United States Environmental Protection Agency / Region 4

Risk Management Program Inspection Report

Tyson Fresh Meats, Inc.

Goodlettsville, Tennessee
December 4, 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 ammonia refrigeration process at the Tyson Fresh Meats, Inc. (Tyson) facility located in Goodlettsville, Davidson County, Tennessee. This facility was selected for inspection because it involves ammonia refrigeration and is a priority area for EPA Region 4. The inspection, which was conducted on December 4, 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 Tyson facility is located Goodlettsville, Tennessee. The facility was built in 1971 and was bought by Tyson in the late 1990s. The facility processes and packages beef and pork products and 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 133,667 pounds of anhydrous 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: Jordan Noles
Inspector: Justin Stark
Date of Facility Visit: December 4, 2024

Facility Identification

Name: Tyson Fresh Meats, Inc. Goodlettsville, TN
Street Address: 201 Cartwright Street
City: Goodlettsville County: Davidson State: Tennessee Zip: 37072
EPA Facility ID No: 1000 0017 5197
Dun & Bradstreet (D&B) No: 6903702
Latitude: 36.331702
Longitude: -086.711797

Name, address and phone of corporate parent company:
Owner/Operator: Tyson Fresh Meats, Inc.
Mailing Address: 2200 W. Don Tyson Parkway City: Springdale State: Arkansas
Zip: 72762
Phone: (479) 290-4000

Name, title, and email of person responsible for 40 C.F.R. Part 68 implementation:
Name: Falah Al-Saadawi
Title: Plant Manager
Phone: (469) 579-7467
Email: falah.al-saadawi@tyson.com

Name and title of emergency contact:
Name: Jason Dyer
Title: Maintenance Manager II
Day phone: (615) 855-2792
24-hour Phone: (309) 558-9097
Email: jason.dyer@tyson.com

Name and titles of stationary source personnel involved in site inspection *(accompanied site tours, provided documents and explanations):*
Name: Glen Heron
Title: Sr. PSM/RMP manager
Phone: (806) 223-7716
Email: glen.heron@tyson.com

Name: Todd Cartwright
Title: Sr. Environmental Manager
Phone: (270) 356-0756

Email: todd.cartwright@tyson.com

Name: Nicolae Plesa
Title: PSM Coordinator
Phone: (615) 855-3941
Email: nicolae.plesa@tyson.com

Name: Brian Coleman
Title: Safety Manager
Phone: (270) 599-2114
Email: brian.coleman@tyson.com

Name: Falah Al-Saadawi
Title: Complex Manager
Phone: (469) 579-7467
Email: falah.al-saadawi@tyson.com

Name: Kalani Johnson
Title: Refrigeration Supervisor
Phone: (615) 497-5350
Email: kalani.johnson@tyson.com

Name: Jason Dyer
Title: Maintenance Manager II
Phone: (309) 558-9097
Email: Jason.dyer@tyson.com

Note: This is not a union facility.

Date and Program Levels of Submitted Risk Management Plan

Date of initial submission: April 16, 2001
Date of most recent submissions: April 22, 2024
Process: Ammonia Refrigeration
Process ID: 1000139840
Program Level as reported in RMP: 3
NAICS code: 311612 (Meat Processed from Carcasses)

3.0 Observations

The inspection of the Tyson 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 ammonia refrigeration 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 Tyson facility are discussed below:

1. 40 C.F.R. § 68.73(c) requires the owner or operator to train each employee involved in maintaining the on-going integrity of process equipment in an overview of that process and its hazards and in the procedures applicable to the employee's job tasks to assure that the employee can perform the job tasks in a safe manner.

    - A release of ammonia occurred on October 3, 2024, while an employee was changing a filter on a compressor (800GL#1). According to the incident report, the release was caused by excessive grease on a gasket which caused the top of the gasket to be pushed out allowing ammonia vapors to escape.

      The "Five Why?" section of the report, states,

      "1. GASKET PUSHED OUT
      2. GREASE ON BOTH SIDES OF GASKET
      3. TO KEEP THE GASKET IN PLACE WHILE INSTALLING THE HATCH
      4. EXCESSIVE GREASE APPLIED
      5. THEY WERE UNDER THE ASSUMPTION THAT GREASE WAS NEEDED ON BOTH SIDES OF GASKET"

      Had the employee been trained on the proper way to apply grease on gaskets while changing filters, the release could have been avoided.

2. 40 C.F.R. § 68.73(d)(3) requires the frequency of inspections and tests of process equipment to be consistent with applicable manufacturers' recommendations and good engineering practices, and more frequently if determined to be necessary by prior operating experience.

    - Facility representatives provided the mechanical integrity program policy for compressors (Document: PSMP 907). The document states that vibration analyses should be conducted on a semi-annual basis. Facility representatives also provided the vibration analyses from the past two years; however, there was an 11-month gap between analyses for compressor 400GL #1 (FES 400GL, S/N V0387, CT# 00317012) from November 2022 to October 2023.

3. 40 C.F.R. § 68.73(e) requires the owner or operator to correct deficiencies in equipment that are outside acceptable limits (defined by the process safety information in 40 C.F.R.

§ 68.65) before further use or in a safe and timely manner when necessary means are taken to assure safe operation.

- Facility representatives provided the reports from the vibration analyses performed on the compressors in the engine room. The reports for the following equipment found excessive vibration and "Urgency" ranging from "significant" to "serious" over a two-year period (May 04, 2022 – October 02, 2024). The table below indicates the results of each analysis performed on each compressor:

Date of Analysis	400GL#1	565GL#1	800GL#1	800GL#2
May 2022	Significant	Normal	Normal	Significant
November 2022	Serious	Normal	Normal	Significant
April 2023	Not found	Normal	Significant	Significant
October 2023	Serious	Normal	Serious	Significant
April 2024	Serious	Significant	Serious	Serious
October 2024	Not found	Significant	Serious	Serious

The reports give explanations as to why the vibrations are occurring and what corrective actions to take. However, the excessive vibration persists in the listed compressors.

Inspection Report,

JORDAN NOLES

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

Approved by:

JASON DRESSLER

Digitally signed by JASON DRESSLER
Date: 2025.01.31 12:34:15 -05'00'

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