DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION ACTIVITY REPORT: On-site Inspection

N238360918

FACILITY: DGP INC.		SRN / ID: N2383				
LOCATION: 3260 FENNER ST.	., MARLETTE	DISTRICT: Bay City				
CITY: MARLETTE		COUNTY: SANILAC				
CONTACT: Chris Clark Jr., Vice President		ACTIVITY DATE: 11/03/2021				
STAFF: Adam Shaffer	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR				
SUBJECT: On-site inspection						
RESOLVED COMPLAINTS:						

An onsite inspection and records review was conducted by Air Quality Division (AQD) staff Adam Shaffer (AS) of DGP Inc (DGP). Applicable records were requested on October 29, 2021, to verify compliance with Renewable Operating Permit (ROP) No. MI-ROP-N2383-2018. An in-person inspection to verify onsite compliance was later completed on November 3, 2021.

Facility Description

DGP is a fiberglass manufacturing company that mainly produces parts for vehicles such as buses, trucks, and RV's. The facility is a major source of hazardous air pollutants (HAPs) and is in operation with ROP No. MI-ROP-N2383-2018. Additionally, the facility is subject to the 40 CFR Part 63 Subpart WWWW for Reinforced Plastic Composites Production.

Offsite Compliance Review

DGP is required to submit semi-annual and annual compliance reports per Part A General Conditions 19-23 of MI-ROP-N2383-2018. Semi-annual and annual compliance reports were reviewed back for select time periods. Most recently, a Violation Notice (VN), dated October 6, 2020, was issued to DGP for the late submittal of a semi-annual compliance report. The late compliance report was received by the AQD on September 28, 2020. Compliance reports received since then have been on time with no deviations reported with the exception of the late compliance report discussed above.

Based on the timing of the inspection, the 2020 Michigan Air Emissions Reporting System (MAERS) Report was submitted on March 12, 2021. Upon review, errors were noted in the report, however, site wide reported VOC / styrene emissions overall appeared acceptable when compared to emission records requested from the company during the inspection. The 2020 MAERS Report was concluded to appear acceptable. The upcoming submittal of the 2021 MAERS Report was also discussed with company staff in a follow up conversation.

Compliance Evaluation

A request was sent to Mr. Chris Clark Jr., Vice President, on October 29, 2021, for various records required by ROP No. MI-ROP-N2383-2018. The onsite inspection of the facility was later completed on November 3, 2021. At the time of the inspection, the records request was discussed with several items clarified and a portion of the records provided. The format of the records was also discussed and clarified where applicable items are located.

AQD staff AS arrived in the area of the facility at 9:41am. Weather conditions at the time of the inspection were sunny skies, winds from the southwest at 0-5mph and temperatures in the low 30's degrees Fahrenheit. While offsite, a brief styrene odor was noted to the northeast of the facility. No odors complaints have been recently received with regards to

the company. Emissions observed appeared to only be heat coming process operations. Upon arriving onsite, AS met with Mr. Clark Jr. who was the primary contact for the duration of the onsite inspection and the records request.

As mentioned above DGP is a fiberglass manufacturing company. The various stages of the operation were observed during the course of the site inspection and will be discussed further below.

ROP No. MI-ROP-N2383-2018

EU-PATTERNSHOP

Processes for this emission unit may be done in an open area of the facility or in one of the two spray booths used in EU-LAMINATION. Materials in this emission unit may include Bondo, catalyst, tooling gelcoat (air atomized, done in gelcoat spray booth), mold resin (hand layup) for making patterns.

Onsite Observations

Per Special Condition (SC) IV.1, the permittee shall equip and maintain the spray booth(s) in EU-PATTERNSHOP with atomized applicators or technology with equivalent or lower styrene emission rates for the application of tooling gelcoat materials. Mold resin and Bondo materials are applied using hand layup techniques. At the time of the inspection, this process was not in operation. It was explained by staff that when EU-PATTERNSHOP is in use they will bring the applicable items over into a paint booth to be used. DGP staff verified that atomized applicators are used for this process.

Three stacks are listed in association with this emission unit and were observed during the course of the site inspection. Though the exact dimensions were not measured they appeared to be consistent with what is listed in MI-ROP-N2383-2018.

Records

This emission unit is subject to a styrene emission limit of 6.0 tons per year (tpy) per a 12-month rolling time period. Records were requested and reviewed for select time periods. As of September 2021, 0.0025 tpy of styrene emissions were emitted which is well within the permitted limit. Previous 12-month rolling time periods reviewed also appeared to be within the permitted limit.

This emission unit is subject to a daily VOC (including styrene) emission limit of 278 lbs/day. Records were requested and reviewed for select time periods. Based on the records reviewed, DGP appears to be meeting this daily emission limit.

This emission unit is subject to a VOC (including styrene) emission limit of 6.2 tpy per a 12-month rolling time period. Records were requested and reviewed for select time periods. As of September 2021, 0.0025 tpy of styrene emissions were emitted which is well within the permitted limit. Previous 12-month rolling time periods reviewed also appeared to be within the permitted limit.

This emission unit is subject to an acetone emission limit of 500 lbs/yr per a 12-month rolling time period. Records were requested and reviewed for select time periods. As of September 2021, no acetone appears to have been emitted for this emission unit. Previous

12-month rolling time periods reviewed also appeared to show no acetone emissions being emitted for this emission unit.

This emission unit is subject to several additional emission limits that are listed below.

Material	Application Method	Styrene Content (wt %)	,	emitted per lb material	MMA Emission Factor (Ib emitted per Ib material applied)
Mold Resin	Manual	50	NA	0.09	NA
Tooling gelcoat(s)	Atomized	38	5	0.199	0.0375
Bondo	Manual	22	NA	0.0277	NA

^{*}The emission factors listed are for worst case styrene and MMA content materials with the specified application method. The emission factors will vary depending on the application method and the styrene and MMA contents. Refer to the Unified Emission Factor (UEF) Table in Appendix 4 for further information.

Records were requested and reviewed of the current list of materials used. Based on the records reviewed the contents listed above appear to be being met.

This emission unit is subject to a tooling gelcoat material daily limit of 216 lbs and a 12-month rolling time period limit of 9,996 lbs. Records were requested and reviewed for select time periods. Based on the records reviewed, no tooling gelcoat materials appear to have been used since at least October 2020.

This emission unit is subject to a mold resin material daily limit of 2,170 lbs and a 12-month rolling time period limit of 103,956 lbs. Records were requested and reviewed for select time periods. Based on the records reviewed, no mold resin materials appear to have been used since at least October 2020.

This emission unit is subject to a bondo body filler material daily limit of 1,080 lbs and a 12-month rolling time period limit of 18,000 lbs. Records were requested and reviewed for select time periods. For the month of September 2021, 2 lbs was the highest daily usage, which is within the permitted limit. Previous time periods reviewed also appeared to be within the daily permitted limit. As of September 2021, 182 lbs of bondo body filler was used per a 12-month rolling time period which is within the permitted limit. Previous 12-month rolling time periods reviewed also appeared to be within the permitted limit.

This emission unit is subject to a catalyst material daily limit of 44 lbs and a 12-month rolling time period limit of 2,279 lbs. Records were requested and reviewed for select time periods. Based on the records reviewed, no catalyst materials appear to have been used since at least October 2020.

Per SC VI.2, the permittee shall keep a separate record of the styrene and MMA monomer contents (if applicable) for each shipment of resin and / or gelcoat received. Speaking with company staff, DGP receives certificate of analysis for materials used onsite. Records were requested for select materials and provided. Company staff stated that the certificate of analysis certify that the materials meet or are less than the percentages of components listed on the applicable safety data sheets for that material in question. Additionally, it appears that DGP uses the worst-case scenario when determining emissions from safety data sheets. After further review, this appears acceptable.

Per SC VI.3a-I, the permittee shall keep track of daily / monthly usage rates, the identity of each material, the styrene / MMA contents for applicable materials, the acetone content for each tooling gelcoat, the VOC content of each material, the VOC and MEK material of the catalyst used, appropriate emission factors for each raw material used, usage rate calculations to demonstrate compliance with SC II.1a-d, and applicable styrene / VOC / acetone emissions. Records were requested and provided for select time periods. After further review, overall, the records appear acceptable.

EU-LAMINATION

This emission unit is for two dry filter spray booths utilized mostly for lamination processes. Materials used may include polyester resin and/or gelcoat, PVA, lacquer thinner, patch booster, catalyst, and lacquer primer.

Onsite Observations

The two booths were observed during the course of the site inspection. The eastern smaller booth DGP staff stated had been used earlier this year but was not in operation. The western larger booth was observed in operation. Dry filters for the spray booth were noted and appeared acceptable.

Per SC IV.1, the permittee shall equip and maintain the spray booth(s) in EU-LAMINATION with non-atomized applicators or technology with equivalent or lower styrene emission rates for the application of resin materials. Gelcoat materials will be applied using atomized applicators, or technology with equivalent or lower styrene emission rates for the application of gelcoat materials. Speaking with staff during the course of the site inspection, this was verified to be being completed.

Two stacks are listed in association with this emission unit and were observed during the course of the site inspection. Though the exact dimensions were not measured they appeared to be consistent with what is listed in MI-ROP-N2383-2018.

Records

This emission unit is subject to a styrene emission limit of 19.8 tpy per a 12-month rolling time period. Records were requested and reviewed for select time periods. As of September 2021, 3.72 tpy of styrene emissions were emitted which is well within the permitted limit. Previous 12-month rolling time periods reviewed also appeared to be within the permitted limit.

This emission unit is subject to a daily VOC (including styrene) emission limit of 1,126 lbs/day. Records were requested and reviewed for select time periods. Based on the records reviewed, DGP appears to be meeting this daily emission limit.

This emission unit is subject to a VOC (including styrene) emission limit of 26 tpy per a 12-month rolling time period. Records were requested and reviewed for select time periods. As of September 2021, 4.0062 tpy of VOC emissions were emitted which is well within the permitted limit. Previous 12-month rolling time periods reviewed also appeared to be within the permitted limit.

This emission unit is subject to an acetone emission limit of 0.6 tpy per a 12-month rolling time period. Records were requested and reviewed for select time periods. As of September 2021, 15.2 lbs per year of acetone emissions were emitted. Previous time periods reviewed also appeared to be within the permitted limit.

This emission unit is subject to several additional emission limits that are listed below.

Material	Application Method		MMA Content (wt %)	Emission Factor (Ib emitted per Ib material	MMA Emission Factor (Ib emitted per Ib material applied)
Resin	Non- atomized	43	NA	0.051	NA
Gelcoat	Atomized	38	10	0.199	0.075

^{*}The emission factors listed are for worst case styrene and MMA content materials with the specified application method. The emission factors will vary depending on the application method and the styrene and MMA contents. Refer to the Unified Emission Factor (UEF) Table in Appendix 4 for further information.

Records were requested and reviewed of the current list of materials. It was noted that the lamination gelcoat material doesn't appear to currently be in use. Based on the records reviewed of the resin materials listed, the content listed above appears to be being met.

This emission unit is subject to a gelcoat material daily limit of 2,688 lbs and a 12-month rolling time period limit of 59,040 lbs. Records were requested and reviewed for select time periods. Based on the records reviewed, it appears that no gelcoat materials have been used for this emission unit since at least October 2020.

This emission unit is subject to a resin material daily limit of 5,460 lbs and a 12-month rolling time period limit of 531,360 lbs. Records were requested and reviewed for select time periods. For the month of September 2021, the highest daily usage of resin reported was 1,504 lbs, which is within the permitted limit. As of September 2021, 223,234 lbs of resin was used per a 12-month rolling time period which is well within the permitted limit. Previous daily and 12-month rolling time periods reviewed also appeared to be within the permitted material limits.

This emission unit is subject to a catalyst material daily limit 108 lbs and a 12-month rolling time period of 10,842 lbs. Records were requested and reviewed for select time periods. For the month of September 2021, the highest daily usage of catalyst reported was 24 lbs, which is within the permitted limit. As of September 2021, 4,600 lbs of catalyst was reported per a 12-month rolling time period which is within the permitted limit. Previous daily and 12-month rolling time periods reviewed also appeared to be within the permitted material limits.

This emission unit is subject to a patch booster material daily limit of 96 lbs and a 12-month rolling time period of 800 lbs. Records were requested and reviewed for select time periods. For the month of September 2021, the highest daily usage of patch booster reported was 2 lbs, which is within the permitted limit. As of September 2021, 63 lbs of patch booster material was reported per a 12-month rolling time period which is well within the permitted limit. Previous daily and 12-month rolling time periods reviewed also appeared to be within the permitted material limits.

This emission unit is subject to a polyvinyl alcohol (PVA) material limit of 504 gallons per a 12-month rolling time period. Records were requested and reviewed for select time periods. As of September 2021, 1 gallons of material has been used per a 12-month rolling time period which is within the permitted limit. Previous 12-month rolling time periods reviewed also appeared to be within the permitted limit.

This emission unit is subject to a lacquer primer material limit of 300 gallons per a 12-month rolling time period. Records were requested and reviewed for select time periods. As of September 2021, 8 gallons of material has been used per a 12-month rolling time period which is within the permitted limit. Previous 12-month rolling time periods reviewed also appeared to be within the permitted limit.

This emission unit is subject to a thinner material limit of 600 gallons per a 12-month rolling time period. Records were requested and reviewed for select time periods. As of September 2021, 6 gallons of material has been used per a 12-month rolling time period which is within the permitted limit. Previous 12-month rolling time periods reviewed also appeared to be within the permitted limit.

Per SC VI.2, the permittee shall keep a separate record of the styrene and MMA monomer contents (if applicable) for each shipment of resin and / or gelcoat received. Speaking with company staff, DGP receives certificate of analysis for materials used onsite. Records were requested for select materials and provided. Company staff stated that the certificate of analysis certify that the materials meet or are less than the percentages of components listed on the applicable safety data sheets for that material in question. Additionally, it appears that DGP uses the worst-case scenario when determining emissions from safety data sheets. After further review, this appears acceptable.

Per SC VI.3a-I, the permittee shall keep track of daily / monthly usage rates, the identity of each material, the styrene / MMA contents for applicable materials, the acetone content for each lacquer primer and thinner used, the VOC content of each material, the VOC and MEK material of the catalyst used, appropriate emission factors for each raw material used, usage rate calculations to demonstrate compliance with SC II.1a-g, and applicable styrene / VOC / acetone emissions. Records were requested and provided for select time periods. Minor errors had been noted after the inspection by the company and corrected records were submitted. After further review, overall, the records appear acceptable.

EU-GELCOAT

This emission unit is for one dry filter spray booth for gelcoat processes. Materials used may include gelcoats, tooling gelcoats, catalyst, and primer surfacer. Gelcoat process may also be done in either lamination booth.

Onsite Observations

This emission unit was observed in operation during the course of the inspection. Dry filters were observed in place for control of the paint booth. Minor air gaps were noted around the filters. These observations were pointed out to company staff and moving forward shall be limited in order to prevent fugitive emissions.

Three stacks are listed in association with this emission unit and as previously stated the emissions appeared to be consistent with what is listed in MI-ROP-N2383-2018.

Records

This emission unit is subject to a styrene emission limit of 16 tpy per a 12-month rolling time period. Records were requested and reviewed for select time periods. As of September 2021, 1.90 tpy of styrene emissions were emitted per a 12-month rolling time period which is within the permitted limit. Previous 12-month rolling time periods reviewed also appeared to be within the permitted limit.

This emission unit is subject to a daily VOC (including styrene and MMA) emission limit of 354 lb/day. Records were requested and reviewed for select time periods. As of September 2021, the highest daily number of VOCs reported emitted was 51 lbs which is within the permitted limit. Previous daily records reviewed also appeared to be within the permitted limit.

This emission unit is subject to a VOC (including styrene and MMA) emission limit of 26.0 tpy per a 12-month rolling time period. As of September 2021, 2.1075 tpy of VOCs were emitted per a 12-month rolling time period which is within the permitted limit. Previous 12-month rolling time periods reviewed also appeared to be within the permitted limit.

This emission unit is subject to a gelcoat styrene content limit of 38% and an MMA content limit of 10%. Records were requested and reviewed for select time periods. Based on the records reviewed, the styrene and MMA content limits appear to be being met.

This emission unit is subject to a gelcoat material limit of 156,000 lbs per a 12-month rolling time period. Records were requested and reviewed for select time periods. As of September 2021, 43,412 lbs of material was used per a 12-month rolling time period which is within the permitted limit. Previous 12-month rolling time periods reviewed also appeared to be within the permitted limit.

This emission unit is subject to a catalyst material limit of 3,000 lbs per a 12-month rolling time period. Records were requested and reviewed for select time periods. As of September 2021, 616 lbs of material was used per a 12-month rolling time period. Previous 12-month rolling time periods reviewed also appeared to be within the permitted limit.

This emission unit is subject to a primer surfacer material limit of 996 gallons per a 12-month rolling time period. Records were requested and reviewed for select time periods. Upon review of the records, one gallon of the material was used in September 2021. Previous time periods appear to show the material not being used.

Per SC VI.2, the permittee shall keep a separate record of the styrene and MMA monomer contents for each shipment of gelcoat received. Speaking with company staff, DGP receives certificate of analysis for materials used onsite. Records were requested for select materials and provided. Company staff stated that the certificate of analysis certify that the

materials meet or are less than the percentages of components listed on the applicable safety data sheets for that material in question. Additionally, it appears that DGP uses the worst-case scenario when determining emissions from safety data sheets. After further review, this appears acceptable.

Per SC VI.3a-j, the permittee shall keep track of daily / monthly usage rates, the identity of each material, the amount of primer surfacer used on a monthly basis, the styrene, MMA and VOC content of each gelcoat material used, the VOC and MEK content for the catalyst used, the VOC and styrene content of the primer surfacer used, the appropriate emission factor for each raw material, monthly / 12-month rolling time period usage rates to demonstrate compliance with SC II.1.a through c, and applicable styrene / VOC daily / monthly / 12-month rolling time period emission rates. Records were requested and provided for select time periods. After further review, the records overall appear acceptable.

EU-CLEANUP

This emission unit is for the acetone and miscellaneous solvent used throughout the facility for cleaning purposes. Acetone used throughout facility. Other solvents are mainly used in lamination booths.

Records

This emission unit is subject to an acetone emission limit of 24.0 tpy per a 12-month rolling time period and a VOC emission limit of 10.1 tpy per a 12-month rolling time period. Records were requested and provided for select time periods. Upon review, it appears that company staff are comparing acetone emissions to the smaller VOC emission limit. Though this is technically not correct as acetone is not a VOC, no further action is necessary at this time. As of September 2021, 1.30 tpy of emissions were reported which is well within both permitted VOC and acetone emission limits. Previous 12-month rolling time periods reviewed also appeared to be within the permitted limits.

Per SC VI.2, the permittee shall keep track of the identify of each clean-up solvent used, the usage rate, any reclaim of clean-up solvent, and acetone / VOC monthly / 12-month rolling time period emissions. Records were requested and reviewed for select time periods. Speaking with company staff, reclaim is completed of solvents, however, the reclaimed material is not applied to the emissions. One cleaning material (Super Blue LF Resin Cleaner) was noted to be used onsite for cleaning operations and it appears that the company has never kept track of usages / potential emissions. However, it appears that only minor amounts of the material are used at a time (the company stores a 55-gallon drum of the material onsite and has not had to purchase additional material in a year and a half). After further review, moving forward the company will verify potential emissions from this material and keep track of applicable items. After further review, overall, the remaining records appear to be acceptable.

EU-ADHESIVE

This emission unit is for adhesive materials used throughout the facility.

During the inspection, it was verified by DGP staff that this part of the process is not being operated currently. Records requested and provided verified that this unit appears to not have been in operation since at least October 2020.

EU-RTM

This emission unit is for the resin transfer molding that is exempt per Rule 286(b).

During the inspection, it was verified by DGP staff that this part of the process is not being operated currently.

FG-FIBERGLASS

This flexible group is for the fiberglass manufacturing process that consists of a pattern shop, production area using resin and gel coatings, and acetone used in cleanup activities. Emission units included in this flexible group are EU-PATTERNSHOP, EU-LAMINATION, EU-GELCOAT, EU-CLEANUP and EU-ADHESIVE.

Onsite Observations

Per SC III.1, all waste cleanup solvent(s), catalyst(s), resin(s), gelcoat(s) and other associated materials used in FG-FIBERGLASS shall be captured and stored in closed containers and disposed of in an acceptable manner in compliance with all applicable state rules and federal regulations. During the inspection, several lids were noted on containers that were not on properly. The air gaps were minor and pointed out to company staff who addressed the problem during the inspection. Two cleaning stations were also noted during the inspection that use the "Super Blue LF Resin Cleaner". A copy of the safety data sheet was provided for the material. Company staff described how the cleaning station works when cleaning parts and the waste reservoir appeared to only be a few gallons in size. Additionally, staff stated that the cleaning stations accumulate approximately 1-2 55-gallon containers of waste a year. Based on the design of the cleaning stations it did not appear that the reservoirs could be entirely sealed. Moving forward to be compliant the two cleaning stations shall be sealed to prevent fugitive emissions.

Per SC IV.1, the permittee shall not operate any booth associated with FG-FIBERGLASS unless all respective exhaust filters are installed, maintained and operated in a satisfactory manner. As stated above, minor air gaps were noted in dry filters for EU-GELCOAT and pointed out to company staff. The filters for the remaining booth in operation at the time of the inspection appeared acceptable. Overall, DGP appears to be in compliance with this condition.

FG-MACT

The stationary source is subject to the Maximum Achievable Control Technology Standards for Reinforced Plastic Composites Production promulgated in Title 40 of the Code of Federal Regulations, Part 63, Subparts A and WWWW. Emission units included in this flexible group are EU-PATTERNSHOP, EU-LAMINATION, EU-GELCOAT, EU-CLEANUP, EU-ADHESIVE and EU-RTM.

Onsite Observations

Based on the observations made at the time of the inspection, it appeared overall that applicable work practice standards per 40 CFR Part 64, Subpart WWWW are being followed.

Following the inspection, it was noted that the safety data sheet for the "Super Blue LF Resin Cleaner" does not list under the chemical composition any HAPs, however, the safety data sheet mentions later that this product may expose the user to chemicals including ethylene oxide. After further review, DGP will need to verify with a technical data sheet that

this cleaning material contains no HAPs and if so, potentially update their Notification of Compliance Status and include this in their next semi-annual and annual deviation reports.

Records

Per SC V.1, the HAP content of any resin, gelcoat, etc., as received and as applied, shall be determined using Material Safety Data Sheets, manufacturers formulation data, or both as deemed acceptable by the AQD District Supervisor. Select records were requested and provided of the several highest used materials onsite. Based on the records provided, DGP appears to be adequately determining the HAP contents of applicable materials used.

Per SC VI.2, the permittee shall submit the applicable notifications and reports by the dates specified in Table 13 and Table 14 to Subpart WWWW. Upon review, it appears that all appropriate notifications have been historically submitted with the exception of a Notification of Compliance Status as specified by 63.9(h) in Table 13. This was discussed at length and a Notification of Compliance was later submitted and received by the AQD on November 22, 2021.

Additional Observations

During the inspection a finishing department was observed that had various cutting, grinding, and drilling machines. Equipment observed appears to be exempt per Rule 285(2) (I)(vi)(B).

During the course of the inspection, several areas were noted with open containers. Speaking with company staff these containers were referred to as hot barrels. Hot barrels were described by staff as containers where residual amounts of materials during production are drained into, mixed with water, and allowed to catalyze. Staff stated that the barrels are kept open during operations and sealed at the end of the day. It appeared that if the containers were sealed it could pose a safety concern. The residual material is accounted for in the usage rates for emission units noted earlier in this report. The catalyzed material is eventually shipped offsite for removal. It was concluded that emissions from the hot barrels appear to be minor (company staff stated that it would take over a year to fill up a 55-gallon container of the catalyzed material) and already accounted for elsewhere, therefore, no further action is necessary at this time.

Conclusion

Based on the facility walkthrough, observations made, and records received, DGP appears to be in compliance with the MI-ROP-N2383-2018, NESHAP Subpart WWWW and applicable air quality rules.

NAME Adam Shaffer

DATE 01/03/2022

SUPERVISOR_Chris Hare