



REGION 5

CHICAGO, IL 60604

MEMORANDUM

SUBJECT: CLEAN AIR ACT INSPECTION REPORT
NSG Glass North America, Inc.

FROM: Manojkumar P. Patel, Environmental Engineer
AECAB (MI/WI)

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

TO: File

BASIC INFORMATION

Facility Name: NSG Glass North America, Inc.

Facility Location: 21705 Pemberville Rd, Luckey, Ohio 43443

Date of Inspection: September 30, 2024

EPA Inspector(s):

1. Manojkumar P. Patel, Environmental Engineer

Other Attendees:

1. Matt James, Plant Manager, NSG Glass North America, Inc.
2. Ashley Gerken, Environmental, Health and Safety Specialist, NSG Glass North America, Inc.
3. Andrea Marrs, North America Sustainability Manager, NSG Glass North America, Inc.
4. Jenna Haviland, Coating Process Improver, NSG Glass North America, Inc.
5. Evan Pelton, Coating Manager, NSG Glass North America, Inc.
6. Andy Marckel, Assistant Plant Manager, NSG North America, Inc.

Contact Email Address: cathy.shell@nsg.com

Purpose of Inspection: Compliance with the Prevention of Accidental Releases found in Section 112(r) of the Clean Air Act (CAA), 42 U.S.C. § 7412(r)

Facility Name: NSG Glass North America, Inc.
Facility Location: 21705 Pemberville Road, Luckey, OH 43443
Date of Inspection: September 30, 2024

Facility Type: Flat Glass Manufacturing (NAICS: 327211)

Regulations Central to Inspection: The Chemical Accident Prevention Provisions at 40 C.F.R. Part 68, commonly referred to as the Risk Management Program

Arrival Time: 8:30 AM EST

Departure Time: 5:15 PM EST

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. Reason: Not a small business
- ☒ Provided CBI warning to facility

The following information was obtained verbally from the facility personnel unless otherwise noted.

Process Description:

NSG Glass North America, Inc. (the facility) owns and operates a float glass manufacturing operations at 21705 Pemberville Road, Luckey, Ohio. The facility produces coated specialty purpose glass mainly used by the solar industry. On or about November 2020, the facility started manufacturing the float glass.

The facility employs about one hundred forty-seven (147) full time employees and operates 24 hours per day for 365 days per year. The facility uses anhydrous Hydrogen Fluoride (HF) for the coating operations.

The facility's HF system contains two (2) HF barrel cabinets. These barrels are supplied on a pallet, designed for handling by a forklift truck. When changing an HF barrel, the new barrel can either be used in the same (duty) barrel cabinet as the previous barrel, or in the standby barrel cabinet according to production requirements. The HF vapor from the HF cabinets is carried over into a common header which is connected to the regenerative thermal oxidizer where all vapor is destroyed.

TOUR INFORMATION

EPA Toured the Facility: Yes

Data Collected and Observations:

Risk Management Program Applicability

The facility describes its operations as under the North Industrial Classification Standards (NAICS) code 327211 (Flat Glass Manufacturing). This NAICS code is not listed under the eligible NAICS code under the RMP regulations. However, the covered process meets the Program Level 3 eligibility requirements because the covered processes are subject to the Occupational Health and Safety Agency (OSHA) Process Safety Management standards at 29 C.F.R. § 1910.190 and it satisfies the requirements at 40 C.F.R. § 68.10(l)(2).

Management System

EPA requested documentation of the management system for implementing elements of the RMP, as specified in 40 C.F.R. § 68.15(a). The facility provided records of a RMP management system at the time of inspection.

The facility was able to provide an assigned qualified person or position that has the overall responsibility for the development, implementation, and integration of RMP elements. Also, an organizational chart or similar document was made available to EPA demonstrating the individual requirements of RMP.

Process Safety Information

The facility will provide the Process Safety Information for EPA's review to a SharePoint site. The facility personnel stated that it will review the confidential business information (CBI) and upload the public version of the information separately from the CBI version.

Process Hazards Analysis (PHA)

The facility used the Hazard and Operability Study (HAZOP) method for conducting the PHA in the initial one that occurred in or around November 2020. EPA observed that a majority of the 2020 PHA actions items and recommendations were completed within the required target deadlines.

Operating Procedures

The facility will provide all operating procedures for EPA's review to a SharePoint site. The facility stated that all operating procedures are readily accessible by employees who are involved in the covered processes. The facility informed EPA during the inspection that the facility annually certifies that operating procedures are current and accurate, and they are reviewed to assure the facility's

current operating practices. EPA was unable to verify the facility's claim about the annual certification.

Training

The facility provided a list of all affected employees that are covered under the training requirement under the RMP. All training records were provided, and EPA will review the training records.

Mechanical Integrity

The facility claims that it has established and developed written procedures to maintain the ongoing integrity of the process equipment. EPA requested inspection, calibration, testing records for HF barrels, HF Cabinets, HF sensors, interlocks on the HF system, and pressure safety valves (PSVs).

EPA did not verify that the inspections and the required testing was performed on all process equipment. The facility will provide documents demonstrating that it followed RAGAGEP for inspections and tests on all covered equipment.

Management of Change

The facility informed EPA that it established and implemented written procedures to manage change to process chemicals, technology, and equipment. EPA reviewed a list of Management of Change (MOC) in the last 5 years and requested that the facility upload all information related to the MOCs to a shared folder provided by EPA.

Compliance Audits

EPA received a copy of the April 2024 Compliance Audit checklist and is reviewing the findings.

Contractors

EPA requested the facility upload all contractor related policies and procedures. EPA was unable to verify how the facility evaluates information about contractor's safety performance when it selects a contractor.

Emergency Response

The facility informed EPA that the facility is not designated as a "responding source" under RMP emergency response program.

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

The facility also claims four (4) photos as CBI.

Field Measurements: were not taken during this inspection.

CLOSING CONFERENCE

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

Requested documents:

- Management structure in terms of RMP and who has responsibility for the different program elements and how that is documented.
- Off-site Consequence Analysis supporting documentation.
- Process Safety Information (which includes SDS, block flow diagram or simplified process flow diagrams, process narrative descriptions, process chemistry, intended inventories, upper and lower limits, consequences of deviation, materials of construction, P&ID's, Electrical Classification Drawings, Relief Systems and their design basis, Ventilation System designs, Design Codes and standards employed, material and energy balances, safety systems and their functions).
- Process Hazard Analysis (This includes any PHA worksheets, reports, recommendations specified, findings/recommendations to address, written schedules for actions to be completed, documentation for resolutions of findings and recommendations). Please also provide the policy on how you conduct PHA's and how to resolve items identified in you PHA. Dates of all PHA's conducted for covered processes. Provide the two most recent PHAs.
- Operating Procedures specific to the covered process (these procedures should include initial startup, charging procedures, normal operations, temporary operations, emergency shutdown, emergency operations, normal shutdown, startup following a turnaround or after emergency shutdown, in some cases procedures on receiving chemicals). Documentation on annual certifications of operating procedures.
- Lockout/Tagout procedures.
- Training documentation on employees who operate and maintain the covered process. This includes a list of all employees presently involved in operating/maintaining the processes (please include names, job titles, shifts, supervisors), training that is required for new employees and existing employees, what is included in refresher training and how often is refresher training conducted, how the company makes sure that employees are trained on operating procedures, test or some verification that employees have understood training.
- Mechanical Integrity program procedures. This includes a listing of all covered equipment in covered processes (i.e., vessels, reactors, pressure relief valves and devices, valves, pumps,

pipng, alarms, controls), task specific instructions, documentation on inspections/testing/repairs of covered process equipment.

- Management of Change written procedures. A listing of MOC's completed within the past two years for each of the covered process areas specified.
- Pre-Startup Safety Reviews completed in the covered process areas.
- Compliance Audits, the two most recent audits, audit reports, findings of the audits, and how these findings have been resolved or corrected. (if applicable)
- 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.
- Employee participation plan of action regarding the implementation of the employee participation.
- Hot work permit program/policy, examples of active permits issued for the processes.
- 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.
- Emergency Response Plan or Emergency Action Plan, include supporting documentation for the annual coordination activities with the local response organizations (LEPC and Fire Department) and a statement of facility designation: responding stationary source or not and related records.

DIGITAL SIGNATURES

Report Author: **MANOJKUMAR PATEL**
Digitally signed by MANOJKUMAR PATEL
Date: 2024.11.06 15:05:05 -06'00'

Section Supervisor: **SARAH MARSHALL**
Digitally signed by SARAH MARSHALL
Date: 2024.11.06 15:07:30 -06'00'

APPENDICES

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

Facility Name: NSG Glass North America, Inc.
Facility Location: 21705 Pemberville Road, Luckey, OH 43443
Date of Inspection: September 30, 2024

APPENDIX A: DIGITAL IMAGE LOG AND DIGITAL VIDEO LOG

Inspector Name: Manojkumar P. Patel

Archival Record Location: [RMP Inspection Sept 30](#)

[Pictures](#)

Image Number	File Name	Date and Time (incl. Time zone and DST)	Description of Image
1			
2	P9300451.JPG	9/30/2024 9:56	HF Gas Detector
3	P9300452.JPG	9/30/2024 9:57	Air Recirculation in the HF Barrel
4	P9300453.JPG	9/30/2024 9:58	Air Recirculation from HF Left Barrel to PCP
5	P9300454.JPG	9/30/2024 10:00	Right HF Barrel
6	P9300455.JPG	9/30/2024 10:00	Two HF Gas Sensors (1st - Right HF Cabinet; 2nd for the Barrel Room
7	P9300456.JPG	9/30/2024 10:02	Right HF Barrel Air Recirculation on the Left - Right to PCP
8	P9300457.JPG	9/30/2024 10:03	Butterfly Valve on the Left HF Barrel
9	P9300458.JPG	9/30/2024 10:08	Flow Transmitter on Left HF Barrel
10	P9300459.JPG	9/30/2024 10:08	Fixed Speed Pump on the Left HF Barrel
11	P9300460.JPG	9/30/2024 10:15	Flow Transmitter in the Barrel Room to Ventilation Line - Open to Atmosphere @12 air exchanges / hour
12	P9300461.JPG	9/30/2024 10:22	Right HF Barrel HF Pressure Indicator
13			
14			
15			
16	P9300465.JPG	9/30/2024 10:44	HF Metering Devices with Recirculation Lines
17	P9300466.JPG	9/30/2024 10:47	Control Panels HF Gas Detectors and Alarm
18	P9300467.JPG	9/30/2024 10:47	HF Gas Sensors Metering Devices
19	P9300468.JPG	9/30/2024 10:51	Metering HF and N2
20	P9300469.JPG	9/30/2024 10:53	HF Room Exterior HF Alarm and E-Stop
21	P9300470.JPG	9/30/2024 10:54	HF Room Entrance HF Gas Alarms
22	P9300471.JPG	9/30/2024 10:56	N2 Purge Line PT179 to PCP
23	P9300472.JPG	9/30/2024 10:58	ID Fan Vacuum for PCP

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