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

N504472854		
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: 07/09/2024
STAFF: Michael Cox	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled Unannounced Inspection		
RESOLVED COMPLAINTS:		

Air Quality Division (AQD) staff Michael Cox (MTC) completed an unannounced inspection of Summit Polymers - Vicksburg (SP) at 1:45 Pm on July 9, 2024, located at 115 South Leja Drive, Vicksburg, Michigan. The purpose of the inspection was to verify compliance with state and federal air pollution regulations as well as compliance with Permit to Install (PTI) No. 228-04I. Visible emissions and odor observations were taken prior to entering the facility. No visible emissions or odors were observed prior to entry.

Facility Description

Summit Polymers – Vicksburg (SP) is an automotive plastic parts manufacturer with product capabilities encompassing full automotive interior systems, which include complete consoles, console components, IP and console trim, door panels and kinematics. SP employs about 100 people and operates 3, 8-hour shifts per day, 5 days per week.

Regulatory Analysis

Summit Polymers – Vicksburg (SP). is a synthetic minor source for volatile organic compounds (VOCs) and hazardous air pollutants (HAPs). SP is also a minor source of carbon monoxide (CO), Nitrous Oxides (NOx), Sulfur Oxides (SOx), and Particulate Matter (PM). The facility is currently operating under General Permit to Install (PTI) 228-04I.

Compliance Evaluation

Upon entering the facility, AQD staff MTC met with Mr. Richard Gippert, Senior Manufacturing Engineer, and Mr. Phil Curths, Human Resources Manager. MTC explained the purpose of the inspection. Mr. Gippert provided a walk-through of the facility and answered site-specific questions as well as provided requested records following the inspection.

EUSystem1:

This emission unit consists of an air-dried plastic automotive interior parts spray booth and associated IR cure ovens. Booths are equipped with dry filters to control particulate overspray.

Mr. Gippert stated that EUSystem1 was taken out of production in March of 2023. This emission unit was then removed from the Vicksburg facility and relocated to their Kentucky plant. During the walk-through of the facility it was noted that EUSystem1 and associated equipment were no longer on site.

EUSystem2:

This emission unit consists of an air-dried plastic automotive interior parts spray coating line consisting of a CO_2 cleaner, one flame treat booth, one topcoat spray booth, one flash zone, one clear coat spray booth, and one IR cure oven. Booths are equipped with dry filters to control particulate overspray.

This emission unit is limited to VOC emissions of 78.0 tons per year (tpy) per 12month rolling time period, VOC, Acetone, and tert-butyl acetate (TBA) emissions of 114.0 tpy per 12-month rolling time period, VOC, Acetone, and TBA emissions of 58.0 tpy per 12-month rolling time period or any single booth portions of EUSystem2, 1.7 tpy of glycol ether db emissions and 1.7 tpy of 2-(2-butoxyethoxy) ethyl acetate per 12-month rolling time period. EUSystem2 also has a VOC material limit of 5.0 pounds per gallon (lb/gal) (minus water) as applied. Records were requested and reviewed for the time period of July 2022 through July 2024. After a review of the records SP was noted to be below the emission and material limits specified above.

During the facility walk-through, it was noted that all VOC/HAP containing material, along with waste coatings, thinners, additives, catalysts, purge solvents and cleanup solvents were stored in closed containers and in a manner to minimize fugitive emissions. Exhaust filters were noted to be in place on the spray booth portion of EUBTHLINE05. The filters in the booths are being disposed of properly. The spray booths for EUBTHLINE05 were noted to have High-Volume Low Pressure (HVLP) spray guns.

A monitoring device for the bake oven portion of EUSystem2 was observed on site. The Temperature device was noted to be 113.4°F at the time of the inspection. The facility is required to operate the bake oven at or below 194°F. Records of the bake oven temperatures were requested and reviewed for the time period of July 2022 through July 2024. The highest temperature record for the bake oven in EUSystem2 was 166.4°F. The monitoring device was also noted to have last been calibrated in December 2023.

The facility is also keeping track of the usage, and a list of VOC, HAP, TACs, and TBA content of the coatings, reducers, additives, thinners, catalyst, purge solvents, and cleanup solvents used as required. The facility requested the use of manufacturer's formulation data in lieu of Method 24 testing. An approval letter for the use of manufacturer's formulation data was dated April 22, 2008, and again on October 5, 2010, for the continued use of manufacturer's formulation data. Manufacturer's formulation data was provided to cross reference the VOC and HAP content of the facility's coatings, reducers, and clean-up solvent. Usage records and a master list of coatings, reducers, additives, thinners, catalyst, purge solvents, and cleanup solvents used were also provided by the facility. No issues were noted.

Five stacks are listed in association with Eusystem2. The stacks were noted to vent unobstructed vertically and appeared to be consistent with the dimensions listed in PTI No. 228-04I.

EUBTHLINE05:

This emission unit consists of an air-dried plastic automotive interior parts spray coating line consisting of a CO₂ cleaner, spray booth #5, and one IR cure oven. Booths are equipped with dry filters to control particulate overspray.

This emission unit is limited to VOC and Acetone emissions of 30.0 tons per year (tpy) per 12-month rolling time period, 4.4 tpy of glycol ether db emissions and 5.0 tpy of 2-(2-butoxyethoxy) ethyl acetate per 12-month rolling time period. EUBTHLINE05 also has a VOC material limit of 5.0 pounds per gallon (lb/gal) (minus water) as applied. Records were requested and reviewed for the time period of July 2022 through July 2024. After a review of the records SP was noted to be below the emission and material limits specified above.

During the facility walk-through, it was noted that all VOC/HAP containing material, along with waste coatings, thinners, additives, catalysts, purge solvents and cleanup solvents were stored in closed containers and in a manner to minimize fugitive emissions. Exhaust filters were noted to be in place on the spray booth portion of EUSystem2. The filters in the booths are being disposed of properly. The spray booths for EUSystem2 were noted to have replaced their High-Volume Low Pressure (HVLP) spray guns with Rotary Bell guns. The facility provided documentation showing that the Rotary Bell spray gun has a higher transfer efficiency vs. the HVLP guns when used in robotic spraying systems such as theirs. This activity is exempt from Rule 201 permitting or a PTI modification per Rule 285(2)(c)(iii).

A monitoring device for the bake oven portion of EUSystem2 was observed on site. The temperature device was noted to be reading 138°F at the time of the inspection. The facility is required to operate the bake oven at or below 194°F. Records of the bake oven temperatures were requested and reviewed for the time period of July 2022 through July 2024. The highest temperature record for the bake oven in EUSystem2 was 180.9°F. The monitoring device was also noted to have last been calibrated in November 2023.

The facility is also keeping track of the usage, and a list of VOC, HAP, TACs, and TBA content of the coatings, reducers, additives, thinners, catalyst, purge solvents, and cleanup solvents used as required. The facility requested the use of manufacturer's formulation data in lieu of Method 24 testing. An approval letter for the use of manufacturer's formulation data was dated April 22, 2008, and again on October 5, 2010, for the continued use of manufacturer's formulation data. Manufacturer's formulation data was provided to cross reference the VOC and HAP content of the facility's coatings, reducers, and clean-up solvent. Usage records and a master list of coatings, reducers, additives, thinners, catalyst, purge solvents, and cleanup solvents used were also provided by the facility. No issues were noted.

Two stacks are listed in association with EUBTHLINE05. The stacks were noted to vent unobstructed vertically and appeared to be consistent with the dimensions listed in PTI No. 228-04I.

FGFACILITY:

This flexible group consists of EUSystem1, EUSystem2, and EUBTHLINE05. Again, it should be noted that EUSystem1 was dismantled and removed from the facility.

FGFACILITY is limited to 9.0 tpy of individual HAP emissions, 22.5 tpy of aggregate HAP emissions, 80 tpy VOC emissions and 4.1 tpy of ethyl benzene emissions per 12 -month rolling time period. Facility wide emission records were requested and reviewed for the time period of July 2022 through July 2024. After a review of the records, SP was noted to be below all of the listed emission limits for the time period covered by this inspection.

FGFACILITY also has material limits of 32,000 gallons per year of Group 1 coatings, 3,000 gallons per year of Group 2 coatings, 3,925 gallons per year of Group 3 coatings, 14,125 gallons per year of Group 4 coatings and 110 gallons per year of Group 5 coatings based on a 12-month rolling time period. Usage records of the grouped coatings were requested and reviewed for the time period of July 2022 through July 2024. The facility was noted to be below the above listed material limits for the time period covered by this inspection.

The facility is also keeping track of the usage, and a list of VOC, HAP, and ethyl benzene content of the coatings, reducers, additives, thinners, catalyst, purge solvents, and cleanup solvents used as required. Usage records and a master list of coatings, reducers, additives, thinners, catalyst, purge solvents, and cleanup solvents used were also provided by the facility. No issues were noted.

Compliance Determination:

Based on the observations made during the inspection and review of the required records and reports, Summit Polymers - Vicksburg appears to be in compliance with PTI 228-04I, as well as all other State and Federal Air Pollution rules and regulations.

NAME Michael T. Con

DATE 7/30/2024

SUPERVISOR Monica Brothers