# FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

RICK SCOTT
GOVERNOR

CARLOS LOPEZ-CANTERA
LT. GOVERNOR

HERSCHEL T. VINYARD JR.
SECRETARY


*Sent by Electronic Mail – Received Receipt Requested*

**PERMITTEE:**

Pilgrim's Pride Corporation
439 Weyanoke Drive
Evans, Georgia 30809

Air Permit No.: 1210018-016-AF
Issuance Date: July 8, 2014
Expiration Date: July 8, 2019

Authorized Representative:

Mr. Stephen James, Southeast Director

Live Oak, FL Poultry Plant

Federally Enforceable State Operation Permit Renewal

This is the final Federally Enforceable State Operation Permit (FESOP), which authorizes the renewal of FESOP No. 1210018-012-AF. This permit also incorporates the changes authorized by construction permit No. 1210018-014-AC.

This permitting action affects the Pilgrim's Pride Corporation Live Oak, FL Poultry Plant. The existing facility is classified in the Poultry Slaughtering and Processing category (Standard Industrial Classification code 2015). The facility is located in Suwannee County at 19740 U.S. Highway 90, Live Oak, Suwannee County, Florida. The UTM coordinates are Zone 17, 292.69 km East, and 3362.07 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.

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, 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

Richard S. Rachal III, P.G. July 8, 2014
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 **July 8, 2014**, to the persons listed below.

Mr. Stephen James, Southeast Director, Pilgrim's Pride Corporation: stephen.james@pilgrims.com
Mr. Thomas Sweat, Senior Principal, Environmental Planning Specialists, Inc.: tsweat@envplanning.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.

(Clerk) July 8, 2014

## FACILITY DESCRIPTION

The Live Oak, FL Processing Plant consists of (2) steam boilers (Nos. 4 & 5), water heater, and a waste gas burner consisting of a flare and ignition system combusting gas generated from the anaerobic lagoon.

**The existing facility consists of the following emission units.**

| **Facility ID No. 1210018** | |
|---|---|
| **ID No.** | **Emission Unit Description** |
| | |
| | |
| 005 | 800 HP Steam Boiler No. 4 |
| 006 | Anaerobic Lagoon Biogas Flare |
| 007 | 600 HP Steam Boiler No. 5 |
| 008 | Water Heater |

## FACILITY REGULATORY CATEGORIES

- The facility is a not 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 not a Title V major source of air pollution in accordance with Chapter 213, F.A.C. *(This classification is contingent upon the Live Oak Heat & Power, LLC, a project developed by Blue Earth, Inc., cogeneration facility (adjacent to the Pilgrim's Pride facility) operating in accordance with the requirements of air construction permit 1210472-001-AC.*
- The facility is a synthetic Non-Title V source.
- The facility is not a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

## RELEVANT DOCUMENTS

The documents listed below are the basis of the permit. They are specifically related to this permitting action. These documents are on file with the Department.

Application for Air Permit-Long Form received June 24, 2014

## SECTION 2.B. FACILITY-WIDE CONDITIONS

1. Permitting Authority: The permitting authority for this project is the Northeast District Waste Air Resource Management, Florida Department of Environmental Protection (Department). The Northeast District's mailing address is 8800 Baymeadows Way West, Suite 100, Jacksonville, Florida 32256. 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 North East 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 Permitting 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; and
   d. Appendix D. Common Testing Requirements.
   e. Appendix E. 40 CFR 60 Subpart A – General Provision.
   f. Appendix F. 40 CFR 60 Subpart Dc
   g. Appendix BACT

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, 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 owner or operator 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.]

8. Annual Operating Report: The owner or operator shall submit an Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) to the Department by April 1st, on an annual basis pursuant to Rule 62-210.370(3), F.A.C.

   [Rule 62-210.370(3), F.A.C.; Rule 62-210.300(3)(c)1.h.,F.A.C.]

9. A completed Application for Non Title V Air Permit Renewal [DEP Form No. 62-210.900(4)] shall be submitted to the Department at least 60 days prior to the expiration date of this operation permit. To properly apply for an operation permit, the owner or operator shall submit the appropriate application form, processing fee, and compliance test reports as required by this permit.

   [Rules 62-4.050, 62-4.090, F.A.C.]

1. Nitrogen Oxides ($NO_x$) Emissions Caps:

a. Pilgrim's Pride: The total maximum allowable site wide $NO_x$ emissions from all operations at the Pilgrim's Pride site (Emissions Units 005 through 008 and heaters) shall not exceed 42.0 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:

$[((EF_{boilers})\ \text{lbs}\ NO_x/\text{MMscf})(\text{Boiler}_{\text{Natural Gas}})(\text{Ton}/2000\ \text{lbs})] + [((EF_{flare})\ (\text{Bio-gas}_{\text{Heat content}})\ (\text{Flare}_{\text{bio-gas combusted}})\ ((\text{Ton}/2000\ \text{lbs})] \leq 42.0\ \text{TPY},\ NO_x$

Where:

| | | |
|---|---|---|
| $EF_{boiler}$ | = | $NO_x$ emission rate from most recent annual performance test, lbs/MMscf |
| $\text{Boiler}_{\text{Natural Gas}}$ | = | Rolling 12-month total of natural gas fired at the facility, million scf (MMscf) |
| $EF_{flare}$ | = | $NO_x$ emission rate from EPA AP-42, Section 13.5, Table 13.5-1, 0.068 lbs/MMBtu |
| $\text{Bio-gas}_{\text{Heat content}}$ | = | Higher heating value of bio-gas, (8.41E-04 MMBtu/scf) |
| $\text{Flare}_{\text{bio-gas combusted}}$ | = | Rolling 12-month total of bio gas combusted in the flare (EU-006), (scf) |

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

[Permit No. 1210018-014-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. Pilgrim's Pride Corporation Live Oak, FL Poultry Plant and the Live Oak Heat & Power, LLC, a project developed by Blue Earth, Inc. energy facility: The total maximum allowable facility wide $NO_x$ emissions from all operations at the Live Oak Heat & Power, LLC, a project developed by Blue Earth, Inc. energy facility (AIRS ID #1210472 ) and the Pilgrim's Pride Corporation Live Oak, FL Poultry Plant (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 Live Oak Heat & Power, LLC, a project developed by Blue Earth, Inc. energy facility (AIRS ID #1210472).

Compliance with this $NO_x$ emissions cap shall be demonstrated from actual emissions determined from the Pilgrim's Pride Corporation site as stated in Facility-Wide Condition 1.a. and actual emissions determined from the Live Oak Heat & Power, LLC, a project developed by Blue Earth, Inc. site as specified within the air permit for the facility.

[Permit No. 1210018-014-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. Facility Wide $NO_x$ Emissions Caps - Recordkeeping: The owner or operator shall maintain a record of the site wide $NO_x$ and the facility-wide $NO_x$ emissions as specified in Facility-Wide Condition 1 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.]

## EU No. 005, Boiler No. 4

This section of the permit addresses the following emissions unit:

| ID No. | Emission Unit Description |
|---|---|
| 005 | Boiler #4 (Superior Boiler: Apache, 800 hp, 26.816 MMBtu/hr, constructed in 1993) fired by Natural Gas. -- The boiler is subject to 40 CFR 60, Subpart Dc, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart A, General Provisions **and** Particulate matter (PM), Sulfur Dioxide ($SO_2$), and Visible Emissions (VE) standards in Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with Less Than 250 Million Btu Per Hour Heat Input, New and Existing Emissions Units. Additional restrictions have been added to avoid classification as a Title V Facility and as a Major Source. |

### PERFORMANCE RESTRICTIONS

1. Permitted Capacity: Boiler No. 4 shall be limited to a maximum heat input of 26.816 MMBtu per hour.

   [Rule 62-210.200(PTE), F.A.C.; Permit No. 1210018-014-AC]

2. Authorized Fuel: Fuels shall be limited to natural gas.

   [BACT Determination, Permit No. 1210018-014-AC, Rules 62-210.200(PTE), and 62-204.800, F.A.C.]

3. Operation: The hours of operation are not limited (i.e., 8760 hours per year).

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

### EMISSIONS STANDARDS

4. a. Emission Limiting Standards for Opacity

   The boiler shall be subject to Visible Emissions – 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.]

   b. Emission Limiting Standards for Particulate Matter (PM) -- The boiler shall be subject to a Best Available Control Technology Determination for PM emissions. PM emissions shall be controlled by the use of exclusively firing natural gas. See **BACT Determination**.

   [Rule 62-296.406(2), F.A.C.]

   c. Emission Limiting Standards for Sulfur Dioxide ($SO_2$) -- The boiler shall be subject to a Best Available Control Technology Determination for $SO_2$ emissions. $SO_2$ emissions shall be controlled by the use of exclusively firing natural gas. See **BACT Determination**.

   [Rule 62-296.406(2), F.A.C.]

## COMPLIANCE DETERMINATIONS FOR OPACITY

5. The owner or operator shall conduct a compliance test that demonstrates compliance with the opacity standard in **Condition 4.a.** of this section prior to obtaining a renewed operation permit.

   [Rule 62-297.310(7)(a)3. & 4.a., F.A.C.]

## COMPLIANCE DETERMINATIONS FOR SULFUR DIOXIDE AND PARTICULATE MATTER

6. For air operating permit renewal, the permittee shall certify in the permit application that only natural gas was burned in the boiler for the term of the permit.

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

## COMPLIANCE DETERMINATIONS FOR OXIDES OF NITROGEN

7. Performance tests using EPA Method 7, 7A, 7E of 40 CFR 60 Appendix A, or other applicable DEP approved reference methods, shall be conducted upon Department request in accordance with Rule 62-297.310(7)(b), F.A.C. See section 2.B, Facility – Wide Conditions.

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

## REPORTING AND RECORDKEEPING REQUIREMENTS

8. a. The owner or operator shall record and maintain records of the total amount of each steam generating unit fuel delivered to that property (Pilgrim's Pride Corporation) during each calendar month.

   [40 CFR 60.48c(g)(3), Rule 62-204.800, F.A.C.]

   b. 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.]

9. See section 2.B, Facility – Wide Conditions.

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

## EU No. 006, Anaerobic Lagoon with Biogas Flare

| ID No. | Emission Unit Description |
|---|---|
| 006 | Anaerobic Lagoon with Biogas Flare The flare combusts biogas generated anaerobically by the oxygen starved lagoon. Maximum production of biogas is estimated at 21,000 standard cubic feet per hour. VOCs and HAPs are primarily converted to carbon dioxide and the hydrogen sulfide in the biogas is converted primarily to sulfur dioxide. Flare temperatures range between 1000 to 2000 degrees Fahrenheit depending upon the heat content of the biogas. Nominal heat content is estimated at 650 Btu per cubic foot. |

### PERFORMANCE RESTRICTIONS

1. Permitted Capacity: Operate the flare within the maximum estimated capacity of 13.65 MMBtu per hour heat input of biogas.

   [Rule 62-210.200(PTE), F.A.C.; Permit No. 1210018-014-AC]

   Authorized Fuel: Fuels shall be limited to biogas generated by the anaerobic lagoon and natural gas (used for start-up purposes only).

   [Permit No. 1210018-014-AC, Requested by the Applicant, Rules 62-210.200(PTE), F.A.C.]

2. Hours of Operation: The hours of operation are not limited (i.e., 8760 hours per year).

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

3. Operation: Operate the flare in accordance with good engineering practices minimizing the smoke generated.

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

### REPORTING AND RECORDKEEPING REQUIREMENTS

4. See section 2.B, Facility – Wide Conditions.

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

**EU No. 007, Boiler No. 5**

| ID No. | Emission Unit Description |
|---|---|
| 007 | Boiler No. 5 (Manufacturer: Johnston: 600 hp, 20.11 MMBtu/hr, constructed in 1998) fired by Natural Gas. -- The boiler is subject to 40 CFR 60, Subpart Dc, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart A, General Provisions **and** Particulate matter (PM), $SO_2$, and Visible Emissions (VE) standards in Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with Less Than 250 Million Btu Per Hour Heat Input, New and Existing Emissions Units. Additional restrictions have been added to avoid classification as a Title V Facility and as a Major Source. |

## PERFORMANCE RESTRICTIONS

1. Permitted Capacity: Boiler No. 5 shall be limited to a maximum heat input of 20.11 MMBtu per hour.

   [Rule 62-210.200(PTE), F.A.C.; Permit No. 1210018-014-AC]

2. Authorized Fuel: Fuels shall be limited to natural gas.

   [BACT Determination, Permit No. 1210018-014-AC, Rules 62-210.200 (PTE), and 62-204.800, F.A.C.]

3. Operation: The hours of operation are not limited (i.e., 8760 hours per year).

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

## EMISSIONS STANDARDS

4. a. Emission Limiting Standards for Opacity

   The boiler shall be subject to Visible Emissions – 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.]

   b. Emission Limiting Standards for Particulate Matter (PM) -- The boiler shall be subject to a Best Available Control Technology Determination for PM emissions. PM emissions shall be controlled by the use of exclusively firing natural gas. See **BACT Determination**.

   [Rule 62-296.406(2), F.A.C.]

   c. Emission Limiting Standards for Sulfur Dioxide ($SO_2$) -- The boiler shall be subject to a Best Available Control Technology Determination for $SO_2$ emissions. $SO_2$ emissions shall be controlled by the use of exclusively firing natural gas. See **BACT Determination**.

   [Rule 62-296.406(2), F.A.C.]

## COMPLIANCE DETERMINATIONS FOR OPACITY

5. The owner or operator shall conduct a compliance test that demonstrates compliance with the opacity standard in **Condition 4.a.** of this section prior to obtaining a renewed operation permit.

   [Rule 62-297.310(7)(a)3. & 4.a., F.A.C.]

## COMPLIANCE DETERMINATIONS FOR SULFUR DIOXIDE AND PARTICULATE MATTER

6. For air operating permit renewal, the permittee shall certify in the permit application that only natural gas was burned in the boiler for the term of the permit.

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

## COMPLIANCE DETERMINATIONS FOR OXIDES OF NITROGEN

7. A performance test using EPA Method 7, 7A, 7E of 40 CFR 60 Appendix A, or other applicable DEP approved reference methods, shall be conducted, upon Department request, in accordance with Rule 62-297.310(7)(b), F.A.C. Note: The EF for $NO_x$ (lbs/MMscf) determined for Boiler No. 4 (EU No. 005) shall be used in determining Facility wide oxides of nitrogen emissions.

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

## REPORTING AND RECORDKEEPING REQUIREMENTS

8. a. The owner or operator shall record and maintain records of the total amount of each steam generating unit fuel delivered to that property (Pilgrim's Pride Corporation) during each calendar month.

   [40 CFR 60.48c(g)(3), Rule 62-204.800, F.A.C.]

   b. 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.]

9. See section 2.B, Facility – Wide Conditions.

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

## EU No. 009, KEMCO Water Heater

| ID No. | Emission Unit Description |
|---|---|
| 009 | Water Heater (Kemco Boiler: 24.35 MMBtu/hr, constructed in 2010) fired by Natural Gas. -- The boiler is subject to 40 CFR 60, Subpart Dc, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units and 40 CFR 60, Subpart A, General Provisions Additional restrictions have been added to avoid classification as a Title V Facility and as a Major Source. The unit only heats water and does not generate steam. |

### PERFORMANCE RESTRICTIONS

1. Permitted Capacity: The Kemco water heater shall be limited to a maximum heat input of 24.4 MMBtu per hour.

   [Rule 62-210.200(PTE), F.A.C.; Permit No. 1210018-014-AC]

2. Authorized Fuel: Fuels shall be limited to natural gas.

   [Permit No. 1210018-014-AC, Requested by the Applicant, Rules 62-210.200(PTE), F.A.C.]

3. Operation: The hours of operation are not limited (i.e., 8760 hours per year).

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

### EMISSIONS STANDARDS

*{Permitting Note: There are no specific emission limiting standards.}*

### COMPLIANCE DETERMINATIONS FOR OXIDES OF NITROGEN

4. A performance test using EPA Method 7, 7A, 7E of 40 CFR 60 Appendix A, or other applicable DEP approved reference methods, shall be conducted, upon Department request, in accordance with Rule 62- 297.310(7)(b), F.A.C.

   *Note:* The EF for $NO_x$ (lbs/MMscf) determined for Boiler No. 4 (EU No. 005) shall be used in determining facility-wide oxides of nitrogen emissions.

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

### REPORTING AND RECORDKEEPING REQUIREMENTS

5. a. The owner or operator shall record and maintain records of the total amount of each steam generating unit fuel delivered to that property (Pilgrim's Pride Corporation) during each calendar month.

   [40 CFR 60.48c(g)(3), Rule 62-204.800, F.A.C.]

   b. 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.]

6. See section 2.B, Facility – Wide Conditions.

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