

N1060

MAWILA

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

N106031390

| | | |
|---|-------------------------------|---------------------------|
| FACILITY: BASF CORP | | SRN / ID: N1060 |
| LOCATION: 13000 LEVAN ROAD, LIVONIA | | DISTRICT: Detroit |
| CITY: LIVONIA | | COUNTY: WAYNE |
| CONTACT: Brandie Baker , EHS Specialist | | ACTIVITY DATE: 07/21/2015 |
| STAFF: Jill Zimmerman | COMPLIANCE STATUS: Compliance | SOURCE CLASS: SM OPT OUT |
| SUBJECT: Target Inspection | | |
| RESOLVED COMPLAINTS: | | |

DATE OF INSPECTION : July 21, 2015
 TIME OF INSPECTION : 10:00 am
 LEVEL OF INSPECTION : II
 NAICS CODE : 325211
 EPA POLLUTANT CLASS : VOC
 INSPECTED BY : Jill Zimmerman
 PERSONNEL PRESENT : Brandie Baker, EHS Specialist
 FACILITY PHONE NUMBER : 734-591-5561
 EMAIL CONTACT : brandie.baker@basf.com

FACILITY BACKGROUND

BASF is a chemical blending facility. The facility is located in Livonia, on Levan Road, just south of Schoolcraft Road. The facility is currently operating as a synthetic minor facility operating two different mixing processes, isocyanate and resin.

COMPLAINT/COMPLIANCE HISTORY

No complaints have been received regarding this facility since the last time that it was inspected.

OUTSTANDING VNs

No Violation Notices (VN) have been issued regarding this facility since the last time that it was inspected.

PROCESS EQUIPMENT AND CONTROLS

BASF is a mixing facility. Different chemicals are added to a batch reactor, where they react to achieve the desired final product. The isocyanate process occurs on the west side of the facility and the resins process occurs on the east side of the facility. There are over thirty storage, blending, and reactor tanks in various sizes.

The isocyanate mixing process is a reaction between the raw materials, including methylene diphenyl diisocyanate (MDI), polyol resin, and catalyst. Raw materials are brought to the facility either on a railcar or a truck. There are seven reactors to create the final product, liquid urethane. The reaction vessels and any transporting of raw materials are controlled by mist eliminators. The carbon adsorption equipment was removed and replaced by the mist eliminators when the most recent permit was issued.

The resin operations include the raw materials polyol resin, blowing agent HFC-134a and HFC-245fa and liquid and powder additives. There are not reactions in this operation, just mixing the chemicals in one of twelve resin blending vessels.

9/24/2015

INSPECTION NARRATIVE

I arrived at the facility and met with Ms. Brandi Baker. She explained the process at the facility, which is mostly different batch mixing of different chemicals in reactors. Ms. Baker also showed me the current recordkeeping form, and agreed to send me an email copy for my review.

Next we walked through the facility, which included raw material storage, and final product storage. There were also large reactor vessels where the different reactions take place. Depending on the customer's requests, different batches are made. On the isocyanate side of the facility, the chemicals react with each other to create the final desired product. On the resin side, the chemicals are mixed together to create the final product, though no reactions occur in this area of the facility.

APPLICABLE RULES/PERMIT CONDITIONS

The facility is currently operating under opt-out permit 198-00H, which was issued on April 2, 2015.

FGISOCYANATE – This flexible group contains all equipment associated with the isocyanate side of the process, including reactors, storage tanks, loading and drumming operations, and various miscellaneous activities.

- I. Emission Limits – Compliance. Based on the records that were collected during the onsite inspection, no emission unit has exceeded the MDI emission limit for the past twelve months. These records are attached to this report.
- II. Material Limits
 1. Compliance. During the past twelve months, the EUISOREACTORS had a throughput of less than 27,000 tons of MDI, which is less than the permit limit of 50,000 tons of MDI.
 2. Compliance. During the past twelve months, the throughput of MDI for EUISODRUMMING1 and EUISODRUMMING2 was less than 24,000 tons, which is less than the permit limit of 50,000 tons.
- III. Process/Operational Restriction – Compliance. The storage tanks at the facility comply with 40 CFR Part 60 Subparts A and Kb.
- IV. Design/Equipment Parameters – NA
- V. Testing/Sampling – NA
- VI. Monitoring/Recordkeeping – Compliance. The facility maintains records for all of the listed emission units by emission units. A copy of the records collected during the onsite inspection is attached to this report.
- VII. Reporting – NA
- VIII. Stack/Vent Restriction – Compliance. All stacks have been installed at this facility to meet the permitted requirements. No modifications have been made to these stacks since the last inspection.
- IX. Other Requirements – NA

FGRESIN – These emissions units make up the resins sections of the facility and include fixed roof resin blend tanks, fugitive emissions and bulk tanker resin emptying and fillings.

- I. Emission Limits – NA
- II. Material Limits – Compliance. The facility reported a throughput of polyol resin of less than 33,000 tons in 2014, which is less than 130,000 tons per year.
- III. Process / Operational Restrictions – NA

- IV. Design / Equipment Parameters – Compliance. The facility operates this flexible reporting group under the required conditions, which include all tanks having a fixed roof.
- V. Testing / Sampling – NA
- VI. Monitoring / Recordkeeping – Compliance. The facility keeps records for the polyol resin and trimethylamine throughput. These records were reviewed onsite.
- VII. Reporting – NA
- VIII. Stack / Vent Restrictions – Compliance. All stacks have been installed at this facility to meet the permitted requirements. No modifications have been made to these stacks since the last inspection.
- IX. Other Requirements – NA

FGFACILITY

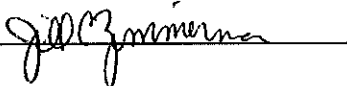
- I. Emission Limits – Compliance. The facility is limited to emitting less than 90 tons per year of VOC. For the past twelve months the facility emitted less than 2 tons of VOCs. The facility is limited to emitting less than 9 tons per year of an individual HAP and less than 22.5 tons per year of aggregated HAPS. During the past year, the facility emitted less than 2 tons of all HAPS.
- II. Material Limits – NA
- III. Process / Operational Restrictions – Compliance. The facility promptly cleans up all spills of MDI in an effort to minimize the amount emitted. During the onsite inspection no MDI spills were observed. The railcars delivering materials must be sealed to Department of Transportation (DOT) specifications. The facility has submitted a MAP plan and there is no evidence that this plan is not being followed.
- IV. Design / Equipment Parameters – NA
- V. Testing / Sampling – NA
- VI. Monitoring / Recordkeeping – Compliance. The facility maintains records for the throughput and emissions of all HAP containing materials at the facility. A copy of these records is attached to this report.
- VII. Reporting – NA
- VIII. Stack / Vent Restrictions – NA
- IX. Other Requirements – NA

MAERS REPORT REVIEW

The MAERS was received on March 13, 2015 and was reviewed on May 29, 2015. All emissions appear to have been reported accurately.

FINAL COMPLIANCE DETERMINATION

BASF appears to be operating in compliance with all state and federal regulations as well as all permit conditions.

NAME  DATE 9/24/15 SUPERVISOR 