

United States Environmental Protection Agency / Region 4

Clean Air Act 112(r), Risk Management Program Inspection Report

Koch Foods - Gadsden Facility

Gadsden, Alabama

April 20, 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 covered process of anhydrous ammonia at the Facility. The inspection consisted of an examination of program documentation as well as site review of the anhydrous ammonia process operations. This report provides background information about the facility and a list of observations.

2.0 Background

Koch Foods - Gadsden (Facility) is owned and operated by Koch Foods – Gadsden LLC which has a parent company called Koch Foods. The Facility uses anhydrous ammonia, a toxic substance regulated by the RMP Rule, 40 CFR Part 68, in its refrigeration system utilized for cold storage of poultry products manufactured by the Facility. The Facility operational capacity and inventory of anhydrous ammonia is above the regulatory threshold quantity of 10,000 pounds.

The Facility is subject to the RMP requirements of 40 CFR Part 68 process level 3. The background specifics are summarized in Table 1 presented below.

TABLE 1: Inspection Information Summary

Inspection Team

Inspector(s): Chetan Gala, US. EPA, Region 4; and Justin Stark, US. EPA, Region 4

Date of Facility Visit: April 20, 2023

Facility Identification

Name: Koch Foods - Gadsden

Street Address: 501 Paden Road,

City: Gadsden County: Etowah State: Alabama Zip: 35903

EPA Facility ID No: 1000 0005 0044

Latitude: 33.97005

Longitude: -085.9724

Name of corporate parent company: N/A

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

Name: Harold Hunt

Title: Complex Manager

Email: harhun@kochfoods.com

Name and title of emergency contact:

Name: Michael Ford, Refrigeration Manager

Day phone: (256) 549-6250

24-hour Phone: (256) 438-3069

Email: michael.ford@kochfoods.com

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

Name	Title	Phone	Email
Michael Ford	Refrigeration Manager	256 438-3069	michael.ford@kochfoods.com
Sheila Holston	Union Representative		
Jeff Seymore	Corporate Env. Director	256 549-6257	Jeff.Seymore@Kochfoods.com
Jay Ragsdale	Corporate PSM Director	903 767-0257	Jay.Ragsdale@Kochfoods.com
Michael Jacobs	PSM Coordinator	256 622-4024	Michael.Jacobs@Kochfood.com

Note: A **UNION** facility

Date and Program Levels of Submitted Risk Management Plan

Date of initial submission: July 15, 2008

Date of recent submission: June 18, 2019

Process ID	Process Description	Process Chemical ID	Process Program Level	Chemical Name	Quantity (lbs)	NAICS code	Flammable / Toxic
1000099734	Ammonia Refrigeration	1000124955	Level 3	Ammonia (anhydrous) CAS Number: 7664-41-7	60,597lbs.	Process NAIC Code: 1000100975 NAIC Code: 311615 NAIC Description: Poultry Processing	Toxic

3.0 Observations

The inspection of the facility evaluated compliance with various sections of the RMP regulations (40 C.F.R. Part 68, Program Level 3). The inspection involved discussions with the facility representatives of issues related to its anhydrous ammonia storage, handling and usage, the Facility's RMP, a review of paperwork associated with the facility's most recent Risk Management Plan (RMPlan), Process Safety Information (PSI), Process Hazard Analysis (PHA), Compliance Audit (CA), Operating Procedures (OP), Management of Change (MOC), Mechanical Integrity (MI), etc., and a walkthrough of the facility. Inspection in-brief and out-brief conferences were conducted, and additional information was requested. The observations from the RMP inspection and available information are presented below:

1. 40 CFR § 68.65(d)(2) requires that the owner or operator must document that equipment complies with recognized and generally accepted good engineering practices (RAGAGEP). During the facility walkthrough, EPA inspectors observed the following:

- Some labels and tags on equipment and valves were missing and were replaced immediately upon making the observation during the facility walk through. Compressors C-7, C-8, and C-9 did not have tags on the valves. Compressor C-9 was out of service. In addition, compressor NX-11 oil cooler was not in operation and was missing tags on two valves.

ANSI/ASME A13.1 (2015) requires piping mains, headers, and branches to be identified with the contents and labeling that includes the physical state and direction of flow.

- Section 5.14.6 of International Institute of Ammonia Refrigeration (IIAR) 2 (2021) requires ammonia piping mains, headers, and branches to be identified with the following information:
 - “Ammonia”,
 - Physical state of the ammonia,
 - Relative pressure level of ammonia, being low or high as applicable,
 - Pipe service, which is permitted to be abbreviated, and
 - Direction of flow.

The marking system must either be one established by a recognized model code or standard or one described and documented by the facility owner or owner’s agent.

- On the roof, some ice and rust were observed on piping above the engine room. Some ice and rust were observed on piping above the critical process air unit (CPA) 1. Some ice and rust were observed on piping above the freezer floor. And in the machinery room, ice was observed on piping connecting to compressors C-7 and C-8.
- Occupational Health and Safety Administration 1910.110(h)(9)(i) requires piping to be well supported and protected against physical damage and corrosion.
- Section 11.1.1 IIAR 6 (2019) requires “Where pitting, surface damage, general corrosion, or a combination thereof, is visually observed on a metal surface of the piping, deficient areas shall be further evaluated per Sections 11.1.1.1 – 11.1.1.3.”
- Section 7.2.6.1 IIAR 9 (2020) requires piping and equipment surfaces not intended for heat exchange to be insulated, treated, or otherwise protected to mitigate condensation and excessive frost buildup where the surface temperature is below the dew point of the surrounding air during normal operation and in an area where condensation and frost could develop and become a hazard to occupants or cause damage to the structure, electrical equipment, or refrigeration system. However, exceptions are as follows:
 - Valves and other equipment can be permitted to be uninsulated where necessary for service access provided that the vapor retarder is sealed to the piping or equipment where insulation of adjoining piping terminates.

- Piping and fittings constructed of corrosion-resistant materials or protected with a corrosion-resistant treatment can be permitted to be uninsulated if they are routinely defrosted or are otherwise managed to limit ice accumulation. Where defrost will be the method of ice control, a means to control and drain condensate shall be provided where condensate will present a nuisance or a hazard.
 - The audible and visual alarms at the entrances of the machinery room were not clearly marked with signage stating or illustrating the meaning of each alarm.
 - Section 7.2.9.1 of IIAR 9 (2020) requires machinery room to be provided in accordance with this section.
 - Buildings and facilities with refrigeration systems must be provided with placards in accordance with NFPA 704. The NFPA 704 ammonia fire diamond for indoor ammonia refrigeration equipment should be 3-3-0 and outdoor entrances should be 3-1-0.
 - The meaning of each alarm shall be clearly marked by signage near the visual and audible alarms.
 - Each machinery room entrance door shall be marked with a permanent sign to indicate that only authorized personnel are permitted to enter the room.
 - A couple of staff offices were found to be within the machinery room and next to its egress pathway to the exit door to the outside of the building premises.
 - Section 6.2.5 IIAR 2 (2021) states “Air shall not flow to or from any portion of premises that is routinely accessible to or occupied by people on a part time basis or full-time basis through a machinery room unless the air is ducted and sealed to prevent ammonia leakage from entering the air stream. Access doors and panels in ductwork, and air-handling units located in a machinery room shall be gasketed and tight-fitting.”
2. 40 CFR § 68.67(c) requires among other things a qualitative evaluation of a range of the possible safety and health effects of failure of controls.
- Of the two most recently completed PHAs, one was conducted March 20-22, 2018, with a PHA report dated March 27, 2018. The latest PHA was conducted March 15-16, 2023. The 2018 PHA report establishes a qualitative evaluation of a range of the possible safety and health effects of failure of controls in terms of a qualitative assessment matrix. The sentence “Lower numbers represent higher severity, likelihood, and risk.” leading to the matrix appears to be reversed and not in congruence with the matrix illustrated on the same page 7. In addition, the likelihood range is defined on a scale of 1 to 4 and not 1 to 5 which is stated on page 7 of the 2018 PHA report. All action items resulting from 2018 PHA report were addressed within 24 months.
 - For the 2023 PHA report, the risk ranking explanation in the document titled “Risk Ranking Page v1.0.docx” does not provide explanation for the numeric values placed in the risk ranking matrix. The one-page document titled “Executive Summary v1.0.pdf” states “Close attention should be paid to the risk ranking for each recommendation, and priority given to those with the lowest number. This ranking is assigned with only two factors, severity and likelihood. The

combination of the two gives the risk ranking. The intent is to determine which items must be addressed for the safety of the facility.”

3. 40 CFR § 68.90(b) states that a non-responding stationary source need not comply with 40 CFR § 68.95 provided that it complies with the requirements of 40 CFR § 68.90(b)(1-5).
 - The Facility is a non-responding stationary source. During the inspection, no documentation was produced for review illustrating compliance with 40 CFR § 68.90(b)(1-5).

Inspection Report,

Prepared by:

CHETAN GALA

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Chetan Gala, Inspector
U.S. EPA Region 4
South Air Enforcement Section
Air Enforcement Branch

Date

Approved by:

Groendyke, Todd

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Todd Groendyke, Chief
U.S. EPA Region 4
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Air Enforcement Branch

Date