

RCRA Inspection Report

1) Inspector and Author of Report

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U.S. Environmental Protection Agency, Region 4
Enforcement and Compliance Assurance Division
Chemical Safety and Land Enforcement Branch
RCRA Enforcement Section
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2) Facility Information

Holcim (US) Inc.
2173 Gardner Boulevard
Holly Hill, South Carolina 29059

Geocycle, LLC
2175 Gardner Boulevard
Holly Hill, South Carolina 29059

EPA ID#: SCD003368891

NAICS: 327310 Cement Manufacturing | 562211 Hazardous Waste Treatment and Disposal

3) Responsible Officials

Garfield Robertson
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4) Inspection Participants

Garfield Robertson, Geocycle LLC
Randy Sparks, Geocycle LLC
Brian Joyce, Holcim

Ryan Donohue, SCDHEC
Tom Richmond, SCDHEC
Laurie Benton DiGaetano, USEPA

5) Date of Inspection

February 29 – March 1, 2024

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; South Carolina Hazardous Waste Management Act, S.C. Code Ann. § 44-56-10 *et seq.*, and South Carolina Hazardous Waste Management Regulations (SCHWMR), S.C. Code Ann. Regs. 61-79.260-270, 61-79.273 and 61-79.279; and Hazardous Waste Permit SCD003368891.

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 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 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.

Pursuant to 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 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 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 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 S.C. Code Ann. Regs. 61-79.262.17(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 S.C. Code Ann. Regs. 61-79.262.15 [40 C.F.R. § 262.15] (hereinafter referred to as the “SAA Permit Exemption”).

Pursuant to S.C. Code Ann. Regs. 61-79.262.17 [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 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 S.C. Code Ann. Regs. 61-79.262.17 [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 Holcim (US), Inc. / Geocycle, LLC’s compliance with the conditions of its RCRA Hazardous Waste Facility Operating Permit SCD003368891, the applicable requirements of RCRA and the corresponding South Carolina regulations. This was an EPA lead inspection.

8) Facility Description

The Holly Hill Plant, located at 200 Safety Street, Highway 453, Holly Hill, South Carolina (the “Facility”), is a cement plant and limestone quarry and a RCRA permitted hazardous waste treatment, storage, and disposal facility with a hazardous waste industrial furnace (also referred to as the “Portland cement kiln system”). The full RCRA Permit, which was issued to the property owners, Holcim (US), Inc. and Orangeburg County, South Carolina, and to the operator, Geocycle (US) LLC (collectively called “the Permittee”), includes the conditions found in the Hazardous Waste Permit, number SCD003368891, issued by the South Carolina Department of Health and Environmental Control (SCDHEC) on April 16, 2013, and in the Hazardous and Solid Waste Amendments (HSWA) portion of the RCRA permit, issued by the Environmental Protection Agency (EPA) on March 3, 2015.

Holcim, Inc. is a worldwide producer of cement and aggregate. The company is headquartered in Jona, Switzerland, and has over 80,000 employees in 70 countries worldwide. Holcim (US), Inc. (Holcim), which is headquartered in Waltham Massachusetts, operates a cement plant and limestone quarry at the Facility. Geocycle (US) LLC (Geocycle), a wholly owned subsidiary of Holcim, Inc., is a waste management service provider. Headquartered in Dundee, Michigan, Geocycle's waste management services include advice, assessment, analysis, logistics support, pretreatment, and final treatment through co-processing. Geocycle receives and blends high British Thermal Unit (BTU) hazardous waste into hazardous waste derived fuel (HWDF) at the subject Facility. The HWDF is one of several potential fuel sources used to heat Holcim's on-site Portland cement kiln system.

Holcim's on-site cement manufacture process generally begins with quarrying and crushing limestone (marle) and then grinding and blending it with other materials such as fly ash and cement kiln dust to produce kiln feed. The kiln feed is gravity fed through the preheater/precalciner and it undergoes physical and chemical changes as it travels through the heated stages into the rotary kiln. Then calciner is added and the rotary kiln is used to further heat the ingredients and produce cement clinker. Holcim may use a combination of fossil fuels (such as coal, petroleum coke, synthetic virgin fuel, fuel oils, and natural gas), non-hazardous alternate fuels (such as rubber, used oil, tires and wood byproducts), and HWDF to provide heat in the cement manufacturing process. After the cement clinker is removed from the rotary kiln and allowed to cool, the clinker is ground with gypsum and other materials to produce the final cement product.

In addition to the on-site quarry and cement plant, the 3,700-acre Facility also includes:

- a **Railcar Staging Area** - approximately 7,960 feet of railroad track within the Facility upon which railcars can be located on-site;
- a **Tank Truck Unloading Area (Area 6100)** – a four-bay tanker truck unloading station permitted to store up to 24,000-gallons (four 6,000-gallon tanker trucks) of hazardous waste and up to 11,000-gallons (200 55-gallon drums or equivalent) of hazardous waste in non-bulk containers;
- a **Railcar Unloading Area (RL01)** – an area of railroad track equipped with secondary containment and permitted to store one rail car containing up to 25,000-gallons of hazardous waste;
- **Tank Farm No. 1 Blend Tanks (Area 4100)** – five identical storage tanks with three in-line grinders. Each storage tank is permitted to store up to 40,000-gallons of hazardous waste;
- **HWDF Burn Tank 5102 (Area 5100)** – one storage tank permitted to store up to 150,000-gallons of HWDF;
- **HWDF Burn Tank 5106 (Area 5100)** – one storage tank permitted to store up to 250,000-gallons of HWDF, which can be pumped through in-line grinders or other solids sizing units to Feed Tank 7101 or to the kiln;
- **HWDF Feed Tank 7101 (Area 7100)** – one storage tank permitted to store up to 250,000-gallons of HWDF, which is pumped into the cement kiln system via the rotary kiln and precalciner;

- **Direct Burn Building (Area 7100)** – covered area permitted to store up to 5,500-gallons (100 55-gallon drums or equivalent) of bulk or non-bulk containers of hazardous waste; and
- a **Laboratory** – on-site laboratory to perform waste sample analyses to support operations at this Facility and several other Geocycle facilities.

The RCRA Permit authorizes the Permittee to accept and store hazardous waste, to blend HWDF, to operate one direct burn system, and to treat HWDF in the Portland cement kiln system. Although the RCRA Permit includes conditions for receiving and storing non-bulk containers of hazardous waste, Facility personnel stated that the Permittee does not currently receive non-bulk containers of hazardous waste and that any non-bulk containers of hazardous waste stored within the permitted container storage area(s) contain only site-generated hazardous waste. Pursuant to the RCRA Permit, the Permittee may treat HWDF at two locations within the Portland cement kiln system: the precalciner portion of the preheater/precalciner tower and the lower (hot) end of the rotary kiln. Typical HWDF accepted and used by the Facility includes waste solvents, oils, out-of-specification intermediates, and products from various industries such as paint, ink, adhesive, resin, plastic, petroleum, petrochemical, pharmaceutical, automotive, and numerous chemical manufacturing and process industries. The Facility also receives and treats bulk shipments of blended HWDF from other recycling and hazardous waste treatment, storage, and disposal facilities.

Five days per week, the Facility receives bulk liquid hazardous waste shipments, which include an average of about fifteen tank trucks and five rail cars per day, on a prearranged schedule. Up to an estimated twenty-four tanker trucks and eight rail cars can be unloaded in one workday, and the Facility focuses on unloading tanker trucks during the daytime and unloading railcars at night. Waste shipments are typically off-loaded into one of five permitted blend tanks (Tanks 1-5) located in Area 4100. Alternatively, HWDF received by the Facility may be transferred directly into one of three permitted storage tanks: the 150,000-gallon burn tank (Tank 5102), the 250,000-gallon burn tank (Tank 5106), or the feed tank (Tank 7101). The RCRA Permit also includes conditions for off-loading HWDF from tanker trailers in the Direct Burn Building (Area 7100) and transferring it directly into the kiln. Each incoming waste shipment is sampled and analyzed to verify that it is substantially the same as described by the pre-qualification records and manifest shipping documents; that it meets the waste acceptance parameters, such as having the correct BTU value; that it is not contaminated with unacceptable quantities of metals, halogens, furans, dioxins, and Polychlorinated biphenyls (PCBs); and that it is compatible with the HWDF already present in the destined storage tank.

Holcim operates the cement plant 24 hours per day, seven days per week and has approximately 190 employees on-site. Geocycle also has employees working on-site seven days per week. On Monday through Friday, Geocycle operates on two shifts with employees performing waste management activities from 7:00 am until 11:00 pm or midnight. Eight of Geocycle's twenty-six on-site employees work in the on-site laboratory, which operates on two shifts sixteen to eighteen hours per day. On Saturday and Sunday, Geocycle employees are on-site to perform required daily inspections and any necessary tank transfer activities.

On the RCRA Part A Application Form 8700-12 and 8700-23, the Permittee also indicated that the Facility is a large quantity generator of hazardous waste (LQG), a receiver of hazardous waste from off-site, a recycler who stores hazardous waste prior to recycling, an importer of

hazardous waste, a large quantity handler of universal waste batteries and lamps, an off-specification used oil burner, and a used oil fuel marketer who directs shipment of off-specification used oil to off-specification used oil burner. Hazardous wastes generated onsite include: used gloves, Tyvek suits, rags and other contaminated PPE and equipment, which are classified with all waste codes that have been received at the facility; contaminated rainwater; laboratory waste, including unused/retained lab samples and sample preparation solvents and empty containers and lab solids waste; absorbent materials and HWDF grinder/strainer solids; and spent carbon generated from the tank emissions control devices, which is sent for disposal when it can no longer be reactivated.

9) Previous Inspection History

Over the past ten years, the EPA and SCDHEC have conducted two joint RCRA CEIs and the SCDHEC has conducted an additional four RCRA CEIs at the subject facility. The most recent RCRA CEI was conducted by the SCDHEC on August 4, 2022. The SCDHEC alleged two violations of container management regulations during that inspection and verified that the Facility returned to compliance on the date of the inspection.

10) Opening Conference

On February 29, 2024, EPA inspector Laurie Benton DiGaetano, accompanied by South Carolina Department of Health and Environmental Control inspectors Ryan Donohue and Tom Richmond, arrived at Holcim (US) Inc. / Geocycle, LLC at approximately 9:15 a.m. and signed in at the kiosk to alert Marcelo Cisternino that they were waiting in the lobby. At approximately 9:35 a.m. a passing employee informed the inspectors that Marcelo Cisternino left the Facility in September. Bill Tierney, Lab Manager for Geocycle, LLC, assisted the inspectors at approximately 9:40 a.m. and introduced them to Javier Sosa, outgoing Holcim Plant Manager. Javier Sosa introduced the inspectors to Holcim's incoming Plant Manager, Hannes Diedericks, and the inspectors completed the site safety training orientation.

Garfield Robertson, Facility Manager for Geocycle, LLC, and Randy Sparks, Regulatory Manager for Geocycle, LLC, participated in the opening conference with the inspectors. The inspectors introduced themselves, showed their credentials to Randy Sparks, 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 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/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.

Garfield Robertson and Randy Sparks 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 Garfield Robertson and Randy Sparks led the inspectors on a tour of the Facility operations.

11) **Inspection Observations**

Laboratory:

The Facility tour began in the on-site laboratory where Geocycle employees perform a variety of analytical tests on waste samples for this Facility and for other Geocycle facilities. Personnel manage a SAA for accumulating hazardous wastes that are generated in the laboratory. The inspectors observed eight containers, with a total capacity of approximately 46 gallons, in this SAA. The laboratory is also equipped with an emergency shower and eyewash station, a spill control kit, and a fire extinguisher.

The inspectors observed two 15-gallon containers for accumulating waste solids generated in the laboratory, including used PPE, wipes, containers, and other solids contaminated with solvents and liquid hazardous waste, as hazardous waste solids (Photo 1). Each container was designed with a pedal to open the hinged lid, and an interior bin for accumulating waste. Facility personnel stated that the interior bin is removed from each container and the contents are emptied into a 55-gallon container at the compactor unit in Area 6100. Each container was labeled as hazardous waste and identified with a DOT flammable liquid hazard placard. The inspectors noted that, because the containers held hazardous waste solids rather than liquids, the DOT flammable liquid hazard placard may not be the preferred method to indicate that the contents are ignitable. Although, these hazardous waste solids also exhibit characteristics of toxicity, neither container was marked with an indication that its contents are toxic.

Pursuant to 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.

The inspectors observed several smaller containers for accumulating hazardous waste liquids generated in the laboratory:

- One 2.5-gallon container of hazardous waste exhibiting the characteristics of ignitability and toxicity in Laboratory Hood #1. The container was labeled as hazardous waste and identified with a DOT flammable liquid hazard placard, but it was not marked with an indication that its contents are also toxic;
- One 2.5-gallon container of hazardous waste exhibiting the characteristics of ignitability and toxicity in Laboratory Hood #2 (Photo 2). The container was labeled as hazardous waste and identified with a DOT flammable liquid hazard placard, but it was not marked with an indication that its contents are also toxic;
- Two 5-gallon containers of acid waste (acetone and water and acid), which were each labeled as hazardous waste and identified with a DOT flammable liquid hazard placard, in a laboratory sink (Photo 3);
- Two 5-gallon containers of waste nitric acid, which were each labeled as hazardous waste and identified with a DOT corrosive hazard placard, in the ICP testing area (Photo 4); and

- One 1-gallon container, which was labeled as hazardous waste and identified with a DOT corrosive hazard placard, hooked up to laboratory equipment in the mercury testing area.

Pursuant to 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.

Tank Truck Unloading Area (Area 6100):

The Facility requests a three-hour window for arriving tanker truck shipments to be sampled, analyzed, approved, and unloaded before the empty tanker truck leaves the Facility. The full trucks are brought into one of the tanker unloading bays in Area 6100 (Photo 5) so that Geocycle employees can obtain a sample of the incoming waste shipment. It may take approximately 45 minutes to complete laboratory analysis and approval activities, and the full truck(s) may return to the adjacent parking area during this time. Once the shipment is approved, the full tanker truck is staged in the unloading bay and the contents are pumped into one of five blend tanks in Area 4100.

In addition to tanker truck sampling and unloading, Geocycle personnel also use Area 6100 to store non-bulk containers of site-generated waste. The inspectors observed one 300-gallon tote containing hazardous waste liquids (Photo 6) at the end of a line of approximately twenty-five 55-gallon containers of hazardous waste solids and one 55-gallon container of nonhazardous gear box oil (Photo 7). The tote is used to accumulate and store liquid hazardous wastes that are generated in the on-site laboratory and subsequently blended in with the HWDF used to heat the on-site kiln. The tote was labeled as hazardous waste and marked with an accumulation start date of February 13, 2024, but it was not identified with an indication of the hazards of its contents. The 55-gallon containers are used to accumulate and store hazardous waste solids generated in the laboratory and throughout the Facility. Each container was labeled as hazardous waste and marked with an accumulation start date. None of the containers were marked to indicate that the contents were toxic, but most were identified with a DOT flammable liquid hazard sticker. One container, dated November 22, 2023, was not marked to indicate that its contents were flammable (Photo 8). The oldest accumulation start date noted during the inspection was November 10, 2023. The inspectors also observed the compactor unit used to compact hazardous waste solids into 55-gallon containers in this area (Photo 9).

Pursuant to the RCRA Permit SCD003368891, Condition VII.B.2 Storage Prohibition, which incorporates S.C. Code Ann. Regs. 61-79.268.50(a)(2)(i) [40 C.F.R. § 268.50(a)(2)(i)], an owner/operator of a hazardous waste treatment, storage, or disposal facility who stores hazardous waste restricted from land disposal must clearly mark each container with an indication of the hazards of the contents.

The inspectors also observed one 55-gallon container near the compactor unit that Facility personnel stated contained acetone used to clean and soak flame arrestors used in the waste transfer equipment (Photo 10). Because the acetone in the container had already been used, the container was labeled as hazardous waste and dated January 8, 2024. However, the

inspectors stated that the container does not need to be labeled or managed as hazardous waste while the acetone is still in use.

Geocycle manages a SAA for accumulating hazardous waste liquids, which exhibit the hazardous waste characteristics of ignitability and toxicity, generated at Area 6100. These liquids are primarily generated as lines are attached and removed from transfer equipment. In this SAA, the inspectors observed two 5-gallon buckets in the unloading bays (Photo 11) and two 5-gallon pails in the control pit. Facility personnel explained that nitrogen is used to purge the transfer lines after unloading a tanker truck, and the 5-gallon buckets are used to accumulate wastes that exit the lines when they are disconnected. Waste is then transferred from the 5-gallon buckets into the 250-gallon tote, which was observed at the workstation CAA, before it is blended in with the HWDF used to heat the on-site kiln. The 5-gallon pails were labeled as hazardous waste, two were identified with a DOT flammable liquid sticker, but none were marked to indicate that the contents are toxic. The 250-gallon tote was labeled as hazardous waste flammable liquid, but it was not marked to indicate that its contents are also toxic.

Pursuant to 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.

Pursuant to S.C. Code Ann. Regs. 61-79.262.17(a)(5)(i)(B) [40 C.F.R. § 262.17(a)(5)(i)(B)], which is a condition of the LQG Permit Exemption, a generator is required to mark or label containers with an indication of the hazards of the contents clearly visible for inspection on each container.

The inspectors also observed a parts washer and 55-gallon container in the workstation between Area 6100 and Area 4100 (Photo 12). The parts washer is used to clean parts associated with the pumps and grinders located in and around this area. The 55-gallon container is used to accumulate hazardous waste spent cleaning fluids that exhibit the hazardous waste characteristics of ignitability and toxicity. The container was labeled as hazardous waste flammable liquid, but it was not marked with an indication that its contents are also toxic.

Pursuant to 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.

Railcar Staging Area:

Arriving railcars are received and stored in the railcar staging area (Photo 13), and up to thirty-five non-RCRA empty railcars containing waste may be stored on-site at any given time. Railcars containing material that meets the acceptance criteria must be unloaded within thirty days of receipt, and personnel estimated that the railcars are typically unloaded within three days. The inspectors observed railcars numbered GATX53850, SKSX117140, and DNAX123039, and verified that these railcars were identified on the daily inspection logs associated with this area.

Railcar Unloading Area (RL01):

The Railcar Unloading Area (RL01) is an area of railroad track equipped with secondary containment located next to Areas 4100 and 6100. RL01 is permitted to store one rail car containing up to 25,000-gallons of hazardous waste, and the inspectors observed one railcar in this area at the time of the inspection. The inspectors also observed two additional railcars along the railcar staging track adjacent to RL01. These three railcars were attached to one another and staged to be unloaded one-by-one in RL01.

Tank Farm No. 1 (Area 4100):

The inspectors observed blend Tanks 1-5 in Tank Farm No. 1 (Area 4100). Each tank was labeled as hazardous waste and marked with a National Fire Protection Association diamond to indicate the hazards of its contents. The inspectors also observed a fire extinguisher and an emergency shower and eyewash station in this area.

Burn Tank 5102 (Area 5100):

Because Geocycle had taken Feed Tank 7101 out of service to perform necessary repairs, Burn Tank 5102 was being used as the feed tank at the time of the inspection. The tank was labeled as hazardous waste and marked with a National Fire Protection Association diamond to indicate the hazards of its contents. The inspectors also observed a fire extinguisher and an emergency shower and eyewash station in this area.

Burn Tank 5106 (Area 5100):

Burn Tank 5106, which was constructed in 2018, is the newest hazardous waste tank at the Facility. The tank was labeled as hazardous waste and marked with a National Fire Protection Association diamond to indicate the hazards of its contents. The inspectors also observed a fire extinguisher and an emergency shower and eyewash station in this area.

Area for Future Tank Farm (Area 5100):

The inspectors observed approximately fifty 275-gallon totes in the area identified for future Tank Farm (Photo 14). The gate to access this area was equipped with a “danger, no smoking sign.” The totes were staged together without any aisle spacing along the wall farthest from Tank 5106 and its secondary containment area. Most of these totes were identified as “used oil” or “waste oil” on a nonhazardous waste label, but the writing on several of those labels had faded or been washed off. Most containers also held 1-foot or less of dark liquid, and at least three of the totes were open (Photo 15). The inspectors observed hazardous waste labels on three of the totes. One hazardous waste tote was dated September 5, 2023 (Photo 16), and another was dated February 28, 2024 (Photo 17). None of these three totes were marked with an indication of the hazards of its contents, and one was open. This area is not permitted for storage of hazardous waste in containers, and it was not identified as a CAA in the records of weekly inspections of container storage areas.

Pursuant to S.C. Code Ann. Regs. 61-79.262.17(a)(6) [40 C.F.R. § 262.17(a)(6)], which incorporates S.C. Code Ann. Regs. 61-79.262.255 [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 S.C. Code Ann. Regs. 61-79.262.17(a)(1)(iv) [40 C.F.R. § 262.17(a)(1)(iv)], which is a condition of the LQG Permit Exemption, (A) a container holding hazardous waste must always be closed during accumulation, except when it is necessary to add or remove waste; and (B) A container holding hazardous waste must not be opened, handled, or stored in a manner that may rupture the container or cause it to leak.

Pursuant to S.C. Code Ann. Regs. 61-79.262.17(a)(5)(i)(B) [40 C.F.R. § 262.17(a)(5)(i)(B)], which is a condition of the LQG Permit Exemption, a generator is required to mark or label containers with an indication of the hazards of the contents clearly visible for inspection on each container.

Pursuant to S.C. Code Ann. Regs. 61-79.262.17(a)(1)(v) [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.

Pursuant to S.C. Code Ann. Regs. 61-79.262.17(b) [40 C.F.R. § 262.17(b)], which is a condition of the LQG Permit Exemption, an LQG who accumulates hazardous waste for more than 90 days is subject to the requirements of 40 C.F.R. Parts 124, 264 through 268, and Part 270 of this chapter, and the notification requirements of section 3010 of RCRA for treatment, storage, and disposal facilities.

Pursuant to the RCRA Permit SCD003368891, Condition I.A. Effect of Permit, any storage, treatment, and/or disposal of hazardous waste not authorized in this Permit is prohibited, except as allowed by the South Carolina Hazardous Waste Management Regulations, R.61-79.

In an email dated March 22, 2024, Randy Sparks stated that the Facility identified a total of 52 totes in Area 5100. He explained that the cement plant brought used oil totes to Geocycle, and that thirty-seven of the totes in this area contained various residues of used oil, including hydraulic oil and/or gear lube oil. Another nine totes were empty, and the final six contained hazardous waste carbon water. Mr. Sparks indicated that the six totes of hazardous waste were either processed into the tank farm on February 29, 2024, or marked with an indication of the hazards of the contents and placed in the permitted container storage area. Following the inspection, Geocycle and Holcim reviewed and revised the process for managing used oil generated by Holcim and brought to Geocycle for processing. Mr. Sparks stated that Holcim employees will ensure that each tote is marked with the words “used oil” and will also notify Geocycle when totes are brought to this area.

Carbon Vent System Area:

The Facility occasionally drains wash water that is generated in the carbon vent system before it enters the scrubber and accumulates the liquid as hazardous waste. The inspectors observed a tote containing approximately 100 gallons of this liquid in the Carbon Vent System Area at Area

5100 (Photo 18). Neither this tote nor the Carbon Vent System Area was identified as a CAA on the log of daily or weekly inspections for hazardous waste container storage areas.

In an email dated March 22, 2024, Randy Sparks stated that the Facility determined that hazardous waste condensate draining from the carbon system will be accumulated in a SAA. Mr. Sparks provided a photograph of a 55-gallon container which has replaced former tote in this SAA. Mr. Sparks also provided a record of training in which employees reviewed the regulatory requirements for managing hazardous waste in a SAA on March 12, 2024. At the time of the inspection, the tote contained approximately 100 gallons of hazardous waste carbon water. Although the tote was labeled with the words “hazardous waste,” it was not marked with an accumulation start date or identified with an indication of the hazards of its contents.

Pursuant to S.C. Code Ann. Regs. 61-79.262.15(a)(6) [40 C.F.R. § 262.15(a)(6)], a generator who accumulates hazardous waste in excess of 55 gallons must, with respect to that amount of excess waste, mark or label the container(s) holding the excess accumulation of hazardous waste with the date the excess amount began accumulating, and also comply with S.C. Code Ann. Regs. 61-79.262.17(a) [40 C.F.R. § 262.17(a)] or remove the excess waste from the SAA within three consecutive calendar days.

Pursuant to 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.

HWDF Feed Tank 7101 (Area 7100):

At the time of the inspection, Feed Tank 7101 was not in service. Personnel were performing repairs to the tank’s agitator, and the Facility had established a SAA to accumulate hazardous waste generated during the repair activities. The inspectors observed one 55-gallon container in this SAA. The container was located next to the tank inside the secondary containment area, and personnel stated that it has been used to accumulate material generated from disconnecting and cleaning out waste transfer lines associated with the tank. The container was labeled as hazardous waste flammable liquid, but it was not marked to indicate that its contents are also toxic.

Pursuant to 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.

Used Oil Tank:

The inspectors observed the Facility’s used oil tank, which was labeled with the words “used oil.”

Direct Burn Building (Area 7100):

The Direct Burn Building in Area 7100 is intended to house equipment necessary for direct transfer of pumpable hazardous waste from a transport vehicle (tanker truck) to the Portland

cement kiln system, but personnel stated that the Facility does not perform this direct transfer activity. Instead, the area is used to unload non-RCRA materials. The area is also permitted to store up to 5,500-gallons (100 55-gallon drums or equivalent) of bulk or non-bulk containers of hazardous waste, but the inspectors did not observe any containers of hazardous waste in this area at the time of the inspection.

Holcim Maintenance Area:

Universal wastes and used aerosol cans are accumulated in the Holcim Maintenance Area (Photo 19). The inspector observed one 55-gallon container of universal waste halogen lamps, one 3-gallon container of universal waste batteries, one 4-foot box of universal waste lamps, and one 8-foot box of universal waste lamps in this area. Each container was marked with an accumulation start date, and the oldest date was January 15, 2024. The containers of universal waste lamps were marked with the words “universal waste bulbs.”

Pursuant to S.C. Code Ann. Regs. 61-79.273.14(e) [40 C.F.R. § 273.14(e)], a SQHUW must label or mark each lamp or container of lamps clearly with one of the following phrases: “Universal Waste-Lamp(s),” or “Waste Lamp(s),” or “Used Lamps.”

The Facility also manages a SAA in this area to accumulate the contents of used aerosol cans. The inspectors observed one 55-gallon container, which was equipped with an aerosol can puncture device, in this SAA (Photo 20). The container was labeled as hazardous waste, but it was not marked with an indication of the hazards of its contents.

Pursuant to 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.

12) Records Review

Contingency Plan and Quick Reference Guide (QRG):

The actions that facility personnel should take in response to an emergency are described in the facility’s Contingency Plan, which was last updated in June 2022. A copy of the Contingency Plan (and its quick reference guide) was most recently submitted to the Orangeburg County Local Emergency Planning Committee on August 9, 2022. The Contingency Plan describes actions facility personnel must take in response to fires, explosions, unplanned sudden or non-sudden releases of hazardous waste or hazardous waste constituents, natural disasters, floods and hurricanes; it plan includes a list of emergency equipment, such as fire extinguishing systems, spill control equipment, communications and alarm systems, and decontamination equipment, at the facility; and it includes an evacuation plan, which describes notification systems to be used to begin evacuation, evacuation routes, and alternate evacuation routes for personnel.

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; a street map of the facility in relation to surrounding businesses, schools and residential areas; the locations of water supply; the identification of on-site notification systems; and the name of the emergency coordinator(s) and emergency telephone number(s). The plan includes a list of names and emergency telephone numbers for persons identified as emergency coordinators.

The primary facility contact identified in the quick reference guide is no longer employed at this location, and the date of the inspection was the interim primary facility contact's last day at that position. The Contingency Plan and (and its quick reference guide) were scheduled to be updated with the contact information for the new Plant Manager, who is taking over the role of the permanent primary facility contact.

Training Records:

According to the RCRA Permit, all Geocycle employees at the Facility receive hazardous waste training, and Holcim employees with job duties that may affect kiln emissions also receive hazardous waste training on a smaller scale. The inspectors reviewed facility job descriptions and employee names that were provided for Holcim's Program Manager, Process Control Coordinator, Control Room Technicians, and Environmental Manager, and for Geocycle's Program Manager, Facility Manager, Laboratory Manager, Lead Chemist, Chemist, Laboratory Technician, Material Handler, Maintenance Manager, Maintenance Mechanic, Senior Customer Service Representative, Customer Service Representative, Administrative Assistant, Environmental, Health and Safety Manager, Operations Supervisor, and Lead Material Handler/Inspector. Each description included the requisite skill, education, or other qualifications, and duties of facility personnel assigned to that position.

The Facility provided a written description of the type and amount of both introductory and continuing training to be given to each person filling the positions listed above. The inspectors reviewed records of employee hazardous waste training completed in 2022 and 2023. No records of universal waste training were available for Holcim employees tasked with managing universal waste.

Waste Manifest and Land Disposal Restriction (LDR) Records:

The Facility provided hazardous waste manifest records and land disposal restriction forms for shipments of hazardous waste sent since the most recent RCRA CEI, and the inspectors reviewed a selection of those records and the quarterly reports.

Daily and Weekly Inspection Records:

The inspectors reviewed available records of inspections of the hazardous waste container storage areas since January 2023. The daily inspection form includes a checklist where employees can record observations about containerized waste in the Truck Unloading Area and Container Storage Area in permitted storage Area 6100; the permitted Blend Tanks 1-5 (Area 4100); the permitted Burn Tank 5106 (Area 5100); the permitted Burn Tank 5102 (Area 5100); the permitted Feed Tank 7101 (Area 7100); and the ancillary equipment associated with those permitted tanks, which is located in RL01 and Areas 4100, 5100, 6100, and 7100. Although the

inspection log includes spaces to enter the date of the inspection, the time of the inspection, and the name of the inspector, several entries included the inspector's initials, rather than the inspector's name, and several entries did not include the time of the inspection.

Pursuant to the RCRA Permit SCD003368891, Condition II.D. General Inspection Requirements, which incorporates S.C. Code Ann. Regs. 61-79.264.15(d) [40 C.F.R. § 264.15(d)] and Section 6.4 of the Approved Permit Application, the owner or operator must record inspections in an inspection log or summary. S.C. Code Ann. Regs. 61-79.264.15(d) [40 C.F.R. § 264.15(d)] requires the inspection records to include, at a minimum, the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions. Section 6.4.3 of the Approved Permit Application requires each inspection form to include the inspector's name, the date of the inspection, the time of the inspection, the item inspected and criteria, and observations and nature of any corrective action required.

Tank Testing and Inspection Certificates:

The NFPA/API Tank Thickness Requirements for the Facility's permitted tanks are found in Attachment 4-17 "NFPA/API Tank Thickness Standard" of the Approved RCRA Permit Application. According to this attachment, the minimum shell thickness range for Blend Tanks T1-T5 is 0.132-0.315 inches; the minimum shell thickness range for Burn Tank 5102 is 0.214-0.4290 inches; and the minimum shell thickness range for Burn Tank 5106 and Feed Tank 7101 is 0.1875-.050 inches. The inspectors reviewed records of the December 7, 2021, formal visual examinations and ultrasonic thickness testing performed on Blend Tanks T1-T5, Burn Tank 5102, Burn Tank 5106, and Feed Tank 7101; the December 5, 2023, formal visual examinations and ultrasonic thickness testing performed on Blend Tanks T1-T5; and the December 6, 2023, formal visual examinations and ultrasonic thickness testing performed on Burn Tank 5102, Burn Tank 5106, and Feed Tank 7101. According to those records, readings at the following measurement point numbers indicate a shell thickness below the minimum value set forth in the RCRA Permit:

December 7, 2021			December 5, 2023		
Tank	Area	Measurement Point Number(s)	Tank	Area	Measurement Point Number(s)
T2	Bottom Side (120 points)	033, 038-043, 046-054, 057-114, 117-133, 135-143, 145-155, 157, 162-173, 175, 177-179	T1	Bottom Side (1 point)	180
T2	NW Side (1 point)	275	T2	Bottom (24 points)	001-024

T2	NE Side (1 point)	034	T2	Bottom Side (52 points)	028-180
T2	SE Side (1 point)	060	T2	NW Side (1 point)	234
T3	Bottom Side (11 points)	025, 052, 073, 086, 114, 116, 132, 174-176, 179	T2	NE Side (1 point)	240
T4	Bottom Side (108 points)	027-028, 031- 032, 034-035, 037-039, 041- 061, 064-065, 068-087, 089- 108, 110-113, 120-122, 124, 126-129, 131- 148, 153-157, 159-160, 162, 169	T2	SE Side (1 point)	261
T4	SE Side (1 point)	283	T3	Bottom (5 points)	006-011
T5	Bottom Side (16 points)	089, 091-096, 134-137, 168- 170, 173-174	T3	Bottom Side (12 points)	046-047, 075, 100, 133, 166, 169, 176-180
			T3	Top Side (3 points)	230, 236, 238
			T4	Bottom Side (55 points)	025-180
			T4	SE Side (1 point)	245
			T5	Bottom Side (122 points)	028-029, 037- 113, 120-124, 127-149, 155- 157, 163-174, 177-180

Pursuant to the RCRA Permit SCD003368891, Condition IV.F.4 Minimum Tank Wall Thickness, the minimum shell, bottom, and top thickness specified in the Approved Permit Application (see Attachment 4-17) shall be maintained at all times to ensure sufficient tank integrity.

Air Emission Monitoring:

The inspectors reviewed records of monthly and quarterly leak detection and repair (LDAR) monitoring conducted in calendar year 2023. Records indicated inconsistencies with the calibration associated with the monitoring events. In some instances, the calibration records included a background reading of zero, which does not appear to be possible given the conditions at this Facility. In addition, a total of sixteen records did not include the time of the monitoring activities.

Pursuant to the RCRA Permit SCD003368891, Condition I.E.9(e)(i) Monitoring and Records, which references 40 C.F.R. § 270.30(j)(3), records of monitoring information shall specify the dates, exact place, and times of sampling or measurements.

13) Closing Conference

The inspectors conducted the exit meeting on March 1, 2024, at 1:45 p.m. Facility representatives present in the exit meeting included: Garfield Robertson, Bryan Joyce, Randy Sparks, Hannes Diedericks, and Wilson Durant. During this meeting, the inspectors stated their preliminary conclusions of the inspection. The Facility agreed to provide information addressing the preliminary conclusions and additional information concerning the contents of the approximately 50 totes observed in Area 5100. On March 22, 2024, Randy Sparks provided a summary of corrective actions taken following the inspection, the 2023 Waste Minimization Report, records of tank testing and certification, and records of hazardous waste training for Holcim personnel on March 12, 2024, in two emails sent to the inspectors.

14) Summary of Observations

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

- **Pursuant to 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.**

In the laboratory SAA, the inspectors observed two 15-gallon containers and two 2.5-gallon containers for accumulating ignitable and toxic hazardous waste solids. None of these containers were marked with an indication that the contents are toxic.

In the Tank Truck Unloading Area (Area 6100), the inspectors observed four 5-gallon containers and one 55-gallon container for accumulating hazardous waste that were not marked with an indication of one or more of the hazards of their contents.

In the Carbon Vent System SAA, the inspectors observed one tote containing approximately 100 gallons of hazardous waste spent carbon water, which was not marked with an indication of the hazards of its contents.

In the HWDF Feed Tank 7101 (Area 7100), the inspectors observed one 55-gallon container for accumulating hazardous waste generated from disconnecting and cleaning

out waste transfer lines associated with the tank. The container was not marked with an indication that the contents are toxic.

In the Holcim Maintenance SAA, the inspectors observed one 55-gallon container for accumulating the contents of spent aerosol cans. The container was not marked with an indication of the hazards of its contents.

- **Pursuant to S.C. Code Ann. Regs. 61-79.262.15(a)(6) [40 C.F.R. § 262.15(a)(6)], a generator who accumulates hazardous waste in excess of 55 gallons must, with respect to that amount of excess waste, mark or label the container(s) holding the excess accumulation of hazardous waste with the date the excess amount began accumulating, and also comply with S.C. Code Ann. Regs. 61-79.262.17(a) [40 C.F.R. § 262.17(a)] or remove the excess waste from the SAA within three consecutive calendar days.**

In the Carbon Vent System SAA, the inspectors observed one tote containing approximately 100 gallons of hazardous waste spent carbon water, which was not marked with an accumulation start date or managed according to the LQG Permit Exemption.

- **Pursuant to S.C. Code Ann. Regs. 61-79.262.17(a)(1)(iv) [40 C.F.R. § 262.17(a)(1)(iv)], which is a condition of the LQG Permit Exemption, (A) a container holding hazardous waste must always be closed during accumulation, except when it is necessary to add or remove waste; and (B) A container holding hazardous waste must not be opened, handled, or stored in a manner that may rupture the container or cause it to leak.**

The inspectors observed one open container of hazardous waste among fifty-two totes in the Area for Future Tank Farm (Area 5100).

- **Pursuant to S.C. Code Ann. Regs. 61-79.262.17(a)(1)(v) [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 the Area for Future Tank Farm (Area 5100), the inspectors observed fifty-two totes, including six that were later identified as containing hazardous waste carbon water, without sufficient aisle space. This area was not identified on the records of weekly container storage area inspections.

- **Pursuant to S.C. Code Ann. Regs. 61-79.262.17(a)(5)(i)(B) [40 C.F.R. § 262.17(a)(5)(i)(B)], which is a condition of the LQG Permit Exemption, a generator is required to mark or label containers with an indication of the hazards of the contents clearly visible for inspection on each container.**

In the Tank Truck Unloading Area (Area 6100), the inspectors observed one 250-gallon hazardous waste storage container that was not marked with an indication of all hazards of its contents.

In the Area for Future Tank Farm (Area 5100), the inspectors observed three containers of hazardous waste that were not marked with an indication of one or more of the hazards of their contents.

- **Pursuant to S.C. Code Ann. Regs. 61-79.262.17(a)(6) [40 C.F.R. § 262.17(a)(6)], which incorporates S.C. Code Ann. Regs. 61-79.262.255 [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.**

In the Area for Future Tank Farm (Area 5100), the inspectors observed fifty-two totes, including six that were later identified as containing hazardous waste carbon water, without sufficient aisle space.

- **Pursuant to S.C. Code Ann. Regs. 61-79.262.17(b) [40 C.F.R. § 262.17(b)], which is a condition of the LQG Permit Exemption, an LQG who accumulates hazardous waste for more than 90 days is subject to the requirements of 40 C.F.R. Parts 124, 264 through 268, and Part 270 of this chapter, and the notification requirements of section 3010 of RCRA for treatment, storage, and disposal facilities.**

In the Area for Future Tank Farm (Area 5100), the inspectors observed fifty-two totes, including six that were later identified as containing hazardous waste carbon water, in an area that is not permitted for the storage of hazardous waste in containers. One of the six containers of hazardous waste was marked with an accumulation start date of September 5, 2023, which indicates that, as of the date of the inspection, the waste had been stored on-site for 177 days.

- **Pursuant to S.C. Code Ann. Regs. 61-79.273.14(e) [40 C.F.R. § 273.14(e)], a SQHUW must label or mark each lamp or container of lamps clearly with one of the following phrases: “Universal Waste-Lamp(s),” or “Waste Lamp(s),” or “Used Lamps.”**

In the Holcim Maintenance Area, the inspectors observed one 55-gallon container, one 4-foot container and one 8-foot container of universal waste lamps, which were each marked with the words “universal waste bulbs.”

- **Pursuant to the RCRA Permit SCD003368891, Condition I.A. Effect of Permit, any storage, treatment, and/or disposal of hazardous waste not authorized in this Permit is prohibited, except as allowed by the South Carolina Hazardous Waste Management Regulations, R.61-79.**

In the Area for Future Tank Farm (Area 5100), the inspectors observed fifty-two totes, including six that were later identified as containing hazardous waste carbon water, in an area that is not permitted for the storage of hazardous waste in containers.

- **Pursuant to the RCRA Permit SCD003368891, Condition I.E.9(e)(i) Monitoring and Records, which references 270.30(j)(3), records of monitoring information shall specify the dates, exact place, and times of sampling or measurements.**

A total of sixteen monthly or quarterly LDAR monitoring records did not include the time of the monitoring activity.

- **Pursuant to the RCRA Permit SCD003368891, Condition II.D. General Inspection Requirements, which incorporates S.C. Code Ann. Regs. 61-79.264.15(d) [40 C.F.R. § 264.15(d)] and Section 6.4 of the Approved Permit Application, the owner or operator must record inspections in an inspection log or summary. S.C. Code Ann. Regs. 61-79.264.15(d) [40 C.F.R. § 264.15(d)] requires the inspection records to include, at a minimum, the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions. Section 6.4.3 of the Approved Permit Application requires each inspection form to include the inspector's name, the date of the inspection, the time of the inspection, the item inspected and criteria, and observations and nature of any corrective action required.**

Although the daily inspection log includes spaces to enter the date of the inspection, the time of the inspection, and the name of the inspector, several entries included the inspector's initials, rather than the inspector's name, and several entries did not include the time of the inspection.

- **Pursuant to the RCRA Permit SCD003368891, Condition IV.F.4 Minimum Tank Wall Thickness, the minimum shell, bottom, and top thickness specified in the Approved Permit Application (see Attachment 4-17) shall be maintained at all times to ensure sufficient tank integrity.**

According to the ultrasonic thickness testing records, 159 ultrasonic thickness readings taken on December 7, 2021, and 278 ultrasonic thickness readings taken on December 5, 2023, were below the minimum thickness standard found in the Approved Permit Application.

- **Pursuant to the RCRA Permit SCD003368891, Condition VII.B.2 Storage Prohibition, which incorporates S.C. Code Ann. Regs. 61-79.268.50(a)(2)(i) [40 C.F.R. § 268.50(a)(2)(i)], an owner/operator of a hazardous waste treatment, storage, or disposal facility who stores hazardous waste restricted from land disposal must clearly mark each container with an indication of the hazards of the contents.**

In the Tank Truck Unloading Area (Area 6100), the inspectors observed one 350-gallon and approximately twenty-five 55-gallon hazardous waste storage containers that were not marked with an indication of one or more of the hazards of their contents.

15) **List of Attachments**

Attachment 1 – Photo Log

16) **Signed**

LAURIE

DIGAETANO

Digitally signed by LAURIE
DIGAETANO
Date: 2024.05.09 10:09:53
-04'00'

Laurie Benton DiGaetano
Environmental Engineer

17) **Concurrence**

ALAN

NEWMAN

Digitally signed by ALAN
NEWMAN
Date: 2024.05.09 11:31:30
-04'00'

Alan R. Newman
Acting Chief
RCRA Enforcement Section

Attachment 1 – Photo Log

20 Photos taken on: February 29, 2024
Photos taken by: Laurie Benton DiGaetano
Photos taken with: Panasonic DMC TS-5
EPA Property Tag: S09533



Photo 1: One of two 15-gallon containers in the laboratory SAA for accumulating waste solids generated in the laboratory.



Photo 2: One of two 2.5-gallon containers in the laboratory SAA for accumulating waste flammable liquids generated in the laboratory. This container was observed in Laboratory Hood #2.



Photo 3: Two 5-gallon containers of acid waste (acetone and water and acid) in the laboratory SAA. Each container was observed in a laboratory sink.

Attachment 1
RCRA CEI Photographs

Laurie Benton DiGaetano, USEPA

Panasonic DMC TS-5 #S09533



Photo 4: One of two 5-gallon containers of waste nitric acid in the laboratory SAA. This container was connected to an ICP testing unit.



Photo 5: Tanker truck unloading bays in Area 6100.



Photo 6: One 300-gallon tote of hazardous waste liquids that were generated in the laboratory observed in Area 6100.

Attachment 1
RCRA CEI Photographs

Laurie Benton DiGaetano, USEPA

Panasonic DMC TS-5 #S09533



Photo 7: Approximately twenty-five 55-gallon containers of compacted hazardous waste solids in Area 6100.



Photo 8: Some of approximately twenty-five 55-gallon containers of hazardous waste compacted solids in Area 6100. One container, dated November 22, 2023, was not marked with an indication of the hazards of its contents.



Photo 9: Compactor unit used to compact hazardous waste solids into 55-gallon containers in Area 6100.

Attachment 1
RCRA CEI Photographs

Laurie Benton DiGaetano, USEPA

Panasonic DMC TS-5 #S09533



Photo 10: One 55-gallon container near the compactor unit that Facility personnel stated contained acetone used to clean and soak flame arrestors used in the waste transfer equipment.

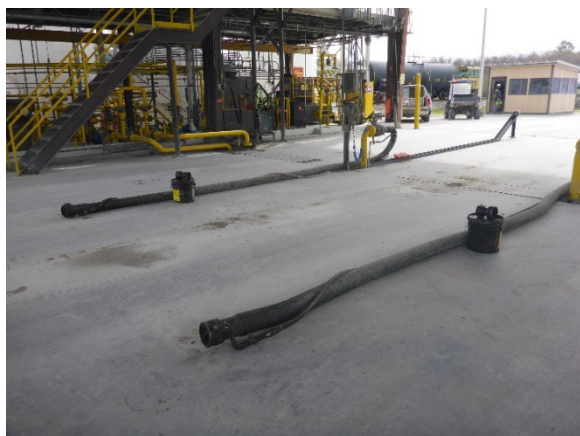


Photo 11: Two 5-gallon buckets in the Area 6100 tanker truck unloading bays used to accumulate hazardous waste liquids generated in this area.



Photo 12: Parts washer and 55-gallon container in the workstation between Area 6100 and Area 4100.

Attachment 1
RCRA CEI Photographs

Laurie Benton DiGaetano, USEPA

Panasonic DMC TS-5 #S09533



Photo 13: Portion of the railcar staging area.



Photo 14: Approximately fifty 275-gallon totes in the area identified for a future tank farm.



Photo 15: Open tote among the approximately fifty 275-gallon totes in the area identified for a future tank farm.

Attachment 1
RCRA CEI Photographs

Laurie Benton DiGaetano, USEPA

Panasonic DMC TS-5 #S09533



Photo 16: One tote of hazardous waste carbon water observed in the area identified for a future tank farm.



Photo 17: One tote of hazardous waste carbon water observed in the area identified for a future tank farm.



Photo 18: Tote containing approximately 100-gallons of hazardous waste carbon water in the Carbon Vent System Area at Area 5100.



Photo 19: Universal waste accumulation and storage area in the Holcim Maintenance Area.



Photo 20: 55-gallon container with an aerosol can puncture device in the Holcim Maintenance SAA for accumulating the contents of waste aerosol cans.