

RCRA Inspection Report

1) Inspector and Author of Report

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

Columbus Roll Shop (CRS)
1949 Airport Road
Columbus, Mississippi 39701

EPA ID#: MSR000103945
NAICS #: 332813
Electroplating, Plating, Polishing, Anodizing, and Coloring

3) Responsible Official

Randy Doughty
Information Technology (IT) and
Environmental, Health, and Safety (EHS) Manager
rdoughty@cdrs.com

4) Inspection Participants

Randy Doughty, Columbus Roll Shop
Bradley D. Justice, P.E., Mississippi Department of Environmental Quality (MDEQ)
Robert Nakamoto, P.E., U.S. EPA, Region 4

5) Date of Inspection

April 25, 2023

6) Applicable Regulations¹

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.

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 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”).

Pursuant to 11 Miss. Admin. Code Pt. 3, R. 1.3 [40 C.F.R. § 262.17)], a Large Quantity Generator (LQG) of hazardous waste may accumulate hazardous waste on-site for 90 days or less 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) [Section 3005 of RCRA, 42 U.S.C. §6925], provided that the generator complies with the conditions listed in 11 Miss. Admin. Code Pt. 3, R. 1.3 [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 (CEI) to determine Columbus Roll Shop’s compliance with the applicable RCRA regulations and the corresponding Mississippi regulations. This was an EPA led inspection supported by MDEQ staff.

8) **Facility Description**

Columbus Roll Shop (CRS) is located in Columbus, Lowndes County, Mississippi. CRS is a contractor, providing roll shop services to Steel Dynamics Columbus’s (SDC) steel mill. Various formulations of steel are poured from SDC’s ladles into a tundish, through a mold, and cooled as they descend. As the molten steel cools, it is passed through rollers that flatten it out onto a roller bed. The steel is flattened as it passes through the rolls, eventually flattening out to about 10-gauge or ¼” sheets. These rolls wear, get surface defects and wear patterns. Bearings wear out, roll surfaces crack, and other problems develop.

When rolls are out of spec, Columbus Roll Shop resurfaces the rolls. CRS may “hot mill” them. This is simply grinding them back into acceptable form. Rolls may also be lathed in the hot mill. CRS may also “cold mill” them. CRS has a total of seven CNC grinders, and one operational lathe. This process includes grinding the rolls, plating them, and electro-discharge texturing (EDT) them. First the surface of the rolls is ground down by the roll grinder. The rolls are then lowered into a bath pit to wash off any grinding swarf. The rolls drip dry or are wiped dry. They are then chrome-plated. They are rinsed or vacuumed off and quality control tests are run. Finally, they are wrapped in paper. Some rolls are Electro-Discharge Textured (EDT) to achieve necessary surface finish on the product. At the end of this repair process the rolls are sent to a

build-up table where bearings are installed. The rolls are then ready for re-use.

CRS is located inside the northern corner of Steel Dynamics Columbus (SDC). They have two shops inside SDC – one for cold milling and another for hot milling. CRS operates 24 hours per day, seven days a week, working 2 shifts 7:00 a.m. to 7:00 p.m., and employ approximately 65 people.

CRS manages their hazardous waste independently. The other waste streams for nonhazardous wastes, used oil and universal waste are managed by Steel Dynamics. CRS notified as an LQG on February 28, 2023. Columbus Roll Shop generates hazardous waste solids Chromium (D007), hazardous waste sludge that is hazardous for Corrosivity (D002) and D007, and liquids that are hazardous for D002, D007, and Lead (D008). The 2022 Biennial report noted that 150 pounds of hazardous waste solids and 28,800 pounds of hazardous waste liquids were generated and that the same amount was shipped.

9) **Previous Inspection History**

Columbus Roll Shop has been inspected four times since 2009. The last inspection was on May 2, 2018. Three violations were cited as a result of that inspection. Informal enforcement was issued on September 4, 2018. The violations were noted as closed on June 6, 2018.

10) **Opening Conference**

On April 25, 2023, the inspection team, Robert Nakamoto (EPA) and Brad Justice (MDEQ), arrived outside of the Columbus Roll Shop at the guard building at approximately 9:45 a.m. The inspectors were met outside of the CRS building by Randy Doughty, the IT and E&HS Manager, and were escorted to a conference room. The inspectors were joined in the opening conference by Jazz Harmond, the Plant Manager. Steven Dye, the General Manager for the facility, was not available but was included in emails following the inspection. The inspectors introduced themselves, showed their credentials to Randy Doughty, and explained the purpose of the visit. It was explained that a RCRA hazardous waste inspection would be conducted. The following personnel were in attendance for the opening conference.

<u>Name</u>	<u>Affiliation</u>
Randy Doughty	Columbus Roll Shop
Jazz Harmond	Columbus Roll Shop
Brad Justice	MDEQ
Robert Nakamoto	US EPA, R4

The inspectors described that the anticipated use of equipment was confined to using either a digital camera (EPA) and/or cell phone (MDEQ) to take pictures of waste management areas during the inspection. 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 paper copy of the EPA information sheet for small businesses was provided to the

company. 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. A paper copy of the EPA policy was provided to the facility. The company did not assert a business confidentiality claim.

Waste generation at the facility was discussed. CRS typically manages bulk hazardous waste liquids on a yearly waste, without much associated satellite accumulation, due to generation occurring during periodic change outs (maintenance). Hazardous waste solids from periodic scheduled maintenance events are also periodically generated. CRS manages 1 to 2 drums per year of hazardous waste solids from general operations throughout the year. Universal waste, nonhazardous and other solid waste streams are managed by Steel Dynamics. Columbus Roll Shop has both ISO 9001 and ISO 14001 registrations.

11) **Inspection Observations**

The inspectors began the tour at the hot mill. Rolls for the production process at Steel Dynamics are returned to Columbus Roll Shop for processing to produce rolls suitable for reuse in Steel Dynamics Columbus' operations. In the hot mill shop, the inspectors observed the lathe press and the grinder CNC equipment in the area. This equipment is used to recondition the rolls. The grinder swarf from the lathe (Photograph 1) and the grinder (Photograph 2) are accumulated in roll off type containers. Those swarf scrap metal materials are returned to the Steel Dynamics Columbus mill for processing (recycling). Photographs were taken of rolls returned to the shop for processing (Photographs 3 and 4). CRS does not operate any hazardous waste satellite accumulation areas in the hot mill.

The inspectors then went to the cold mill. The process is very similar. Used oil is collected in the cold mill shop. Two (2) approximate 300-gallon intermediate bulk container (IBC) totes of used oil were observed (Photographs 5 and 6). Grinder swarf from processing is collected in this area (Photograph 7). The hazardous waste satellite accumulation area is located near the wash-stand for the shop and had one container (Photographs 8 and 9). It was observed that the 55-gallon satellite accumulation container was properly labeled excepting for the use of a DOT Class 9 label for indicating the hazard of the container.

The inspectors informed the facility staff that recent EPA guidance in February 2023 had clarified that the Class 9 Miscellaneous DOT label, when used by itself, does not qualify as an adequate applicable hazard indicator. It is recommended that the main hazard of the container be put on a separate label or another pre-printed label be utilized in addition to the Class 9 DOT label. It is recommended that no handwritten additions to the actual Class 9 DOT label should be made on the label itself. The wastewater discharge is sent to the SDC wastewater treatment facility that operates under the SDC NPDES permit.

Pursuant to 11 Miss. Admin. Code Pt. 3, R. 1.3 [40 C.F.R. § 262.15(a)(5)], A generator must mark or label its container with the following: (ii) An indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication

consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704).

The inspectors concluded the inspection tour at the 90-day central accumulation area (CAA) for hazardous waste. There was one (1) 55-gallon container of hazardous waste stored in the CAA (Photograph 10). The container was dated 4/26/2023. It was observed that the 90-day CAA drum was labeled with the words "Hazardous Waste," and had a Class 9 DOT label. The inspectors again noted that the DOT Class 9 Miscellaneous label by itself does not qualify as an adequate hazard indicator. It is recommended that the main hazard of the container's contents be put on a separate label or another pre-printed label be utilized in addition to the Class 9 DOT label. It is recommended that no written additions on the actual Class 9 DOT label should be made. This was the same observation on hazard marking as noted above.

Pursuant to 11 Miss. Admin. Code Pt. 3, R. 1.3 [40 C.F.R. § 262.15(a)(5)], A generator must mark or label its container with the following: (ii) An indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704).

We completed the tour and returned to the office for the records review following lunch.

12) **Records Review**

The records were reviewed following the tour and after the lunch break. Randy Doughty also provided some follow-up records following the inspection by email on 4/26/2023.

Waste Profiles – The hazardous and non-hazardous waste profiles are maintained through the Waste Management website. CRS uses environmental aspect sheets that identify the waste, and the waste profiles are maintained through the Waste Management site.

Weekly Inspections – The weekly inspections of the 90-day CAA were reviewed for 2021, 2022, and 2023. Robert Nakamoto reviewed these inspection records and no deficiencies or missing inspections were identified.

Hazardous Waste Manifests – The hazardous waste manifests for 2020, 2021, 2022, and 2023 were reviewed. Land disposal restriction (LDR) certifications were included with the manifests. Waste is shipped to Chemical Waste Management in Emelle, Alabama and to Deer Park Texas. Signed copies of hazardous waste manifests from 3/2/2022, 5/14/2021, 5/16/2022, and 9/14/2022

were later provided by email.

Contingency Plan and Quick Reference Guide (QRG) – The contingency plan was dated 5/17/2019 and included a QRG. A copy of each was provided by email. No issues were identified with the content of the Contingency Plan. However, it was observed that the QRG did not include the 8 required components under 11 Miss. Admin. Code Pt. 3, R. 1.3 [40 C.F.R. Part 262.262(b)].

Pursuant to 11 Miss. Admin. Code Pt. 3, R. 1.3 [40 C.F.R. § 262.262(b)], A large quantity generator that first becomes subject to these provisions after May 30, 2017 or a large quantity generator that is otherwise amending its contingency plan must at that time submit a quick reference guide of the contingency plan to the local emergency responders identified at paragraph (a) of this section or, as appropriate, the Local Emergency Planning Committee. The quick reference guide must include the following elements:

- (1) The types/names of hazardous wastes in layman’s terms and the associated hazard associated with each hazardous waste present at any one time (e.g., toxic paint wastes, spent ignitable solvent, corrosive acid);**
- (2) The estimated maximum amount of each hazardous waste that may be present at any one time;**
- (3) The identification of any hazardous wastes where exposure would require unique or special treatment by medical or hospital staff;**
- (4) A map of the facility showing where hazardous wastes are generated, accumulated and treated and routes for accessing these wastes;**
- (5) A street map of the facility in relation to surrounding businesses, schools and residential areas to understand how best to get to the facility and also evacuate citizens and workers;**
- (6) The locations of water supply (e.g., fire hydrant and its flow rate);**
- (7) The identification of on-site notification systems (e.g., a fire alarm that rings off site, smoke alarms); and**
- (8) The name of the emergency coordinator(s) and 7/24-hour emergency telephone number(s) or, in the case of a facility where an emergency coordinator is continuously on duty, the emergency telephone number for the emergency coordinator.**

RCRA Training – The RCRA training included job titles and descriptions, Hazardous Waste Operations and Emergency Response Standard (HAZWOPER) and RCRA Training for Randy Doughty and Steven Dye. Steven Dye’s training was provided by Randy Doughty via email on 4/26/2023.

Annual Reporting – The 2022 annual report for hazardous waste was provided by Randy Doughty and reviewed by Robert Nakamoto and no compliance issues were identified. In the annual report for 2022 the facility reported the generation of three waste streams. Waste Stream 1 was “Chromium Contaminated Debris from Electroplating Operations”, which was hazardous for Chromium (D007). 8,078 pounds of Waste Stream 1 was reported as generated and shipped in 2022. Waste Stream 2 was for “Waste Corrosive Liquid, Acidic”, which was hazardous for Corrosivity (D002), D007, and Lead (D008). 70,148 pounds of Waste Stream 2 was reported as

generated and shipped in 2022. Waste Stream 3 was “Waste Sludge, Acid” which was hazardous for D002 and D007. 6,040 pounds of Waste Stream 3 was reported as generated and shipped in 2022.

Waste Minimization – Mississippi requires annual waste minimization reports and pollution prevention fees for small and large quantity generators of hazardous waste. Pollution prevention fees were collected for 2020 and 2021 with the 2022 P2 fees being due in July 2023.

13) Closing Conference

The inspectors conducted the exit meeting at approximately 3:00 p.m. The following personnel were in attendance for the exit meeting.

<u>Name</u>	<u>Affiliation</u>
Randy Dougherty	Columbus Roll Shop
Michael Ewing	Columbus Roll Shop
Jazz Harmond	Columbus Roll Shop
Cody Childs	Columbus Roll Shop
Dustin Blaxton	Columbus Roll Shop
Brad Justice	MDEQ
Robert Nakamoto	US EPA, R4

The inspection team briefed that the two areas of concern that were observed were the hazard marking indicator on the accumulation drums and the requirement to expand the Quick Reference Guide. It was discussed that the main waste stream has a high chromium content. The facility is investigating potentially recycling the material and briefed on some of the obstacles to recycling the material at present. The inspection concluded at approximately 3:30 p.m.

14) List of Appendices

Appendix 1 – Photograph Log.

15) Signed

Nakamoto, Robert Digitally signed by Nakamoto, Robert
Date: 2023.07.28 13:03:46 -04'00'

Robert S. Nakamoto
Environmental Engineer

16) Concurrence

ARACELI CHAVEZ

Digitally signed by ARACELI
CHAVEZ

Date: 2023.07.28 13:27:04 -04'00'

Araceli B. Chavez
Chief
RCRA Enforcement Section

Appendix 1 – Photograph Log

Photographs taken on: April 25, 2023

Photos taken by: Robert Nakamoto

Photos taken with: Kodak PixPro FZ53

EPA Property Tag: SX9091



Photograph 1 – Lathe Scrapings



Photograph 2 – Grinding Scraps



Photograph 3 – Used Steel Mill Rolls from SDC



Photograph 4 – Used Steel Mill Roll from SDC in Roll Shop



Photograph 5 – Used Oil Tote



Photograph 6 – Second Used Oil Tote



Photograph 7 – Used Swarf



Photograph 8 – Satellite Accumulation Drum



Photograph 9 – Hazardous Waste Label and Class 9 DOT Label



Photograph 10 – 90-Day CAA Hazardous Waste Drum With Class 9 DOT Label