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

A288939559		
FACILITY: BMC Global, LLC dba Blissfield Manufacturing		SRN / ID: A2889
LOCATION: 626 DEPOT ST, BLISSFIELD		DISTRICT: Jackson
CITY: BLISSFIELD		COUNTY: LENAWEE
CONTACT: Rebecca Parott , Quality Auditor		ACTIVITY DATE: 04/27/2017
STAFF: Mike Kovalchick	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled Inspection of an Opt-Out Source.		
RESOLVED COMPLAINTS:		

SM Opt Out Source for HAPs. Full Compliance Evaluation (FCE) 2017

Facility Contacts

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Purpose

On April 27, 2017, I conducted an unannounced compliance inspection of Blissfield Manufacturing Company (Company) located in Blissfield, Michigan in Lenawee County. The purpose of the inspection was to determine the facility's compliance status with the applicable federal and state air pollution regulations, particularly Michigan Act 451, Part 55, Air Pollution Control Act and administrative rules, and Permit to Install (PTI) # 325-96C which was issued on August 30, 2007.

Facility Location

The facility is located in a mixed commercial and residential area of Blissfield. Some residential homes are very close to the facility on the North and East side of the plant and there has been historical odor complaints. See aerial photo dated October, 2016.

Facility Background

The Company manufactures mostly oil coolers and refrigerator condensers.

The facility last had an inspection on March 21, 2013 and was found to be in compliance with their one PTI.

Regulatory Applicability

PTI 325-96C covers all the various coating operations at the facility.

Brazen furnace that is considered exempt from permitting as it predates most or all current air quality regulations and would be exempt under Rule 282 (2) (i), Rule 285 (2) (i).

Miscellaneous other small processes at the facility generate minimal emissions. One example is welding stations that are controlled by "Smog hogs" that vent into the in-plant environment.

The facility is not subject to 40 CFR Part 63, Subpart HHHHHH - National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area

Sources as the active emission units at the facility are not spray applying coatings and don't contain the metals of concern outlined in the standard.

The facility is not subject to 40 CFR Part 63 Subpart MMMM as it is not a Major source of HAPs.

Arrival & Facility Contact

Visible emissions or odors were not observed upon my approach to the Company's facility. I arrived at 9:30 am, proceeded to the facility office to request access for an inspection, provided my identification and spoke with Brand Farver (BF)-Vice President of the facility. I also met with Rebecca Parott (RP)-Quality Auditor at the plant. I informed them of my intent to conduct a facility inspection and to review the various records as necessary.

Both BF and RP extended their full cooperation and fully addressed my questions.

Pre-Inspection Meeting

BF outlined that the facility is operating from 5 am to 3:30 pm, 4 days a week and currently has 20 employees. Business is steady to slowly falling. BF indicated that most of their business is the manufacture of oil coolers and refrigerator condensers. There has been no new processes added to the facility in a long time.

Next we went through the emission unit table of their PTI to determine which processes are currently active.

EU-COLDCLEANERS; Seven (7) cold cleaner tanks. These tanks are no longer being used but remain at the facility likely with mineral spirits still in them with the lids closed.

EU-SMBOOTH; One spray coating booth in the sheet metal area. This spray booth is no longer used.

EU-CONVEYORDIP2; One conveyorized dip #2 coating line and bake oven for miscellaneous metal parts. This process is active.

EU-BATCHDIP3; Batch type dip tank #3 and bake over for miscellaneous metal parts. This process is active.

EU-HSDIP; One conveyorized paint dip with natural-gas fired oven for a high strength adhesive coating system on miscellaneous metal parts. This process has been removed.

EU-CONVENTBOOTH; One conventional spray booth for miscellaneous metal parts in the conventional work area. This spray booth is no longer used.

EU-CONV/HERMBOOTH; One conventional/hermetic spray booth for miscellaneous metal parts in the conventional work area. This spray booth has been removed.

EU-TANKBOOTH; One spray coating booth used in the production of metal tanks/canisters. This spray booth is no longer used.

RP went on to explain how she gathers paint information at the facility. She personally goes to each of the 2 coating lines and records when she occasionally adds paint to each of the reservoirs. She then takes the handwritten sheets and puts them into spreadsheets on the computer.

Onsite Inspection

Both BF and RP gave me a tour of the facility.

The facility is very large but showed very little signs of activity with many processes that were not active or otherwise abandon and employees few and far between.

No smoke was seen inside the buildings and only light paint odors noted in the vicinity of the 2 active coating lines.

We first went over to inspect dip tank # 3 and the associated electric powered oven. The line had a few

metal oil cooler parts hanging on the conveyor but wasn't turned on during the inspection. Parts come into a booth like structure around the dip tank, lowered then raised out of the paint reservoir. At that point, a hand held air gun is pointed at the part to remove the excess paint. The air stream essentially blasts off the excess paint which hits the side of the wall then drains back into the paint reservoir. Then the conveyor brings the part to a nearby oven that has 2 exhaust stacks. There is no thermocouple on the oven but the operator estimated the temperature to be 250 to 300 deg. F. It takes about 15 minutes for a part to go through the oven. See attached pictures.

Next we went to the larger dip tank #2 and the associated oven for that. The line was inactive for the day. It operates in a similar manner to the tank #3 line although the electric powered oven looked to be more modern with a single exhaust stack.

Next we walked by a brazing oven. Small amounts of a copper paste that contains up to 20% nickel along with a copper power than contains up to 40% zinc are applied to metal parts then heated to 2000 deg F. in the oven. There are open flames on both sides of the oven with an exhaust stack with no blower on each end. See attached photos. In the middle of the oven there is a water cooling system that exhausts to a water cooling tower on the roof. The process was on but no parts were going through it during the inspection and no smoke was observed. The process was very old and the operator was unaware of the BTH ratings on the oven.

Next we walked over to look at small utility room containing the gas fired boiler for the facility. It appeared to be very small so didn't bother to check the BTU rating.

We concluded the inspection by going up on the roof. The roof is accessed by a permanent ladder attached to the outside wall. The roof area was very extensive with numerous stacks and vents of all shapes and sizes. See attached photos. Many of the stacks were no longer active. No smoke or particulate fall out was observed. Heat waves were observed coming out of one of the stacks associated with the brazing furnace. The water cooler tower was inspected. Water could be seen pouring down the side of it. Small amount of water was leaking out of the tower and on to the roof. Essentially ,air is drawn in one side of the apparatus and exits the other side. There is some minor concern for mold/fungus growth and associated odor due to presence of the hot water and the filter like interior of the water cooler but little odor was noted.

Recordkeeping/Permit Requirements Review

Coatings records were available prior to the inspection as the Company emails them to the AQD on a regular basis. See Attachment (1). The records indicated that only tank #2 and tank #3 coating lines are active. HAP and VOC emissions for the year ending in March, 2017 was only around 1 ton well below the permitted levels of 30 tons per year for VOC and 22.5 tons per year for HAPS. More detailed records were not requested during the inspection due to the very low amount of coating that is being done there versus the large amount of coating that is allowed by their PTI.

Attachment (2) is the MAERS report for 2016. The MAERS report was consistent with the coating records reports that they submit. It appears that the Company is using a capture and control efficiency for their VOC emission calculations that appears to have no basis. RP indicated that in her MAERS submittal, she simply used the same methodology that had been used by the previous person that made a MAERS submittal for the Company. A correction will be made to their MAERS report that removes these control factors which will result in an adjustment upward of a few hundred pounds of VOC's.

Attachment (3) contains to MSDS's for the paste and powder used in the brazing oven. Note the nickel content.

Attachment (4) show purchase records for the paste and powder in 2016. 3500 hundred pounds of the powder and about 945 pounds of paste were purchased. This amounts to a maximum nickel usage of about 189 pounds. As the vast majority of that is expected to remain on the metal part, it appears it represents little hazard despite the annual IRSL being only 0.0042 micro grams/cubic meter.

All the conditions of PTI 325-96C were reviewed and the Company was found to be in compliance with all of them.

Post-Inspection Meeting

I held a brief post-inspection meeting with BF and RP. I indicated that didn't have any compliance concerns. I thanked them for their time and cooperation, and I departed the facility at approximately 10:50 am.

Compliance Summary

The Company is in compliance with their PTI 325-96C and no other concerns were noted that required any action on the part of the Company.



Image 1(Aerial photo) : Aerial photo of the facility.





Image 2(Oven #3) : Exit of the oven for dip tank #3

Image 3(Dip tank #3) : Dip tank #3. (Rotate right 90 degrees)



Image 4(Entr. Brazing Oven) : Entrance to the Brazing Oven



Image 5(Exit Brazing Oven) : Exit Brazing Oven



Image 6(Oven Stacks) : One of the oven stacks



Image 7(Roof) : Roof



Image 8(Roof) : Roof



Image 9(Exit Water Cooler) : Exit exhaust from water cooler tower used for the brazing furnace



Image 10(Entrance Water Coole) : Entrance exhaust to water cooler tower for brazing oven located on the roof above the brazing process

NAME M. Kovalchich DATE 4/25/2017 SUPERVISOR_