

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

N077027865

FACILITY: BASF Corporation		SRN / ID: N0770
LOCATION: 23930 Concord Ave, MATTAWAN		DISTRICT: Kalamazoo
CITY: MATTAWAN		COUNTY: VAN BUREN
CONTACT: Dwight Taylor, Plant Manager		ACTIVITY DATE: 11/19/2014
STAFF: Dorothy Bohn	COMPLIANCE STATUS: <i>Compliance</i>	SOURCE CLASS: SM OPT OUT
SUBJECT: unannounced inspection		
RESOLVED COMPLAINTS:		

When I arrived at the plant location I drove past it and came back. I did not observe any visible emissions or notice any odors but I don't believe was downwind of the plant either. I entered the facility about 10:25 and met with Dwight Taylor, Plant Manager; Doug Teugh, QC Supervisor; and Vern, Maintenance. At the opening meeting I gave them a copy of the inspection brochure.

They are operating 10 hour shifts 1 or 2 a day 5 days a week with some Saturdays. Their primary product is polyurethane adhesive that cures by the water in the atmosphere (65-70% of production) We reviewed the equipment at the plant and what I wanted to see. I decided I did not need to see the underground storage tanks (USTs). But was told that there are 3, each split into 2 so 6 compartments. None of the materials stored in them have changed. I was told they have vapor return lines to collect working loss vapors and return them to the tank. There are no emissions unless a pressure relief valve blows. The USTs have not changed and contain the same materials. They are working on a new process to install under Rule 290.

We then toured the facility. All the equipment since the last inspection is still there but a significant number of it is not being used. Some of this is slated for removal.

**Basement:** There are a number of raw material storage tanks.

**EUWBLine:** This is included in the PTI. Tanks 7A & B are not used. The mixers are #5 & 7. There is also a packaging line.

**Acrylics room:** 99% of these products are not made anymore and Mixer A is the only one used as of now. Mixer B, C, X, Y & Z are still here. They are planning to use mixers B & C with the new Rule 290 process. Mixer X they said has never been used. I will email the company and ask what these mixers operate under because I don't see them in the PTI or in MAERs as a Rule 290.

**1<sup>st</sup> floor:** The Geyer packaging and the old quarts packaging machines are gone. The Premium pints packaging machine is called their linear pints, and the Pro 2000 Pints machine is called the rotarty pints machine. The top of water-based mixer 5 is on the 1<sup>st</sup> floor.

**EUPL mix room:** About 10-15 years ago they went from producing construction adhesive on this line to solvent based concrete coatings and is uncontrolled. The concrete coating does not use hexane. Tanks 1&2, and mixers 2&3 are there but are not being used. Right outside the door to this room is a small packaging line for PL mixes that packages from drums into cans. The Kure N Seal packaging is for PL room mixes also.

**EUMeyers Room:** In the prepolymer part are storage tanks, including the MDI Isocyanate tanks with permit requirements. Unloading of the MDI is supervised by one of 2 trained staff. I was shown the work instruction book with procedure 20.260 for operating this equipment. In the mix room mixer 6A is gone. Mixers 6B, FE (#2) and FD (#1) are covered under the PTI. Mixer FF is the Rule 290 unit. The baghouse is located outside and vents horizontally. There were 4 drums of C in series that control mixer FE. One drum has the breakthrough detector. It still was somewhat pink. All the processes in this room are in closed containers. Xylene is used to clean the blades now.

**Acrylic Coating Mix room:** Only Mixers 7 & 8 are on this floor. The tops of mixers 1, 2 & 3 (A,B & ,C) come through the floor. 99% of these products are not made any more and so only mixer A is being used. According to the company's 11/25 email, the acrylics process is operating under Rule 290 as EUWBCMixer1. In MAERs it is included under RG-Coatings.

**2nd Floor:** Maintenance is on the 2<sup>nd</sup> floor (see other), a premium quarts packaging machine for Mixers FD and FF in the Meyers room and 3 drums of carbon that control mixer 1 & 3 (FD & FF) in the Meyers room. The 3 are in parallel each having a breakthrough indicator. It appeared to me that they were close to maxing out. The carbon was new on 9/9/14 and they said they would be changed in the next 2 weeks.

**3rd Floor:** This has raw material storage and the Rule 290 UCrete process. This is a 2 part product. One part is just packaged. The other part is mixed then packaged.

**Other:** I was told they do not have any generators – either for emergency electricity or fire pumps. They do have a cold cleaner in maintenance, the lab and the Meyers Room. I was told that the one in maintenance is always empty unless in use. I observed the one in maintenance – it is a short “drum” maybe about 1-1/5’ tall and wider than a 55 gallon drum with a lid that was closed. It was empty and posted twice. Vern said that it is about a 20 gal drum. When needed he puts about 5 gallons of cleaner in it, uses it and then pitches it. I also viewed the one in the Meyers Room. The lid was closed and it was also posted.

The plant is heated by a 1960 gas-fired boiler and some electric heating units in the office areas. The boiler is 5.25 MMBtu/hr. The facility is subject to the area source MACT Part 63, Subpart 6V but I did not evaluate their compliance with this as we are not delegated authority for it.

**Records Review:** The company uses a software program, SAP, that tracks all business data, including recipes, and is the basis for the air records. Everything is made in batches and each batch has a sheet/recipe, as does packaging. So they know how many batches were made and develop a monthly volume sheet that includes both raw materials and finished product. They have developed emission factors of # emissions/# of product to calculate the emissions.

For any given month total HAPs emissions were less than 0.1 tpy. The maximum VOC was 0.77 tpy in 7/2013 and the highest pph was 0.5 but this is using 20 hour work days and sometime it is 1 shift. The only notification in the file in the last several years was received on 7/9/12 for Rule 285(c). The maximum emissions for the EUPLLine were 126# VOC in October 2014. Emissions from the acrylics room was around 2.5#VOC/month and from the waterbased line (EUWBLLine) maximum emissions were in 7/13 at 3.98# VOC.

Rule 290 records showed maximum monthly emissions of the following:

Quart Packaging – 0.4 # in 10/14,	1 <sup>st</sup> Floor Packaging – 0.97 # in 9/14
Tank A radiance - < 1# VOC	Meyers290 3.25# VOC in 4/13
PL Packaging – 119# VOC	
EUUCrete - < 10# MDI (MDI has an ITSL of 0.6 so it is only allowed 20#/month.	

They also use a very small amount of ink on the packaging prints (<1 pint a year). This can operate under Rule 287(c). I believe that some of the packaging lines being treated as Rule 290 were actually included in their PTI. But the records indicate whichever way they do it they are below their limits.

At the closing meeting we discussed that they are probably a true minor source and what their options are for becoming one (they could revise their PTI to remove the HAPs limits, or they could void the PTI and probably operate everything under exemptions). They are going to look into this. I left at 1:15. I told them that they appeared to be in compliance but that I wanted to sit down and review everything at the office. The facility does look to be in compliance.

NAME Norothy Bohm

DATE 11/25/14

SUPERVISOR MB 11/25/2014