

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Self Initiated Inspection

U1313240423684

FACILITY: World Corrugated Container		SRN / ID: U13132404
LOCATION: 930 Elliot Street, Albion		DISTRICT: Kalamazoo
CITY: Albion		COUNTY: CALHOUN
CONTACT: Dean Falkenberg , Plant Manager		ACTIVITY DATE: 11/13/2013
STAFF: Rex Lane	COMPLIANCE STATUS: Compliance	SOURCE CLASS:
SUBJECT: Self-Initiated Inspection		
RESOLVED COMPLAINTS:		

On November 13, 2013, Air Quality Division (AQD) staff (Rex Lane) arrived at World Corrugated Container, Inc. (WCC) located at 930 Elliot Road, Albion, Michigan at 9:45 a.m. to conduct an unannounced air quality inspection. Prior to the inspection, staff drove around the south end of the building to observe a large cyclone collector in operation near the semi-truck loading and unloading area. During staff's brief observations, no visible emissions were noted from the cyclone exhaust vent and the parking lot below the cyclone appeared to be free of any accumulations of dust or cardboard. Staff then made initial contact with office personnel and stated the purpose of the visit. She asked me to wait and shortly thereafter staff made contact with Mr. Dean Falkenberg, Jr., Plant Manager, WCC. Staff stated that they would like to conduct an air quality inspection of the facility and provided Mr. Falkenberg with their inspector credentials, business card and a copy of MDEQ's Environmental Inspections brochure.

We went to a conference room and staff indicated that the AQD has not inspected the facility previously and asked Mr. Falkenberg for a summary of the facility operations. Mr. Falkenberg stated that this facility is considered to be a flat sheet plant in that they purchase liner board and corrugated stock to manufacture corrugated containers and pallets for the packaging industry. The facility has miscellaneous process equipment to die cut, fold, slot, glue and print on corrugated containers based on customer needs and specifications. The facility is housed in a 108,000 ft² building and they commenced operations in 1991 and currently operate five days/week with one full and a partial second shift. During the pre-inspection meeting, staff asked Mr. Falkenberg if the facility had any boilers or emergency generators and he said no. Staff also asked about an outbuilding in the southwest corner of the property and Mr. Falkenberg indicated that it is a heated garage used to keep the diesel semi-trucks warm and that no maintenance activities are performed in this outbuilding. We then proceeded on a tour of the facility.

In the southwest corner of the facility, a corrugated scrap baler machine is located beneath the cyclone collector. At various locations in the plant, there are air pick up collectors that transport die cut pieces, slots, trimmings and scrap sheet fed grindings from process equipment to the cyclone collector. The baled scrap is sold to a recycler and the bulk of this material is one inch square or larger. The cyclone collector appears to be an appropriately designed and operated particulate collector and is considered to be exempt from air use permitting requirements under Rule 285(I)(vi)(c). Staff asked if there are periodic internal maintenance inspections of the cyclone and Mr. Falkenberg said that he was not aware of any in his twelve years of employment with the facility. Staff recommended that the facility develop a preventative maintenance program and have the internal and external cyclone components inspected periodically for wear, corrosion, etc.

Adjacent to the scrap baler was a piece of equipment described by Mr. Falkenberg as an ink splitter. Spent water based flexographic ink collects in a common drain sink next to the ink splitter and is periodically pumped into an open top tank on the top of the ink splitter that is equipped with an electric mixer. Plant personnel pre-mix alum, lime, and an anionic flocculant in water and then blend this into the open top tank. Flocculated ink solids are collected on filter paper and dried in a small electric oven and placed in 55-gallon drums for waste disposal. The filtrate liquid is discharged to the City of Albion municipal sewer system. The ink splitter is considered to be a wastewater treatment and is exempt from air use permitting requirements under Rule 285(m).

We then entered a maintenance area and staff noted a cold cleaner with an open lid while not in use. Staff informed Mr. Falkenberg that the lid must be closed when not in use and he promptly closed it. Staff provided him with cold cleaner operational use labels to post above the machine. Provided the equipment is operated in accordance with the operational use label, this equipment is exempt from permitting under Rule 281(h). The maintenance area also had welding equipment that vents externally and is exempt under Rule 285(i) and miscellaneous metal working equipment that vents internally and is exempt under Rule 285(I)(vi)(B).

The facility has a 2-color Langston and a 3-color McKinley flexographic folder gluer machine that use water based flexographic inks (Zeres and Flint Ink Group) and a water based glue (Cold Glue # 2199 – Specialty Adhesives). The facility has two 2-color Hopper flexographic folder gluer machines that use glycol based inks and the same water based glue. The facility also has two folder gluer machines that seal container board with adhesive tape and four folder gluer machines that utilize hot melt adhesives which are exempt from permitting under Rule 287(i). A corrugated pallet production was in operation on the east side of the production floor. The same water based glue is used in the pallet production to attach the cardboard reinforcement ribs to the top and bottom sheet of the pallet.

For the post-inspection meeting, we went back to the conference room and staff requested to see the MSDS sheets for the flexographic inks (water based and glycol) and water based glues. Staff also requested ink and glue usage records for all of the flexographic and folder gluer machines at the facility. The MSDS sheets that staff reviewed for the inks and glue appeared to be generic (% solids and specific gravity) and did not contain specific information on % VOC and/or % water, by weight. Staff then reviewed the provided monthly ink inventory records listed in pounds and concluded that they contained insufficient detail to determine if the process equipment could comply with Rule 287(c) (i.e. < 200 gallons minus water/month) collectively, or on an individual basis. Staff informed Mr. Falkenberg that they should contact their ink and glue suppliers to obtain the required VOC and water content information. Staff also requested that they compile ink and glue usage records based on inventory and purchase records for the last six months and email this information to staff within one week in order to verify the equipment does not require an air permit and can be operated under Rule 287(c).

Staff thanked Mr. Falkenberg for his time and left the facility at 12:00 p.m.

Receipt of Post-Inspection Records:

On November 22, 2013, Mr. Falkenberg emailed the water, solids and VOC content information for the inks and glues used at the facility and usage records for the previous six months excluding water content. Based on the provided monthly usage records for the past six months, the highest facility wide usage month was June 2013 at 45.6 gallons ink/adhesive usage or approximately 23% of the limit under Rule 287(c). Provided the facility continues to track ink and adhesive usage on a monthly basis to demonstrate continued compliance with the usage limit under Rule 287(c), the facility is considered to be in compliance with state air quality rules at the time of the inspection. -RIL

NAME

Rex J. Lane

DATE

11/25/13

SUPERVISOR

MA 11/25/2013