DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

ACTIVITY REPORT: Scheduled Inspection

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FACILITY: Rec Boat Holdings LLC - Cruiser Plant	SRN / ID: N1328			
LOCATION: 609 13 TH. St., CADILLAC	DISTRICT: Cadillac			
CITY: CADILLAC	COUNTY: WEXFORD			
CONTACT: Rick Videan , Vice President, Manufacturing	ACTIVITY DATE: 09/25/2014			
STAFF: Rob Dickman COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR			
SUBJECT: Scheduled Inspection of the ROP Source				
RESOLVED COMPLAINTS:				

Inspected this source per ROP Number MI-ROP-N1328-2011. This facility manufactures power boats utilizing composite materials. No odors or visible emissions were noted from any point outside the facility. Following are the findings of the inspection by ROP permit condition:

SOURCE-WIDE CONDITIONS

- I. EMISSION LIMIT(S) 1,2. VOC emissions are limited to 5,267.0 pounds per calendar day and less than 225 ton per 12 month rolling time period. This information is reported quarterly and reviewed. Please see MACES for details on this review. A sample of this reporting is included with this report. Please see records 2Y and 1J
- 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. The permittee is required to maintain the following information:
 - Gallons or pounds of each material used on a daily basis Record 2B,D,I,Q,T
 - b. Where applicable, gallons or pounds of each material reclaimed on a daily basis Record 3E
 - VOC content (weight percent) of each material determined by manufacturer's formulation data or other method as approved by the AQD District Supervisor;
 - d. VOC emission calculations determining the daily emissions in pounds per calendar day Record 2Y
 - e. VOC emission calculations determining the monthly emissions in tons per calendar month Records 1J, 2Y
 - 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. Record 1J

Information required in items a,b, and d-f is contained within quarterly reporting supplied by the facility. This information is reported quarterly and reviewed. Please see MACES for details on this review. A sample of this reporting is included with this report. Item "c" is demonstrated through Certificates of Analysis (COA) for the various materials used. These were available upon request.

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 no stack restrictions
- IX. OTHER REQUIREMENT(S)

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.

<u>EULAMINATION</u> - 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) – 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 reviewed. Please see MACES for details on this review. A sample of this reporting is included with this report. Please see Records 1B, 2G

II. MATERIAL LIMIT(S)

Ma	erial	Limit	Time Period/ Operating Scenario
1.	Resin (including tooling resins and resins containing vinyl toluene)	45,489 pounds/day	Calendar day – 2B
2.	Resin containing up to 12 percent, by weight, of vinyl toluene	3,600 pounds/day	Calendar day – 2D
3.	Production resin maximum styrene monomer content	35%, by weight	Instantaneous - COA
4.	Production resin maximum vinyl toluene content	12% by weight	Instantaneous - COA
5.	Tooling resin maximum styrene monomer content	50%, by weight	Instantaneous - COA

The information items 1 and 2 is reported quarterly and reviewed. Please see MACES for details on this review. A sample of this reporting is included with this report. Please see records listed above. Chemical content is demonstrated through Certificates of Analysis (COA) for the various materials used. These were available upon request.

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 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.
- 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.
- 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

- 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 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.
- 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.
- 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. Please see MACES for details on this review. A sample of this reporting is included with this report. Please see Record 2A
- 5. The permittee shall maintain records determining the total daily resin usage rate in pounds per calendar day.

 This information is reported quarterly and reviewed. Please see MACES for details on this review. A sample of this reporting is included with this report. Please see Record 2B
- 6. The permittee shall maintain separate records determining the total daily usage rate of production resins which contain vinyl toluene. This information is reported quarterly and reviewed. Please see MACES for details on this review. A sample of this reporting is included with this report. Please see Record 2D
- 7. The permittee shall calculate and maintain daily records of the actual VOC (including styrene and vinyl toluene) emission rates in pounds per hour, using the emission factors and equations listed in Appendix 7. This information is reported quarterly and reviewed. Please see MACES for details on this review. A sample of this reporting is included with this report. Please see Record 2G
- 8. The permittee shall calculate and maintain monthly records of the actual VOC (including styrene and vinyl toluene) 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 using the emission factors and equations listed in Appendix 7. This information is reported quarterly and reviewed. Please see MACES for details on this review. A sample of this reporting is included with this report. Please see Record 1B
- 9. The permittee shall maintain monthly records of non-atomized applicator usage, in a manner acceptable to the District Supervisor, demonstrating that 50 percent of total resin and all production resins containing vinyl toluene were applied by the use of non-atomized applicators. These records were available and demonstrate compliance.

- 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 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 and do not appear to have been recently altered.

IX. OTHER REQUIREMENT(S) – No other requirements

<u>EUGELCOAT</u> - 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) – VOC emissions, including styrene, are limited to 98.9 pph and 134.4 tpy. Styrene emissions are limited to 69.8 pph and 94.8 tons per year. This information is reported quarterly and reviewed. Please see MACES for details on this review. A sample of this reporting is included with this report. Please see Records 2L, 1D, 1E, 2O

II. MATERIAL LIMIT(S)

Mal	erial	Limit	Time Period/ Operating Scenario
1.	Gel coat	10,000 pounds/day ²	Calendar day – 2I
2.	Gel coat maximum styrene monomer content	30.7%, by weight ²	Monthly average - COA

The information for item 1 is reported quarterly and reviewed. Please see MACES for details on this review. A sample of this reporting is included with this report. Please see records listed above. Chemical content is demonstrated through Certificates of Analysis (COA) for the various materials used. These were available upon request.

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 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.
- 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 and good condition.
- IV. DESIGN/EQUIPMENT PARAMETER(S) No design or equipment restrictions
- V. TESTING/SAMPLING No testing or sampling requirements

VI. MONITORING/RECORDKEEPING

- 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. Please see MACES for details on this review. A sample of this reporting is included with this report. Please see Records 2I and 1C
- The permittee shall maintain a current listing form 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.
- 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.
- 4. The permittee shall maintain records of the calendar day hours of operation. This information is reported quarterly and reviewed. Please see MACES for details on this review. A sample of this reporting is included with this report. Please see Record 2A.
- 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. Please see MACES fo details on this review. A sample of this reporting is included with this report. Please see Records 2F, 2G

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. Please see Records 1D, 1E.

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 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. Please see MACES for details on this review. A sample of this reporting is included with this report.
- VIII. STACK/VENT RESTRICTION(S) These 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

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

- I. EMISSION LIMITS No emissions limits
- II. MATERIAL LIMIT(S) VOC based cleanup solvent usage is limited to 937,500 pounds per 12 month rolling time period. This information is reported quarterly and reviewed. Please see MACES for details on this review. A sample of this reporting is included with this report. Please see Record 1H
- III. PROCESS/OPERATIONAL RESTRICTION(S)
- 1. All waste cleanup solvent is stored in closed containers, as observed during the inspection.
- 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, and disposed in a Class II landfill.
- 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.
- 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 are managed properly pursuant to this condition.
- IV. DESIGN/EQUIPMENT PARAMETER(S) No design or equipment restrictions
- V. TESTING/SAMPLING No testing or sampling requirements
- VI. MONITORING/RECORDKEEPING
- 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 and f are reported quarterly and reviewed. Please see MACES for details on this review. A sample of this reporting is included with this report. Please see Records 1H and 2X. Chemical identification and content, as in items a and b are demonstrated through Certificates of Analysis (COA) for the various materials used. These were available upon request. Records of d and e were available for review upon request.

- 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.
- 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

- 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. 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) These 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.

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

- I. EMISSION LIMIT(S) 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 reviewed. Please see MACES for details on this review. A sample of this reporting is included with this report. Please see Records 1F and 2V.
- II. MATERIAL LIMIT(S) 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

- 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 reviewed. Please see MACES for details on this review. A sample of this reporting is included with this report. Please see Records 2Q and 2T.
- 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.

- 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 reviewed. Please see MACES for details on this review. A sample of this reporting is included with this report. Please see Records 1F and 2V.
- 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.

- 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 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 reviewed. Please see MACES for details on this review. A sample of this reporting is included with this report.
- 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

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

- I. EMISSION LIMIT(S) Acetone emissions are limited to 125 tpy based on 12-month rolling time period. This information is reported quarterly and reviewed. Please see MACES for details on this review. A sample of this reporting is included with this report. Please see Record 1G
- II. MATERIAL LIMIT(S) No material limits
- III. PROCESS/OPERATIONAL RESTRICTION(S)
- The permittee shall recover and reclaim a minimum of 48 percent, by weight, of the acetone used.
 This information is reported quarterly and reviewed. Please see MACES for details on this review. A sample o this reporting is included with this report. Please see Record 3E
- 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
- 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 reviewed. Please see MACES for details on this review. A sample of this reporting is included with this report. Please see Record 1G, 3
- 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 reviewed. Please see MACES for details on this review. A sample of this reporting is included with this report. Please see Records 3A,B,C.
- 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 reviewed. Please see MACES for details on this review. A sample of this reporting is included with this report. Please see Record 3D.

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 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 reviewed. Please see MACES for details on this review. A sample of this reporting is included with this report.
- VIII. STACK/VENT RESTRICTION(S) These 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

EUGRINDCUTBOOTH - 30 foot by 60 foot Grinding/Cutout Booth. Control is through a dust collection system.

- EMISSION LIMITS No emissions limits
- II. MATERIAL LIMIT(S) No material limits
- III. PROCESS/OPERATIONAL RESTRICTION(S)
- 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)
- The permittee shall not operate EUCUTGRINDBOOTH unless the dust collection system is installed, maintained, and operated. During the inspection, this equipment was operating.
- 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 syster 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
- 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.

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)

- 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) VOC emissions including styrene are limited to 12.6 tpy based on a 12-month rolling time period. This information is reported quarterly and reviewed. Please see MACES for details on this review. A sample of this reporting is included with this report. Please see Record 1I.
- II. MATERIAL LIMIT(S)

Material		Limit	Time Period/ Operating Scenario
1.	Resin maximum styrene content	47%, by weight ¹	Instantaneous
2.	Resin maximum VOC content	50%, by weight ²	Instantaneous
3.	Adhesive/tackifier maximum styrene content	0.6%, by weight ¹	Instantaneous
4.	Adhesive/tackifier maximum VOC content	46%, by weight ²	Instantaneous

Several limits exist for the different materials used in the RTM process. The styrene content of the RTM resin is limited to 47% and the total VOC content is limited to 50%. Currently, the styrene content of the RTM is 47% and the VOC content is 50%, which is in compliance with the permit limits. For the adhesive/tackifier, the styrene content is limited to 0.6% by weight and the VOC content is limited to 46% by weight. Currently, the styrene content is 0.5% and the VOC content is 46%, both of which are in compliance with the permit limits.

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

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. The permittee shall maintain the following information on a monthly basis:
 - a. The amount of resin material used; (Record 2B)
 - b. The amount of adhesive/tackifier used; (Record 2T)
 - c. The styrene content of each resin and adhesive/tackifier used; (COA)
 - d. The VOC content of each resin and adhesive/tackifier used; (COA)
 - 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. (Record 1I)

The information in items a, b, and e is reported quarterly and reviewed. Please see MACES for details on this review. A sample of this reporting is included with this report. Please see Records 2B, 2T, and 1l. Chemical content as in items c and d is demonstrated through Certificates of Analysis (COA) for the various materials used. These were available upon request.

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 available upon request.

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) 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

<u>FGOPENMOLDING</u> - All open molding operations utilizing production resin, tooling resin, pigmented gel coat, clea 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) – 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)

Ma	erial	Limit	Time Period/ Operating Scenario
1.	Organic HAP content of production resin	28%, based upon a weighted average ^a	Atomized application
2.	Organic HAP content of production resin	35%, based upon a weighted average ^a	Non-atomized application
3.	Organic HAP content of pigmented gel coat	33%, based upon a weighted average ^a	NA
4.	Organic HAP content of clear gel coat	48%, based upon a weighted average ^a	NA
5.	Organic HAP content of tooling resin	30%, based upon a weighted average ^a	Atomized application
6.	Organic HAP content of tooling resin	39%, based upon a weighted average ^a	Non-atomized application
7.	Organic HAP content of tooling gel coat	40%, based upon a weighted average ^a	NA
8.	Organic HAP content of filled production resin	46 kilograms per megagram of filled resin applied ^a	NA
9.	Organic HAP content of filled tooling resin	54 kilograms per megagram of filled tooling resin applied ^a	NA

^a 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 September of 2014, 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

Emissions Averaging – Not applicable

Compliant Materials

1. 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 then the applicable organic HAP content limits, this calculation is not necessary to demonstrate compliance. Semi Annual reporting submitted in September of 2014 indicates compliance.

- 2. 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.
- 3. 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 September of 2014 indicates compliance.
- 4. 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 September of 2014 indicates compliance.
- 5. 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.
- 6. 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 September of 2014 indicates compliance.
- 7. 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.
- 8. The permittee shall maintain records of the calculations performed in condition VI.1, if required, to demonstrate compliance based on weighed-average organic HAP content as described in 40 CFR 63.5713. Semi Annual reporting submitted in September of 2014 indicates compliance.
- 9. 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.
- 10. 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 HAF contents for each operation, expressed as weight percent. Semi Annual reporting submitted in September of 2014 indicates compliance.

- 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. Semiannual reporting of compliance as required in 40 CFR 63.5764. The report shall be postmarked orreceived 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) These 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

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 excep 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
- 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.
- 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.

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

IX. OTHER REQUIREMENT(S)

1. No other requirements

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

NAME

DATE 9/26/19/ SUPERVISOR