

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

N510171042

<b>FACILITY:</b> AGCO, INC		<b>SRN / ID:</b> N5101
<b>LOCATION:</b> 7389 COSTABELLA RD, REMUS		<b>DISTRICT:</b> Grand Rapids
<b>CITY:</b> REMUS		<b>COUNTY:</b> MECOSTA
<b>CONTACT:</b> Larry Pulliam , President		<b>ACTIVITY DATE:</b> 02/13/2024
<b>STAFF:</b> Scott Evans	<b>COMPLIANCE STATUS:</b> Compliance	<b>SOURCE CLASS:</b> MAJOR
<b>SUBJECT:</b> FY24 On-Site Compliance Inspection.		
<b>RESOLVED COMPLAINTS:</b>		

### Introduction

On February 13, 2024, State of Michigan Department of Environment, Great Lakes, and Energy Air Quality Division (AQD) staff member Scott Evans (SE) conducted an on-site inspection of the AGCO Inc. facility located at 7389 Costabella Rd. in Remus, Michigan, to assess compliance with permitted requirements and all other applicable 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 used. This facility is a major source facility for hazardous air pollutants (HAPs) due to a greater than 10 tons per year (tpy) potential to emit Styrene. This facility has one Renewable Operating Permit (ROP): MI-ROP-N5101-2023.

Upon arrival at the facility, SE conducted an inspection of the facility perimeter. During this initial inspection there were no observed visible emissions (VEs) leaving the facility. While there were odors of styrene throughout the facility, these odors were only faint and intermittent outside of the facility property. After this initial perimeter inspection, an on-site inspection of the facility was conducted.

### MI-ROP-N5101-2023

This ROP was initially approved on November 7, 2023. It contains requirements that apply source wide as well as three Emission Units (EUs) and one Flexible Group (FG) as listed below:

- EUCASTING
- EUGELCOAT
- EUCLEANUP
- FGPLASTICCOMP

### Source-Wide Conditions

These conditions apply to all process equipment at the facility including permitted equipment, grandfathered equipment, and exempt equipment.

There is one emission limit which states that no more than 55.1 tpy of Styrene may be emitted for each 12-month rolling annual period. During a review of emissions records, it was observed that the highest 12-month rolling emission level was 6.1 tpy as of November 2023. This is compliant with the permitted limit.

There are three recordkeeping requirements. The first states that all required calculations must be completed in a format acceptable to the AQD by the 15<sup>th</sup> day of each calendar month. The provided documents were within compliance of this requirement.

The second requirement states that a listing of chemical composition of all materials used must be maintained by the facility and available for review. During the inspection, a record of all documents was present and available for review, demonstrating compliance with this requirement.

The third requirement states that the following information must be maintained on a monthly basis:

- Amount of styrene-containing material used.
- Amount of styrene-containing material reclaimed.
- Styrene content in each used material.
- Monthly styrene emissions in tons per calendar month.
- Styrene emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

Records were provided to demonstrate compliance with these requirements. These records were used to determine compliance with the above emission limit.

There are three reporting requirements included. The first states that prompt reporting of deviations must be submitted while the second and third outline due dates for ROP semi-annual and annual compliance reports. This facility submitted their most recent ROP Semi-Annual Compliance Certification on August 23, 2023, and reported no deviations. The facility was reminded of the upcoming due date for their next semi-annual and annual reports.

This facility is also required to notify the AQD if there are changes to land use for the facility. There have been no changes and there are currently no planned changes.

#### EUCLEANUP

This includes miscellaneous cleanup activities using enclosed cleaning stations and other VOC-containing solvents throughout the facility for cleaning.

There is one material limit for this EU that states that no more than 440 gallons of dibasic ester-containing materials may be used per 12-month rolling period. During the last inspection it was identified during a review of chemical compositions of the cleaners used on site at the time that none of the cleaners contained dibasic ester. During this inspection it was discussed and confirmed that there have been no changes to the chemicals used for cleanup at the facility. As such, no dibasic ester was used at the facility since the last inspection was conducted.

There are five process restrictions for cleanup. The first states that enclosed cleaning stations shall be installed, maintained, and operated properly for the cleaning of fiberglass tools. During the inspection, these stations were observed in use and appeared to be compliant with all requirements.

The second states that the cleaning stations shall have covers that only open for putting tools in and taking them out between cycles. During the inspection, all units were closed both when in use and between uses, demonstrating compliance with the requirement.

The third requirement states that methylene chloride can only be used in closed containers for cleaning cured resin from equipment. No open containers of methylene chloride were observed on the facility during the inspection.

The fourth requirement states that spray cleaning operations shall be conducted within closed stations. No open spraying was observed during the inspection.

The fifth requirement states that all waste solvents shall be stored in closed containers. No open containers of waste solvent were observed during the inspection.

Cleanup activities have three recordkeeping requirements. The first states that all cleaning station covers shall be inspected monthly to determine proper integrity and function. Monthly inspection sheets were observed at each station during the inspection.

The second states that all required calculations must be completed in a format acceptable to the AQD by the 15<sup>th</sup> day of each calendar month. The provided documents were within compliance of this requirement.

The third requirement states that the following records need to be maintained on a monthly basis:

- Identity of each solvent used.
- Amount of each solvent used.
- Amount of solvent reclaimed.
- Monthly cover inspection results.
- Calculations determining the monthly usage rate of dibasic ester-containing cleaning materials which are used outside the Marble Matic cleaning stations, in gallons per calendar month, and the annual usage rate in gallons per 12-month rolling time period as determined at the end of each calendar month.

The required records were provided, and copies are included with this report with the exception of monthly cover inspections. Those records were maintained by hand and observed on site and appeared to meet all requirements.

Cleanup activities have the same ROP reporting requirements as the Source-Wide requirements and compliance is discussed above.

#### FGPLASTICCOMP

This flexible group includes the reinforced plastic parts manufacturing process which includes one (1) resin casting machine, three (3) open molding dry filter spray booths which utilize mechanical atomized and mechanical non-atomized applicators for gelcoat application, and miscellaneous cleanup activities. Paste wax and/or mold release may also be used. The open molding operations are subject to the Reinforced Plastic Composites Production NESHAP – 40 CFR Part 63, Subpart WWW. Dry filters in spray booths and one baghouse are utilized as particulate pollution control equipment.

This FG has ten emission limits, the first nine of which are outlined in the following table:

Pollutant	Limit	Time Period/Operating Scenario	Highest Recorded	Compliant? (Y/N)

Pollutant	Limit	Time Period/Operating Scenario	Highest Recorded	Compliant? (Y/N)
1. VOC (including Styrene)	65.1 tpy <sup>2*</sup>	12-month rolling time period as determined at the end of each calendar month	9.17 tpy. October 2023	Y
2. Organic HAP from Open Molding – Clear Gelcoat	522 lb/ton <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	287.1 lb/ton	Y
3. Organic HAP from Open Molding – Pigmented Gelcoat	377 lb/ton <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	205.2 lb/ton	Y
4. Organic HAP from Open Molding – High Performance Gelcoat	605 lb/ton <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	178 lb/ton	Y
5. Organic HAP from Open Molding – White/Off-White Gelcoat	267 lb/ton <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	205.2 lb/ton	Y
6. Organic HAP from Open Molding – Tooling Gelcoat	440 lb/ton <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	186 lb/ton	Y
7. Organic HAP from Mechanical Application – Tooling Resin	254 lb/ton <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	24.4 lb/ton	Y
8. Organic HAP from Manual Application – Tooling Resin	157 lb/ton <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	101 lb/ton	Y
9. Particulate	0.10 lb / 1,000 lbs of exhaust gas <sup>**</sup>	Hourly	See Discussion Below	

The ninth limit in the table above regarding particulate matter is assessed for compliance through proper installation and operation of baghouse equipment. While testing via method 5B or 5C may be necessary to verify compliance, at this time this does not appear to be necessary. During the inspection there were multiple running baghouses with no evidence of uncaptured particulate matter being released from the equipment, including a lack of dust or fallout in surrounding areas and no odors of styrene outside of the facility, which is one of the primary sources of particulate matter from this facility. Testing may be required later if release of particulate matter is suspected as has been an issue in the past.

The tenth requirement outlines the acceptable methods for the facility to demonstrate compliance with the requirements of National Emission Standard for Hazardous Air Pollutants (NESHAP) 40 CFR

Part 63 Subpart WWWW. Compliance with this requirement is demonstrated through compliance with the above limits within the emission limit table. Records were provided by the facility, which were used to make the above compliance determinations as they meet option 10.a of the requirement through demonstration of resins and gel coats meeting the emission limits of Table 3 of 40 CFR Part 63 Subpart WWWW.

This FG has six material limits, five of which are outlined in the below table:

Material	Limit	Compliant? (Y/N)
1. Clear Gelcoats	44% VOC by weight (minus water) <sup>a</sup> as applied <sup>2</sup>	Y
2. Pigmented/ Color (Non-white) Gelcoats	37% VOC by weight (minus water) <sup>a</sup> as applied <sup>2</sup>	Y
3. Kitchen Gelcoats (High performance)	47% VOC by weight (minus water) <sup>a</sup> as applied <sup>2</sup>	Y
4. White/off-white Gelcoats	35% VOC by weight (minus water) <sup>a</sup> as applied <sup>2</sup>	Y
5. Resins	37% VOC by weight (minus water) <sup>a</sup> as applied <sup>2</sup>	Y

Compliance determinations were made with a review of chemical formulations provided for each of the materials used on site. This is discussed further in the recordkeeping section of this report.

The sixth requirement states that HAP-containing solvents shall not be used in EUGELCOAT except that styrene may be used in closed systems and HAP-containing cleaners may be used to clean cured resin from application equipment. No HAP-containing cleaners were observed being used in prohibited ways during the inspection and it was verified by facility staff that guidelines are followed at all times.

This FG has five operational restrictions. The first says that all waste materials shall be stored in closed containers and disposed of in acceptable ways. During the inspection waste containers were observed on site and appeared to be appropriately sealed unless being filled. Disposal was discussed and it was relayed that waste materials are removed through a contracted company.

The second states that HAP-containing materials shall be kept in closed containers. All storage of materials was done in containers that were closed unless actively in use during the inspection.

The third states that all process operations shall be conducted in a manner to minimize emissions. This appeared to be met by the facility during the inspection through closed containers when not in use, proper containment and disposal of waste materials.

The fourth requirement states that the facility must be in compliance with work practice standards outlined in 40 CFR Part 63 Subpart WWWW. Adherence with all other operational restrictions in this ROP demonstrates compliance with this requirement.

The fifth requirement states that processes associated with EUCASTING may not be operated unless the appropriate control equipment is installed, maintained, and operated properly. All control

equipment including filters, containers, and dust collectors were observed to be operating properly during the inspection.

All EUGELCOAT booths were observed to have proper filters installed. All were in good condition and it was expressed by facility staff that the filters are changed multiple times per week as needed to maintain good, functional condition.

This FG has three testing requirements. The first two state that manufacturer data must be used to determine HAP and VOC content of all used materials. As demonstrated through records and emission and material limit evaluations, the facility is adhering to these requirements appropriately.

The third requirements states that the facility may be required to verify the emission rates of particulate matter (PM) from dust collectors controlling EUCASTING if requested by the AQD. At the time of the inspection there was no evidence of excess PM being released from the facility. In addition, one of the primary dust collectors for the facility had been replaced within the past two years at the facility and appeared to be operating properly. At this time, verification of emission rates does not appear to be necessary.

This FG has ten recordkeeping requirements. The first states that all required calculations must be completed in a format acceptable to the AQD by the 15<sup>th</sup> day of each calendar month. The provided documents were within compliance of this requirement.

The second states that the facility shall keep separate HAP and VOC content records for each material shipment. The provided records reflected compliance with this requirement.

The third requires that records of material chemical composition be maintained by the facility. Appropriate records are kept by the facility and were provided upon request. These records were used to verify compliance with above-discussed limits regarding HAP and VOC content of various materials.

The fourth requirement states that the following monthly VOC records shall be maintained by the facility:

- Amount of each material used.
- VOC content of each material.
- VOC emission factor for each material in accordance with 40 CFR Part 63 Subpart WWWW.
- VOC mass emission calculations determining the monthly emission rate in tons per calendar month, and the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

Records were provided as required and the VOC information was used to determine compliance with above emission limits.

The fifth requirement states that HAP content and emissions data must be maintained in accordance with 40 CFR Part 63 Subpart WWWW to demonstrate continuous compliance. Specifically, the facility must maintain records of resin and gel coat use, HAP content of the used materials, and record of where materials are used if electing the compliance option of adhering to the limits within Table 3 of 40 CFR Part 63 Subpart WWWW, which the facility has elected as

discussed above. The required records were provided and used to make the above compliance determinations with HAP content and emission limits. These records are included with this report.

The sixth requirement states that the facility must provide the following records:

- Copies of all provided notifications and reports.
- Performance tests, design, and performance evaluations.
- All records used to demonstrate compliance with HAP emission factors and limits.
- A certified statement that the permittee is in compliance with Table 4 of 40 CFR Part 63 Subpart WWWW.

The facility, at the time of the inspection, had not submitted semi-annual compliance reports for 40 CFR Part 63 Subpart WWWW since 2019. When discussed, the facility reviewed records and submitted retroactive compliance reports for all missed years. The facility, at the time of writing this report, is now in compliance with the reporting requirement and will continue to submit semi-annual compliance reports as required.

The seventh requirement states that records of all preventative maintenance performed on EUCASTING equipment shall be maintained by the facility. These records were provided for review on site and appeared to be compliant with the requirement.

The remaining recordkeeping requirements establish how records must be maintained by the facility and how long various records must be maintained. The facility was able to demonstrate digital records that refer back to beyond the retention requirement of five years.

This FG has multiple reporting requirements established within the ROP as well as through the NESHAP. The facility is required to submit ROP semi-annual deviation and annual compliance certification reports. The facility is currently up to date on all submissions to the AQD. The facility is also required to submit any applicable reports as outlined within Table 13 of the NESHAP. At this time, the facility is compliant with all applicable requirements. The facility is also required to submit these reports to the EPA, which they are aware of.

This FG has three stacks that were all observed during the inspection. The stacks were not measured directly for safety, though all appeared to be compliant with permitted requirements.

This FG is also required to have an approvable preventative maintenance plan for EUCASTING. The facility is currently operating on the previously approved plan and so no resubmission is required at this time.

### **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.

This facility also utilizes baghouses for controlling dust from certain cutting, forming, and grinding equipment that only vents internally. This equipment is exempt from air permitting requirements by Rule 285(2)(I)(vi)(C). During the inspection, one baghouse was not in use because the equipment controlled by this baghouse was broken and awaiting repair. The two other baghouses used to control dust from various cutting, forming, and grinding processes at the facility were operating as expected.

### **Conclusion**

At the conclusion of this inspection the facility appeared to be compliant with all permitted requirements as well as all other applicable air quality rules and regulations.

NAME Scott Evans

DATE 3/29/2024

SUPERVISOR HH