



**FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION**

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

RICK SCOTT
GOVERNOR

CARLOS LOPEZ-CANTERA
LT. GOVERNOR

JONATHAN P. STEVERSON
SECRETARY

PERMITTEE:

Pure Pine, LLC
Post Office Box No. 128
Williston, Florida 32696

Permit/Cert Number: 0750086-005-AO
Date of Issue: January 12, 2015
Expiration Date: May 7, 2017

Authorized Representative:
Mr. Eddie Hodge, President

Project: Air Operation Permit Revision

PROJECT AND LOCATION

This permit authorizes the revision of Permit No. 0750086-003-AO to incorporate Construction Permit No. 0750086-004-AC. The existing facility is a Wood Processing Plant (Standard Industrial Classification No. 2426). The facility is located in Levy County at approximately 3 miles E of SR 41 in Williston, Florida. The UTM coordinates are Zone 17, 361.00 km East, and 3244.00 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.

SECTION 1. GENERAL INFORMATION

Executed in Jacksonville, Florida.



Richard S. Rachal III, P.G.
Program Administrator
Permitting and Cleanup Programs

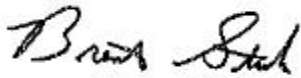
FILING AND ACKNOWLEDGEMENT & CERTIFICATE OF SERVICE

Filed on this date pursuant to § 120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged. The undersigned hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit) and all copies were sent before the close of business on January 12, 2015 to the listed persons.

Eddie Hodge, Pure Pine, LLC- (derbygoldinfo@aol.com)

Will Irby, Pure Pine, LLC- (www4w@aol.com)

Pradeep Raval, Koogler & Associates- (praval@kooglerassociates.com)



Clerk

01/12/2015
Date

SECTION 1. GENERAL INFORMATION

FACILITY AND PROJECT DESCRIPTION

The facility operates a 16.0 MMBtu/hr, Wood-Fired, Triple-Pass, Rotary Dryer. This facility produces both wet and dried wood shavings for use in animal bedding.

Wet logs are processed through one of five shaving machines and cut into the desired size. Each of the shaving machines has a maximum capacity of about 40 yards of shavings per hour. Wet shavings are fed through the rotary dryer to reduce moisture. From the rotary dryer, the shavings are routed to a cyclone and through a screen system in order to separate the wood shavings from the smaller wood particles (fines and sawdust). The separated fines and sawdust are routed to a storage bin before being feed, by auger, to the combustion zone of the rotary dryer as the fuel source. Some of the wet shavings are shipped directly to the customers.

The drying process is equipped with computer controls. The dryer temperature typically varies between 400 °F and 600 °F. The dryer is allowed to operate continuously and the dryer startup time is approximately 30 minutes. The maximum heat input rate for the burner is estimated to be 16 MMBtu/hr, based on 2000 lbs of sawdust burned per hour with a heat value of 8000 Btu/lb.

Particulate Matter emissions from the dryer are controlled by the cyclone. The cyclone is about 10 ft in diameter and about 35 ft tall. The air volumetric flow is approximately 500 cfm.

The dry and wet shavings are sold as product. The production rate of dry shavings is approximately 1 ton/hour. The production rate of dry shavings is determined on a daily basis as the product is packaged. Based on continuous operation, the facility has the potential to produce up to 8,760 tons of dried shavings per year.

This project revises the operation permit to include the addition of two electric shaving mills (included in the five mentioned above) and two electric pelletizers and to increase the heat input to EU 001 from 8.0 MMBtu/hr to 16.0 MMBtu/hr.

The facility is subject to the following regulations: Florida Administrative Code Chapters 62-4; 62-103; 62-204; 62-210; 62-212, 62-296, and 62-297. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting requirements or regulations.

SECTION 1. GENERAL INFORMATION

The existing facility consists of the following permitted emissions units.

Facility ID No. 0750086	
Eu ID No.	Emission Unit Description
001	16.0 MMBtu/hr wood-fired burner & rotary dryer. Air Pollution Control Equipment: One (1) Heil Cyclone. Gas Volume.....500 ACFM Gas Temperature.....150 °F Removal efficiencyestimated to be 99% (for shavings)

Potential to Emit: Emissions factors from stack tests conducted at a similar facility are used to estimate potential emissions of the dryer. These emissions factors are considered more conservative since the tested unit has a higher heat input rate (20MMBtu/hr) and higher temperature (1400 °F), which is likely to emit more VOCs and HAPs from the drying process. The estimated emissions factors and the potential emissions are as shown below.

Pollutant (s)	Emissions Factor (lb/tons of shavings produced)	Emissions Rate (lb/hr)	Emissions Rate (ton/yr)
PM/PM10	1.33	1.3	5.8
SO2	0.03	0.03	0.1
NOx	0.3	0.3	1.3
CO	2.8	2.8	12.3
VOC	8.7	8.7	38.1
Methanol	0.047	0.05	0.2
Formaldehyde	0.038	0.04	0.2

Emissions based on: 8760 hours per year, 2000 lb per hour fuel rate, 8000 btu/lb HHV wood, 16 MMBtu/hour heat rate and 1 ton per hour production rate.

All PM emissions from the electrical shavers and electrical pelletizer are fugitive and there is no control equipment.

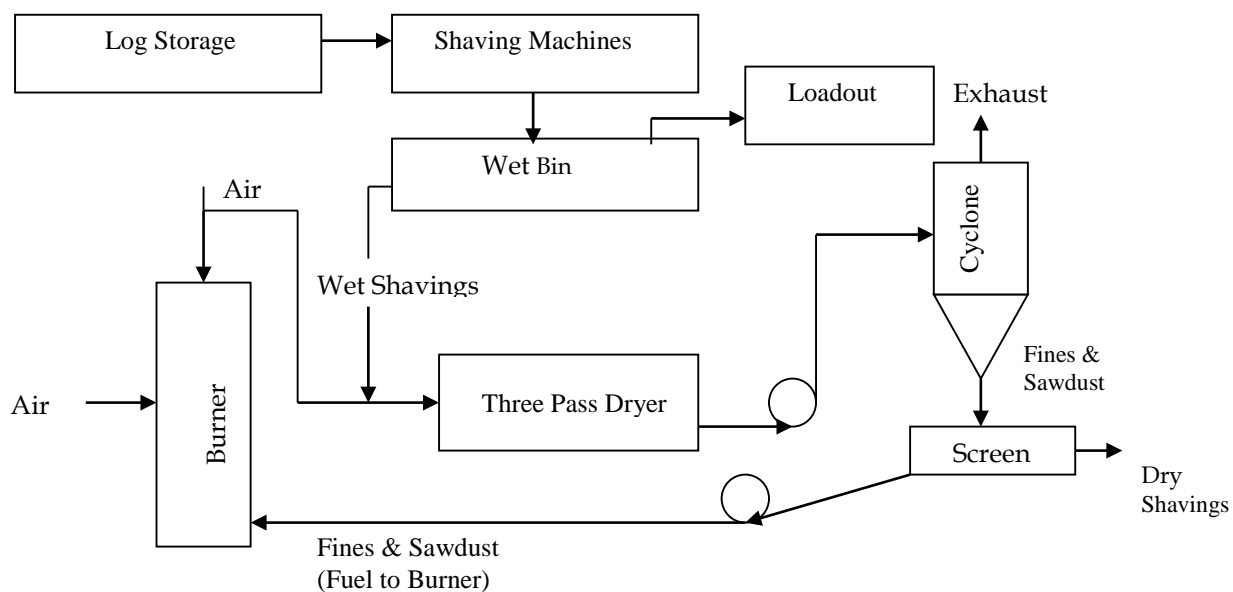
Objectionable Odor: No odor problems are expected at this facility.

Compliance: The stack atop the burner is not an exhaust point to the atmosphere; it is an opening for ambient air intake. If “blue haze” emissions occur through cyclone’s stack (exhaust), it means that the gases are too hot and the wood’s resin is being cooked out. During the winter there may be a white, condensed water vapor plume visible from the cyclone’s stack (exhaust). It is preferable that VE test be conducted during warm weather. It is expected that only small amounts of PM (ashes and/or sawdust) will escape as emissions from the cyclone. If a significant amount of PM emissions are observed, it may be an indication of improper operation, malfunction, or the potential PM emissions were underestimated.

SECTION 1. GENERAL INFORMATION

REGULATED EMISSION UNITS:

<u>EU No.</u>	<u>EU Description</u>	<u>Control Device</u>
001	16.0 MMBtu/hr Wood-Fired Burner & Rotary Dryer	Heil Cyclone



SECTION 1. GENERAL INFORMATION

FACILITY REGULATORY CLASSIFICATIONS

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

The facility is a minor source of air pollution because the potential emissions of regulated air pollutants are less than 100 tons per year, and individual and total hazardous air pollutants are less than 10 and 25 tons per year, respectively in accordance with Chapter 62-210, F.A.C.

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 – Non-Title V Source received January 9, 2015.

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 Program. The Northeast District Office'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 Office.
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 Northeast District Office is: 8800 Baymeadows Way West, Suite 100, Jacksonville, Florida 32256 and Phone Number (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.
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 permittee from compliance with any applicable federal, state, or local permitting or regulations.
5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time.

[Rule 62-4.080, F.A.C.]

6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification.

[Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

7. Construction Permit Required. Unless exempt from permitting pursuant to Rule 62-210.300(3)(a) or (b), F.A.C., or Rule 62-4.040, F.A.C., an air construction permit shall be obtained by the owner or operator of any proposed new, reconstructed, or modified facility or emissions unit, or any new pollution control equipment prior to the beginning of construction, reconstruction pursuant to CFR 60.15 or 63.2, or modification of the facility or emissions unit or addition of the air pollution control equipment; or to establish a PAL; in accordance with all applicable provisions of Chapter 62-210, F.A.C., Chapter 62-212, F.A.C., and Chapter 62-4, F.A.C.

[Rule 62-210.300(1)(a), F.A.C.]

SECTION 2. ADMINISTRATIVE REQUIREMENTS

8. Application for Non-Title V Operation Permit Renewal: A completed Application for Air Permit –Non-Title V Source (DEP Form No. 62-210.900(3), F.A.C.), 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 permittee shall submit the appropriate application form, processing fee, and compliance test reports as required by this permit.

[Rules 62-4.030, 62-4.055, 62-4.220, 62-210.300(1)(a), and 62-4.210.300(2), F.A.C.]

9. The ID Number and Project Name for this source shall be used on all correspondences.

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. EU001 Wood-Fired Burner and Rotary Dryer

This section of the permit addresses the following emissions unit:

ID No.	Brief Description
001	16.0 MMBtu/hr wood-fired burner & rotary dryer. Air Pollution Control Equipment: One (1) Heil Cyclone. Gas Volume.....500 ACFM Gas Temperature.....150 °F Removal efficiencyestimated to be 99% (for shavings)

{ This facility is subject to the requirements of Rule 62.296.410, F.A.C }

OPERATIONAL PARAMETERS

- A.1. Hours of Operation.** The hours of operation are not restricted: 24 hours/day; 7 days/week; 52 weeks/year (8760 hours/year and 8784 during a Leap Year).
[Rules 62-4.160(2) & (14)(b), 62-210.200(PTE), F.A.C.]
- A.2. Maximum Operation Rate.** The maximum heat input rate shall not exceed 16 MMBtu/hour.
[Permit No. 0750086-004-AC, Rules 62-4.160(2) & (14)(b), 62-210.200(PTE), F.A.C.]
- A.3. Method of Operation- Fuels.** The burner is carbonaceous (wood waste) fired.
[Rule 62-210.200(PTE), F.A.C.]
- A.4. Wood-Fired Burner & Rotary Dryer -Visible Emissions.** The Visible emissions from this emissions unit shall not exceed 20 percent opacity except for 27 percent opacity for not more than 6 minutes in any one hour.
[Rule 62.296.410(2)(a), F.A.C.]
- A.5. Control Device.** The cyclone shall be maintained in good operating condition and shall remain in place at all times during operation. If there is a malfunction on the control unit, the owner or operator shall immediately take corrective actions to minimize emissions.
[Rule 62-4.070(3) F.A.C]

TEST METHODS AND PROCEDURES

- A.6. Wood-Fired Burner & Rotary Dryer -Visible Emissions.** The Visible Emissions test method shall be EPA Method 9, as described in 40 CFR Part 60, Appendix A-4. This compliance test shall be conducted on an annual basis, at least once each federal fiscal year (October 1 – September 30). The test shall be conducted at the common stack located on top of the cyclone.

[Rules 62-296.410(3)(a), 62-297.310(7)(a)4.a., F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. EU001 Wood-Fired Burner and Rotary Dryer

RECORDS AND REPORTS

A.7. **Recordkeeping.** Owner or operator shall record the following data:

- a. Monthly production rate for dried shavings.
- b. Monthly VOCs, individual HAP and total HAPs emissions.
- c. Total estimated emissions of VOC, Individual HAP and Total HAPs for 12-consecutive month.
- d. Copy of all calculations and supporting documents for VOC and HAP emission rate estimation.

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