# Citrosuco North America, Inc.

Facility ID No. 1050001
Polk County

## Title V Air Operation Permit Renewal

Permit No. 1050001-012-AV
(Renewal of Title V Air Operation Permit No. 1050001-011-AV)

**Permitting Authority:**

State of Florida
Department of Environmental Protection
Air Resource Management, Southwest District

13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926

Telephone: (813) 632-7600
Fax: (813) 632-7668

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Statement of Basis

# *DRAFT/PROPOSED PERMIT*

**PERMITTEE:**
Citrosuco North America, Inc.
5937 Hwy 60 East
Lake Wales, FL 33898

Permit No. 1050001-012-AV
Citrosuco North America, Inc.
Facility ID No. 1050001
Title V Air Operation Permit Renewal

The purpose of this permit is to renew the Title V air operation permit and incorporate the terms and conditions of construction permit No. 1050001-013-AC for the above referenced facility. The existing Citrosuco North America facility is located in Polk County at 5937 Hwy 60 East, Lake Wales, Florida. UTM Coordinates are: Zone 17, 451.7 km East and 3085.8 km North. Latitude is: 27º 53' 45" North; and, Longitude is: 81º 29' 26" West.

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

Effective Date: xx/xx/2011
Renewal Application Due Date: Exp. DATE -225, 20xx
Expiration Date: Eff. DATE + 5 years, 2016

*(Draft/Proposed)*

_____

Cindy Zhang-Torres, P.E.
Air Permitting Manager
Southwest District

CZT/nb/pp

## SECTION I. FACILITY INFORMATION.

### Subsection A. Facility Description.

This facility processes up to 32,000,000 boxes of citrus into various citrus products and animal feed. The facility consists of two citrus peel dryers connected to three waste heat evaporators, two citrus peel pellet coolers, four boilers (three boilers are regulated emissions units and one is an insignificant emissions unit), two emergency stationary diesel engines, and process equipment (which include fruit washers, oil and juice extraction equipment, cooling towers, fruit and peel conveyance equipment, lime silo, and peel storage).

### Subsection B. Summary of Emissions Units.

| EU No. | Brief Description |
|---|---|
| *Regulated Emissions Units* | |
| 001 | 800 Horsepower Boiler |
| 006 | Citrus Peel Dryer No. 2 |
| 007 | Citrus Peel Dryer No. 3 |
| 008 | 2,000 Horsepower Boiler |
| 009 | Pellet Cooler No. 2 |
| 010 | Pellet Cooler No. 3 |
| 012 | 1,000 Horsepower Boiler |
| 015 | Two (2) Existing Emergency Stationary CI RICE Diesel Engines > 500 HP |

### Subsection C. Applicable Regulations.

Based on the Title V air operation permit renewal application received February 21, 2011, this facility is NOT a major source of hazardous air pollutants (HAP). Because this facility operates stationary reciprocating internal combustion engines, it is subject to regulation under 40 CFR 63, Subpart ZZZZ – National Emissions Standards For Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines. The existing facility is a PSD major source of air pollutants in accordance with Rule 62-212.400, F.A.C. A summary of applicable regulations is shown in the following table.

| Regulation | EU No(s). |
|---|---|
| 40 CFR 60, Subpart A, NSPS General Provisions | 008, 012 |
| 40 CFR 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units | 008, 012 |
| 40 CFR 63, Subpart A, NESHAP General Provisions | 015 |
| 40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines | 015 |
| 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 | 001, 008, 012 |
| Chapters 62-4, 62-210, 62-213, 62-296, 62-297, F.A.C. | All |

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

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

**Emissions and Controls**

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

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

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

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

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

a. Enclosed conveyance of material between the pelletizers and pellet coolers.
b. Washing of feedmill equipment at the end of the season to remove accumulated dust.
c. Storage of animal feed supplement in a totally enclosed building.
d. Utilization of a street sweeper in the truck parking and traffic areas.

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

*{Permitting Note: Proposed by applicant in Title V air operation permit application received February 21, 2011}*

**FW6.** Fruit Throughput Limit. The owner or operator shall not process more than 32.0 million boxes of citrus fruit in any consecutive 12 month period. For purposes of this permit, a box of citrus fruit shall be defined to contain 90 pounds of oranges or 85 pounds of grapefruit. The owner or operator shall make and maintain monthly and rolling 12 month records of fruit processing rates to demonstrate compliance with this limitation. Such records shall be made from daily processing records and shall be completed no later than the 10$^{th}$ day of each following month.
[Rule 62-4.070(3), F.A.C.; Construction Permit 1050001-013-AC]

**FW7.** VOC Emission Limits and Oil Recovery. VOC emissions will be limited by achieving a **72 percent recovery** of oil from citrus fruits processed each calendar year. Compliance with the emission limit for VOC shall be demonstrated by calculating the compliance indicator, as follows. All measured quantities of oil used

in Equations 1 and 2 shall be in units of tons and the total results of the selected equation shall reflect the sum total for the entire calendar year.

a. The facility may use either Equation 1 or 2 to demonstrate compliance, provided that the facility has maintained the necessary records to use that equation. In the case of Equation 2, all recovered oil must be actually measured and all emitted volatilized oil must be treated as emissions and not as reductions of peel oil. If the result of the selected equation is positive or zero, the facility is in compliance with the VOC emission limit. If the result of the selected equation is negative, the facility is in violation of the VOC emission limit. The facility may use either equation to demonstrate compliance, even if the other equation results in a negative compliance indicator.

b. Facilities may accept wet peel from, or send wet peel to another facility for further processing and drying, provided that each facility involved receives or provides, respectively, sufficient recorded information to account for the recovery of oil from such peel, including oil in products and by-products at the receiving facility. A facility that sends wet peel offsite for any purpose shall not include the related oil in products and by-products in its oil recovery calculations. Such oil shall be included in the oil recovery calculations of the receiving facility. In any case, oil in products and by-products related to peel that is not processed through a peel dryer shall be excluded from all oil recovery calculations.

Equation 1:
Compliance Indicator = OIF(1 – K1) – OPP + ODP

Equation 2:
Compliance Indicator = OJ + CPO + EO + DL + ODP – K1(OIF)

Where:
K1 = 0.72.

And the following are all in units of tons:
OIF = Oil in Incoming Fruit
ODP = Oil in Dried Pellets
OPP = Oil in Pressed Peel
OJ = Oil in Juice
CPO = Cold Press Oil
EO = Essence Oil
DL = d-limonene

Fruit and byproduct oil quantities, required for equations 1 and 2, as applicable, shall be measured daily. All peel oil recovery at a facility shall be determined using the same methodology at all times during each processing year. The following sampling and analytical methods shall be used for determining oil contents of fruit, pressed peel, dried peel and pellets: The sampling and analytical method for determining oil content in incoming whole fruit is the method documented in "FMC FoodTech Citrus Systems Division, Procedures for Analysis of Citrus Products, Chapter VI, Procedure 1. Whole Fruit Available Oil, FMC Technologies Inc., Lakeland, FL, pp. 119 to 123, (effective August 16, 2002)" hereby adopted by reference; the analytical method for determining oil content is the Scott Method (Bromate Titration Method) as documented in "FMC FoodTech Citrus Systems Division, Procedures for Analysis of Citrus Products, Chapter IV, Procedure 10. Recoverable Oil (Scott Method), FMC Technologies Inc., Lakeland, FL, pp. 40 to 44, (effective August 16, 2002)" hereby adopted by reference; the methods for sampling, sample preparation and analytical calculations for peel residue, press cake, and pellets are those documented in "Braddock, R. J. (1999), Handbook of Citrus By- Products and Processing Technology, Section 12.3.1.2 Analysis, John Wiley & Sons, NY, pp. 180 to 181," hereby adopted by reference. Copies of these documents may be obtained by contacting the Division of Air Resource Management at 2600 Blair Stone Road, Mail Station 5500, Tallahassee, FL 32399-2400.
[Rule 62-4.070(3), F.A.C.; Construction Permit 1050001-013-AC]

**FW8.** Records Retention. All recorded data shall be maintained at the facility by the permittee for a period of five years and made available to the Department upon request.
[Rule 62-213.440, F.A.C.]

**FW9.** When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.
[Rule 62-213.440, F.A.C.]

**Annual Reports and Fees**

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

**FW10.** Annual Operating Report. The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by April 1st of each year.
[Rule 62-210.370(3), F.A.C.]

**FW11.** Annual Emissions Fee Form and Fee. The annual Title V emissions fees are due (postmarked) by March 1st of each year. The completed form and calculated fee shall be submitted to: Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070. The forms are available for download by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: http://www.dep.state.fl.us/air/emission/tvfee.htm.
[Rule 62-213.205, F.A.C.]

**FW12.** Annual Statement of Compliance. The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit within 60 days after the end of each calendar year during which the Title V permit was effective.
[Rules 62-213.440(3)(a)2. & 3. and (3)(b), F.A.C.]

**FW13.** Prevention of Accidental Releases (Section 112(r) of CAA). If and when the facility becomes subject to 112(r), the permittee shall:

a. Submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: (703) 227-7650.

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

[40 CFR 68]

## Subsection A. EU No. 006 – Citrus Peel Dryer No. 2 and EU No. 007 – Citrus Peel Dryer No. 3

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

| EU No. | Brief Description |
|---|---|
| -006<br>-007 | The two (2) 60,000 pounds per hour (water removal rate) pressed citrus peel dryers (Citrus Peel Dryer Nos. 2 and 3) each have a maximum input rate of 50.0 tons per hour of pressed peel (including water). Each peel dryer has a maximum heat input rate of 93.6 million Btu per hour. The exhaust gases from the peel dryers are sent to the 60,000 pounds/hour, 120,000 pounds/hour, or 100,000 pounds/hour (water removal capacity) waste heat evaporators, which function as indirect heat exchangers to drive moisture from the press liquor (from the horizontal peel presses). The waste heat evaporators also reduce particulate matter emissions. Each peel dryer can be connected to any of the three waste heat evaporators. |

### Essential Potential to Emit (PTE) Parameters

**A.1.** Permitted Capacity. The maximum heat input rate for each dryer shall not exceed 93.6 million Btu per hour, daily average.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit 1050001-013-AC]

**A.2.** Methods of Operation. Natural gas shall be fired in these units. No. 2 distillate fuel oil with a maximum of 0.10 percent sulfur, by weight, can be fired only during periods of gas curtailment.
[Rule 62-213.410, F.A.C.; Construction Permit 1050001-013-AC]

**A.3.** Hours of Operation. These emissions units are allowed to operate, as necessary, to process 32.0 million boxes of citrus fruit in any consecutive 12-month period.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit 1050001-013-AC]

*{Permitting Note: For emission calculations, the operation of each of these emissions units is estimated not to exceed 4,500 hours per year.}*

**A.4.** Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements.
[Rule 62-297.310(2), F.A.C.]

### Emission Limitations and Standards

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

Unless otherwise specified, the averaging times for Specific Conditions A.5., A.6., and A.7. are based on the specified averaging time of the applicable test method.

**A.5.** Visible Emissions. Visible emissions from each dryer shall not exceed 20 percent opacity.
[Construction Permit 1050001-013-AC]

**A.6.** Particulate Matter. The total $PM/PM_{10}$ emissions from both dryers shall not exceed 26.0 pounds per hour and 58.5 tons in any consecutive 12-month period.
[Rule 62-212.400(12), F.A.C.; Construction Permit 1050001-013-AC]

**A.7.** Sulfur Dioxide. Sulfur dioxide emissions shall be limited by firing natural gas. No. 2 distillate fuel oil with a maximum of 0.10 percent sulfur, by weight, can be fired only during periods of gas curtailment. Measurement of the sulfur content of fuel oil shall be by latest American Society for Testing and Materials methods suitable for determining sulfur content. Sulfur dioxide emissions shall be determined by material balance using the sulfur content and amount of the fuel(s) fired in each emission source, assuming that for each pound of sulfur in the fuel fired, 2 pounds of sulfur dioxide are emitted. (*See Specific Condition A.10.*)
[Construction Permit 1050001-013-AC]

**Excess Emissions**

**A.8.** Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.
[Rule 62-210.700(1), F.A.C.]

**A.9.** Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.
[Rule 62-210.700(4), F.A.C.}

**Monitoring of Operations**

**A.10.** Fuel Sulfur Monitoring. The permittee has elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor or the permittee upon each fuel delivery. This protocol is allowed because the emissions unit does not have an operating flue gas desulfurization device. The fuel sulfur content, percent by weight, shall be evaluated using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or the latest edition.
[Rules 62-213.440 and 62-297.440, F.A.C.; Construction Permit 1050001-013-AC]

**Test Methods and Procedures**

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

**A.11.** Test Methods. Required tests shall be performed in accordance with the following reference methods:

| Method | Description of Method and Comments |
|---|---|
| 1-4 | Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content |
| 5 | Determination of Particulate Matter Emissions from Stationary Sources |
| 9 | Visual Determination of the Opacity of Emissions from Stationary Sources |

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

[Rule 62-297.401, F.A.C.]

**A.12.** Common Testing Requirements. Tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit.
Additionally, since the two dryers are served by three waste heat evaporators and each dryer can be connected to any of the waste heat evaporators, testing shall be conducted on the stack(s) that are, at the time, exhausting gases from the corresponding dryer (e.g., if a dryer is exhausting through two waste heat evaporators, testing shall be conducted *simultaneously* on both stacks).
[Rule 62-297.310, F.A.C.]

**A.13.** Annual Compliance Tests Required. During each federal fiscal year (October 1st to September 30th), each citrus peel dryer shall be tested to demonstrate compliance with the emissions standards for particulate matter and visible emissions.
[Rule 62-297.310(7), F.A.C.; Construction Permit No. 1050001-013-AC]

*{Permitting Note: The permittee may request a reduction in test frequency following five consecutive tests showing compliance with the combined $PM/PM_{10}$ hourly limit of Specific Condition A.6.}*

**Recordkeeping and Reporting Requirements**

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

**A.15.** Fuel Sulfur Content Records. The permittee shall keep records of all fuel analysis provided by the vendor or the permittee verifying the liquid fuel sulfur content upon each fuel delivery.
[Rule 62-4.070(3), F.A.C.; Construction Permit 1050001-013-AC]

**A.16.** Heat Input Recordkeeping. In order to provide information to document compliance with the fuel heat input rate limitations of Specific Condition A.1., the permittee shall monitor and maintain daily record logs of the amount of each fuel used and the hours of operation. The logs shall be maintained on file and shall be made available to the Department upon request.
[Rule 62-4.070(3), F.A.C.; Construction Permit 1050001-013-AC]

**A.17.** $PM/PM_{10}$ Recordkeeping. In order to document compliance with specific condition A.6., the owner or operator shall make and maintain monthly and rolling 12-month records of particulate emissions to demonstrate compliance with this limitation, based on the most recent stack test results multiplied by the hours of operation each month. The records shall be maintained on file and shall be made available to the Department upon request.
[Rule 62-4.070(3), F.A.C.; Construction Permit 1050001-013-AC]

**Other Requirements**

**A.18.** Best Management Practices for Carbon Monoxide. The facility shall operate its citrus peel dryers in accordance with the manufacturer's operating manual, or recommended operating practices provided by the manufacturer, equipment vendor, or a professional engineer registered in Florida, as well as with the practices described in this paragraph. The facility shall report to the Department any failure to follow these practices, and shall make such report in writing within 7 days from discovery of such failure. Records and copies of reports shall be maintained on site for a period of five years and shall be made available to the Department upon request. The facility shall:

a. Train dryer operators to perform the operating practices of this paragraph using the manuals and plans described, and allow only trained employees to operate dryers;
b. Maintain a written plan with operating procedures for startup, shutdown and malfunction of the equipment, and follow that plan during these events;
c. Operate and maintain the burner and burner controls to maintain a proper air to fuel ratio;
d. Visually check the flame characteristics once per operating shift;
e. Monitor the moisture content of the dried peel exiting the dryer on a daily basis, and maintain that moisture content greater than six percent by weight at all times during operation;
f. Make burner and burner control adjustments on an annual basis, or more frequently as required by visual checks;
g. Perform an inspection of combustion equipment as prescribed by the equipment manufacturer or registered professional engineer, but no less often than annually, and replace parts that are worn or improperly operating;
h. Keep records of combustion operations that document the operating practices described in this paragraph, such documentation shall include a manual, which can be the manufacturer's operation manual, and daily logs; and
i. Document maintenance performed on equipment, and all normal processing equipment and operating practices changes.

[Rule 62-4.070(3), F.A.C.; Construction Permit 1050001-013-AC]

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

| EU No. | Brief Description |
|---|---|
| -009<br>-010 | The two citrus peel pellet coolers (Pellet Coolers Nos. 2 and 3) each have a maximum rated capacity of 24.0 tons per hour. Dried citrus peel from peel dryers is sent to the pellet mill where molasses is added and pellets formed for use as an animal feed supplement. Pellets are then sent to the pellet coolers. Cyclone dust collectors (8,000 acfm each) are used to return any suspended product to the mill for reprocessing. |

**Essential Potential to Emit (PTE) Parameters**

**B.1.** Permitted Capacity. The capacity of the pellet coolers are determined by the capacity of the citrus peel dryers.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit 1050001-013-AC]

*{Permitting Note: The pellet cooler inputs are equal to the output of dried peel from the peel dryers.}*

**B.2.** Hours of Operation. These emissions units are allowed to operate, as necessary, to process 32.0 million boxes of citrus fruit in any consecutive 12-month period.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit 1050001-013-AC]

*{Permitting Note: For emission calculations, the operation of each of these emissions units is estimated not to exceed 4,500 hours per year.}*

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

**Emission Limitations and Standards**

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

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

**B.4.** Visible Emissions. Visible emissions from each pellet cooler shall not exceed 5 percent opacity.
[Construction Permit 1050001-013-AC]

**B.5.** Particulate Matter. The total $PM/PM_{10}$ emissions from both pellet coolers shall not exceed 1.0 pounds per hour and 2.25 tons in any consecutive 12-month period.
[Rule 62-212.400(12), F.A.C.; Construction Permit 1050001-013-AC]

**Excess Emissions**

**B.6.** Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.
[Rule 62-210.700(1), F.A.C.]

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

**Test Methods and Procedures**

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

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

| Method | Description of Method and Comments |
|---|---|
| 1-4 | Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content |
| 5 | Determination of Particulate Matter Emissions from Stationary Sources |
| 9 | Visual Determination of the Opacity of Emissions from Stationary Sources |

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

[Rule 62-297.401, F.A.C.]

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

**B.10.** Annual Compliance Tests Required. During each federal fiscal year (October 1st to September 30th), each pellet cooler shall be tested to demonstrate compliance with the emissions standards for visible emissions.
[Rule 62-297.310(7), F.A.C.; Construction Permit 1050001-013-AC]

**B.11.** Compliance Test Prior To Renewal. Compliance test shall be performed for particulate matter emissions from each pellet cooler between January 1, 2015 and April 30, 2015. The test shall occur prior to obtaining a renewed operating permit to demonstrate compliance with the hourly emission limit in Specific Conditions B.5.
[Rules 62-210.300(2)(a) and 62-297.310(7)(a), F.A.C.; Construction Permit 1050045-013-AC]

*{Permitting Note: The time period for particulate matter emissions testing represents the end of the last citrus processing season prior to permit renewal.}*

**Recordkeeping and Reporting Requirements**

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

## Subsection C. EU No. 001 – 800 Horsepower Boiler, EU No. 008 – 2,000 Horsepower Boiler, and EU No. 012 – 1,000 Horsepower Boiler

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

| EU No. | Brief Description |
|---|---|
| -001 | The high efficiency 800 Horsepower Boiler is a Johnston 509 steam boiler with a maximum heat input of 31.0 million Btu per hour. The boiler was placed into service January 1, 1985. |
| -008 | The 2,000 Horsepower Boiler is a Johnston 509 steam boiler with a maximum heat input of 84.35 million Btu per hour. The boiler was placed into service March 15, 2000. |
| -012 | The 1,000 Horsepower Boiler is a Johnston 509 steam boiler with a maximum heat input of 38.5 million Btu per hour. The boiler was placed into service January 1, 2002. |

### Essential Potential to Emit (PTE) Parameters

**C.1.** Permitted Capacity. The combined maximum allowable heat input rate for all three boilers shall not exceed 153.85 million Btu per hour, daily average.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit 1050001-013-AC]

**C.2.** Methods of Operation. Natural gas shall be fired in these units. No. 2 distillate fuel oil with a maximum of 0.10 percent sulfur, by weight, can be fired only during periods of gas curtailment.
[Rule 62-213.410, F.A.C.; Construction Permit 1050001-013-AC]

**C.3.** Hours of Operation. These emissions units may operate continuously (8,760 hours/year).
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit 1050001-013-AC]

**C.4.** Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements.
[Rule 62-297.310(2), F.A.C.]

### Emission Limitations and Standards

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

Unless otherwise specified, the averaging times for Specific Conditions C.5., C.6., and C.7. are based on the specified averaging time of the applicable test method.

**C.5.** 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.; Construction Permit 1050001-013-AC]

**C.6.** Particulate Matter. shall be limited by firing natural gas. No. 2 distillate fuel oil with a maximum of 0.10 percent sulfur, by weight, can be fired only during periods of gas curtailment.
[Rule 62-296.406(2), F.A.C.; Construction Permit 1050001-013-AC]

**C.7.** Sulfur Dioxide. Sulfur dioxide shall be limited by firing natural gas. No. 2 distillate fuel oil with a maximum of 0.10 percent sulfur, by weight, can be fired only during periods of gas curtailment. Measurement of the sulfur content of fuel oil shall be by latest American Society for Testing and Materials methods suitable for determining sulfur content. Sulfur dioxide emissions shall be determined by material balance using the sulfur content and amount of the fuel(s) fired in each emission source, assuming that for each pound of sulfur in the fuel fired, 2 pounds of sulfur dioxide are emitted. (*See Specific Condition C.11.*)
[Rule 62-296.406(3), F.A.C.; Construction Permit 1050001-013-AC]

**Excess Emissions**

**C.8.** Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.
[Rule 62-210.700(1), F.A.C.]

**C.9.** Excess Emissions Allowed. Excess emissions from existing fossil fuel steam generators resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.
[Rule 62-210.700(2), F.A.C.]

**C.10.** Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.
[Rule 62-210.700(4), F.A.C.]

**Monitoring of Operations**

**C.11.** Fuel Sulfur Monitoring. The permittee has elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor or the permittee upon each fuel delivery. This protocol is allowed because the emissions unit does not have an operating flue gas desulfurization device. The fuel sulfur content, percent by weight, shall be evaluated using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or the latest edition.
[Rules 62-213.440, 62-296.406(3), and 62-297.440, F.A.C.; Construction Permit 1050001-013-AC]

**Test Methods and Procedures**

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

**C.12.** Test Methods. Required tests shall be performed in accordance with the following reference methods:

| Method | Description of Method and Comments |
|---|---|
| 9 | Visual Determination of the Opacity of Emissions from Stationary Sources |

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

[Rule 62-297.401, F.A.C.]

**C.13.** Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit.
[Rule 62-297.310, F.A.C.]

**C.14.** Annual Compliance Tests Required. During each federal fiscal year (October 1st to September 30th), each boiler shall be tested to demonstrate compliance with the emissions standards for visible emissions.
[Rule 62-297.310(7), F.A.C.]

**Recordkeeping and Reporting Requirements**

**C.15.** Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

**C.16.** Fuel Sulfur Content Records. The permittee shall keep records of all fuel analysis provided by the vendor or the permittee verifying the liquid fuel sulfur content upon each fuel delivery.
[Rule 62-4.070(3), F.A.C.; Construction Permit 1050001-013-AC]

**C.17.** Heat Input Recordkeeping. In order to provide information to document compliance with the fuel heat input rate limitation of Specific Condition C.1., the permittee shall monitor and maintain daily record logs of the amount of each fuel used and the hours of operation. The logs shall be maintained on file and shall be made available to the Department upon request.
[Rule 62-4.070(3), F.A.C.; Construction Permit 1050001-013-AC]

**Other Requirements**

**C.18.** Best Management Practices for Carbon Monoxide. The facility shall operate its boilers in accordance with the manufacturer's operating manual, or recommended operating practices provided by the manufacturer, equipment vendor, or a professional engineer registered in Florida, as well as with the practices described in this paragraph. The facility shall report to the Department any failure to follow these practices, and shall make such report in writing within 7 days from discovery of such failure. Records and copies of reports shall be maintained on site for a period of five years and shall be made available to the Department upon request. The facility shall:

a. Train boiler operators to perform the operating practices of this paragraph using the manuals and plans described, and allow only trained employees to operate boilers;

b. Maintain a written plan with operating procedures for startup, shutdown and malfunction of the equipment, and follow that plan during these events;

c. Operate and maintain the burner and burner controls to maintain a proper air to fuel ratio;

d. Visually check the flame characteristics once per operating shift;

e. Make burner and burner control adjustments on an annual basis, or more frequently as required by visual checks;

g. Perform an inspection of combustion equipment as prescribed by the equipment manufacturer or registered professional engineer, but no less often than annually, and replace parts that are worn or improperly operating;

h. Keep records of combustion operations that document the operating practices described in this paragraph, such documentation shall include a manual, which can be the manufacturer's operation manual, and daily logs; and

i. Document maintenance performed on equipment, and all normal processing equipment and operating practices changes.

[Rule 62-4.070(3), F.A.C.; Construction Permit 1050001-013-AC]

**C.19.** Federal Rule Requirements. In addition to the specific conditions listed above, Emissions Unit Nos. 008 and 012 are also subject to the applicable requirements contained in 40 CFR 60 Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units), as adopted by reference in Rule 62-204.800(8)(b), F.A.C.; as well as Subpart A (General Provisions) for 40 CFR 60, adopted by reference in Rule 62-204.800(8)(d), F.A.C. The applicable provisions of Subpart Dc are listed below:

Applicability and delegation of authority.
60.40c(a)

Definitions.
60.41c

Standard for sulfur dioxide.
60.42c

Standard for particulate matter.
60.43c

Compliance and performance test methods and procedures for sulfur dioxide.
60.44c(h)

Compliance and performance test methods and procedures for particulate matter.
60.45c

Reporting and recordkeeping requirements.

The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted.
60.48c(g)

The reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.
60.48c(j)

[Rules 62-204.800 and 62-213.440, F.A.C.]

*{Permitting Note: The emissions limits in Specific Conditions C.5. – C.7. are at least as stringent as those specified in 40 CFR 60 Subpart Dc.}*

## Subsection D. EU No. 015 - Two (2) Existing Emergency Stationary CI RICE Diesel Engines > 500 HP

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

| EU No. | Brief Description |
|---|---|
| -015 | Two existing stationary compression ignition (CI) reciprocating internal combustion engine (RICE) provide stand-by electrical power during emergency conditions. Both engines are rated at 2,518 horsepower, were manufactured by Caterpillar, and were placed in service in 1991. Engine serial numbers are 25Z02439 and 25Z02441. |

*{Permitting Note: The engines are exempt from the construction permit requirements of Rule 62-210.300(1), F.A.C., in accordance with the provisions of Rule 62-210.300(3)(a)35 ., F.A.C. (Emergency Generators).}*

*{Stationary CI RICE Engine Listing Note: The information on the engines was submitted in the Title V air operation permit application received February 21, 2011}*

***IMPORTANT REGULATORY CLASSIFICATIONS*** – These engines are regulated under NESHAP 40 CFR 63 Subpart ZZZZ (National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines), as amended in the 08/20/10 Federal Register, as existing stationary Reciprocating Internal Combustion Engines (RICE) at an area source of hazardous air pollutants (HAPs).

### Operation Requirements

**D.1.** Operating Hours. There are no specific limitations on operating hours for these existing stationary engines.

*{Permitting Note: In order to be considered an emergency RICE subject to the 40 CFR 63 Subpart ZZZZ requirements for emergency CI RICE, the engine must be operated in accordance with the requirements specified in 40 CFR 63.6640(f) (see **Appendix NESHAP Subpart ZZZZ**).}*

### Applicable Federal Requirements

**D.2.** Federal 40 CFR 63 NESHAP Subpart ZZZZ Requirements. The engines in this section are subject to the applicable requirements of NESHAP 40 CFR 63 Subpart ZZZZ (National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE)), which is attached to this permit as Appendix NESHAP Subpart ZZZZ, as it applies to existing RICE at area sources of hazardous air pollutants (HAP). The applicable requirements are shown in the Summary of NESHAP 40 CFR Part 63 Subpart ZZZZ Applicable Requirements for Existing Stationary Reciprocating Internal Combustion Engines (RICE) at Area Sources of HAP, attached to this permit, under the category Emergency CI > 500 HP.
[Rule 62-4.070(3), F.A.C.; NESHAP 40 CFR 63 Subpart ZZZZ]

*{Compliance Note: The final compliance date for the applicable Subpart ZZZZ requirements for the existing compression ignition (CI) RICE engines at this area source of HAP is 05/03/2013. (40 CFR 63.6595(a)(1).}*

**D.3.** Federal NESHAP 40 CFR 63 Subpart A General Provisions Requirements. The engines in this section are subject to the applicable requirements of NESHAP 40 CFR 63 Subpart A (General Provisions for 40 CFR 63), as adopted and incorporated by reference in Rule 62-204.800(11)(d), F.A.C., which is attached to this permit as Appendix NESHAP Subpart A. The applicable requirements of Subpart A are shown in Table 8 to 40 CFR 63 Subpart ZZZZ.
[Rule 62-204.800(11)(d), F.A.C.; NESHAP 40 CFR 63 Subpart ZZZZ]

## SECTION IV. APPENDICES.

**The Following Appendices Are Enforceable Parts of This Permit:**

Appendix A, Glossary

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

Appendix NESHAP Subpart A, General Provisions

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

Appendix NSPS Subpart A, General Provisions

Appendix NSPS Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

Appendix RR, Facility-wide Reporting Requirements

Appendix TR, Facility-wide Testing Requirements

Appendix TV, Title V General Conditions

Summary of NESHAP 40 CFR Part 63 Subpart ZZZZ Applicable Requirements for Existing Stationary Reciprocating Internal Combustion Engines (RICE) at Area Sources of HAP