TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

OWNER

Georgia-Pacific, LLC

PERMITTEE

Slaughter Fibers, Inc.
104 Macon Road
Palatka, FL 32177

Foley Chip Mill
ARMS Facility ID No. 1230059

PROJECT

Project No. 1230059-006-AO

COUNTY

Taylor, Florida

PERMITTING AUTHORITY

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

COMPLIANCE AUTHORITY

Florida Department of Environmental Protection
Northeast District Office
Compliance Assurance
8800 Baymeadows Way West, Suite 100
Jacksonville, Florida 32256

September 5, 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

The Foley Chip Mill is hardwood chip mill (SIC No. 2421). The facility is located at 3979 Stone Container Road, Perry, Florida 32348. This site is adjacent to the existing Buckeye Florida Limited Partnership Foley Mill. The UTM coordinates are zone 17, 256.4 km East; 3330.7 km North. This site is an area that is in attainment (or designated as unclassifiable) for all pollutants subject to a National Ambient Air Quality Standard (NAAQS).

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 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 **does not** have one or more emissions units subject to NSPS (40CFR 60).
- This facility **does not** have one or more emissions units subject to NESHAP (40 CFR 61 or Part 63)

Processing Schedule

09/02/14 Department received the Application for Air Permit – Non-Title V Source

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 the draft permit distributed with this evaluation.

2. PSD APPLICABILITY

General PSD Applicability

For areas currently in attainment with the state and federal AAQS or areas otherwise designated as unclassifiable, the Department regulates major stationary sources of air pollution in accordance with Florida's PSD preconstruction review program as defined in Rule 62-212.400, F.A.C. Under preconstruction review, the Department first must determine if a project is subject to the PSD requirements ("PSD applicability review") and, if so, must conduct a PSD preconstruction review. A PSD applicability review is required for projects at new and existing major stationary sources. In addition, proposed projects at existing minor sources are subject to a PSD applicability review to determine whether potential emissions *from the proposed project itself* will exceed the PSD major stationary source thresholds. A facility is considered a major stationary source with respect to PSD if it emits or has the potential to emit:

- 250 tons per year or more of any regulated air pollutant; or
- 100 tons per year or more of any regulated air pollutant and the facility belongs to one of the following 28 PSD-major facility categories: fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), Kraft pulp mills, Portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants, fossil fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants and charcoal production plants.

Once it is determined that a project is subject to PSD preconstruction review, the project emissions are compared to the "significant emission rates" defined in Rule 62-210.200, F.A.C. for the following pollutants: carbon monoxide (CO); nitrogen oxides (NO_X); sulfur dioxide (SO_2); particulate matter (PM); particulate matter with a mean particle diameter of 10 microns or less (PM_{10}); volatile organic compounds (VOC); lead (Pb); fluorides (Fl); sulfuric acid mist (SAM); hydrogen sulfide (H_2S); total reduced sulfur (TRS), including H_2S; reduced sulfur compounds, including H_2S; municipal waste combustor organics measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans; municipal waste combustor metals measured as particulate matter; municipal waste combustor acid gases measured as SO_2 and hydrogen chloride (HCl); municipal solid waste landfills emissions measured as non-methane organic compounds (NMOC); and mercury (Hg). In addition, significant emissions rate also means any emissions rate or any net emissions increase associated with a major stationary source or major modification which would construct within 10 kilometers of a Class I area and have an impact on such area equal to or greater than 1 $\mu g/m^3$, 24-hour average.

If the potential emission exceeds the defined significant emissions rate of a PSD pollutant, the project is considered "significant" for the pollutant and the applicant must employ the Best Available Control Technology (BACT) to minimize the emissions and evaluate the air quality impacts. Although a facility or project may be *major* with respect to PSD for only one regulated pollutant, it may be required to install BACT controls for several "significant" regulated pollutants.

Based on the information below from Permit Nos. 1230059-002-AC and 123059-003-AC, the highest potential emissions from the proposed temporary portable generator is estimated at 2.10 TPY NOx. No changes in emissions are being made from the construction permits; therefore, the project is not subject to PSD review.

The table summarizes the potential maximum emissions from the temporary use engine combined with the previously calculated potential emissions from the Chip Mill:

FOLEY CHIP MILL POTENTIAL FACILITY-WIDE EMISSIONS SUMMARY

	PM (tons)	**PM_{10} (tons)**	**$PM_{2.5}$ (tons)**	**NO_x (tons)**	**CO (tons)**	**SO_2 (tons)**	**VOC (tons)**
Chip Mill[1,2]	19.0	10.0	3.0				
Portable[3] Generator	0.14	0.14	0.15	2.10	0.47	0.14	1.46
Total	19.14	10.14	3.15	2.10	0.47	0.14	1.46

[1] Detailed emission calculations are available in Application No. 1230059-002-AC.

[2] Emissions based on 8,760 hours of operation

[3.] Annual emissions from the engine are based on the proposed estimated 504 hours per year maximum operating rate.

Facility Description

The Foley Chip Mill consists of a log yard, sawing, and debarking operations, chipping operations, and chip and bark handling. All energy consuming equipment at the facility are operated exclusively by electrical power, except that the facility is allowed the use of a portable gasoline /diesel fuel powered generator only during periods when electrical power supplied to the mill is temporarily interrupted. The facility estimates such interruptions to result in the generator being operated for no more than 504 hours per year in a typical year.

The Foley Chip Mill receives whole, hardwood logs and processes them into wood chips and hogged bark. Logging trucks deliver whole logs to the facility where they are placed into storage using a clamshell crane. When they are ready to be processed, the whole logs are loaded onto the log conveyor where they are cut to the appropriate length by a sizing saw. The sized logs are conveyed to the debarker where the bark is removed from the logs. The debarked logs are conveyed on the chipper infeed conveyor to the chipping saw, where the logs are reduced into wood chips suitable for use in a pulp mill. The chip outfeed conveyor loads the chips onto railcars, or when the rail operation is shutdown, onto transport trucks, for offsite distribution. Bark from the debarker is conveyed to the hogger and then conveyed to a truck loadout station for shipment by truck.

The maximum annual raw log throughput rate is 1,314,000 tons per year (TPY), based on the debarker design of 150 tons per hour (TPH) and operation for 8,760 hours per year. The maximum annual bark production rate is 183,960 TPY, based on 14 percent of a log being bark. The maximum annual chip production is 1,130,040 TPY, based on the chipper design of 129 TPH, the annual log consumption of 1,314,000 TPY, and based on 86 percent of a log being wood. The bark hogger has a design capacity of 21 TPH. The facility operates continuously, 8,760 hrs/yr.

The facility sends the bark generated by the debarking operations to the Buckeye Foley Pulp Mill, although the bark could go to other users. All of the wood chips generated by the chip mill operation are sent to customers other than the Buckeye Foley Pulp Mill, as the Foley Chip Mill processes only hardwoods, and the Buckeye Foley Pulp Mill only uses softwood in its pulping operation.

Temporary Portable Generator: The temporary 200 kW portable generator is classified as a mobile non-road compression ignition (CI) reciprocating internal combustion engine (RICE) pursuant to the definition in 40 CFR 1068.30 and therefore is not subject to the requirements of 40 CFR 60, Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines and 40 CFR 63, Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

The facility anticipates an hourly gasoline/diesel fuel usage rate for the temporary portable generator of a maximum of 6.0 gallons per hour, with an annual usage rate of 3,020 gallons based on an estimated 504 hours of operation due to interruptions. This annual estimated usage rate is below the 64,000 gallons threshold in the conditional exemption of Rule 62-210.300(3)(a)35., F.A.C. The engine therefore meets the categorical exemption rule 62-210.300(3)(a)35., F.A.C.

The fuel usage in the engine is to be included in the recordkeeping requirements of the facility.

3. FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) REVIEW

Rule Applicability

Title V Applicability Review

Based on the information submitted, project potential emissions the Foley Chip Mill are less than 100 tons per year, and 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants; therefore, the facility is not classified as a Title V Source. Because the facility is not classified as one of the 28 named source categories, fugitive emissions are not counted towards the 100 ton per year Title V applicability threshold.

NSPS Applicability

The temporary 200 kW portable generator is classified as a mobile non-road compression ignition (CI) reciprocating internal combustion engine (RICE) pursuant to the definition in 40 CFR 1068.30 and therefore is not subject to the requirements of 40 CFR 60, Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Hazardous Air Pollutants

Based on the information submitted, project potential emissions the Foley Chip Mill, potential HAP emissions are less than major source thresholds of 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants. As such, the facility is classified as an area source of HAP emissions and the major source NESHAPs and the Clean Air Act Section 112(g) [Case-by-Case MACT Determination] do not apply to this project.

NESHAP Applicability

Based on the submitted application the facility does not operate any units or activities that are subject to 40 CFR 63, Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

Applicability of Previous Air Permits

The conditions of this permit supplements all other previously issued air permits for this facility. These conditions are in addition to all other applicable permit conditions and regulatory requirements. The owner or operator shall continue to comply with the conditions of those permits, which include restrictions and standards regarding, operations, recordkeeping, reporting, operation of air pollution control devices, and the like. The Permittee shall also comply with the applicable Rules of 62-4, 62-210, 62-212, 62-296, and 62-297, F.A.C.