

RCRA Inspection Report

1) Inspector and Author of Report

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2) Facility Information

Piedmont Chemical Industries I, LLC
331 Burton Avenue
High Point, North Carolina 27261

EPA ID# NCD003215779

3) Responsible Officials

Michael Chestnut
Director of Compliance & Regulations
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4) Inspection Participants

Michael Chestnut, Piedmont Chemical
Elizabeth O'Leary, Piedmont Chemical

Daniel Girdner, NCDEQ
Laurie Benton DiGaetano, USEPA

5) Date of Inspection

December 01, 2022

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, & 279; and the North Carolina Solid Waste Management Law (NCSQML), North Carolina General Statutes (N.C.G.S.) §§ 130A-17 to -28 and 130A-290 to - 310.22, and North Carolina Hazardous Waste Management Rules, 15A North Carolina Administrative Code (NCAC) 13A .0101 to .0119.

Pursuant to 15A NCAC 13A .0102 [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.

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.

Pursuant to 15A NCAC 13A .0119 [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.

Pursuant to 15A NCAC 13A .0170(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 Sections 130A-294(c) and (g) of the NCSQML, N.C.G.S. § 130A-294(c) to (g) [Section 3005 of RCRA, 42 U.S.C. § 6925], and without complying with 15A NCAC 13A .0170(a) [40 C.F.R. § 262.16(b) or § 262.17(a)], except as required in 15A NCAC 13A .0170(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 .0170(a) [40 C.F.R. § 262.15(a)] (hereinafter referred to as the “SAA Permit Exemption”).

Pursuant to 15A NCAC 13A .0170(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 Sections 130A-294(c) and (g) of the NCSQML, N.C.G.S. § 130A-294(c) to (g) [Section 3005 of RCRA, 42 U.S.C. § 6925], provided that the generator complies with the conditions listed in 15A NCAC 13A .0170(a) [40 C.F.R. § 262.17] (hereinafter referred to as the “LQG Permit Exemption”).

7) Purpose of Inspection

The purpose of this inspection was to conduct an unannounced compliance evaluation inspection to determine Piedmont Chemical Industries I, LLC’s compliance with the applicable requirements of RCRA and the corresponding North Carolina regulations. This was an EPA lead inspection.

8) Facility Description

Company and Facility Overview:

According to www.piedmontchemical.com, Piedmont Chemical Industries I, LLC (Piedmont Chemical) is a subsidiary of the Syntha Group, a family-owned and operated chemical manufacturer headquartered at the subject facility in High Point, North Carolina. The corporation was founded in 1938 to support the local textile industry surrounding High Point, and the Syntha Group currently has five different production sites in the United States, with plants in North Carolina, South Carolina, and Tennessee.

Piedmont Chemical has operated at the 5.4-acre subject facility for 85 years, and currently manufactures specialty chemicals, softeners, oligomers, antimicrobials, defoamers, scouring agents, carriers, and leveling agents at this location. The facility operates under the NAICS number 325611 for Soap and Other Detergent Manufacturing and approximately 40% of the manufacturing products are textile specialty chemicals. Piedmont Chemical has about 70 employees at this location and operations run 24-hours per day, five days per week using three

shifts. Products are manufactured in chemical batch reactors, and they are shipped to customers in drums, totes, or tanker trucks. In addition to the manufacturing production reactors, the facility also operates a quality control laboratory, a research and development laboratory, a wastewater pretreatment plant, and a pilot plant on-site.

Waste Management Program:

The facility operates one SAA for managing hazardous waste generated in the quality control laboratory, one SAA for managing used aerosol cans, and one central accumulation area (CAA) for managing hazardous waste generated throughout the facility. Personnel stated that the facility is in the process of adding two more SAAs for managing hazardous wastes generated during sampling activities in the manufacturing area.

Piedmont Chemical routinely generates hazardous waste spent solvents from analyzing samples from the production process in the quality control laboratory. The facility operates a SAA in the laboratory area for accumulating these hazardous waste samples. The hazardous waste samples are routinely transferred into a tote at the facility's CAA for subsequent storage before they are shipped off-site.

The facility also routinely generates hazardous waste spent solvents from cleaning reactor vessels in the production area. Depending upon which production processes are performed after one another in the same reactor, the facility may use a solvent or a surfactant to clean the reactor between batches. When mineral spirits are used to clean a reactor, the used mineral spirits are accumulated in a tote. Totes of used mineral spirits are stored in the facility yard until the mineral spirits are used again for reactor cleaning. The facility uses and reuses mineral spirits for cleaning reactors until production personnel determine that the material is no longer suitable for reuse. Totes of spent mineral spirits that will not be reused are brought to the CAA for storage and subsequent shipment offsite as hazardous waste.

One family of reactions performed at the facility generates a methanol by-product. When possible, Piedmont Chemical sells this material as a by-product, but if the facility's rate of generation exceeds demand, the methanol by-product is shipped offsite as a hazardous waste.

In addition to the hazardous wastes described above, the facility may also generate hazardous waste when process lines are flushed, when off-spec material cannot be reworked or sold as a by-product, when raw materials become expired or out of date, and when spills are cleaned up. Although the facility sometimes generates less than 1,000 kilograms of hazardous waste in a given calendar month, Piedmont Chemical has elected to routinely operate under the conditions of the LQG Permit Exemption. Piedmont Chemical has operated as an LQG for thirty years, and never notified as a SQG of hazardous waste.

The facility most recently notified as an LQG of hazardous waste as part of its Biennial Report, which was submitted on February 17, 2022. According to this report, Piedmont Chemical shipped 210 pounds of D001, F003, F005 hazardous waste aerosols and 5,500 pounds of D001 spent solvents offsite during calendar year 2021. During the inspection, facility personnel provided the following waste profile records for hazardous wastes that may be (or that have been) generated onsite:

- D001 Waste Adhesives,
- D001 Waste Flammable Solids (ethyl acetate),
- D001 waste flammable liquids (naphthalene),
- D001 waste flammable liquids (contains xylene),
- D039 hazardous waste liquid (contains tetrachloroethylene polyethylene glycol),
- D001, U154 waste flammable liquid (isopropanol butanol),
- D001 toluene polymer sludge waste flammable liquid (toluene),
- D001 waste styrene monomer, stabilized,
- D002 outdated material proxel aq preservative,
- Lab Pack unused out of date material,
- D001 product removed from inventory Perkadox 20S,
- D002, U190 phthalic anhydride,
- D001 waste aluminum nitrate, and
- D002 waste corrosive liquid, acidic (dodecylguanidine hydrochloride).

Waste Tank:

Piedmont Chemical removed the former hazardous waste storage tank in July 2022. The tank was previously used to store spent solvents, but it was taken out of service around calendar year 2012.

9) Previous Inspection History

Over the past twenty years, the North Carolina Department of Environmental Quality (NCDEQ) has conducted eight RCRA CEIs at the subject facility, and no violations have been recorded since October 31, 2005. The most recent RCRA CEI was conducted on June 14, 2017.

10) Opening Conference

On December 1, 2022, EPA inspector Laurie Benton DiGaetano, accompanied by NCDEQ inspector Daniel Girdner, arrived at Piedmont Chemical Industries I, LLC (Piedmont Chemical) at approximately 9:30 AM. Michael Chestnut, Director of Compliance & Regulations, immediately received the inspectors. Michael Chestnut and the inspectors were joined by Elizabeth O'Leary, Product Stewardship Manager, for the opening conference. The inspectors introduced themselves, showed their credentials to Michael Chestnut and Elizabeth O'Leary, and explained the purpose of the visit.

The inspectors described the anticipated use of a digital camera during the inspection and provided a request for records. The EPA inspector noted that the EPA has resources available for small businesses. 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, and the EPA's information sheet for small businesses can be found at <https://www.epa.gov/sites/production/files/2017-06/documents/smallbusinessinfo.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.

Michael Chestnut and Elizabeth O’Leary provided an overview of the facility’s history and current operations during the opening conference. The inspection participants also discussed health and safety protocols and required personal protective equipment before the facility representatives led the inspectors on a tour of the facility operations.

11) Inspection Observations

Wastewater Treatment:

At the start of the facility tour, the inspectors observed a roll-off container of filter cake generated by the onsite wastewater treatment system. Michael Chestnut explained that the wastewater treatment system does not perform biological treatment and the area does not have an associated laboratory. The system uses polymers to generate a flocculant and remove solids from the process wastewater before discharging to the publicly owned treatment works. Personnel monitor the pH and flocculant levels to ensure proper coagulation, and the filter cake is sent to a landfill as nonhazardous solid waste.

P-Shed and Hazardous Waste Central Accumulation Area (CAA):

Next, the inspection participants toured the hazardous waste CAA, which is located in the “P-Shed,” a covered concrete pad along the outside wall of the warehouse. The CAA is located in one of several bays which are separated by metal screens in the P-Shed. The inspectors observed signs reading “supervisor access only” and “hazardous waste storage” hanging on metal chains across the opening to the designated CAA bay. Personnel attached a “no smoking” sign to the upper chain during the inspection (Photo 1).

Pursuant to 15A NCAC 13A .0107 [40 C.F.R. § 262.17(a)(1)(vi)(B)], which is a condition of the LQG Permit Exemption, if hazardous waste is placed in containers, “No Smoking” signs must be conspicuously placed wherever there is a hazard from ignitable or reactive waste.

The CAA is equipped with a fire extinguisher attached to a support beam at the corner of the P-Shed and a spill kit was observed next to an emergency shower and eyewash station in the production area. Michael Chestnut stated that another spill kit is located inside the warehouse next to the P-Shed; that a pull station to trigger an evacuation alarm is located just inside the warehouse; that facility personnel only work in the CAA during the first shift; and that facility personnel carry two-way radios when working in this area.

The inspectors observed four 275-gallon totes and one 5-gallon bucket of hazardous waste in the CAA during the inspection (Photo 2). Michael Chestnut stated that one tote contained hazardous waste generated from a “bad” production batch and that the other three totes contained hazardous waste samples from the Quality Control laboratory or otherwise off the process lines. The tote of off-spec product was labeled hazardous waste flammable liquid (vinyl trimethoxysilane) with the EPA Hazardous Waste Number D001, and it was marked with an accumulation start date of November 22, 2022. Each of the three totes of hazardous waste samples was labeled hazardous waste flammable liquid (isopropanol, butanol), identified with the EPA Hazardous Waste Number D001, and classified with a flammable liquid DOT hazard placard. Two of these totes

were marked with an accumulation start date of November 3, 2022, and the third was marked with an accumulation start date of November 22, 2022. The 5-gallon bucket was labeled hazardous waste sodium nitrate, identified with the EPA Hazardous Waste Number D001, classified with an oxidizer DOT hazard placard, and marked with an accumulation start date of November 17, 2022.

Process Area:

The inspectors observed a 5-gallon bucket for collecting drips from piping and equipment associated with a reactor vessel in the production area. Michael Chestnut explained that liquid that accumulates in the drip buckets may be shipped off-site as hazardous waste if it cannot be added to a subsequent production batch. The inspectors explained that if the material is destined for disposal as hazardous waste, the facility should designate a SAA at the point where hazardous waste is generated. The accumulation bucket(s) should be managed in accordance with the SAA Permit Exemption, which includes being labeled as hazardous waste, marked with an indication of the hazards associated with the waste, and closed at the end of the production process when liquid ceases dripping into the bucket from the piping and equipment.

Quality Control (QC) Laboratory SAA:

Piedmont Chemical operates a SAA for managing hazardous waste samples generated in the QC Laboratory. The inspectors observed one 55-gallon drum, one 2.5-gallon flammable safety can, and one 2-gallon flammable safety can in this SAA. Michael Chestnut explained that when one of the flammable safety cans is filled, laboratory personnel bring it out to the 55-gallon drum and transfer the contents of the flammable safety can into the 55-gallon drum. Although Piedmont Chemical was managing more than one container within the same SAA, it appeared that the total volume of waste in those containers was less than 55-gallons at the time of the inspection. Please note that the SAA Permit Exemption limits the total volume of waste accumulated in any SAA to be no more than 55 gallons at any given time. Pursuant to 15A NCAC 13A .0170(a) [40 C.F.R. § 262.15(a)(6)], a generator who accumulates an excess of 55 gallons of hazardous waste in a SAA must, with respect to that amount of excess waste, comply with 15A NCAC 13A .0170(a) [40 C.F.R. § 262.17(a)] or remove the excess waste from the SAA within three consecutive calendar days.

The 55-gallon drum in the QC Laboratory SAA was observed on a wooden pallet just outside the laboratory door (Photo 3). The drum was labeled as hazardous waste flammable liquids, identified with the EPA Hazardous Waste Number D001, and secured with a locked funnel lid. Two more 55-gallon drums, labeled “lab waste nonregulated liquid” and “lab waste nonregulated solids” were also observed on this wooden pallet. The drum labeled lab waste nonregulated solids did not have a lid, and the inspectors observed used PPE and glass bottles inside the open container. According to facility personnel, the standard operating procedure for the laboratory is to pour liquids from the smaller containers into either the hazardous waste container or the lab waste nonregulated liquid container, and then place the empty containers into the lab waste nonregulated solids container. Some of the small containers observed in the open lab waste nonregulated solids container were not empty, and it was unclear if the material inside the small containers was hazardous waste.

Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.11], a person who generates a solid waste, as defined in 15A NCAC 13A .0106 [40 C.F.R. § 261.2], must use the steps articulated in 15A NCAC 13A .0107(a) [40 C.F.R. § 262.11] to make an accurate determination as to whether that waste is a hazardous waste in order to ensure wastes are properly managed according to applicable RCRA regulations.

The 2-gallon and 2.5-gallon flammable safety cans in the QC Laboratory SAA were observed on laboratory benches inside the laboratory (Photo 4). Each container was closed and marked to indicate that its contents are flammable, but neither was labeled with the words “hazardous waste.”

Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.15(a)(5)(i)], which is a condition of the SAA Permit Exemption, a generator is required to mark or label its containers with the words “Hazardous Waste.”

The Attic Universal Waste Management Area:

Piedmont Chemical manages e-waste and universal waste lamps and batteries in a designated area in the “Attic.” According to the records provided during the inspection, the facility sent shipments of universal waste lamps and batteries to Clean Lights Recycling on March 2, 2020, on May 20, 2021, and on May 12, 2022.

The inspectors observed one box of 4-foot fluorescent lamps, one box of 8-foot fluorescent lamps, three small boxes of universal waste lamps or emergency lights, two empty 5-gallon buckets for universal waste batteries, and one 5-gallon bucket of used alkaline batteries in the universal waste management area (Photo 5). All containers holding universal waste were closed, and the oldest container was dated June 3, 2022. Each box of lamps or lights was labeled as universal waste, but one or more of the boxes was labeled “universal waste bulbs” rather than “universal waste lamps.”

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 Facility Yard:

The inspectors observed totes of ortho-xylene, methanol and isopropyl alcohol staged in the facility yard. These solvents are used to clean reactor vessels between batches and returned to the storage tote after use. According to facility personnel, the solvents are used and reused for reactor cleaning until the production personnel determine that they are no longer suitable for reuse. After the final cleaning cycle, the tote of spent solvents is moved to the CAA for storage and shipment as hazardous waste.

Main Plant:

Piedmont Chemical manages used oil and waste aerosols in areas inside and just outside of the Main Plant, respectively. The inspectors observed one 275-gallon tote of used oil inside the Main

Plant area. The tote was closed and labeled with the words “used oil.” The inspectors also observed two 55-gallon drums of used aerosol cans in an area just outside of the Main Plant. Neither of the drums was labeled “hazardous waste” or “universal waste aerosols.” The rings used to close the drums were not secured, and personnel were unable to secure one of the two rings. The total volume of aerosol cans in this area was less than 55-gallons, and the contents of the two drums were consolidated into one drum. The functioning ring was used to secure the lid to the drum of consolidated aerosol cans.

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. § 262.15(a)(5)], which is a condition of the SAA Permit Exemption, a generator is required to mark or label its containers with the words “Hazardous Waste” and with an indication of the hazards of the contents.

Contingency Plan:

The actions that facility personnel should take in response to and prevention of fire emergencies and sudden or non-sudden releases of hazardous waste or hazardous waste constituents are described in the facility’s Emergency Action Plan and Contingency Plan, dated March 9, 2017. The plan includes the name and emergency telephone number for the emergency coordinator and a list of emergency equipment at the facility. The equipment list includes fire extinguishing systems, personal protection equipment, sumps and spill containment systems, spill response equipment, and the in-house evacuation alarm. The plan also includes a facility diagram, which indicates the location of fire extinguishers, safety showers and eyewash stations, spill kits and first aid equipment, and an evacuation plan and diagram for personnel. The evacuation plan describes signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes.

The quick reference guide includes the types/names of hazardous waste in layman’s terms and the associated hazard associated with each hazardous waste present at any one time; the estimated maximum amount of each hazardous waste that may be present at any one time; the identification of any hazardous wastes where exposure would require unique or special treatment by medical or hospital staff; a map of the facility showing where hazardous wastes are generated, accumulated and treated and routes for accessing these wastes; the locations of water supply; the identification of on-site notification systems; and the name of the emergency coordinator and emergency telephone number.

A copy of the contingency plan (and its quick reference guide) was most recently submitted to the High Point Police Department, the High Point Fire Department, and the High Point Regional Hospital via the e-plan system. The plan was also mailed to the Wake Forest Baptist Hospital on March 11, 2021.

Training Records:

The inspectors reviewed facility job descriptions and employee names that were provided for the Director of Compliance & Regulations, the Site Manager, the Environmental Control Technician, The Environmental Control Operator, the Operations Manager, the Distribution manager, the Site Engineer, the Environmental Control Technicians, the Quality Assurance Technicians, Warehouse and Tanker personnel, Sales personnel, and Maintenance personnel. Each description included the requisite skill, education, or other qualifications, and duties of facility personnel assigned to that position.

Training records indicated that Michael Chestnut completed HAZWOPER and DOT training, but no specific RCRA hazardous waste training in 2022. Michael Chestnut provided in-house hazardous waste training to facility personnel in February 2022.

Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.17(a)(7)(iii)], which is a condition of the LQG Permit Exemption, facility personnel must take part in an annual review of the initial program of classroom instruction, online training, or on-the-job training that teaches them to perform their duties in a way that ensures compliance with this part.

Waste Manifest Records:

The inspectors reviewed available hazardous waste manifest records and land disposal restriction forms for shipments of hazardous waste sent during the past three years.

On September 1, 2020, Piedmont Chemical initiated two shipments of hazardous waste that were later rejected by the designated facility, Ecoflo (NCD980842132). Manifest number 000982210WAS indicated that one drum of F027 waste toxic solids (sodium pentachlorophenate, pentachlorophenol), seven totes of D001 waste heptanes, and four drums of U122 waste formaldehyde solutions were shipped to Ecoflo. However, the Discrepancy Indication Space (Item 18a) of this manifest indicates that the seven totes of D001 waste heptanes and four drums of U122 waste formaldehyde solutions were rejected and returned to Piedmont Chemical. Manifest number 000982401WAS indicated that two totes of D001 waste heptanes were shipped to Ecoflo. However, the Discrepancy Indication Space (Item 18a) of this manifest indicates that these totes were rejected and returned to Piedmont Chemical.

NCDEQ conducted a follow-up visit to the facility on January 23, 2023, to review hazardous waste manifest records associated with these rejected shipments. Piedmont Chemical personnel explained that the seven totes of D001 waste heptanes in the first shipment and the two totes of D001 waste heptanes in the second shipment were later identified as D001 waste flammable liquid (isopropanol, butanol) and shipped to Giant Resource Recovery (SCD987594991) on September 25, 2020, using manifest number 000283073GRR; and that the four drums of U122 waste formaldehyde did not match the waste profiles for Ecoflo. NCDEQ is working with Piedmont Chemical to determine what waste was shipped using lines 1 and 3 of manifest 000982210WAS, and the fate of that material after it was rejected by Ecoflo.

Piedmont Chemical did not enter the appropriate U.S. DOT proper shipping name, identification number (UN/NA), and technical name for the waste flammable liquid (isopropanol, butanol) on

the original manifests (000982210WAS and 000982401WAS) sent to Ecoflo on September 1, 2020, or for the material identified as U122 waste formaldehyde on manifest number 000982210WAS. In addition, Piedmont Chemical did not sign the waste minimization certification statement (Item 15) on these manifests when the facility offered the hazardous waste for transport for offsite treatment, storage, or disposal on September 1, 2020, and did not sign the Alternate Facility (or Generator) space (Item 18c) on the manifests when the shipments were returned on September 14, 2020. The facility did not provide documentation that a copy of each manifest (000982210WAS and 000982401WAS) used to return the rejected shipments was sent to Ecoflo.

Pursuant to 15A NCAC 13A .0107(b) [40 C.F.R. § 262.20(a)(1)], a generator that offers for transport a hazardous waste for offsite treatment, storage, or disposal must prepare a Manifest (OMB Control number 2050-0039) on EPA Form 8700-22, and, if necessary, EPA Form 8700-22A. According to the Hazardous Waste Manifest Instructions, generators must enter the U.S. DOT proper shipping name, hazardous class or division, identification number (UN/NA) and packing group for each waste as identified in 49 C.F.R. 172 in Item 9b. Include technical name(s) and reportable quantity references, if applicable.

Pursuant to 15A NCAC 13A .0107(b) [40 C.F.R. § 262.20(a)(1)], a generator that offers for transport a hazardous waste for offsite treatment, storage, or disposal must prepare a Manifest (OMB Control number 2050-0039) on EPA Form 8700-22, and, if necessary, EPA Form 8700-22A. According to the Hazardous Waste Manifest Instructions, the generator must read, sign and date the waste minimization certification statement in Item 15.

Pursuant to 15A NCAC 13A .0107(b) [40 C.F.R. § 262.23(f)(1)(ii)], for rejected shipments of hazardous waste that are returned to the generator by the designated facility, the generator must sign Item 18c of the original manifest if the original manifest is used for the returned shipment.

Pursuant to 15A NCAC 13A .0107(b) [40 C.F.R. § 262.23(f)(3)], for rejected shipments of hazardous waste that are returned to the generator by the designated facility, the generator must send a copy of the manifest to the designate facility that returned the shipment to the generator within 30 days of delivery of the rejected shipment.

Inspection Records:

The inspectors reviewed Piedmont Chemical's available records of inspections of the hazardous waste central accumulation area (CAA) since December 2020. Although the inspection log includes a checklist to record observations about leaking containers, closed containers, container labels, and evidence of spills, the checklist does not include a place to record observations about container deterioration caused by corrosion or other factors. The records include the date of the inspection and the initials of the employee conducting the inspection. The inspection records did not include documentation of inspections between September 9, 2022, and October 28, 2022.

Pursuant to 15A NCAC 13A .0107(d), which is a condition of the LQG Permit Exemption, a generator is required to keep records of inspections and results of inspections required by 15A NCAC 13A .0107(a) [40 C.F.R. § 262.17(a)(1)(v)] for three years from the date of the inspection.

Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.17(a)(1)(v)], which is a condition of the LQG Permit Exemption, a generator is required to, at least weekly, inspect central accumulation areas looking for leaking container and for deterioration of containers caused by corrosion or other factors.

In years past, Piedmont Chemical operated a hazardous waste storage tank at the subject facility. The tank was taken out of service several years ago, and it was removed from the facility in July 2022. The inspectors reviewed records of daily tank inspections that were conducted between December 2019 and July 2022.

12) Closing Conference

The inspectors conducted the exit meeting with Michael Chestnut and Elizabeth O’Leary. During this meeting, the inspectors stated their preliminary conclusions of the inspection.

13) Summary of Observations

Based on the observations made during the inspection, the following RCRA requirements appear to be applicable at the subject facility:

- **Pursuant to 15A NCAC 13A .0107 [40 C.F.R. § 262.17(a)(1)(vi)(B)], which is a condition of the LQG Permit Exemption, if hazardous waste is placed in containers, “No Smoking” signs must be conspicuously placed wherever there is a hazard from ignitable or reactive waste.**

Facility personnel immediately attached a “No Smoking” sign to the chain across the opening to the CAA bay.

- **Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.11], a person who generates a solid waste, as defined in 15A NCAC 13A .0106 [40 C.F.R. § 261.2], must use the steps articulated in 15A NCAC 13A .0107(a) [40 C.F.R. § 262.11] to make an accurate determination as to whether that waste is a hazardous waste in order to ensure wastes are properly managed according to applicable RCRA regulations.**

Just outside the laboratory door, the drum labeled lab waste nonregulated solids did not have a lid, and the inspectors observed used PPE and glass bottles inside the open container. Some of the small containers were not empty, and it was unclear if the material inside the small containers was hazardous waste.

- **Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.15(a)(5)(i)], which is a condition of the SAA Permit Exemption, a generator is required to mark or label its containers with the words “Hazardous Waste.”**

The 2-gallon and 2.5-gallon flammable safety cans in the QC Laboratory SAA were closed and marked to indicate that its contents are flammable, but neither was labeled with the words “hazardous waste.”

- **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 box of 4-foot fluorescent lamps, one box of 8-foot fluorescent lamps, and three small boxes of universal waste lamps or emergency lights in the universal waste management area. Each box was labeled as universal waste, but one or more of the boxes was labeled “universal waste bulbs” rather than “universal waste lamps.”

- **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.**

The inspectors observed two 55-gallon drums of used aerosol cans in an area just outside of the Main Plant. The rings used to close the drums were not secured, and personnel were unable to secure one of the two rings. The contents of the two drums were immediately consolidated into one drum, and the functioning ring was used to secure the lid to the drum of consolidated aerosol cans.

- **Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.15(a)(5)], which is a condition of the SAA Permit Exemption, a generator is required to mark or label its containers with the words “Hazardous Waste” and with an indication of the hazards of the contents.**

The inspectors observed two 55-gallon drums of used aerosol cans in an area just outside of the Main Plant. Neither of the drums was labeled “hazardous waste” or “universal waste aerosols.”

- **Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.17(a)(7)(iii)], which is a condition of the LQG Permit Exemption, facility personnel must take part in an annual review of the initial program of classroom instruction, online training, or on-the-job training that teaches them to perform their duties in a way that ensures compliance with this part.**

Training records indicated that Michael Chestnut completed HAZWOPER and DOT training, but no specific RCRA hazardous waste training in 2022.

- **Pursuant to 15A NCAC 13A .0107(b) [40 C.F.R. § 262.20(a)(1)], a generator that offers for transport a hazardous waste for offsite treatment, storage, or disposal must prepare a Manifest (OMB Control number 2050-0039) on EPA Form 8700-22, and, if necessary, EPA Form 8700-22A. According to the Hazardous Waste Manifest Instructions, generators must enter the U.S. DOT proper shipping name, hazardous class or division, identification number (UN/NA) and packing group for each waste as identified in 49 C.F.R. 172 in Item 9b. Include technical name(s) and reportable quantity references, if applicable.**

Piedmont Chemical did not enter the appropriate U.S. DOT proper shipping name, identification number (UN/NA), and technical name for the waste flammable liquid (isopropanol, butanol) on the original manifests (000982210WAS and 000982401WAS) sent to Ecoflo on September 01, 2020, or for the material identified as U122 waste formaldehyde on manifest number 000982210WAS.

- **Pursuant to 15A NCAC 13A .0107(b) [40 C.F.R. § 262.20(a)(1)], a generator that offers for transport a hazardous waste for offsite treatment, storage, or disposal must prepare a Manifest (OMB Control number 2050-0039) on EPA Form 8700-22, and, if necessary, EPA Form 8700-22A. According to the Hazardous Waste Manifest Instructions, the generator must read, sign and date the waste minimization certification statement in Item 15.**

Piedmont Chemical did not sign the waste minimization certification statement (Item 15) on manifests 000982210WAS and 000982401WAS when the facility offered the hazardous waste for transport for offsite treatment, storage, or disposal on September 1, 2020.

- **Pursuant to 15A NCAC 13A .0107(b) [40 C.F.R. § 262.23(f)(1)(ii)], for rejected shipments of hazardous waste that are returned to the generator by the designated facility, the generator must sign Item 18c of the original manifest if the original manifest is used for the returned shipment.**

Piedmont Chemical did not sign the Alternate Facility (or Generator) space (Item 18c) on manifests 000982210WAS and 000982401WAS when the shipments were returned on September 14, 2020.

- **Pursuant to 15A NCAC 13A .0107(b) [40 C.F.R. § 262.23(f)(3)], for rejected shipments of hazardous waste that are returned to the generator by the designated facility, the generator must send a copy of the manifest to the designate facility that returned the shipment to the generator within 30 days of delivery of the rejected shipment.**

Piedmont Chemical did not provide documentation that a copy of each manifest (000982210WAS and 000982401WAS) used to return the rejected shipments was sent to Ecoflo.

- **Pursuant to 15A NCAC 13A .0107(d), which is a condition of the LQG Permit Exemption, a generator is required to keep records of inspections and results of inspections required by 15A NCAC 13A .0107(a) [40 C.F.R. § 262.17(a)(1)(v)] for three years from the date of the inspection.**

The inspection records did not include documentation of inspections between September 9, 2022, and October 28, 2022. Although the inspection log includes a checklist to record observations about leaking containers, the checklist does not include a place to record observations about container deterioration caused by corrosion or other factors.

14) **List of Appendices**

Appendix 1 – Photo Log:

Five Photos taken on: December 1, 2022

Photos taken by: Laurie Benton DiGaetano

Photos taken with: DMC TS-5 Digital Camera

EPA Property Tag: S09533

15) **Signed**

LAURIE DIGAETANO

Digitally signed by LAURIE

DIGAETANO

Date: 2023.02.08 12:30:25 -05'00'

Laurie Benton DiGaetano

Environmental Engineer

Concurrence

ARACELI

CHAVEZ

Digitally signed by ARACELI

CHAVEZ

Date: 2023.02.08 14:05:44 -05'00'

Araceli B. Chavez

RCRA Enforcement Section

Piedmont Chemical Industries
RCRA CEI Photographs
Laurie Benton DiGaetano, USEPA



Photo 1: Hazardous waste central accumulation area (CAA) after employees attached a “no smoking” sign to the upper chain.

Piedmont Chemical Industries
RCRA CEI Photographs
Laurie Benton DiGaetano, USEPA



Photo 2: Four 275-gallon totes and one 5-gallon bucket in the CAA.



Photo 3: 55-gallon drum in the laboratory SAA.



Photo 4: 2.5-gallon flammable safety can in the laboratory SAA, which was not labeled with the words “hazardous waste.”



Photo 5: Containers of universal waste in the attic.