

United States Environmental Protection Agency / Region 4

Risk Management Program Inspection Report

Constellium Muscle Shoals LLC

Muscle Shoals, Alabama

August 20, 2024

1.0 Introduction

The U.S. Environmental Protection Agency's efforts to reduce the likelihood and severity of chemical accidents includes planning and legislative initiatives such as the National Contingency Plan, the Emergency Planning and Community Right-to-Know Act (EPCRA), and the Accidental Release Prevention requirements under Section 112(r) of the Clean Air Act (CAA), as amended in 1990. This report outlines an inspection of the Risk Management Program (RMP) as mandated by Section 112(r)(7) of the CAA.

The focus of this inspection was to assess the RMP for the water treatment and aluminum smelting process at the Constellium Muscle Shoals LLC (Constellium) facility located in Muscle Shoals, Colbert County, Alabama. This facility was selected for inspection because it hadn't been inspected within the last five years. The inspection, which was conducted on August 20, 2024, consisted of an examination of program documentation as well as site reviews of various aspects of facility operations. Personnel from the facility participated throughout the inspection. Requested program documents were provided for further review off-site. This report will provide a background of the facility and a listing of observations.

2.0 Background

The Constellium facility is located in Muscle Shoals, AL. The facility uses sulfur dioxide in its aluminum casting process and uses chlorine to treat the wastewater from the aluminum casting process. The process is regulated as program level 3. According to facility records, the facility has a maximum of 12,000 pounds of chlorine and 6,000 pounds of sulfur dioxide on site. The aluminum casting process and the wastewater treatment process at the facility are subject to the RMP requirements of 40 C.F.R. Part 68 and EPCRA Section 302. The background specifics are summarized as follows in Table 1.

TABLE 1: Inspection Information Summary

Inspection Team

Lead Inspector: Jordan Noles, EPA

Inspector-in-Training: Callie Sotolongo, EPA

Date of Facility Visit: August 20, 2024

Facility Identification

Name: Constellium Muscle Shoals LLC

Street Address: 4805 Second Street

City: Muscle Shoals County: Colbert State: Alabama Zip: 35661

EPA Facility ID No: 1000 0008 0574

Dun & Bradstreet (D&B) No: N/A

Latitude: 34.762389

Longitude: -087.588278

Name, address and phone of corporate parent company:

Owner/Operator: Constellium

Mailing Address: 300 E Lombard St. Suite 1710

City: Baltimore State: Maryland Zip: 30313

Phone: (443) 420-7881

Name, title, and email of person responsible for 40 C.F.R. Part 68 implementation:

Name: Benjamin Yancey

Title: Environmental Manager

Phone: (256) 386-6496

Email: benjamin.yancey@constellium.com

Name and title of emergency contact:

Name: Benjamin Yancey

Title: Environmental Manager

Day phone: (256) 386-6496

24-hour Phone: (256) 366-4010

Email: benjamin.yancey@constellium.com

Name and titles of stationary source personnel involved in site inspection (*accompanied site tours, provided documents and explanations*):

Name: John Simmons

Title: Consultant

Phone: (256) 443-8319

Email: jsimmons@see-env.com

Name: Trevor Beasley

Title: Health, Safety, and Security SME

Phone: (256) 904-0255

Email: trevor.d.beasley@constellium.com

Name: Angela Lovelady

Title: Environmental Engineer

Phone: (256) 957-8755

Email: angela.lovelady@constellium.com

Name: Kaitlyn Hicks
Title: Environmental Engineer
Phone: (256) 957-8164
Email: kaitlyn.hicks@constellium.com

Name: Avery Irvin
Title: Intern, Environmental
Phone: (205) 567-1259
Email: N/A

Name: Andrea Hortlet
Title: Environmental
Phone: (256) 904-3712
Email: andrea.hortlet@constellium.com

Name: Katherine Wade
Title: Safety Specialist
Phone: (256) 904-1553
Email: katherine.wade@constellium.com

Note: This is not a union facility.

Date and Program Levels of Submitted Risk Management Plan

Date of initial submission: June 21, 1999
Date of most recent submissions: January 28, 2015

Process: Casting/mix station
Process ID: 1000060747
Program Level as reported in RMP: 3
NAICS code: 331314 (Secondary Smelting and Alloying of Aluminum)

Process: HSCCL/Wastewater treatment
Process ID: 1000060749
Program Level as reported in RMP: 3
NAICS code: 33281 (Coating, Engraving, Heat Treating, and Allied Activities)

3.0 Observations

The inspection of the Constellium facility evaluated various sections of the RMP regulations (40 C.F.R. Part 68, Program Level 3) and the inspection checklist included in “Guidance for Conducting Risk Management Programs Inspections under Clean Air Act Section 112(r).” The inspection included an opening conference where EPA inspectors reviewed documents associated with the facility’s Risk Management Plan. The discussion was followed by a tour of

the facility's aluminum casting and wastewater treatment process areas. An inspection out-brief was conducted where EPA inspectors requested additional documents for review off-site and described their observations. Observations from the RMP inspection at the Constellium facility are discussed below:

1. 40 C.F.R. § 68.65(c)(1)(iii) requires information pertaining to the technology of the process to include the maximum intended inventory.
 - Facility representatives provided the inspection team with the process safety information (PSI) for both covered processes. The document has a section for maximum intended inventory which lists the amount of sulfur dioxide on-site as 4,000 pounds (lbs.). This is inconsistent with what facility representatives told the inspection team, what is listed in the RMP submittal, and what was observed on-site. There are three 1-ton cylinders totaling 6,000 lbs. on-site.
2. 40 C.F.R. §§ 68.65(d)(1)(i)-(iii)-(vi) requires the information pertaining to the equipment in the process to include materials of construction; electrical classification; and design codes and standards employed.
 - The inspection team asked for the PSI for each process and facility representatives provided such documents; however, the materials of construction, electrical classification, and design codes and standards employed were not found.
3. 40 C.F.R. § 68.65(d)(2) requires the owner or operator to document that equipment complies with recognized and generally accepted good engineering practices (RAGAGEP).
 - The chlorine pipes were not labeled with the contents or direction of flow. American Society of Mechanical Engineers (ASME) A13.1 requires identification and direction of flow for pipes containing hazardous substances.
4. 40 C.F.R. § 68.67(e) requires the owner or operator to establish a system to promptly address the team's findings and recommendations; assure that the recommendations are resolved in a timely manner and that the resolution is documented; document what actions are to be taken; complete actions as soon as possible; develop a written schedule of when these actions are to be completed; and communicate the actions to operating, maintenance and other employees whose work assignments are in the process and who may be affected by the recommendations or actions.
 - The facility performed a process hazard analysis (PHA) in December 2023 and developed a document to keep track of the action items. Fourteen action items were either overdue at the time of the inspection or were overdue when they were finally closed out.
5. 40 C.F.R. §§ 68.69(a)(2)(i)-(ii) requires the owner or operator to develop and implement written operating procedures that provide clear instructions for safely conducting

activities involved in each covered process consistent with the process safety information and shall address the consequences of deviation and steps required to correct or avoid deviation in the operating limits.

- Facility representatives provided the operating procedures for the “Casthouse/Bigas Station.” There were no “consequences of deviation” or “steps required to correct or avoid deviation” for the various operating limits (i.e. pressure, temperature). Facility representatives stated the “consequences of deviation” and “steps required to correct or avoid deviation” are in the PHA.
6. 40 C.F.R. § 68.79(d) requires the owner or operator to promptly determine and document an appropriate response to each of the findings of the compliance audit, and document that deficiencies have been corrected.
- The facility conducted a compliance audit of the RMP covered processes in 2019. However, the facility did not create a tracking system for the findings/action items that resulted from the compliance audit. Without a tracking system, there is no documentation of the action items having been closed out.
 - The facility conducted a compliance audit of the RMP covered processes in 2022. Three of the action items that resulted from the compliance audit are either currently overdue or were closed out after the due date.
7. 40 C.F.R. § 68.93(a) requires coordination with local emergency planning and response organizations to occur at least annually, and more frequently if necessary, to address changes: At the stationary source; in the stationary source's emergency response and/or emergency action plan; and/or in the community emergency response plan.
- Facility representatives did not provide any documentation showing that it had coordinated annually with the local fire department in the last five years.
8. 40 C.F.R. § 68.190(b)(1) requires the owner or operator of a stationary source to revise and update the RMP submitted under § 68.150 at least once every five years from the date of its initial submission.
- The latest RMP submission was submitted by the facility on January 28, 2015. The RMP should have been resubmitted on or before January 28, 2020. The RMP has not been resubmitted at the time of drafting this inspection report.
9. 40 C.F.R. § 68.195(b) requires, within one month of any change in the emergency contact information required under §68.160(b)(6), the owner or operator to submit a correction of that information.
- Benjamin Yancey is listed as the emergency contact in the latest RMP submittal. Benjamin Yancey has not worked at the facility in many years.

Inspection Report,

**JORDAN
NOLES**

Digitally signed by
JORDAN NOLES
Date: 2024.10.21
12:56:41 -04'00'

Jordan Noles, Inspector
North Air Enforcement Section
U.S. EPA Region 4

Approved by:

**JASON
DRESSLER**

Digitally signed by JASON
DRESSLER
Date: 2024.10.21
12:19:45 -04'00'

Jason Dressler, Section Chief
North Air Enforcement Section
U.S. EPA Region 4