

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

N626138273

FACILITY: SUMMIT POLYMERS, INC. Plant One		SRN / ID: N6261
LOCATION: 4750 EXECUTIVE DR, PORTAGE		DISTRICT: Kalamazoo
CITY: PORTAGE		COUNTY: KALAMAZOO
CONTACT: Tony Martin , General Manager		ACTIVITY DATE: 12/15/2016
STAFF: Monica Brothers	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Unannounced scheduled inspection		
RESOLVED COMPLAINTS:		

This was an unannounced, scheduled inspection. Summit Polymers-Plant One is a facility that makes plastic parts for the automotive industry by using plastic injection molding machines. The parts are also coated in four robotic coating booths at the facility. They commenced operations in 1995 and are currently operating under PTI #176-97B.

Staff (Monica Brothers) arrived at the facility at about 10:20am and introduced myself to the receptionist. During the last inspection in 2013, staff met with Mr. Mark Archambault, the HR Manager, so I asked the receptionist if he was available to conduct an air quality inspection with me. She said that Mark was out of the office that day, but the General Manager, Tony Martin, would be available to meet with me and give me a tour of the facility. A few minutes later, Tony met me in the lobby and showed me to his office where we discussed a few preliminary questions. I gave him my business card and briefly explained the inspection process and the types of records I would want to see after the facility tour.

Tony said that they now have about 200 employees who work three shifts per day, five days a week. I asked Tony if they had any boilers, emergency generators, fire pumps, parts washers, or burn off ovens, and he said that they only have 3 very small portable generators and one parts washer. They also have a small (20 gallons or less) still for recycling acetone. This would be considered exempt from permitting under Rule 285(u). Tony said that they now have 26 plastic injection molding machines, which is four more than they had during the last inspection in 2013. They still have the same four paint booths, numbers 1, 3, 4, and 5. Booths 4 and 5 are connected to the same cure oven, so therefore there are only 3 cure ovens at the facility.

#### Facility Tour:

I observed the 26 injection molding machines, which make plastic parts for the automotive industry. Tony said that they make many parts for the Ford F150. They use a mold release for this process, and the SDS for this was obtained. The acetone still was not operating at the time of inspection, and I did not see any opened containers of coating or solvent just sitting around while not in use.

All of the paint booths and cure ovens were operating. They use IPA, only when needed, before the parts go into the cure ovens. The MSDS for this was obtained. Tony said that Booths 4 and 5 use the solvent-based coatings, while booths 1 and 3 used the water-based coatings. However, all of the booths have the capability to use both types of coatings interchangeably. All of the paint booths are now equipped with robotic applicators. The filters in each paint booth looked like they were installed properly, and Tony said that the filters get changed multiple times daily, with each shift change.

The cure ovens are all infrared air dry units that have a temperature limit of 194°F. Tony said that there is an alarm that will shut down the ovens if the temperature reaches this limit. The cure oven for Booth 1 was reading 159°F, the cure oven for Booths 4 and 5 was reading 164°F, and the cure oven for Booth 3 was reading 136°F at the time of inspection. I observed the parts washer, which had the lid closed and the DEQ rules posted. After the facility tour, Tony gave me some of the required records that he had on-hand. I told him to email me electronic copies of the other records so that I could review them more carefully back at the office.

As I was leaving the facility, no visible emissions were seen coming from any of the stacks. I did notice two large tanks in the back of the facility that were not observed on the facility tour. I emailed Tony and asked him what they were for and what their capacities were. He said that they were for holding resin pellets for their plastic injection molding process, but that they do not use them at all anymore and that they have been empty for 10+ years. Each of the tanks held about 40,000lbs of resin pellets when they were in use.

The following table shows the recordkeeping requirements for PTI #176-97B, along with my comments on the associated records that the company submitted to me. Summit Polymers seemed to be in compliance with their permit at the time of the inspection.

**FGBOOTHs:**

<b>MONTHLY</b>	<b>Limit</b>	<b>Actual</b>
Gallons (with water) of each coating and clean-up solvent used and reclaimed (where applicable).	N/A	Facility is keeping these records
VOC content (minus water and with water), acetone (CAS No. 67-64-1) content, and tert-butyl acetate (CAS No. 540-88-5) content of each coating as applied and each clean-up solvent as used.	N/A	Facility is keeping these records
VOC mass emission calculations determining the monthly emission rates in tons per calendar month for each separately, and combined.	N/A	Facility is keeping these records
VOC, acetone, and tert-butyl acetate combined mass emission calculations determining the monthly emission rates in tons per calendar month.	N/A	Facility is keeping these records
VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.	72.0 TPY	Facility is keeping these records, and the highest value was 25.46 TPY in October for 2016.
VOC, acetone, and tert-butyl acetate combined mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.	132.0 TPY	Facility is keeping these records, and the highest value was 43.33 TPY in October for 2016.
Gallons (with water) of each formaldehyde (CAS No. 50-00-0) containing material used.	N/A	Facility is keeping these records
Where applicable, gallons (with water) of each formaldehyde (CAS No. 50-00-0) containing material reclaimed.	N/A	Facility is keeping these records
The formaldehyde (CAS No. 50-00-0) content (with water) in pounds per gallon of each material used.	N/A	Facility is keeping these records
Formaldehyde (CAS No. 50-00-0) mass	N/A	Facility is keeping these

emission calculations determining the monthly emission rate in pounds per calendar month.		records
Formaldehyde (CAS No. 50-00-0) mass emission calculations determining the annual emission rate in pounds per 12-month rolling time period as determined at the end of each calendar month.	152.6 lbs/year	Facility is keeping these records and is way under this limit. Emissions were 0.000932 lbs/year for November 2016.
The glycol ether DB (CAS No. 112-34-5) content (with water) in pounds per gallon of each material used.	N/A	Facility is keeping these records
Glycol ether DB (CAS No. 112-34-5) mass emission calculations determining the daily emission rate in pounds per calendar day.	20.9 lbs/day	Facility is keeping these records and is usually at about 5 lbs/day.
Gallons (with water) of each triethylamine (CAS No. 121-44-8) containing material used.	N/A	Facility is keeping these records
Where applicable, gallons (with water) of each triethylamine (CAS No. 121-44-8) containing material reclaimed.	N/A	Facility is keeping these records
The triethylamine (CAS No. 121-44-8) content (with water) in pounds per gallon of each material used.	N/A	Facility is keeping these records
Triethylamine (CAS No. 121-44-8) mass emission calculations determining the daily emission rate in pounds per calendar day.	7.3 lbs/day	Facility is keeping these records and their highest value was around 1.5 lbs/day for December 2016.

**BOOTHS 1,3,4,5 Separately:**

MONTHLY	Limit	Actual
Gallons (with water) of each coating and clean-up solvent used and reclaimed (where applicable).	N/A	Facility is keeping these records
VOC content (minus water and with water), acetone (CAS No. 67-64-1) content, and tert-butyl acetate (CAS No. 540-88-5) content of each coating as applied and each clean-up solvent as used.	N/A	Facility is keeping these records

VOC, acetone, and tert-butyl acetate mass emission calculations determining the monthly emission rates in tons per calendar month.	N/A	Facility is keeping these records
VOC, acetone, and tert-butyl acetate mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.	56.0 TPY for Booth 1, and 60.0 TPY for all other booths, separately	Facility is keeping these records and is under these limits.
Daily Volume Weighted Average of VOC content of each coating, as applied	5.0 lbs/gallon (minus water) as applied	Facility is keeping these records and is under their limit, but there are days when they get extremely close to the 5.0 lbs/gallon limit.
The permittee shall keep, in a satisfactory manner, continuous records of the cure oven temperatures for EUBOOTH_1, EUBOOTH_3, EUBOOTH_4, and EUBOOTH_5, each separately, as required by SC VI.2. Continuous temperature data recording shall consist of instantaneous measurements made at equally spaced intervals, not to exceed 15 minutes per interval.	194F or less	Facility is keeping these records and is under this limit.

**FGFACILITY:**

MONTHLY	Limit	Actual
Gallons or pounds of each HAP containing material used.	N/A	Facility is keeping these records
Where applicable, gallons or pounds of each HAP containing material reclaimed.	N/A	Facility is keeping these records
HAP content, in pounds per gallon or pounds per pound, of each HAP containing material used.	N/A	Facility is keeping these records
Individual and aggregate HAP emission calculations determining the monthly emission rate of each in tons per	N/A	Facility is keeping these records

calendar month.		
Individual and aggregate HAP emission calculations determining the annual emission rate of each in tons per 12-month rolling time period as determined at the end of each calendar month.	9.0 TPY (Individual), and 22.5 TPY (Aggregate)	Facility is keeping these records and is under these limits.

NAME *Monir B...*

DATE 1/12/17

SUPERVISOR MA 1/12/2017

