United States Environmental Protection Agency / Region 4

Risk Management Program Inspection Report

Air Products, Gallatin

Gallatin, Tennessee
December 5, 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 Hydrogen process at the Air Products, Gallatin (AP) facility located in Gallatin, Sumner County, Tennessee. This facility was selected for inspection because it had never been inspected by EPA under the RMP. The inspection, which was conducted on December 5, 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 before and during the inspection. This report will provide a background of the facility and a listing of observations.

2.0 Background

The AP facility is located in Gallatin, Tennessee. The facility uses Hydrogen for steam reforming of natural gas. The process is regulated as program level 3. According to facility records, the facility has a maximum of 16,872 pounds of Hydrogen on site. The Hydrogen 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, U.S. EPA R4
Inspector: Jordan Noles, U.S. EPA R4

Date of Facility Visit: December 5, 2024

Facility Identification

Name: Air Products, Gallatin
Street Address: 1315 Airport Road
City: Gallatin County: Sumner State: Tennessee Zip: 37066
EPA Facility ID No: 1000 0002 9177
Dun & Bradstreet (D&B) No: 3001070
Latitude: 36.371493
Longitude: -86.423903

Name, address and phone of corporate parent company:
Owner/Operator: Air Products and Chemicals, Inc.
Mailing Address: 1940 Air Products Boulevard City: Allentown State: Pennsylvania
Zip: 18106
Phone: (610) 481-7711

Name, title, and email of person responsible for 40 C.F.R. Part 68 implementation:
Name: Steve Young
Title: Site Manager
Phone: (734) 757-7039
Email: Youngsr1@airproducts.com

Name and title of emergency contact:
Name: Steve Young
Title: Site Manager
Phone: (734) 757-7039
24-hour Phone: (815) 323-0430
Email: Youngsr1@airproducts.com

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

Name: Don Rogers
Title: Ops Specialist
Phone: (586) 553-5383
Email: RogersD1@airproducts.com

Name: Amanda Sanguinett
Title: Environmental Specialist
Phone: (484) 885-3272
Email: Sanguiaa@airproducts.com

Name: David Kristoffersen
Title: Site Supervisor
Phone: (815) 323-0430
Email: Kristodm@airproducts.com

Note: This is not a union facility.

Date and Program Levels of Submitted Risk Management Plan

Date of initial submission: June 14, 1999
Date of most recent submissions: May 6, 2024
Process: H2 Storage & Reformer Pit
Process ID: 1000141400
Program Level as reported in RMP: 3
NAICS code: 32512 (Industrial Gas Manufacturing)

3.0 Observations

The inspection of the AP 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 hydrogen 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 AP facility are discussed below:

1. 40 C.F.R. § 68.30(c) requires the owner or operator to use the most recent Census data, or other updated information, to estimate the population potentially affected.

    - The facility is using 2010 Census data to estimate the population that could be potentially affected by a worst-case scenario release of hydrogen and an alternative release scenario of hydrogen. However, the most recent Census data currently out is 2020.

2. 40 C.F.R. § 68.65(d)(1)(i-viii) requires the Process Safety Information (PSI) to contain information pertaining to the equipment in the process. (1) Information pertaining to the equipment in the process shall include: (i) Materials of construction; (ii) Piping and instrument diagrams (P&ID's); (iii) Electrical classification; (iv) Relief system design and design basis; (v) Ventilation system design; (vi) Design codes and standards employed; (vii) Material and energy balances for processes built after June 21, 1999; and (viii) Safety systems (e.g. interlocks, detection or suppression systems).

- The inspection team requested PSI before and during the inspection. The inspection team was able to review the materials of construction, P&ID’s, electrical classification, relief system design and design basis, material and energy balances, and safety systems. The design codes and standards employed were not available during the inspection. At the time of writing this report, the EPA has not received documentation pertaining to the facility’s design codes and standards employed.

3. 40 C.F.R. § 68.67(f) requires that at least every five (5) years after the completion of the initial process hazard analysis (PHA), the PHA shall be updated and revalidated by a team meeting the requirements in 40 C.F.R. § 68.67(d), to assure that the PHA is consistent with the current process. Updated and revalidated PHAs completed to comply with 29 C.F.R. 1910.119(e) are acceptable to meet this requirement. In addition, 40 C.F.R. § 68.67(g) requires the owner or operator to retain PHAs and updates or revalidations for each process covered by this section, as well as the documented resolution of recommendations described in 40 C.F.R. § 68.67(e) for the life of the process.

   - The inspection team requested the most recent PHA before and during the inspection. At the time of writing this report, the EPA has not received documentation pertaining to the facility’s most recent PHA.

4. 40 C.F.R. § 68.69(c) requires the operating procedures to be reviewed as often as necessary to assure that they reflect current operating practice, including changes that result from changes in process chemicals, technology, and equipment, and changes to stationary sources. The owner or operator shall certify annually that these operating procedures are current and accurate.

   - During the inspection, operating procedures were reviewed. However, the inspection team was not provided with three years’ worth of annual certifications that operating procedures were reviewed, are current, and accurate.

5. 40 C.F.R. § 68.73(d) requires: (1) Inspections and tests to be performed on process equipment; (2) Inspection and testing procedures shall follow recognized and generally accepted good engineering practices; (3) The frequency of inspections and tests of process equipment shall be consistent with applicable manufacturers' recommendations and good engineering practices, and more frequently if determined to be necessary by prior operating experience; and (4) The owner or operator shall document each inspection and test that has been performed on process equipment. The documentation shall identify the date of the inspection or test, the name of the person who performed the inspection or test, the serial number or other identifier of the equipment on which the inspection or test was performed, a description of the inspection or test performed, and the results of the inspection or test.

- The inspection team requested the most recent mechanical integrity testing, which was a Non-Destructive Testing of process equipment, before and during the inspection. At the time of writing this report, the EPA has not received documentation pertaining to the facility's Non-Destructive Testing.

6. 40 C.F.R. § 68.200, requires the owner or operator to maintain records supporting the implementation of 40 C.F.R. Part 68 at the stationary source for five years, unless otherwise provided in 40 C.F.R. Part 68, Subpart D.

   - During the inspection, the inspection team was not provided with the following: Design codes and standards employed in the PSI; the most recent PHA; three years' worth of annual certifications of operating procedures; and mechanical integrity testing.

Inspection Report,

JUSTIN STARK

Digitally signed by JUSTIN STARK
Date: 2025.02.10 16:06:56 -05'00'

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

Approved by:

JASON DRESSLER

Digitally signed by JASON DRESSLER
Date: 2025.02.11 14:33:12 -05'00'

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