

**DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
ACTIVITY REPORT: Scheduled Inspection**

N215753160

<b>FACILITY:</b> DEVEREAUX SAWMILL	<b>SRN / ID:</b> N2157
<b>LOCATION:</b> 2872 N HUBBARDSTON RD, PEWAMO	<b>DISTRICT:</b> Grand Rapids
<b>CITY:</b> PEWAMO	<b>COUNTY:</b> IONIA
<b>CONTACT:</b> John Gehringer, Kiln Manager	<b>ACTIVITY DATE:</b> 03/05/2020
<b>STAFF:</b> Kaitlyn DeVries	<b>COMPLIANCE STATUS:</b> Non Compliance
<b>SUBJECT:</b> The purpose of this inspection was to determine compliance with PTI Nos. 1-09, 101-05, 81-02, and other applicable air quality rules and regulations.	
<b>RESOLVED COMPLAINTS:</b>	

On Thursday March 5, 2020 Department of Environment, Great Lakes, and Energy (EGLE) Air Quality Division (AQD) staff Kaitlyn DeVries (KD) conducted an unannounced, scheduled inspection of Devereaux Sawmill located at 2872 N. Hubbardston Rd. Pewamo, Michigan. The purpose of this inspection was to determine compliance with PTI Nos. 1-09, 101-05, 81-02, and other applicable air quality rules and regulations.

Prior to arriving on site, KD surveyed the area for any excess odors or opacity; none were noted. Upon arrival on site, KD met with Mr. John Gehringer, Kiln Manager, who escorted KD through the facility as well as supplied the pertinent records.

### Facility Description

Devereaux Sawmill (DS) is a milling facility that specializes in manufacturing kiln dried hardwood lumber. The facility operations involve the intake of green hardwood logs. Per Mr. Gehringer, no softwood lumber is processed here. The logs are de-barked, cut, sized to the appropriate board dimensions, and dried using open air-dry storage and large lumber kilns, before being sent for distribution.

### Regulatory Analysis

The facility currently holds three (3) permits, PTI Nos 1-09, 101-05, and 81-2. The facility is currently operating as a minor source in regards to criteria pollutants but is subject to some Federal Regulations including 40 CFR Part 60 Subpart Dc for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR Part 63 the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines, 40 CFR Part 63 Subpart JJJJJ for Industrial, Commercial, and Institutional Boilers at Area Sources, and 40 CFR Part 60 Subpart JJJJ the Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. Each of these permits and federal regulations will be evaluated in full in the following section as well as the exempt emission units that are also located on site.

### Compliance Evaluation

#### *PTI No. 1-09*

This permit is for fifteen (15) kilns (FG-KILNS) that are used for curing the lumber after the wood is cut and appropriately sized. These kilns were installed between 1999 and 2006. Each of these kilns are indirect steam-heated lumber drying kilns with a charge capacity ranging from 40 to 60 thousand board feet (MBF). The kilns are slowly heated from 100°F to approximately 140°F, with a maximum temperature of 165°F. The woodfired boiler that is described in PTI No. 81-02 is used to produce the steam that used for the kilns. Drying time in the kilns depends on the species of wood and the size of the boards.

Since the last inspection in 2017 DS has installed three (3) additional kilns that are operated in the same manner. This brings the total number of Kilns up to 18. Due to the installation of the additional kilns, a Violation Notice will be sent for Rule 201 – failure to obtain a permit to install for the additional three (3) kilns.

Volatile Organic Compound (VOC) emissions from the kilns are limited to 52.9 tons per year (tpy) based upon a 12-month rolling time period. The 12-month rolling VOC emissions as of February 2020 were 25.8 tons. Mr. Gehringer stated that the emissions are for all 18 kilns, not just for the permitted 15. Only hardwoods are allowed to be processed in the kiln's and, as previously mentioned, the facility does not process any softwoods.

Only 24,600 MBF of wood is allowed to be dried in FG-KILNS per 12-month rolling time period. Per the attached records, as of February 2020 the 12-month rolling board feet dried was 13,600 MBF.

*PTI No. 101-05*

This permit is for several pieces of equipment for the processing of the wood and the storage of the sawdust produced by the operations.

All of the emission units listed below (EU-Headsaw etc) have dust collection systems, including cyclones. Some of the emission units have the sawdust that is collected in the collection system transferred to one of a few silos (EU-Wetsilo etc). KD was able to observe the dust collection systems in operation. KD asked Mr. Gehringer if any of the systems were equipped with a magnehelic gauge to determine the proper operation of the systems. After checking with some maintenance staff and KD observing the systems herself, they are not equipped with magnehelic's. KD then asked how DS staff ensures that the systems are properly operating. DS staff stated that they watch the cleaning cycles of the units since they are pulse jet baghouses, as well as conducting regular routine maintenance. This also includes the complete overhaul of the bags on a set frequency.

#### EU-HeadSaw

This emission unit is the saw milling process consisting of a head saw, a linebar resaw, and an edger all controlled by a common dust collection system and cyclone dust collector (Collector #1). The sawdust collected from this process is transferred pneumatically to either the wet silo or the cement silo.

The head saw has a particulate matter (PM) emission limit of 0.10 pounds per 1000, pounds of exhaust gases and a PM-10 emission limit of 9.6 pounds per hour (pph), both of these emission limits are based upon testing of the control device as well as proper operation. At the time of the inspection, the dust collection system appeared to be properly operating.

This emission unit is limited to 4500 hours of operation, per 12-month rolling time period. Per the attached records, as of February 2020, the facility itself has operated for a 12-month rolling time of 2149 hours. While the individual hours of operation for this piece of equipment isn't kept. The entire facility operations ensure compliance with this limit, however, DS should make an effort to individually track the hours of operation for this piece of equipment.

While the stack was not explicitly measured, the dimensions appeared to be correct.

#### EU-EndTrimmer

This emission unit is a saw mill process consisting of an end trimmer controlled by a cyclone dust collector (Collector #2). The sawdust collected from this process is transferred pneumatically to the dry silo.

The end trimmer has a PM emission limit of 0.10 pounds per 1000, pounds of exhaust gases and a PM-10 emission limit of 2.9 pph, both emission limits are based upon testing of the control device as well as proper operation. At the time of the inspection, the dust collection system appeared to be properly operating. KD was able to see the saw in operation and the collection system appeared to be properly operating.

This emission unit is limited to 4500 hours of operation, per 12-month rolling time period. Per the attached records, as of February 2020, the facility itself has operated for a 12-month rolling time of 2149 hours. While the individual hours of operation for this piece of equipment isn't kept. The entire facility operations ensure compliance with this limit, however, DS should make an effort to individually track the hours of operation for this piece of equipment.

While the stack was not explicitly measured, the dimensions appeared to be correct.

#### EU-WetSilo

This emission unit is the sawdust storage silo, which is controlled by a cyclone dust collector (collector #3). The sawdust stored in this silo is transferred pneumatically to the cement silo.

PM emissions from the wet silo are limited to 0.10 pounds per 1000, pounds of exhaust gases. PM-10 emissions

are limited to 4.0 pph; both emission limits are based upon testing of the control device as well as proper operation. At the time of the inspection, the dust collection system appeared to be properly operating.

This emission unit is limited to 4500 hours of operation, per 12-month rolling time period. Per the attached records, as of February 2020, the facility itself has operated for a 12-month rolling time of 2149 hours. While the individual hours of operation for this piece of equipment isn't kept. The entire facility operations ensure compliance with this limit, however, DS should make an effort to individually track the hours of operation for this piece of equipment.

While the stack was not explicitly measured, the dimensions appeared to be correct.

#### EU-DrySilo

This emission unit is the sawdust storage silo controlled by a cyclone dust collector (collector #4). The sawdust in this silo may be transferred pneumatically to the cement silo

PM emissions from the dry silo are limited to 0.10 pounds per 1000, pounds of exhaust gases. PM-10 emissions are limited to 2.9 pph; both emission limits are based upon testing of the control device as well as proper operation. At the time of the inspection, the dust collection system appeared to be properly operating.

This emission unit is limited to 4500 hours of operation, per 12-month rolling time period. Per the attached records, as of February 2020, the facility itself has operated for a 12-month rolling time of 2149 hours. While the individual hours of operation for this piece of equipment isn't kept. The entire facility operations ensure compliance with this limit, however, DS should make an effort to individually track the hours of operation for this piece of equipment.

While the stack was not explicitly measured, the dimensions appeared to be correct.

#### EU-CementSilo

This emission unit is a sawdust storage silo, which is controlled by a cyclone dust collector (collector #5).

PM emissions from the cement silo are limited to 0.10 pounds per 1000, pounds of exhaust gases. PM-10 emissions are limited to 2.9 pph; both of these emission limits are based upon testing of the control device as well as proper operation. At the time of the inspection, the dust collection system appeared to be properly operating.

This emission unit is limited to 4500 hours of operation, per 12-month rolling time period. Per the attached records, as of February 2020, the facility itself has operated for a 12-month rolling time of 2149 hours. While the individual hours of operation for this piece of equipment isn't kept. The entire facility operations ensure compliance with this limit, however, DS should make an effort to individually track the hours of operation for this piece of equipment.

While the stack was not explicitly measured, the dimensions appeared to be correct.

#### *PTI No. 81-02*

This permit is for one (1) 17.21 MMBTU wood fired boiler with a multiclone collector. The boiler is only allowed to burn green hardwood, and as previously mentioned, the facility only processes green hardwood, thus no other wood is burned in the boiler. This boiler appears to be subject to NESHAP 40 CFR Part 63 Subpart JJJJJJ for Commercial Industrial Boilers at Area Sources. The AQD does not have delegation for this regulation therefore it will not be further evaluated.

The facility is required to take Method 9 Visible emissions observations from the stack for the boiler at latest once every calendar quarter. The facility has been properly submitting the Method 9 readings to the department and the opacity readings have been less than the allowable 20%.

The permit requires DS to maintain hourly PM emission records from the boiler, with an emission limit of 6.02 lb./hr. Per Mr. Gehringer, the boiler operates 24 hours per day. The records indicate that on 47 days over the past 12-months the hourly emission exceeded the 6.02 lb./hr. limit. A Violation notice will be issued for the exceedance of the PM emission limit.

*Exempt Emission Units:*

As previously mentioned, DS has a permit for a wood fired boiler. DS also has one (1) 12.2 MMBTU Cleaver Brooks Natural Gas fired boiler. This boiler is from 2002 and is used as a back-up for the woodfired boiler. This boiler is exempt from Rule 201 permitting under Rule 282(2)(b)(i) but does appear to be subject to the Standards of Performance of Small Industrial-Commercial-institutional Steam Generating Units 40 CFR Part 60 Subpart Dc. The unit only burns natural gas and DS is meeting the requirements for this regulation.

The facility also has one (1) small coating booth and is used for painting the Devereaux logo onto the lumber. This coating booth is exempt from Rule 201 permitting under Rule 287(2)(c). The filter appeared to be working well with no gaps and is replaced on an as needed basis. According to a DS staff person, the facility goes through no more than two (2) 55-gallon drums of paint per month (110 gallons). While they aren't exactly keeping track of the usage records, they have the purchase records of the drums to ensure compliance with the 200-gallon limit. KD advises Mr. Gehringer that they should keep track of the usage, and if they start to dip into that third drum a month, to be mindful of the limits established in this exemption.

There is also one (1) 25 Kw natural gas Generac emergency generator. This emission unit is exempt from Rule 201 permitting under Rule 282(2)(b)(i). This unit is subject to the provisions of 40 CFR Part 63 Subpart ZZZZ for Reciprocating Internal Combustion Engines. This unit may also be subject to the provisions of 40 CFR Part 60 Subpart JJJJ the Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. According to the attached manufacturers specification sheet, this is an EPA certified engine. The unit is equipped with an hour meter and is only operated for emergency purposes.

The facility does not have any cold cleaners.

**Compliance Determination**

Based upon the observations made during the inspection and a subsequent review of the records it appears that Devereaux Sawmill is not in compliance with PTI No 81-02. A Violation notice will be issued for the exceedance of the hourly PM emission limit established in PTI No. 81-02 EU-BOILER1 Special Condition 1.1a as well as for the violation of Rule 201 for the installation of the three (3) additional kilns.

NAME Karl M. Duvie

DATE 4/10/2020

SUPERVISOR [Signature]