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

N186434860		
FACILITY: NORON COMPOSITE TECHNOLOGIES, INC		SRN / ID: N1864
LOCATION: 650 Hoague Rd., GRANT TWP		DISTRICT: Cadillac
CITY: GRANT TWP		COUNTY: MASON
CONTACT: Jonathon Bosley, REGULATORY COMPLIANCE MANAGER		ACTIVITY DATE: 05/11/2016
STAFF: Rob Dickman-	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Scheduled inspection	of this ROP subject source.	
RESOLVED COMPLAINTS;		

Noron Composite Technologies, Inc. has been in operation at this location since 1988. The facility manufactures laminated fiberglass products parts primarily for the health care and food service industries. In the past they have also produced parts for the boat manufacturing industry. Parts are constructed in molds (that are also manufactured on-site) from sprayed gelcoat, fabric and chopped fiberglass, and manually applied resin. These operations meet the definitions for open molding non-CR/HS, tooling, and gel coat as defined in 40 CFR Part 63, Subpart WWWW for Reinforced Plastic Composites Production. There are other associated processes such as material cutting, solvent clean-up, cut-out, grinding, and finishing that also occur on-site. Acetone is the primary solvent used to clean tools and flush equipment. Prior to entering the facility, no odors were noted downwind. The production floor of the facility demonstrated good housekeeping. Records reviewed and obtained from the facility appeared complete, well organized, and were available upon request. No issues were noted during the inspection. Following are the findings of the inspection by ROP special condition. It should be noted that this inspection was performed just prior to issuance of the facility's ROP renewal (MI-ROP-N1864-2016), therefore, the inspection was per MI-ROP-N1864-2011.

EUFOAM - Spray foam insulation for freezer /cooler units

This emission unit has been out of service for more than 12 months (February 2015). It was noted during the inspection that the unit has been dismantled.

<u>EULAMINATION</u> - Three dry filter spray booths used for resin application process. Production resin(s) are applied with non-atomized applicators. Tooling Resins are applied manually or using non-atomized applicators.

I. EMISSION LIMIT(S) – VOC emissions are limited to 11.1 tpy based on a 12-month rolling time period. VOC emissions as of April of 2016 were 1.8 tpy based on a 12-month rolling time period.

II. MATERIAL LIMIT(S) – Production resin is limited to a VOC content of 34% by weight. Tooling resin is limited to a VOC content of 50% by weight. Production resin formulated specifically for this facility is 34% by weight or less. Tooling resin, also formulated specifically for this facility is 50% by weight or less. Compliance for these limits is determined through Certificates of Analysis or SDS sheets. These were available and appeared up to date at the time of the inspection.

III. PROCESS/OPERATIONAL RESTRICTION(S) – All chemical wastes are to be stored in closed containers and disposed of properly. During the inspection, it was noted that each production room had a closed container for storage of waste.

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. All exhaust filters shall be in place during operation. During the inspection, it was noted that all exhaust filters were in place and appeared in good condition.

2. All guns used shall be non-atomizing. All guns noted during inspection were non atomizing type.

V. TESTING/SAMPLING - No testing or sampling requirements

VI. MONITORING/RECORDKEEPING

1. VOC emissions calculations are required to be kept monthly. These records are being kept and a sample of these records is attached. (Page 2)

2. VOC content of production and tooling resins shall be kept on a per shipment basis. These records are being kept and a sample of these records is attached. (Page 7)

3. The permittee shall keep the following information for each calendar month:

a. The identity and amount (in pounds) of each resin used.

b. The VOC content of each resin used.

c. The appropriate emission factor for each raw material used.

d. VOC emission calculations determining the monthly emission rate in tons per calendar month, and the emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

These records are being kept and a sample of these records is attached. (Page 2)

VII. REPORTING

1-3. All semi-annual and annual deviation reporting has been completed in a timely manner. Review of this reporting is documented in MACES.

VIII. STACK/VENT RESTRICTION(S) – There are three stacks associated with this EU. The stacks appear in compliance with criteria listed in the ROP and do not appear to have been recently altered.

IX. OTHER REQUIREMENT(S) - No other requirements

<u>EUGELCOAT</u> - Three dry filter spray booths used for application of gelcoat materials. Mechanical atomized applicators are used for the application of gelcoat. Dry filters on each booth to control overspray.

I. EMISSION LIMIT(S) – VOC emissions are limited to 18 tpy based on a 12-month rolling time period. VOC emissions as of April of 2016 were 3.3 tpy based on a 12-month rolling time period.

II. MATERIAL LIMIT(S):

1. Clear gelcoats are limited to 48% VOC, 48% Styrene by weight, Clear gelcoat used is 41% VOC, 31% Styrene by weight.

2. White gelcoats are limited to 36% VOC, 31% Styrene by weight, White gelcoat used is 36% VOC, 30% Styrene by weight.

3. Color gelcoats are limited to 45% VOC, 40% Styrene by weight, Color gelcoats used are no higher than 42% VOC, 37% Styrene by weight.

4. Tooling gelcoats are limited to 48% VOC, 43% Styrene by weight, Clear gelcoat used is 46% VOC, 42% Styrene by weight.

5. All gelcoats are limited to 10% MMA. The highest MMA content of any gelcoat used is 10%

Compliance for these limits is determined through Certificates of Analysis or SDS sheets. These were available and appeared up to date at the time of the inspection.

III. PROCESS/OPERATIONAL RESTRICTION(S) – All chemical wastes are to be stored in closed containers and disposed of properly. During the inspection, it was noted that each production room had a closed container for storage of waste.

IV. DESIGN/EQUIPMENT PARAMETER(S) - All exhaust filters shall be in place during operation. During the inspection, it was noted that all exhaust filters were in place and appeared in good condition.

V. TESTING/SAMPLING – No testing or sampling requirements

VI. MONITORING/RECORDKEEPING

1. VOC emissions calculations are required to be kept monthly. These records are being kept and a sample of these records is attached. (Page 3)

2. VOC content of production and tooling resins shall be kept on a per shipment basis. These records are being kept.

3. The permittee shall keep the following information for each calendar month:

a. The identity and amount (in pounds) of each gelcoat used.

b. The styrene, MMA and VOC content of each gelcoat used.

c. The appropriate emission factor for each raw material used.

d. VOC emission calculations (including styrene and MMA) determining the monthly emission rate in tons per calendar month, and the emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

These records are being kept and a sample of these records is attached. (Page 1,3)

VII. REPORTING

1-3. All semi-annual and annual deviation reporting has been completed in a timely manner. Review of this reporting is documented in MACES.

VIII. STACK/VENT RESTRICTION(S) – There are three stacks associated with this EU. The stacks appear in compliance with criteria listed in the ROP and does not appear to have been recently altered.

IX. OTHER REQUIREMENT(S) – No other requirements

<u>EUMISCMATERIALS</u> - Miscellaneous solvent materials that are NOT resins and/or gelcoats and which are used throughout the facility. May include catalysts, paste wax, mold release, etc.

I. EMISSION LIMIT(S) – VOC emissions are limited to 18 tpy based on a 12-month rolling time period. VOC emissions as of April of 2016 were 0.9 tpy based on a 12-month rolling time period.

II. MATERIAL LIMIT(S) - No material limits

III. PROCESS/OPERATIONAL RESTRICTION(S) – No process or operational restrictions.

IV. DESIGN/EQUIPMENT PARAMETER(S) – No design or equipment restrictions

V. TESTING/SAMPLING – No testing or sampling requirements

VI. MONITORING/RECORDKEEPING

1. VOC emissions calculations are required to be kept monthly. These records are being kept and a sample of these records is attached. (Page 4)

2. The permittee shall keep the following information for each calendar month:

- a. The identity and amount (in pounds) of each material used.
- b. The VOC content of each material used.
- c. The appropriate emission factor for each raw material used.

d. VOC emission calculations determining the monthly emission rate in tons per calendar month, and the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

These records are being kept and a sample of these records is attached. (Page 4)

VII. REPORTING - 1-3. All semi-annual and annual deviation reporting has been completed in a timely manner. Review of this reporting is documented in MACES.

VIII. STACK/VENT RESTRICTION(S) – There are six stacks associated with this EU. The stacks appear in compliance with criteria listed in the ROP and does not appear to have been recently altered.

IX. OTHER REQUIREMENT(S) – No other requirements

EUCLEANUP - Acetone used for cleanup activities throughout the shop.

I. EMISSION LIMIT(S) – Acetone emissions are limited to 30 tpy based on a 12-month rolling time period. Emissions as of April 2016 were 6.74 tons based on a 12 month rolling time period. While the facility does collect much of their cleanup solvents, the assumption for emissions calculations is that all acetone used is lost as fugitive.

II. MATERIAL LIMIT(S) – No material limits

III. PROCESS/OPERATIONAL RESTRICTION(S) – All chemical wastes are to be stored in closed containers and disposed of properly. During the inspection, it was noted that each production room had a closed container for storage of waste.

IV. DESIGN/EQUIPMENT PARAMETER(S) – No design or equipment restrictions

V. TESTING/SAMPLING – No testing or sampling requirements

VI. MONITORING/RECORDKEEPING

1. Acetone emissions calculations are required to be kept monthly. These records are being kept and a sample of these records is attached. (Page 6)

2. The permittee shall keep the following records

a. The identity and amount (in gallons or pounds) of acetone used.

b. Where applicable, gallons or pounds of acetone reclaimed.

c. Acetone emission calculations determining the monthly emission rate in tons per calendar month, and the emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

These records are being kept (see Page 6). The facility does not reclaim any acetone. Spent solvent is staged in drums and sent away for recycling but does not return to the facility.

3. VII. REPORTING - 1-3. All semi-annual and annual deviation reporting has been completed in a timely manner. Review of this reporting is documented in MACES.

4. VIII. STACK/VENT RESTRICTION(S) – There are six stacks associated with this EU. The stacks appear in compliance with criteria listed in the ROP and does not appear to have been recently altered.

5. IX. OTHER REQUIREMENT(S) – No other requirements

<u>FGMACT</u> - All emission units subject to 40 CFR Part 63, Subpart WWWW, National Emissions Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production.

Emission Units: EULAMINATION, EUGELCOAT, EUCLEANUP

I. EMISSION LIMIT(S):

1. Organic HAP from Open Molding – Non-corrosion resistant and/or high strength (CR/HS) Resin, Mechanical Application - 88 Pounds/ Ton

2. Organic HAP from Open Molding - Non-CR/HS Resin, Manual Application - 87 Pounds/ Ton

3. Organic HAP from Open Molding – Tooling Resin, Mechanical Application - 254 Pounds/ Ton

4. Organic HAP from Open Molding – Tooling Resin, Manual Application - 157 Pounds/ Ton

5. Organic HAP from Open Molding - Gel Coat, Tooling - 440 Pounds/ Ton

6. Organic HAP from Open Molding – Gel Coat, White/off White Pigmented Gel Coating - 267 Pounds/ Ton

7. Organic HAP from Open Molding – Gel Coat All Other Pigmented Gel Coating - 377 Pounds/ Ton
8. Organic HAP from Open Molding – Gel Coat clear production gel coat - 522 Pounds/ Ton
The facility demonstrates compliance with the emission limits for gelcoats using the weighted average option per 63.5810(c). Compliance for resins is demonstrated using the HAP content limit option 63.5810 (d) and Table 7 of Subpart WWWW. Records of material HAP contents and usage are maintained each month as well as emission calculations. Certificates of analysis are available for some gel coats and resins but data from the SDS is used for the emission calculations. This is acceptable per 63.5895 (c). Records review indicates compliance with the applicable emission limits.

II. MATERIAL LIMIT(S) – No material limits

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not use cleaning solvents that contain HAP. The facility uses acetone only for cleanup

2. Permittee shall keep containers that store HAP-containing materials closed or covered. During the inspection, it was noted that each production room had a closed container for storage of waste.

IV. DESIGN/EQUIPMENT PARAMETER(S) - No design or equipment restrictions

V. TESTING/SAMPLING

1. The HAP content of any resin, gelcoat, etc., as received and as applied, shall be determined using manufacturer's formulation data, or other information as deemed acceptable. The facility uses material made specifically for them and the manufacturer provides this data.

VI. MONITORING/RECORDKEEPING

1. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material. This information was available for inspections

2. The permittee shall demonstrate compliance with the emission limits. These calculations must be completed within 30 days after the end of each month. Calculations are completed in a timely and complete manner.

3. The permittee must meet the requirements of 40 CFR 63 subpart WWWW, Table 3 and the work practice standards in Table 4 that apply regardless of the quantity of HAP emitted. Table 3 lists emissions limits that the facility must meet per various materials and application processes. Records indicate the facility is well below these limits. Table 4 lists work practice standards for this type of facility. The facility does used closed containers for storage of all waste materials and utilizes non-HAP containing material for cleanup (acetone).

4. The permittee must collect and keep records of resin and gel coat use, organic HAP content, and operation. Records of purchase and usage of all materials are being kept.

5. Resin and gel coat use records are not required for the individual resins and gel coats that are demonstrated, as applied to meet the applicable emission limits. However, while not required by the MACT, the facility does track and record usage of these materials.-

6. The permittee must demonstrate continuous compliance with each standard that applies in the following:

a. Compliance with organic HAP emission limits.

b. Compliance with the work practice standards.

Records indicate the facility is in continuous compliance with HAPs emissions limits and inspection of the facility indicates they are in compliance with work practice standards.

VII. REPORTING

1-3. All semi-annual and annual deviation reporting has been completed in a timely manner. Review of this reporting is documented in MACES.

4. The permittee shall submit a compliance report semiannually. Review of this reporting is documented in MACES.

VIII. STACK/VENT RESTRICTION(S) – There are no stack restrictions

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR, Part 63, Subpart A and Subpart WWWW for Reinforced Plastic Composites Production by the initial compliance date. Records and inspection of the facility indicate the facility is in continuous compliance with Subpart WWWW.

At the time of this inspection, this facility was in compliance with their air permitting.

NAME

SUPERVISOR