

REPORT OF RCRA COMPLIANCE EVALUATION INSPECTION

At

CEMEN TECH INC.

1700 N. 14th Street
Indianola, Iowa 50125
(515) 690-8609

EPA RCRA ID No. IAD984569921

On

May 11-12, 2023

By

TOEROEK ASSOCIATES, INC.

For

U.S. ENVIRONMENTAL PROTECTION AGENCY

Region 7

Enforcement and Compliance Assurance Division

INTRODUCTION

At the request of the Enforcement and Compliance Assurance Division/Chemical Branch/RCRA Section of the U.S. Environmental Protection Agency (EPA) Region 7, Toeroek Associates, Inc. and its subcontractor CLAENE Group (Toeroek team) conducted a hazardous waste compliance evaluation inspection (CEI) at Cemen Tech Inc. (CTI), at 1700 N. 14th Street, Indianola, Iowa. The CEI was conducted under the authority of Section 3007 of the Resource Conservation and Recovery Act (RCRA), as amended. The CEI covered hazardous waste generator, used oil, and universal waste requirements as applicable. This report and its attachments present the findings of the CEI.

PARTICIPANTS

CTI:

Sunjo Chang, Environmental, Health and Safety Manager
Emily Lyons, Human Resources Director
Ken Jokerst, Director of Operations

Toeroek Team:

John D. Dixon, Inspector, (703) 473-8717

INSPECTION PROCEDURES

Prior to the CEI at CTI on May 11, 2023, I conducted a drive-by visual inspection. I did not observe any areas of concern during the drive-by. Upon my arrival, I entered the lobby of the facility, introduced myself, and explained the purpose of the CEI to the attendant. She contacted Mr. Chang, who met me in the lobby within approximately 10 minutes. I introduced myself to Mr. Chang and explained the purpose of the CEI. Mr. Chang escorted me to a conference room where I conducted an entry briefing with him.

During the entry briefing, I presented my business card and EPA credentials to Mr. Chang. I explained the scope and procedures for the CEI. I explained the facility's right to make confidentiality claims and provided a Notice Regarding Proprietary/ Confidential Business Information. I stated that at the conclusion of the CEI, he would be presented with a Confidentiality Notice (Notice) with which he could make or not make a claim of confidentiality for the facility. I also provided Mr. Chang a copy of U.S. Federal Codes 1001 and 1002, concerning communication of false statements and documents to federal inspectors, and RCRA Section 3007, explaining EPA's inspection authority, both of which he read.

A copy of each of the following documents was left with the facility during the inspection:

- RCRA Facility Access Information Sheet
- Mr. Trevor Urban's business card
- RCRA Section 3007
- U.S. Federal Codes 1001 and 1002
- Instructions for Responding to a Notice of Preliminary Findings (provided via e-mail immediately following the inspection)
- Notice Regarding Proprietary/Confidential Business Information
- U.S. EPA Small Business Resources Information Sheet
- Chemical Facility Anti-Terrorism Standards
- E-Manifest Fact Sheet: Generators
- Managing Your Hazardous Waste: A Guide for Small Businesses
- Part 279 Requirements: Used Oil Management Standards
- EPA Region 7 Emergency Response Program
- Recycling Electronics: A Guide for Businesses
- Battery Recycling/Disposal
- Management of Fluorescent Lamps for Businesses
- Incompatible Chemicals
- Universal Wastes – Including Aerosol Cans
- TCLP – Toxicity Characteristic Leaching Procedure
- Iowa Environmental Guide for Businesses

I reviewed the Notification Acknowledgement/Verification Report (Verification Report) with Mr. Chang (Attachment 1). Based on this review, as well as observations during the CEI, I changed the Site Contact Information to include Mr. Chang's name, title, phone number, and email address. I also deleted hazardous waste codes D003 and F003 from the Regulated Waste Activities section of the Verification Report.

I conducted the visual inspection and the majority of the records review on May 11, 2023, accompanied by Mr. Chang, Mr. Jokerst, and Ms. Lyons. Prior to their participation, I provided a copy of U.S. Federal Codes 1001 and 1002 to Mr. Jokerst and Ms. Lyons, which they read. During the records review, I reviewed facility documentation such as waste shipping records, waste profiles, hazardous waste determination records, inspection logs, RCRA Contingency Plan, training records, and written job descriptions. I prepared and completed a site-specific inspection checklist to document my observations.

I completed the records review and conducted an exit briefing on May 12, 2023, with Mr. Chang, Mr. Jokerst, and Ms. Lyons. During the exit briefing, I provided a Receipt for Documents and Samples, which Mr. Chang signed, acknowledging receipt (Attachment 2). I provided Mr. Chang the Notice, which he signed indicating no confidential business information had been provided (Attachment 3). I also provided Mr. Chang a Notice of Preliminary Findings (NOPF), which he signed to acknowledge receipt (Attachment 4).

A map of facility was obtained during the CEI and is in Attachment 5. An aerial photograph of the facility was downloaded after the CEI and is in Attachment 6. The 47 photographs taken during the CEI are in Attachment 7; of these, 45 are discussed in this report.

FINDINGS AND OBSERVATIONS

1. Facility Description and General Information

CTI is manufacturer of volumetric concrete mixers. The facility manufactures approximately seven to eight units per week, primarily truck chassis-mounted units. The manufacturing process includes fabrication, assembly, and mount and test. Fabricators cut, form, and weld steel components from sheet steel. Neither media blasting nor electroplating is performed at the facility. After fabrication, steel components are washed in a wash bay and painted in a large paint booth. Mixers are then assembled using the painted steel components and purchased components such as plastics, electrical components, and water lines. The final stage of manufacturing is mounting and testing, where the finished mixers are tested for proper operation and quality control. Additional information about the types of units manufactured at the facility can be found on CTI's website (www.cementech.com).

Wastes generated during manufacturing include waste paint related material (WPRM), paint booth filters, waste aerosol cans, waste aerosol can residue, wash bay wastewater, and scrap metal. WPRM consists of waste paint and solvent generated during paint gun cleaning and paint line flushing. The facility considers WPRM hazardous based on product and process knowledge. CTI previously reclaimed solvent from WPRM through use of an onsite distillation unit. However, according to Mr. Jokerst, the distillation unit was disconnected approximately two years prior and is no longer used. WPRM is collected for off-site fuel blending. Paint booth filters are generated during maintenance of the paint booth. The facility considers paint booth filters nonhazardous based on product and process knowledge, as well as analytical testing. Waste paint booth filters are consolidated with the facility's general trash waste stream for landfill disposal.

Waste aerosol cans are generated during touch-up painting operations. The facility considers waste aerosol cans hazardous based on product and process knowledge. Waste aerosol cans are punctured, and the waste aerosol can residue drains into a satellite accumulation container (SAC). Punctured and drained aerosol cans are consolidated with the facility's scrap metal waste stream for off-site recycling. The waste aerosol can residue is considered hazardous based on product and process knowledge but has not yet been transported off site.

Wash bay wastewater is generated in the wash bay used to clean steel components prior to painting. The facility considers wash bay wastewater nonhazardous based on product and process knowledge, as well as analytical testing. Wash bay wastewater is discharged directly to the sanitary sewer system via floor drains in the wash bay and is ultimately treated at the City of Indianola's publicly owned treatment works (POTW). Scrap metal (primarily scrap steel) generated during fabrication or assembly is collected for off-site recycling. Scrap metal is considered excluded from the definition of solid waste according to Title 40 *Code of Federal Regulations* (40 CFR) 261.1(c)(9) and 261.4(a)(13) when recycled.

Facility and equipment maintenance activities generate used oil, used oil filters, waste batteries, waste lamps, waste ballasts, waste cardboard, and general trash. Used oil generated at the facility is managed according to provisions of 40 CFR Part 279, and is accumulated in a used oil storage container until collected for off-site recycling. Used oil filters are hot drained into the used oil storage container, and then managed as used oil. Waste automotive batteries are managed according to provisions of 40 CFR 266 Subpart G and are exchanged with the vendor for reclamation when replacement batteries are purchased. Waste non-automotive batteries and waste lamps are managed as universal wastes according to provisions of 40 CFR Part 273 and are collected for off-site recycling. The facility considers waste ballasts and waste cardboard nonhazardous based on product and process knowledge. Waste ballasts and waste cardboard are collected for off-site recycling. General trash consists primarily of packaging and office-type refuse, and includes paint booth filters and disposable personal protective equipment (PPE) from painting operations. The facility considers general trash nonhazardous based on product and process knowledge, and sends the waste off site for landfill disposal.

CTI began operations at its current location in 1975. The facility consists of a single building with 119,178 square feet under roof on 11.7 acres. CTI currently employs approximately 180 to 200 personnel, half of which work at the facility. Onsite employees work one of two shifts (6:00 a.m. to 4:30 p.m. and 4:30 p.m. to 3:00 a.m.) Monday through Friday. Offsite employees provide non-manufacturing support, such as technical support and sales, at alternate locations.

On April 19, 2016, CTI was inspected by an EPA inspector as a small quantity generator (SQG) of hazardous waste. During the CEI, the inspector made the following preliminary findings:

- Failure to accumulate universal waste lamps in a closed container
- Failure to demonstrate the length of time that universal waste had been accumulating
- Failure to label used oil storage containers with the words "used oil"
- Failure to keep two 5-gallon SACs closed
- Failure to identify contents of two 5-gallon containers in the paint booth

- Failure to label 11 hazardous waste accumulation containers with the words “hazardous waste”
- Failure to keep nine hazardous waste accumulation containers closed
- Failure to label eight 5-gallon hazardous waste accumulation containers with accumulation start dates
- Failure to conduct a hazardous waste determination on a container of unknown liquid
- Failure to make arrangements with local emergency agencies
- Failure to have an emergency coordinator on site or on call
- Failure to post required emergency information near a telephone
- Failure to conduct a hazardous waste determination on disposable wipes and gloves used by paint booth operators
- Failure to conduct a hazardous waste determination on spent parts washer solvent
- Failure to conduct a hazardous waste determination on sump sludge

Of these preliminary findings, failure to label one hazardous waste accumulation container with an accumulation start date was repeated during this CEI.

2. RCRA Status

CTI was identified as a large quantity generator (LQG) of hazardous waste (generating more than 1,000 kilograms [kg] of hazardous waste per month) on the Verification Report provided by EPA (Attachment 1). During the CEI, I confirmed CTI’s LQG status through a review of current operations, interview with Mr. Chang, and a review of waste disposal records (manifests).

CTI submitted a 2021 Hazardous Waste Biennial Report on February 28, 2022. A copy of the Biennial Report summary received from EPA is in Attachment 8. The facility reported 14,160 pounds of WPRM and 17,786 pounds of distillation bottoms on the 2021 Biennial Report. However, the facility no longer reclaims solvent through distillation. All waste paint and solvent now is considered WPRM and is transported off site for fuel blending. I determined the facility’s current hazardous waste generator status based on hazardous waste manifests from shipments in calendar year 2023. Copies of the manifests for hazardous waste shipments in calendar year 2023 to date (January 5, 2023, through April 26, 2023) are in Attachment 9. The table below summarizes the hazardous waste manifests for shipments in calendar year 2023.

Manifest No.	Date	Waste	Weight
017946028 FLE	01/05/2023	WPRM	5,000 pounds
017944623 FLE	01/10/2023	WPRM	4,500 pounds
017945433 FLE	01/19/2023	WPRM	3,000 pounds
017945518 FLE	02/07/2023	WPRM	5,000 pounds
018110146 FLE	02/28/2023	WPRM	4,000 pounds
018108656 FLE	03/27/2023	WPRM	7,000 pounds
018109078 FLE	04/26/2023	WPRM	12,000 pounds

Based on the 2023 hazardous waste manifests, I estimated the facility generates 7,000 to 12,000 pounds (3,175 to 5,433 kg) of hazardous WPRM per calendar month. Therefore, I determined that CTI is operating as a LQG of hazardous waste (D001, D035, F005) and inspected the facility

as such. I also inspected CTI as a small quantity handler (SQH) of universal waste (accumulating less than 5,000 kg of universal waste at any time) and a used oil generator.

CTI accumulates hazardous waste in designated satellite accumulation areas and one hazardous waste container accumulation area (HWCAA). I inspected two satellite accumulation areas and the HWCAA during the CEI.

3. Waste Streams

This section of the CEI report describes waste streams generated by the facility, including the facility's waste determination and waste codes, generation process and rate, management at the facility, and ultimate disposition. The following discussion of waste streams is based on my interviews with Mr. Chang, Mr. Jokerst, and Ms. Lyons, the visual inspection, and my review of available documentation.

WPRM is generated from painting operations. The waste consists of liquid waste paint and solvent generated during paint gun cleaning and paint line flushing. The facility considers WPRM hazardous (D001, D035, F005) based on product and process knowledge. According to Mr. Jokerst, methyl ethyl ketone (MEK) is the only solvent used for paint gun cleaning and paint line flushing. CTI previously reclaimed solvent from WPRM through use of an onsite distillation unit. However, according to Mr. Jokerst, the distillation unit was disconnected approximately two years prior and is no longer used. He stated that the facility has no plans to reinstall the unit. Based on manifests from calendar year 2023 (Attachment 9), the facility generates approximately 7,000 to 12,000 pounds of WPRM per month. The waste is hard piped through the paint booth wall and into a 55-gallon SAC in the Paint Kitchen. Full SAC containers are transferred to the facility's HWCAA. WPRM is collected by Barton Solvents and transported to WRR Environmental Services in Eau Claire, Wisconsin, for fuel blending. The waste was last collected on April 26, 2023 (Attachment 9, Page 7).

During the CEI, I noticed that the hazardous waste codes for WPRM were identified as D001, D005, and F005 on the calendar year 2023 manifests (Attachment 9). These waste codes were also identified on the land disposal restriction (LDR) notifications associated with each manifest. A copy of the LDR notification for the April 26, 2023, hazardous waste shipment is in Attachment 10. An E-Manifest report for the date range January 1, 2022, through May 12, 2023, is in Attachment 11. Based on this report, WPRM has been shipped under the D001, D005, and F005 hazardous waste codes since July 29, 2022. Copies of the manifests for shipments on April 6, June 15, and July 29, 2022, are in Attachment 12.

I asked Mr. Chang about the disparity between the facility's waste determination for WPRM (D001, D035, and F005) and the pre-printed manifests and LDR notifications (D001, D005, and F005). He stated that D001, D035, and F005 are the correct waste codes, and the waste codes on manifests and LDR notifications were incorrect as barium (D005) is not a constituent of the waste and MEK (D035) should be included. Mr. Chang located a waste profile renewal form, dated April 5, 2022, that requested cancellation of the existing WPRM profile (D001, D007, D008, D018, D035, F003, F005). He also located a new waste profile form for WPRM, dated March 29, 2022, that identified the hazardous waste codes as D001, D005, F003, and F005. Copies of these waste profile forms are in Attachments 13 and 14. Mr. Chang speculated that the

waste codes printed on the manifests and LDR notifications were changed based on the March 29, 2022, waste profile form and the error had not been noticed.

CTI considers WPRM hazardous (D001, D035, F005) based on product and process knowledge. Based on the paints and solvent used at the facility, this waste determination appears to be adequate. However, the facility failed to include correct hazardous waste codes for WPRM on manifests since July 29, 2022, as required by 40 CFR 262.20(a) (**NOPF No. 6**). I also determined that the facility failed to include correct hazardous waste codes for WPRM on LDR notifications since July 29, 2022, as required by 40 CFR 262.17(a)(9) referencing 40 CFR 268.7(a)(2) (**NOPF No. 7**). I provided compliance assistance regarding requirements for manifests and LDR notifications.

During the CEI, I observed the distillation unit in the Paint Kitchen previously used by the facility to reclaim solvent from WPRM (Attachment 7, Photograph 9). The distillation unit was empty and not in use.

I observed a 55-gallon SAC of WPRM in the Paint Kitchen (Attachment 7, Photograph 10). The SAC was connected by hard pipe to the paint system in the adjacent paint booth. The SAC was near the point of generation, under control of the operators (painters), structurally sound, closed, and held approximately 20 gallons of WPRM. The SAC was labeled with the words “hazardous waste” (Attachment 7, Photograph 11). However, the SAC was not labeled with an indication of the nature of the hazard, as required by 40 CFR 262.15(a)(5)(ii) (**NOPF No. 1**). Additional photographs of the SAC are in Attachment 7, Photographs 12 and 13.

I provided compliance assistance regarding labeling requirements for SACs during the CEI. Prior to leaving the Paint Kitchen, operators affixed a “flammable liquid” label to the SAC to identify the nature of the hazard (Attachment 7, Photograph 14).

The facility’s HWCAA is an outdoor concrete pad outside of the Paint Kitchen. During the CEI, I observed eight 55-gallon hazardous waste accumulation containers (HWACs) of WPRM in the HWCAA (Attachment 7, Photographs 19, 20, and 28). Each HWAC was structurally sound, closed, full, labeled with the words “hazardous waste” and an indication of the nature of the hazard, and dated. Representative photographs of the HWACs are in Attachment 7, Photographs 21 through 25).

Seven of the eight HWACs were marked with accumulation start dates that ranged from April 27 to May 10, 2023. The dates were written in a month-day-year numerical format. The eighth HWAC was marked with an accumulation start date of “1-5-23” (Attachment 7, Photograph 26). Messrs. Chang and Jokerst speculated that the date had been inadvertently marked in a day-month-year format because all HWACs are collected from the HWCAA at least monthly. A copy of the manifest for the last collection of WPRM HWACs, dated April 26, 2023, is in Attachment 9, Page 7. I determined that the facility failed to mark an accurate accumulation start date on one HWAC, as required by 40 CFR 262.17(a)(5)(i)(C) (**NOPF No. 3**).

I provided compliance assistance regarding accumulation start dates on HWACs during the CEI. Prior to leaving the HWCAA, personnel changed the date on the eighth HWAC to clearly

indicate an accumulation start date of May 1, 2023, in a month-day-year format (Attachment 7, Photograph 27).

Paint booth filters are generated during maintenance of the paint booth. The facility does not track the quantity of paint booth filters generated during routine maintenance. However, the primary paint filters are changed approximately every other week and the secondary filters are changed approximately once per month. The facility considers paint booth filters nonhazardous based on product and process knowledge, as well as analytical testing. Paint booth filters are dry when changed, and spent solvent is not sprayed onto the filters. Paint booth filters are consolidated with the facility's general trash waste stream. General trash is collected by Waste Management and transported to the South Central Iowa Landfill Agency landfill in Winterset, Iowa, for disposal.

A copy of an analytical report dated November 4, 2016, for toxicity characteristic leaching procedure (TCLP) testing of paint booth filters is in Attachment 15. Based on the TCLP results and product/process knowledge, the hazardous waste determination appears to be adequate. I observed the paint booth during the CEI (Attachment 7, Photograph 33). I did not observe paint booth filters in accumulation during the CEI.

Waste aerosol cans are generated during touch-up painting operations. The facility considers waste aerosol cans hazardous based on product and process knowledge. The facility generates approximately 55 gallons of waste aerosol cans per year. Waste aerosol cans are collected in a 55-gallon SAC near the Assembly and Mount and Test areas. The waste aerosol cans are transferred to the Paint Kitchen and punctured in an aerosol can puncturing unit. The residue drained from punctured aerosol cans is collected in a 55-gallon SAC, and the punctured aerosol cans are consolidated with the facility's scrap metal waste stream. Scrap metal is collected by Scrap Processors Inc. in Des Moines, Iowa, for recycling.

During the CEI, I observed the 55-gallon SAC of waste aerosol cans near the Assembly and Mount and Test areas (Attachment 7, Photograph 38). The SAC was near the point of generation, under control of the operator, structurally sound, closed, and full. The SAC was labeled with the words "hazardous waste" and an indication of the nature of the hazard (Attachment 7, Photograph 39). I noted no deficiencies with management of waste aerosol cans during the CEI. I provided compliance assistance regarding management of aerosol cans as universal waste.

Waste aerosol can residue consists of residue drained from punctured aerosol cans. The waste is accumulated in a 55-gallon SAC beneath the aerosol can puncturing unit in the Paint Kitchen. The facility generates less than 1 gallon of waste aerosol can residue per year. The facility considers waste aerosol can residue hazardous (D001) based on product and process knowledge. According to Mr. Chang, waste aerosol can residue has not yet been shipped off site for disposal.

During the CEI, I observed a 55-gallon SAC of waste aerosol can residue beneath the aerosol can puncturing unit in the Paint Kitchen (Attachment 7, Photographs 29 and 30). The SAC was at the point of generation, under control of the operator, structurally sound, closed, and held approximately 5 gallons of waste. However, the SAC was not labeled with an indication of the nature of the hazard, as required by 40 CFR 262.15(a)(5)(ii) (**NOPF No. 1**). Additionally, the

SAC was not labeled with the words “hazardous waste,” as required by 40 CFR 262.15a)(5)(i) (NOPF No. 2).

I provided compliance assistance regarding labeling requirements for SACs during the CEI. Prior to leaving the Paint Kitchen, operators affixed a “hazardous waste” label to the SAC as well as a “flammable liquid” label to identify the nature of the hazard (Attachment 7, Photographs 31 and 32).

Wash bay wastewater is generated in the wash bay used to clean steel components or apply surface agents prior to painting. The facility considers wash bay wastewater nonhazardous based on product and process knowledge, as well as analytical testing. Wash bay wastewater is discharged directly to the sanitary sewer system via floor drains in the wash bay and is ultimately treated at the City of Indianola’s POTW; therefore, it is excluded from the definition of solid waste. I did not determine the generation rate for wash bay wastewater during the CEI.

I asked Mr. Chang if the wastewater discharge required a permit from the city or routine monitoring. He explained that city did not require a permit or routine monitoring, but sampling has been performed. A copy of an analytical report dated April 11, 2022, for TCLP testing of wash bay wastewater taken from the floor drain pit is in Attachment 16. Based on the TCLP results and product/process knowledge, the hazardous waste determination appears to be adequate. Mr. Chang explained that when a new product is planned for use in the wash bay, the city is provided the safety data sheet (SDS) for approval. A copy of an email dated May 10, 2023, regarding use of a new product in the wash bay is in Attachment 17. During the CEI, I observed the wash bay (Attachment 7, Photograph 8) and noted no deficiencies.

Scrap metal primarily consists of scrap steel generated during fabrication or assembly. The facility considers scrap metal excluded from the definition of solid waste according to 40 CFR 261.1(c)(9) and 261.4(a)(13) when recycled. Scrap metal also includes punctured and drained waste aerosol cans. Scrap metal is accumulated in various containers throughout the facility and in outdoor roll-off containers. Scrap metal is collected by Scrap Processors Inc. in Des Moines, Iowa, for recycling. The scrap metal generation rate is not tracked and could not be determined during the CEI. I observed accumulation of scrap metal in the Fabrication area (Attachment 7, Photograph 44) and noted no deficiencies. I did not observe the outdoor roll-off containers for scrap metal accumulation during the CEI.

Used oil is generated during equipment maintenance and product testing. The facility manages used oil according to provisions of 40 CFR Part 279. Based on shipping records, the facility generates approximately 100 to 200 gallons of used oil per year. Used oil is accumulated in a 300-gallon used oil storage container and is collected by Safety-Kleen Systems in Des Moines, Iowa, for recycling. Used oil was last collected on January 30, 2023 (Attachment 18).

During the CEI, I observed the 300-gallon used oil storage container near the Assembly and Mount and Test areas (Attachment 7, Photograph 34). The used oil storage container appeared to be structurally sound and was labeled with the words “used oil” (Attachment 7, Photograph 35). I noted no deficiencies with management of used oil during the CEI.

Used oil filters are generated during equipment maintenance and product testing. The generation rate could not be determined during the CEI. The facility manages used oil filters as used oil according to provisions of 40 CFR Part 279. Used oil filters are hot drained into the 300-gallon used oil storage tank and accumulated in a 55-gallon used oil storage container. Used oil filters are collected by Safety-Kleen Systems in Des Moines, Iowa, for recycling. During the CEI, I observed a 55-gallon used oil storage container that held used oil filters (Attachment 7, Photograph 36). The used oil storage container appeared to be structurally sound and was labeled with the words “used oil” (Attachment 7, Photograph 37). I noted no deficiencies with management of used oil filters during the CEI.

Waste batteries are generated during equipment maintenance, and include lead-acid, nickel, and alkaline batteries. Waste automotive batteries are exchanged with a vendor when purchasing new batteries according to provisions of 40 CFR 266 Subpart G. The facility manages all other waste batteries as universal waste according to provisions of 40 CFR Part 273. Universal waste batteries are accumulated in containers and sorted by type. Universal waste batteries are shipped to Waste Management in Blaine, Minnesota, for recycling using the Waste Management BatteryTracker program. Based on certificates of recycling, I estimated the facility generates 50 to 100 pounds of universal waste batteries per year. Copies of the certificates of recycling for the last two shipments of universal waste batteries are in Attachment 19. I did not determine the generation rate for waste automotive batteries.

During the CEI, I observed a container of waste batteries in the Shipping/Receiving area (Attachment 7, Photograph 1). The container was structurally sound, labeled with the words “used batteries,” dated December 21, 2022, and held waste automotive batteries (Attachment 7, Photographs 2 and 4). This container was labeled as “universal waste,” although the batteries it contained were not being managed under the provisions of 40 CFR 273. I observed a second container of waste batteries on the production floor (Attachment 7, Photograph 5). The container was structurally sound, labeled with the words “used batteries,” dated April 18, 2023, and held three waste alkaline batteries (Attachment 7, Photographs 6 and 7).

I observed a 3.5-gallon container of waste batteries in the Maintenance area (Attachment 7, Photographs 40 through 43). The container was structurally sound, labeled with the words “universal waste – batteries,” dated June 4, 2022, and held approximately 2 gallons of alkaline and nickel batteries. I observed a second 3.5-gallon container of waste batteries in the Maintenance area. The container was structurally sound, labeled with the words “universal waste – batteries,” dated August 13, 2022, and held approximately 2 gallons of small lead-acid batteries. I noted no deficiencies with management of waste batteries during the CEI.

Waste lamps consist of waste 4-foot and 8-foot fluorescent lamps generated during facility maintenance. The facility manages all waste lamps as universal waste according to provisions of 40 CFR Part 273. Waste lamps are accumulated in fiberboard containers in the Maintenance area. Universal waste lamps are shipped to Waste Management in Blaine, Minnesota, for recycling using the Waste Management LampTracker program. Based on certificates of recycling, I estimated the facility generates 50 to 100 pounds of waste lamps per year. Copies of the certificates of recycling for the last two shipments of waste lamps are in Attachment 20. Waste lamps had recently been shipped and new accumulation containers had not yet been started. Therefore, I observed no universal waste lamps in accumulation during the CEI.

Waste ballasts are generated during facility maintenance. The facility considers waste ballasts nonhazardous based on product and process knowledge. Waste ballasts are accumulated in a 5-gallon container in the Maintenance area and are shipped to Waste Management in Blaine, Minnesota, for recycling using the Waste Management BallastTracker program. Based on certificates of recycling, I estimated the facility generates 25 to 50 pounds of waste ballasts per year. A copy of the certificate of recycling for the last shipment of waste ballasts is in Attachment 21. During the CEI, I observed a 5-gallon accumulation container that held approximately 3 gallons of waste ballasts and noted no deficiencies.

Waste cardboard consists of discarded cardboard packaging. The facility considers waste cardboard nonhazardous based on product and process knowledge. Waste cardboard is accumulated in an 8-cubic-yard roll-off container outside the facility. CTI generates approximately 16 cubic yards of waste cardboard per week. The waste is collected by Waste Management two times per week for recycling. During the CEI, I observed the waste cardboard accumulation container (Attachment 7, Photograph 45) and noted no deficiencies.

General trash consists of general office and non-cardboard packaging refuse generated during production and facility maintenance. Paint booth filters and disposable PPE generated during painting operations are also added to general trash waste stream. The facility considers general trash nonhazardous based on product and process knowledge. General trash is accumulated in several containers throughout the facility and transferred to two 8-cubic-yard roll-off containers outside the facility. The facility generates approximately 48 cubic yards of general trash (and overflow from the waste cardboard accumulation container) per week. The waste is collected by Waste Management three times per week and transported to the South Central Iowa Landfill Agency landfill in Winterset, Iowa, for disposal. During the CEI, I observed the general trash roll-off containers (Attachment 7, Photographs 46 and 47) and noted no deficiencies.

4. Required Response Equipment and Hazard Management

Per 40 CFR 262.15(a)(8) and 262.17(a)(6), a LQG must operate to minimize possibility of a fire, explosion, or spill, and must maintain emergency response equipment. During the CEI, I observed adequate aisle space for emergency response in the HWCAA, and no evidence of spills or leaks. I observed “no smoking” signs, fire extinguishers, telephones, and spill control materials (granular absorbent material, absorbent socks, and shovels) readily available for emergency response. Photographs of representative emergency response equipment and materials are in Attachment 7, Photographs 15 through 17. I noted no deficiencies with required response equipment and hazardous management during the CEI.

5. HWCAA

At the time of the CEI, the HWCAA held eight HWACs. The oldest container was dated April 27, 2023. One container had an inaccurate date that initially made it appear older (apparently dated January 1, 2023). This inaccurate date was corrected (to May 1, 2023) during the inspection (**NOPI No. 3**). All HWACs were structurally sound, closed, and adequately labeled. The HWCAA consisted of a concrete pad immediately outside of the Paint Kitchen. The pad did not have a spill containment berm and was not covered. However, I observed no

evidence of spills or leaks on the concrete pad or the surrounding area. I observed absorbent materials and shovels in the Paint Kitchen readily available for emergency response. I noted no deficiencies with management of HWACs in the HWCAA during the CEI, other than the inaccurate date.

I asked Mr. Chang if the HWCAA is inspected. He stated that he inspects the HWCAA weekly and inspections are documented electronically in the facility's environmental data management system. I reviewed the electronic inspection records on Mr. Chang's computer and noted no missed inspection weeks since Mr. Chang was hired as the Environmental, Health and Safety Manager in November 2022. A printout of the electronic inspection record for May 1, 2023, is in Attachment 22.

I asked if HWCAA inspections were performed prior to November 2022. Mr. Chang explained that he had no reason to believe inspections were not performed. However, if records were maintained to document HWCAA inspections prior to November 2022, they have not been located.

6. Manifests, Bills of Lading, Biennial Report

CTI generated approximately 35 manifests over the past 3 years. I reviewed a total of 24 manifests and associated LDR notifications during the CEI (5 from 2021, all 12 from 2022, and all 7 from 2023 to date). Copies of all manifests from 2023 are in Attachment 9, and copies of select manifests from 2022 are in Attachment 12.

During the CEI, I noticed that the manifests and associated LDR notifications for shipments of WPRM since July 29, 2022, included the D005 characteristic hazardous waste code instead of D035. This appeared to be due to an error on the waste profile form submitted in March 2022, resulting in incorrect waste codes on the pre-printed manifests and LDR notifications. Additional discussion regarding these waste codes is provided in Section 3 of this report. I determined during the CEI that the facility failed to include correct hazardous waste codes on manifests for WPRM, as required by 40 CFR 262.20(a) (**NOPF No. 6**) and on the associated LDR notifications, as required by 40 CFR 262.17(a)(9) referencing 40 CFR 268.7(a)(2) (**NOPF No. 7**).

7. Personnel Training Requirements

Personnel training is required by LQG regulations specified in 40 CFR 262.17(a)(7) to ensure that employees are thoroughly familiar with proper waste handling procedures relevant to their responsibilities. During the CEI, I discussed personnel training requirements with Mr. Chang. He explained that all personnel receive initial and annual training that covers health and safety topics, waste identification and management, emergency response, and other topics relevant to each job position. Training is administered by Department Heads to personnel, and attendance is tracked electronically in the facility's environmental data management system. The data management system maps the type and frequency of required training to job positions. I reviewed the training material provided to painters, which addresses hazardous waste management, universal waste management, and actions required for emergency response, and noted no deficiencies with the training content. I reviewed electronic attendance records for

painters and maintenance personnel for the current 2022-2023 training cycle. A printout of the current training record for painters is in Attachment 23.

The electronic data management system only had attendance records for the 2022-2023 training cycle. I asked if training was performed prior to 2022. Mr. Chang explained that he had no reason to believe training was not performed, but many of the records documenting the type of training and attendance prior to 2022 have not been located. Ms. Lyons searched for training records during the records review and was able to locate some partial training records for 2020 (Attachment 24). However, the 2020 records did not include waste management or emergency response topics. Ms. Lyons could not locate any applicable training records for 2021 during the CEI. I determined the facility failed to maintain documentation confirming training had been conducted prior to 2022, as required by 40 CFR 262.17(a)(7)(iv)(D) (**NOPF No. 5**).

Written job descriptions for Environmental, Health and Safety Manager, Industrial Engineer, and all painting and maintenance job titles are included in Attachment 25.

8. Preparedness and Prevention and Contingency Plan

As a LQG, CTI is required to arrange for emergency response with local emergency agencies, to designate an emergency coordinator (EC) for the facility, and maintain a RCRA Contingency Plan. CTI's RCRA Contingency Plan was last updated November 2022. A copy of the One Plan (without appendices) is in Attachment 26.

I noted the RCRA Contingency Plan included a description of actions needed to respond to fires, explosions, and spills, a description of arrangements with local emergency agencies, and a list of emergency response equipment, as required by 40 CFR 262.17(a)(6) referencing 262.261(a, c, and e). The RCRA Contingency Plan included an evacuation plan; however, the plan did not include a description of the signals to begin evacuation. I determined the facility failed to include a complete evacuation plan in the RCRA Contingency Plan, as required by 40 CFR 262.17(a)(6) referencing 262.261(f) (**NOPF No. 4**).

Maps showing locations and capabilities of emergency response equipment and evacuation routes were appendices to the RCRA Contingency Plan and are not included in Attachment 26; however, I reviewed the maps during the CEI and noted no deficiencies. During my review of the RCRA Contingency Plan, I noted the evacuation plan did not include a description of the signal to begin evacuation

The RCRA Contingency Plan included the telephone numbers of the primary EC (Mr. Stan Duckett, Maintenance Supervisor) and alternate ECs listed in order of contact, as required by 40 CFR 262.17(a)(6) referencing 262.261(d). It also included a Quick Reference Guide, as required by 40 CFR 262.17(a)(6) referencing 262.262(b). The Quick Reference Guide appendices are not included in Attachment 26; however, I reviewed these appendices and noted no deficiencies.

According to Mr. Chang, copies of the RCRA Contingency Plan with Quick Reference Guide have been provided to the emergency agencies identified in the plan, as required by 40 CFR 262.17(a)(6) referencing 262.262(a).

9. Air Emissions: 40 CFR Part 265 Subparts AA, BB, CC

EPA regulations in 40 CFR Part 265, Subparts AA, BB, and CC apply to LQGs. If a LQG manages hazardous waste with an organic concentration greater than 10 parts per million by weight (ppmw), the standards specified in Subpart AA apply to hazardous waste air emissions from certain process vents. A process vent used in distillation, fractionation, solvent extraction, thin-film evaporation, air stripping, or steam stripping is regulated by Subpart AA. CTI is not subject to the Subpart AA regulations because the facility does not have any of the process vents listed above. The facility does not plan to operate its WPRM distillation unit in the future.

If a LQG has equipment that contains or contacts hazardous waste composed of 10 percent or greater organics by weight, the facility is subject to Subpart BB standards for inspection and monitoring of the equipment. CTI is not subject to the Subpart BB regulations because it does not have equipment that contains or comes in contact with hazardous waste.

The standards found in Subpart CC apply to LQGs that manage hazardous waste in containers with organic compounds (VOC) concentration that exceeds 500 ppmw. The Subpart CC standards are applicable because the facility accumulates hazardous waste that contains VOCs in 55-gallon hazardous waste accumulation containers. During the CEI, I determined that CTI meets the Subpart CC requirements for containers by using Container Level 1 controls (hazardous waste accumulation containers smaller than 122 gallons that are Department of Transportation [DOT]-approved). I noted no concerns with management of hazardous waste per the Subpart CC air emissions requirements.

10. Summary of Preliminary Findings

In summary, as part of the CEI, I made the following preliminary findings:

1. Failure to label two SACs with an indication of the nature of the hazard, as required by 40 CFR 262.15(a)(5)(ii) (**NOPF No. 1**)
2. Failure to label one SAC with the words “hazardous waste,” as required by 40 CFR 262.15(a)(5)(i) (**NOPF No. 2**)
3. Failure to mark an accurate accumulation start date on one HWAC, as required by 40 CFR 262.17(a)(5)(i)(C) (**NOPF No. 3**)
4. Failure to include a complete evacuation plan in the RCRA Contingency Plan, as required by 40 CFR 262.17(a)(6) Referencing 262.261(f) (**NOPF No. 4**)
5. Failure to maintain documentation confirming training had been conducted prior to 2022, as required by 40 CFR 262.17(a)(7)(iv)(D) (**NOPF No. 5**)
6. Failure to include correct hazardous waste codes on manifests for WPRM, as required by 40 CFR 262.20(a) (**NOPF No. 6**)
7. Failure to include correct hazardous waste codes on LDR notifications for WPRM, as required by 40 CFR 262.20(a) (**NOPF No. 7**)

Other than items specifically noted in the narrative, I observed no additional issues. However, further review by EPA may change or add to my findings.

John D. Dixon

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John D. Dixon

Inspector

CLAENE Group, LLC.

Mike Martin -
signing for Amber
Whisnant

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Amber Whisnant

Section Chief

ECAD/CB/RCRA, EPA Region 7

Attachments

1. Notification Acknowledgement/Verification Report (1 Page)
2. Receipt for Documents and Samples (1 Page)
3. Confidentiality Notice (1 Page)
4. Notice of Preliminary Findings (1 Page)
5. Facility Map (2 Pages)
6. Google Earth Aerial Photograph (1 Page)
7. Photographic Documentation (47 Photos and Photolog) (28 Pages)
8. 2021 Biennial Report Summary (4 Pages)
9. Manifests for 2023 Hazardous Waste Shipments (7 Pages)
10. LDR Notification for Shipment on April 26, 2023 (1 Page)
11. E-Manifest Report for 2022 and 2023 (8 Pages)
12. Manifests for Shipments on April 6, June 15, and July 29, 2022 (3 Pages)
13. WPRM Waste Profile Cancellation Form Dated April 5, 2022 (1 Page)
14. WPRM Waste Profile Form Dated March 29, 2022 (1 Page)
15. Analytical Report for Paint Booth Filter TCLP (12 Pages)
16. Analytical Report for Wash Bay Wastewater TCLP (12 Pages)
17. Email Regarding Wash Bay Product Approval (1 Page)
18. Used Oil Receipt and Bill of Lading (2 Pages)
19. Certificates of Recycling for Waste Batteries (2 Pages)
20. Certificates of Recycling for Waste Lamps (2 Pages)
21. Certificate of Recycling for Waste Ballasts (1 Page)
22. HWCAA Inspection Record Dated May 1, 2023 (7 Pages)
23. Training Attendance Record for Painters 2022-2023 (1 Page)
24. Partial Training Records for 2020 (3 Pages)

25. Written Job Descriptions (21 Pages)
26. RCRA Contingency Plan Without Appendices (16 Pages)