

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

N504455529

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| FACILITY: SUMMIT POLYMERS-VICKSBURG | | SRN / ID: N5044 |
| LOCATION: 115 South Leja Dr., VICKSBURG | | DISTRICT: Kalamazoo |
| CITY: VICKSBURG | | COUNTY: KALAMAZOO |
| CONTACT: Richard Gippert , Sr. Manufacturing Engineer | | ACTIVITY DATE: 09/15/2020 |
| STAFF: Monica Brothers | COMPLIANCE STATUS: Non Compliance | SOURCE CLASS: SM OPT OUT |
| SUBJECT: Announce Scheduled Inspection | | |
| RESOLVED COMPLAINTS: | | |

This was an announced scheduled inspection. The last time this facility was inspected was in January of 2015. Staff, Monica Brothers arrived at Summit Polymers-Vicksburg at about 9:00 am and met with Rick Gippert, Senior Manufacturing Engineer, Eretia Warner, HR Manager, and Abigail Burris, Human Resources Coordinator. Rick had previously sent met records electronically, except for the temperature records for the cure ovens. We took a look at those in a conference room before we took a tour of the facility. The temperature readings are taken every three minutes and logged electronically. Their records showed that they were consistently under the required maximum 194°F limit in their permit. The highest number I saw was 180°F on August 24th. Rick said the temperatures tend to increase in the summer when the weather is warmer but that they have never gone above 194°F. Each cure oven has an alarm that would indicate any temperature readings over that limit.

I also asked Rick a few preliminary questions about the facility. The facility uses plastic injection molding machines to make parts for the automotive industry and then paints those parts. They currently have 38 molding machines, which are internally vented. They commenced operations in 1994. Rick said that the facility does the plastic injection molding 24-hours/day, but the coating only runs for two shifts each day. They do work on weekends, but only on an as-needed basis. There are currently about 380 employees who work at this facility. They do not have any boilers or emergency generators on-site, but they do have one parts washer, which we saw on the facility tour. The lid was closed, and the rules were posted. Rick said that they no longer have a distiller for line flush, which was previously considered exempt under Rule 285(2)(u). They have a mask washer and a sample booth that is considered exempt under Rule 290. They are keeping records for this and are under the Rule 290 limits.

The following summaries contain my observations on the facility tour, as well as my findings while reviewing the required records for each emission unit in PTI #228-04H.

EUSystem 1:

This emission unit contains air-dried plastic automotive parts spray booths and associated IR cure ovens. During the tour I observed the paint booths which use robotic applicators and have dry filters for particulate control. Rick said that they change the filters about once per shift. They seemed to be installed correctly. Containers of coatings and other solvents seen around this emission unit were closed when not in use and the temperature in the IR cure oven was 102.9 at that time.

Records:

| Permit Requirement | Time Period | Permitted Limit | Observations/Compliance |
|--|-------------------------------|-----------------|---|
| Gallons (with water) of each coating, reducer, thinner, additive, catalyst, clean-up solvents used and reclaimed | Daily | N/A | Compliance: The facility is keeping these records. |
| VOC content (minus water and with water) of each material as applied. | Daily Volume-weighted Average | 5 lbs/gal | Compliance: The facility is keeping these records, which are consistently under this limit. |
| Acetone content and t-butyl acetate content | Instantaneous | N/A | Compliance: The facility is keeping these |

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| of each material as applied | | | records. |
| VOC, acetone, and t-butyl acetate separate and combined mass emission calculations, determining the tons/month emission rate | Monthly | N/A | Compliance: The facility is keeping these records. |
| VOC, acetone, and t-butyl acetate separate and combined mass emission calculations determining the annual emission rate in tons/year for a 12-month rolling time period. | Monthly (12-month rolling) | 60 tons/year | Compliance: The facility is keeping these records, which are consistently under this limit. |

EUSystem2:

This emission unit is an air-dried plastic automotive interior parts spray coating line consisting of a CO₂ cleaner, one flame treat booth, one topcoat spray booth, one flash zone, one clear coat spray booth, and one IR cure oven. During the tour I observed the paint booths which use robotic applicators and have dry filters for particulate control. Rick said that they change the filters about once per shift. They seemed to be installed correctly. Containers of coatings and other solvents seen around this emission unit were closed when not in use. I could not take a reading of the temperature on the cure oven for this emission unit because it is an older temperature monitor and does not have a visual read-out. They have to hook up a computer to the monitor in order to read the temperature. However, there is an alarm on this monitor that will indicate if temperatures go above 194°F.

Records:

| Permit Requirement | Equipment | Time Period | Permitted Limit | Observations |
|---|--|---------------|-------------------|--|
| Gallons (with water) of each VOC, acetone, and TBA containing material used and reclaimed (monthly) | Each coating booth portion (there are two), individually and combined. | Monthly | N/A | Compliance: The facility is keeping these records. |
| VOC (with water), acetone, and TBA contents of each material as applied | Each coating booth portion (there are two), individually and combined. | Instantaneous | N/A | Compliance: The facility is keeping these records. |
| VOC, acetone, and TBA emissions | Each coating booth portion (there are two), individually and combined. | Monthly | N/A | Compliance: The facility is keeping these records. |
| VOC emissions in | Each coating | Monthly (12- | 78 tons/year (12- | Compliance: The |

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| tons/year | booth portion (there are two), individually and combined. | month rolling) | month rolling) | facility is keeping these records, which are consistently under this limit. |
| Combined VOC, acetone, and TBA combined emissions in tons/year | Each coating booth portion (there are two), individually and combined. | Monthly (12-month rolling) | 58 tons/year for each individual booth and 114 tons per year for the booths combined | Non-compliance: The facility has 12-month rolling VOC records, but did not provide VOC, acetone, and TBA combined for EUSystem2. |
| Gallons (with water) of each glycol ether DB and 2-(2-butoxyethoxy) ether acetate (TACs) containing material used and reclaimed | EUSystem2 | Monthly | NA | Compliance: The facility is keeping these records. |
| Each TAC content (with water) in pounds per gallon of each material used | EUSystem2 | Instantaneous | NA | Compliance: The facility is keeping these records. |
| Each TAC emissions in tons/month | EUSystem2 | Monthly | NA | Compliance: The facility is keeping these records. |
| Each TAC annual emissions in tons/year for 12-month rolling time period | EUSystem2 | Monthly (12-month rolling) | 1.7 tons/year | Non-compliance: Facility either did not have some of these records, or they were not being calculated correctly. |
| Gallons (minus water) of each VOC containing material used and reclaimed | EUSystem2 | Daily | NA | Compliance: The facility is keeping these records. |
| VOC (minus water) content of each material as applied | EUSystem2 | Instantaneous | NA | Compliance: The facility is keeping these records. |
| VOC content of the coatings in lbs/gal, minus water, as applied | EUSystem2 | Daily Volume-weighted Average | 5 lbs/gal | Non-compliance: Records indicate an exceedance of this limit on June 13, 2020. The daily volume-weighted average was 5.24 lbs/gal on this date. A violation notice will be sent. |

EUBTHLINE05:

This emission unit contains air-dried plastic automotive parts spray booth #5 and associated IR cure

oven. During the tour I observed the paint booths which use robotic applicators and have dry filters for particulate control. Rick said that they change the filters about once per shift. They seemed to be installed correctly. Containers of coatings and other solvents seen around this emission unit were closed when not in use and the temperature in the IR cure oven was 101.5 at that time.

Records:

| Permit Requirement | Time Period | Permitted Limit | Observations/Compliance |
|--|-------------------------------|-----------------|---|
| Gallons (with water) of each coating, reducer, thinner, additive, catalyst, clean-up solvents used and reclaimed | Daily | N/A | Compliance: The facility is keeping these records. |
| VOC content (minus water and with water) and acetone content of each material as applied. | Instantaneous | NA | Compliance: The facility is keeping these records. |
| VOC content of the coatings in lbs/gal, minus water, as applied | Daily Volume-weighted Average | 5.0 lbs/gal | Non-compliance: Facility records indicate exceedances of this limit on August 8, 2018 (5.10 lbs/gal), November 16, 2018 (5.28 lbs/gal), and January 25, 2019 (5.13 lbs/gal). A violation notice will be sent. |
| VOC and acetone combined mass emission calculations in tons/month | Monthly | N/A | Compliance: The facility is keeping these records. |
| VOC and acetone combined mass emission calculations in tons/year for a 12-month rolling time period. | Monthly (12-month rolling) | 30 tons/year | Non-compliance: Facility records indicate exceedances of this limit in September 2019 (31.06 tpy), October 2019 (33.26 tpy), November 2019 (34.26 tpy), December 2019 (34.43 tpy), and January 2020 (35.20 tpy). A violation notice will be sent. |

FGFACILITY:

Records:

| Permit Requirement | Time Period | Permitted Limit | Observations/Compliance |
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| Gallons of lbs of each HAP-containing material used and reclaimed | Monthly | NA | Compliance: The facility is keeping these records. |

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| HAP content in lbs/gal or lbs/lb of each HAP-containing material used. | Instantaneous | NA | Compliance: The facility is keeping these records. |
| Individual HAP emissions in tons/month and 12-month rolling (limit = less than 9 tpy) | Monthly | 9 tons/year | Non-compliance: facility was not calculating this correctly. |
| Aggregate HAP emissions in tons/month and 12-month rolling (limit = less than 22.5 tpy) | Monthly | 22.5 tons/year | Non-compliance: facility was not calculating this |
| Gallons or lbs of each VOC-containing material used and reclaimed | Monthly | NA | Compliance: The facility is keeping these records. |
| VOC content in lbs/gal or lbs/lb of each VOC-containing material used. | Instantaneous | NA | Compliance: The facility is keeping these records. |
| Gallons, with water, of each of Group 1 Coatings used on 12-month rolling time period. | Monthly | 32,000 gal/year | Non-compliance: Facility had monthly totals but not 12-month rolling totals. |
| Gallons, with water, of each of Group 2 Coatings used on 12-month rolling time period. | Monthly | 3,000 gal/year | Non-compliance: Facility had monthly totals but not 12-month rolling totals. |
| Gallons, with water, of each of Group 3 Coatings used on 12-month rolling time period. | Monthly | 3,925 gal/year | Non-compliance: Facility had monthly totals but not 12-month rolling totals. |
| Gallons, with water, of each of Group 4 Coatings used on 12-month rolling time period. | Monthly | 14,125 gal/year | Non-compliance: Facility had monthly totals but not 12-month rolling totals. |
| Gallons, with water, of each of | Monthly | 110 gal/year | Non-compliance: Facility had monthly totals but not 12-month rolling totals. |

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| Group 5 Coatings used on 12-month rolling time period. | | | |
| VOC emissions in tons/month | Monthly | N/A | Compliance: The facility is keeping these records. |
| VOC emissions in tons/year for a 12-month rolling time period | Monthly | 80 tons/year | Compliance: The facility is keeping these records, which are consistently under this limit. |
| Gallons (with water) of each ethylbenzene-containing material used and reclaimed | Monthly | NA | Compliance: The facility is keeping these records. |
| Ethylbenzene content (with water) in lbs/gal of each material used | Monthly | NA | Compliance: The facility is keeping these records. |
| Ethylbenzene emissions in tons/month | Monthly | NA | Compliance: The facility is keeping these records. |
| Ethylbenzene emissions in tons/year for a 12-month rolling time period | Monthly | 4.1 tons/year | Non-compliance: facility was not calculating this correctly |

The facility was not in compliance at the time of inspection. A violation notice will be sent.

NAME 

DATE 9/30/2020 SUPERVISOR RIL 10/5/20