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

A002332957

FACILITY: OTSEGO PAPER INC		**SRN / ID:** A0023
LOCATION: 320 N Farmer St., OTSEGO		**DISTRICT:** Kalamazoo
CITY: OTSEGO		**COUNTY:** ALLEGAN
CONTACT: Frank Knowles , Environmental Compliance		**ACTIVITY DATE:** 01/05/2016
STAFF: Dale Turton	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MAJOR
SUBJECT:		
RESOLVED COMPLAINTS:		

An inspection was conducted at the USG, Otsego Paper Company mill facility on January 5, 2016. In addition to me, Amanda Chapel (AQD) was present for the inspection. We met with Frank Knowles, Environmental Compliance Supervisor for the company.

The current ROP for Otsego Paper is MI-ROP-A0023-20013. The mill has one paper machine and produces the paper that will be attached to drywall board (gypsum board). A power plant associated with the mill has two turbines and a package boiler.

EUPAPERMACHINE1

The paper machine "Big Mo" was operating. This triple Fourdrinier former machine produces a three ply sheet. The top ply uses clean white recycled magazine stock and the middle and bottom plies use other recycled paper or corrugated boxboard. Separate pulping, cleaning and refining equipment are used to prepare the two types of furnish.

Various chemicals are used on the machine such as retention aids, size, felt washes and cleaners, and wire cleaners. The listing of these chemicals, and their composition, are all kept in a spreadsheet and in MSDS form. Records of usage rates of materials, the hours of operation for the machine, and the monthly and yearly emission calculations are all kept in a spreadsheet. The latest calculated rolling 12-month emissions were 29.2 tons whereas the permit limit is 110 tons per year. They continue to use the same or similar Nalco Chemicals that were in the original 2007 permit to install application.

The dry end is exhausted through the large and tall super stack, and the wet end is exhausted through several smaller and shorter stacks. Staff did not take any measurements of stacks during this inspection to verify compliance with the ht. and dia. restrictions in the permit.

EUTURBINE1, EUDUCTBURNER1, EUTURBINE2, & EUDUCTBURNER2

The #1 turbine is the north unit and the #2 turbine is the south unit. For turbine #1, the exhaust feeds into the associated duct burner with Heat Recovery Steam Generator (HRSG), and then the combined exhaust goes to SV005. For turbine #2, the exhaust feeds into the associated duct burner with HRSG, and then the combined exhaust goes to SV006.

During the inspection, turbine #1 was observed with the turbine running without supplemental natural gas being burned in the duct burner. The turbine was burning 92 MSCFH and was generating 8436 Kw.

During the inspection, turbine #2 was observed running with both the turbine and duct burner firing gas. The turbine was burning 101 MSCFH and was generating 8436 Kw. The duct burner was burning 10.7 MSCFH to add to the heat available for making steam in the HRSG.

Both turbines are currently subject to the CAIR Ozone NOx Budget Permit, which is incorporated into the ROP. The company is submitting the reports to EPA as required by the NOx permit.

Pipeline natural gas is being burned, and the sulfur is well less than 0.8% by weight as required in the permit.

Both units are equipped with a NOx CEMs. These are used to comply with the requirements of the CAIR Ozone NOx Budget Permit, the lbs NOx/MMBTU limit in the ROP duct burner tables, and, in part with the annual NOx

limit in the ROP turbine tables. The NOx CEMS was being operated for information only since January is not during the ozone season. The calibrations are not being done so the readings are not guaranteed to be accurate. They will start the calibrations and have the RATA performed in the spring. They recently upgraded to new Horiba software for the data generated with the CEMs units.

The NOx emission factor for the ozone season is derived from an average of the CEMS readings during the 2nd and 3rd quarter. The NOx emissions for the 7 month period not in the ozone season is derived from the highest 24 hour NOx emissions during the ozone season.

A RATA on the NOx CEMs was last performed in April 2015, which they passed.

For turbine #1, CO and VOC emissions will be calculated using the data gathered from the 12/17/2013 stack test for this turbine and duct burner. For turbine #2, CO and VOC emission calculations will be done using the data gathered from the 4/16-17/2014 stack test for this turbine and duct burner.

EUPACKAGEBOIL

The package boiler has been operated on natural gas only. Fuel usage is being recorded as required. No opacity monitoring has been done since they have not burned oil. They don't have any oil being stored on-site at this time.

This boiler was tested for NOx, CO, and VOC on 7/15/2014. The emissions were measured in lb/hr, and when multiplied by 8760 hours in a year, all comply with the annual emission limit in tons. The NOx also complied with the lb/MMTU limit.

The Annual Capacity Factor (ACF) while burning natural gas was less than 0.2 % for 2015 whereas they are allowed up to 10%. Since there was no oil burned, the ACF was 0% for oil use.

FGCOGEN

Steam production and heat input are being recorded as required. Natural gas is being tested periodically for BTU content. It was last measured at 1050 BTU/ft3.

The total heat input limit has not been exceeded. They are in compliance with the tons per year limits for NOx, CO, and VOC.

FG-RULE290
There are currently no emissions tracked under this category.

EUFIREPUMPEAST

The East Fire Pump is a compression ignition engine subject to the NSPS in Part 60, Subpart IIII. The Clarke Company that manufactured the unit has supplied a certification form for the emissions from this unit. The tracked run hours never reach 500 hours in a year, so they change the oil annually. The total hours reading on the meter is 87 hours. They also inspect the air filter and hoses annually. The oil and filter was changed in the unit during November 2015.

FGRICEMACT

The West Fire Pump and the Blackstart are both compression ignition engines (RICE) that are subject to Part 63, Subpart ZZZZ of the MACT standards. A requirement is to change the oil every 500 hours of use or annually. In this case, the tracked hours never reach 500 hours in a year, so they change annually. They also inspect the air filter and hoses annually since they never reach 500 or 1000 hours. The oil and filter was changed in the blackstart during November 2013 and in the west fire pump during November 2015.

There is only one blackstart engine for the two turbines. If needed, the blackstart engine makes the electricity that powers the hydraulic starters for each turbine.

OTHER EQUIPMENT

The company now operates two hydropulpers for the recycled corrugated medium and one hydropulper for the recycled magazine stock. They have new systems of centrifugal cleaners and refining equipment for each type of furnish. There are no reported emissions from the pulping and cleaning operations.

There were not any complaints due to the aerated waste water treatment ponds in 2015.

NAME Dale Turton DATE 1/14/2016 SUPERVISOR [illegible] 1/15/2016