RCRA Inspection Report

1) **EPA Inspector and Author of the Report**

David Champagne
Physical Scientist (404) 562-9028
champagne.david@epa.gov

U.S. EPA Region 4
Resource Conservation and Recovery Act Enforcement Section
Chemical Safety and Land Enforcement Branch
Enforcement and Compliance Assurance Division
61 Forsyth St. S.W. 10th Floor
Atlanta, Georgia 30303-8960

2) Facility Information

Holcim (US) Inc./Geocycle LLC.
8677 Hwy 45 Alternate South
Artesia, Mississippi 39736
EPA ID# MSD077655876
562211 – Hazardous Waste Treatment and Disposal

3) Responsible Official

Mr. George Colvin, Facility Manager
Holcim (US) Inc./Geocycle LLC
george.colvin@geocycle.com
Direct (662) 272-6026
Mobile (662) 549-2860

4) Inspection Participants

Mr. George Colvin, Holcim (US) Inc./Geocycle LLC
Mr. David Champagne, U.S. EPA Region 4, Inspector
Mr. Brad Justice, MDEQ Inspector

5) Date of Inspection

March 11, 2021, 09:30 hours

6) Applicable Regulations

Mississippi Hazardous Waste Management Regulations (MHWMR), 11 Miss. Admin. Code Pt. 3, R. 1.1-1.24

Section 17-17-1 *et seq.* of the Mississippi Code of 1972, Miss. Code Ann. § 17-17-1 *et seq.*

Section 17-17-27 of the Mississippi Code of 1972, Miss. Code Ann. § 17-17-27

Pursuant to 11 Miss. Admin. Code Pt. 3, R. 1.3 [40 C.F.R. § 262.10], a Large Quantity Generator (LQG) is a generator who generates greater than or equal to 1,000 kilograms (2200 lbs) of non-acute hazardous waste in a calendar month.

Pursuant to the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) of 1976, 42 USC Section 6901 et seq., and the Hazardous and Solid Waste Amendments (HSWA) of 1984, P.L. 98-616, and regulations promulgated thereunder by the U.S. Environmental Protection Agency (Codified and to be codified in Title 40 of the Code of Federal Regulations), a federal RCRA Permit was issued to Holcim (US) Inc./Geocycle LLC for the Artesia, Mississippi facility located at 8677 Hwy. 45 Alternate South, Artesia, Mississippi, 39736 (the RCRA Permit). The Permittee must comply with all terms and conditions of the RCRA Permit issued on September 21, 2017. This Permit consists of the applicable regulations contained in 40 C.F.R. Parts 260 through 264, 266, 268, 270 and 124 and the statutory requirements of RCRA as amended by HSWA. The permit is effective the Issued Date and shall remain in effect for ten (10) years until September 30, 2027, unless revoked and reissued, or terminated.

Pursuant to 11 Miss. Admin. Code Pt. 3, R. 1.3 [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 17-17-27(4) of the Mississippi Code of 1972, Miss. Code Ann. § 17-17-27(4), and without complying with 11 Miss. Admin. Code Pt. 3, R. 1.3 [40 C.F.R. § 262.16(b) or §262.17(a)], except as required in 11 Miss. Admin. Code Pt. 3, R. 1.3 [40 C.F.R. § 262.15(a)(7) and (8)], provided that the generator complies with the satellite accumulation area conditions listed in 11 Miss. Admin. Code Pt. 3, R. 1.3 [40 C.F.R. § 262.15(a)] (hereinafter referred to as the "SAA Permit Exemption").

7) Purpose of Inspection

The purpose of the inspection was to conduct an unannounced hazardous waste compliance evaluation inspection (CEI) to determine the facility's compliance with applicable RCRA regulations.

8) Facility Description

The EPA issued a RCRA Hazardous Waste Permit to Holcim (US) Inc. and Geocycle LLC, which own and operate, respectively, a hazardous waste management facility (Holcim or the facility) located at 8677 Hwy 45 Alternate South in Artesia, Mississippi. The most recent Hazardous Waste Generator Notification (EPA Form 8700-12) dated February 24, 2021, also characterized the facility as a large quantity generator (LQG) of hazardous waste. The RCRA Permit authorizes the management of hazardous waste in tanks, containers, and bulk containers, including the disposal of hazardous waste through fuel blending. In addition, the RCRA Permit

addresses corrective action for releases of hazardous constituents and contains provisions restricting land disposal of hazardous waste and organic air emissions from tanks and containers, and provisions for waste minimization. The facility was built in the late 1990's and employs 5 employees. The facility and operates Monday through Friday between the hours of 06:00 hours and 16:00 hours, with a guard on duty from 14:00 hours to 06:00 hours. A guard is also on duty 24 hours a day on Saturday and Sunday.

9) Previous Inspection/Compliance History

Holcim was last inspected by MDEQ September 22, 2020. On February 12, 2019, MDEQ and EPA inspected Holcim and found 1 violation.

- Part IX. Tanks of the RCRA Hazardous Waste Permit issued on September 21, 2017 [40 C.F.R. § 264 Subpart J] which incorporates Section I.X.D.1. Design and Construction [40 C.F.R. § 264.193(c)&(e)] a generator accumulating hazardous waste in tank systems is required to comply with the applicable requirements for vault systems.

10) Findings

Opening Conference

On Thursday March 4, 2021, MDEQ hosted a conference call with the facility to discuss the EPA's and MDEQ's plans to conduct a RCRA Hazardous Waste CEI and to ensure everyone could adhere to the CDC's Covid-19 guidance. On Wednesday March 11, 2021, the EPA and MDEQ inspectors arrived at the facility around 09:30 hours CST and met with Mr. George Colvin, Facility Manager. The inspectors presented their credentials to Mr. Colvin and explained that the purpose of the visit was to conduct a RCRA Hazardous Waste CEI. The facility provided a brief overview of the process and both parties proceeded with a process-based walk through of the facility.

Truck Waste Drop-Off and Process Pad

The facility operates a process that allows trucks to drive in and empty hazardous waste in one of two available truck bays. Samples are taken and retained for 90-days. At the time of the inspection, there were two satellite accumulation areas (SAAs) at each truck bay. One SAA is used to accumulate personal protective equipment (PPE) solids, and the other is used to accumulate hazardous waste liquids. The inspectors observed one 55-gallon drum in each of the four SAAs. Each container was closed, labeled "Hazardous Waste," and labeled with the hazardous characteristic of the contents within the container. The drums accumulating PPE solids were also labeled hazardous waste (toluene, xylene).

This area also contained a roll-off Vac Box (UN1993). The Vac Box contained Tank 6 Solids. This container was labeled "Hazardous Waste", labeled with the hazardous characteristic of the contents within the container, and dated February 15, 2021.

This area also contained a hazardous waste central accumulation area (CAA) for storage of 55-gallon containers. At the time of the inspection, there were five (5) 55-gallon containers in the

CAA. The containers were closed, labeled "Hazardous Waste," dated (oldest date 12/26/2020) and labeled with the hazardous characteristic of the contents within the container (toluene and xylene).

At the time of the inspection, the facility had two (2) operating unloading pumps and three more process pumps that transfer waste to the onsite treatment tanks. The treatment process takes approximately 48 hours. The tagging system for the pumps, valves, connectors, and other ancillary equipment were not all legible or present (Photographs 1-3).

Pursuant to the RCRA Permit, Part VI. Organic Air Emission Standards for Tanks, Containers, Miscellaneous Units, and Equipment [40 C.F.R. § 264.1050], which incorporates Section VI.A.2. Equipment Standards [40 C.F.R. § 264.1052 through 264.1058, 264.1060 through 264.1062, & 264.1064(b)], each piece of equipment subject to 40 C.F.R. Part 264 Subpart BB shall be tagged with a unique identification number.

This area contains one SAA for accumulating retain samples. The inspectors observed three (3) 5-gallon containers of retain samples in this SAA. At the time of the inspection, the containers were not labeled with in indication of the hazards of its contents (Photograph 4).

Pursuant to 11 Miss. Admin. Code Pt. 3, R. 1.3 [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 Treatment and Storage Area

At the time of the inspection, there were 6 total fuel tanks. There was one (1) 90,000-gallon burn tank (#4106), one (1) 90,000-gallon blend tank (#4105) and four (4) 40,000-gallon fuel-blend tanks (#4101, #4102, #4103, #4104). At the time of the inspection, the secondary containment floor appeared to have cracks, gaps, and/or holes (Photographs 5 and 6).

Pursuant to the RCRA Permit, Part IX. Tanks [40 C.F.R. § 264 Subpart J], which incorporates Section I.X.D.1. Design and Construction [40 C.F.R. § 264.193(e)(1)(iii)], a facility using a tank system for storing or treating hazardous waste must provide secondary containment with an external liner system that is free of cracks or gaps.

Laboratory

The facility tests retain samples to ensure wastes and products meet the specifications of requirements in its laboratory. At the time of the inspection, there was one SAA in the laboratory. The inspectors observed one (1) 3-gallon container of liquid waste retains and one (1) 20-gallon container of PPE hazardous waste in this SAA. Both containers were labeled "Hazardous Waste," labeled with the hazardous characteristics of the contents within the container, and they were closed.

Records

At the time of the inspection, the EPA reviewed inbound and outbound manifests stating that the facility utilizes the following:

Inbound Transporters
Space City Services: TX12000084784
CEI Environmental Services: LAR000301006
Action Resources: ALR00007237
Outbound Transporters
Kansas City Southern: MOD006965859
CSXT: FLD006921340

Annual hazardous waste operations training documentation was provided for applicable staff. A waste analysis plan was provided. Contingency plan was provided and dated March 2014, and last updated in May of 2018. No records were provided to show that the original contingency plan or any of its revisions were provided to local authorities.

Pursuant to the RCRA Permit, Part II. General Facility Conditions [40 C.F.R. Part 264 Subparts B, C, D, E, G, H], which incorporates Section II.H. Contingency Plan [40 C.F.R. §§ 264.51-56] and Section II.H.2. Copies of Plan [40 C.F.R. § 264.53], the permittee shall provide a copy of the contingency plan and all revisions to the plan to all police departments, fire departments, hospitals, and state and local response teams that may be asked to provide emergency assistance.

Method 21 inspection documentation for ancillary equipment showed that the equipment associated with the transfer of hazardous waste contained a chemical composition of at least 10% by weight of organic constituents that were in light liquid service. Mr. Colvin, Facility Manager, stated that Method 21 monitoring is conducted on the pumps and agitators monthly, valves quarterly, and connectors annually. Pursuant to 40 C.F.R. § 264.1057(b), if an instrument reading of 10,000 ppm or greater is measured for a valve in light liquid service, a leak is detected. Pursuant to 40 C.F.R. § 264.1058(b), if an instrument reading of 10,000 ppm or greater is measured for a pressure relief device in light liquid service, a leak is detected.

The following Table (Table 1) identifies leaks that were documented by the facility in the operating record:

Table 1: Tank and Ancillary Equipment Leak Inspection Log

DATE	TAG	Description	Tank/Associated Piping	Found by	PID Reading
1/22/2018	333	Connector (Flange)	Tank 4106 Piping	Daily Inspection Visual Liquid Leak	No Reading Taken
4/23/2018	162	Valve	Manifold System	Daily Inspection Visual Liquid Leak	No Reading Taken
4/23/2018	24	Valve	Unloading System	Monthly Inspection Visual Liquid Leak	>10K ppm
11/28/2018	242	Pump	Transfer/Loading System	Daily Inspection Visual Liquid Leak	No Reading Taken
12/14/2018	507	Rupture Disc	Tank 4105	Daily Inspection Visual Liquid Leak	>10K ppm
3/15/2019	452	Rupture Disc (Flange)	Tank 4101	Daily Inspection Visual Liquid Leak	No Reading Taken
5/2/2019	147	Grinder	Unloading System	Daily Inspection Visual Liquid Leak	No Reading Taken
9/24/2019	392A	Connector (Reducer)	Vapor Balance Piping	Daily Inspection Visual Liquid Leak	No Reading Taken
12/12/2019	432	Rupture Disc (Flange)	Tank 4104	Daily Inspection Visual Liquid Leak	No Reading Taken
1/15/2021	242	Pump	Transfer/Loading System	Daily Inspection Visual Liquid Leak	No Reading Taken

Based upon the leak detection records summarized in Table 1, a leak was detected at Valve 24 on 04/23/2018 and at Valve 162 on 04/23/2018, but the valves were not monitored monthly following the detected leaks.

Pursuant to the RCRA Permit, Part VI. Organic Air Emission Standards for Tanks, Containers, Miscellaneous Units, and Equipment [40 C.F.R. § 264.1050], which incorporates Section VI.A.2. Equipment Standards [40 C.F.R. § 264.1057(c)(2)], if a leak is detected at a valve in light liquid service, the valve shall be monitored monthly until a leak is not detected for two consecutive months.

Based upon the leak detection records summarized in Table 1, a leak was detected at Flange Connector 333 on 01/22/2018, at Pump 242 on 11/28/2018 and 01/15/2021, at Rupture Disc 507 on 12/14/2018, at Rupture Disc 452 on 03/15/2019, at Rupture Disc 432 on 12/12/2019, at Grinder 147 on 05/02/2019, and at Reducer Connector 392A on 09/24/2019. The facility did not provide any records to show that these pieces of equipment were monitored within 5 days by the method specified in § 264.1063(b).

Pursuant to 40 C.F.R. § 264.1058, pressure relief devices in light liquid service and flanges and other connectors shall be monitored within 5 days by the method specified in 40 C.F.R. § 264.1063(b), if evidence of a potential lead is found by visual, audible, olfactory, or any other detection method.

Mr. Colvin, Facility Manager stated that tanks, railcars, tanker trucks and vac boxes are inspected annually. The inspection team agreed that this information could be submitted following the inspection. On Friday April 16, 2021, the inspection team received annual inspection documentation pursuant to 40 C.F.R Part 61 Subpart FF for the tanks/containers dating back 3 years.

On April 16, 2021, Mr Colvin emailed the inspection team a copy of the written assessment and certification required for the design and installation of the new tank storage system and components that comprise the Artesia waste storage and blending facility.

Facility calibration records of a Tiger photoionization detector (PID) were reviewed and determined that isobutylene gas (500 ppm), methane gas (500 ppm) and zero air were used in the calibration of the PID. Upon review of calibration records, it appears that calibrations are completed on a quarterly basis. Pursuant to 40 C.F.R. § 264.1063(b)(1), monitoring shall comply with Reference Method 21 in 40 C.F.R. part 60. Pursuant to Reference Method 21-Determination of Volatile Organic Compound Leaks, Section 6.1 Equipment and Supplies, a VOC monitoring instrument detector shall respond to the compounds being processed. It appears that the lamp used in the Tiger PID is not capable of accurately reading methane gas, and isobutylene is not included as a calibration gas option in the regulations. The inspection team requested that the facility provide evidence, including manufacturing specifications for the lamp used with the PID, to demonstrate that the lamp is capable of accurately reading the gases used to calibrate the instrument, and that the gases used to calibrate the instrument are allowed per the regulations.

Pursuant to the RCRA Permit, Part VI. Organic Air Emission Standards for Tanks, Containers, Miscellaneous Units, and Equipment [40 C.F.R. § 264.1050], which incorporates Section VI.A.4. Subpart BB Test Methods and Procedures [40 C.F.R. § 264.1063], the Permittee shall comply with test methods and procedures for all equipment subject to Subpart BB.

At the time of the inspection, the facility did not possess recordkeeping information in the facility operating records for each piece of equipment to which subpart BB of part 264 applies. Specifically, for each piece of equipment to which Subpart BB applies, the facility did not provide records to show the approximate location within the facility, the hazardous waste state at the equipment, and the method of compliance with the standard.

Pursuant to the RCRA Permit, Part VI. Organic Air Emission Standards for Tanks, Containers, Miscellaneous Units, and Equipment [40 C.F.R. § 264.1050], which incorporates Section VI.A.5. Equipment Records [40 C.F.R. § 264.1064(b)(1)(i) - (vi)], owners and operators must have recordkeeping information for each piece of equipment to which subpart BB of part 264 applies.

11. Summary

The inspectors conducted the exit meeting with the facility presenting the preliminary results of the inspection. Holcim was inspected as a large quantity generator of hazardous waste and a treatment storage and disposal facility. At the time of the inspection, the facility did not appear to be in compliance with some requirements of RCRA. The inspection concluded at approximately 14:00 hours.

12) Signed

5/5/2021

David Champagne
Physical Scientist

Date

13) Concurrence

ARACELI CHAVEZ Digitally signed by ARACELI CHAVEZ Date: 2021.05.05 12:32:36 -04'00'

Araceli B. Chavez
Chief
RCRA Enforcement Section

Date

Photographs of Holcim (US) Inc./Geocycle LLC
8677 Hwy 45 Alternate South
Artesia, Mississippi 39736
EPA ID# MSD077655876
Camera Model: Google Pixel XL
By: David Champagne

Photograph 1 of 6: Illegible Tag on Ancillary Equipment Subject to Subpart BB

Photograph 2 of 6: Illegible Tags on Ancillary Equipment Subject to Subpart BB

Photograph 3 of 6: Ancillary Equipment Managing Waste Subject to Subpart BB

Photograph 4 of 6: Three 5-gallon containers at the Retain Sample SAA Missing Characteristic Labels

Photograph 5 of 6: Cracks in Secondary Containment for Hazardous Waste Storage

Photograph 6 of 6: Cracks in Secondary Containment for Hazardous Waste Storage