Title V Air Operation Permit Renewal
Permit No. 0270003-016-AV

## APPLICANT

The applicant for this project is Peace River Citrus Products, Inc. The applicant's responsible official and mailing address are: Bart Plymale, Vice President of Operations, Peace River Citrus Products, Inc., PO Box 730, Arcadia, FL 34265.

## FACILITY DESCRIPTION

The applicant operates Peace River Citrus Products, Inc., which is located at 4104 Hwy 72, Arcadia, Florida.

This is a juice processing facility with one citrus peel dryer, one citrus peel pellet cooler, three 750 HP boilers, and process equipment (which includes fruit washers, oil and juice extraction equipment, cooling towers, fruit and peel conveyance equipment, a lime silo and peel storage).

The Gulf, model number 40, citrus peel dryer has a design process input rate of 32.6 tons/hour of pressed peel and lime (approx. 28% solids), with a maximum product output rate of 10.2 tons/hour of dried peel (approx. 90% solids). The peel dryer is fired at a maximum heat input rate of 54.0 MMBtu/hr. The exhaust gas from the peel dryer is sent to a 40,000 pound/hour (water removal capacity) waste heat evaporator which functions as an indirect heat exchanger to drive moisture from the press liquor (from the vertical peel press), and also acts as a particulate scrubber control device. The initial startup date of the peel dryer was 1980. This emissions unit is regulated under Rule 62-210.300, F.A.C., Permits Required, and the applicable requirements of Construction Permit 0270003-014-AC.

The Citrus Peel Pellet Cooler has a capacity of 20 tons per hour and a design process input rate of 10.2 tons per hour of dried citrus peel. Dried citrus peel from the peel dryer is sent to the pelletizer where molasses is added and the mixture is compressed into hard pellets for use as an animal feed supplement. The process up to this point is totally enclosed. The pellets are then conveyed into the pellet cooler that has a fan that pulls outside air up through the pellets to cool them to near ambient temperature. The air is discharged to the atmosphere through a CPM Model 2726-7 cyclone collector. Any suspended product collected by the cyclone is returned to the pelletizer for reprocessing. This emissions unit is regulated under Rule 62-210.300, F.A.C., Permits Required, and the applicable requirements of Construction Permit 0270003-014-AC.

Three (3) 750 HP Johnson fire-tube boilers are used to provide steam in a citrus processing facility. These boilers are designated as Boiler No. 1 (North), in service November 29, 1993; Boiler No. 2 (South), in service November 29, 1993; and, Boiler No. 3 (southernmost boiler), in service May 1, 1997. Each boiler is fired at a maximum heat input rate of 29.05 MMBtu/hr. These emissions units are regulated under NSPS - 40 CFR 60, Subpart Dc, Small Industrial-Commercial-Institutional Steam Generating Units, adopted and incorporated by reference in Rule 62-204.800(7)(b)4.; and, Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with less than 250 Million Btu per Hour Heat Input, New and Existing Units. The applicant states the facility is not a major source of hazardous air pollutants, therefore the MACT requirements of 40 CFR 63, Subpart DDDDD will not apply to the facility's boilers.

Also included in this permit are miscellaneous insignificant emissions units and/or activities.

## PROJECT DESCRIPTION

The purpose of this permitting project is to renew the existing Title V permit for the above referenced facility.

## PROCESSING SCHEDULE AND RELATED DOCUMENTS

Initial (after Citrus Statute repermitting) Title V Air Operation Permit issued August 2, 2006
Application for a Title V Air Operation Permit Renewal received December 13, 2010
Additional Information Request dated January 21, 2011

Additional Information Responses received February 8, 10, 11, and 14, 2011.
Notice of Intent to Issue Air Permit issued ***TBD***
Public Notice Published ***TBD***

## PRIMARY REGULATORY REQUIREMENTS

Title III: The facility is not identified as a major source of hazardous air pollutants (HAP).

Title V: The facility is a Title V major source of air pollution in accordance with Chapter 62-213, Florida Administrative Code (F.A.C.).

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

NSPS: The facility does operate units subject to the New Source Performance Standards (NSPS) of 40 Code of Federal Regulations (CFR) 60.

NESHAP: The facility does not operate units subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) of 40 CFR 63.

CAIR: The facility is not subject to the Clean Air Interstate Rule (CAIR) set forth in Rule 62-296.470, F.A.C.

CAM: Compliance Assurance Monitoring (CAM) does not apply to any of the units at the facility. The emissions units with emissions limits or standards at this facility are the citrus peel dryer with a $PM/PM_{10}$ standard and the citrus pellet cooler with a $PM/PM_{10}$ standard. The citrus peel dryer includes an integral waste heat evaporator with water spray heads whose purpose is to keep the heat transfer surfaces clean; in doing so it also reduces particulate matter. Since the waste heat evaporator is integral to the operation of the citrus peel dryer, it is not considered a control device. The citrus pellet cooler has a cyclone to return product to the process and may not be considered a control device; also, the uncontrolled emissions of $PM/PM_{10}$ are below major. For these reasons, the CAM requirements of 40 CFR 64 do not apply to these emissions units.

## PROJECT REVIEW

The following changes were made as part of this renewal:

Wrote the permit using the new Tallahassee Title V template.

Added Precautions to Prevent emissions of Unconfined Particulates.

Changed the name of EU 003 from Citrus Peel Pellet Mill to Citrus Peel Pellet Cooler and clarified the description with input from the permittee to more accurately reflect the function of the emission unit.

Took a recordkeeping condition (S.C. 14) out of the facility wide section and added it to the peel dryer and pellet cooler sections (S.C. A.16. and B.12.).

Removed superfluous Specific Conditions (C.10. and C.11.).

Updated Equivalent Emissions in Table 1 for $SO_2$ for the peel dryer and boiler to figures based on the maximum heat input and operating hours.

## CONCLUSION

This project renews Title V air operation permit No. 0270003-015-AV, which was issued on August 2, 2006. This Title V air operation permit renewal is issued under the provisions of Chapter 403, Florida Statues (F.S.), and Chapters 62-4, 62-210 and 62-213, F.A.C.