UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604

SUBJECT: CLEAN AIR ACT INSPECTION REPORT
SABIC Innovative Plastics, Ottawa, Illinois

FROM: Charles Hall, Environmental Engineer
AECAB (MN-OH)

THRU: Brian Dickens, Section Chief
AECAB (MN-OH)

TO: File, SABIC Innovative Plastics, Ottawa, Illinois

BASIC INFORMATION

Facility Name: SABIC Innovative Plastics,

Facility Location: 2148 North 2753rd Street, Ottawa, Illinois

Dates and Times of Inspection and Videoconference:

Date	Start	Finish
24 July 2023	12:55 hrs CDT	17:40 hrs CDT
25 August 2023	08:00 hrs CDT	09:40 hrs CDT

EPA Inspectors:

1. Charles Hall, U.S. EPA, R5, ECAD, AECAB, MN/OH AECAS
2. Silvia Palomo, U.S. EPA, R5, SEMD, ERB1, CEPPS
3. Matthew Walters, R5, ECAD, AECAB, MN/OH AECAS (08/25/2023 only)

Other Attendees:

1. Nathan Burke, Chemical Operations Manager
2. Michelle Kohr, Environmental, Health, Safety, & Security Manager (08/25/2023 only)
3. Terry Tecklenburg, Air Environmental Engineer
4. Pete Trolinger, Senior Process Engineer
5. Keith Vogl, Maintenance Manager (08/25/2023 only)

Contact Email Address: michelle.kohr@sabic.com

Purpose of Inspection: CAA 112(r) inspection

Facility Type: manufacturer of specialty plastic and resin products

Regulations Central to Inspection: 40 C.F.R. Part 68

Inspection Type:

☐ Unannounced Inspection
☒ Announced Inspection

OPENING CONFERENCE

☒ Presented Credentials
☒ Stated authority and purpose of inspection.
☐ Provided Small Business Resource Information Sheet.
☒ Small Business Resource Information Sheet not provided because SABIC is not a Small Business.
☒ Provided CBI warning to facility.

The following information was obtained verbally from the facility representatives.

Process Description: SABIC receives acrylonitrile in rail tank cars and stores them in the railyard outside the fence line until they are moved to the unloading rack. SABIC unloads acrylonitrile into one of two 500,000-gallon tanks with a fixed roof with internal floating roof. The maximum weight of acrylonitrile in each is 3.36 million pounds. SABIC receives 1,3-butadiene in river barges and unloads it into one of two spheres. The east sphere has a volume of 634,000 gallons. The maximum weight of 1,3-butadiene in the east sphere is 3.33 million pounds. The west sphere has a volume of 432,000 gallons. The maximum weight of 1,3-butadiene in the west sphere is 2.27 million pounds. SABIC transfers each chemical in separate pipe racks to the various reactors. SABIC has additional equipment to remove the inhibitor from 1,3-butadiene.

Staff Interview: The staff interview used the RMP Program Level 3 Process Checklist as an outline and focused on questions A10–12, B1–35, Section D, Section E, Section G, and H2. Some of the SABIC representatives were not available on the day of the inspection. Consequently, on July 24, 2023, the inspectors focused on seeing the receiving and process equipment. EPA and SABIC representatives met on August 25, 2023, for a follow up discussion.

TOUR INFORMATION

EPA Tour of the Facility: Yes.

Data Collected and Observations: The RMP Program Level 3 Process Checklist (Appendix B) summarizes the observations of whether SABIC has the required documents in its Risk Management Plan.

Photos were taken during the inspection.

Field Measurements were not taken during the inspection.

RECORDS REVIEW

Before the inspection, the inspector requested the following documents:

1. Management structure in terms of RMP and who has responsibility for the different program elements and how that is documented;
2. Off-site Consequence Analysis supporting documentation;
3. Process Safety Information;
4. Process Hazard Analysis;
5. Operating Procedures specific to the covered process;
6. Lockout/Tagout procedures;
7. Training documentation on employees who operate and maintain the covered process;
8. Mechanical Integrity program procedures;
9. Management of Change written procedures;
10. Pre-Startup Safety Reviews completed in the covered process areas;
11. Compliance Audits, the two most recent audits, audit reports, findings of the audits, and how these findings have been resolved or corrected. (if applicable);
12. Incident Investigations performed for each of the covered processes, reports from the investigations, documentation on how the report findings and recommendations were addressed and resolved;
13. Employee participation plan of action regarding the implementation of the employee participation;
14. Hot work permit program/policy, examples of active permits issued for the processes;
15. Contractor policy, a list of contractors who have worked on or near the covered processes within the past two years, documentation on the safety performance and programs evaluated when selecting a contractor, work practices that control the entrance/exit or present of contractors, documentation on how applicable provisions of the emergency response program are explained to contractors; and
16. Emergency Response Plan or Emergency Action Plan.

CLOSING CONFERENCE

☒ Provided U.S. EPA point of contact to the facility.

Requested documents:

Before the inspection, the inspector requested the following documents:

- The Off-Site Consequence Analyses;
- The Process Safety Information;
- The Process Hazardous Analysis;
- Training records for three randomly selected employees;
- The Management of Change documents;
- The Pre-Startup Safety Review documents;

- The Compliance Audits;
- The Incident Investigation documents;
- The Employee Participation documents;
- The Hot Work Permit documents; and
- The Contractors documents.

After the August 25, 2023, videoconference, Hall and Walters requested the following information:

- Electrical classification diagrams;
- Emergency response documentation;
- Documentation for worst and alternative case scenario items in 68.39;
- Identification of the operating procedures that contain the operator response to high oxygen content in the North Butadiene Charge Tank, South Butadiene Charge Tank, and Decant Tank;
- Identification of the operating procedures that contain the operator response to excessive pressure in the North Butadiene Charge Tank and South Butadiene Charge Tank; and
- Identification of the items in the PHA that address the hazards of popcorn polymer formation

Compliance Assistance: The inspectors did not provide compliance assistance.

Concerns: During the August 25, 2023, follow up meeting with the SABIC representatives, Hall identified one area of concern. EPA raised concerns over the calculation of the worst-case scenario, but after further review, the inspectors do not have a concern at this time.

DIGITAL SIGNATURES

Report Author: CHARLES HALL Digitally signed by CHARLES HALL Date: 2023.09.21 14:30:17 -05'00'

Section Chief: BRIAN DICKENS Digitally signed by BRIAN DICKENS Date: 2023.09.21 15:01:04 -05'00'

APPENDICES AND ATTACHMENTS

A. Digital Image Log

B. RMP Program 3 Checklist