

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

B201337624

FACILITY: Ox Paperboard of Michigan, LLC		SRN / ID: B2013
LOCATION: 700 CENTREVILLE RD, CONSTANTINE		DISTRICT: Kalamazoo
CITY: CONSTANTINE		COUNTY: SAINT JOSEPH
CONTACT: Michael Raymond , General Manager		ACTIVITY DATE: 11/16/2016
STAFF: Dennis Dunlap	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Scheduled inspection.		
RESOLVED COMPLAINTS:		

This was not an announced inspection. Dennis Dunlap was the AQD inspector. Mike Raymond and Robert Gest were the contacts for Ox Paperboard. The facility employs about 100 people and may operate 3 shifts per day, seven days per week. The facility produces paperboard from 100% recycled paper. The paperboard may be sold as is or be made into building products at this facility. No strong odors associated with the operations were detected during the inspection.

### Walkthrough

The beater room contains the pulper, stock and water chests, and a clarifier. Most of the recycled paper is obtained from Wal-Mart. The clarifier is used to remove solids. The solids and water are put back into the process. Also in this area is water filtration equipment and equipment to remove non-paper materials such as plastic and metal from the pulp. This material is conveyed to dumpsters outside. Metal that is recovered is recycled. Other material goes to the landfill.

On the main floor there is an area for chemical storage. Most chemicals are stored in totes. Nearby is the maintenance shop. This contains two safety clean degreasers. The lids were closed and rules were posted. These are the only degreasers at the facility.

The boiler room contains two natural gas-fired boilers, labeled north and south. According to Mike Raymond the boilers do not have the ability to burn oil any longer. The ROP contains conditions based on oil use. At the next renewal it should be ascertained whether these conditions can be removed or whether a permit-to-install is needed to modify the conditions. Also, the facility is a major source because of the potential to emit of sulfur dioxide. If the boilers are not able to use oil, the facility may be able to opt-out of the ROP. This was discussed with Mike Raymond. He indicated that for the time being they would keep the ROP. The label on the boilers indicates that they are 23 MM Btu/hr. However, in 1986 the burners were modified to also use oil. At that time the boiler ratings may have increased to 30 MMBtu/hr which is in the ROP.

The paper machine was operating. The pulp going into the machine is about 97% water. Additions to the pulp at this point include Royce brown dye, polymer, and de-foamer. These contain VOCs and are tracked in a flexible group EUPAPERMACHINE Rule 290 group. Two other chemicals are used, Del Pac and Neu Roz. This material is stored in two internal tanks. These do not contain VOCs. The stack dryers operate at 200-300 degrees. There is a tote that contains a lubricant for the dryer bearings. The finished paper is rolled on a winder. There is a separate area where the paper may be cut to size. Cuttings go back to the pulper. There are also pick-ups here that go to the two cyclones on the roof that are connected to the dust collector.

Outside there is a silo that stores plastic beads. These are brought in by a rail car. The plastic beads are used in an extruder that puts a plastic film on paper. The extruder is exempt by Rule 286(a). Next to the silo are two tanks that are no longer used.

Also outside is the fire pump house. The fire pump has a table in the ROP, FGRICEMACT. It is subject to 40 CFR Part 63 Subpart ZZZZ. Since the facility is an area source the DEQ does not have regulatory authority to enforce this. There is a control panel that records hours of operation. There is a diesel oil tank with secondary containment.

There is an outside dust collector that emits to the outside air. It is downstream of two cyclones which

are ducted to the dust collector. The dust collector serves paper and trimming operations throughout the plant. Currently the dust collector is not in the ROP. At the next renewal this should be evaluated because the dust collector is subject to Rule 331.

Also outside is a large clarifier for wastewater that goes to the city.

The extruder heats paper then applies a layer of plastic. Plastic beads are melted at the machine. A layer of foil ay also be applied with the plastic. This operation is exempt by Rule 286(a).

The laminator glues 3, 4, or 5 layers of paperboard to produce building materials. The outside layer contains the plastic that was applied by the extruder. The laminator is in a Rule 290 group for the glue (Elvanol) which is a polyvinyl alcohol that contains about 0.5% methanol. The glue comes in solid form and is mixed on a platform above the laminator. There are no outside emissions for the mixing operation. There is flexographic printer here that applies markings for the final product. The printer is in a Rule 290 group for the inks which contain about 0.25% VOC. There is a second flexographic printer that was associated with the extruder that has not been used for many years. The edges of the finished product are trimmed off. The trim machine is connected to the cyclones and dust collector.

Also in the plant is a cutting machine used to cut paperboard into smaller sizes.

#### Records Review

The SDS's for the inks, the defoamer, brown dye, polymer, laminator glue, Del Pac, and Neu Roz were seen. The Rule 290 groups contain EUPAPER MACHINE, EULAMINATOR, and EUFLEXOPRESS. These records appear to be in order. Most of the VOC (and HAP) emissions come from the glue used in EULAMINATOR which contains methanol. Monthly emissions usually range from 100 - 400 pounds per month.

There is a source-wide table in the ROP that limits HAPs to below major source thresholds. The facility is keeping these records. The majority of the emissions is from methanol (see above), with some HAP emissions from the natural gas used in the boilers.

Natural gas usage by the boilers is tabulated each month.

Some records were examined for the fire pump. On 8/29/16 yearly maintenance was performed which included changing the oil and filter, replacing the air filter, and checking hoses and belts. Oil delivery records were not seen.

For the boilers there is a table in the ROP, FGBOILERGACT for 40 CFR Part 63 Subpart JJJJJJ. Most of the conditions in this table pertain to limiting the use of liquid fuel. Since the boilers are not able to burn oil, the purpose of this table is not clear. The AQD does not have regulatory authority to enforce this area source MACT.

NAME Dennis Dewlap

DATE 11/17/16

SUPERVISOR MA 11/10/16