

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection

U39170003766867

FACILITY: J Rettenmaier		SRN / ID: U391700037
LOCATION: 16369 US-131, Schoolcraft		DISTRICT: Kalamazoo
CITY: Schoolcraft		COUNTY: KALAMAZOO
CONTACT: Rachel Plotner , QA/QC Manager		ACTIVITY DATE: 03/28/2023
STAFF: Monica Brothers	COMPLIANCE STATUS: Non Compliance	
SUBJECT: Unannounced scheduled inspection		SOURCE CLASS:
RESOLVED COMPLAINTS:		

Staff, Monica Brothers, arrived on-site at about 9:15 am. I signed in at the front office, and the receptionist told me to drive down to the other office building where Rachel Plotner, the QA/QC Manager would meet me. Upon arrival at the second office location, I observed some particulate matter coming from one of the baghouses on top of Building 1. Many of the other baghouse exhaust points also looked to be caked in particulate material. We first went to a conference room where we were joined by Jeff Przekora, Lead Project/Safety Engineer, Karlyn Page, Assistant QA/QC Manager, and Marty Henschel, Maintenance Superintendent. I briefly explained the inspection process and asked them some preliminary questions. When I mentioned the particulate that I saw coming from one of the baghouses, Jeff said that it was probably just steam. J. Rettenmaier takes virgin wood material and shreds and mills it into various types of food-grade cellulose powder for use in both human and pet food industries. They have three natural gas-fired emergency generators, five small boilers that are used for building heat and not for the processes, and one parts washer in the maintenance area.

I asked about their maintenance schedule for the baghouses, and Jeff said that there are alarm systems for the baghouses that will alert employees if a bag leak is suspected. As the filters are used and more particulate builds up on them, the amperage to the fan or blower will increase. This amperage is monitored by the facility's PLC system, which gets interpreted by production staff. The production staff then will change filters when a decrease in the plant efficiency is noticed. There are a total of 27 baghouses at the facility, and 23 of these have differential pressure monitoring devices on them. Jeff said that the four baghouses that do not currently have monitoring devices are scheduled to have monitors installed in the near future. He said that they were also in the process of installing a trial particulate sensor that will detect any particulate that might be exiting the stacks on the baghouses, but that they don't know yet whether these will become permanent. Jeff said that in addition to replacing filters in the baghouses as needed, they also sometimes change the filters when they are switching from making one product to another. Some product switches do not require this baghouse filter change and others do. I also asked Jeff if they have a visible emissions inspection program. He said that they do not, but that all of the employees watch for any visible particulate emissions.

This facility does not currently have any Permits to Install and is claiming to operate under exemptions. However, when I asked Jeff what exemption they were operating under for the cellulose production equipment, he did not know. The facility could not produce any exemption demonstrations or calculations at the time of the inspection. A violation notice will be sent for this (Rule 201). After our initial discussion, we took a tour of the facility.

Cellulose Production and Baghouses:

There are four cellulose production lines in Building 1. There are two hammermills and one shredder that processes the virgin wood material prior to the material going to the lines. Line 1 consists of Line 1a and Line 1b and simply presses the material into pellets to be shipped to another facility for further processing. Line 1a is for brown cellulose pellets, and Line 1b is for white cellulose pellets. Line 2 consists of four cutter-mills, one ball-mill, and some sifting equipment. Line 3 is identical to Line 2. Line 4 consists of eight cutter-mills and one ball-mill. The raw wood material gets milled and sifted down to a specific size and texture depending on what the buyer wants and then gets packaged into various sizes of bags and containers. Each line has at least one baghouse associated with it, but the lines can also have multiple baghouses that control particulate from different processes within the lines.

Building 5 contains Lines 5, 6, and 7. Lines 5 and 7 are what they call “compactor lines”, which compact the cellulose material, but does not pelletize like Line 1. Line 6 consists of just four cutter-mills and sifters. We went to the roof of Building 5 to take a look at the baghouses. Jeff showed me that the baghouse for Line 5 was reading 2 inches of water at that time, which Jeff said was within that baghouse’s appropriate operating range. The roof of Building 5 had a lot of white particulate on it and around the baghouses. I could also see the top of Building 1 from the roof of Building 5, which also had a lot of white particulate on it. I could also see the baghouse vents on Building 1, which were caked in the same white particulate. Jeff said that some of that particulate was from when they clean a clog from a baghouse. He said that the material that gets cleaned out of the baghouses gets packed into a super sack for disposal but that some of the material ends up on the roof. However, it was clear from the caked baghouse vents that there were many prior events where particulate has not been appropriately caught by the baghouses and has escaped through the vents and landed on the roof of the buildings. A violation notice will be sent for improper collection and disposal of particulate matter (Rule 370), as well as for improper operation and maintenance on the baghouses (Rule 910). I will also be requesting that the facility submit a Malfunction Abatement Plan (MAP) for their baghouses, which should include a visible emissions inspection program, maintenance program, specific operating parameters for each baghouse and corrective actions that will be taken in the event of upsets and out-of-range baghouse readings. Under this MAP, records of these activities and associated monitoring will need to be kept by the facility going forward.

Boilers:

There are five small natural gas-fired boilers at the facility. The first one we observed was in Warehouse E. It is a Laars unit that was built in 2011 and has a heat input capacity of 2,00,000 Btu/hr. The model number is RHHH2000NAIF2FAN, and the serial number is A11237180. The other four boilers are identical Weil-McLain boilers that were built in 1999. There are two in the shipping area and two in the Building 1 production area. Each of these boilers has a heat input capacity of 910,000 Btu/hr. The boiler model number is LGB-8 and the series number is 2. These boilers can be considered exempt under Rule 282(2)(b)(i). These boilers are only used for building heat and are not used in the cellulose-making process.

Emergency Generators:

There are three emergency generators at the facility. First, we viewed the one at Building 5. This is a Cummins Onan Genset generator that has a rating of 65 kW and was installed in 1999. The model number is GGHB-3381729 and the serial number is K990028467. The non-resettable hour

meter read 951.5 hours during the inspection. I did not see an EPA certification sticker on this unit. The second unit we viewed was a Cummins Onan Genset generator that has a rating of 42 kW and was installed around 2003. This unit is located near the front office. The model number is GGFE-5628085, and the serial number is G030521730. The non-resettable hour meter read 809.2 hours during the inspection. I did not see an EPA certification sticker on this unit either. The third and final unit we viewed was also a Cummins Onan Genset generator that has a rating of 125 kW and was installed in 2016. This unit is located near Building 1. The model number is GGJ-1621487, and the serial number is F160965732. The non-resettable hour meter read 234.5 hours. This unit had an EPA certification sticker on it. These emergency generators can be considered exempt under Rule 285(2)(g). The facility runs each of these units for about 15 minutes each week for readiness testing and is keeping track of the hours of operation.

Other exempt equipment:

There is one parts washer in the maintenance area of the facility. During the inspection, the lid was closed, but I did not see any rules posted. I gave the facility some Egle cold cleaner stickers to put on the unit. The unit uses VOLTS II, which is 100% VOC. The SDS for this material is attached to this report. The air/vapor interface is less than ten square-feet, and the unit is not heated or agitated. The parts washer can be considered exempt under Rule 281(2)(h). They also have some welding equipment in the maintenance area, which can be considered exempt under Rule 285(2)(i), along with some machining equipment, such as band saws, which are vented internally and can be considered exempt under Rule 285(1)(vi).

J. Rettenmaier was not in compliance at the time of this inspection. A violation notice will be sent for the lack of exemption demonstration (Rule 201), improper collection and disposal of particulate matter (Rule 370), and improper maintenance and operation of the baghouses (Rule 910). I will also be requesting that the facility submit a MAP for the baghouses, as well as potential to emit (PTE) calculations.

NAME Monica Kent

DATE 4/6/23

SUPERVISOR RIL 4/6/23