Initial Title V Air Operation Permit
Permit No. 0550049-007-AV

APPLICANT

The applicant for this project is E-Stone USA Corporation. The applicant's responsible official and mailing address are: Mr. James Gorsuch, CFO, E-Stone USA Corporation, 8041 Haywood Taylor Blvd., Sebring, Florida 33870.

FACILITY DESCRIPTION

The applicant operates the existing E-Stone facility which is located in Highlands County at 8041 Haywood Taylor Blvd., in Sebring, Florida.

This facility is a cultured granite reinforced plastics manufacturing facility. The facility is an automated open mold batch process using noncorrosive, high strength mechanical resin application. The open molding operation is non-atomized mechanical resin application with non-vapor suppressed resin. For purposes of 40 CFR 63 Subpart WWWW requirements, this facility is a new facility prior to startup.

PROJECT DESCRIPTION

The purpose of this permitting project is to revise the initial Title V Air Operating permit (No. 0550049-004-AV) for the above referenced facility to include the operation of Polymerizing Line No. 2 with the associated Regenerative Thermal Oxidizer (RTO), (EU008).

PROCESSING SCHEDULE AND RELATED DOCUMENTS

- Initial Title V Air Operation Permit Issued **November 30, 2009**
- Air Construction Permit for Polymerizing Line No. 2 with the associated Regenerative Thermal Oxidizer (RTO), (EU008).Issued **October 28, 2011**
- Application for revision of Title V Air Operating Permit (0550049-004-AV) to add the operation of Polymerizing Line No. 2 with the associated Regenerative Thermal Oxidizer (RTO), (EU008), received **October 4, 2012.**

PRIMARY REGULATORY REQUIREMENTS

Title III: The facility is identified as a major source of hazardous air pollutants (HAP).

Title IV: The facility does not operate units subject to the acid rain provisions of the Clean Air Act.

Title V: The facility is a Title V major source of air pollution in accordance with Chapter 62-213, Florida Administrative Code (F.A.C.).

PSD: The facility is not a Prevention of Significant Deterioration (PSD) major source of air pollution in accordance with Rule 62-212.400, F.A.C.

NSPS: The facility does not operate units subject to the New Source Performance Standards (NSPS) of 40 Code of Federal Regulations (CFR) 60.

NESHAP: The facility operates units subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) of 40 CFR 63.

CAIR: The facility is not subject to the Clean Air Interstate Rule (CAIR) set forth in Rule 62-296.470, F.A.C.

Siting: The emission units were not originally certified pursuant to the power plant siting provisions of Chapter 62-17, F.A.C.

CAM: Compliance Assurance Monitoring (CAM) does not apply to any of the units at the facility.

PROJECT REVIEW

The facility is comprised of 2 nonmetallic mineral processing plants, 2 polymerizing lines, 2 polishing lines, and an epoxy station.

The applicant has an approved Title V air operating permit (No. 0550049-004-AV) that was issued on November 30, 2009. The applicant proposes to add the operation of a new regenerative thermal oxidizer (EU008) to polymerizing line 2 to control hazardous air pollutants (HAP), primarily styrene. Polymerizing line 2 was constructed under permit No. 0550049-003-AC. Potential emissions associated with polymerizing line 2 were reviewed and included in the Air Construction permit. Project, No. 0550049-007-AV, therefore, results in no increase in emissions. The facility is subject to the following federal regulations: 40 CFR 63 Subpart WWWW, National Emissions Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production, 40 CFR Part 63 Subpart SS, National Emission Standards for Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process and 40 CFR 63 Subpart A, General Provisions.

The facility HAP emissions are limited pursuant to the regulations in 40 CFR 63 Subpart WWWW. HAP emissions from the PTEs are also vented to the atmosphere through cyclones and baghouses. Cyclones and baghouses throughout the facility control particulate matter (PM) emissions. Polymerizing line No. 1 is equipped with a baghouse and cyclone. Polymerizing line No. 2 is equipped with two baghouses and a cyclone. The two polymerizing lines also have Regenerative Thermal Oxidizer (RTO) units.

The facility is subject to 40 CFR 60 Subpart WWWW. Subpart WWWW requires monthly calculations of organic HAP emissions before and after controls to determine compliance demonstration. Organic HAP emissions need to be calculated ***prior*** to any add-on controls to determine control requirements and the applicable emission limits for the facility. If the facility's organic HAP emissions ***prior*** to add-on controls are less than 100 TPY, the facility would be subject to the applicable limits in Table 3 of 40 CFR 63 Subpart WWWW. However, if the facility HAP emissions ***prior*** to add-on controls are 100 TPY or greater, the facility may be required to reduce the total organic HAP emissions from your operations by at least 95 percent by weight. Demonstration of compliance with the applicable emission limits (Table 3 or 95 percent reduction) may be met ***after*** add-on controls. Refer to 40 CR 63.5799, 63.5805, and 63.5810.

One of the two polishing lines (Polishing Line 1) is a completely wet process. Polishing line No.1 is an insignificant unit. The other polishing line (Polishing Line No. 2) is dry and is equipped with a baghouse to control PM emissions. Recordkeeping is required.

The facility has emission units/activities which are insignificant.

The two nonmetallic mineral processing plants emit primary criteria pollutants at insignificant levels. At the request of the applicant the hours of operation are limited. Each nonmetallic processing plant has a baghouse and a cyclone to control PM emissions. Recordkeeping is required.

The two polymerizing lines are each enclosed in their own permanent total enclosure. Based upon the information in the construction application, air construction permit number 0550049-003-AC authorized emissions from both PTEs to be vented to one RTO for control of Hazardous Air Pollutants (HAPs), which are primarily styrene emissions. However, the two polymerizing lines were not constructed as authorized by the facility's construction permit. The facility did not connect polymerizing line no.2 to the RTO and did not conduct the initial performance and compliance testing on polymerizing line no. 2. In the Title V operation application, the applicant stated that Polymerizing Line No.2 will need its own dedicated RTO prior to being placed into operation. This will require a new construction permit. Since Polymerizing Line No. 2 did not conduct initial performance testing and initial compliance testing by the expiration date of the construction permit, this emission unit is not authorized to operate.

Polymerizing Line No. 1 has completed initial performance testing and has demonstrated compliance with 40 CFR 63 Subpart WWWW.

The facility is subject to 40 CFR 60 Subpart WWWW. Subpart WWWW requires monthly calculations of organic HAP emissions before and after controls in order to determine compliance demonstration. Organic HAP emissions need to be calculated ***prior*** to any add-on controls in order to determine control requirements and the applicable emission limits for the facility. If the facility's organic HAP emissions ***prior*** to add-on controls are less than 100 TPY, the facility would be subject to the applicable limits in Table 3 of 40 CFR 63 Subpart WWWW. However, if the facility HAP emissions ***prior*** to add-on controls are 100 TPY or greater, the facility may be required to reduce the total organic HAP emissions from your operations by at least 95 percent by weight. Demonstration of compliance with the applicable emission limits (Table 3 or 95 percent reduction) may be met ***after*** add-on controls. Refer to 40 CR 63.5799, 63.5805, and 63.5810.

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The facility has emission units/activities which are insignificant.

CONCLUSION

This project is a revision to the initial Title V air operation permit No. 0550049-004-AV. This Title V air operation permit revision is issued under the provisions of Chapter 403, Florida Statues (F.S.), and Chapters 62-4, 62-210, 62-213, F.A.C. In accordance with the terms and conditions of this permit, the above named permittee is hereby authorized to operate the facility as shown on the application and approved drawings, plans, and other documents, on file with the permitting authority.