

RCRA Inspection Report

1) Inspector and Author of Report

Laurie Benton DiGaetano, Environmental Engineer
RCRA Enforcement Section
Chemical Safety and Land Enforcement Branch
Enforcement and Compliance Assurance Division
U.S. Environmental Protection Agency, Region 4
61 Forsyth Street, S.W. Phone: (404) 562-8948
Atlanta, Georgia 30303 Email: benton-digaetano.laurie@epa.gov

2) Facility Information

Allura EPA ID# NCR000144840
1149 Abtco Road
North Wilkesboro, North Carolina 28659

3) Responsible Officials

Kim Burton, Environmental Health and Safety Manager

4) Inspection Participants

Kim Burton, Allura
Ernest Lawrence, NCDEQ
Laurie Benton DiGaetano, U.S. EPA

5) Date of Inspection

July 29, 2021

6) Applicable Regulations

Resource Conservation and Recovery Act (RCRA) Sections 3002 (42 U.S. Code – Annotated U.S.C.A. 6925 and 6927), Title 15A of the North Carolina Administrative Code (NCAC), Chapter 13; and 40 Code of Federal Regulation (C.F.R.), Parts 260 - 270, 273, 278, & 279.

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 .0102(b) [40 C.F.R. § 260.10], a very small quantity generator of hazardous waste (VSQG) is a generator who generates less than or equal to 100 kilograms (220 pounds) of non-acute hazardous waste; and 1 kilogram (2.2 pounds) of acute hazardous waste; and 100 kilograms (220 pounds) of any residue or contaminated soil, water or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous waste in a calendar month.

Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.14(a)], hazardous waste generated by a VSQG is not subject to the requirements of parts 124, 262 (except 262.10 through 262.14) through 268, and 270 of this chapter, and the notification requirements of section 3010 of RCRA and the VSQG may accumulate hazardous waste onsite without complying with such requirements, provided that the VSQG meets all the conditions listed in 15A NCAC 13A .0107(a) [40 C.F.R. § 262.14] (hereinafter referred to as the “VSQG Exemption”).

Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.17], an LQG may accumulate hazardous waste on-site for 90 days or less without a permit or without having interim status, as required by 130A-294(c) and (g) of the NCSWML, N.C.G.S. § 130A-294(c) and (g) [Section 3005 of RCRA, 42 U.S.C. § 6925], provided that the generator complies with the conditions listed in 15A NCAC 13A .0107(a) [40 C.F.R. § 262.17] (hereinafter referred to as the “LQG Permit Exemption”).

Pursuant to 15A NCAC 13A .0107(a) [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 any 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 130A-294(c) and (g) of the NCSWML, N.C.G.S. § 130A-294(c) and (g) [Section 3005 of RCRA, 42 U.S.C. § 6925], and without complying with 15A NCAC 13A .0107(a) [40 C.F.R. § 262.16(b) or § 262.17(a)], except as required in 15A NCAC 13A .0107(a) [40 C.F.R. § 262.15(a)(7) and (8)], provided that the generator complies with the satellite accumulation area conditions listed in 15A NCAC 13A .0107(a) [40 C.F.R. § 262.15(a)] (hereinafter referred to as the “SAA Permit Exemption”).

Pursuant to 15A NCAC 13A .0119(b) [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 this inspection was to conduct an unannounced compliance evaluation inspection to determine Allura’s compliance with the applicable requirements of RCRA and the corresponding NCDEQ regulations. This was an EPA lead inspection.

8) **Previous Inspection History**

NCDEQ has conducted five RCRA CEIs at the subject facility since 2010. Violations of weekly inspection, hazardous waste training, and contingency plan requirements were noted during the 01/05/2017 CEI, and those violations were corrected on or before 02/21/2017.

9) **Facility Description**

Allura manufactures fiber cement board at a total of three facilities: one in North Carolina, one in Oregon, and one in Mexico. The subject facility in North Wilkesboro, North Carolina, has approximately 100 employees. The facility operates under the NAICS Code 327310 for Cement

Manufacturing and operations run 24-hours per day, seven days per week.

Although Allura has been operating as a large quantity generator at this location since 2016, it appears that the facility has been generating less than 100 kilograms of hazardous waste each calendar month since 2019. The company most recently notified as an LQG of hazardous waste as part of the biennial report, which was received on 02/24/2020. The report identified used Rydlyme as the only hazardous waste shipped off-site during calendar year 2019.

The manufacturing process begins by mixing cellulose fibers with water to form a wood pulp, which is then mixed with fly ash, cement, and calcium carbonate to form a fiber cement slurry mixture. The slurry is deposited onto stainless steel spacers which are put under vacuum pressure to remove excess water. Water that is removed in the vacuum system falls into a trench and flows into a clarifier before being routed back for reuse in the wood pulping process. The solids that are separated in the clarifier primarily contain silica, and they are returned for reuse in the fiber cement slurry generation process. Water that drains onto the floor inside the manufacturing building flows outside to a thickener overflow system before it is also routed back for reuse in the production process. Additional water is recovered in the thickener overflow system by treating solids that settle out in the system in a filter press. The recovered water is reused in the production process, and solids generated in the filter press are shipped off-site for disposal as nonhazardous waste.

The stainless-steel spacers must be cleaned and oiled between uses, and calcium deposits gradually build up on the spacers. About every six months, the spacers are cleaned to remove the calcium deposits. Prior to 2019, Allura used a Rydlyme product to clean the spacers, and the spent Rydlyme was accumulated and disposed of as D002 / D007 hazardous waste. Allura now uses a de-scaler product to clean the spacers. The stainless-steel spacers are placed into a dip tank of de-scaler for approximately 20-30 minutes to remove the calcium deposit buildup. After cleaning the spacers, the used de-scaler is pumped for use as-is with the process water.

After dewatering in the vacuum system, sheets of fiber cement are heated in a precuring oven to remove additional water and prepare the sheets for further processing. The sheets of dewatered cement boards are layered together to form the desired thickness of the final product and the layered boards are placed into an autoclave, where they are heated under pressure to bind the layers together and form the final cement board.

An inkjet printer is used to mark each board with a barcode. The ink jet printing process and the associated activities to clean the printer generate approximately three-or-four gallons of spent solvent each year. The spent solvents are accumulated and disposed of as D001 / D007 / F003 hazardous waste.

Some fiber cement boards are also painted on-site. The painting process is done by applying a water-based primer in a curtain coater unit, and then applying a water-based paint in a carousel spray booth. The painting process generates a nonhazardous wastewater.

10) Opening Conference

On 07/29/2021, EPA inspector Laurie Benton DiGaetano, accompanied by NCDEQ inspector

Ernest Lawrence, arrived at Allura at approximately 9:55 a.m. Ms. Kim Burton, Environmental Health and Safety Manager, immediately received the inspectors. The inspectors introduced themselves, showed their credentials to Ms. Burton, and explained the purpose of the visit. The inspectors described the anticipated use of equipment (digital camera) during the inspection and provided a request for records. The inspectors discussed the company's ability, pursuant to 40 C.F.R. §2.203, to assert a business confidentiality claim for information submitted to the EPA. The company did not assert a business confidentiality claim. The inspection participants also discussed health and safety protocols and required personal protective equipment before Ms. Burton led the inspectors on a tour of the Facility operations.

Ms. Burton provided an overview of the facility's history and current operations during the opening conference. The participants discussed the Small Business Regulatory Enforcement Fairness Act's classification of a "small business," which is generally set by the Small Business Administration using the business' SIC/NAICS code and annual receipts or number of employees. The EPA inspector did not provide a copy of the agency's information sheet for small businesses, but the information sheet can be found at <https://www.epa.gov/sites/production/files/2017-06/documents/smallbusinessinfo.pdf>.

11) **Findings**

Inkjet Printer Satellite Accumulation Area (SAA): Allura manages one SAA near the inkjet printer for managing D001 / D007 / F003 hazardous waste spent solvents that are generated by the inkjet printer. The inspectors observed one 55-gallon drum in this SAA. The drum was located inside a flammable cabinet, and it was equipped with a latched funnel lid. The drum was labeled hazardous waste printing ink waste, and it was identified with a flammable liquid DOT hazard placard.

Former Central Accumulation Area (CAA): In the past, Allura managed a hazardous waste CAA on a concrete pad in the facility yard. Ms. Burton stated that the facility has not used this area for hazardous waste storage since the last shipment of hazardous waste was sent off-site in May 2019. The inspectors did not observe any containers of hazardous waste in the former CAA at the time of the inspection.

Boiler Room SAA and Universal Waste Storage: Allura manages a SAA in the Boiler Room for managing D001 hazardous waste aerosol can waste that is generated by accumulating the contents of punctured aerosol cans used at the facility. The inspectors observed two 55-gallon drums in this SAA. One drum was equipped with an aerosol can puncture device, and the other was closed. Both drums were labeled hazardous waste aerosol can puncture and identified with a flammable DOT hazard placard. The inspectors observed another open 55-gallon container labeled empty aerosol can disposal. Ms. Burton stated that used aerosol cans are accumulated in this container, and an employee punctures the cans in this area approximately once every three weeks.

Although the SAA Permit Exemption limits the total volume of waste accumulated in a SAA at any given time to be no more than 55 gallons, hazardous waste generated by a VSQG is not subject to the requirements of the SAA Permit Exemption. Allura may accumulate hazardous waste onsite without complying with such requirements, provided that the facility meets all the

conditions listed in the VSQG Exemption.

The inspectors also observed one cardboard box containing four-foot used fluorescent bulbs in the Boiler Room. The box was open, and the “universal waste – bulbs” label was affixed to the shelving unit rather than the cardboard box. Personnel closed the box and placed the universal waste label onto the box on the day of the inspection.

Pursuant to 15A NCAC 13A .0119(b) [40 C.F.R. § 273.13(d)], a small quantity handler of universal waste (SQHUW) must contain any lamp in containers or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. Such containers and packages must remain closed and must lack evidence of leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions.

Pursuant to 15A NCAC 13A .0119(b) [40 C.F.R. § 273.14(e)], a small quantity handler of universal waste (SQHUW) must identify the type of universal waste by labeling or marking each lamp or container of lamps clearly with one of the following phrases: “Universal Waste – Lamp(s), or “Waste Lamp(s),” or “Used Lamp(s).”

The inspectors observed one 20-gallon of used oil in the Boiler Room. The container was closed and labeled with the words “used oil.”

Contingency Plan: Although a VSQG may accumulate hazardous waste onsite without complying with the requirements of the LQG Permit Exemption, Allura maintains a Contingency Plan which describes the actions that facility personnel should take in response to an emergency. The plan, which was created when the facility was operating as an LQG, describes actions facility personnel must take in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility. The plan describes arrangements agreed to with the Wilkes Regional Medical Center, Hugh Chatham Memorial Hospital, Wilkes County Sheriff, and the Roaring River Fire Department. The plan lists the names and emergency telephone numbers for persons identified as emergency coordinators; and it includes an evacuation plan for personnel.

A copy of the Contingency Plan was submitted to the Wilkes Regional Medical Center, Hugh Chatham Memorial Hospital, Wilkes County Sheriff, and the Roaring River Fire Department.

Training Records: While operating as an LQG, Allura identified seven employees with RCRA hazardous waste job responsibilities. The inspectors reviewed facility job descriptions and employee names that were provided for these individuals. Each description included the requisite skill, education, or other qualifications, and duties of facility personnel assigned to that position. The inspectors also reviewed records of RCRA hazardous waste training for these individuals, which was most recently provided in 2019.

Allura continues to provide RCRA DOT, universal waste, and nonhazardous waste training to personnel. The inspectors reviewed records of annual nonhazardous and universal waste training, which was most recently provided in August 2020 and was scheduled to be provided again in

August 2021.

Waste Manifest Records: The inspectors reviewed available hazardous waste manifest records and land disposal restriction forms for shipments of hazardous waste. The last hazardous waste shipment was sent to Envirite of Ohio (OHD980568992) in May 2019.

Inspection Records: The inspectors did not review records of inspections of the hazardous waste CAA, because no waste has been stored in this area since May 2019.

12) **Closing Conference**

The inspectors conducted the exit meeting with Ms. Burton. During this meeting, the inspectors stated their preliminary conclusions of the inspection.

13) **Inspection Findings**

Based on the observations made during the inspection, Allura corrected deficiencies with the following RCRA requirements on the day of the inspection:

- Pursuant to 15A NCAC 13A .0119(b) [40 C.F.R. § 273.13(d)], a small quantity handler of universal waste (SQHUW) must contain any lamp in containers or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. Such containers and packages must remain closed and must lack evidence of leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions.
- Pursuant to 15A NCAC 13A .0119(b) [40 C.F.R. § 273.14(e)], a small quantity handler of universal waste (SQHUW) must identify the type of universal waste by labeling or marking each lamp or container of lamps clearly with one of the following phrases: “Universal Waste – Lamp(s),” or “Waste Lamp(s),” or “Used Lamp(s).”

14) **Signed**

LAURIE
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Laurie Benton DiGaetano
Senior Enforcement and Compliance Specialist

Date

Concurrence

ARACELI CHAVEZ

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Araceli B. Chavez
Chief
RCRA Enforcement Section

Date