unit is also subject to the applicable requirements contained in 40 CFR 60, Subpart A General Provisions (Attachment to this permit).

Subsection B: 12,864 brake horsepower Natural Gas Fired Spark Ignition Engine (EU 002)

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
002	A generator set (Wartsila Model 20V34SG or equivalent) comprised of a spark-ignition, four-stroke, lean-burn internal combustion engine. The engine is rated at 9.34 MW of electrical output and 12,864 brake horsepower mechanical output at 100 percent load. The engine is fired with natural gas. Exhaust gas exits at approximately 740°F with a volumetric flow rate of 64,500 acfm through a stack that is approximately 4 feet in diameter and 55 feet above ground level. The engine will be equipped with two thermal heat exchangers: • A jacket surrounding the engine that will be used to heat water to 195 °F, and • An exhaust gas boiler that will be used to generate steam and a heat recovery steam generator. There is not a duct burner associated with the heat recovery gas boiler. Exhaust gas exits at approximately 160 °F. The hot water and steam generated will be sent directly to Pilgrim's Pride Corporation of Georgia, Inc., Live Oak Florida Processing Facility located adjacent to this facility. A portion of the electricity generated will be sent directly to the Pilgrim's Pride facility while the remainder is to be sold to the local electric utility. Nitrogen Oxides (NO_X) emissions will be minimized through the use of the lean burn technology and electronic tuning of the engine. Carbon Monoxide (CO), Volatile Organic Compounds (VOCs), and organic Hazardous Air Pollutant (HAP) emissions will be controlled through the use of an oxidation catalyst. Exhaust gases passes through a fixed catalyst bed and an oxidation reaction occurs converting the CO, VOC and HAP to carbon dioxide (CO_2) and water vapor (H_2O). The oxidation catalyst will be either a ceramic or metallic substrate coated with a layer that increases its surface area (washcoat) and a catalytically active material (e.g. platinum or palladium) is added onto the washcoat. It is estimated that the control efficiency of the oxidation catalyst is 80% and 94% respectively, for VOC and organic HAPs, and CO emissions.

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

The following table provides important details for this emissions unit:

Engine Brake HP	Date of Construction	Model Year	Primary Fuel	Type of Engine	Displacement liters/cylinder (l/c)	Serial #	Date of last mod. or reconst.
9.34 MW 12,864 HP	2014	2013	Natural Gas	Non-Emergency	----	Unknown	N/A

EQUIPMENT

B.1.a. Reciprocating Internal Combustion Engine: The permittee is authorized to construct and install a 12,864 brake horsepower (mechanical output at 100 percent load) engine driven co-generator unit (Wartsila, Model No. 20V34SG). The co-generator unit generally consists of the following components: engine, oxidation catalyst, exhaust gas heat recovery boiler.

b. Oxidation Catalyst: The permittee is authorized to install an oxidation catalyst for the control of VOC, CO, and organic HAP emissions. The oxidation catalyst generally consists of a ceramic or metallic substrate coated with a washcoat layer and a catalytically active material (e.g. platinum or palladium). It is estimated that the control efficiency of the oxidation catalyst is 80% for VOC and organic HAP emissions and 94% for CO emissions.

[Application No. 1210472-001-AC]

PERFORMANCE RESTRICTIONS

Essential Potential to Emit (PTE) Parameters

B.2. Permitted Capacity. The natural gas fired engine has a maximum 12,864 brake horsepower mechanical output at 100 percent load (approximate design heat input rate is 82.68 MMBtu/hour equivalent to 81,000 cubic feet of natural gas per hour).

[Rules 62-4.070(3), 62-204.800, 62-212.200(PTE), F.A.C., Application No. 1210472-001-AC]

B.3. Restricted Operation: The hours of operation of this emission unit are not limited (8,760 hours per year). However, in the event it is unavailable/inoperable, the natural gas fired boiler (EU 001) may be operated to provide a source of steam. This engine is not authorized, with the exception of the period of time for the facility to transfer to the natural gas boiler (EU 001) operation, to operate both EUs 001 and 002 at the same time.

[Rules 62-4.070(3), 62-210.200(PTE), F.A.C.; Application No. 1210472-001-AC]

B.4. Authorized Fuel: The engine shall be fired with natural gas only.

[Application No. 1210472-001-AC; and Rule 62-210.200(PTE), F.A.C.]

B.5. Control Equipment.

a. Nitrogen Oxides. To control nitrogen oxides, the permittee shall use lean burn technology and electronic tuning of the engine to achieve at least the NO_x emissions standards specified in this permit.

b. Carbon Monoxide, VOC & HAPs. To control Carbon Monoxide, Volatile Organic Compounds, and Organic Hazardous Air Pollutant emissions, the permittee shall operate the oxidation catalyst to achieve at least the CO and VOC emissions standards specified in this permit. The oxidation catalyst shall be on line and functioning properly whenever the engine is in operation, including during engine startup and shutdown.

[Rule 62-4.070, F.A.C., Application No. 1210472-001-AC]

EMISSIONS STANDARDS

{Permitting Note: Unless otherwise specified, the averaging times for these Conditions B.9. and/thru B.11. are based on the specified averaging time of the applicable test method.}

B.6. NESHAP, 40 CFR 63 Subpart ZZZZ Applicability: This engine is classified as a new stationary Reciprocating Internal Combustion Engines (RICE). In accordance with 40 CFR 63.6590(c)(4), the unit must meet the requirements of 40 CFR 63 Subpart ZZZZ by complying with the 40 CFR 60 Subpart JJJJ standards. No further 40 CFR 63 Subpart ZZZZ standards shall apply to this engine.

[40 CFR 63.6675(def); 40 CFR 63.6585(a) & (c); 40 CFR 63.6590(a)(2)(iii); 40 CFR 63.6590(c)(1)]

B.7. NSPS, 40 CFR 60, Subpart JJJJ Applicability: This engine is classified as a non-emergency spark ignition (SI) four-stroke lean burn (4SLB) engine and is subject to the standards of 40 CFR 60 Subpart JJJJ.

[40 CFR 60.4230(a)(4)(i)]

B.8. 40 CFR 60, Subpart A-General Provision: Table 3 to 40 CFR 60 Subpart JJJJ shows which parts of the General Provisions in §§ 60.1 through 60.19 are applicable. *Refer to Appendix* .

[40 CFR 60.4246]

B.9. Nitrogen Oxides (NO_x) Emissions:

a. NO_x emissions shall not exceed 1.0 grams per horsepower hour (g/HP-hr) or 82 parts per million by volume dry (ppmvd) @15%O_2. Owners and operators of stationary non-certified SI engines may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent O_2.

[40 CFR 60.4233(e); Table 1 of Subpart JJJJ of Part 60 CFR]

b. NO_x emissions shall not exceed 57.0 tons per any consecutive 12-month rolling period. This limitation is requested by the applicant to escape being classified as a Title V Major source when emissions are totaled with the Pilgrim's Pride Corporation of Georgia, Inc., Live Oak Florida Processing Facility (AIRS ID #1210018).

[Application No. 1210472-001-AC; Applicant Requested Emission Limitation; Title V Major Source Applicability Avoidance; Rule 62-4.070, F.A.C.; Rule 62-210.200(PTE), F.A.C.]

B.10. Carbon Monoxide (CO) Emissions.

a. CO emissions shall not exceed 2.0 g/HP-hr or 270 ppmvd@ 15%O_2. Owners and operators of stationary non-certified SI engines may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent O_2.

[40 CFR 60.4233(e); Table 1 of Subpart JJJJ of Part 60 CFR]

b. CO emissions shall not exceed 20.0 tons per any consecutive 12-month rolling period. This limitation is requested by the applicant.

[Application No. 1210472-001-AC; Applicant Requested Emission Limitation; Rule 62-4.070, F.A.C.; Rule 62-210.200(PTE), F.A.C.]

B.11. Volatile Organic Compounds (VOC) Emissions.

a. VOC emissions shall not exceed 0.7 g/HP-hr or 270 ppmvd@ 15%O_2. Owners and operators of stationary non-certified SI engines may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent O_2.

[40 CFR 60.4233(e); Table 1 of Subpart JJJJ of Part 60 CFR]

b. VOC emissions shall not exceed 20.0 tons per any consecutive 12-month rolling period. This limitation is requested by the applicant.

[Application No. 1210472-001-AC; Applicant Requested Emission Limitation; Rule 62-4.070, F.A.C.; Rule 62-210.200(PTE), F.A.C.]

c. For purposes of this subpart, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included

[40 CFR 60 Subpart JJJJ, Table 1 of Subpart JJJJ of Part 60 CFR]

COMPLIANCE REQUIREMENTS

B.12. The engine shall be operated and maintained such that it achieves the emission standards as required in 40 CFR 60.4233 [Conditions B.9., B.10., and B.11.] over the entire life of the engine.

[40 CFR 60.4234]

B.13. The permittee shall demonstrate compliance with the emission standards specified in 40 CFR 60.4233(e) [Conditions B.9.a., B.10.a., and B.11.a.] and according to the requirements specified in §60.4244, as applicable, and according to paragraphs a. and b. of this condition.

a. Maintenance Plan: The permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[40 CFR 60.4243]

b. Performance Tests.

i. Initial. The permittee shall conduct initial performance tests for each pollutant specified in Conditions B.9., B.10., and B.11. within 60 days after achieving the maximum production rate at which the engine will be operated, but not later than 180 days after its initial startup.

[40 CFR 60.4243(b)(2)(ii); 40 CFR 60.8(a)]

ii. Subsequent. The permittee must conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.

[40 CFR 60.4243(b)(2)(ii)]

[40 CFR 60.4243(b)(2)]

TESTING REQUIREMENTS

B.14. Compliance Test Procedures: The performance tests must follow the procedures below.

a. Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in 40 CFR 60.8 and under the specific conditions that are specified by Table 2 of 40 CFR 60 Subpart JJJJ.

b. Performance tests during periods of startup, shutdown, or malfunction are not allowed, as specified in 40 CFR 60.8(c). If the stationary SI internal combustion engine is non-operational, it is not necessary to startup the engine solely to conduct a performance test; however, the performance test must be conducted immediately upon startup of the engine.

c. Three separate test runs must be conducted for each performance test required, as specified in 40 CFR 60.8(f). Each test run must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and last at least 1 hour.

d. To determine compliance with the NO_x mass per unit output emission limitation, the concentration of NO_x in the engine exhaust should be converted using Equation 1, below:

$$ER = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{HP - hr} \qquad \text{(Eq. 1)}$$

Where:

ER = Emission rate of NO_X in g/HP-hr.

C_d = Measured NO_X concentration in parts per million by volume (ppmv).

1.912×10^{-3} = Conversion constant for ppm NO_X to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, horsepower-hour (HP-hr).

e. To determine compliance with the CO mass per unit output emission limitation, convert the concentration of CO in the engine exhaust using Equation 2 of this section:

$$ER = \frac{C_d \times 1.164 \times 10^{-3} \times Q \times T}{HP - hr} \qquad \text{(Eq. 2)}$$

Where:

ER = Emission rate of CO in g/HP-hr.

C_d = Measured CO concentration in ppmv.

Condition B.14. Continued:

1.164×10^{-3} = Conversion constant for ppm CO to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr.

f. For purposes of this subpart, when calculating emissions of VOC, emissions of formaldehyde should not be included. To determine compliance with the VOC mass per unit output emission limitation, convert the concentration of VOC in the engine exhaust using Equation 3 of this section:

$$ER = \frac{C_d \times 1.833 \times 10^{-3} \times Q \times T}{HP - hr} \qquad \text{(Eq. 3)}$$

Where:

ER = Emission rate of VOC in g/HP-hr.

C_d = VOC concentration measured as propane in ppmv.

1.833×10^{-3} = Conversion constant for ppm VOC measured as propane, to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr.

g. If the owner/operator chooses to measure VOC emissions using either Method 18 of 40 CFR part 60, appendix A, or Method 320 of 40 CFR part 63, appendix A, then it has the option of correcting the measured VOC emissions to account for the potential differences in measured values between these methods and Method 25A. The results from Method 18 and Method 320 can be corrected for response factor differences using Equations 4 and 5 of this section. The corrected VOC concentration can then be placed on a propane basis using Equation 6 of this section.

$$RF_i = \frac{C_{Mi}}{C_{Ai}} \qquad \text{(Eq. 4)}$$

Where:

RF_i = Response factor of compound i when measured with EPA Method 25A.

$C_{M\ i}$ = Measured concentration of compound i in ppmv as carbon.

Condition B.14. Continued:

$C_{A\ i}$ = True concentration of compound i in ppmv as carbon.

$$C_{i\ corr} = RF_i \times C_{i\ meas} \qquad \text{(Eq. 5)}$$

Where:

$C_{i\ corr}$ = Concentration of compound i corrected to the value that would have been measured by EPA Method 25A, ppmv as carbon.

$C_{i\ meas}$ = Concentration of compound i measured by EPA Method 320, ppmv as carbon.

$$C_{Peq} = 0.6098 \times C_{i\ corr} \qquad \text{(Eq. 6)}$$

Where:

C_{Peq} = Concentration of compound i in mg of propane equivalent per DSCM.

[40 CFR 60.4244]

B.15. Table 2 to Subpart JJJJ of Part 60—Requirements for Performance Tests:

For each	Complying with the requirement to	You must	Using	According to the following requirements
1. Stationary SI internal combustion engine demonstrating compliance according to § 60.4244.	a. limit the concentration of NO_X in the stationary SI internal combustion engine exhaust	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, Appendix A or ASTM Method D6522-00 (Reapproved 2005). [a e]	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O_2concentration of the stationary internal combustion engine exhaust at the sampling port location;	(2) Method 3, 3A, or 3B [b] of 40 CFR part 60, appendix A or ASTM Method D6522-00 (Reapproved 2005). [a e]	(b) Measurements to determine O_2concentration must be made at the same time as the measurements for NO_X concentration.
		iii. If necessary, determine the exhaust flowrate of the stationary internal combustion engine exhaust;	(3) Method 2 or 19 of 40 CFR part 60, appendix A.	

For each	Complying with the requirement to	You must	Using	According to the following requirements
		iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(4) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03. [e]	(c) Measurements to determine moisture must be made at the same time as the measurement for NO_X concentration.
		v. Measure NO_X at the exhaust of the stationary internal combustion engine.	(5) Method 7E of 40 CFR part 60, appendix A, Method D6522-00 (Reapproved 2005) [a e], Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03. [e]	(d) Results of this test consist of the average of the three 1-hour or longer runs.
	b. limit the concentration of CO in the stationary SI internal combustion engine exhaust	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A or ASTM Method D6522-00 (Reapproved 2005). [a e]	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O_2concentration of the stationary internal combustion engine exhaust at the sampling port location;	(2) Method 3, 3A, or 3B [b]of 40 CFR part 60, appendix A or ASTM Method D6522-00 (Reapproved 2005). [a e]	(b) Measurements to determine O_2concentration must be made at the same time as the measurements for CO concentration.
		iii. If necessary, determine the exhaust flowrate of the stationary internal combustion engine exhaust;	(3) Method 2 or 19 of 40 CFR part 60, appendix A.	
		iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(4) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03. [e]	(c) Measurements to determine moisture must be made at the same time as the measurement for CO concentration.
		v. Measure CO at the exhaust of the stationary internal combustion engine.	(5) Method 10 of 40 CFR part 60, appendix A, ASTM Method D6522-00 (Reapproved 2005) [a e], Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03. [e]	(d) Results of this test consist of the average of the three 1-hour or longer runs.
	c. limit the concentration of VOC in the stationary SI internal combustion engine exhaust	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A.	(a) If using a control device, the sampling site must be located at the outlet of the control device.

For each	Complying with the requirement to	You must	Using	According to the following requirements
		ii. Determine the O_2concentration of the stationary internal combustion engine exhaust at the sampling port location;	(2) Method 3, 3A, or 3B [b]of 40 CFR part 60, appendix A or ASTM Method D6522-00 (Reapproved 2005). [a e]	(b) Measurements to determine O_2concentration must be made at the same time as the measurements for VOC concentration.
		iii. If necessary, determine the exhaust flowrate of the stationary internal combustion engine exhaust;	(3) Method 2 or 19 of 40 CFR part 60, appendix A.	
		iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(4) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03. [e]	(c) Measurements to determine moisture must be made at the same time as the measurement for VOC concentration.
		v. Measure VOC at the exhaust of the stationary internal combustion engine.	(5) Methods 25A and 18 of 40 CFR part 60, appendix A, Method 25A with the use of a methane cutter as described in 40 CFR 1065.265, Method 18 of 40 CFR part 60, appendix A, [c d]Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03. [e]	(d) Results of this test consist of the average of the three 1-hour or longer runs.

[a] You may petition the Administrator for approval to use alternative methods for portable analyzer.

[b] You may use ASME PTC 19.10-1981, Flue and Exhaust Gas Analyses, for measuring the O_2content of the exhaust gas as an alternative to EPA Method 3B.

[c] You may use EPA Method 18 of 40 CFR part 60, appendix, provided that you conduct an adequate presurvey test prior to the emissions test, such as the one described in OTM 11 on EPA's Web site (*http://www.epa.gov/ttn/emc/prelim/otm11.pdf*).

[d] You may use ASTM D6420-99 (2004), Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography/Mass Spectrometry as an alternative to EPA Method 18 for measuring total nonmethane organic.

[e] Incorporated by reference, see 40 CFR 60.17.

B.16. Compliance Test Notification: 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.]

MONITORING REQUIREMENTS

B.17. Oxidation Catalyst

a. Inlet Temperature Monitoring: In accordance with the manufacturer's specifications, the permittee shall install, calibrate, operate and maintain an in-line thermocouple to continuously measure and record the temperature of the engine exhaust gas at the inlet of the oxidation catalyst unit.

(i) The thermocouple must collect data at least once every 15 minutes.

(ii) The temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.

(iii) The temperature of the engine exhaust shall be maintained so that the catalyst inlet temperature is greater than or equal to 650 °F or the minimum inlet temperature as determined by the catalyst manufacturer, 3-hour block average.

(iv) Calibration of the thermocouple shall be in accordance with the manufacturer's recommendations, but shall occur at least on an annual basis.

b. Pressure Drop Monitoring: The permittee shall install, calibrate, operate, and maintain a CPMS to continuously measure the pressure drop across the oxidation catalyst unit.

(i) The pressure drop measurement must collect data at least once every 15 minutes.

(ii) The catalyst shall be maintained so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst measured during the initial performance test.

(iii) The permittee shall determine a site-specific pressure drop range based on the pressure drop monitored during the initial performance, supplemented by engineering assessments and the manufacturer's recommendations.

(iv) Calibration of the monitor shall be in accordance with the manufacturer's recommendations, but shall occur at least on an annual basis.

c. Quarterly Exhaust Gas CO Emissions Measurements: The permittee shall conduct CO measurements in the exhaust duct using a hand-held analyzer on at least a quarterly basis.

(i) Calibration of the analyzer shall be in accordance with the manufacturer's recommendations, but shall occur at least on an annual basis.

d. Oxidation Catalyst Replacement: The oxidation catalyst shall be replaced should the measured CO emissions using the hand-held analyzer stated in Condition B.17.c. are equal to or greater than 4.1 lb/hr CO;

[Rule 62-4.070(3) F.A.C.; Application No. 1210472-001-AC]

NOTIFICATION REQUIREMENTS

B.18. An initial notification as required in 40 CFR 60.7(a)(1) shall be submitted to the Permitting Authority. The notification must include the information in paragraphs (1) through (5) of this condition.

(1) Name and address of the owner or operator;

(2) The address of the affected source;

(3) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

(4) Emission control equipment; and

(5) Fuel used.

[40 CFR 60.4245(c)]

B.19. Monitoring Notification: The permittee shall submit to the Compliance Authority a summary of the instances in which a CPMS is not maintained within the operating value as specified in Condition B.17. within a reasonable time (not to exceed 30 days of such instance).

[Rule 62-4.070, F.A.C.]

RECORDKEEPING REQUIREMENTS

B.20. The following records shall be kept:

a. All notifications submitted to comply with 40 CFR 60 Subpart JJJJ and all documentation supporting any notification.

b. Maintenance conducted on the engine.

c. Since the stationary SI internal combustion engine is not a certified engine, documentation that the engine meets the emission standards.

d. Monitoring data in relation to the oxidation catalyst as specified in Condition B.17.

e. Engine Power Output in MW-hr, summarized on at least a monthly basis.

f. The total amount of natural gas consumed in the engine during each calendar month.

g. The daily hours of operation of the engine.

[40 CFR 60.4245(a); Rule 62-4.070, F.A.C.; Application No. 1210472-001-AC]

REPORTING REQUIREMENTS

B.21. Performance Test Report. A copy of each performance test as conducted in 40 CFR 60.4244 [Condition B.14.] shall be submitted to the Compliance Authority within 45 days after the test has been completed.

[40 CFR 60.4245(d); Rule 62-297.310(8), F.A.C.]

B.22. Heat Recovery Boiler. At least 30 days prior to commencement of construction, the Permittee shall submit to the Permit Authority in a written or electronic format the specific vendor information for the heat recovery boiler: this information should include at least, the maximum design heat input, the manufacturer, manufacturer date, make, and model number, final flow diagram of the final designed system.

[Rule 62-4.070, F.A.C.]