

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

N684244403

FACILITY: RheTech Inc		SRN / ID: N6842
LOCATION: 9201 W Grand River, FOWLERVILLE		DISTRICT: Lansing
CITY: FOWLERVILLE		COUNTY: LIVINGSTON
CONTACT: Kurt Temmen , Plant Manager		ACTIVITY DATE: 05/22/2018
STAFF: Kelly Richart	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Scheduled unannounced inspection. No permits for compliance, mainly exempt through rule 286(2)(a)- plastic extrusion.		
RESOLVED COMPLAINTS:		

Contact:

Kurt Temmen, Plant Manager, 734-320-1989, ktemmen@rhetechnology.com

Location:

9201 W. Grand River
Fowlerville, MI

Company:

There are four RheTech locations around the US- the Fowlerville location opened in 1997. RheTech is a HEXPOL company, a leading producer of filled and reinforced polypropylenes, engineered resins, color concentrates and additives.

Previous Inspections:

8/24/2012 Brad Myott
10/31/2008 Ken Damrel

PTI/Exemptions:

Exemption Rule 286(2)(a): plastic extrusion
Exemption Rule 281(2)(h): paris washer
Exemption Rule 284(k): Talc powder supply

Arrival:

Time: 8:54am

Conditions: 55 °F, cloudy, winds from the West at 3 mph, no visible emissions or odors.

I arrived at the facility and was greeted by Kurt Temmen the Plant Manager. We briefly sat down and discussed any changes to the facility since the previous inspection in 2012 and then toured the facility. There was a slight plastic odor in the building, but it was very organized and well-kept. RheTech runs 3 shifts a day, 5 days a week, on average.

Facility Equipment:Exemption Rule 286(2)(a)Plastic Extrusion Lines:

There are 3 plastic extrusion lines (F1, F2, F3). This equipment is the same as during the previous inspection in 2012. The plastic mixture is heated to 450-500 °F, and includes polypropylene and additives such as shredded fiberglass, talcum powder, and occasionally mica depending on the extrusion line and product request.

Line F1: 1200 HP, 160 mm twin screw extruder, polypropylene plastic produced on this line.

Line F2: 500 HP, 90 mm, twin screw extruder, polypropylene and shredded fiberglass used.

Line F3: 400 HP, 6" single screw extruder, polypropylene plastic produced on this line.

On each extrusion line, there is a hood over the die head (beginning) of each extrusion line to collect the smoke and impurities being burned off of the plastic mix. This smoke is collected and sent to the Smog Hog. There is a second hood over the end of the extrusion line to collect particulate matter which is sent to the Dust Collector.

During the inspection, I saw F1 going through a product change, and F2 producing black pellets of a fiberglass/polypropylene mix, and F3 producing black polypropylene pellets.

Smog Hog:

The beginning of the plastic extrusion process is under vacuum and the smoke is captured while the mix is compounding. This process pulls out the volatiles from all 3 plastic extrusion lines before the mixture is sent through the extrusion process. The captured smoke from all 3 extrusion lines vents into the Smog Hog. There are 24 electrostatic filters and this process separates the oil and contaminants from the air and vents the filtered air back into the plant. This unit was upgraded in July 2017. The filters are serviced weekly by UAS (manufacturing company). The sludge oil that is separated is collected in buckets on the floor. This oil goes into their waste sludge oil crate where it is collected, and US Industrial Tech comes to remove the waste when needed. Kurt showed me a copy of a previous removal service done by US Industrial Tech.

Dust Collector:

At the end of each extrusion line, there is a hood to collect any particulate matter coming off of the finished plastic pellets. This particulate matter is collected into the dust collector located outside of the building. The dust collector has cartridge filters, and blasts of air knock off any particulate matter into two 55-gallon drums below. There was no excess dust around the drums, it looked very well-kept. They change filters approximately once a year and change the drums about every 3 weeks- at this point they are about half full, and they send this collected matter to a third party to dispose of the waste.

Exemption Rule 281(2)(h)Parts Washer:

RheTech has a Crystal Clean parts washer that is approximately 3 by 2 feet in size and excess waste is collected into a small drum below. The "sink" area is concealed by a flat lid, so no evaporation occurs. It is exempt through Rule 281(2)(h) as the surface area of the parts washer air/vapor interface is less than 10 square feet. Heritage Crystal Clean comes in for maintenance roughly every quarter to remove the drum contents. Kurt showed me a copy of a blanket PO from when the parts washer was serviced.

Exemption Rule 284(k)Talcum Powder Collector:

There was a new ventilation system installed last year for their talcum powder supply to capture the dust that is emitted when this product is added to the system. It has a hood and collection system that vents into a dust collector with cartridge filters and is collected into a 55-gallon drum. This area was tidy, and the drum was concealed.

Miscellaneous:

There are no emergency generators, or boilers.

RheTech just replaced a majority of the ventilation ductwork in July 2017 inside facility.

There are 3 large ventilation fans on the side of the building and one large fan on the ceiling for extra ventilation.

Summary:

All of the processes seen during the inspection are exempt and do not require a permit. I did not find any violations or areas of concern. The facility was very well-kept and organized.

Departure:

Time: 9:30 am

Conditions: 57 °F, cloudy, rain, winds from the West at 3mph, no visible emissions or odors

Kurt and I sat down after the tour and discussed my findings and the exemption booklet. Kurt requested a copy of the inspection report and that I also cc Brian Gillett to the email.

NAME

Kelly R.

DATE

5/30/18

SUPERVISOR

J.S.M.