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

B153440236

FACILITY: GRAPHIC PACKAGING INTERNATIONAL, INC.		**SRN / ID:** B1534
LOCATION: 79 E. FOUNTAIN STREET, BATTLE CREEK		**DISTRICT:** Kalamazoo
CITY: BATTLE CREEK		**COUNTY:** CALHOUN
CONTACT: David Likens , EHS Manager		**ACTIVITY DATE:** 06/08/2017
STAFF: Rex Lane	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MAJOR
SUBJECT: Inspection		
RESOLVED COMPLAINTS:		

On June 8, 2017, Air Quality Division (AQD) staff (Rex Lane) arrived at Graphic Packaging International, Inc. (hereafter "facility") located at 79 East Fountain Street, Battle Creek, Michigan at 1:15 p.m. to conduct an unannounced air quality inspection. Staff signed in and made contact with Mr. David Likens, HSE Manager and stated that they would like to conduct an unannounced air quality inspection. The facility was last inspected by the AQD on 9/2/15 and was determined to be in compliance at that time. Staff presented Mr. Likens with their inspector credentials and a business card. Mr. Likens indicated that he has only been with the facility for a few months.

The facility is a 100% recycled paperboard plant that produces 14 – 26 point paper roll stock on two paper machines for consumer packaging. The facility does not have any package printing operations. The facility employs over 200 associates and operates two 12-hour shifts, seven days per week.

The facility is considered to be a major source for nitrogen oxides (NOX) only and currently operates under Renewable Operating Permit MI-ROP-B1534-2016. On April 8, 2015, the facility was issued Permit to Install (PTI) No. 9-15 for the rebuild of paper machine # 2; combining the emission limits for paper machine # 1 and # 2; and boiler modifications including installation of low-NOx burners, a heat recovery system and to restrict boiler fuel only to pipeline grade natural gas. The mill was shut down in early May 2015 for preventative maintenance and to rebuild paper machine # 2 and install the low NOX burners and heat recovery system on the boiler. The boiler was required to undergo emission testing to demonstrate compliance with the NOX emission factor associated with the low NOX burner technology data used in the permit application for PTI No. 9-15. Emission testing was completed on March 7, 2016 and the average NOX emission rate during testing was 117.6 lbs./MMCF gas which is 98% of the allowable limit.

Mr. Chad Longcore, Technical Superintendent came into Mr. Likens' office during the pre-inspection meeting. Staff asked about the status of the two 50,000 gallon # 6 fuel oil tanks in the basement of the facility. Per Mr. Longcore, the remaining oil was removed by a contractor and one tank has been cleaned out and pressure tested and the second tank still needs to be cleaned and pressure tested. The oil feed piping to the boiler has been removed. The facility does not have any stationary emergency generators, but have electrical taps and can bring in a portable rental unit when the need arises. Staff asked if there have been any other changes (i.e. beyond those changes associated with PTI No. 9-15) at the facility since the last AQD inspection. Mr. Longcore indicated that he wasn't aware of anything new other than perhaps like-for-like replacement of existing equipment that they believe would be exempt from air use permitting requirements. The next annual preventative maintenance facility shutdown is scheduled for October 2017.

Mr. Likens then gave staff a tour of the facility. Required PPE is a hard hat, safety glasses, steel toed boots and a safety vest. Information provided below is based on observations and discussions during the inspection and records requested and provided during and following the inspection:

The facility has four natural gas space heaters with maximum design capacity of 3 - 5 MMBtu/hr. that are exempt from air use permitting under Rule 282(2)(b)(i). Each paper machine is equipped with a natural gas fired coating drying oven with maximum design capacity of 5 - 6 MMBtu/hour. The facility has a paper rewind machine which vents internally and is exempt under Rule 285(2)(l)(vi)(B). Trimmed scrap paper is fed back into the dry end beaters on each paper machine. The facility has recently installed a core cutter to trim the cardboard tubes for the paperboard stock rolls to desired length near the maintenance area. The core cutter process vents internally and is exempt from permitting under Rule 285(2)(l)(vi)(B).

EUBLR001:

The facility has one 140,000 pound steam/hour Babcock and Wilcox boiler used for production of process steam and electricity (steam turbine). The boiler is equipped with two 88.50 MMBtu/hr. Variflame (John Zink) low-NOX burners. At the time of the inspection, the boiler was operating at about 87,000 lbs. steam/hour (~ 62%

load). The back pressure steam turbine was down for maintenance repairs. The back pressure steam turbine typically generates around 3,000 Kw/hour when in operation. The typical steam load is about 95,000 lbs. steam/hour when both paper machines and the back pressure steam turbine are in operation. Boiler maintenance is usually completed during the annual preventative maintenance shutdown of the facility. Upon staff's arrival at the facility, no visible emissions were observed from the boiler stack.

A review of natural gas usage records indicates a noticeable drop in natural gas consumption following boiler efficiency improvements completed in May 2015. The current 12-month rolling average for natural gas throughput is 1,011 MMscf/year (64% of limit) and 69.2 tons/year for nitrogen oxides which is approximately 73% of allowable limit.

FGPAPERMACH12:

Paper machine No. 1 is a 95-inch web paperboard stock machine that includes a wet and paperboard coater # 1 and drying oven # 1. Paper machine No. 2 is a 120-inch web paperboard stock machine that includes a wet and paperboard coater # 2 and drying oven # 2. Paper machines # 1 and # 2 were both in operation during the inspection.

The facility maintains VOC and HAP content data for each coating and other chemicals (i.e. wet end process) and operating hours for each paper machine, VOC emissions on daily basis, monthly and 12-month rolling average and individual and total HAPs on a monthly and 12-month rolling average. Based on a review of 2016 and 2017 emission records submitted following the inspection, the highest hourly and 12-month rolling acetaldehyde emission rates were 40% and 30%, respectively of their allowable limits. The highest average calendar day VOC emission rate was about 55% of the allowable limit. The highest 12-month rolling average VOC rate was 46% of the allowable limit. The highest individual and combined 12-month rolling HAPs emission rates were about 15% and 15%, respectively of their allowable limit. Vinyl acetate was the highest individual HAP recorded at 0.56 tons/12-month rolling average. On a monthly average, all coatings used on both paper machines must be less than or equal to 0.05 pounds VOC per gallon of coating minus water, as applied. In 2016-17, pre-coat formulas ranged between 0.014 – 0.015 lbs. VOC/gallon coating minus water as applied and top coat formulas ranged between 0.016 – 0.017 lbs. VOC/gallon coating minus water as applied which demonstrates compliance with Condition I.5.

EUSTARCHSILO:

The facility maintains a daily coating room inventory report that includes a check of starch silo level and a section for checking for visible emissions during loading of the starch silo. Staff reviewed inventory reports during the inspection which indicated no visible emissions were noted during starch deliveries. Per the inventory report form, the facility is required to discontinue unloading of starch if dust is observed and contact maintenance for repairs. This complies with the requirements of condition VI.1. The silo was not being loaded at the time of the inspection. The facility performs PM checks on the baghouse controls once every two months.

FGCOLDCLEANERS:

The facility currently has four cold cleaners in use around the mill and continues to use Crystal Clean 106 mineral spirits. The solvent MSDS sheet was reviewed during previous AQD inspections and determined that the solvent does not contain any halogenated compounds. Staff observed one cold cleaner in the maintenance area. The cold cleaner lid was closed and had a DEQ operational label that was well worn. Staff provided Mr. Likens with several DEQ cold cleaner stickers so that they could replace any worn out labels.

At the time of the inspection and based on a review of records obtained during or following the inspection, it appears that the facility is in compliance with the requirements of MI-ROP-B1534-2016.

NAME RIL DATE 6/15/17 SUPERVISOR MJQ 6/16/17