

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

N510163244

FACILITY: AGCO, INC		SRN / ID: N5101
LOCATION: 7389 COSTABELLA RD, REMUS		DISTRICT: Grand Rapids
CITY: REMUS		COUNTY: MECOSTA
CONTACT: Larry Pulliam , President		ACTIVITY DATE: 06/02/2022
STAFF: Scott Evans	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: On site air quality inspection to assess compliance with ROP and all other applicable air quality rules and regulations.		
RESOLVED COMPLAINTS:		

Introduction

On June 2, 2022 State of Michigan Department of Environment, Great Lakes, and Energy Air Quality Division (AQD) staff member Scott Evans (SE) conducted an on-site, unannounced inspection of the AGCO Inc. facility located at 7389 Costabella Rd. in Remus, Michigan, to assess compliance with air quality rules and regulations. AGCO is a manufacturer of marble products such as kitchen and bathroom fixtures. Resins and gelcoats are used with limestone to create countertops in varying styles and colors. The facility also manufactures fiberglass forms for on-site use. The facility is classified as a major source due to its potential to emit of Styrene, a hazardous air pollutant (HAP), which exceeds 10 tons per year (tpy). The facility has one active Renewable Operating Permit (ROP): MI-ROP-N5101-2018a.

On the day of the inspection, SE observed no visible emissions originating from the facility during a viewing of the perimeter of the facility. There were some odors of styrene outside of the building on property grounds, but the odors were not noticeable beyond the property line. Upon entering the facility SE was greeted by Staff Member Scott Tait (ST). After a brief discussion of the purpose of the inspection, walkthrough of the facility was conducted during which all production, maintenance, and storage areas were visited. Records for the time period of June 2021 through May 2022 were reviewed in detail remotely at a later date. A copy of these records is included with this report.

MI-ROP-N5101-2018a

This ROP was first approved in August of 2018 and revised in May of 2020. It covers three emission units (EUs) (EUCASTING, EUGELCOAT, and EUCLEANUP) and one flexible group (FG) (FGPLASTICCOMP).

Source Wide Conditions

The facility has one emission limit that is applied source wide: 55.1 tpy of Styrene on a 12-month rolling time period as determined at the end of each calendar month. As discussed below, records maintained by the facility demonstrate compliance with this requirement.

The facility is required to keep the following records for all processes source wide:

- The facility shall keep a list including Material Safety Data Sheets (MSDS) information of all materials used in production.
- Monthly records of the following:
 - Amount of each styrene containing material used.
 - Amount of styrene containing material reclaimed (if applicable).
 - Styrene content of each material used.

- Monthly Styrene emissions.
- 12-month rolling annual styrene emissions.

During the inspection, lists and MSDSs of all materials used were briefly reviewed and confirmed to be maintained as required. After the inspection, records were provided remotely that confirmed monthly use of styrene-containing materials is recorded. The facility does not reclaim any styrene containing materials. Information regarding styrene content of materials used is included in the reviewed MSDSs. The below emission data was provided:

- Highest monthly styrene emissions were 1317.971 lbs. in July of 2021.
- Highest annual styrene emissions were 8.2 tons from January 2021 through December 2022.

As demonstrated by the records, the facility was in compliance with the source-wide styrene emission limit.

The facility is required to report ROP annual and semiannual deviation reports to the AQD. Most recent reports were received on March 11, 2022. At that time the semiannual report contained one deviation and the annual report contained two, one of which was the same as the deviation reported in the semiannual report. One deviation was a failure to keep a monthly inspection report. That deviation was corrected. The second deviation was the failure of the on-site baghouse to properly collect and contain styrene dust. This issue was identified during the last inspection conducted on August 12, 2021. The baghouse has since been replaced and the issue has been resolved. This is discussed in more detail later in the report. At this time, the facility appears to be compliant with reporting requirements contained in the ROP.

The facility is required to report changes in land use of the property. No changes were reported and, at this time, this appears to be accurate.

EUCLEANUP

This emission unit covers miscellaneous cleanup equipment and activities. It has one material limit: no more than 440 gallons of dibasic ester containing solvents may be used per 12-month rolling time period. Records demonstrating compliance are discussed below.

The following process restrictions are applied to the emission unit:

- Enclosed cleaning stations must be installed for cleaning fiberglass.
- Cleaning stations must have covers that completely close any openings while in use.
- Methylene Chloride may only be used in closed containers.
- Spray operations may only be used in enclosed cleaning stations and not exposed to ambient air.
- Waste solvent shall be collected into closed containers.

During the inspection, all above requirements appeared to be met. Cleaning stations were enclosed and all cleaning operations including spray or methylene chloride were conducted in these properly enclosed areas. Waste containers could be seen with proper lidding when not in active use.

The facility is expected to keep the following records for EUCLEANUP:

- Stations should be visually inspected monthly to ensure proper covering integrity.
- The following monthly records shall be kept:
 - Identity of each cleanup material used.
 - Amount of each cleanup material used.
 - Cleanup solvent reclaimed (if any).
 - Visual station inspection reports.
 - Monthly dibasic ester usage.
 - 12-month rolling annual dibasic ester usage.

During the inspection it was discussed that stations are inspected regularly during each use for any needed repairs. Upon review of cleaning solvent MSDSs, it was identified that no cleaners currently used at the facility contain dibasic ester. As such, all usage levels on records of dibasic ester-containing material are 0 lbs. used, which is compliant with the applicable limit.

FGPLASTICCOMP

This flexible group covers all three emission units: EUCASTING, EUGELCOAT, and EUCLEANUP. Dry filters are used for particulate control in gelcoat spray booths and a baghouse is used for particulate control on EUCASTING.

The following emission limits apply to the flexible group per a 12-month rolling time period as determined at the end of each calendar month:

- 65.1 tpy of Volatile Organic Compounds (VOCs)
- 522 lbs/ton of Organic HAP from Open Molding – Clear Gelcoat.
- 377 lbs/ton of Organic HAP from Open Molding – Pigmented Gelcoat.
- 605 lbs/ton of Organic HAP from Open Molding – High Performance Gelcoat.
- 267 lbs/ton of Organic HAP from Open Molding – White/Off White Gelcoat.
- 440 lbs/ton of Organic HAP from Open Molding – Tooling Gelcoat.
- 254 lbs/ton of Organic HAP from Mechanical Application – Tooling Resin.
- 157 lbs/ton of Organic HAP from Manual Application – Tooling Resin.
- Hourly limit of 0.10 lb of particulate per 1000 lbs of exhaust gas.

The following material limits apply to the flexible group:

- 44% VOC by weight of clear gelcoats.
- 37% VOC by weight of color gelcoats.
- 47% VOC by weight of Kitchen gelcoats.
- 35% VOC by weight of white/off-white gelcoats.
- 37% VOC by weight of resins.
- The facility shall not use any cleaning solvents in EUGELCOAT that contain HAP, except that styrene may be used as a cleaner in closed systems, and organic HAP containing cleaners may be used to clean cured resin from application equipment.

Records demonstrating compliance with the above emission and material limits are discussed below.

This flexible group has four operational restrictions applied to it within the ROP:

- All waste from the flexible group shall be collected and stored in closed containers.
- HAP-containing material containers must be closed except when in use.
- Mixers shall be closed when in use including vents and openings for adding material.
- EUCASTING equipment shall not operate unless control equipment is installed and functional.

During the inspection it could be observed that all waste and HAP-containing material containers were lidded except for those that were in use. In-use mixers were properly closed. During the inspection it could be observed that the baghouse was installed and functioning properly to control particulate from EUCASTING due to the absence of particulate matter from surrounding surfaces near collection bins and exhaust vents.

The facility is required to ensure that all EUGELCOAT spray booths are equipped and operated with appropriate exhaust filters. This could be observed during the inspection.

The flexible group has three associated testing requirements in the ROP:

- HAP content of any materials shall be determined by MSDSs.
- VOC content, water content, and density of any materials shall be determined by manufacturers formula data.
- The AQD may require testing results to confirm particulate emission rates from the EUCASTING bag house.

During the records review of MSDSs and manufacturers formulation data it could be determined that HAP and VOC content data was available for all used materials. At the time of the inspection, the baghouse appeared to be operating properly with no visible particulate emissions. No further testing is necessary at this time.

The facility is required to keep the following records regarding the flexible group:

- Separate records for VOC and HAP content of each material must be maintained.
- MSDSs and manufacturers formulation data of each material shall be kept on site for each material used.
- The following monthly VOC records must be maintained:
 - Amount of each material used.
 - VOC content of each material used.
 - Emission factors from an approved source (as defined in the ROP) for each material used.
 - VOC emissions for each month.
 - VOC emissions for each 12-month rolling time period.
- The following monthly HAP records must be maintained.
 - Demonstration that HAP emission calculations meet the methodology and limits described in 40 CFR Part 63 Subpart WWWW.
 - Demonstration that HAP emission limits are met during combined processes.
 - Demonstration of compliance with weighted average emission limits.
- Demonstration of continuous compliance with 40 CFR Part 63 Subpart WWWW (can be accomplished with adequate records documentation)
- The following 40 CFR Part 63 Subpart WWWW relevant records
 - Copy of each notification and report that is submitted.
 - All data used to determine HAP emissions.

- Certified statement determining compliance with work standard practices.
- Record of maintenance operations on EUCASTING.

As discussed above, the facility had copies of MSDS sheets and formulation data available for review, which included information regarding HAP and VOC content of all used materials. Additionally, during the inspection, it was confirmed that all VOC and HAP records were available for immediate review as well as maintenance records for EUCASTING. For the sake of timeliness during inspection, VOC and HAP records for the time period of June 2021 through May 2022 were requested electronically for later review by SE. Records regarding all 40 CFR Part 63 Subpart WWWW requirements were also requested for the same time period. The following analyses were determined from these records:

- VOC Records
 - Charts demonstrating material use, VOC content, and VOC emission factors were provided in adequate format. These records appeared to indicate compliance with the above material limits.
 - The highest monthly VOC emission rate was 2,610 lbs. (1.3 tons) during July 2021.
 - The highest 12-month rolling annual VOC emission rate was 18,985.21 lbs. (9.49 tons) from January 2021 through December 2021.
- HAP Records
 - HAP Calculations appear to follow required methodology parameters as outlined in 40 CFR Part 63 Subpart WWWW.
 - HAP emission limits meet requirements described above. These documents are not reiterated here for brevity and are, instead, attached to the report for review.
- 40 CFR Part 63 Subpart WWWW Records
 - All notifications were included in appropriate fashion.
 - MSDS sheets used for determining HAP levels and emissions calculations were provided as explained above.
 - Certified documentation was available for review during the inspection. Copies of all certificates of analysis were provided for all batches from April 2020 through July 2021. They are attached to this report for review if desired.

As demonstrated above, the facility appeared to be compliant with all emission limits and record keeping requirements.

The flexible group has three associated stacks:

- SVGRANITE
- SVCLEAR
- SVKITCHEN

These stacks were not measured during the inspection for safety reasons. However, the stacks appeared to meet the dimensional requirements and do not appear to have been modified recently.

For this flexible group the facility is required to follow the guidelines of National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subparts A and WWWW. At the time of

inspection and upon review of provided records the facility appears to be compliant. The facility is also required to maintain an approved Preventative Maintenance Plan (PMP) for the facility. This PMP was provided to the AQD during past ROP application and approval processes. It is approved and still in use at the facility with maintenance records being kept as required.

Other Items

MAERS

The facility is expected to submit appropriate air emissions records annually through the Michigan Air Emissions Reporting System (MAERS). The most recent submission in 2022 was audited by SE. The results of the audit found the facility to be in compliance with reporting requirements. A copy of this report is included.

Exempt Equipment

The facility has two boilers on site that are exempt from air permitting under Rule 282(2)(b)(i) as both are rated at 184,000 BTU and are both operated on natural gas. As both boilers are less than 10 mmBTU in output, they are both exempt from New Source Performance Standards (NSPS) 40 CFR Part 60 Subpart Dc. These boilers are both defined as hot water heaters (capacity of less than 120 gallons) and so are not subject to NESHAP 40 CFR Part 63 Subpart DDDDD.

The facility has one 40,000 gallon storage tank used for resin storage. It is exempt from air permitting by Rule 286(2)(a) as it is used for plastic resin storage.

The facility has multiple pieces of cutting, grinding, and sanding equipment for the manufacturing of products. This equipment is exempt from air permitting requirements by Rule 285(2)(I)(vi)(B) as it vents to the internal environment of the facility.

Some pieces of equipment are controlled by a baghouse that vents externally. This equipment is exempt from air permitting requirements by Rule 285(2)(I)(vi)(C). During the last inspection, the installed baghouse was found to be insufficiently capturing and controlling dust. A violation notice was issued. The facility has since removed the nonfunctioning unit and replaced it with a new unit. This new unit remains exempt under the same exemption rules and appears to be functioning appropriately and meeting the needs of the facility. At this time the issue is considered resolved.

Conclusion

At the conclusion of the inspection the facility appeared to be compliant with the requirements of MI-ROP-N5101-2018a as well as all other applicable air quality rules and regulations.

NAME Scott Evans

DATE 6/16/2022

SUPERVISOR HH