

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

N776437290

FACILITY: M. ARGUESO & CO., INC. (DBA PARAMELT)		SRN / ID: N7764
LOCATION: 2817 MCCRACKEN ST, MUSKEGON		DISTRICT: Grand Rapids
CITY: MUSKEGON		COUNTY: MUSKEGON
CONTACT: Peter Silverstein , Plant Manager		ACTIVITY DATE: 10/06/2016
STAFF: Chris Robinson	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MINOR
SUBJECT: The purpose of this inspection was to conduct an odor survey and to determine the facilities compliance status with all air quality rules and regulations.		
RESOLVED COMPLAINTS: C-16-02196		

AQD staff Chris Robinson (CR) and Kaitlyn DeVries (KD) were onsite to conduct an odor investigation and a scheduled unannounced inspection on October 6, 2016, to determine the facility's compliance status with all air quality rules and regulations.

CR and KD arrived near the facility at approximately 10:20 am and performed several odor surveys near the facility along Leon Street, Plainfield Avenue and McCracken Street. The wind direction and speed was west zero-calm. No odors or visible emissions were detected. CR and KD arrived at the facility at approximately 10:30 am and met with Mr. Peter Silverstein, Plant Manager, and Mr. Daryl Andresen. AQD staff presented Mr. Silverstein and Mr. Andresen with business cards and informed them that AQD was there to perform an inspection of the M. Argueso & Co. Inc. (DBA Paramelt) facility to determine compliance status with their permit.

According to Mr. Silverstein and Mr. Andresen there has not been any major changes since the last inspection on June 26, 2012, and the facility is operating three shifts, five to seven days per week.

Facility Description

MDEQ-AQD issued M. Argueso & Co., Inc. PTI No. 57-07 on August 13, 2007 for the construction of a specialty wax formulation facility located at 2817 McCracken Street in Muskegon, Michigan. The facility has two (2) permitted emission units, EU-1 and EU-2. Emission unit EU-1 consists of a 7,500 CFM wet dust collector and seven (7) tanks. Emission unit EU-2 consists of an aluminum mesh pre-filter, a 5,000 cfm wet collector, a 3,000 lb. carbon adsorption bed for VOC removal and five (5) tanks.

This facility produces advanced technology casting wax blends for the investment casting industry. The process involves the melting, addition and blending of some or all of waxes, resins, filters, additives, colors and scents in steam-heated tanks. The formulated waxes are sent to holding tanks prior to being finished or formed into pellets, slabs or flakes.

PTI No. 57-07 Compliance Evaluation

Emissions Limits

Emission units EU-1 and EU-2 have a combined rolling 12 month VOC limit of 5.9 tpy. The facility provided "Air Emissions" tracking spreadsheets, which are included, for the last 12 months. As of August 2016 the rolling annual emissions were calculated out to be 3.9 tpy. This total also includes uncontrolled fugitive emissions (EU-0) and is within their permitted limits.

Process/Operational Limits

As noted above, no visible emissions (VE) were observed. Therefore, the facility met there VE requirements of 20%.

M. Argueso & Co., Inc. submitted a revised Periodic Monitoring Program (EWI-31) in June 2010, which states that the coconut shell carbon in the tank for the DC-2 control system will be replaced when PID readings from the carbon bed exhaust read >10ppm for more than seven (7) successive days. Site personnel record daily PID readings for days of operation. Based on this data, which is attached, the facility is following the EWI-31 guidelines and changed the carbon on July 5, 2016 due to elevated PID data.

The facility installed equipment in 2012 and 2013 for a process called Hotbox Reclaim. This process consists of two large modified shipping containers with electric heaters, which use steam to melt reclaimed wax they originally manufactured and sold. Contaminants are then removed through a centrifuge and the processed wax is sent to holding tanks for reuse. This process was initially vented internally but is now vented into the facility's

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existing control system (DC-1).

The facility originally installed and operated this equipment under Rule 290(a)(ii)(A), which allows for 1,000lbs./month of an uncontrolled non carcinogenic air contaminant with an ITSL $\geq 2.0 \text{ ug/m}^3$ and Rule 290(a)(ii)(B), which allows for 20lbs./month of an uncontrolled non carcinogenic air contaminant with an ITSL > 0.04 & $< 2.0 \text{ ug/m}^3$. A detailed recordkeeping review revealed that the facility was not keeping individual emission unit records consistent with the requirements of Rule 290. In addition, the facility exceeded the maximum combined allowable emissions specified in 290(a)(ii)(B), of 20lbs./month per unit. Based on the attached records, the facility emissions for both hotboxes combined was 43 lbs. in March 2016 and 67lbs. in August 2016.

Equipment

The facility operates two (2) wet scrubbers (DC-1 & DC-2). DC-2 also has a 3,000lb carbon adsorption bed. The facility has installed and maintains a pressure gauge on the inlet of the DC-2 carbon bed. The gauge appears to be operating properly. At the time of this inspection the pressure reading was bouncing between approximately 4.5-5.5 psi, which, according to personnel and attached site records, is normal.

Daily inspection logs and monthly maintenance/inspection logs are completed by site personnel and are attached to this report. The records indicate that the facility routinely inspects and cleans both control systems. Also, based on discussions with Mr. Silverstein and Mr. Andresen, Emission units EU-1 and EU-2 are not operated unless their respective scrubbers are running.

Testing

The facility maintains an air emissions tracking spreadsheet, as required in Appendix B of their permit, which is attached, for tracking material usage and VOC content in EU-1 & EU-2. Per discussions with the facility's consultant and records review, the facility uses Safety Data Sheets to determine VOC content. Based on a review of the August 2016 spreadsheet, "Automate Green" had the highest VOC content of 50.6%.

The facility conducted a PID VOC removal efficiency test on the DC-2 carbon system as required in 2008. PID monitoring for VOC removal efficiency is an ongoing test required by the facility's EWI-31 and has been discussed above.

Monitoring

As mentioned above, the facility developed and maintains a Periodic Monitoring Program (EWI-31) to ensure that they meet the 90% VOC removal efficiency specified in special condition 1.7 of their permit. The facility submitted a revised EWI-31 to AQD in June 2010 and maintains a daily PID tracking spreadsheet to determine when to change the carbon in the DC-2 scrubber.

Recordkeeping/Reporting/Notification

The facility provided, in a timely manner, current and complete records, which are discussed throughout this report. The facility is in compliance with special conditions 1.12 through 1.17 of their permit.

Stack/Vent Restrictions

AQD staff did not specifically measure the height or diameters of stacks SV-1 and SV-2. However, visual inspections appear to reflect the measurements specified in their permit.

PTI No. 57-07 Appendix A: EHS Work Instructions (EWI-31)

The facility's Periodic Monitoring Plan is the EWI-31. The facility has installed a manometer on both scrubbers. During this site inspection the manometer reading for both scrubbers was approximately 10" w.c. Lids to all kettles are kept closed except for filling and to prevent condensation from building up on the lids of the reclaim kettles. Based on the observations made during this inspection, discussions with Mr. Andresen and Mr. Silverstein and a records review, the facility has met the EWI-31 requirements. Daily/Monthly and Six Month inspection/maintenance logs are complete and attached.

Miscellaneous

Boilers

The facility has two boilers on-site (Boiler A & B). Boiler B has been disconnected and removed from the facility. Boiler A is active and is a model 6-x-10W natural gas only, 8,176 MMBTU, installed in 1994, with a low NOx burner installed in 2015. Since this boiler is natural gas only and rated for 8,176 MMBTU it is not subject to NSPS, is exempt under Rule 282(b)(i) and the Boiler MACT does not apply.

Conclusion

Based on observations made during the October 6, 2016 inspection and subsequent records review, M. Argueso & Co. Inc. is not in compliance with all air quality rules and regulations.

A Rule 201 violation notice will be issued for failure to maintain records and emission limits required under Rule 290.

NAME

Chris Robinson

DATE

11/2/2016

SUPERVISOR

[Signature]