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

N172249084

FACILITY: BIEWER SAWMILL INC		**SRN / ID:** N1722
LOCATION: 6256 GERWOUDE, MCBAIN		**DISTRICT:** Cadillac
CITY: MCBAIN		**COUNTY:** MISSAUKEE
CONTACT: Shawn Johnston , General Manager		**ACTIVITY DATE:** 05/22/2019
STAFF: Kurt Childs	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** SM OPT OUT
SUBJECT: Compliance Inspection		
RESOLVED COMPLAINTS:		

Introduction

On May 22, 2019 I conducted a Minor source inspection of Biewer Sawmill - McBain for compliance with PTI's 286-05 (Wood Fired Boiler), 262-03 (New Planer System), 104-18 (35 MMBtu continuous lumber kiln) and the Air Pollution Control Rules. The Cleaver-Brooks 71.64 MMBtu gas fired boiler permitted under PTI 102-18 has not been installed. Changes since the last inspection include the removal of equipment permitted under voided PTI 06-00 (Zurn gas fired boiler) and 1146-91 (Johnston Gas Fired Boiler), and the installation of a new sawmill which replaced the previous sawmill. I met with Mr. Shawn Johnston and Mr. Aaron Breitmeyer, the plant manager. We toured the plant and inspected each of the permitted processes.

At the time of the inspection the weather was overcast, 55 degrees F, with southeast winds at 15 mph. There were no visible emissions from any of the stacks or dust collection equipment, only water vapor from the new kiln stacks and the boiler. Additionally, I did not observe any fugitive dust being generated on the site. There were accumulations of sawdust on the wood chip/sawdust silo cyclones.

Biewer Sawmill Inc. produces non-treated dimensional lumber from logs. Processes occurring at the facility include log cutting, debarking, sawing, kiln drying, planing and chipping. There is a storage yard, sawmill (emissions released to general in-plant environment), wood chip collection, storage and loading (cyclone dust collector), Four steam heated batch kilns, one new continuous lumber kiln, planing department with cyclone dust collector, and one wood fired boiler using waste wood chips from on-site sawmill process. There are also storage silos equipped with cyclones for the wood chip boiler fuel and two storage bins with cyclones for sawdust that is sold in bulk and bags for horse bedding. Sources of air emissions include transport and storage of wood chips/sawdust, Kiln and burner emissions, planing, wood fired boilers, wood-chipper.

We toured the new sawmill which is located in an expanded building where the old sawmill was previously located. The new sawmill is larger and runs faster. Wood chips from the sawmill are collected and transported by conveyor to several load-out bins that are controlled by a cyclone dust collector.

We observed the wood fired boiler and associated cyclone and electrostatic precipitator (ESP) control equipment which were operating. The wood fired boiler provides steam to the four batch steam kilns. The boiler and ESP operation are monitored in a small control room as are the lumber kiln operations. The ESP operating parameters observed at the time of the inspection were as follows:

ESP

Section	Amp	Volt	MA	KV	SCR	KW	S/M
1	10	202	19	32.9	124	1	30
2	16	333	108	44.4	82	5	30

Following our site-inspection, we reviewed plant records in Mr. Breitmeyer's office. Records required by the PTI's are maintained in a three-ring binder and are also used for the quarterly CEMS reports.

With regard to the specific requirements of each of the permits I made the following observations:

PTI 286-05, Wood Fired Boiler

1.1a. The PM-10 emissions from the wood fired boiler are limited to 0.10 pounds per 1000 pounds of exhaust gas. Compliance with this limit is determined through stack testing. The one-time compliance demonstration stack test was completed on April 20, 2007.

1.1b. The PM-10 emissions from the wood fired boiler are limited to 0.10 pounds per MMBTU. Compliance with this limit is determined through stack testing and development of emissions factors which were verified during the April 20, 2007 stack test.

1.1c. The PM-10 emissions from the wood fired boiler are limited to 6.04 pounds per hour. Compliance with this limit was verified during the April 20, 2007 stack test.

1.2. The facility only burns clean virgin wood waste that is a byproduct of their operations.

1.3. The limit on the wood fuel burned is 9.7 tons per hour. Records indicate fuel usage varies from 4-6 tons per hour.

1.4. A SSM plan has been submitted to the AQD as part of the PM-MAP. This plan was approved by AQD on 1/25/2011 .

1.5. A PM plans for the ESP has been submitted to the AQD. This plan was approved by AQD on 1/25/2011

1.6. NA, Testing has been completed as required.

1.7. The cyclone and ESP were in operation at the time of the inspection and appeared to be functioning properly.

1.8. The opacity monitor was installed and operating at the time of the inspection.

1.9. Wood fuel usage was being recorded as required (see attached sample record).

1.10. NA, the required notification has been made.

1.11. At the time of the inspection emissions records were being kept. Daily hours of operation were also being kept.

1.12. Daily records of the amount of wood being used are being kept.

1.13. Stack parameters for the stack on the ESP have not been modified and appear correct.

PTI 262-03, New Planer System

1.1a and 1.b. The PM-10 emissions from the new planer system are limited to 18 pounds per hour and 128.2 pounds per day. Compliance with this limit is determined through stack testing and emissions calculations. Stack testing was completed in October 2004.

1.2. The cyclone was in operation at the time of the inspection and appeared to be functioning properly at that time. The air intake from the dust collection system had previously been changed from outside the building to inside the building. This was done in response to an incident that generated a complaint when the vane feeder froze up and excess dust overflowed the cyclone.

1.3. NA, Testing has been completed as required.

1.4 and 1.5. Records of daily and hourly operation are maintained.

1.6. PM-10 emission records are maintained.

1.7a. The stack dimensions have not changed and appear to be correct.

PTI 104-18, Continuous Direct Fired Kiln (EU-CDK)

I.1. VOC emissions are limited to 31.50 tpy. Compliance is based on recordkeeping of process throughput and the application of proper emission factors. The limit is a 12-month rolling average but there is currently only one month of data since the process just began operating. Records provided by Beiwer Sawmill, Inc. indicate that VOC emissions during the first month of operation were 1.6 tons.

II.1. The only fuel allowed is natural gas. The Kiln burner can only burn natural gas.

II.2. Only hardwoods and/or softwoods may be processed in the kiln. Biewer Sawmill, Inc. only processes hardwoods and softwoods, primarily softwoods and mostly red pine.

II.3. The process limit is 63 MMBF per year per 12-mos. rolling time period. The kiln processed 4.66 MMBF the first month of operation.

VI.1. Calculations of VOC emissions are maintained (see attached sample record).

VI.2. Records necessary to demonstrate compliance with the emission limit are maintained (see attached sample record).

VII.1. Notification of completion of construction is required. The AQD received notification on April 11, 2019.

VIII.1. and 2. Stack dimensions. Stacks appear to meet the Max. 28" diameter and Min. 50' height, Mr. Breitmeyer confirmed the height was 50'.

40 CFR Part 63 Subpart JJJJJJ

The wood fired boiler is subject to the area source boiler MACT which was amended 12/20/2012. Requirements that apply to this "Existing Large Boiler" are for a one-time energy assessment and tune-ups on a five-year cycle. The compliance date is March 21,2014. The AQD received notification of the energy assessment on .

Summary

All of the necessary records were being maintained. an example of the monthly records is attached. As a result of this inspection it was determined that the plant was operating properly. The required emission records and supporting operational records were being maintained and demonstrated compliance with the applicable emission limits.

NAME  DATE 5-10-19 SUPERVISOR SN