

RCRA Inspection Report

1) Inspector and Author of Report

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2) Facility Information

Sentury Reagents, Inc.	EPA ID#: SCD982085136
Physical Address: 2515 Commerce Drive Rock Hill, South Carolina 29731	Mailing Address: P.O. Box 150 Rock Hill, South Carolina 29731

3) Responsible Officials

Rob Ellis, Owner	rellis@senturyreagents.com
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4) Inspection Participants

Rob Ellis, Sentury Reagents Tom Richmond, SCDHEC	Laurie Benton DiGaetano, US EPA
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5) Date of Inspection

November 16, 2021

6) Applicable Regulations

Resource Conservation and Recovery Act (RCRA) Sections 3002 (42 U.S. Code – Annotated U.S.C.A. 6925 and 6927), South Carolina Hazardous Waste Management Regulations (SCHWMR) R.61-79, 260 through 270, 273, 278, & 279; and 40 Code of Federal Regulation (C.F.R.), Parts 260 - 270, 273, 278, & 279.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.260.10 [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 25 S.C. Code Ann. Regs. 61-79.260.10 [40 C.F.R. § 260.10], a small quantity generator of hazardous waste (SQG) is a generator who generates greater than 100 kilograms (220 pounds) but less than 1,000 kilograms (2,200 pounds) of non-acute hazardous waste in a calendar month.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.15(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 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 Section 44-56-60(a)(2) and (b)(3) of the SCHWMA, S.C. Code Ann. § 44-56-60(a)(2) and (b) [Section 3005 of RCRA, 42 U.S.C. § 6925], and without complying with 25 S.C. Code Ann. Regs. 61-79.262.16(b) or R.61-79.262.17(a) [40 C.F.R. § 262.16(b) or §262.17(a)], except as required in 25 S.C. Code Ann. Regs. 61-79.262.15(a)(7) and (8) [40 C.F.R. § 262.15(a)(7) and (8)], provided that the generator complies with the satellite accumulation area conditions listed in 25 S.C. Code Ann. Regs. 61-79.262.15(a) [40 C.F.R. § 262.15(a)] (hereinafter referred to as the “SAA Permit Exemption”).

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.16 [40 C.F.R. § 262.16], an SQG may accumulate hazardous waste on-site for 180 days or less without a permit or without having interim status, as required by Section 44-56-60(a)(2) and (b)(3) of the SCHWMA, S.C. Code Ann. § 44-56-60(a)(2) and (b) [Section 3005 of RCRA, 42 U.S.C. § 6925], provided that the generator complies with the conditions listed in 25 S.C. Code Ann. Regs. 61-79.262.16 [40 C.F.R. § 262.16] (hereinafter referred to as the “SQG Permit Exemption”).

Pursuant to 25 S.C. Code Ann. Regs. 61-79.273.9 [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 (CEI) to determine Sentury Reagents, Inc.’s compliance with the applicable requirements of RCRA and the corresponding SCDHEC regulations. This was an EPA lead inspection.

8) **Previous Inspection History**

SCDHEC has conducted one RCRA CEI at the subject facility since 2007. On 02/28/2017, SCDHEC conducted the most recent RCRA CEI at the subject facility and found two apparent violations of RCRA’s requirements for the management of universal waste.

9) **Facility Description**

Sentury Reagents is a chemical manufacturing corporation based in Rock Hill, South Carolina. The subject facility occupies approximately five acres and is the company’s only production facility. Operations began at this location in 1990. The facility operates under the NAICS Code 325180 for Other Basic Inorganic Chemical Manufacturing and specializes in the production of high purity chemicals for use in catalysts, corrosion inhibitors, intermediates, metal finishing, pigments, and other areas. Products include high purity chromium salts, magnesium chemicals, potassium chemicals and various organics. Sentury Reagents currently has six employees, and operations at the facility run from 7:00 am until 4:00 pm, Monday through Friday.

All products are created using batch processes and are sold through a third party-distributor. Batch production typically takes from one to three days to complete, but some products, such as

dichromates, may take a couple weeks to complete. Although products are typically packaged and sold in 15, 30, or 55-gallon drums, liquid products may be packaged and sold in containers of varying sizes up to the size of a tote and dry products may be packaged and sold in containers of varying sizes up to the size of a 55-gallon drum.

Sentury Reagents operated as a large quantity generator (LQG) of hazardous waste until February 2005, when they re-notified as a small quantity generator (SQG) of hazardous waste. The facility re-notified as an LQG between October 2017 and February 2018 but has otherwise operated as an SQG of hazardous waste at the subject facility since 2005. At the time of the inspection, the facility had notified and was operating as an SQG.

The facility has identified five satellite accumulation areas (SAAs) and one central accumulation area (CAA) for managing hazardous wastes generated on-site. The following hazardous wastes are generated at this location:

- The facility routinely generates empty packages that contained certain hazardous raw materials, used coveralls, Tyvek, gloves and PPE, and contaminated trash, which are accumulated together as D007 / D008 hazardous waste solids.
- The facility routinely uses filters to remove impurities during the production process. The used filters are managed as D007 or D007 / D008 hazardous waste.
- The facility also routinely generates filter cake in the on-site wastewater treatment (WWT) system. Mr. Ellis explained that a TCLP analysis is performed on every drum of filter cake, and those drums that exhibit the characteristic of toxicity due to elevated levels of lead or chromium are managed and disposed of as hazardous waste.
- Off-specification products may also be managed and disposed of as hazardous waste if they are found to exhibit a hazardous waste characteristic.
- The facility generates D007 / D008 hazardous waste during scheduled vessel or tank clean-out events. Mr. Ellis stated that these clean-out events are typically scheduled during periods of slow production, in order to ensure that the facility does not exceed the waste generation rate threshold to become an LQG of hazardous waste.

10) Opening Conference

On November 16, 2021, EPA inspector Laurie Benton DiGaetano, accompanied by SCDHEC inspector Tom Richmond, arrived at the subject Sentury Reagents facility at approximately 9:30 a.m. Facility personnel notified Mr. Rob Ellis, Owner, of the inspectors' arrival, and he arrived at the facility to receive the inspectors at approximately 10:00 a.m. The inspectors introduced themselves, showed their credentials to Mr. Ellis, 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 Mr. Ellis led the inspectors on a tour of the Facility operations.

Mr. Ellis provided an overview of the facility's history and current operations during the opening conference. The company may meet 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, which can be found at <https://www.epa.gov/sites/production/files/2017-06/documents/smallbusinessinfo.pdf>.

Because Sentury Reagents frequently generates just under 1,000 kilograms of total hazardous waste per month, the inspectors discussed the possibility that the facility may need to meet the conditions found in 15A NCAC 13A .0107(a) [40 C.F.R. Part 262 Subpart L] if they ever exceed the generation rate of an LQG due to a single planned or unplanned episodic event during any given calendar year.

11) **Findings**

Warehouse and SAA 4: The facility tour began in the warehouse, where the facility stores raw materials and finished goods.

Sentury Reagents also manages universal waste lamps in the warehouse. The inspectors observed one box of 4-foot used fluorescent lamps and one box of 8-foot used fluorescent lamps in this area (Photo 1). Both boxes were closed and labeled as universal hazardous waste lamps. The box of 4-foot lamps was marked with an accumulation start date of 04/22/2021 and the box of 8-foot lamps was marked with an accumulation start date of 03/29/2021.

Sentury Reagents also manages one SAA in the warehouse for managing empty raw material bags, used PPE and contaminated trash as hazardous waste solids (Photo 2). The inspectors observed one 55-gallon drum in this SAA, which is identified as SA4 Weighing Area on the weekly inspection log. The drum was located near the exit leading to the Main Plant. The drum was labeled D007 / D008 hazardous waste solid, but it was not marked with an indication of the hazards of its contents.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.15(a)(5) [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 hazards of the contents.

On the day following the inspection, Mr. Ellis sent an email to the inspectors which included a photograph to show that the hazardous waste label has been modified to indicate that the contents of this container are toxic.

Main Plant CAA and SAA: Next the inspection participants entered the Main Plant which houses the facility's CAA. The area is located within the building, which is equipped with a diked floor to contain spills. The inspectors observed a fire extinguisher and an emergency response telephone, which also operates the internal paging system, in this area. Mr. Ellis stated that emergency response telephones are also located in the laboratory and the warehouse. However, the telephone observed in the Main Plant was not operational at the time of the inspection.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.16(b)(8)(ii)(A) and (B) [40 C.F.R. § 262.16(b)(8)(ii)(A) and (B)], which is a condition of the SQG Permit Exemption, all areas where hazardous waste is either generated or accumulated must be equipped with (A) an internal communications or alarm system capable of providing immediate emergency instruction (voice) or signal to facility personnel; and (B) a device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or State or local emergency response teams.

The inspectors observed two cubic yard boxes on wooden pallets in the designated CAA (Photos 3 and 4). Mr. Ellis stated that the boxes contain used gloves, respirator cartridges and other PPE, empty product bags and other contaminated trash. Each box was labeled D007 / D008 hazardous waste solid and identified with a DOT class 9 hazard placard. One box was dated 11/16/2021 and the other was dated 09/21/2021.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.16(b)(6)(i)(B) [40 C.F.R. § 262.16(b)(6)(i)(B)], which is a condition of the SQG Permit Exemption, a generator is required to mark or label its containers with an indication of the hazards of the contents.

On the day following the inspection, Mr. Ellis sent an email to the inspectors which included a photograph to show that the hazardous waste labels had been modified to indicate that the contents of these containers are toxic.

Sentury Reagents manages one SAA in the Main Plant for managing hazardous waste filter cloths that are generated in the production process (Photo 5). The inspectors observed one 55-gallon drum in this SAA, which is identified as SA1 Amm Mix Platform on the weekly inspection log. The drum was located on the Mix Platform. The drum was closed and labeled D007 hazardous waste solids, but it was not marked with an indication of the hazards of its contents.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.15(a)(5)(ii) [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 hazards of the contents.

On the day following the inspection, Mr. Ellis sent an email to the inspectors which included a photograph to show that the hazardous waste label has been modified to indicate that the contents of this container are toxic.

Potassium Room SAAs: In the Potassium Room, Mr. Ellis explained that the facility is able to recycle much of the materials found on-site. For example, liquids that are left at the end of one production batch, are placed into a container and stored on-site for use in starting the next production batch of that particular product. Because the production process includes a final filtration step to remove impurities, crystalized raw materials and floor sweepings may also be used in the production process.

Sentury Reagents manages one SAA on the floor in the Potassium Room for managing used PPE, gloves and trash that are generated in the production process (Photo 6). The inspectors observed one 55-gallon drum in this SAA, which is identified as SA3 Kroom / 300 Room Floor on the weekly inspection log. The drum was closed and labeled D007 / D008 hazardous waste solids, but it was not marked with an indication of the hazards of its contents.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.15(a)(5)(ii) [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 hazards of the contents.

On the day following the inspection, Mr. Ellis sent an email to the inspectors which included a photograph to show that the hazardous waste label has been modified to indicate that the contents of this container are toxic.

Sentury Reagents manages one SAA on the Potassium Mix Platform for managing hazardous waste filter cloths that are generated in the production process (Photo 7). The inspectors observed one 55-gallon drum in this SAA, which is identified as SA2 Potassium Mix Platform on the weekly inspection log. The drum was closed and labeled D007 / D008 hazardous waste solids, but it was not marked with an indication of the hazards of its contents.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.15(a)(5)(ii) [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 hazards of the contents.

On the day following the inspection, Mr. Ellis sent an email to the inspectors which included a photograph to show that the hazardous waste label has been modified to indicate that the contents of this container are toxic.

Although Century Reagents had not identified another SAA on the Potassium Mix Platform, the inspectors observed a 5-gallon bucket, which was being used to accumulate hazardous waste used PPE, gloves and trash (Photo 8). Mr. Ellis explained that the contents of this bucket are emptied into one of the cubic yard boxes in the CAA. The bucket was not equipped with a lid, it was not labeled as hazardous waste, and it was not marked with an indication of the hazards of its contents.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.15(a)(4) [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 25 S.C. Code Ann. Regs. 61-79.262.15(a)(5) [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 (i) with the words “hazardous waste,” and (ii) with an indication of the hazards of the contents.

Grinding Room: In the grinding room, large pieces of solid products are placed into a grinding machine in order to break them into the specified particle size.

WWT Filter Cake: The facility also houses the sludge filter press of the on-site wastewater treatment (WWT) system in the Grinding Room. Mr. Ellis stated that the WWT system is also run as a batch process, and the frequency of wastewater treatment is dependent on the production levels of the facility. Mr. Ellis estimated that the facility can run two WWT batches in one week or one WWT batch every couple of weeks. Each WWT batch generates enough filter cake to fill about two 55-gallon drums. The inspectors observed a total of approximately thirty-six 55-gallon drums (nine wooden pallets, with four 55-gallon drums per pallet) of filter cake labeled non-hazardous waste (Profile USW-05037) staged in the Main Plant across from the door to the Grinding Room. The pallets were staged close together, without sufficient aisle spacing to walk between them. However, it appeared that each drum was labeled to indicate that it was awaiting analysis for a hazardous waste determination and marked with an accumulation start date. The oldest date observed on any drum of WWT filter cake was 06/23/2021.

Mr. Ellis explained that the WWT system is designed to convert hexavalent chrome to trivalent chrome before the wastewater is discharged to the Rock Hill POTW. Filter cake that is generated by this process is accumulated in a metal hopper beneath the filter press. After the filter cake is released from the filter press into the metal hopper, it is transferred into 55-gallon drums for storage and transportation. Mr. Ellis stated that samples are collected for each drum of filter cake as it is being filled. Sentury Reagents performs TCLP analysis on those samples in the on-site laboratory in order to determine if it will be disposed as hazardous or non-hazardous waste. However, the on-site laboratory has not been certified by the State of South Carolina to conduct the TCLP analysis.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.11(d)(2) [40 C.F.R. § 262.11(d)(2)], when available knowledge is inadequate to make an accurate determination, a person who generates a solid waste, as defined in 25 S.C. Code Ann. Regs. 61-79.261.2 [40 C.F.R. § 261.2], must test the waste according to the applicable methods set forth in Subpart C of 40 C.F.R. Part 261. Pursuant to 25 S.C. Code Ann. Regs. 61-79.261.24 [40 C.F.R. § 261.24], which is found in Subpart C of 40 C.F.R. Part 261, a solid waste exhibits the characteristic of toxicity if, using the Toxicity Characteristic Leaching Procedure (TCLP), test Method 1311 in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,” EPA Publication SW-846, as incorporated by reference in 25 S.C. Code Ann. Regs. 61-79.260.11 [40 C.F.R. § 260.11], the extract from a representative sample of the waste contains any of the contaminants listed in table 1 at the concentration equal to or greater than the respective value given in that table. Pursuant to 25 S.C. Code Ann. Regs. 61-79.260.11(a) [40 C.F.R. § 260.11], the TCLP referenced in 25 S.C. Code Ann. Regs. 61-79.261.24 [40 C.F.R. § 261.24] is applied to necessary testing to be performed by a certified laboratory.

Laboratory SAA: Sentury Reagents manages one SAA for managing hazardous waste lead chromate liquid that is generated by the Atomic Analyzer (AA) in the laboratory. The inspectors observed two containers in this SAA, one 55-gallon drum (Photo 9) and one 5-gallon carboy (Photo 10). Hazardous waste lead chromate liquid generated in the AA machine drains into the 5-gallon carboy through a tube, which was threaded through the container lid. Mr. Ellis explained that liquid is poured from the carboy into the 55-gallon drum at the end of each day.

The 5-gallon carboy was located on the floor next to the AA machine and the 55-gallon drum was located in the corner of the room on the other side of the AA machine. Both containers were labeled hazardous waste, but neither was marked with an indication of the hazards of its contents.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.15(a)(5)(ii) [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 hazards of the contents.

On the day following the inspection, Mr. Ellis sent an email to the inspectors which included photographs to show that the hazardous waste labels have been modified to indicate that the contents of these containers are toxic.

The total volume of waste in this SAA was less than 55-gallons at the time of the inspection. Please note, however, that 25 S.C. Code Ann. Regs. 61-79.262.15(a)(6)(i) and (ii) [40 C.F.R. § 262.15(a)(6)(i) and (ii)] requires a generator who accumulates an excess of 55-gallons of hazardous waste at or near any point of generation to comply within three consecutive calendar days with the applicable CAA regulations or remove the excess from the SAA within three consecutive calendar days to either a CAA, an on-site interim status or permitted treatment, storage, or disposal facility, or an off-site designated facility. Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.15(a)(6)(iii) [40 C.F.R. § 262.15(a)(6)(iii)], the generator must mark or label the container(s) holding the excess accumulation of hazardous waste with the date the excess amount began accumulating and continue to comply with the requirements of the SAA Permit Exemption during the three-consecutive-calendar-day period.

Arrangements with Local Authorities: The inspectors reviewed records that Sentury Reagents had attempted to make arrangements with local authorities who may be called upon to provide services in the event of an emergency.

Emergency Procedures: Sentury Reagents has identified Mr. Ellis, who will be either on the premises or on call, as the emergency coordinator with the responsibility for coordinating all emergency response measures. The inspectors observed emergency response information, including the name and emergency telephone number of the emergency coordinator and an evacuation map, posted on the wall next to the emergency telephones.

Job Descriptions: The inspectors reviewed the job descriptions for the Quality Control Lab Analyst, the Materials Handler and the Facility Manager positions. Each of these job descriptions included an explanation of the hazardous waste job related duties and the education prerequisites.

Employee Training Manual: The employee training manual included job training requirements for each identified job position. The inspectors reviewed employee training manual modules for the Hazardous Waste Training Program and the Materials Management and Global Harmonization System Training.

Waste Manifest Records: The inspectors reviewed available hazardous waste manifest records and land disposal restriction forms for shipments of hazardous waste sent since 01/01/2019. Hazardous waste manifest records show that D007 / D008 hazardous waste solids, and D007 / D008 hazardous waste liquids are routinely shipped to Michigan Disposal (MID000724831)

and/or Clean Earth Alabama (ALD981020894), and that D007 hazardous waste solid was also sent to EQ Detroit (MID980991565).

Although the records did not include a signed return copy of hazardous waste manifest number 014844439JJK for a shipment of D007 / D008 hazardous waste solid (chromium / lead) sent to Michigan Disposal (MID000724831) on 10/07/2020, facility personnel were able to locate an electronic version of the signed manifest and provided it to the inspectors during the inspection. The records also did not include a signed return copy of hazardous waste manifest number 013308634JJK for a shipment of D007 / D008 hazardous waste solid (chromium / lead) sent to Clean Earth Alabama (ALD981020894) on 11/26/2019, or of hazardous waste manifest number 013310178JJ for a shipment of D007 / D008 hazardous waste liquid (lead chromate) sent to Michigan Disposal (MID000724831) on 05/04/2021.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.44(b) [40 C.F.R. § 262.44(b)], which incorporates 25 S.C. Code Ann. Regs. 61-79.262.42(b) [40 C.F.R. § 262.42(b)], an SQG who does not receive a copy of the manifest with the handwritten signature of the owner or operator of the designated facility must submit an Exception Report to the EPA Regional Administrator for the Region in which the generator is located if he has not received a copy of the manifest with the handwritten signature of the owner or operator of the designated facility within 45 days of the date the waste was accepted by the initial transporter.

Inspection Records: The inspectors reviewed Sentury Reagents' available records of inspections of the hazardous waste CAAs and SAAs since 11/20/2018. The inspection log includes a checklist to record observations about leaking containers and for deterioration of containers caused by corrosion or other factors. The records include the date of the inspection and the initials of the employee conducting the inspection. One inspection record was missing for the week of 12/24/2018.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.16(b)(2)(iv) [40 C.F.R. § 262.16(b)(2)(iv)], which is a condition of the SQG 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.

12) Closing Conference

The inspectors conducted the exit meeting with Mr. Ellis. During this meeting, the inspectors stated their preliminary conclusions of the inspection. Mr. Ellis agreed to provide the signed, returned copies of manifest numbers 013310178JJ and 013308634JJK.

On 11/17/2021, Mr. Ellis sent an email to the inspectors which included photographs to show that the hazardous waste labels had been modified to indicate that the contents of the containers are toxic.

13) Inspection Findings

Based on the observations made during the inspection, Sentury Reagents was apparently deficient with the following RCRA requirements:

- Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.11(d)(2) [40 C.F.R. § 262.11(d)(2)], when available knowledge is inadequate to make an accurate determination, a person who generates a solid waste, as defined in 25 S.C. Code Ann. Regs. 61-79.261.2 [40 C.F.R. § 261.2], must test the waste according to the applicable methods set forth in Subpart C of 40 C.F.R. Part 261. Pursuant to 25 S.C. Code Ann. Regs. 61-79.261.24 [40 C.F.R. § 261.24], which is found in Subpart C of 40 C.F.R. Part 261, a solid waste exhibits the characteristic of toxicity if, using the Toxicity Characteristic Leaching Procedure (TCLP), test Method 1311 in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,” EPA Publication SW-846, as incorporated by reference in 25 S.C. Code Ann. Regs. 61-79.260.11 [40 C.F.R. § 260.11], the extract from a representative sample of the waste contains any of the contaminants listed in table 1 at the concentration equal to or greater than the respective value given in that table. Pursuant to 25 S.C. Code Ann. Regs. 61-79.260.11(a) [40 C.F.R. § 260.11(a)], the TCLP referenced in 25 S.C. Code Ann. Regs. 61-79.261.24 [40 C.F.R. § 261.24] is applied to necessary testing to be performed by a certified laboratory.
- Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.15(a)(4) [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 25 S.C. Code Ann. Regs. 61-79.262.15(a)(5) [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 (i) with the words “hazardous waste,” and (ii) with an indication of the hazards of the contents.
- Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.16(b)(2)(iv) [40 C.F.R. § 262.16(b)(2)(iv)], which is a condition of the SQG 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.
- Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.16(b)(6)(i)(B) [40 C.F.R. § 262.16(b)(6)(i)(B)], which is a condition of the SQG Permit Exemption, a generator is required to mark or label its containers with an indication of the hazards of the contents.
- Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.16(b)(8)(ii)(A) and (B) [40 C.F.R. § 262.16(b)(8)(ii)(A) and (B)], which is a condition of the SQG Permit Exemption, all areas where hazardous waste is either generated or accumulated must be equipped with (A) an internal communications or alarm system capable of providing immediate emergency instruction (voice) or signal to facility personnel; and (B) a device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or State or local emergency response teams.

- Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.44(b) [40 C.F.R. § 262.44(b)], which incorporates 25 S.C. Code Ann. Regs. 61-79.262.42(b) [40 C.F.R. § 262.42(b)], an SQG who does not receive a copy of the manifest with the handwritten signature of the owner or operator of the designated facility must submit an Exception Report to the EPA Regional Administrator for the Region in which the generator is located if he has not received a copy of the manifest with the handwritten signature of the owner or operator of the designated facility within 45 days of the date the waste was accepted by the initial transporter.

14) **List of Appendices**

Appendix 1 – Photo Log:

Ten Photos taken on: November 16, 2021

Photos taken by: Laurie Benton DiGaetano

Photos taken with: Panasonic DMC TS-5 Digital Camera

EPA Property Tag: S09533

15) **Signed**

Laurie Benton DiGaetano
Senior Enforcement and Compliance Specialist

Concurrence

Araceli B. Chavez
Chief
RCRA Enforcement and Compliance Section



Photo 1: One box of 4-ft used fluorescent lamps and one box of 8-ft used fluorescent lamps in the Warehouse. Both boxes were closed and labeled as universal hazardous waste lamps. The 4-ft box was marked with an accumulation start date of 04/22/2021 and the 8-ft box was marked with an accumulation start date of 03/29/2021.



Photo 2: SAA One 55-gallon drum in the Warehouse SAA for managing empty raw material bags, used PPE and contaminated trash as hazardous waste solids. The drum was closed and labeled D007 / D008 hazardous waste solids, but it was not marked with an indication of the hazards of its contents.



Photo 3: Two cubic yard boxes of used gloves, respirator cartridges and other PPE, empty product bags and contaminated trash in the CAA. Each box was labeled D007 / D008 hazardous waste solid and identified with a DOT class 9 hazard placard. One box was dated 11/16/2021 and the other was dated 09/21/2021.



Photo 4: Two cubic yard boxes of used gloves, respirator cartridges and other PPE, empty product bags and contaminated trash in the CAA. Each box was labeled D007 / D008 hazardous waste solid and identified with a DOT class 9 hazard placard. One box was dated 11/16/2021 and the other was dated 09/21/2021.



Photo 5: One 55-gallon drum in the Main Plant SAA for managing hazardous waste filter cloths that are generated in the production process. The drum was closed and labeled D007 hazardous waste solids, but it was not marked with an indication of the hazards of its contents.



Photo 6: One 55-gallon drum on the floor in the Potassium Room SAA for managing hazardous waste used PPE, gloves and trash. The drum was closed and labeled D007 / D008 hazardous waste solids, but it was not marked with an indication of the hazards of its contents.



Photo 7: One 55-gallon drum in the Potassium Room platform SAA for managing hazardous waste filter cloths that are generated in the production process. The drum was closed and labeled D007 / D009 hazardous waste solids, but it was not marked with an indication of the hazards of its contents.



Photo 8: One 5-gallon bucket on the platform in the Potassium Room for accumulating hazardous waste used PPE, gloves and trash. The drum bucket was not closed or labeled, and this area was not identified as a SAA.



Photo 9: One 55-gallon drum in the Laboratory SAA for managing hazardous waste lead chromate liquid that is generated by the Atomic Analyzer. The drum was closed and labeled hazardous waste liquid, but it was not marked with an indication of the hazards of its contents.



Photo 10: One 5-gallon carboy in the Laboratory SAA for managing hazardous waste lead chromate liquid that is generated by the Atomic Analyzer. The container was closed and labeled hazardous waste liquid, but it was not marked with an indication of the hazards of its contents.