

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

B762852676

FACILITY: Transcontinental Battle Creek		SRN / ID: B7628
LOCATION: 155 Brook St., BATTLE CREEK		DISTRICT: Kalamazoo
CITY: BATTLE CREEK		COUNTY: CALHOUN
CONTACT: Joe Newton , EHS Manager		ACTIVITY DATE: 02/27/2020
STAFF: Amanda Chapel	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT:		
RESOLVED COMPLAINTS:		

On February 27, 2020 Air Quality Division's (AQD) Amanda Chapel (staff) conducted an unannounced air quality inspection Transcontinental Battle Creek (formerly Coveris Flexibles) located at 155 Brook Street, Battle Creek, Michigan. Transcontinental prints on plastic film used in a wide variety of consumer product packaging. The facility was last inspected on March 22, 2016 and was found to be in compliance with state air regulations. Transcontinental is permitted as a synthetic minor source for volatile organic compounds (VOCs) and for individual and aggregate hazardous air pollutants (HAPs) under permit to install (PTI) 362-99F.

The facility updated their permit after the last inspection to remove obsolete equipment and update a condition concerning the pressure in the permanent total enclosure (PTE). I arrived on site at 9:30am. The sky was overcast and I did not observe any visible emissions or detect any odors from the facility. I entered the facility and called the number for Mr. Joe Newton, Production Manager. He met me in the lobby along with Mr. Tyler Lofton, Process Engineer, I signed in, and we went to a conference room for the pre-inspection meeting. Mr. Lofton will be taking over the environmental, health, and safety position at the facility.

Since the last air quality inspection, rotogravure press 806 was removed in February 2019 and rotogravure press 808 is not operational and slated to be removed beginning March 2020. The natural gas fired boiler, installed under exemption 282(2)(b)(i), will be removed once roto press 808 is removed. Seigwerk remains the facility's main ink supplier which supplies the facility with ink that does not contain HAPs. Sun Chemical is the other ink supplier at the facility and they supply the facility with a HAP breakdown based on purchases made, monthly.

In general, the facility receives raw materials which are sent to the laminator, if needed, then to curing, printing, slitting, and then shipped out of the facility. The facility operates the Regenerative Thermal Oxidizers (RTOs) in parallel along with two permanent total enclosures (PTEs). One PTE captures from presses 112, 100, and 102 and the other PTE pulls from the parts wash room, press 110, 806, and 808 which have been removed. Mr. Newton and Mr. Lofton gave staff a tour of the facility. The facility has about 150 staff and runs on a 24/5 schedule running 8-hour shifts and some as needed on Saturday. Required PPE are safety shoes, glasses, hearing protection, and hair net. Additionally, jewelry should be removed or covered as well as nail polish which requires gloves. The following will discuss the tour and facility's compliance with permit 362-99F.

The facility tour began with the machine shop which has a lathe, grinders, and various machining equipment which is all vented internally. This are exempt under Rule 285(2)(l)(vi)(B). This area also has a plunger pad solvent station using ethyl acetate or n propyl alcohol for general cleaning purposes. These units are exempt from permitting under Rule 285(2)(r)(iv). We walked into the oils and lubricants storage area. They are stored behind a metal gate and all lids appears to be closed.

The plates room is where printing plates are maintained. This was in operation at the time of the inspection. There are 7 plunger pad solvent stations in this area. The facility has five slitting machines listed from west to east, 127, 124, 131, 125, and 135 that are used to trim the plastic web width of printed products to the size determined by the client. The process vents internally and the plastic waste is landfilled. The process is exempt under Rule 285(2)(l)(vi)(B). The facility has also installed a laser cabinet which exhausts heat outside. This functions to score or pierce holes in the plastic packaging to allow a perfect tear of the material when it is packaged. There are plans to install a second laser cabinet at the facility. The facility provided an exemption determination. The cabinet exhausts outside and particulate is controlled by a synthetic fiber pleater air filter. The process appears to be exempt under Rule 285(2)(l)(vi)(B).

The laminator was operating during the inspection and is located outside of the PTE. There is discussion about moving the laminator inside one of the PTEs. The process binds polyurethane and foil using an adhesive which when cured creates a permanent bond. Based on records provided at the time of the inspection, the 12-month rolling VOC emissions in December 2019 were 4.503 pounds or 0.002 tons. The highest month of VOC emissions was March 2019 at 0.531 pounds. This is well below the allowed VOC emission limit of 0.01 tpy. The facility maintains SDS information in an SDS online database. The actual hours of operation are tracked monthly. Total hours of operation in 2019 was 3,065.82 hours. The equipment is labeled both on the machine itself and on the room outside where the machine is located.

The next stop on the tour was the 110 press which is a 10-color wide web flexographic press with built in laminator. This was going through a color check and was not actually running during the inspection. The wash room is also located in this area. This contains the Renzman side loading (EU\_SideLoad) and Renzman Top Loading (EU\_TopLoad) solvent distillation units. These are located within a PTE which is controlled by parallel RTOs. The facility distills as much solvent out of the process as possible and uses the recovered solvent to clean parts in the facility. Any other solvent usage is tracked at the solvent stations at the printers themselves. Any waste is shipped off site appropriately.

From here we observed the boiler which is located in a storage room for rollers. This 1.7 MMBtu/hour natural gas fired boiler was installed in April 1999 under exemption Rule 282(2)(b)(i). The boiler was used to provide steam heat to the dryer sections of the rotogravure presses. Since the presses are removed or slated for removal, the boiler is also going to be removed from the facility.

The facility has separate ink dispensing and mixing areas and storage areas. The mixing, blending, and metering operations associated with surface coating lines are exempt from permitting under Rule 287(2)(k). These are run by Seigwerk contractors. The inks need to be mixed to specific colors based on pre-determined formulas. The ink company provides the facility with monthly records of usage and emissions based on the mixing formulas. The ink containers were covered at the time of the inspection.

Rotogravure printer 808 was not running at the time of inspection and was in the process of preparing to be torn down. From here, we proceeded to the roof to observe the RTO control panels, RTOs, and duct work on the roof. The control panels showing the PTE differential pressures were -0.046 for 110/wash/roto and -0.008 for 100/102/112. The RTO control panels monitor continuously and sends a number to the data acquisition system (DAS) every 2 minutes. The panel was reading 1600 degrees F and -5.35" WC for the Enterprise and 1595 degrees F and 3.81" WC for the Clean Switch. In the closeout discussion, I asked the facility to check why the WC number was reading as positive. An email (attached) explains the pressure drop numbers. We walked onto the roof and there were no VEs from the RTO stacks or smells of solvents.

Back inside, we observed the 100, 102, and 112 flexographic presses which were running. The presses were labeled on the presses themselves. This area contains the two alkaline based water systems used to clean the rollers from the presses of the latent ink. These are exempt from permitting under Rule 281(2)(e). One was in operation during the time of the inspection. There is a warehouse area where finished product is stored before being shipped offsite. The facility also has a fixed storage tank farm with 11 above ground tanks which was installed in 1985. They currently only use tanks 7, 8, and 10 which are 4,500 gallons and tanks 9 and 11 which are 3,500 gallons. Solvents stored in these tanks are n propyl acetate, ethyl acetate, n propyl alcohol, and DUP FL5 which is a mixture of ethanol, n propyl acetate, and isopropanol. This is exempt under Rule 284(2)(i). They are also exempt from regulations under 40 CFR Part 60, Subpart Kb because they have a storage capacity less than 75 M<sup>3</sup> (about 19,813 gallons).

Once the facility tour was complete, we went to a conference room to do a records review. As discussed above, EU\_LAM-404 appears to be in compliance with all requirements in PTI 362-99F.

#### FG\_FLEXO-ROTO-PW

Covers were observed on EU\_SideLoad and EU\_Top Load in compliance with Rule 707. The provision to meet a minimum control efficiency of 60% for add on control devices for flexographic printing and 65% for rotogravure printing was demonstrated in a 2004 stack test showing VOC destruction efficiency from the RTOs at 98%, showing compliance with Rule 624. The readings from the PTE panels showed compliance with the minimum reading of -0.007 inches of water. The PTE was observed to be installed

and operating properly at the time of the inspection.

The facility appears to be monitoring the differential pressure of the PTE continuously as required by SC VI.2. The differential pressure was observed to change on the panel if someone entered the PTE and would return to below permitted limit once the door was closed. An interlock system is installed on the PTE. If the pressure is out of spec for the PYE, an amber light will begin flashing. If it remains out of range for 15 minutes, the system will shut down the presses.

An updated air pressure differential monitoring plan (APDMP) was request from the facility once both rotogravure presses were removed. The facility maintains all SDS online to satisfy the requirement that chemical composition be maintained. The facility also receives specific usages, percentage and chemical components, and emissions data from the ink manufacturer based on monthly usages.

Records show the highest VOC emission for this flexible group was in March 2019 at 2.936 tons of VOC and the 12-month rolling was 18.67 tpy. This is well below the permitted 75 tpy limit.

#### FG\_RTO-1 and 2

Minimum VOC capture efficiency of 100% has been verified by several performance tests of the PTEs and destruction efficiency of VOC was last tested at 98%. The RTOs are equipped with a continuous pressure monitoring device with a visual alarm, as discussed above. The facility is monitoring and recording the temperature in the RTOs continuously on the Allen Bradley Process Logic Controller (PLC) which is sent to the data acquisition system (DAS). At the time of the inspection, the RTOs were operating at the appropriate temperatures.

#### FG\_FACILITY

As of December 2019, there were 28 pounds or 0.014 tpy of aggregate HAPs. September 2019 was the highest emission month for HAPs at 6.2 pounds with xylene being the highest emission HAP at 5.2 pounds. It was suggested the facility begin tracking each individual HAP for a 12-month rolling total as well as the aggregate 12-month rolling total. The facility is also well below the facility wide VOC emission limit at 18.67 tpy.

Based on the records review and facility tour, the facility appears to be in compliance with PTI 362-99F.

NAME *Annunzio*

DATE 3/13/20

SUPERVISOR 3/16/20 RIL