United States Environmental Protection Agency / Region 4

Risk Management Program Inspection Report

Koch Foods, Inc.

Morton, Mississippi
September 12, 2023

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 ammonia refrigeration process at the Koch Foods, Inc. (Koch) facility located in Morton, Scott County, Mississippi. This facility was selected for inspection because it had never been inspected under the RMP. The inspection, which was conducted on September 12, 2023, 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 Koch facility is located in Morton, Mississippi. This facility uses anhydrous ammonia for refrigeration purposes. The refrigeration process, consisting of piping, valves, and equipment, cycles ammonia through various physical states (high pressure liquid, low pressure liquid, low pressure vapor, high pressure vapor, then back to high pressure liquid) in order to provide refrigeration for cold food storage. The process is regulated as program level 3. According to facility records, the facility has a maximum of 46,000 pounds of ammonia on site. The ammonia refrigeration 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: Justin Stark (Inspector-In-Training), U.S. EPA
Inspector: Jordan Noles, U.S. EPA
Inspector: Laura James, Mississippi Department of Environmental Quality (MDEQ)
Inspector: Riley Moss, MDEQ

Date of Facility Visit: September 12, 2023

Facility Identification

Name: Koch Foods, Inc.
Street Address: 410 Koch Drive
City: Morton County: Scott State: Mississippi Zip: 39117
EPA Facility ID No: 1000 0019 9304
Dun & Bradstreet (D&B) No: 00-819-5638
Latitude: 32.313833
Longitude: -89.662361

Name, address and phone of corporate parent company:
Owner/Operator: Koch Foods, Inc.
Mailing Address: 1300 W Higgins Rd Ste 100
City: Park Ridge State: Illinois Zip: 60068
Phone: NA

Name, title, and email of person responsible for 40 C.F.R. Part 68 implementation:
Name: Word Strength
Title: Complex Manager
Phone: (601) 732-3255
Email: worstr@kochfoods.com

Name and title of emergency contact:
Name: Mark McGlaun
Title: Maintenance Manager
Day phone: (601) 732-3201
24-hour Phone: (972) 632-9073
Email: Mark.McGlaun@kochfoods.com

Name and titles of stationary source personnel involved in site inspection *(accompanied site tours, provided documents and explanations):*
Name: Branden Jolly
Title: Complex Safety Manager
Phone: (601)-732-3100
Email: Branden.Jolly@Kochfoods.com

Name: Joe Biard
Title: Corp Safety
Phone: (601)-732-3100
Email: Joe.Biard@Kochfoods.com

Name: Brent Warrens
Title: Corp Safety
Phone: (601)-732-3100
Email: Brent.Warrens@Kochfoods.com

Name: Mark McGlaun
Title: Maintenance Manager
Phone: (601)-732-3100
Email: Mark.McGlaun@Kochfoods.com

Name: Randy Cline
Title: Refrigeration Engineer
Phone: (601)-732-3100
Email: Randy.Cline@Kochfoods.com

Name: Erick Davidson
Title: Refrigeration Manager
Phone: (601)-732-3100
Email: Erick.Davidson@Kochfoods.com

Name: Jay Ragsdale
Title: PSM Director
Phone: (601)-732-3124
Email: Jay.Ragsdale@Kochfoods.com

Name: Word Strength
Title: Complex Manager
Phone: (601)-732-3255
Email: worstr@kochfoods.com

Name: Richie Grant
Title: Plant Manager
Phone: (601)-732-3100
Email: Richie.Grant@Kochfoods.com

Note: This is a union facility.

<u>Date and Program Levels of Submitted Risk Management Plan</u>

Date of initial submission: June 18, 2007
Date of most recent submissions: May 23, 2022
Process: Ammonia Refrigeration
Process ID: 1000125238
Program Level as reported in RMP: 3
NAICS code: 311991 (Perishable Prepared Food Manufacturing)

3.0 Observations

The inspection of the Koch 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. The discussion was followed by a tour of the facility's ammonia refrigeration process areas. EPA inspectors then requested paperwork associated with the facility's Risk Management Plan (RMPlan). The documents were reviewed by EPA inspectors on-site and provided for review off-site. An inspection out-brief was conducted where EPA inspectors described their observations. Observations from the RMP inspection at the Koch facility are discussed below:

1. 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):

    - During the facility walk-through, the Inspection Team observed one area of ammonia piping with breached/damaged insulation by "EC-3" on the facility's roof. Uninsulated piping is inconsistent with the following RAGAGEP:

        - Section 5.10.1 of American National Standards Institute/International Institute of Ammonia Refrigeration (ANSI/IIAR) 2 (2021) states, "piping and equipment surfaces not intended for heat exchange shall be insulated, treated, or otherwise protected to mitigate condensation and excessive frost buildup."

    - During the facility walk-through, the Inspection Team observed faded and peeling pipe labels on the facility's roof. Lack of adequate pipe labeling for ammonia piping is inconsistent with the following RAGAGEP:

        - Section 5.14.6 of ANSI/IIAR 2 (2021) states, "Ammonia piping mains, headers and branches shall be identified with the following information:
          1. "AMMONIA;"
          2. Physical state of the ammonia;
          3. Relative pressure level of ammonia, being low or high as applicable;
          4. Pipe service, which shall be permitted to be abbreviated; and
          5. Direction of flow.

          The marking system shall either be one established by a recognized model code or standard or one described and documented by the facility owner."

    - During the facility walk-through, the Inspection Team observed combustible materials such as pallets, and cardboard boxes in the Ammonia Machinery Room (AMR). Combustible materials in the AMR is inconsistent with the following RAGAGEP:

  - Section 6.4 of ANSI/IIAR 2 (2021) states "Combustibles materials or flammable liquids shall not be stored in machinery rooms outside of approved fire-rated storage containers."

- During the facility walk-through, the Inspection Team observed a ladder, box, and other items blocking access to the eyewash/safety shower in the AMR. Lack of access to an eyewash/safety shower in the AMR is inconsistent with the following RAGAGEP:

  - Section 6.7.1.2 of ANSI/IIAR 2 (2021) states "The path of travel within the machinery room to at least one eyewash/safety shower unit shall be unobstructed and shall not include intervening doors."

- During the facility walk-through, the Inspection Team did not observe an eyewash/safety shower outside the AMR. Not having an eyewash/safety shower outside the AMR is inconsistent with the following RAGAGEP:

  - Section 6.7.2 of ANSI/IIAR 2 (2021) states "A minimum of one eyewash/safety shower unit shall be located outside the machinery room and shall be no further than 55 ft. from the outside of the machinery room door."

- During the facility walk-through, the Inspection Team did not observe panic hardware on the two doors exiting the AMR. Not having panic hardware on doors exiting the AMR is inconsistent with the following RAGAGEP:

  - Section 6.10.2 of ANSI/IIAR 2 (2021) states "Machinery room doors shall be self-closing and tight-fitting. Doors that are part of the means of egress shall be equipped with panic hardware and shall be side hinged to swing in the direction of egress for occupants leaving the machinery room. Machinery room doors shall open with the use of only panic hardware and shall not require the use of other hardware or switches to exit the room. Where the machinery room is not provided with fire sprinklers, doors communicating with the building interior shall be one-hour-fire-rated. Doors to the outdoors shall be fire-rated where required by the building code based on the fire rating required for exterior wall openings."

- During the facility walk-through, the Inspection Team observed an elbow-shaped section of insulated ammonia piping on the roof not resting on pipe support. A lack of support of ammonia piping is inconsistent with the following RAGAGEP:

  - Section 13.4.2 of ANSI/IIAR 2 (2021) states "Refrigerant piping shall be isolated and supported to prevent damage from vibration, stress, corrosion, and physical impact."

2. 40 C.F.R. § 68.93(a), requires the owner or operator to coordinate response needs with local emergency planning and response organizations 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.

    - According to the facility records, a walkthrough by the local fire department has not occurred since before COVID-19. The facility contacted the local fire department on September 11, 2023, to schedule a walkthrough. This was one day before the EPA's inspection, but after the notification of the EPA's planned RMP inspection was sent to the facility on August 29, 2023. The walkthrough is scheduled to take place in November 2023.

Inspection Report,

Prepared by:

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Justin Stark, Inspector-In-Training
North Air Enforcement Section
U.S. EPA Region 4

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Jordan Noles, Inspector
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