



**TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION**

APPLICANT

Lehigh Hanson
840 West Avenue
Deland, Florida 32720

Facility ID No. 1070043

PROJECT

Project No. 1070043-005-AF
Application FESOP
Renewal

COUNTY

Putnam

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Northeast District Office
Waste and Air Resource Management
8800 Baymeadows Way West, Suite 100
Jacksonville, Florida 32256

April 30, 2014

1. GENERAL PROJECT INFORMATION

Air Pollution Regulations

Projects at stationary sources with the potential to emit air pollution are subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The statutes authorize the Department of Environmental Protection (Department) to establish regulations regarding air quality as part of the Florida Administrative Code (F.A.C.), which includes the following applicable chapters:

Table 1 - Applicable Rules from the F.A.C.

Chapter	Description
62-4	Permits
62-204	Air Pollution Control – General Provisions
62-210	Stationary Sources of Air Pollution – General Requirements
62-212	Stationary Sources – Preconstruction Review
62-296	Stationary Sources – Emission Standards
62-297	Stationary Sources – Emissions Monitoring

In addition, the U. S. Environmental Protection Agency (EPA) establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 specifies New Source Performance Standards (NSPS) for numerous industrial activities. Part 61 specifies National Emission Standards for Hazardous Air Pollutants (NESHAP) based on specific pollutants. Part 63 specifies NESHAP based on the Maximum Achievable Control Technology (MACT) for numerous industrial categories.

Federal regulations adopted by reference are given in Rule 62-204.800, F.A.C. State regulations approved by EPA are given in 40 CFR 52, Subpart K – Florida, also known as the State Implementation Plan (SIP) for Florida.

Glossary of Common Terms

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of this permit.

Facility Process Description and Location

Hanson Pressure Pipe, Inc. Palatka Plant is an existing Pressure Pipe Production Plant, which is categorized under Standard Industrial Classification Code No. 3272. The facility is located in Putnam County at 245 Comfort Road in Palatka, Florida. The UTM coordinates of the existing facility are Zone 17, 436.53 km East, and 3286.5 km North. This site is in an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to state and federal Ambient Air Quality Standards (AAQS).

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Facility Regulatory Categories

- 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.
- 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.
- This facility has no emissions units subject to NSPS (40 CFR Part 60)
- This facility has no emissions units subject to NESHAP (40 CFR Part 61 or Part 63)

Project Description

This project is for the renewal of Permit No. 1070043-004-AF.

The facility includes a concrete batching operation and a pipe coating and forming operation.

The concrete batching operation includes five concrete batch plants (EU 001-005), all subject to the requirements of Rule 62-296.414, F.A.C. for Concrete Batch Plants. Each of the concrete batch plants is equipped with a Griffin Environmental Model 36-LS dust collector (at the cement bins and silo), that controls PM emissions generated from the loading of cement.

Each weigh hopper and mixer of each concrete batch plant is equipped with an expandable, close loop design dust bag for PM control. The installation of the close loop design dust bags provide reasonable assurance that the 5% opacity standard of Rule 62-296.414(1), F.A.C is met. The dust bags compensate for air being displaced by charging cement without creating positive pressure inside the weigh hoppers and mixers. The air bags then return collected dust material back to the mixer or weigh hopper during the concrete mixing process.

The Griffin Environmental Model 36-LS cement bin and silo dust collector exhaust point shall be tested annually in order to demonstrate compliance with the visible emissions limit as specified in Specific Condition A.3. of the permit.

Visible emission from the storage and transfer of sand and aggregates at the facility is considered negligible, as the sand contains a 3 to 5% moisture content. Both materials are stored in covered hoppers and open bins.

The pipe coating operation consists of several processes that include the formation of steel cylinders by welding (exempt per Rule 62-210.300(3)(a)13., F.A.C) to produce vertical and horizontal pressure pipes and the subsequent curing in kilns (five natural gas Kilns, four with a maximum heat input of 2.5MMbtu/hr and one with a maximum heat input of 3.5MMbtu/hr.) These units are exempt from permitting per Rule 62-210.300(3)(a)34., F.A.C. The facility also consists of a sand blasting operation for the sand blasting of specific pressure pipes. The sand blasting operation is exempt per Rule 62-210.300(3)(b)1., F.A.C.

VOC and HAP emissions are generated from the coating, paint and form oil materials used in the pressure pipe coating and forming operations at the facility. The facility has elected to synthetically limit facility-wide VOC and HAP emissions caps in order to retain minor source status. Compliance with the facility wide VOC/HAP emissions shall be accomplished through record keeping of a monthly log at the facility for each material that

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contains VOC and HAPs for a period of at least five years from the date the data is recorded. The log, at a minimum, shall contain the following:

Monthly

- a) Designation of the month and year of operation for which the records are being tabulated; and
- b) Consecutive 12-month total VOC, Total HAPs and individual HAP emissions rate.
- c) Documents or supporting justifications for VOC, Total HAPs and individual HAP emissions calculation including, but not limited to:
 - i. Material Safety Data Sheet (MSDS) or material specification sheet.
 - ii. Purchase receipt of the VOC containing materials or other supporting documents indicating the materials usage.

The owner or operator shall demonstrate compliance with the emissions cap as stated in Specific Condition No. B.1. of the permit by using Mass Balance Calculations as Specified in Appendix C (Common Conditions) of this permit. The owner or operator shall also summarize on a monthly basis the estimated VOC and HAP emissions. The monthly VOC/HAP, Total HAPs and VOC emissions shall be added to the total emissions rate from the previous 11 months to obtain the emissions rate in 12 consecutive months.

The exempt units are subject to the general visible emissions limiting standards of Rule 62-296.320(4)(b)1., F.A.C., as stated in the permit. Visible emissions compliance tests for these exempt units/activities are required in the event of a Special Compliance test in accordance with Rule 62-297.310(7)(b), F.A.C.

The following table summarizes the facility wide potential emissions and is for informational purposes only.

Pollutant	Emissions (tpy)
CO	4.87
NO _x	5.80
PM	87.37
PM ₁₀	26.43
SO ₂	.03
VOC	99.0
HAP	9.00
Total HAP	24.0

The VOC and HAPs emissions limit are requested by the applicant for operational flexibility.

Processing Schedule

4/29/14 Department received the Application for Air Permit

2. APPLICATION REVIEW

State Requirements

- **Chapter 62-210, F.A.C** **Stationary Sources – General Requirements**
- Rule 62-210. 300, F.A.C Permits Required
- Rule 62-210. 350, F.A.C Public Notice and Comment
- **Chapter 62-296, F.A.C** **Stationary Sources – Emissions Standards**
- Rule 62-296.320, F.A.C General Pollutant Emissions Limiting Standards
- Rule 62-296.414 F.A.C Concrete Batching Plants
- **Chapter 62-297, F.A.C** **Stationary Sources – Emissions Monitoring**
- Rule 62-297.310, F.A.C General Test Requirements
- Rule 62-297.320, F.A.C Standards for Persons Engaged in Visible Emissions Observations.

Federal NSPS Provisions

There are no New Source Performance standards that apply to any emission source at the facility.

Federal NESHAP Provisions

There are no National Emission Standards for Hazardous Air Pollutants that apply to any emission source at the facility.

3. DETERMINATION

The Department makes a determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the permit. No air quality modeling analysis is required because the project does not result in a significant increase in emissions. Brent Steele is the project engineer responsible for reviewing the application and drafting the permit. Additional details of this analysis may be obtained by contacting the project engineer at the Florida Department of Environmental Protection, Northeast District Office, 8800 Baymeadows Way West, Suite 100, Jacksonville, FL 32256, Phone: 904/256-1700.