

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

U75141381927709

FACILITY: Fibre Converters		SRN / ID: U751413819
LOCATION: One Industrial Dr., Constantine		DISTRICT: Kalamazoo
CITY: Constantine		COUNTY: SAINT JOSEPH
CONTACT: Steve Reed, VP of Operations		ACTIVITY DATE: 11/07/2014
STAFF: Dennis Dunlap	COMPLIANCE STATUS: Compliance	SOURCE CLASS: <i>Methanol</i>
SUBJECT:		
RESOLVED COMPLAINTS:		

This was not an announced inspection. Steve Reed is the contact person.

This facility employs 70 people. There is one shift five days/week, and there is a partial 2nd shift. The building was a former GM plant. It may also have been called Marcon Industries in the past.

1. The lamination machine takes paper and laminates it into layers. There are 4 coaters that use adhesive for this process. The adhesive is made from clay, water, and solid polyvinyl alcohol. This is mixed in a special room. According to the MSDS, the polyvinyl alcohol is 92-100% pure. According to the manufacturer (Sekisui) website, there may be a small amount of methanol (0-0.9%) in the material. Based on the usage rate of the adhesive which was provided for 2013, this would calculate to a max. emission rate of 361 pounds of methanol per month. This is within the 1,000 pounds per month for Rule 290.

After the lamination process the paper may go to a poly extruder which places a layer of polyethylene film on the paper using heat. This may be exempt from needing an air permit by Rule 286(d). There is also a flexographic printer on this machine. The ink contains 2.4841 % of VOC by weight according to the MSDS. The VOC is 2-propanol. The ink usage is 350-400 pounds per month, or about 44 gallons. The VOC emission rate would be about 10 pounds per month. This appears to be exempt from needing an air permit by Rule 287(c).

The paper goes to die cutter machines where it is cut into various shapes. There is a dust collection system for this. The dust collector is inside the building and emits inside. It is planned to move the dust collector outside. There is also a system to convey waste pieces of paper to a baler where they are packaged for recycling. The baler is next to the dust collector. There is a cyclone here that is not used.

2. There are two extruder machines. These take a mixture of 50% polypropylene plastic, 50% wood flour (sawdust), some recycled material, and occasionally a lubricant called Struktol which contains zinc stearate. This mixture is heated at 400-450 degrees and formed into sheets. The sheets are used in the automotive industry for car interiors. It appears that this process is exempt from needing an air permit by Rule 286(d). Each extruder has a stack that goes out through the roof. There is a dust collector system at the extruder machines.

Recycled material comes from customers and is ground by grinders (leuciator ?) controlled by an inside dust collector. This is the recycled material that may be used in the extruders.

3. There are 2 boilers. These are natural gas fired and about 427,000 btu/hr. These are exempt by Rule 282(b)(i). There is a small natural gas fired emergency generator installed in 1980-1982. A rating could not be found but it is a Ford engine likely under 500 hp. This engine may be subject 40 CFR Part 63 Subpart ZZZZ for spark ignition engines at area sources.

4. There is a parts cleaner in the tool room. The lid was closed and rules were posted.

It appears that the processes at this facility are exempt from needing an air permit.

NAME *Dennis Dunlap*

DATE *11/13/14*

SUPERVISOR *YMA 11/13/2014*