

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

P126272230

FACILITY: SEAL BOND LLC		SRN / ID: P1262
LOCATION: 1251 E MOUNT GARFIELD ROAD, NORTON SHORES		DISTRICT: Grand Rapids
CITY: NORTON SHORES		COUNTY: MUSKEGON
CONTACT: Nathaniel Stoller ,		ACTIVITY DATE: 05/23/2024
STAFF: Scott Evans	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: On-site inspection.		
RESOLVED COMPLAINTS:		

Introduction

On May 23, 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 Seal Bond, Inc. facility located at 1251 East Mount Garfield Rd. in Norton Shores, Michigan, to assess compliance with permitted requirements and all other applicable air quality rules and regulations. Seal Bond Inc. is a manufacturer of commercial and industrial grade adhesives, sealants, and coatings. The adhesives are manufactured in batches and consists of liquid and solid raw materials. The facility has one Permit to Install (PTI): PTI No. 72-22A. The facility is a minor source for Hazardous Air Pollutants (HAPs) and a synthetic minor, Title V Opt-Out source for volatile organic compounds (VOCs).

On the day of inspection, SE conducted an initial inspection of the facility exterior. No odors or visible emissions were observed during this inspection of the facility perimeter. SE then approached the facility and was greeted by Nathaniel Stoller and Alex Carmichael. A discussion to explain the purpose of the days visit preceded an inspection of the facility.

PTI No. 72-22A

This PTI contains requirements for three flexible groups (FGs):

- FGADHESIVEMFG
- FGVESSELCLEAN
- FGFACILITY

FGADHESIVEMFG

This FG is a batch processing process for manufacturing adhesives. Process steps include adding materials, blending, mixing, heating, cooling, vacuum sealing, and packaging. It has requirements applicable to the following emission units:

- EULARGERYNOLDS – 185 gallon blending vessel.
- EUROSS – 185 gallon blending vessel.
- EUSMALLREYNOLDS – 46 gallon blending vessel.
- EUSUPREYNOLDS – 295 gallon blending vessel.
- EUHUGEST – 530 gallon blending vessel.
- EUHOCKMEYER – 400 gallon blending vessel.
- EUHOCKMEYER2 – 500 gallon blending vessel.
- EUMYERS – 35 gallon blending vessel.
- EUFUSION1 – 470 gallon blending vessel.
- EUFUSION2 – 500 gallon blending vessel.

- EUFUSION3 – 500 gallon blending vessel.
- EULM1 – 1 gallon R&D blending vessel.
- EULM2 – 4 gallon R&D blending vessel.
- EULM3 – 4 gallon R&D blending vessel.
- EURA1 – 500 gallon blending vessel.
- EURA2 – 300 gallon blending vessel.

This FG has a vinyl trimethoxysilane (VTMO) scrubber as pollution control for all batches with VTMO added at the beginning of the process.

This FG has one emission limit and two material limits as shown in the table below.

During the inspection process, records verifying the above material and emission limits were reviewed. Review of these records confirmed the compliance determinations included above. These records are discussed further below, and copies of these records are included with this report.

This FG has one process restriction which states that the facility may not operate the process unless a malfunction abatement plan (MAP) for the VTMO scrubber has been submitted within 90 days of the issuance of the permit. No new MAP was submitted, however, this facility is utilizing equipment from the previous facility. As such, the previously submitted MAP is still applicable and no changes to it were required to remain applicable to the current operation. This MAP is included in this report for reference.

This FG has one design parameter which states that batches utilizing VTMO cannot be processed unless the VTMO scrubber has been properly installed and is operational while the process is running. During the inspection it was observed that multiple individual scrubber units were installed and operational. Operation was clear due to attachment of the exhaust tubes sending all emissions from the active mixing vessels through the collection chambers of the units. It was discussed that these scrubbers remain installed on the units and operate as necessary, with capture barrels being interchangeable to ensure the units operate and capture as needed. Log sheets indicating when the units are operated and when capture barrels are swapped were observed on site. These logs are handwritten and maintained at the facility. No copies were requested at this time, but are available if needed.

This FG has six recordkeeping requirements. The first states that records must be maintained in a manner acceptable to the AQD District Supervisor by the 15th day of every calendar month. During the inspection, records were briefly reviewed on site to confirm compliance. The remaining requirements state that the following records shall be maintained by the facility:

- Amount of dry solid materials used.
- Amount of liquid and paste materials used.
- VOC emissions data:
 - Amount of each VOC-containing material used.
 - VOC content of each material.
 - Monthly VOC emissions.
 - 12-month rolling annual VOC emissions.
- Number of batches run with VTMO added.

- Date and time of operation of VTMO scrubber operation.

Records were reviewed briefly on site to ensure that proper records were being maintained at the facility. Copies were provided to the AQD remotely for review. This review was the basis for compliance determinations made regarding emission and material limits above.

This FG has six stacks associated with its equipment. These stacks were not measured directly during the inspection. All stacks were present and appeared to meet dimensional requirements.

FGVESSELCLEAN

This process is for all equipment that uses clean-up solvent to remove product residue from blending vessels and mixer blades. It includes all equipment included in the FGADHESIVEMFG above. There is no associated pollution control equipment with these processes.

This FG has one emission limit and one material limit as described in the table below.

During the inspection process, records verifying the above material and emission limits was reviewed. Review of these records confirmed the compliance determinations included above. As noted above, the facility has not utilized hydrotreated light distillates since this facility began operation in January 2023. Records are discussed further below, and copies of these records are included with this report.

This FG has two process restrictions that require all waste clean-up solvents be stored in closed containers and that these materials be handled so as to minimize the generation of fugitive emissions. Throughout the inspection it could be seen that all materials on site and all waste containers were properly lidded and sealed when not in use.

This FG has three recordkeeping requirements. The first states that records must be maintained in a manner acceptable to the AQD District Supervisor by the 15th day of every calendar month. During the inspection, records were briefly reviewed on site to confirm compliance. The remaining records state that the following records shall be maintained by the facility:

- Hydrotreated light distillates (CAS 64742-47-8):
 - Gallons used, reclaimed, recycled, recovered, and disposed monthly.
 - Clean-up solvent used per month.
- VOCs:
 - Gallons of cleanup material used, reclaimed, recycled, recovered, and disposed monthly.
 - VOC content of each material.
 - Monthly VOC emissions.
 - 12-month rolling annual VOC emissions.

Records were reviewed briefly on site to ensure that proper records were being maintained at the facility. Copies were provided to the AQD remotely for a deeper review. This deeper review was the basis for compliance determinations made regarding emission and material limits above.

This FG has one associated stack. This stack was not measured directly during the inspection. The stack was present and appeared to meet dimensional requirements.

FG FACILITY

This FG has conditions that apply source-wide to all process equipment including equipment covered by other permits, grand-fathered equipment, and exempt equipment.

This FG has one opt-out emission limit that limits source-wide VOC emissions to no more than 36 tpy of VOCs emitted for each 12-month rolling time period. The highest recorded maximum since the issuance of the permit in August of 2023 was 19.5 tpy. This was determined with provided records that are discussed below. This recorded maximum is compliant with the applicable limit of 36 tpy.

This FG has two recordkeeping requirements. The first states that records must be maintained in a manner acceptable to the AQD District Supervisor by the 30th day of every calendar month. During the inspection, records were briefly reviewed on site to confirm compliance. The remaining records state that the following records shall be maintained by the facility:

- VOCs:
 - Amount of each VOC-containing material used, reclaimed, recycled, recovered, and disposed.
 - VOC content of each material.
 - Monthly VOC emissions.
 - 12-month rolling annual VOC emissions.

Records were reviewed briefly on site to ensure that proper records were being maintained at the facility. Copies were provided to the AQD remotely for a deeper review. This deeper review was the basis for compliance determinations made regarding emission and material limits above.

Other Notes

It is important to note that there was initial confusion about the nature of this facility during the permitting process. Upon approval of this permit, the facility was inconsistently identified as both a true minor source and a Title V opt out source. Due to this confusion, the facility was not flagged for annual reporting as would be required of a Title V opt-out facility. Upon review during this inspection, it was confirmed that this facility is a Title V opt-out facility. As such, the facility should be required to report annually.

The facility was unaware of their reporting requirements. Additionally, the facility was not flagged for reporting within AQD systems. The error has been corrected and the facility will be required to report annual emissions moving forward. The facility has been informed of this.

Conclusion

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

NAME Scott Evans

DATE 6/13/2024

SUPERVISOR 