

RCRA Inspection Report

1) Inspector and Author of Report

William Kappler
Physical Scientist
Phone: (404) 562-8498
kappler.william@epa.gov

U.S. Environmental Protection Agency, Region 4
Enforcement and Compliance Assurance Division
Chemical Safety and Land Enforcement Branch
RCRA Enforcement Section
61 Forsyth Street, S.W.
Atlanta, Georgia 30303

2) Facility Information

Corning, Inc., Durham Facility
1 Becton Circle
Durham, North Carolina 27712

EPA ID #: NCD982128498
NAICS #: 339113 - Surgical Appliances/Supplies
NAICS #: 327215 – Glass Product Manufacturing

3) Responsible Officials

Robert Geist
EHS Manager
geistr@corning.com
(919) 450-8895

4) Inspection Participants

Lizbeth Simonds, Corning, Inc., Durham Facility
Robert Geist, Corning, Inc., Durham Facility
Michael Rodgers, Corning, Inc., Durham Facility
Abraham DiPera, Corning, Inc., Durham Facility
Jim Edmonston, Corning, Inc., Durham Facility
Morgan Askew, Corning, Inc., Durham Facility
Aram Kim, North Carolina Department of Environmental Quality (NCDEQ)
William Kappler, U.S. Environmental Protection Agency, Region 4

5) Date of Inspection

May 14, 2024, at 9:10 a.m.

6) Applicable Regulations¹

Resource Conservation and Recovery Act (RCRA) Sections 3002 (42 U.S. Code – Annotated U.S.C.A. 6925 and 6927), and 40 Code of Federal Regulation (C.F.R.) Parts 260 - 270, 273, 278, &

¹ As the State's authorized hazardous waste program operates in lieu of the federal RCRA program, the citations of those authorized provisions will be to the authorized State program. However, for ease of reference, the federal citations will follow in brackets.

279; The North Carolina Solid Waste Management Law, N.C.G.S. § 130A-17 to -28 and 130A-290 to -310.22, and North Carolina Hazardous Waste Management Rules, 15A NCAC 13A .0101 to .0119.

Pursuant to 15A NCAC 13A .0102(b) [40 C.F.R. § 260.10], a large quantity generator of hazardous waste (LQG) is a generator who generates greater than or equal to 1,000 kilograms (2,200 pounds) of non-acute hazardous waste in a calendar month.

Pursuant to 15A NCAC 13A .0107 [40 C.F.R. § 262.15(a)], a generator may accumulate as much as 55 gallons of non-acute hazardous waste in containers at or near the point of generation where wastes initially accumulate, which is under the control of the operator of the process generating the waste, without a permit or without having interim status, as required by Chapter 403 of the Florida Statutes, Fla. Stat. § 403.702 et seq., [Section 3005 of RCRA, 42 U.S.C. § 6925], and without complying with F.A.C. Chapter 62-730.160(1), [40 C.F.R. § 262.16(b) or § 262.17 (a)], except as required in F.A.C. Chapter 62-730.160(1), [40 C.F.R. § 262.15(a)(7) and (8)], provided that the generator complies with the satellite accumulation area conditions listed in F.A.C. Chapter 62-730.160(1), [40 C.F.R. § 262.15(a)] (hereinafter referred to as the “SAA Permit Exemption”).

Pursuant to 15A NCAC 13A .0107 [40 C.F.R. § 262.17], a generator of 1,000 kilograms or greater of hazardous waste in a calendar month is a large quantity generator (LQG) and may accumulate hazardous waste on-site for 90 days or less without a permit or without having interim status, as required by Chapter 403 of the Florida Statutes, Fla. Stat. § 403.702 et seq., [Section 3005 of RCRA, 42 U.S.C. § 6925], provided that the generator complies with the conditions listed in F.A.C. Chapter 62-730.160(1) [40 C.F.R. § 262.17] (hereinafter referred to as the “LQG Permit Exemption”).

Pursuant to 15A NCAC 13A .0119(a) [40 C.F.R. § 273.9], a small quantity handler of universal waste (SQHUW) is a universal waste handler who does not accumulate 5,000 kilograms or more of universal waste (batteries, pesticides, mercury-containing equipment, lamps, or aerosol cans, calculated collectively) at any time.

7) Purpose of Inspection

The purpose of the inspection was to conduct a joint unannounced compliance evaluation inspection to determine the Corning, Inc Durham Facility hereinafter, (“Corning” or the “facility”) compliance with the applicable requirements of the Resource Conservation and Recovery Act (RCRA) and the corresponding North Carolina Department of Environmental Quality (NCDEQ) regulations. This was an EPA lead inspection.

8) Facility Description

Corning is located at 1 Becton Circle, Durham, Durham County, North Carolina at Latitude 36.092723, and Longitude -78.851298. The facility has been operating at this location since

2012. The total property consists of approximately 1.5 acres that is owned by Corning. The facility employs approximately 400 people and operates seven days per week, 24 hours per day on four shifts. The facility consists of one large building with approximately 500,000 square feet of space. The City of Durham provides potable water and sanitary sewer services. The facility Corning is a manufacturer of plastic laboratory hardware. Products include pipettes, flasks, and plates. The facility molds and packages the products on-site. The facility operates eight lines in which molding and/or injection of plastic form the various products. Parts of an item are fitted together by ultrasonic welding of the plastic part. Once this occurs, pallets of the packaged products are run through a gamma radiator for sterilization of the product. Hazardous waste is generated at the facility from the printing process used to mark measurements on some of the products. Two formulations of inks are used for the printing process. One is an ignitable ink and the other is a non-RCRA regulated UV ink. Used oil is generated from maintenance of the equipment.

Corning is also a manufacturer of glass laboratory hardware. Glass products consist of various size glass measuring instruments and vials. Raw glass is received in the form of five-foot rods. The glass is placed into an oven to prepare the glass to be formed or molded. Upon reaching temperature the glass is cut and is formed into the specified vial size. The vial is next inspected for quality and next placed into an oven in an annealing process to relieve internal glass stress, and from fracturing or shattering of the glass. The product is next processed in an automated spray coating system to reduce glass friction on the product. The product is next cured in an oven. After curing the product is inspected, packaged, and shipped.

Corning operates three ion-exchange process systems (ion-exchange units) to strengthen the glass product by exchanging potassium and sodium ions. Waste potassium nitrate is generated during the ion-exchange process and when spent is stored in a stainless steel lined concrete pit (salt sheds). Corning has determined the waste potassium nitrate is an oxidizer (D001).

Hazardous waste generated at the facility may consist of waste flammable liquid, methanal, methylene chloride (D001, F002, F003) generated from the printing operations and waste potassium nitrate mixture (D001) generated from ion-exchange unit operations. Universal waste aerosol cans and used lamps are generated. Used oil is generated from machine operations and is shipped for recycling.

Hazardous waste is transported by Miller Environmental Group, Inc (NYD986908085) and Veolia ES Technical Solutions (NJD080631369). The designated facility consists of EQ Detroit, Inc (MID980991566) and to Veolia ES Technical Solutions (NCD986166338).

Corning originally notified the NCDEQ as a small quantity generator (SQG) of hazardous waste on October 25, 1999. Corning recently submitted a RCRA site notification form (EPA Form 8700-12) of its regulated waste activity to the NCDEQ on December 14, 2023, notifying as a large quantity generator (LQG) of hazardous waste (D001, D002, D003, D004, D006-D009, D011) and a small quantity handler of universal waste (SQHUW). AEI notified their NAICS number as

339113 - Surgical Appliances/ Supplies Manufacturing and NAICS number as 327215 – Glass Product Manufacturing – Purchased Glass.

9) Previous Inspection History

Corning was inspected by the NCDEQ on February 15, 2018, for compliance with state and federal hazardous waste regulations and found no apparent violations of the RCRA requirements.

Corning has never previously been inspected by the EPA for compliance with state and federal hazardous waste regulations.

10) Opening Conference

On May 14, 2024, EPA inspector William Kappler, accompanied by NCDEQ inspector Aram Kim, (inspectors) arrived at Corning at approximately 9:10 a.m. The inspectors were greeted at the front lobby reception by Corning personnel. The inspectors identified themselves and explained the purpose of the visit. The inspectors were asked to sign-in. The EPA inspector did not sign the log due to Corning's requirement of confidentiality. Sam Likeas, Head of Corning Security, immediately received the inspectors. The inspectors were informed that personnel identifiable information (PII) would be needed in the form of the inspector's driver's license to enter the birth date into Corning's database. The inspectors presented their credentials. The EPA informed Corning that PII could not be provided, and the US EPA inspection credentials presented to the facility was sufficient to enter the facility for a federal inspection. Michael Rodgers, Corning EHS Engineer received the inspectors and escorted inspectors to a conference room for an opening conference. The inspectors were joined by Lizbeth Simonds, Robert Geist, Abraham DiPera, Jim Edmonston, and Morgan Askew of Corning (Corning representatives) for the opening conference. The inspectors introduced themselves, showed their credentials and explained the purpose of the visit. The inspectors described the anticipated use of equipment (digital camera) during the inspection and provided a written list of records needed for review. The EPA inspector explained that the Small Business Regulatory Enforcement Fairness Act's classification of a "small business" is generally set by the Small Business Administration using the business' SIC/NAICS code and annual receipts or number of employees. A copy of the EPA's information sheet for small businesses can be found at https://www.epa.gov/sites/production/files/2017-06/documents/small_businessinfo.pdf. The EPA inspector also discussed the company's ability, pursuant to 40 C.F.R. § 2.203, to assert a business confidentiality claim for information submitted to EPA. The company did not assert a business confidentiality claim.

Corning representatives provided an overview of the history and current process operations during the opening conference. The inspection participants also discussed health and safety protocols and required personal protective equipment before Corning representative led the inspectors on a tour of the operations.

11) Inspection Observations

Finished Goods Warehouse

Products are received and stored in the warehouse prior to the sterilization process. Hazardous waste was not observed in this area at the time of the inspection.

Receiving Warehouse

Raw products are received for storage. Hazardous waste was not observed in this area at the time of the inspection.

Corning Pharmaceutical Technologies (CPT)

Corning manufacture glass products in the CPT line. The line is supported by eight converting areas that process the glass by softening, molding, and severing of the glass product. The three ion-exchange units (IOX- 102, IOX-103, and IOX-104) are each constructed with a 2,100-gallon capacity tank. IOX-104 began operating in June 2021. All the ion-exchange units became operational by December 2021. The waste potassium nitrate is transferred through a stainless-steel exhaust pipe to the salt shed. The ion-exchange units each have a SAA. Waste salt accumulated in the ion-exchange unit during the process is manually removed using a broom and dustpan and stored in the SAA container.

IOX- 102 SAA

The inspectors observed one 55-gallon container next to IOX-102 storing residual waste salt. The container was closed, in good condition, labeled with the words hazardous waste, and labeled with a 5.1 oxidizer pictogram (D001).

IOX-103 SAA

The inspectors observed one 55-gallon container next to IOX-103 storing residual waste salt. The container was closed, in good condition, labeled with the words hazardous waste, and labeled with a 5.1 oxidizer pictogram (D001).

IOX-104 SAA

The inspectors observed one 55-gallon container next to IOX-102 storing residual waste salt. The container was closed, in good condition, labeled with the words hazardous waste, and labeled with a 5.1 oxidizer pictogram (D001).

Salt Shed

The salt shed is located on the south side of the wall from the ion-exchange units in a large room constructed with a concrete floor and enclosed with walls and a roof. The inspectors observed four open stainless-steel lined concrete pits (pit), secured with guard rails, measuring from top to bottom of each pit between 33 feet 2.5 inches to 32 feet 6.75 inches long by 12 feet 11 inches to 12 feet 3.5 inches wide by 3 feet 0.5 inches deep. Each of the three ion-exchange units discharge into a dedicated pit. Corning representatives indicated waste potassium nitrate is discharged through the pipe(s) as a molten liquid and begins to solidify as soon as it is stored in the pit. The solidified potassium nitrate is shipped to a designated facility

as hazardous waste (D001). Corning representatives indicated the potassium nitrate in each ion-exchange unit will need to be exchanged twice per year. The inspectors observed the pits were not storing waste potassium nitrate at the time of the inspection. The pits appeared clean and in good condition. The pits were not marked or labeled with the words hazardous waste or with an indication of the hazards at the time of this inspection (Photographs 2, 3, 4, 5, and 6).

On May 21, 2024, Corning emailed Sections 3.4 to 4.3.5 of their Hazardous Waste Management Plan – Rev. 1 (HWMP). The HWMP identified the pits as hazardous waste tanks and the applicable conditions in 40 C.F.R. § 265 Subpart J and Subparts BB and CC apply.

Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.17(a)(2)], which incorporates 15A NCAC 13A .0110(j) [40 C.F.R. § 265.192(a)], and is a condition of the LQG Permit Exemption, owners or operators of new tank systems or components must ensure that the foundation, structural support, seams, connections, and pressure controls (if applicable) are adequately designed and that the tank system has sufficient structural strength, compatibility with the waste(s) to be stored or treated, and corrosion protection so that it will not collapse, rupture, or fail. The owner or operator must obtain a written assessment reviewed and certified by a qualified Professional Engineer in accordance with § 270.11(d) of this chapter attesting that the system has sufficient structural integrity and is acceptable for the storing and treating of hazardous waste.

Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.17(a)(2)], which incorporates 15A NCAC 13A .0110 [40 C.F.R. § 265.1063(d)], and is a condition of the LQG Permit Exemption, owners and operators in accordance with the waste analysis plan required by § 265.13(b), an owner or operator of a facility must determine, for each piece of equipment, whether the equipment contains or contacts a hazardous waste with organic concentration that equals or exceeds 10 percent by weight.

Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.17(a)(2)], which incorporates 15A NCAC 13A .0110 [40 C.F.R. § 265.1084(a)(1)], and is a condition of the LQG Permit Exemption, waste determination procedure to determine average volatile organic (VO) concentration of a hazardous waste at the point of waste origination.

An owner or operator shall determine the average VO concentration at the point of waste origination for each hazardous waste placed in a waste management unit exempted under the provisions of § 265.1083(c)(1) of this subpart from using air emission controls in accordance with standards specified in § 265.1085 through § 265.1088 of this subpart, as applicable to the waste management unit.

Converting Lines

Michael Rodgers indicated to inspectors that there are eight converting lines numbered as CV-101 to CV-108. Each converting line may also consist of a used oil station. Not all the converting lines were operating at the time of this inspection.

Converting Line CV-103

The inspectors observed one 55-gallon container storing used oil that was closed and labeled with the words used oil and one 55-gallon container storing used oil rags that was closed and labeled as non-regulated and marked with words used oily rags.

Process Support Room

Equipment from the ion-exchange process units, converting lines and nozzles on the spray coat machines are cleaned using a solvent in this room.

The inspectors observed a 55-gallon container inside a yellow overpack container, and a funnel inserted into the 55-gallon container. The inspectors observed the funnel's lid appeared closed and latched in position, the container was in good condition, labeled with the words hazardous waste, and labeled with an indication of the hazards. The entire hazardous waste label and hazard indicator label could not be read, unless standing directly over the container (Photograph 1). The inspectors recommended that the facility consider using a containment system that provides a clear view of the container labels.

The inspectors observed a 10-gallon container storing waste n-propyl acetate/alcohol-soaked rags. The container was in good condition, labeled with the words hazardous waste, and labeled with an indication of the hazards. The inspectors observed the container's lid was not closed due to a rag partially sticking out of the container's rim. Corning representatives placed the rag back into the container and closed the lid.

Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.15(a)(4)], which is a condition of the SAA Permit Exemption, a generator is required to keep containers of hazardous waste closed at all times during accumulation, except when adding, removing, or consolidating waste; or when temporary venting of a container is necessary for the proper operation of equipment, or to prevent dangerous situations, such as build-up of extreme pressure.

Corning Pharmaceutical Technologies CAA

The inspectors observed hazardous waste was not stored in the CAA at the time of the inspection. The inspectors observed that a no smoking sign was not placed in the CAA.

The inspectors asked Corning representatives to conspicuously place no smoking signs in the CAA wherever there is a hazard from ignitable or reactive waste.

Corning Life Sciences (CLS) – Pipette Molding and Printing

Corning operates eight lines in which molding and/or injection of plastic form the various products. A printing process is used to mark metric measurements on the products.

25 Millimeter Line

The inspectors observed one 5-gallon container storing hazardous waste ink and solvent rags generated from the print process. The container was closed, in good condition, labeled with the words hazardous waste, and labeled with an indication of the hazards.

50 Millimeter Line

The inspectors observed one 5-gallon container storing hazardous waste ink and solvent rags generated from the print process. The container was closed, in good condition, labeled with the words hazardous waste, and labeled with an indication of the hazards.

10 Millimeter Line

The inspectors observed one 5-gallon container storing hazardous waste ink and solvent rags generated from the print process. The container was closed, in good condition, labeled with the words hazardous waste, and labeled with an indication of the hazards.

10 Millimeter Line

The inspectors observed a second 10-millimeter line with one 5-gallon container storing hazardous waste ink and solvent rags generated from the print process. The container was closed, in good condition, labeled with the words hazardous waste, and labeled with an indication of the hazards.

Five Millimeter Line

The inspectors observed one 5-gallon container storing hazardous waste ink and solvent rags generated from the print process. The container was closed, in good condition, labeled with the words hazardous waste, and labeled with an indication of the hazards.

Two Millimeter Line

The inspectors observed a second two-millimeter line with one 5-gallon container storing hazardous waste ink and solvent rags generated from the print process. The container was closed, in good condition, labeled with the words hazardous waste, and labeled with an indication of the hazards.

One Millimeter Line

The inspectors observed one 5-gallon container storing hazardous waste ink and solvent rags generated from the print process. The container was closed, in good condition, labeled with the words hazardous waste, and labeled with an indication of the hazards.

100 Millimeter Line

The inspectors observed one 5-gallon container storing hazardous waste ink and solvent rags generated from the print process. The container was closed, in good condition, labeled with the words hazardous waste, and labeled with an indication of the hazards.

Cell Culture and Cut Line

Corning manufactures the Petrie dishes and flasks in this area.

Flask Line 3

The inspectors observed one 5-gallon container storing hazardous waste. The container was closed, in good condition, labeled with the words hazardous waste, and labeled with an indication of the hazards.

Flask Line 6

The inspectors observed one 5-gallon container storing hazardous waste. The container was closed, in good condition, labeled with the words hazardous waste, and labeled with an indication of the hazards.

Indoor Central Accumulation Area (CAA)

Corning operates a CAA in the CLS. The inspectors observed one 55-gallon container storing hazardous waste liquid (D001) with a funnel inserted into the container and one closed 55-gallon container storing hazardous waste solid (D001). The containers were in good condition, with aisle space, labeled with the words hazardous waste, labeled with an indication of the hazards, and marked with the date March 25, 2024, and May 8, 2024. The inspectors observed the lid on the funnel inserted in the container storing hazardous waste liquid did not appear to be closed. The inspectors observed a no smoking sign posted on the wall (Photograph 8).

Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.17(a)(1)(iv)(A)], which is a condition of the LQG Permit Exemption, a container holding hazardous waste must always be closed during accumulation, except when it is necessary to add or remove waste.

The inspectors also observed one closed 55-gallon container storing aerosol cans, in good condition, and labeled with the words universal waste. The inspectors observed the container was not marked with a date (Photograph 7).

Pursuant to 15A NCAC 13A .0119(a) [40 C.F.R. 273.15(c)] A SQHUW who accumulates universal waste must be able to demonstrate the length of time that the universal waste has been accumulated from the date it becomes a waste or is received. The handler may make this demonstration by:

- (1) Placing the universal waste in a container and marking or labeling the container with the earliest date that any universal waste in the container became a waste or was received;**
- (2) Marking or labeling each individual item of universal waste (e.g., each battery or thermostat) with the date it became a waste or was received;**
- (3) Maintaining an inventory system on-site that identifies the date each universal waste became a waste or was received;**
- (4) Maintaining an inventory system on-site that identifies the earliest date that any universal waste in a group of universal waste items or a group of containers of universal waste became a waste or was received;**
- (5) Placing the universal waste in a specific accumulation area and identifying the earliest date that any universal waste in the area became a waste or was received; or**

(6) Any other method which clearly demonstrates the length of time that the universal waste has been accumulated from the date it becomes a waste or is received.

The inspectors observed one closed 55-gallon container storing used oil, in good condition, and labeled with the words used oil.

Outdoor Central Accumulation Area (CAA)

Corning operates an outdoor CAA. The CAA is constructed of steel with a grated floor, posted with a no smoking sign. The inspectors observed eight 55-gallon containers and one 35-gallon container storing hazardous waste. The containers were closed, in good condition, labeled with the words hazardous waste, labeled with an indication of the hazards, and marked with the dates in March and April 2024. The inspectors observed the earliest date was March 25, 2024. The inspectors observed the container aisle space was not maintained (Photograph 9).

Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.17(a)(6)], which incorporates 15A NCAC 13A .0107(i) [40 C.F.R. § 262.255], and is a condition of the LQG Permit Exemption, a generator is required to maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless aisle space is not needed for any of these purposes.

The inspectors also observed one closed 55-gallon container storing aerosol cans, in good condition, labeled with the words universal waste and marked with the date March 25, 2024.

Hallway Outside Hyper Static

The inspectors observed one empty 15-gallon red safety container for IPA rags next to a part washer. The container was closed, in good condition, labeled with the words hazardous waste, and labeled with an indication of the hazards.

Mold Shop

Molds are repaired in the shop. The inspectors observed one 55-gallon container storing hazardous waste. The container was closed, in good condition, labeled with the words hazardous waste, and labeled with an indication of the hazards. The inspectors also observed one 35-gallon container storing aerosol cans next to a yellow fire cabinet. The container was closed, in good condition, and labeled with the words hazardous waste. The inspectors observed the container was not marked or labeled with an indication of the hazards (Photograph 10).

Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.15(a)(5)(ii)], which is a condition of the SAA Permit Exemption, a generator is required to mark or label its containers with an indication of the hazardous of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (*i.e.*, ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram

consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704).

Advanced Surfaces – Room 119A

Advanced Surfaces is located on the second floor of the building. Room 119A is a garment dressing area for the clean room. Two doors provide access to the clean room laboratories. Upon entering the dressing area, Corning representatives indicated to the inspectors there were no remaining correct size garments in stock to fit the Corning representatives and the inspectors. The inspectors asked the Corning representatives to contact a representative of the clean room to determine if any additional clean room garments were available. The additional garments were not available. The clean room laboratories were not inspected.

Waste Salt CAA

SAA containers storing residual waste salt in the ion-exchange unit are transferred to the CAA when full. The inspectors observed one 55-gallon container storing waste potassium nitrate in the CAA. The container was closed, in good condition, labeled with the words hazardous waste, labeled with an indication of the hazards, and marked with the date April 12, 2024 (Photographs 11 and 12).

Outdoor Used Oil Tank

The inspectors observed a 2,500-gallon vertical tank on a concrete pad constructed with a six-to-eight-inch concrete berm. The inspectors observed the concrete pad did not appear impacted by a release of used oil. The inspectors observed the tank was closed and labeled with the words used oil.

12) Records Review

Manifest and Land Disposal Restriction (LDR) Records

The inspectors reviewed the hazardous waste manifest records and land disposal restriction forms for shipments of hazardous waste from February 2021 through March 23, 2024. During the review of the hazardous waste manifests, there was a discussion regarding a waste stream classified as D001 waste oxidizing solid (potassium nitrate, mixture). This hazardous waste was last shipped off site on November 15, 2023.

Contingency Plan

The inspectors observed the contingency plan was revised in January 2024. Joey Baily is the primary emergency coordinator. Robert Geist and Michael Rodgers are the alternate emergency coordinators.

On Date, June 12, 2024, Corning provided a hard copy of the revised contingency plan to the NCDEQ listing Brian Gibson as the primary emergency coordinator.

Quick Reference Guide

The inspectors observed the quick reference guide (QRG) did not identifying the water supply flow rate.

Also, the QRG should identify or identify it does not apply, any hazardous wastes where exposure would require unique or special treatment by medical or hospital staff.

Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.17(a)(6)], which incorporates 15A NCAC 13A .0107(j) [40 C.F.R. § 262.262(b)], and is a condition of the LQG Permit Exemption, the quick reference guide must include (3) the identification of any hazardous wastes where exposure would require unique or special treatment by medical or hospital staff; and (6) the water supply flow rate.

Arrangements with Local Authorities

The inspectors observed the facility did not document the attempted arrangements with the local police department, local hospitals, other emergency response teams, or the Local Emergency Planning Committee.

Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.17(a)(6)], which incorporates 15A NCAC 13A .0107(i) [40 C.F.R. § 262.256], and is a condition of the LQG Permit Exemption, a generator must: (a) attempt to make arrangements with the local authorities identified, as appropriate for the type of waste handled at the facility and the potential need for the services of these authorities, and (b) maintain records documenting the arrangements made.

Weekly Container Inspection Records

The inspectors reviewed the weekly container inspections conducted on the hazardous waste stored in the facility's four CAAs from May 2020 to May 2024.

Personnel Training

The inspectors reviewed the RCRA training given to employees and records. Robert Geist and Michael Rodger were given RCRA training from Lion Technology, Inc on March 28, 2024. The most recent RCRA personnel training to facility employees was given on April 2 and 4, 2024, by Michael Rodgers. It appears the applicable training was not available at the time of the inspection for Joey Baily, the primary emergency coordinator identified in the contingency plan.

On May 21, 2024, Corning emailed to the EPA a training sign-in sheet identifying Joey Baily was given emergency management training on September 28, 2023.

Waste Minimization

The facility has not put together their waste minimization plan in accordance with 40 CFR 262.27. It appears a waste minimization plan was not available at the time of the inspection.

Pursuant to 15A NCAC 13A .0107 [40 C.F.R. § 262.27(a)], which is a condition of the LQG Permit Exemption, a generator who initiates a shipment of hazardous waste must certify to

one of the following statements in Item 15 of the uniform hazardous waste manifest:
“I am a large quantity generator. I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable, and I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment;”

Biennial Report

The biennial report for 2023 was submitted to the NCDEQ in March 2024.

13) Closing Conference

The inspectors conducted a closing conference with Corning representatives. During the meeting, the inspectors stated their preliminary conclusions of the inspection.

14) Summary of Observations

During the inspection, observations were made concerning the following RCRA requirements:

Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.17(a)(2)], which incorporates 15A NCAC 13A .0110(j) [40 C.F.R. § 265.192(a)], and is a condition of the LQG Permit Exemption, owners or operators of new tank systems or components must ensure that the foundation, structural support, seams, connections, and pressure controls (if applicable) are adequately designed and that the tank system has sufficient structural strength, compatibility with the waste(s) to be stored or treated, and corrosion protection so that it will not collapse, rupture, or fail. The owner or operator must obtain a written assessment reviewed and certified by a qualified Professional Engineer in accordance with § 270.11(d) of this chapter attesting that the system has sufficient structural integrity and is acceptable for the storing and treating of hazardous waste.

Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.17(a)(2)], which incorporates 15A NCAC 13A .0110 [40 C.F.R. § 265.1063(d)], and is a condition of the LQG Permit Exemption, owners and operators in accordance with the waste analysis plan required by § 265.13(b), an owner or operator of a facility must determine, for each piece of equipment, whether the equipment contains or contacts a hazardous waste with organic concentration that equals or exceeds 10 percent by weight.

Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.17(a)(2)], which incorporates 15A NCAC 13A .0110 [40 C.F.R. § 265.1084(a)(1)], and is a condition of the LQG Permit Exemption, waste determination procedure to determine average volatile organic (VO) concentration of a hazardous waste at the point of waste origination.

An owner or operator shall determine the average VO concentration at the point of waste origination for each hazardous waste placed in a waste management unit exempted under the provisions of § 265.1083(c)(1) of this subpart from using air emission controls in

accordance with standards specified in § 265.1085 through § 265.1088 of this subpart, as applicable to the waste management unit.

Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.15(a)(4)], which is a condition of the SAA Permit Exemption, a generator is required to keep containers of hazardous waste closed at all times during accumulation, except when adding, removing, or consolidating waste; or when temporary venting of a container is necessary for the proper operation of equipment, or to prevent dangerous situations, such as build-up of extreme pressure.

Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.17(a)(1)(iv)(A)], which is a condition of the LQG Permit Exemption, a container holding hazardous waste must always be closed during accumulation, except when it is necessary to add or remove waste.

Pursuant to 15A NCAC 13A .0119(a) [40 C.F.R. 273.15(c)] A SQHUW who accumulates universal waste must be able to demonstrate the length of time that the universal waste has been accumulated from the date it becomes a waste or is received. The handler may make this demonstration by:

- (1) Placing the universal waste in a container and marking or labeling the container with the earliest date that any universal waste in the container became a waste or was received;
- (2) Marking or labeling each individual item of universal waste (e.g., each battery or thermostat) with the date it became a waste or was received;
- (3) Maintaining an inventory system on-site that identifies the date each universal waste became a waste or was received;
- (4) Maintaining an inventory system on-site that identifies the earliest date that any universal waste in a group of universal waste items or a group of containers of universal waste became a waste or was received;
- (5) Placing the universal waste in a specific accumulation area and identifying the earliest date that any universal waste in the area became a waste or was received; or
- (6) Any other method which clearly demonstrates the length of time that the universal waste has been accumulated from the date it becomes a waste or is received.

Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.17(a)(6)], which incorporates 15A NCAC 13A .0107(i) [40 C.F.R. § 262.255], and is a condition of the LQG Permit Exemption, a generator is required to maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless aisle space is not needed for any of these purposes.

Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.15(a)(5)(ii)], which is a condition of the SAA Permit Exemption, a generator is required to mark or label its containers with an indication of the hazardous of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (*i.e.*, ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram

consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704).

Records

Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.17(a)(6)], which incorporates 15A NCAC 13A .0107(i) [40 C.F.R. § 262.262(b)], and is a condition of the LQG Permit Exemption, the quick reference guide must include (3) the identification of any hazardous wastes where exposure would require unique or special treatment by medical or hospital staff; and (6) the water supply flow rate.

Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.17(a)(6)], which incorporates 15A NCAC 13A .0107(j) [40 C.F.R. § 262.256], and is a condition of the LQG Permit Exemption, a generator must: (a) attempt to make arrangements with the local authorities identified, as appropriate for the type of waste handled at the facility and the potential need for the services of these authorities, and (b) maintain records documenting the arrangements made.

Pursuant to 15A NCAC 13A .0107 [40 C.F.R. § 262.27(a)], which is a condition of the LQG Permit Exemption, a generator who initiates a shipment of hazardous waste must certify to one of the following statements in Item 15 of the uniform hazardous waste manifest: "I am a large quantity generator. I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment;"

15) List of Attachments

Attachment 1 – RCRA Inspection Photographs
Photos taken by: William Kappler on May 14, 2024
Samsung Camera (Model WB250F); EPA Property Tag# S75917

16) Signed

**WILLIAM
KAPPLER**

Digitally signed by
WILLIAM KAPPLER
Date: 2024.07.12
16:05:43 -04'00'

William Kappler
Physical Scientist

17) Concurrence

**ALAN
NEWMAN**

Digitally signed by ALAN
NEWMAN
Date: 2024.07.12
17:31:19 -04'00'

Alan Newman
Acting Chief
RCRA Enforcement Section

Attachment 1- Corning Inc – Durham Facility
RCRA Inspection Photographs



Corning, Inc. -Durham Facility (Corning). Process Support Room. The inspectors observed labels on one 55-gallon container that were not clearly observed. Photograph 1 taken at 11:40 a.m.



Corning. Salt Shed. The inspectors observed four stainless-steel lined concrete pits (pit) that store potassium nitrate (D001) generated from the ion-exchange unit IOX-104. Photograph 2 taken at 11:55 a.m.



Corning. Salt Shed. The inspectors observed four stainless-steel lined concrete pits (pit) that store potassium nitrate (D001) generated from the ion-exchange unit IOX-104. Observed guard rails. Photograph 3 taken at 11:55 a.m.



Corning. Salt Shed. The inspectors observed four stainless-steel lined concrete pits (pit) that store potassium nitrate (D001) generated from the ion-exchange unit IOX-104. Photograph 4 taken at 11:55 a.m.



Corning. Salt Shed. The inspectors observed four stainless-steel lined concrete pits (pit) that store potassium nitrate (D001) generated from the ion-exchange unit IOX-102. Photograph 5 taken at 11:57 a.m.



Corning. Salt Shed. The inspectors observed four stainless-steel lined concrete pits (pit) that store potassium nitrate (D001) generated from the ion-exchange unit IOX-103. Photograph 6 taken at 11:57 a.m.



Corning. CLS Indoor CAA. The inspectors observed one 55-gallon container of UW aerosol cans that was not marked with a date. Photograph 7 taken at 12:12 p.m.



Corning. CLS Indoor CAA. The inspectors observed the lid on the funnel inserted in the container storing hazardous waste liquid did not appear to be closed. The inspectors observed a no smoking sign posted on the wall. Photograph 8 taken at 12:13 p.m.



Corning. Outdoor CAA. The inspectors observed the container aisle space was not maintained. Photograph 9 taken at 12:22 p.m.



Corning. Mold Shop. The inspectors observed one 35-gallon container storing aerosol cans labeled as hazardous waste. The inspectors observed the container was not marked or labeled with an indication of the hazards. Photograph 10 taken at 12:33 p.m.



Corning. Waste Salt CAA. The inspectors observed one 55-gallon container storing hazardous waste potassium nitrate (D001) in the CAA at the time of the inspection. Photograph 11 taken at 2:34 p.m.



Corning. Waste Salt CAA. The inspectors observed one 55-gallon container storing hazardous waste potassium nitrate (D001) in the CAA at the time of the inspection. Photograph 12 taken at 2:34 p.m.