DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION ACTIVITY REPORT: Site Review

M355457438

FACILITY: General Formulations, Inc.		SRN / ID: M3554
LOCATION: 320 S. Union St., SPARTA		DISTRICT: Grand Rapids
CITY: SPARTA		COUNTY: KENT
CONTACT: Rob Bachholzky , Chemist		ACTIVITY DATE: 11/17/2020
STAFF: Adam Shaffer	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Partial Compliance Evaluation - Records Review		
RESOLVED COMPLAINTS:		

A partial compliance evaluation (PCE) was completed by Air Quality Division (AQD) staff Adam Shaffer (AS) for General Formulations, Inc. (GF) by requesting applicable records on November 17, 2020, to verify compliance with Permit to Install (PTI) No. 192-03G. A site inspection to verify compliance will be completed at a later date.

Facility Description

GF is a coating and laminating operations facility that creates products for various advertising and marketing industries. The facility is in operation under PTI No. 192-03G and is an opt out source of hazardous air pollutants (HAPs) and volatile organic compounds (VOCs).

Offsite Compliance Review

Based on the timing of the inspection, the 2019 Michigan Air Emissions Reporting System (MAERS) Report had already been received and processed by the AQD with the 2020 MAERS Report not having been submitted yet. For 2019, 51,128 lbs of VOC emissions were reported. Emissions reported were compared to records provided. Some differences were noted, and it appears that GF reported slightly more emissions (less than one ton) then in the records provided. After further review, the 2019 MAERS Report appears acceptable.

Records Compliance Evaluation

A request was sent to Mr. Rob Bachholzky, QC Manager, of GF on November 17, 2020, for various records required by PTI No. 192-03G.

PTI No. 192-03G

EU-CoaterUV

This emission unit is for a 61-inch wide, ultraviolet (UV) coating and curing station on a static cling laminator. Coating is applied via method of reverse gravure with an enclosed doctor blade.

This emission unit is subject to a VOC emission limit of 4.6 tons per year (tpy) per a 12-month rolling time period. Records were requested and reviewed back through October 2019. For the month of September 2020, 6.11 lbs of VOCs were emitted. As of September 2020, 0.05 tpy of VOCs were emitted per a12-month rolling time period which is within the permitted limit. Previous 12-month rolling time periods were reviewed and also appeared to be within the permitted limit.

The facility is subject to a VOC material limit of 0.16 lb / gal minus water as applied for each material used. As stated by GF staff, this coating line only utilizes one material. Supporting documentation from the manufacturer states the material to have a VOC content of 0.16 lb / gal which meets the permitted material limit.

Per Special Condition (SC) V.1, GF shall utilize test method 24 or upon request utilize manufacturers formulation data to determine the VOC content for each material used for EU-CoaterUV. GF has previously requested to use formulation data to determine the VOC contents for this line and as mentioned above provided supporting documentation to verify the VOC content of the one material used. This was determined to be acceptable.

Per SC 3a-d, GF shall keep track of usage rates, VOC contents, and monthly / 12-month rolling time period VOC emissions for EU-CoaterUV. Records were requested and provided back through October 2019. Upon review of the records provided, minor errors were noted and GF staff were made aware. Overall, it appears that GF is keeping track of usage rates, VOC contents and monthly / 12-month rolling time period VOC emissions.

EU-CoaterE

This emission unit is a 60-inch wide, roll to roll laminator with gravure and wire rod coating stations, and a single zone natural gas-fired oven. EU-CoaterE uses only water-based coatings.

This emission unit is subject to a VOC emission limit of 22.9 tpy per a 12-month rolling time period. Records were requested and reviewed for select time periods. For the month of September 2020, 0.59 tons of VOCs were emitted and as of September 2020, 8.38 tpy of VOCs were emitted per a 12-month rolling time period which is well within the permitted limit. Previous 12-month rolling time periods reviewed were also within the permitted limit.

This emission unit is subject to a VOC material limit of 0.8 lb / gal minus water as applied. Records were initially requested for select materials used and were provided. Upon review, VOC contents were not consistent from formulation data and emission records. This was clarified by GF staff that yearly EPA Method 24 testing had been completed for select materials per requirement of PTI No. 192-03F. This permit has since then been voided and the new PTI No. 192-03G does not contain this requirement. Test Method 24 results were requested for select materials and provided. Differences were noted between the Test Method 24 results and the formulation data provided. Reviewing the emission records GF appeared to correctly be utilizing the higher VOC contents from the Test Method 24 results for calculating emissions. After further review, this material limit appears to be being met.

Per SC V.1, GF shall utilize EPA Test Method 24 or upon request utilize manufacturers formulation data to determine the VOC content for each material used for EU-CoaterE. GF has previously requested to use formulation data to determine the VOC contents for this line and as mentioned above completed EPA Method 24 testing for select materials. After further review, GF appears to be adequately determining VOC contents for materials used for EU-CoaterE.

Per SC VI.3a-d, GF shall keep track of usage rates, any reclaim of materials, VOC contents, and monthly / 12-month rolling time period VOC emissions. Records were requested and reviewed for select time periods. Based on the records review, GF appears to be adequately keeping track of usage rates, VOC contents and monthly /12-month rolling

time period emissions. Speaking with GF staff it appears that no reclaim is completed for materials used by this emission unit.

EU-CoaterF

This emission unit is for a 64-inch wide, roll to roll laminator with gravure and wire rod stations, and a natural gas-fired oven. EU-CoaterF uses only water-based coatings and emissions are uncontrolled.

This emission unit is subject to a VOC emission limit of 40 tpy per a 12-month rolling time period. Records were requested and reviewed for select time periods. For the month of September 2020, 0.604 tons of VOCs were emitted and as of September 2020, 6.311 tpy of VOCs were emitted per a 12-month rolling time period 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 8-hr emission limit for hydrotreated distillates (CAS No. 64742-46-7) of 20.0 lbs. Records were requested and based on the records provided no hydrotreated distillates were emitted since at least last October 2019. This was discussed at length with GF staff and determined the one coating material containing hydrotreated distillates is no longer used. However, GF intends to keep the hydrotreated distillate emission limit in PTI No 192-03G in case they need to switch back to the former coating material. After further review this appears acceptable at this time.

This emission unit is subject to a VOC material limit of 0.8 lb / gal minus water as applied. Records were initially requested for select materials used and were provided. Upon review, VOC contents were not consistent from formulation data and emission records. This was clarified by GF staff that yearly EPA Method 24 testing had been completed for select materials per requirement of PTI No. 192-03F. This permit has since then been voided and the new PTI No. 192-03G does not contain this requirement. Test Method 24 results were requested for select materials and provided. Differences were noted between the Test Method 24 results and the formulation data provided. Higher VOC contents from the Test Method 24 appear to overall be used, however, one material was noted to still use the older formulation data instead. After discussing this with GF staff it appears that the records had not been updated for this one material. GF staff also mentioned that this material is only used on EU-CoaterF. Based on how low the VOC emissions are for this coating line, it is highly unlikely that the VOC emission limit was exceeded for this EU-CoaterF. Moving forward, GF staff shall utilize up to date VOC contents when calculating emissions.

Per SC V.1, GF shall utilize EPA Test Method 24 or upon request utilize manufacturers formulation data to determine the VOC content for each material used for EU-CoaterF. GF has previously requested to use formulation data to determine the VOC contents for this line and as mentioned above completed EPA Method 24 testing for select materials. After further review, GF appears to be adequately determining VOC contents for materials used for EU-CoaterF.

Per SC VI.3a-d, GF shall keep track of usage rates, any reclaim, VOC contents, and monthly / 12-month rolling time period VOC emissions. Records were requested and provided for select time periods. Speaking with GF staff it appears that no reclaim is completed for materials used by this emission unit. After further review, it appears that overall, GF is keeping track of usage rates, VOC contents and monthly / 12-month rolling time period VOC emissions.

Per SC VI.4a-d, GF shall keep track of usage rates, reclaim if applicable, hydrotreated distillate contents, and 8-hr emission rates. As stated previously, GF no longer uses materials that contained hydrotreated distillates, therefore, no emissions were reported.

FG-C&NewMixroom

This flexible group is for roll laminators (coater), natural gas fired oven, and a new mix room. Coater C uses only solvent-based coatings. EU-NewMixroom is a batch process where coatings and adhesives are produced for internal use and external sales. Both are controlled by Permanent Total Enclosure (PTEs) and the existing regenerative thermal oxidizer (RTO). Each emission unit is equipped with a filtrations system to control particulate matter.

At the time of the records request, the two emission units (EU-CoaterC and EU-NewMixroom) are still in the process of being constructed. Per GF staff, EU-CoaterC is almost constructed with wet trials anticipated being started the end of December 2020. The EU-NewMixroom is at least six months out from completion. In a follow up conversation with GF staff on January 4, 2021, trial operations for EU-CoaterC had been completed on December 23, 2020. GF staff submitted notifications on January 18, 2021, for the startup of the existing RTO and the completion of EU-CoaterC. GF staff were aware of the 180-day timeline now for testing of the old RTO to determine the VOC destruction efficiency. The new mix room was still being constructed and GF staff were aware that due to timing of completion this may require a second RTO destruction efficiency test for VOCs if the new mix room cannot be completed and included during the first testing. Since the emission units for this flexible group had not finished being constructed or had just finished being constructed, no records associated with both emission units were requested.

FG-SolventBased

This flexible group is for roll laminators (coaters) natural gas fired ovens, and a mix room. EU-CoaterB uses only solvent-based coatings and EU-CoaterD, EU-CoaterG, and EU-CoaterH use water and / or solvent-based coatings. EU-Mixroom is a batch process where coatings and adhesives are produced for internal use and external sales. VOC emissions during use of solvent-based materials are controlled by a PTE and a new Regenerative Thermal Oxidizer (New RTO) otherwise exhausted via bypass stack(s). Each emission unit is equipped with a filtration system to control particulate matter.

This flexible group is subject to an 89 tpy VOC emission limit per a 12-month rolling time period. Records were requested and reviewed for select time periods. For the month of September 2020, 0.53 tons of VOCs were emitted. As of September 2020, 10.12 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 were also within the permitted limit.

This flexible group is subject to a second VOC emission limit of 62.3 tpy per a 12-month rolling time period for EU-CoaterD and EU-CoaterG during periods of New RTO bypass. As identified during previous phone conversations, EU-CoaterG is not connected to the New RTO, thus all emissions from EU-CoaterG will apply to this emission limit. For the month of September 2020, 0.88 tons of VOCs were emitted. As of September 2020, 7.96 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 emission limit.

This flexible group is subject to a third VOC emission limit of 42.0 tpy per a 12-month rolling time period for EU-CoaterH during periods of New RTO bypass. GF staff stated in response to the records request that EU-CoaterH only runs to the New RTO and appears that it is never run-on bypass.

This flexible group is subject to an instantaneous material limit for VOC contents of waterborne coatings of 0.54 lb/gal (minus water) as applied uncontrolled. Records were requested and reviewed. It appears that GF is meeting this material limit.

Per SC III.4, GF is required to submit a Malfunction Abatement Plan (MAP) within 180 days of commencement of operations for EU-CoaterH or FG-SolventBased. A MAP was submitted late to the AQD on July 17, 2020. Errors were noted and discussed with GF staff and a corrected MAP was submitted on October 30, 2020. Records were requested for select months. The checklist for maintenance inspections appears to be from the manufacturer. Based on the records reviewed and follow up discussion with GF staff, it appears that GF is following the MAP.

Per SC VI.3a-e, GF shall keep track of use of New RTO or bypass start and end times for each emission unit, usage rates of materials (with water) used and reclaimed, VOC contents of materials, separate VOC monthly / 12-month rolling time period emissions (FG-SolventBased, EU-CoaterD and EU-CoaterG during bypass, and EU-CoaterH). Records were requested and reviewed back for select time periods. As mentioned earlier, EU-CoaterH is not run-on bypass from the RTO and EU-CoaterG is not connected to the RTO. Reviewing the bypass times for EU-CoaterD, numerous dates were noted where the coating line utilized water-based coatings, however, the times the unit would have been on bypass were not recorded. This was brought to the attention of GF staff and discussed. After further review it did not appear that bypass time records were being readily kept for select materials for EU-CoaterD, though GF also has the option of keeping track of use of the New RTO which would be identified in temperature records provided. GF staff later provided updated records with the bypass times for EU-CoaterD. In a follow up conversation, Mr. Bachholzky stated that EU-CoaterD will no longer go on bypass of the New RTO unless approved by him.

Based on the records reviewed, GF appears to be keeping track of usage rates, VOC contents, and applicable monthly / 12-month rolling time period emissions. Reclaim was discussed with GF staff and is only completed for EU-Mixroom, however, values appear to not be applied to emissions for this unit.

Per SC VI.4, when FG-SolventBased is using the New RTO, GF shall monitor and record the combustion zone temperature on a continuous basis and demonstrate compliance based on a three-hour rolling average combustion zone temperature. Records were requested and reviewed for select time periods. Most recently, GF completed testing to verify the VOC destruction efficiency of the New RTO per SC V.2 on August 11, 2020. An average destruction efficiency of 98.9% was achieved with a new RTO setpoint temperature of 1,696°F. It was noted during testing that in order to satisfy maximum routine operation, higher solvent containing materials were used by the coating lines which resulted in a higher operating RTO temperature with the unit also becoming "self-sustaining" in that no natural gas was being used by the RTO to maintain the combustion chamber temperature. Per SC IV.2, "Satisfactory operation of the New RTO includes a minimum VOC destruction efficiency for the New RTO of 95 percent (by weight), maintaining a three-hour rolling average combustion zone temperature of at least 1400°F or the minimum combustion zone

temperature from the most recent acceptable stack test, and a minimum retention time of 0.5 seconds." GF staff stated that the setpoint for the New RTO is 1600°F. Based on the temperature records reviewed, the New RTO appears to be meeting the required 1400°F to demonstrate compliance, however, the temperature was noted several times to be below the 1696°F that was used to determine a VOC destruction efficiency of at least 95 percent by weight during testing. Moving forward, this condition of satisfactory operation of the New RTO will be reviewed by AQD staff and GF may potentially be required to submit a PTI application to modify this permitted condition. Additionally, moving forward records provided will be corrected to adequately show the three-hour rolling average as required per PTI No. 192-03G.

Per SC IV.5, GF shall monitor and record, in a satisfactory manner, the air flow or pressure differential between each PTE portion of FG-SolventBased and the adjacent area, on a continuous basis, to verify that air is entering each PTE. Records were requested and provided for select time periods. Upon review, records are recorded every minute and averaged every fifteen minutes per conversation with GF staff instead of a rolling three-hour average. Moving forward, records will be provided in a format that adequately demonstrates a rolling three-hour average. It was noted from reviewing the records that the PTEs through the course of a day may be turned on and off several times. The rolling averages also appeared to include the times when the unit was not in operation. After further review, the downtimes for each PTE cannot be considered when calculating a three-hour average. This was discussed with GF staff and moving forward will be updated accordingly. Two instances were identified from the records reviewed where the PTEs appeared to not be operating properly and were brought to the attention of GF staff. The first instance was determined to be when maintenance was being completed on the PTE for EU-CoaterH. After review, the response received for EU-CoaterH appeared acceptable. The second instance was regarding the PTE for EU-CoaterG which is not physically connected to the RTO. Questions were raised by GF staff that if EU-CoaterG is not connected to the RTO would the PTE limit apply. It was also stated that adequate operation of a PTE relies on the drawing in of air from the RTO during operation, thus with the PTE for EU-CoaterG not connected to the RTO this could potentially affect the performance of the PTE. After further review and AQD internal discussions, it was concluded that moving forward if the PTE consistently does not meet the pressure drop limit of at least a 0.007 inch of water column. GF shall either modify the PTE to provide adequate draw in or submit a PTI application to modify their permit to reflect the current condition of EU-CoaterG.

Per SC VII.1, notifications shall be submitted to the AQD within 30 days of completion of the construction of EU-CoaterH and the switch of the existing RTO exhaust stack to the new stack. Notifications were received for both requirements.

FG-TACs

This flexible group is for toxic air contaminants (TAC) emitted from seven (7) emission units.

This flexible group is subject to a 1,4-Dioxane (CAS No. 123-91-1) emission limit of 1,115.5 lb/yr per a 12-month rolling time period as determined at the end of each calendar month. Records were requested and reviewed for select time periods. For the month of September 2020, 2 lbs of 1,4-Dioxane were emitted. As of September 2020, 22 lbs of 1,4-Dioxane were emitted which is well within the permitted limit. Previous 12-month rolling time periods were also within the permitted limit.

This flexible group is subject to an acrylic acid (CAS No. 79-10-7) emission limit of 5,574.3 lb/yr per a 12-month rolling time period as determined at the end of each calendar month. Records were requested and reviewed for select time periods. Based on the monthly / 12-month rolling time period records, no significant emissions were reported, and GF appears to be meeting this emission limit.

This flexible group is subject to a cumene (CAS No. 98-82-8) emission limit of 1,034.7 lb / yr per a 12-month rolling time period as determined at the end of each calendar month. Records were requested and reviewed for select time periods. For the month of September 2020, 0.1756 lbs of cumene were emitted. As of September 2020, 0.2545 lbs of cumene were emitted per a 12-month rolling time period which is well within the permitted limit. Based on the records provided, it would appear that GF is meeting this emission limit.

This flexible group is subject to a formaldehyde (CAS No. 50-00-0) emission limit of 446.2 lb / yr per a 12-month rolling time period as determined at the end of each calendar month. Records were requested and reviewed for select time periods. For the month of September 2020, no significant amount of formaldehyde emissions was reported being emitted. As of September 2020, 8 lbs of formaldehyde was emitted per a 12-month rolling time period. Previous 12-month rolling time periods reviewed also appeared to be within the permitted limit.

This flexible group is subject to a butyl acrylate (CAS No. 141-32-2) emission limit of 38.0 lb / 8-hr. Records were requested and provided for select time periods. GF keeps track of daily emissions of butyl acrylate, which after further review since October 2019, appeared to be less than the 8-hr emission limit. This is acceptable, however, if daily emissions increase to over the 38.0 lb limit then they will need to be broken up into the 8-hr time periods in order to demonstrate compliance with this emission limit.

This flexible group is subject to an ammonium hydroxide (CAS No. 1336-21-6) emission limit of 19.3 pounds per hour (pph). Records were requested and provided for select time periods. GF keeps track of daily emissions of ammonium hydroxide, which after further review since October 2019, appeared to be less than the pph emission limit. This is acceptable, however, if daily emissions increase to over the 19.3 pph limit then they will need to be broken up into the pph time period in order to demonstrate compliance with this emission limit.

Per SC VI.3a-e, GF shall keep track of usage rates of materials containing 1,4-dioxane, acrylic acid, cumene, and formaldehyde, any reclaim of materials if applicable, contents of applicable contaminants, and monthly / 12-moth rolling time period applicable emissions. As previously stated, the only reclaim completed onsite is for EU-Mixroom.

Upon review of the records provided, it was determined that contents for select materials were not consistent with formulation data provided. These inconsistencies appear to be minor and should not result in any emission limit exceedance. Therefore, a violation notice will not be issued at this time. AS notified company staff that these inconsistencies will need to be corrected moving forward.

Per SC VI.4a-d, GF shall keep track of usage rates of materials containing butyl acrylate, any reclaim if applicable, butyl acrylate contents and emission rates in pounds per 8-hr time periods. Records were requested and reviewed for select time periods. After further review, the records appear acceptable at this time.

Per SC VI.5.a-d GF shall keep track of usage rates of materials containing ammonium hydroxide, any reclaim if applicable, ammonium hydroxide contents and emission rates in pounds per hour. Records were requested and reviewed for select time periods. After further review, the records overall appeared acceptable at this time.

FGFACILITY

This flexible group applies source-wide to all process equipment including equipment covered by other permits, grand-fathered equipment and exempt equipment.

This flexible group is subject to individual / aggregate HAP emission limits of less than 9.0 tpy and less than 22.5 tpy respectively per a 12-month rolling time period. Records were requested and reviewed for select time periods. For the month of September 2020, 0.233 tons of aggregate HAPs were emitted. As of September 2020, 3.438 tpy of aggregate HAPs were emitted per a 12-month rolling time period which is well within the permitted limit for both individual and aggregate HAPs. Previous 12-month rolling time periods reviewed were also within the permitted limits. Based on the records provided, GF appears to be keeping track of individual HAPs.

This flexible group is subject to a daily VOC emission limit of 493 lbs / day. Records were requested and reviewed for select time periods. Two days were observed where the daily VOC emission limit was exceeded (October 29, 2019 – 638.09 lbs of VOCs and June 23, 2020 – 704.39 lbs of VOCs). The two days were brought to the attention of GF staff and discussed. After further review, it appears that based on the responses received by GF staff, the two daily emission exceedances appear to have been due to errors in records and would not have been exceedances. Additionally, formatting errors were noted for several emission units when adding up the daily emission limits. This was brought to the attention of GF staff and shall be corrected moving forward. Reviewing the records, it appears that despite the formatting errors it is highly unlikely that there are any potential daily VOC emission exceedances.

This flexible group is subject to a second VOC emission limit of less than 90 tpy per a 12-month rolling time period. Records were requested and review for select time periods. For the month of September 2020, 2.75 tons of VOCs were emitted. As of September 2020, 29.87 tpy of VOCs were reported emitted per a 12-month rolling time period which appears to be within the permitted limit. Previous 12-month rolling time periods reviewed also appear to be within the permitted limit. As mentioned above, formatting errors were noted when adding up VOC emissions for several emission units, however, based on how low the reported emissions are it is highly unlikely an emission exceedance would have occurred.

This flexible group is subject to a benzophenone (CAS No. 119-61-9) emission limit of 0.5 tpy per a 12-month rolling time period. Records were requested and reviewed for select time periods. For the month of September 2020, 0.000352 tons of VOCs were emitted. As of September 2020, 0.006 tpy of benzophenone emissions were reported emitted per a 12-month rolling time period which appears to be well within the permitted limit. Previous 12-month rolling time periods reviewed also appear to be well within the permitted limit.

Per SC V.1, GF shall determine the HAP contents for each material by using manufacturer's formulation data and per SC V.2, GF shall determine the VOC contents using EPA Test Method 24 or upon request manufacturer's formulation data. GF has historically requested to use manufacturer's formulation data to determine the VOC contents of coating materials, however, the previous PTI No. 192-03F had required EPA

Method 24 testing to be completed for select materials. A mixture of Test Method 24 results and manufacturer's formulation data is used to determine the VOC contents for all materials and manufacturer's formulation data is used to determine the HAP contents. Select materials were requested and provided. Based on the records reviewed, GF appears to be adequately determining the VOC / HAP contents.

Per SC VI.3a-e, GF shall keep track of usages rates of each HAP containing material, reclaim if applicable, HAP contents and individual / aggregate HAP monthly / 12-month rolling time period emissions. Records were requested and reviewed for select time periods. Upon review of the records provided, errors were noted in HAP contents provided from formulation data and what was used to determine emissions. This was brought to the attention and discussed at length with GF staff. It was determined that errors were noted in several of the coating line spreadsheets provided with one in particular (EU-CoaterD) using older HAP content information when determining HAP emissions. The facility was informed to update and use current formulation data going forward. Based on reviewing the records and conversations with GF staff, several instances of overreporting emissions were noted due to inconsistencies with HAP contents and the destruction efficiency of the New RTO was not being taken into account for select materials. The inconsistencies appear to be minor and should not result in any emission limit exceedances. Therefore, a violation notice will not be issued at this time. AS notified company staff that these inconsistencies will need to be corrected moving forward. As stated earlier, EU-Mixroom is the only emission unit that would reclaim materials, however, the reclaim is not applied to reported emission. GF appears to be keeping track of usage rates and HAP contents.

Per SC VI.4a-d, GF shall keep track of on a daily basis, RTO bypass times, usage rates, reclaim if applicable, VOC contents and daily VOC emission calculations. Records were requested and reviewed. As stated previously, RTO bypass times were noted missing for several times regarding EU-CoaterD and were discussed with GF staff. Updated records were later provided. In a follow up conversation, Mr. Bachholzky stated that EU-CoaterD will no longer go on bypass of the New RTO unless approved by him. Formatting errors were noted when reviewing the daily VOC emission records as well two days that appeared to show an emission exceedance. After speaking with GF staff, it appeared that the two potential emission exceedances were not accurate and moving forward the formatting errors when computing the daily VOC emissions would be fixed. Based on the records reviewed, GF appears to overall be keeping track of usage rates, VOC contents, and daily VOC emission calculations. Reclaim is only completed for EU-Mixroom, however, reclaimed materials are not applied to VOC emission calculations.

Per SC VI.5a-e, GF shall keep track of usage rates of each VOC containing material, reclaim if applicable, VOC contents and monthly / 12-month rolling time period VOC emissions. Records were requested and reviewed for select time periods. As mentioned previously, errors were noted in VOC emission records that would potentially affect monthly / 12-month rolling time period VOC emissions. Based on how low GF's VOC emissions are it is highly unlikely that any VOC emission limits were exceeded. After further review, GF appears to overall be keeping track of usage rates, VOC contents, and monthly / 12-month rolling time period VOC emissions. The EU-Mixroom is the only emission unit that reclaims materials, however, reclaim values are not applied to reported emissions.

Per SC VI.6a-e, GF shall keep track of usage rates of all benzophenone containing materials, any reclaim if applicable, benzophenone contents (Emissions of 2% of the weight percent of benzophenone are assumed based on reactivity), and monthly / 12-month rolling

time period benzophenone emissions. Records were requested and reviewed for select time periods. Based on the records reviewed, GF appears to be keeping track of usage rates, benzophenone contents, and monthly / 12-month rolling time period emissions.

Conclusion

Based on a review of the records provided, GF appears to be in compliance with PTI No. 192-03G, however, there are inconsistencies in the records reviewed that the company will need to address.

NAME Adam Shaffer

DATE 03/02/21 SUPERVISOR 44