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

N186454479					
FACILITY: NORON COMPOSITE T	SRN / ID: N1864				
LOCATION: 650 Hoague Rd., GRA	DISTRICT: Cadillac				
CITY: GRANT TWP		COUNTY: MASON			
CONTACT: Ron Melchert Sr , Presid	dent	ACTIVITY DATE: 07/24/2020			
STAFF: Jodi Lindgren	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR			
SUBJECT: Field inspection and records review report					
RESOLVED COMPLAINTS:					

FACILITY DESCRIPTION

On Friday July 24, 2020, Jodi Lindgren of the Department of Environmental, Great Lakes, and Energy (EGLE) – Air Quality Division (AQD) conducted a scheduled inspection of Noron Composite Technologies, Inc. (Noron) (N1864) located at 650 West Hoague Road, Manistee, Mason County, Michigan, 49660. Mr. Ronald Melchert owner of Noron was present to accompany AQD staff during the plant inspection.

Noron is a Title V facility as a major source of hazardous air pollutants (HAPs) due to the potential to emit over ten tons of styrene. The Federal Air Permit, MI-ROP-N1864-2016, was issued on May 13, 2016. The permitted process requires the use of styrene containing gel coats and resins to produce laminated fiberglass products for various industries, but primarily health care and food service. The permitted process includes three dry filter spray booths used for resin application, three dry filter spray booths used for gel coat application, and other associated materials used for tooling processes and cleaning. As a reinforced plastic composites producer, the process is subject to the performance testing and recordkeeping requirements of 40 CFR Part 63 Subpart WWWW (NESHAP WWWW).

On February 9 2016, Noron was issued permit to install 168-04C increasing the VOC material limits for the tooling resins. PTI 168-04C will be rolled into the ROP during the next renewal.

The facility has not operated since January 2020, but retains an active ROP as the owner placed the business for sale. At the time of the inspection, all of the permitted process equipment has been dismantled, sold, and removed from the facility. The stacks have been appropriately decommissioned and are in the process of being sold. All process materials such as resin and gel coat have been removed from the site via sale or proper disposal.

As part of the full compliance evaluation, permit required records were reviewed for the time period of January 2019 to December 2019. The facility had inconsistent, limited production during the month of January 2020 prior to permanently ceasing operation. The records for January 2020 were available for review and appeared adequate but will not be discussed in this evaluation as it was not representative of typical operation.

COMPLIANCE EVALUATION

A. SOURCEWIDE – There are currently no source wide terms and conditions contained in the ROP; therefore, this section is not applicable.

B. EULAMINATION – Three dry filter spray booths used for the resin application process. Production resins and tooling resins are applied mechanically with non-atomized applicators. This emission unit is covered in the ROP and modified by PTI 168-04C.

1. Emission Limits – VOC emissions are limited to 11.1 tons per year pursuant to conditions of the ROP and PTI 168-04C. Records demonstrated compliance with a total of 1.22 tons of VOC emissions in 2019 utilizing mass balance calculations.

2. Material Limits – The ROP restricts the production resin to no more than 34% VOC by weight and the PTI 168-04C restricts tooling resins to no more than 55% VOC by weight. Records of all the resins used appeared to be thorough and documentation of verifying VOC content was available. The highest VOC content of the production resin was 33% and the highest VOC content of the tooling resin was 46.9%, which demonstrates compliance with the ROP and PTI 168-04C.

3. Process/Operational Restrictions - The ROP requires an exhaust filter to be installed, maintained, and

operated in a satisfactory manner for all booths in operation. PTI 168-04C requires all process material waste to be captured, stored, and disposed of in a manner that is compliant with all state and federal regulations. Proper filter use was unable to be verified as all process equipment and booths were dismantled at the time of the inspection. Invoices showing filter purchases were available and indicative of compliance with the ROP. No process material waste was on site during the inspection. Previously used storage areas were still partially in place during the inspection. They appeared to offer proper containment and they appeared to previously connect to the ventilation system exiting through a filtered exhaust indicating compliance with PTI 168-04C.

4. Design/Equipment Parameters – The ROP and PTI 168-04C requires the use of non-atomized applicators or equivalent technology as well as proper filtration in the associated exhaust. Previous AQD inspections indicate the use of non-atomized applicators and proper filtration. The process equipment including applicators had been sold prior to the inspection. Sale invoices indicated non-atomized applicators had been sold and purchase invoices indicated filters were available for the exhaust system while they were in operation indicating compliance with the ROP and PTI 168-04C

5. Testing/Sampling – There are no testing and/or sampling requirements associated with this emission unit in the ROP or PTI 168-04c; therefore, this section is not applicable.

6. Monitoring/Recordkeeping – The ROP and PTI 168-04C states monthly emission calculations must be completed and available to AQD as well as records of all resin used with the associated VOC content. The previously received ROP annual certification, ROP semi-annual certification, and MAERS submittal included a list of all the resins used with the associated VOC contents and emission calculations satisfying the requirements of the ROP and PTI.

7. Reporting – All reports submitted pursuant to the ROP were previously reviewed and documented with no noncompliance issues. PTI 168-04C did not reporting requirements.

8. Stack/Vent Restrictions – The stacks associated with this emission unit appeared to be installed in accordance with the specifications contained in the ROP.

9. Other Requirements – There are no other requirements associated with this emission unit; therefore, this section is not applicable.

C. EUGELCOAT – Three dry filter spray booths used for the gel coat application process. Gel coats are applied mechanically with non-atomized applicators.

1. Emission Limits – VOC emissions are limited to 18 tons per year pursuant to conditions of the ROP. Records demonstrated compliance with a total of 2.19 tons of VOC emissions in 2019 utilizing mass balance calculations.

2. Material Limits – The ROP restricts the percent VOC, styrene monomer (styrene), and MMA contents by weight for each of the gel coats types listed in the table below along with the reported values. Records reported the use of two white gel coat formulas and two non-white color gel coat formulas. The report values in the table represents the highest value for each pollutant when multiple formulas were used.

Gel coat Type	ROP limit by weight		Reported values by weight			
	% VOC	% Styrene	% MMA	% VOC	% Styrene	% MMA
Clear Gel coats	48%	48%	10%	47%	31.1%	10%
White Gel coats	36%	31%	10%	36%	30.7%	5%
Color Gel coats	45%	40%	10%	43.7%	37%	6%
Tooling Gel coats	48%	43%	10%	46%	42.3%	4.2%

The records provided to AQD indicates compliance with the ROP material limits.

3. Process/Operational Restrictions – The ROP requires an exhaust filter to be installed, maintained, and operated in a satisfactory manner for all booths in operation. Proper filter use was unable to be verified as all process equipment and booths were dismantled at the time of the inspection. Invoices showing filter purchases were available and indicative of compliance with the ROP.

4. Design/Equipment Parameters – There are no design and/or equipment parameters associated with this emission unit in the ROP; therefore, this section is not applicable.

5. Testing/Sampling - There are no testing and/or sampling requirements associated with this emission unit in

the ROP; therefore, this section is not applicable.

6. Monitoring/Recordkeeping – The ROP states monthly emission calculations must be completed and available to AQD as well as records of all gel coats used with the associated VOC, styrene, and MMA content. The previously received ROP annual certification, ROP semi-annual certification, and MAERS submittal included a list of all the gel coats used with the associated VOC, styrene, and MMA contents and emission calculations satisfying the requirements of the ROP.

7. Reporting – All reports submitted pursuant to the ROP were previously reviewed and documented with no noncompliance issues.

8. Stack/Vent Restrictions – The stacks associated with this emission unit appeared to be installed in accordance with the specifications contained in the ROP.

9. Other Requirements – There are no other requirements associated with this emission unit; therefore, this section is not applicable.

D. EUMISCMATERIALS – Miscellaneous solvent materials that are not resins and/or gel coats and which are used throughout the facility. May include catalysts, paste wax, mold release, etc.

1. Emission Limits – VOC emissions are limited to 6.3 tons per year pursuant to conditions of the ROP. Records demonstrated compliance with a total of 0.47 tons of VOC emissions in 2019 utilizing mass balance calculations.

2. Material Limits – There are no material limits associated with this emission unit in the ROP; therefore, this section is not applicable.

3. Process/Operational Restrictions – There are no process and/or operational restrictions associated with this emission unit in the ROP; therefore, this section is not applicable.

4. Design/Equipment Parameters – There are no design and/or equipment parameters associated with this emission unit in the ROP; therefore, this section is not applicable.

5. Testing/Sampling – There are no testing and/or sampling requirements associated with this emission unit in the ROP; therefore, this section is not applicable.

6. Monitoring/Recordkeeping – The ROP states monthly emission calculations must be completed and available to AQD as well as records of all miscellaneous solvents used with the associated VOC content. The previously received ROP annual certification, ROP semi-annual certification, and MAERS submittal included a list of all the miscellaneous solvents used with the associated VOC contents and emission calculations satisfying the requirements of the ROP.

7. Reporting – All reports submitted pursuant to the ROP were previously reviewed and documented with no noncompliance issues.

8. Stack/Vent Restrictions – The stacks associated with this emission unit appeared to be installed in accordance with the specifications contained in the ROP.

9. Other Requirements – There are no other requirements associated with this emission unit; therefore, this section is not applicable.

E. EUCLEANUP – Acetone used for cleanup activities throughout the shop.

1. Emission Limits – Acetone emissions are limited to 30 tons per year pursuant to conditions of the ROP. Records demonstrated compliance. The emissions calculations could not be located during the inspection, but the total usage was available. The total acetone used in 2019 was 4.75 tons, so the emissions would be well below the 30 ton per year limit.

2. Material Limits – There are no material limits associated with this emission unit in the ROP; therefore, this section is not applicable.

3. Process/Operational Restrictions – The ROP requires all Acetone waste to be captured, stored, and disposed of in a manner that is compliant with all state and federal regulations. Only a partially full quart sized canister of acetone was on site during the inspection. It was stored in the original container tightly capped indicating compliance with the ROP requirements.

4. Design/Equipment Parameters - There are no design and/or equipment parameters associated with this

emission unit in the ROP; therefore, this section is not applicable.

5. Testing/Sampling – There are no testing and/or sampling requirements associated with this emission unit in the ROP; therefore, this section is not applicable.

6. Monitoring/Recordkeeping – The ROP states monthly emission calculations must be completed and available to AQD as well as records of total volume of acetone used and recovered. The previously received ROP annual certification, ROP semi-annual certification, and MAERS submittal included a list of total volume of acetone used daily satisfying the requirements of the ROP.

7. Reporting – All reports submitted pursuant to the ROP were previously reviewed and documented with no noncompliance issues.

8. Stack/Vent Restrictions – The stacks associated with this emission unit appeared to be installed in accordance with the specifications contained in the ROP.

9. Other Requirements – There are no other requirements associated with this emission unit; therefore, this section is not applicable.

F. FGMACT – All emission units subject to 40 CFR Part 63, Subpart WWWW, National Emission Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production (MACT WWWW).

1. Emission Limits – The table below outlines the emission limits. Compliance with gel coat emission limits in the table below is demonstrated by using the weighted average per 40 CFR 63.5810(C). Compliance with resin emission limits shown in the table below is demonstrated by using the HAP contents limits per 40 CFR 63.5810 (d) and Table 7 of MACT WWWW. Certificates of analysis are utilized when available for gel coats and resins. In the event that no certificate of analysis is available, SDS data is used to complete the calculation. Records provided by the company in semi-annual reports demonstrates compliance.

Ormonia HAD Limit	12 month rolling average			Emission Unit	
Organic HAP Limit					
88 lbs./ton resin	Open Molding	Non-CR/HS Resin	Mechanical Application	EULAMINATION	
87 lbs./ton resin	Open Molding	Non-CR/HS Resin	Manual Application	EULAMINATION	
254 lbs./ton resin	Open Molding	Tooling Resin	Mechanical Application	EULAMINATION	
157 lbs./ton resin	Open Molding	Tooling Resin	Manual Application	EULAMINATION	
440 lbs./ton gel coat	Open Molding	Gel Coat	Tooling	EUGELCOAT	
267 lbs./ton gel coat	Open Molding	Gel Coat	White/Off White	EUGELCOAT	
377 lbs./ton gel coat	Open Molding	Gel Coat	Non-white Color	EUGELCOAT	
522 lbs./ton gel coat	Open Molding	Gel Coat	Clear Production	EUGELCOAT	

2. Material Limits – There are no material limits associated with this flexible group in the ROP; therefore, this section is not applicable.

3. Process/Operational Restrictions – MACT WWWW requires all waste catalysts, resins, and gel coats to be captured, stored, and disposed of in a manner that is compliant with all state and federal regulations. No process material waste was on site during the inspection. Previously used storage areas were still partially in place during the inspection. They appeared to offer proper containment and they appeared to previously connect to the ventilation system exiting through a filtered exhaust indicating compliance.

4. Design/Equipment Parameters – There are no design and/or equipment parameters associated with this flexible group in the ROP; therefore, this section is not applicable.

5. Testing/Sampling – MACT WWWW dictates the HAP content of any resin, gel coat, etc. be determined using manufacturer's formulation data. The facility maintained data from the manufacture for all HAP containing materials including the formulas developed specifically for Noron.

6. Monitoring/Recordkeeping – MACT WWW requires all HAP containing material be monitored for usage volumes, HAP content, application methods, work practices, and monthly emission calculations. I was unable to observe work practices as the facility is nonoperational. However, the facility has records of demonstrating the usage, application method, and monthly emission calculations for all subject materials. The required MACT WWWW annual certification reports, semi-annual certification reports, and notifications have been submitted

with the necessary information and in a timely manner.

7. Reporting – All reports submitted pursuant to the ROP and MACT WWWW were previously reviewed and documented with no noncompliance issues.

8. Stack/Vent Restrictions – There are no stack or vent restriction associated with this flexible group in the ROP; therefore, this section is not applicable.

9. Other Requirements – Based upon the records review and onsite inspection, AQD staff determined the facility to be in compliance with the applicable requirements of MACT WWWW.

EVALUATION SUMMARY

Conclusion – Based upon the Full Compliance Evaluation, it appears the source was in compliance with ROP No. MI-ROP-N1864-2016 and PTI 168-04C at the time of the evaluation.

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DATE 8/5/2020

SUPERVISOR