



REGION 5

CHICAGO, IL 60604

MEMORANDUM

SUBJECT: CLEAN AIR ACT INSPECTION REPORT
ASC Engineered Solutions, Ashtabula, OH

FROM: Karyn DeFranco, Physical Scientist
AECAB (MN/OH)

THRU: Brian Dickens, Section Supervisor
AECAB (MN/OH)

TO: File

BASIC INFORMATION

Facility Name: ASC Engineered Solutions

Facility Location: 2751 West Ave, Ashtabula, OH 44005-0398

Date of Inspection: 10/09/2024

EPA Inspector(s):

1. Karyn DeFranco, Physical Scientist
2. Natalie Schulz, Environmental Engineer

Other Attendees:

1. Tim Estlack, Plant Manager, ASC Engineered Solutions
2. Ken Kelmer, EHS Manager, ASC Engineered Solutions
3. Tom Hinkle, Plant Super Intendent, ASC Engineered Solutions
4. Jim Guy, VP EHS, ASC Engineered Solutions (virtually)
5. Josh Glach, Environmental Hygienist, ASC Engineered Solutions (virtually)
6. Holly DeRose, Corporate Director EHS, ASC Engineered Solutions (virtually)
7. Chad Nunnery, EHS Manager TN location, ASC Engineered Solutions (virtually)

Contact Email Address: jglach@asc-es.com and kelmer@asc-es.com

Purpose of Inspection: To investigate compliance with PTIO HAP emission limits.

Facility Name: ASC Engineered Solutions
Facility Location: 2751 West Ave, Ashtabula, OH
Date of Inspection: October 9, 2024

Facility Type: Rubber Product Manufacturing

Regulations Central to Inspection: PTIO number P0127046 emission limits including, but not limited to: Condition B.2; Condition B.5(a); Condition B.6; and Conditions C.3(c) and Condition C.4(c).

Arrival Time: 9:20 AM

Departure Time: 11:15 AM

Inspection Type:

- ☒ Unannounced Inspection
- ☐ Announced Inspection

OPENING CONFERENCE

- ☒ Presented Credentials
- ☒ Stated authority and purpose of inspection
- ☒ Provided Small Business Resource Information Sheet
- ☒ Provided CBI warning to facility

The following information was obtained verbally from ASC Engineered Solutions unless otherwise noted.

Company Ownership: The Facility changed ownership from Ashtabula Rubber Co. to ASC Engineered Solutions approximately two years ago.

Process Description:

ASC Engineered Solutions (ASC) operates a rubber manufacturing and rubber-to-metal bonding facility in Ashtabula, OH.

Rubber manufacturing. Raw materials include but are not limited to polymers, oils, and curing agents (peroxide and sulfur curing) for rubber manufacturing. Raw materials are processed in a heated mixer. Air emissions from the mixers are routed to a dust collector. After mixing, some material is milled and extruded prior to being molded, while other material goes straight to molding. The molding includes compression, transfer, and injection molding. After molding operations, depending on the final product, material either goes to finished goods, post-cure operations, or de-flash operations. Post-cure operations are conducted in a steam autoclave or a hot-air oven. During de-flash operations, parts are cryogenically frozen with liquid nitrogen and tumbled in media to remove excess flash and waste rubber material.

Metal inserts. Raw materials include but are not limited to ferrous castings, lead ingots, and adhesive for metal inserts. First, the metal inserts are prepped with an abrasive media blast. The abrasive blast units are enclosed with its own self-contained system and filter. After prep, adhesive is applied in

either an automatic or manual spray booth. After adhesive is applied, the rubber and metal insert are molded together.

Staff Interview:

- The facility has approximately 94 employees;
- The facility operates two rubber mixers, one with a 20L capacity and one with a 75L capacity;
- The facility operates 4 extruders;
- The facility operates ~25 molding machines;
- The facility informed EPA that the permit is not reflective of their current equipment. For instance, the facility removed two autoclaves the beginning of 2023 and now only operates one autoclave (P004). At the time of the tour, the facility informed EPA that instead they operate two hot-air ovens (one of which was installed approximately two months prior to the inspection) that are not in the permit because they are classified as “de minimis” and are planning to install a third hot-air oven soon. Additionally, the facility informed EPA that it no longer operates its grinding system (P005). The facility informed EPA that it intends to have these changes represented in its upcoming permit application;
- The facility informed EPA that the steam autoclave (P004) is used less than 1% for producing all products;
- Emissions from the autoclave and hot-air ovens vent to atmosphere;
- The facility operates the post-cure operations for three shifts/day;
- The hot-air ovens have a maximum capacity of 1,194 lbs for the two ovens currently in operation and operate at ~300°F;
- The two hot-air ovens currently operating are electric, the third new hot-air oven to be installed is gas-heated;
- Each batch for the hot-air ovens is approximately two hours;
- The metal insert abrasive blast unit filter is changed on a routine preventative maintenance basis. There are separate blast units dedicated to the preparation of metal containing lead;
- The facility also operates three mills in the extruder room to warm up the rubber before extrusion. Emissions from mills and extruders vent to the room;
- The facility uses three types of molding: compression, injection, and transfer;
- The molding machines operate at ~350°F;
- The facility operates a separate self-contained lead-only abrasive blast unit, which vents to an attached enclosure with filter;

TOUR INFORMATION

EPA Toured the Facility: Yes

Data Collected and Observations:

EPA toured the facility and observed the mixing operation, autoclave, hot-air ovens, extrusion operations, molding operations, adhesive spray booths, and extruders. EPA noted a sweet odor in the mixing operation area. EPA observed a residue on the stack of the older oven.

At the time of the tour the facility operated under a Permit-to-Install and Operate (PTIO), number P0127046. Permit Condition B.2 requires ASC's emissions to be less than 9.9 ton/year for a single HAP and 24.9 ton/year for a total HAP. Permit Condition B.5(a) requires ASC to keep daily records of individual HAP content of each adhesive, total combined HAP content of the adhesives and volume of adhesive used. As part of this inspection, EPA requested ASC's air emission calculations and PERs for the past 3 years. Permit Condition B.6 requires ASC to submit quarterly deviation reports. As part of this inspection, EPA requested ASC's deviation reports for the past 3 years. Permit Condition C.3(c) and Condition C.4(c) requires ASC to operate a dry filtration system on their adhesive spray booths and maintain the dry filtration system in accordance with the manufacturer's recommendations. The spray booths were not operating at the time of the tour. As part of this inspection, EPA requested ASC's pressure drop records for each spray booth (automatic and manual) for the past 6 months.

Photos and/or Videos: were not taken during the inspection.

Field Measurements: were not taken during this inspection.

CLOSING CONFERENCE

☒ Provided U.S. EPA point of contact to the facility

Requested documents:

- Internal air emission calculations for the past 3 years (in Excel or Excel compatible format);
 - o If not already included in these spreadsheets, provide the amount of peroxide-cured and sulfur-cured rubber processed by the facility;
- Copy of PERs for past 3 years;
- Copy of deviation reports for the past 3 years;
- Email correspondence with Ohio EPA regarding ovens;
- Pressure drop records for each spray booth (automatic and manual) for the past 6 months;
- Copy of permit application (to be submitted when it is submitted to Ohio EPA); and
- Information on the lead content of the metal inserts

DIGITAL SIGNATURES

Report Author: **KARYN DEFRANCO**
 Digitally signed by KARYN DEFRANCO
Date: 2024.11.20 09:30:14 -06'00'

Section Supervisor: **BRIAN DICKENS**
 Digitally signed by BRIAN DICKENS
Date: 2024.11.20 10:19:51 -06'00'