

United States Environmental Protection Agency / Region 4

Risk Management Program Inspection Report

Lanxess Corporation

Memphis, Tennessee

October 27, 2022

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 chemical manufacturing process at the Lanxess Corporation (Lanxess) located in Memphis, Shelby County, Tennessee. This facility was selected for inspection because it hadn't been inspected under the RMP in the last five years. The inspection, which was conducted on October 27, 2022, consisted of a discussion of and request for program documentation, as well as a site review of various aspects of facility operations. Personnel from the facility participated throughout the inspection. Documents were provided for review. This report will provide a background of the facility and a listing of observations.

2.0 Background

The Lanxess facility is located in Memphis, Tennessee. This facility uses oleum in a process to produce Oxone. The plant opened in 1959 and expanded in 2019. In a continuous process, Oxone is made through a series of steps from oleum. The oleum is received by railcar. Oxone is used in a myriad of ways, including oxidizing powder, disinfectants, swimming pool shock oxidizers, etc. The final product is sold to end users in 5 kg., 25 kg., and 1,000 kg. packages. The chemical manufacturing process at the facility is 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: Bethany Terpin, EPA

Date of Facility Visit: October 27, 2022

Facility Identification

Name: Lanxess Corporation - Memphis
Street Address: 2571 Fite Rd. Oxone Spot 26
City: Memphis County: Shelby State: Tennessee Zip: 38127
EPA Facility ID No: 1000 0023 4203
Dun & Bradstreet (D&B) No: 80523085
Latitude: 35.268090
Longitude: -089.975411

Name, address and phone of corporate parent company:

Owner/Operator: Lanxess Corporation
Mailing Address: 111 RIDC Park West Drive
City: Pittsburgh State: Pennsylvania Zip: 15275
Phone: (412) 809-1000

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

Name: Eric Brantley
Title: Site Manager
Email: eric.brantley@lanxess.com

Name and title of emergency contact:

Name: Control Room Operator
Title: Control Room Operator
Day phone: (901) 708-1950
24-hour Phone: (901) 708-1950
Email: N/A

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

Name: Michael Morris
Title: HSEQ Manager
Phone: (346) 218-8473
Email: michael.morris@lanxess.com

Name: Nimisha Shulka
Title: PSM Engineer
Phone: (901) 708-1980
Email: nimisha.shulka@lanxess.com

Name: Cathy Barnes
Title: HSE Manager
Phone: (901) 493-9520
Email: cathy.barnes@lanxess.com

Name: Eric Brantley
Title: Site Manager
Phone: (919) 924-9443
Email: eric.brantley@lanxess.com

Name: Roger Kenney
Title: Production Manager
Phone: (901) 708-1990
Email: roger.kenney@lanxess.com

Name: Joe Johnson
Title: Maintenance Manager
Phone: (901) 482-7930
Email: joe.johnson@lanxess.com

Name: Seth McMillan
Title: Reliability Engineer
Phone: (901) 708-1982
Email: seth.mcmillan@lanxess.com

Name: Eddie Jones
Title: Maintenance
Phone: (901) 708-1981
Email: eddie.jones@lanxess.com

Note: This is a union facility.

Date and Program Levels of Submitted Risk Management Plan

Date of initial submission: April 04, 2017
Date of most recent submission: August 12, 2019
Process as reported in RMP: Oxone Process
Process: Oxone Process
Process ID: 1000102222
Program Level as reported in RMP: 3
NAICS code: 32518 (Other Basic Inorganic Chemical Manufacturing)

3.0 Observations

The inspection of the Lanxess 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 began with an opening discussion of facility operations. EPA inspectors requested paperwork associated with the facility’s Risk Management Plan (RMPlan). The documents were reviewed by EPA inspectors on-site and later off-site. The discussion was followed by a tour of the facility’s Oxone manufacturing process. An inspection out-brief was conducted where EPA inspectors described their observations. Observations from the RMP inspection at the Lanxess facility are discussed below:

1. 40 C.F.R. § 68.30(a) requires the owner or operator to estimate in the RMP the population within a circle with its center at the point of the release and a radius determined by the distance to the endpoint defined in § 68.22(a).
 - Facility representatives sent the offsite consequence analysis (OCA) after the inspection via email. The population estimation along with the map with toxic endpoint indicated by a circle with the point of release in the center for worst case scenario or alternative release scenario were not included in the OCA that was given to the inspection team.
2. 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.
 - At the time of the inspection, some pipes on the roof had missing labels or labels that were faded and/or peeling off. Pipes should be labeled in accordance with ANSI/ASME A13.1.
3. 40 C.F.R. § 68.69(c) requires the owner or operator to certify annually that operating procedures are current and accurate.
 - Facility representatives supplied the certifications of operating procedures for the calendar years of 2019, 2021, and 2022; however, the certification for 2020 was not produced. Without the documentation, there is no way for the inspection team to be sure the operating procedures were certified for the calendar year 2020.

Inspection Report,

Prepared by:

JORDAN NOLES

Digitally signed by JORDAN
NOLES

Date: 2022.12.12 12:18:24 -05'00'

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

Date

Approved by:

JASON DRESSLER

Digitally signed by JASON
DRESSLER

Date: 2022.12.12 12:30:41 -05'00'

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

Date