

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
ACTIVITY REPORT: On-site Inspection

B799066795

FACILITY: Hexacomb		SRN / ID: B7990
LOCATION: 807 HARRISON, KALAMAZOO		DISTRICT: Kalamazoo
CITY: KALAMAZOO		COUNTY: KALAMAZOO
CONTACT: Deral Murrie , Maintenance Manager		ACTIVITY DATE: 03/14/2023
STAFF: Monica Brothers	COMPLIANCE STATUS: Compliance	
SUBJECT: Unannounced scheduled inspection		SOURCE CLASS: MINOR
RESOLVED COMPLAINTS:		

Staff, Monica Brothers, arrived on-site at about 2:30pm and met with Deral Murrie, Maintenance Manager. Upon arrival, no visible emissions or odors were observed. We first went to his office to discuss some preliminary questions and go over some recordkeeping items before taking a tour of the facility. Hexacomb commenced operations in 1981 and makes honeycomb packaging materials out of rolls of paper and adhesive. They were last inspected in 2012 and are currently operating under PTI #161-02C. They do not have any boilers or emergency generators on-site, but they do have one parts washer. I asked Deral if they still do any printing with inks, and he said "no". During this inspection I also verified the stack height of Cyclone2, using a rangefinder.

#### FG-VOCProcess:

This Flexible Group consists of three panel manufacturing lines (EU-PanelLineA, EU-PanelLineB, and EU-PanelLineD), two core machines (EU-CoreMach1, and EU-CoreMach2), one assembly table (EU-AssemblyTable1) and one wrap station (EU-WrapRun). The panel lines and the core machines are the only equipment that uses adhesive. There are two large tanks (7,500 gallons and 7,000 gallons) inside the building that store the two adhesives they are currently using, one for the panel lines and the other for the core machines. These tanks are vented internally and are not heated. The core machines use rolls of paper and adhesive to create a core of honeycomb webbing. The panel lines then take the honeycomb cores and apply sheets of paper to both sides using adhesive. I viewed EU-WrapRun during the tour, which they call the Hexablock machine. It uses hot melt, which is considered exempt under Rule 287 (2)(i). Deral said that they only use a very small amount of brake cleaner in aerosol cans for clean-up on the machines. Otherwise, they just use water for cleaning.

I noticed that the facility had a third core machine that was not already in their permit. I asked Deral about whether they installed this third core machine under an exemption, and he said that he would have to check with his environmental team on that and get some additional information. After the inspection Deral sent me some documentation that shows that they installed this core machine under the Rule 290 exemption. This documentation is attached to this report.

Permit # 161-02C also requires the facility to do Method 24 testing for each of the VOC-containing materials used in this Flexible Group. Since they no longer print or use any inks, the only VOC-containing materials used are the two adhesives. Looking through the AQD files for Hexacomb, I found documentation that they were approved to use manufacturer's formulation data for the adhesives they were using at the time. It does not say that the approval was only for those specific materials, so they have been using manufacturer's formulation data ever since, even if they changed the adhesives they were using. According to the records, the VOC content of their

adhesives has gone down over the years, so this approach is acceptable. However, I let Deral know that if they ever changed to using higher VOC-content materials for this Flexible Group, that they should get it tested via Method 24 just to make sure the manufacturer's formulation data is accurate and that they are staying under their permitted limits. He said that he would do that.

I viewed their VOC records, and they are consistently far under their limit of 9.0 tons/year for a 12-month-rolling time-period.

FG-Cyclone2:

This Flexible Group consists of one cyclone that is used to control paper waste from the panel lines, the Sysco die-cutter and the shredder/scrap conveyor. I went onto the roof during the inspection to view the cyclone. No visible emissions were seen coming from the cyclone, and the roof looked clean, except for a couple of paper scrap piles. Deral said that those piles were from a previous clog that hadn't been disposed of yet because of the snowy and icy weather conditions. He said that now that the weather was improving, they would safely be able to get on the roof and remove this paper material. They are required to conduct weekly visible emissions observations. I viewed the records for these observations, and they have not seen any visible emissions coming from the cyclone within the past couple of years. I used the rangefinder to measure the stack height for the cyclone, which is required to be at least 42 feet above ground-level. The rangefinder measurement was about 46 feet, which is in-compliance with their permit.

Other Exempt Equipment:

There are two die presses, the Bruno and the Chenfeng, that vent internally and are considered exempt under Rule 285(2)(l)(vi). They also have one parts washer that is maintained by Safety-Kleen. It uses Safety-Kleen Premium Solvent (Virgin and Recycled) and is considered exempt under Rule 281(2)(h). The lid was closed, and I gave Deral some EGLE parts washer stickers to place on the unit. They also do some welding, which is considered exempt under Rule 285(2)(i).

The facility seemed to be in-compliance at the time of inspection.

NAME 

DATE 3/28/23

SUPERVISOR RIL 4/6/23