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

N132835272

FACILITY: Rec Boat Holdings LLC - Cruiser Plant		SRN / ID: N1328
LOCATION: 609 13 TH. St., CADILLAC		DISTRICT: Gaylord
CITY: CADILLAC		COUNTY: WEXFORD
CONTACT: Trent Burch , Environmental/Safety Compliance		ACTIVITY DATE: 06/14/2016
STAFF: Becky Radulski	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: scheduled inspection and records review		
RESOLVED COMPLAINTS:		

Traveled to N1328 Rec Boat Holdings, LLC – Cruiser Division on June 14, 2016 to conduct a FY16 Full Compliance Evaluation (FCE) scheduled inspection to determine compliance with MI-ROP-N1328-2016. Present for the inspection was Trent Burch, Environmental/Safety Compliance (231-779-2601, tburch@recboatholdings.com).

The facility manufactures boats of various sizes and types - Four Winns, Wellcraft, Glastron and Scarbb models. The boats are constructed from start to finish at the facility, starting with a drum and ending with completed operating boat. Small boats take about 1 week from start to finish; larger boats may take months based on options. 96 different models are produced, 16-47 feet length.

The facility was inspected as the boat was constructed. The tour began in the drum storage room which contained gel coats, resins and waste drums (acetone - funnel with closed lid). The application of fiberglass and gel coats onto molds was observed in the mold area. Several molds in various stages of application were viewed. Active application was being applied to 37 foot boat during the inspection. The finished mold is grinded at the edges and for cutouts prior to assembly. All filters appeared to be in good condition.

The Cruiser Plant generally operates 1 shift Monday-Friday. The facility was shut down over Memorial Day for inventory and cleaning.

REGULATORY DISCUSSION

N1328 cruiser plant. Applies gelcoats and resin to construct fiberglass boat parts; Cleanup activities utilize acetone; and use of adhesives in boat assembly.

N1328 is Major for VOCs, as they have potential to emit over 100 tons.

N1328 is Major for HAPs.

There is no control device for VOCs, therefore CAM is not applicable on any EU.

Became a NON PSD source in 2004 – source took a source-wide limit of 225 tpy VOC. (notes in eval form for PTI 292-03).

EULAMINATION and EUGELCOAT are subject to Subpart 40 CFR 63 VVVV – Boat Manufacturing.

SPECIAL CONDITIONS AND RECORDS REVIEW

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EULAMINATION	Cruiser Plant- fiberglass lamination of boat parts. This process includes various size molds which are used in the manufacturing of fiberglass hulls and decks and small fiberglass parts which may consist of swim platforms, showers, dashes, etc. Control: filter (fabric mat or panel)	01/04/1999 3/26/2010	FGOPENMOLDING
EUGELCOAT	Cruiser Plant - gel coat application to fiberglass boat parts. The process includes various size molds which are used in the manufacturing of fiberglass hulls and decks and small fiberglass parts which may consist of swim platforms, showers, dashes, etc. Control: filter (fabric mat or panel)	10/01/1986 10/05/2010	FGOPENMOLDING
EUVOCCLEANUP	Cruiser Plant - VOC-based cleanup solvent(s) Control: filter (fabric mat or panel)	03/16/2004	NA
EUADHESIVE	Cruiser Plant adhesive application. Control: NA	06/01/1988	NA
EURESINMIXING	Cruiser Plant resin mixing operations. Control: NA	07/07/2006	FGMIXING
EUGELCOATMIXING	Cruiser Plant gel coat mixing operations. Control: NA	07/07/2006	FGMIXING
EUACETONECLEANUP	Cruiser Plant cleanup operations utilizing acetone. Control: NA	10/1/1988	NA
EUGRINDCUTBOOTH	Cruiser Plant 30' by 60' grinding/cutout booth. Particulate emissions will remain in-plant. Control: dust collection system	07/07/2006	NA
EURTM	Resin transfer molding (RTM) process for small parts production. Control: NA	03/26/2010	NA

SOURCE-WIDE CONDITIONS

I. EMISSION LIMITS

SC I.1,2. VOC emissions are limited to 5,267.0 pounds per calendar day and less than 225 tons per 12 month rolling time period. This information is reported quarterly and demonstrates compliance with these conditions. For the first quarter, the highest reported lb/day is 1,639 total VOC; the 12 month rolling is 99.5 tpy – both are under the permitted limits.

VI. MONITORING/RECORDKEEPING

SC VI.1. The permittee is required to maintain the following information:

a. Gallons or pounds of each material used on a daily basis – recorded and submitted monthly in quarter reports for each material.

b. Where applicable, gallons or pounds of each material reclaimed on a daily basis – recorded and submitted monthly in quarter reports for each material. Records indicate that (1) 100% of waste

acetone recovered is reclaimed offsite and that (2) reclaim includes all acetone captured and recycled on site and all acetone sent off site for recycle and disposal.
c. VOC content (weight percent) of each material determined by manufacturer's formulation data or other method as approved by the AQD District Supervisor; these records are available upon request – the system was demonstrated online while at the facility.
d. VOC emission calculations determining the daily emissions in pounds per calendar day – see SC 1.1 above.
e. VOC emission calculations determining the monthly emissions in tons per calendar month – see SC 1.1 and 1.2 above.
f. VOC emission calculations determining the annual emission rate in tons per 12 month rolling time period, as determined at the end of each calendar month. – See 1.2 above.

IX. OTHER REQUIREMENT(S)
SC IX.1. If the permittee manufactures fiberglass reinforced plastic (FRP) composite small parts at this stationary source, these FRP composite small parts must be used on the fiberglass boats that are manufactured at this stationary source. If the FRP composite small parts manufactured at this stationary source are used on fiberglass boats manufactured outside of this stationary source, then all operations associated with the manufacture of the FRP composite small parts will be subject to 40 CFR, Part 63, Subpart WWWW, except as described in 40 CFR 63.5787(d). The permittee shall maintain written documentation identifying where the FRP composite small parts were used. The parts manufactured at this facility are used by this source only. Therefore, this condition does not apply.

EULAMINATION - Fiberglass lamination of boat parts. This process includes various size molds which are used in the manufacturing of fiberglass hulls and decks and small fiberglass parts which may consist of swim platforms, showers, dashes, etc. Emissions are controlled by fabric filters.

I. EMISSION LIMIT(S)
SC I.1 and 2 - Volatile organic compound (VOC) emissions, including styrene and vinyl toluene, are limited to 127.3 pounds per hour, based on a calendar day average and 158.2 tons per 12 month rolling time period. This information is reported quarterly and demonstrated compliance with the limits. First quarter reported 48.2 lbs/hr and 50.3 tons per 12 month rolling as the highest reported values.

SC I.3 – VOC, including styrene and vinyl toluene, as 0.0385 pound per pound of resin applied. This information was reviewed at the facility during the inspection and demonstrated compliance with the limit.

II. MATERIAL LIMIT(S)
SC II.1 - Resin (including tooling resins and resins containing vinyl toluene) is limited to 45,489 pounds/day. This information is reported quarterly and demonstrated compliance with the limits. First quarter reported between 7,000 and 15,000 pounds/day.

SC II.2 - Resin containing up to 12 percent, by weight, of vinyl toluene is limited to 3,600 pounds/day. This information is reported quarterly and demonstrated compliance with the limits. First quarter reported between 0 and 40 pounds/day.

SC II.3, 4 and 5 - Production resin maximum styrene monomer content is limited to 35%, by weight;

Production resin maximum vinyl toluene content is limited to 12% by weight; Tooling resin maximum styrene monomer content is limited to 50%, by weight. These chemical contents are demonstrated through Certificates of Analysis (COA) for the various materials used. These were available upon request.

III. PROCESS/OPERATIONAL RESTRICTION(S)

SC III.1. All waste resins shall be captured and stored in closed containers and disposed of in an acceptable manner. Upon inspection, it was noted that waste is stored in closed containers and facility staff indicated any waste removal is performed using an outside contractor.

SC III.2. The permittee shall use non-atomized applicators or technology with equivalent or lower styrene emission rates for a minimum of 50 percent of the resin usage. Upon inspection, it was noted that these applicators are being employed. Records indicate they are used greater than 50% of the source operating time.

SC III.3. All production resins which contain vinyl toluene shall be applied using non-atomized application equipment (flowcoaters). Upon inspection, it was noted that these applicators are being employed.

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

V. TESTING/SAMPLING – No testing or sampling requirements

VI. MONITORING/RECORDKEEPING

SC VI.1. The permittee shall maintain records of the chemical composition of each shipment of the production and tooling resins including the weight percent of each component (specifically styrene and vinyl toluene) using manufacturer's formulation data or other. Chemical content is demonstrated through Certificates of Analysis (COA) for the various materials used. These were available upon request. The facility does not switch often, COA kept online.

SC VI.2. The permittee shall maintain separate records, for each production resin used, of the pounds of VOC emitted per pound of material applied using the equation in Appendix 7. Information regarding material usage is tracked daily, compiled monthly, and reported quarterly. Records of each resin used and corresponding emissions were available upon request.

SC VI.3. The permittee shall maintain records of the appropriate emission factor, application method, applicable monomer contents, and dated version of the UEF table used for each resin. AQD review has determined that the records and calculations are adequate and demonstrate compliance with the recordkeeping requirements.

SC VI.4. The permittee shall maintain calendar day records of the hours of operation. Hours of operation is recorded on a daily basis. This information is reported quarterly and reviewed. Records were also viewed at the facility.

SC VI.5-9. The permittee shall maintain records determining the volumes as limited in the material limits section above. This information is reported quarterly and reviewed. These material limits were already discussed in SC II.

VII. REPORTING

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

SC VII.4. The permittee shall prepare monthly reports of VOC (including styrene and vinyl toluene) emission rate calculations (hourly, based upon a calendar day average, and 12 month rolling time period), hours of operation, and daily resin usage. Review of these reports has indicated compliance with these limits. Please see MACES for details.

VIII. STACK/VENT RESTRICTION(S)
The stacks appear in compliance with criteria listed in the ROP for height and width.

IX. OTHER REQUIREMENT(S) – No other requirements

EUGELCOAT - Gel coat application to fiberglass boat parts. The process includes various size molds which are used in the manufacturing of fiberglass hulls and decks and small fiberglass parts which may consist of swim platforms, showers, dashes, etc. Emissions are controlled by fabric filters.

I. EMISSION LIMIT(S)
SC I.1 – 4 - VOC emissions, including styrene, are limited to 98.9 pph and 134.4 tpy based on 12 month rolling time period. Styrene emissions are limited to 69.8 pph and 94.8 tons per year based on 12 month rolling time period. This information is reported quarterly and demonstrated compliance with these limits. First quarter reported 76.8 pph; 48.3 tpy based on 12 month rolling; 59.4 pph; and 36.7 tpy based on 12 month rolling, respectively.

II. MATERIAL LIMIT(S)
SC II.1 Gel coat is limited to 10,000 pounds/day. This information is reported quarterly and demonstrated compliance with the limits. First quarter reported between 0 to 7,000 pounds/day.

SC II.2 Gel coat maximum styrene monomer content is limited to 30.7%, by weight[2]. Chemical content is demonstrated through Certificates of Analysis (COA) for the various materials used. These were available upon request.

III. PROCESS/OPERATIONAL RESTRICTION(S)
SC III.1. All waste gel coats shall be captured and stored in closed containers and disposed of in an acceptable manner. Upon inspection, it was noted that waste is stored in closed containers and facility staff indicated any waste removal is performed using an outside contractor.

SC III.2. The permittee shall not operate EUGELCOAT unless all exhaust filters are in place and operating properly. Upon inspection, it was noted that the exhaust filters appeared in good condition. Filters are changed frequently based on usage.

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

V. TESTING/SAMPLING – No testing or sampling requirements

VI. MONITORING/RECORDKEEPING

SC VI.1. The permittee shall maintain daily, monthly and 12-month rolling time period (as determined at the end of each calendar month) gel coat usage records consisting of calculations determining the daily usage rate of each gel coat in pounds per calendar day, the monthly gel coat usage rate in pounds per calendar month, and the annual gel coat usage rate in pounds per 12-month rolling time period. This information is reported quarterly and reviewed.

SC VI.2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each shipment of gel coat, including the weight percent of each component using manufacturer's formulation data. Chemical content is demonstrated through Certificates of Analysis (COA) for the various materials used. These were available upon request.

SC VI.3. The permittee shall maintain records of the appropriate emission factor (specify the application method, applicable monomer contents, and dated version of the UEF table used) for each gel coat used. AQD review has determined that the records and calculations are adequate and demonstrate compliance with the recordkeeping requirements.

SC VI.4. The permittee shall maintain records of the calendar day hours of operation. This information is reported quarterly and reviewed. Records were also viewed at the facility.

SC VI.5. The permittee shall calculate and maintain daily records of the actual styrene and VOC (including styrene) emission rates in pounds per hour. This information is reported quarterly and reviewed, as discussed above.

SC VI.6. The permittee shall calculate and maintain monthly records of the actual styrene and VOC (including styrene) emission rates 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. This information is reported quarterly and reviewed, as discussed above.

VII. REPORTING

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

SC VII.4. The permittee shall prepare monthly reports of styrene and VOC (including styrene) emission rate calculations (hourly, based upon a calendar day average, and 12-month rolling time period), hours of operation, and daily gelcoat usage (as specified in Section VI). The monthly reports shall be submitted quarterly to the District Supervisor, unless otherwise specified in any recordkeeping, reporting or notification condition. The reports shall be postmarked or received by the appropriate AQD District Office no later than 30 days following the end of each calendar quarter. This information is reported quarterly and reviewed.

VIII. STACK/VENT RESTRICTION(S) – The stacks appear in compliance with criteria listed in the ROP for height and width.

IX. OTHER REQUIREMENT(S) – No other requirements

EUVOCCLEANUP - VOC based clean-up solvent usage. Control is by dry fabric filters.

I. EMISSION LIMITS – No emissions limits

II. MATERIAL LIMIT(S)
SC II.1 VOC based cleanup solvent usage is limited to 937,500 pounds per 12 month rolling time period. This information is reported quarterly and demonstrated compliance. The first quarter reports 38,486.9 pounds per 12 month rolling time period.

III. PROCESS/OPERATIONAL RESTRICTION(S)
SC III.1. All waste cleanup solvent is stored in closed containers, as observed during the inspection.

SC III.2. All waste cleanup solvents, rags/wipedown cloths, etc. shall be captured and stored in closed containers and disposed of in an acceptable manner. All waste cleanup solvents, rags/wipedown cloths, etc. are stored in closed containers as observed during the inspection.

SC III.3. The permittee shall store organic HAP-containing solvents used for removing cured resin or gel coat in containers with covers. Storage is in sealed containers. Records indicate there is no HAP content in the cleanup solvent.

SC III.4. On containers with a capacity greater than 7.6 liters (2 gallons), the distance from the top of the container to the solvent surface must be no less than 0.75 times the diameter of the container. Containers were viewed and discussed with staff, the containers are maintained to meet this condition specification.

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

V. TESTING/SAMPLING – No testing or sampling requirements

VI. MONITORING/RECORDKEEPING

SC VI.1. The permittee shall maintain the following information on a monthly basis:
a. The identity of each cleanup solvent used;
b. The VOC content of each cleanup solvent used;
c. The amount (in gallons or pounds) of each cleanup solvent used;
d. The amount (in gallons or pounds) of each cleanup solvent reclaimed;
e. Calculations determining the percent by weight of all VOC-based cleanup solvents recovered and reclaimed per calendar month;
f. Calculations determining the total monthly cleanup solvent usage rate in pounds per calendar month, and the annual cleanup solvent usage rate in pounds per 12 month rolling time period as determined at the end of each calendar month.

The information for item c, d, e and f are reported quarterly and demonstrated compliance. Conditions a and be are demonstrated through of Analysis (COA) for the various materials used, which were available upon request.

SC VI.2. The permittee shall visually inspect any containers holding organic HAP containing solvents used for removing cured resin and gel coat at least once per month. The inspection should ensure that the containers have covers with no visible gaps. The permittee shall maintain records of the monthly inspections and any repairs or corrective actions taken. These records are being kept and were available upon request. The latest inspection by staff was dated 6/13.

SC VI.3. The permittee shall determine and record the organic HAP content of the cleaning solvents. Chemical content is demonstrated through Certificates of Analysis (COA) for the various materials used. These were available upon request.

VII. REPORTING

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

SC VII.4. All required calculations shall be completed in a format acceptable to the AQD District Supervisor and shall be submitted quarterly to the AQD District Supervisor, unless otherwise specified in any recordkeeping, reporting, or notification conditions. All requested records were available at the time of the inspection

VIII. STACK/VENT RESTRICTION(S) – The stacks appear in compliance with criteria listed in the ROP for height and width.

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

EUADHESIVE - Application of adhesives during the boat manufacturing process. No controls on this process.

I. EMISSION LIMIT(S)
SC I.1 and 2 - Combined VOC and acetone emissions are limited to 484 pounds per calendar day and 61.0 tons per 12 month rolling time period. This information is reported quarterly and demonstrated compliance with these limits. First quarter reported a range of 0-96 pounds per day and 2.2 tons per 12 month rolling.

II. MATERIAL LIMIT(S)
SC I.1 - The organic hazardous air pollutant (HAP) content of the adhesives is limited to 5%, by weight. Records indicate the adhesives used contain no HAPs.

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
SC VI.1. The permittee shall maintain records of daily, monthly and 12-month rolling time period adhesive usage and hours of operation. This information is reported quarterly and demonstrated compliance. Records of operation were also viewed at the facility.

SC VI.2. The permittee shall maintain monthly records of adhesive VOC and acetone content. Chemical content is demonstrated through Certificates of Analysis (COA) for the various materials used. These were available upon request.

SC VI.3. The permittee shall maintain records of daily, monthly, and 12-month rolling time period VOC and acetone (combined) emissions. This information is reported quarterly and demonstrated compliance. See SC I.2.

SC VI.4. The permittee shall use the methods specified in 40 CFR 63.5758 to determine the organic HAP contents of carpet and fabric adhesives. Records indicate the adhesives used contain no HAPs.

VII. REPORTING

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

SC VII.4. The permittee shall prepare monthly reports of daily adhesive usage rate, VOC and acetone content, and VOC and acetone emissions (pounds per calendar day and tons per 12-month rolling time period) in a format acceptable to the AQD District Supervisor. The reports shall be submitted quarterly to the District Supervisor, unless otherwise specified in any recordkeeping, reporting or notification condition. This information is reported quarterly and demonstrated compliance.

VIII. STACK/VENT RESTRICTION(S) – The stacks appear in compliance with criteria listed in the ROP for height and width.

IX. OTHER REQUIREMENT(S) – No other requirements

EUACETONECLEANUP - Acetone based cleanup solvent usage. No control associated with this EU.

I. EMISSION LIMIT(S)
SC I.1 - Acetone emissions are limited to 125 tpy based on 12-month rolling time period. This information is reported quarterly and demonstrated compliance. First quarter reports show 21.7 tpy based on 12 month rolling.

II. MATERIAL LIMIT(S) – No material limits

III. PROCESS/OPERATIONAL RESTRICTION(S)
SC III.1. The permittee shall recover and reclaim a minimum of 48 percent, by weight, of the acetone used. This information is reported quarterly and demonstrated compliance. First quarter reports indicate a recover of 50.3-51.3%.

SC III.2. All waste cleanup solvents shall be captured and stored in closed containers and disposed of in an acceptable manner. Upon inspection, it was noted that waste is stored in closed containers and facility staff indicated any waste removal is performed using an outside contractor.

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

V. TESTING/SAMPLING – No testing or sampling requirements

VI. MONITORING/RECORDKEEPING
SC VI.1. The permittee shall use the recordkeeping format in Appendix 4 to maintain a monthly

and 12 month rolling time period record of the amount of acetone used, recovered and reclaimed. This information is reported quarterly and demonstrated compliance as seen in Appendix A of the quarterly reports. See MACES for each quarters review.

SC VI.2. The permittee shall maintain records for each calendar month of the amount, in pounds, of acetone purchased and the amount, in pounds, sent off-site for either recycling or disposal. This information is reported quarterly and demonstrated compliance as seen in Appendix A of the quarterly reports. See MACES for each quarters review.

SC VI.3. The permittee shall maintain monthly and 12 month rolling time period records of the amount of acetone lost to the atmosphere by using the mass balance method listed in Appendix 4. This information is reported quarterly and demonstrated compliance as seen in Appendix A of the quarterly reports. Also see SC I.1 above.

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

SC VII.4. The permittee shall report the total amount, in pounds, of acetone lost to the atmosphere for each calendar month and 12-month rolling time period to the AQD District Supervisor. Reports shall be submitted on a quarterly basis, unless otherwise specified in any recordkeeping, reporting or notification condition. This information is reported quarterly and demonstrated compliance as seen in Appendix A of the quarterly reports. See MACES for each quarters review.

VIII. STACK/VENT RESTRICTION(S) – The stacks appear in compliance with criteria listed in the ROP for height and width.

IX. OTHER REQUIREMENT(S) – No other requirements

EUGRINDCUTBOOTH - 30 foot by 60 foot Grinding/Cutout Booth. Control is through a dust collection system. Based on the inspection there are 3 30x60 booths.

I. EMISSION LIMITS – No emissions limits

II. MATERIAL LIMIT(S) – No material limits

III. PROCESS/OPERATIONAL RESTRICTION(S)
SC V.1. The permittee shall maintain the pressure drop across dust collection system filters between 2.20 and 3.20 inches W.G. At the time of the inspection, all dust collection was in operation and demonstrated compliance.

IV. DESIGN/EQUIPMENT PARAMETER(S)
SC IV.1. The permittee shall not operate EUCUTGRINDBOOTH unless the dust collection system is installed, maintained, and operated. During the inspection, this equipment was operating.

SC IV.2. The permittee shall not operate the cutting and/or grinding operations associated with EUCUTGRINDBOOTH unless a gauge, which measures the pressure drop across the filters associated

with the dust collection system is installed, maintained and operated in a satisfactory manner. The emission unit was equipped with a differential pressure gauge for measuring the pressure drop across the filters.

V. TESTING/SAMPLING – No testing or sampling requirements

VI. MONITORING/RECORDKEEPING

SC VI.1. The permittee shall continuously monitor the pressure drop across the dust collection system filters and record the pressure drop once per week. Records indicate this is being performed. Records were reviewed onsite, pressure drops were at 2.6 (cruiser booth), 2.53 (stringer) and 2.6 (sport booth).

VII. REPORTING

SC VII.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)

SC VII.1. The exhaust gases from EUCUTGRINDBOOTH shall not be discharged to the ambient air at any time. Air which passes through the plant are released to the general in-plant environment, as determined during the inspection.

IX. OTHER REQUIREMENT(S) – No other requirements

EURTM - Resin transfer molding operations. No controls associated with this EU.

I. EMISSION LIMIT(S)

SC I.1 - VOC emissions including styrene are limited to 12.6 tpy based on a 12-month rolling time period. This information is reported quarterly and demonstrated compliance. First quarter reports 0 VOCs emitted.

II. MATERIAL LIMIT(S)

SC II.1-4 - styrene content of the RTM resin is limited to 47%, the total VOC content is limited to 50%, the adhesive/tackifier, the styrene content is limited to 0.6% by weight, and the VOC content is limited to 46% by weight. Records were viewed onsite and determine compliance with these 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

SC VI.1. The permittee shall maintain the following information on a monthly basis:

a. The amount of resin material used;
b. The amount of adhesive/tackifier used;
c. The styrene content of each resin and adhesive/tackifier used;
d. The VOC content of each resin and adhesive/tackifier used;

e. VOC emission calculations determining the actual VOC emission rate (including styrene) in tons per calendar month, and the annual VOC emission rate (including styrene) in tons per 12 month rolling time period as determined at the end of each calendar month using the emission factor and equation listed in Appendix 7.
The information in items a, b, and e is reported quarterly and demonstrated compliance. The information in items c and d is demonstrated through Certificates of Analysis (COA) for the various materials used. These were available upon request.

SC VI.2. The permittee shall maintain a separate record of the styrene monomer content and total VOC content for each shipment of resin and adhesive/tackifier received. Chemical content is demonstrated through Certificates of Analysis (COA) for the various materials used. These were viewed online at the facility.

VII. REPORTING
VII.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) – These 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

FGOPENMOLDING - All open molding operations utilizing production resin, tooling resin, pigmented gel coat, clear gel coat, and tooling gel coat including the application of gel coat or skin coat layers that are applied before lamination by closed molding for the purpose of compliance with 40 CFR 63 Subpart VVVV. Control is through dry fabric filters.

I. EMISSION LIMIT(S)
SC I.1 Limits are calculated pursuant to Appendix 7 of the ROP. Currently, the limit contained in Condition I.1 does not apply to this facility. This limit is used if the facility opts to use the Emissions Averaging Option for determining compliance with 40 CFR 63 Subpart VVVV. Currently, the facility used the Compliant Materials Option.

II. MATERIAL LIMIT(S)
SC II.1-9 lists the material limits FGOPENMOLDING is subject to. The material limits are applicable when using the compliant materials option (40 CFR 63.5701(b)) to demonstrate compliance with the emission limit contained in Condition I.1. As mentioned previously, the facility is using the Compliant Materials Option for demonstrating compliance with 40 CFR 63 Subpart VVVV. The facility must meet a HAP content weighted average limit of 35% for production resins and and 33% for pigmented gelcoats. Based upon the semi-annual report submitted in July of 2016, the facility is in compliance with these limits.

Chemical content is demonstrated through Certificates of Analysis (COA) for the various materials used. These were available upon request.

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
SC VI.1-7 - Emissions Averaging – Not applicable

SC VI. 8-15 Compliant Materials
8. When using Compliant Materials to comply with the organic HAP limit in Condition I.1 above, the permittee may use the equation listed in Appendix 7 to calculate the weighted average organic HAP content at the end of every month for all resins and gel coats used in each operation in the past 12 months. If all resins and gel coats used have organic HAP contents no greater than the applicable organic HAP content limits, this calculation is not necessary to demonstrate compliance. Semi Annual reporting submitted in July 2016 indicates compliance.

9. If filled resins are used, the equation listed in Appendix 7 must be used to demonstrate compliance for the filled material on an as-applied basis. This condition is not applicable to actual plant operations.

10. The permittee shall use the methods specified in 40 CFR 63.5758 to determine the organic HAP contents of resins and gel coats. Semi Annual reporting submitted in July 2016 indicates compliance.

11. The permittee shall use the equation listed in Appendix 7 to show that the weighted-average organic HAP content of each resin and gel coat does not exceed the limits specified in Conditions II.1 through II.7. Semi Annual reporting submitted in July 2016 indicates compliance.

12. The permittee shall maintain records of the HAP content of each resin and gel coat. Chemical content is demonstrated through Certificates of Analysis (COA) for the various materials used. These were available upon request.

13. The permittee shall maintain records of the application method for production resin and tooling resin. This record is not required if all production resins and tooling resins are applied with nonatomized technology. Semi Annual reporting submitted in July 2016 indicates compliance.

14. The permittee shall maintain records of the amount of resins and gel coats used per month. This record is not required for an operation if all resins and gel coats used for that operation comply with the organic HAP content requirements. The facility employs the compliant material option and has been determined to be in compliance with it.

15. The permittee shall maintain records of the calculations performed in condition VI.1, if required, to demonstrate compliance based on weighted-average organic HAP content as described in 40 CFR 63.5713. Semi Annual reporting submitted in July 2016 indicates compliance.

SC 16-18 General Requirements
16. The permittee shall maintain a copy of each notification and report submitted pursuant to 40 CFR 63 Subpart VVVV and shall maintain all documentation supporting any notification or report. The facility maintains these files.

17-18. The permittee shall maintain records of the total amounts of open molding production

resin, pigmented gel coat, clear gel coat, tooling resin, and tooling gel coat used per month and the weighted average organic HAP contents for each operation, expressed as weight percent. Semi Annual reporting submitted in July 2016 indicates compliance.

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

SC VII.4. Semiannual reporting of compliance as required in 40 CFR 63.5764. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. Review of this reporting is documented in MACES.

VIII. STACK/VENT RESTRICTION(S) – The stacks appear in compliance with criteria listed in the ROP for height and width.

IX. OTHER REQUIREMENT(S) - No other requirements

FGMIXING - All resin and gelcoat mixing operations as defined as any operation in which resin or gel coat, including the mixing of putties and polyputties, is combined with additives that include, but are not limited to, fillers, promoters, or catalysts. No controls associated with this group.

I. EMISSION LIMITS – No emissions limits

II. MATERIAL LIMIT(S) – No material limits

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. All resin and gel coat mixing containers with a capacity equal to or greater than 208 liters, including those used for on-site mixing of putties and poly putties, must have a cover with no visible gaps in place at all times except when material is being manually added to or removed from a container, or when mixing or pumping equipment is being placed in or removed from a container. The facility maintains correct containers.

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

V. TESTING/SAMPLING – No testing or sampling requirements

VI. MONITORING/RECORDKEEPING
SC VI.1. The permittee shall visually inspect all mixing containers subject to 40 CFR 63.5731 at least once per month. The inspection should ensure that all containers have covers with no visible gaps between the cover and the container, or between the cover and equipment passing through the cover. The facility maintains correct containers. Records of inspections were available upon request and 6/13 inspection records were viewed.

SC VI.2. The permittee shall maintain records of which mixing containers are subject to 40 CFR 63.5731 and the results of the inspections, including a description of any repairs or corrective actions taken. The facility maintains correct containers. Records of inspections were available upon

request.

VII. REPORTING
SC VII.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 no stack restrictions

MAERS
MAERS was reviewed and addressed separately. There were no issues.

CONCLUSION
Based on this inspection, the facility appears to be in compliance with its ROP and all applicable requirements.

NAME Becky Radwoski DATE 9/20/16 SUPERVISOR