



REGION 5

CHICAGO, IL 60604

MEMORANDUM

SUBJECT: CLEAN AIR ACT INSPECTION REPORT
ASK Chemicals, Cleveland, Ohio

FROM: Veronica Fischer, Environmental Engineer
AECAB (MI/WI)

THRU: Sarah Marshall, Section Supervisor
AECAB (MI/WI)

TO: File

BASIC INFORMATION

Facility Name: ASK Chemicals

Facility Location: 2191 West 110th Street, Cleveland, OH 44102

Date of Inspection: April 23, 2024

EPA Inspector(s):

1. Veronica Fischer, Environmental Engineer
2. Giles Chickering, Environmental Engineer

Other Attendees:

1. Rich Daff, Plant Manager
2. Steven Henson, EHS Manager
3. John Mural, Operations Manager

Contact Email Address: Richard.Daff@ask-chemicals.com

Purpose of Inspection: To evaluate compliance with the facility's operating permit and the Ohio SIP

Facility Type: Chemical and resin manufacturing facility

Regulations Central to Inspection: Federally enforceable state operating permit and the Ohio SIP

Facility Name: ASK Chemicals
Facility Location: 2191 West 110th St, Cleveland, OH
Date of Inspection: April 23, 2024

Arrival Time: 9:05 AM EDT

Departure Time: 11:30 AM EDT

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.
- ☒ Provided CBI warning to facility

The following information was obtained verbally from ASK Chemicals personnel unless otherwise noted.

Process Description:

ASK Chemicals (ASK) owns and operates a chemical manufacturing facility in Cleveland, Ohio that produces chemicals and resins for use in foundries. ASK primarily produces a two-part resin for the formation of foam molds for metal casting. Part 1 is the phenolic resin base, while part 2 is the isocyanate catalyst. The facility also has another catalyst blending operation for amine-based and vinyl catalysts and has a chemical repackaging operation.

The phenolic resin production process is performed in two batch reactors. Emissions from the reactor are controlled by a caustic scrubber. ASK also operates a methanol recovery unit. The methanol recovery unit consists of a vacuum distillation process to remove water from methanol so that it can be recycled to the process. The methanol vacuum distillation column is also controlled by the caustic scrubber. The caustic scrubber is used to control volatile organic chemical (VOC) emissions, including formaldehyde and methanol.

In the catalyst blending process, the isocyanate catalyst is blended with various solvents depending on the product. ASK has two blend tanks dedicated to the isocyanate catalyst blending operation. The facility has one other blend tank for blending various amine-based or vinyl catalysts with solvents. The isocyanate blending tanks are not controlled for emissions, however the amine blending tank has a vapor balance system and an acid scrubber.

ASK also repackages bulk amines into smaller volume drums and totes. This operation is also controlled by an acid scrubber.

Staff Interview:

The caustic scrubber is monitored for pH and differential pressure. The pH is monitored by sampling, which is conducted every four hours. The scrubber must maintain an overall control efficiency of 85 percent and the pH is required to be maintained between 11.5 and 14.0, as required by the facility's operating permit. Differential pressure is continuously monitored, is alarmed, and is required to be maintained between 2.0 and 7.0 inches of water.

TOUR INFORMATION

EPA Toured the Facility: Yes

Data Collected and Observations:

EPA inspectors used an optical gas imaging (OGI) camera to monitor equipment for VOC emissions. Emissions were observed from a filter and from the caustic scrubber stack.

Photos and/or Videos: were taken during the inspection and are listed in Appendix A.

Field Measurements: were not taken during this inspection.

CLOSING CONFERENCE

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

Requested documents:

- Reports for any engineering study or performance test for the caustic scrubber
- Emissions calculations (preferably in Excel format) for the last three years
- Quarterly deviation reports for the last three years
- PERs for the last three years
- Batch tickets for April 23, 2024 (day of inspection) to show what was being routed to the caustic scrubber at the time of the inspection

Concerns:

EPA inspectors reviewed the emissions that were observed with the OGI camera with ASK personnel.

DIGITAL SIGNATURES

Report Author: **VERONICA FISCHER**
 Digitally signed by VERONICA FISCHER
Date: 2024.06.21 11:22:00 -05'00'

Section Supervisor: **SARAH MARSHALL**
 Digitally signed by SARAH MARSHALL
Date: 2024.06.21 11:30:25 -05'00'

Facility Name: ASK Chemicals
Facility Location: 2191 West 110th St, Cleveland, OH
Date of Inspection: April 23, 2024

APPENDICES

1. Appendix A: Digital Image Log and Digital Video Log

Facility Name: ASK Chemicals
Facility Location: 2191 West 110th St, Cleveland, OH
Date of Inspection: April 23, 2024

APPENDIX A: DIGITAL IMAGE LOG AND DIGITAL VIDEO LOG

Inspector Name: Veronica Fischer **Archival Record Location:** ERC/Enf_ASK
Chemicals_OH_24/Inspection/Videos

Image Number	File Name	Date and Time (EDT)	Latitude and Longitude	Description of Image
1	FLIR0155.mp4	9:22 AM	-	Filter
2	FLIR0156.mp4	9:37 AM	-	Connector on R301
3	FLIR0157.mp4	10:03 AM	-	Emissions from top of building
4	FLIR0158.mp4	10:07 AM	-	Emissions from caustic scrubber stack