

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

N504428500

FACILITY: SUMMIT POLYMERS-VICKSBURG		SRN / ID: N5044
LOCATION: 115 South Leja Dr., VICKSBURG		DISTRICT: Kalamazoo
CITY: VICKSBURG		COUNTY: KALAMAZOO
CONTACT: Dawn Robertson, Human Resources Manager		ACTIVITY DATE: 01/28/2015
STAFF: Dorothy Bohn	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT:		
RESOLVED COMPLAINTS:		

This was an unannounced inspection. Prior to entering the facility I observed it from the east side and did not see any visible emissions or detect any odors. I entered at 9:30 and left at 12:00. Rick Gippert, Senior Manufacturing Engineer, and Dawn Robertson, HR manager, were my contacts. The facility does plastic injection molding of automotive parts and paints the parts. The current permit is #228-04F effective in April 2014.

Diane said they are really expecting their work to take off this year with the truck parts that they are making. They are enlarging the building to the south to accommodate more plastic injection molding machines, storage and truck bays. There is currently no plan to expand the coating. Currently they process about 4,000 tons of plastic a year.

Parts Washer: There is one in maintenance. I did not observe it as they said it uses the same material as the time of the last inspection. This cleaner did not contain VOC.

Paint Room: This is where the paint, solvents and wastes are stored. A 5 gallon solvent distiller is also located here which is used for line flush. They are not currently using the distiller because the product has not been usable. It is exempt per Rule 285(u). The lid was open on the rag drum and Rick closed it. They had 55 gallon drums of different materials and waste containers. Dawn said she checks the room once a week, usually on Fridays, to check on the rag drum lid and it has almost always been closed. She said maybe she needs to switch the checks to different days.

Sample Booth: This is a booth operating under Rule 290. They coat samples for prospective customers/parts or very small jobs in it. The booth was not in use and the filters were not installed. In 2013 the maximum monthly emissions were 4.6# with the total for the year being 22.6 #. In 2014 the maximum emissions in a month were 10.75#. So this is meeting Rule 290.

Mask Washer: This was next to the sample booth. It uses a waterbased product called Challenge that the MSDS says does not emit VOC. The only hazardous ingredient listed was dimethylamine epichlorohydrin polymer (CAS 25988-97-0) which is listed in the toxics screen as having an annual ITSL of 0.1 ug/m3. The MSDS says it is 5-15% by weight (wt) of this polymer and 40-60% by wt. water. I checked back with Dawn and Rick to confirm if this vents outside (water vapor) and it does so this chemical is likely being emitted to the atmosphere and therefore they need to meet an exemption or get a PTI. Rule 290 looks to be the only exemption that would apply and they would be allowed 20#/month. They calculated they could use up to 12 gallons a month and comply (calculated 11.8 gal). They are going to retain this calculation and then track use to demonstrate compliance with Rule 290. They do not have monthly use records from previous years but yearly use 25# in 2013 and 42.2# in 2014. As long as it was not all in one month they were ok. They know that they have to keep monthly records to comply.

Coating lines/Booths: EUSystem1 is called booth 1 and has 2 booths. EUSystem2 is called booth 9 and also has 2 booths. EUBthLine05 now has 2 booths. FGPlasticCoat now only has Booth 3. Booth 2 was removed in 2014 and did not operate at all that year. Booths 4 & 8 have also been dismantled and they did not operate in 2013 or 2014. All of the paint booths are robotic with IR ovens and HVLP applicators. Rick told me they have test caps but it doesn't appear they are used. I observed the filters on each booth and they were all good.

They are required to have a device to monitor & continuously record the temperature of the IR ovens to ensure it is below 194°F (except the sample booth, and booth 3 since 4/2014). The temperature is recorded digitally and is supposed to be downloaded every 2 weeks and it looked like it was. All the ovens (except the sample booth are equipped with an alarm that will sound if the temperature goes over 194°F. I only looked at a couple actual records (Booth 3) and the air temp was around 100°F. Since it is infrared heat and they do not want the part to exceed a temp. of 180oF so the air temp. will never exceed the 194oF.

Records of paint use for all the booths are determined by the amount of parts produced on the line. They know how much coating is needed to paint each part and the flow of paint through the robot. They reconcile the use each quarter when an inventory is performed. They had all required records. They are no longer precleaning the parts with IPA but are using a hand

blower on them.

RECORDS:

EUSYSTEM1: Monthly records show compliance with the recordkeeping & tpy limits. They have not operated 12 months yet on the acetone/t-butyl acetate limit but the largest month so far was November with 2168# and since May they have emitted a total of 5278#. The VOC limit was raised from 25 tpy to 30 tpy in 4/2014. In 2013 the max monthly emissions was 2590# and in 2014 it occurred in January with 2387#. In December of 2013 and 2014, the VOC 12 month rolling totals (MRT) were 11.9 and 8.2 tpy, respectively. These values include the purge and clean-up solvents. The daily average volume-weighted VOC content (VVC) in #/gal. so far in January they are all less than 3. In December the maximum was 4.7 and in October 2014 the maximum was 3.6.

EUSYSTEM2: They said that they plan to start using the t-butyl acetate and acetone in this line like in EUSystem1 but it was not included in the PTI so they will need to revise it before they do. The max monthly VOC emissions in 2013 & 2014 were 160# (in Oct.) and 2933# (in Dec.), respectively. The 12 MRT at the end of each of those years were 5.8 tons and 9.8 tons, respectively.

EUBTHLINE05: The use records and calculations show compliance with the limits. Calculations show a max VOC 12 MRT of 1377# in 2014 and 714 # in 2013. This is way below their 30 tpy limit. Records showed compliance with the 5.0#VOC/gallon limit. The max was 11/2014 at 2.86. At the time of the inspection they were using waterbased black coating with a silver trim. Rick said that the modification to Booth#5 and its stacks was completed around July but they had not submitted the notification of this (VII.1). Rick sent an email on 1/28/15 providing this notification (see the file).

FGPlasticCoat: The only booth left in this group is #3. Waterbased paint is applied in FGPlasticCoat. In 2013 the max. VOC 12 MRT was 3.72 # and in 2014 it was 144#.

FGFacility: This table contains their opt-out limits for HAP and VOC. They had records of individual & aggregate HAP emissions. For 12/2013 the records showed combined HAP at 2396# on a 12MRT. This is so low I didn't look at the individual HAP. For 12/2014 Ethylbenzene & styrene are the highest individual HAPs at 1850# and 1797# (12 MRT), respectively and the combined HAP was 4314# 12 MRT. (They just started including the styrene from the plastic injection molding in 2014. This total also includes 108-65-6, a glycol ether that is not a HAP. 12 MRT VOC emissions at the end of 2013 was 40,086# and for 2014 was 41,919#.

Overall the company seems to be in compliance.

NAME Dorothy Bohn DATE 2/9/15 SUPERVISOR MD 2/9/2015