

REPORT OF RCRA COMPLIANCE EVALUATION INSPECTION

At

BORGHI USA, INCORPORATED

402 West Division Street
West Burlington, Iowa 52665
(319) 758-6990

EPA RCRA ID No. IAR000525451

On

August 19 and 22, 2024

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 Borghi USA, Incorporated (Borghi) located at 402 West Division Street, West Burlington, 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 represent the findings of the CEI.

PARTICIPANTS

Borghi:

Matthew Brakeville, Plant Manager
Kevin May, Laboratory and Wastewater Operator

Toeroek Team:

Steve Johnson, Field Inspector, (816) 520-7009

INSPECTION PROCEDURES

Prior to the CEI at Borghi on August 19, 2024, I conducted a drive-by inspection of the facility and real property that were visible from common right-of-way and parking areas. I did not observe any areas of concern during the drive-by inspection. After the drive-by inspection, I entered the main entrance to the office building and approached the reception desk. I introduced myself to the receptionist and explained the purpose of the visit. I requested to see the facility contact Mr. Francesco Cremonini. She replied that Mr. Cremonini was no longer at the facility and proceeded to contact the current plant manager to inform him of my arrival. Mr. Matthew Brakeville met me in the reception lobby approximately 5 minutes later. I introduced myself to Mr. Brakeville and explained the purpose of the CEI. Mr. Brakeville asked that I accompany him to a nearby conference room where I conducted the entry briefing with him.

During the entry briefing, I presented my EPA credentials and provided my work e-mail address and cellular phone number to Mr. Brakeville. I explained the scope, procedures and estimated duration of the CEI. I explained the facility's right to make confidentiality claims and provided a copy of the 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 information gathered regarding the facility or process descriptions offered. I also provided Mr. Brakeville 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, which he read.

A copy of each of the following documents were offered to Mr. Brakeville during the CEI. All except for the first six items were offered in either electronic form or hard copy form at the facility's discretion. Mr. Brakeville opted for electronic files. Those were presented on a dedicated flash drive containing only the described documents. He copied the files during the CEI visit and returned the flash drive.

- RCRA Facility Access Information Sheet
- Mr. Trevor Urban's contact information (a business card was not available)
- RCRA Section 3007
- U.S. Federal Codes 1001 and 1002
- Instructions for Responding to a Notice of Preliminary Findings
- 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
- IDNR-Recycling Electronics: A Guide for Businesses
- IDNR-Battery Recycling/Disposal
- IDNR -Management of Fluorescent Lamps for Businesses
- IDNR-Incompatible Chemicals guidance document
- SQG Re-Notification Requirement Update Sheet

- IDNR Lead-Based Paint Management Guide
- IDNR Guide- Universal Wastes – Including Aerosol Cans
- IDNR - TCLP – Toxicity Characteristic Leaching Procedure
- IDNR Solvent Wipes Rule Guidance
- Iowa Environmental Guide for Businesses

I reviewed the Notification Acknowledgement/Verification Report (Verification Report) with Mr. Brakeville (Attachment 1). Mr. Brakeville explained that recent changes had resulted in the departure of both Mr. Cremonini and the Human Resource Manager, Lewis Worden, listed on the NAVR form. I revised the Verification Report to identify Mr. Brakeville as the Site Contact and Ms. Gail Gonyan as the report contact.

At the outset of the briefing, Mr. Brakeville stated that he had been expecting a return visit. When I asked for clarification, he replied that he expected follow-up since the facility's attorney and consultant staff had just completed a walk-through of the facility a week earlier and that he was anxious to show what had been accomplished. Mr. Brakeville explained that the plant had been the subject of a number of investigations beginning in 2022. These included:

- West Burlington Fire Department investigation in response to a hydrochloric acid release that occurred on April 14, 2022. The initial response was followed by an ordered plant closure until April 18, 2022, and clean-up by Clean Harbors Environmental Services personnel.
- West Burlington Public Works Department records review and discharge investigation in May 2022 concerning the hydrochloric acid spill.
- Occupational Health and Safety Administration (OSHA) inspection in response to employee injury on December 25, 2021, a complaint related to general work practices, and in response to the April 2022 release.
- EPA Region 7 RCRA CEI following the OSHA site investigation in October 2022. Subsequent to the investigation, Borghi entered into a recorded Consent Agreement and Final Order (CAFO) with EPA Region VII in response to observed compliance deficiencies.

I conducted a visual inspection and records review on August 19, 2024, accompanied by Mr. Brakeville. During the records review, I reviewed facility documentation such as waste shipping records, waste profiles, Safety Data Sheets (SDS), Emergency Response Plan, available training records and a training outline. I prepared and completed a site-specific inspection checklist to document my observations.

I conducted an exit briefing on August 19, 2024, with Mr. Brakeville. During the exit briefing, I provided a Receipt for Documents and Samples to Mr. Brakeville (Attachment 2). However, when preparing this report, I noticed that I had inadvertently neglected to obtain Mr. Brakeville's signature on the Receipt for Documents and Samples. I provided Mr. Brakeville with the Notice, which he signed indicating no confidential business information had been provided (Attachment 3). I also provided Mr. Brakeville a revised Notice of Preliminary Findings (NOPF), which he signed to acknowledge receipt (Attachment 4).

After the August 19, 2024, exit briefing, I discussed my preliminary findings with the EPA Task Order Contracting Officer's Representative (TOCOR), Mr. Trevor Urban, via telephone. Mr. Urban forwarded additional compliance and enforcement documents resulting from the CAFO (Docket No. RCRA-07-2023-0121, effective September 12, 2023). I reviewed the documents provided. I also contacted Ms. Tiffany DeLong, with the EPA Region 7 Enforcement and Compliance Assurance Division, via telephone on August 20, 2024. During these conversations, specific items related to compliance with the CAFO requirements were identified for evaluation during the CEI. These items included:

- On-site maintenance of records verifying compliance with prescribed Sampling and Analysis Plans
- On-site maintenance of records verifying compliance with the prescribed Quality Assurance Project Plan (QAPP) and Health and Safety Plans
- Records verifying completion of the prescribed 30 consecutive filter press sludge sampling events
- Maintenance of required waste disposal reports
- Fundamental compliance with RCRA large quantity generator (LQG) requirements pending final resolution of the CAFO conditions.
- Removal of all hazardous waste following submission of the Waste Disposal Report

The follow-up visit on August 22, 2024 was performed to obtain documentation that all inventoried wastes had been removed from the site and that appropriate remedial measures had been taken. The inspection included evaluation of site plans and records applicable to LQG facilities including Preparedness and Prevention, contingency plan, personnel training and inspection requirements.

Maps of facility layout were included within the Emergency Response Plan document obtained during the CEI and are in Attachment 5. An aerial photograph of the facility was downloaded from Google Earth after the CEI and is in Attachment 6. The 68 photographs taken during the CEI are in Attachment 7, of which 62 are discussed or referenced in this report.

FINDINGS AND OBSERVATIONS

1. Facility Description and General Information

Borghi is a manufacturer of pneumatic and hydraulic delivery conduit components utilized in the automotive, agricultural, and general industry sectors. According to Mr. Brakeville, major customers include New Holland, Case, and Caterpillar equipment manufacturers. Borghi has been operating at the current location since 2001. Manufacturing operations include cutting and forming of small-diameter pipe and tube stock into customer-specified fluid and pneumatic delivery conduit and fittings. According to Mr. Brakeville, the facility does not use paint or other surface coatings on completed parts prior to final shipment to customers. Touchup painting using aerosol paints is performed on in-plant carrier racks and carts on an as-needed basis.

The facility offices and production floors are housed in a single freestanding structure with approximately 81,000 square feet under roof. Office and shipping activities occupy an estimated

20,000 square feet. The balance is occupied by production space. A single receiving dock is located on the west end of the facility, and shipping docks are located on the southeast corner (Attachment 7, Photographs 1 and 2). Borghi currently employs approximately 121 full-time employees (FTE) who work one 8-hour shift (6:00 a.m. to 2:00 p.m.) Monday through Friday. A second shift employs ten of the FTEs that serve as maintenance and materials movement staff supporting the day production shift. Second shift is operated on an 8-hour schedule with a ½-hour overlap.

Manufacturing processes employed at Borghi include saw cutting of pipe and tube stock, bending, flare forming and anti-corrosion coating in a serial plating system using immersion dip tanks. Additional fabrication techniques include mid-temperature brazing of fittings and metal inert gas (MIG) welding. Quality control (QC) activities include low-pressure and high-pressure leak test booths for completed product components. Representative photographs of the manufacturing processes, process areas, and QC test booths are in Attachment 7, Photographs 3, 4, 8, 11, 31, 32, and 35 through 39.

Anti-corrosion coating consists of trivalent zinc plating applied via submersion dip tanks (Attachment 7, Photographs 17 through 20). A schematic block diagram of the trivalent zinc plating process is included in this report as Attachment 8. Dip tank wastewater and rinsates are pretreated in an onsite wastewater treatment system then discharged directly to the sanitary sewer system with no prior accumulation or surge retention basins. Wastewater is ultimately treated at the City of West Burlington publicly-owned treatment works (POTW). According to Mr. Brakeville, the discharge is authorized under a categorical pretreatment agreement with the West Burlington wastewater treatment authority. Conditional to the pretreatment agreement is weekly zinc analysis of the wastewater treatment system effluent. Mr. Brakeville reported maximum allowable concentrations for zinc of 1.4 milligrams per liter (mg/L) and oil and grease of 0.52 mg/L. A copy of the analytical report for samples collected the week of July 29, 2024 is included as Attachment 9.

Photographs of onsite wastewater treatment components are in Attachment 7, Photographs 21 through 23 and 26. A photograph of the treated effluent discharge line is in Attachment 7, Photograph 24. Borghi has determined the pretreated wastewater to be exempt from the definition of solid waste, per Title 40 *Code of Federal Regulations* (40 CFR) 261.4(a)(1)(ii). Wastewater generated from the onsite wastewater treatment system is not discussed further in this report.

Waste corrosive liquids are generated during cleanout of chemical intermediate bulk containers (IBCs) and other containers, as well as plating solution overflow. The facility considers waste corrosive liquids to be hazardous waste based on product/process knowledge and analytical testing.

Wastes generated during equipment maintenance, facility maintenance, and support operations include wastewater treatment filter cake, saw water, used fluorescent lamps, waste batteries, aerosol cans, scrap metal, wood waste/scrap dunnage, waste cardboard and packaging plastic, cloth personal protective equipment (PPE) and utility rags, used oil/coolant mixtures, oil-contaminated spill booms and pads, and general trash.

Wastewater treatment filter cake and saw water (which consists of spent aqueous lubricant from the saw machines) are considered to be nonhazardous based on product/process knowledge and analytical testing. Used fluorescent lamps, waste batteries, and aerosol cans are managed as universal wastes according to provisions of 40 CFR Part 273 and are recycled. Scrap metal is considered to be excluded from the definition of solid waste according to 40 CFR 261.4(a)(13) and 261.6(a)(3)(ii). Wood waste/scrap dunnage and waste cardboard and packaging plastic are considered to be nonhazardous based on product and process knowledge and are landfilled. Cloth PPE and utility rags are considered to be nonhazardous based on product and process knowledge, collected for offsite laundering, and returned for reuse. Used oil/coolant mixtures are managed as used oil according to 40 CFR Part 279 and are collected for recycling. Oil-contaminated spill booms and pads are considered to be nonhazardous based on product and process knowledge and are collected for recycling. General trash is considered to be nonhazardous based on product and process knowledge and is landfilled.

According to Mr. Brakeville, Borghi has been subject to numerous investigations since April 2022, for issues related to impermissible storage of wastes, absence of categorical pretreatment reporting, and suspicion of unpermitted discharge to the wastewater authority. EPA Region VII conducted a RCRA CEI at Borghi on October 19, 2022. At the time of the inspection, the following solid wastes were observed:

- Solvent-contaminated shop rags in the maintenance area
- Waste vats of process rinse waters in the plating area
- A total of 52 IBCs holding unidentified and unknown plating solutions and liquid wastes stored in unsecured areas outside of the physical plant structure
- A 20-cubic-yard roll-off container of scrap metal outside the facility
- A covered roll-off container of wastewater treatment filter cake
- Oil-contaminated spill pads

Based on observations during the CEI and responses to subsequent information requests, EPA Region VII issued the CAFO, effective September 12, 2023, with the following violation of 40 CFR 262.11:

Respondent had not conducted hazardous waste determinations on the following solid waste streams: the process rinse waters, the wastewater sludge, and the contents of the fifty-two (52) 275-gallon totes

Corrective actions imposed by the Order included:

- Separation of incompatible waste in common areas by a dike or berm structure
- Placement of waste material into containers that do not contain incompatible waste
- Assurance that incompatible waste materials are not mixed in a container
- Creation and maintenance of a full inventory of wastes
- Creation of Sampling and Analysis Plans (SAPs) for hazardous waste determinations
- Submittal of Waste Disposal Reports after wastes have been shipped off site

2. RCRA Status

On October 15, 2019, Borghi notified EPA of its regulated waste activity as a very small quantity generator (VSQG) of hazardous waste (generating less than 100 kilograms (kg) of hazardous waste per calendar month). After the October 19, 2022, CEI and subsequent responses to information requests, Borghi notified the EPA on March 29, 2023, of its change in generator status to large quantity generator (LQG) of hazardous waste (generating more than 1,000 kg of hazardous waste per calendar month or accumulating more than 6,000 kg of hazardous waste at any time). That change was reflected on the Verification Report provided by EPA (Attachment 1).

Borghi submitted a 2023 Hazardous Waste Biennial Report (Attachment 10). This report included a total of 13,370 gallons of hazardous waste, consisting of aqueous corrosive liquids with and without toxic metals, and 1,200 pounds of waste corrosive liquid from container cleanout. Using an assumed weight of 8.34 pounds per gallon (weight of water) for the aqueous waste, this equates to 108,160 pounds (49,061 kg) of hazardous waste. Based on the quantity of hazardous waste reported in the 2023 Hazardous Waste Biennial Report and the facility's ongoing enforcement action, I inspected Borghi as a LQG of hazardous waste. Based on observations during the CEI, I also inspected Borghi as a small quantity handler (SQH) of universal waste (accumulating less than 5,000 kg of universal waste at any time) and used oil generator.

According to Mr. Brakeville, the facility should operate as a VSQG again if the management system and controls function as desired. The accumulation of plating bath solutions, overflow, and rinse waters should be eliminated through proper use of the wastewater treatment system, and generation of waste corrosive liquids requiring offsite treatment should be less than the VSQG threshold of 100 kg per month. Currently, under conditions of the CAFO, the facility is collecting all used plating solutions and overflow liquids that may contain heavy metal constituents for analysis prior to assignment to onsite treatment or offsite disposal at a permitted facility. Mr. Brakeville stated that any change in generator status would only be made when the facility is returned to a compliant state with all parties satisfied that corrective actions have been completed.

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. Borghi and its environmental contractor have performed hazardous waste determinations for all wastes generated at the facility. A copy of a spreadsheet with waste profiles, including hazardous waste determinations, is in Attachment 11. The following discussion of waste streams is based on my interview with Mr. Brakeville, the visual inspection, and my review of available documentation.

Waste corrosive liquids consists of spent acid and caustic solutions generated from cleanout of IBCs and 55-gallon containers that held chemicals such as hydrochloric acid, sulfuric acid, nitric acid and sodium hydroxide. This waste stream also includes plating solution overflow. Borghi considers waste corrosive liquids to be hazardous (D002 and/or D007, D008, D010) based on

product/process knowledge and analytical testing. Currently, under conditions of the CAFO, the facility is collecting all used plating solutions, overflow liquids, and other waste corrosive liquids that may contain heavy metal constituents are collected for analysis prior to assignment to onsite treatment or offsite disposal at a permitted facility.

During the CEI, I observed several 55-gallon drums and 275-gallon IBCs that held corrosive acid and caustic products in the plating room and wastewater treatment area. No waste corrosive liquids were observed in accumulation.

I did observe an IBC and an 85-gallon container in the hazardous waste container accumulation area (HWCAA) that held plating solution from plating circuit Tank 39 (Attachment 7, Photograph 29). The hazardous waste accumulation containers (HWACs) were structurally sound and closed. According to Mr. Brakeville, the facility was awaiting analytical test results to make the final hazardous waste determination. In the interim, the container was labeled with the words “hazardous waste” and marked with an accumulation start date of August 9, 2024 (Attachment 7, Photographs 27 and 28). The containers were not marked with an indication of the nature of the hazard, as required by 40 CFR 262.17(a)(5)(i)(B) (**NOPF No. 1**).

I provided compliance assistance to Mr. Brakeville during the CEI regarding labeling container labeling requirements. Specifically, I explained that containers of waste pending analysis should be labeled and managed as hazardous waste until analytical results demonstrate that the waste is nonhazardous. This includes labeling with the words “hazardous waste” (or hazardous waste – pending analysis), the accumulation start date, and an indication of the nature of the hazard.

Wastewater treatment filter cake is generated from the dewatering of solids from the settling tank serving the onsite wastewater treatment system. Solids are pumped from the tank to a plate-filter press where they are dewatered. Once the dewater cycle has completed, resulting filter cake is manually removed from the vertical filter plates and transferred to a holding container (tip hopper). When full, contents of the tip hopper are transferred to a 20-cubic-yard roll-off container on the outdoor staging pad. The facility generates approximately 9,000 pounds of wastewater treatment filter cake per week. Borghi considers the waste to be nonhazardous based on product/process knowledge and analytical testing, specifically, the 30-consecutive-sample reporting compelled by the CAFO. Wastewater filter cake is transported to Envirite of Illinois in East Harvey, Illinois, or Backridge Landfill in LaGrange, Missouri, for landfill disposal. Representative copies of shipping documents for wastewater treatment filter cake are in Attachment 12.

During the CEI, I observed the filter press in the wastewater treatment area (Attachment 7, Photograph 22). I also observed the 20-cubic-yard roll-off container for wastewater treatment filter cake on the northwest corner of the outdoor staging pad (Attachment 7, Photographs 43 and 44). The roll-off container was structurally sound and closed. Mr. Brakeville estimated that the container is shipped approximately every 2 to 3 weeks. I observed no deficiencies associated with the management of wastewater treatment filter cake.

Saw water consists of spent aqueous lubricant from the saw machines used to cut pipe/tube stock to custom lengths prior to fabrication. Saw water is recirculated in a partially-open system to a 750-gallon holding reservoir on each of two saw machines. Approximately twice per year,

the reservoirs are evacuated by vacuum-pump and transported to an offsite wastewater treatment facility. Borghi has determined that saw water is nonhazardous based on product and process knowledge.

During the CEI, I observed the saw machines (Attachment 7, Photograph 8). I did not observe saw water in accumulation.

Waste lamps consist of used 4-foot fluorescent lamps generated from facility maintenance. The facility generates approximately 50 to 60 pounds of waste lamps per year. Borghi manages waste lamps as universal waste according to provisions of 40 CFR Part 273. The facility generates approximately 40 pounds of waste lamps per year according to records. Waste lamps are accumulated in a fiberboard container in the forming area of the facility. Waste lamps are collected in pre-labeled Recycle Pak containers for common carrier shipment to Veolia in Port Washington, Wisconsin, for recycling.

During the CEI, I observed a universal waste accumulation container for waste lamps in the forming area shop (Attachment 7, Photograph 10). The container was empty. I did not observe accumulation of waste lamps during the CEI.

Waste batteries are generated during equipment maintenance, and include closed-cell lead-acid, lithium-ion, and alkaline batteries. The facility generates less than 30 pounds of waste batteries per year. Borghi manages waste batteries as universal waste according to provisions of 40 CFR Part 273. Mr. Brakeville stated that used batteries had historically been taken by a plant officer to the Household Hazardous Waste station at the Des Moines County Landfill in Burlington, Iowa, where they were surrendered for recycling.

I did not observe waste batteries in accumulation during the CEI. I asked about the disposition of batteries removed from forklifts or other mobile stock. Mr. Brakeville stated that all lifts are serviced off site, as needed, and any waste batteries generated during servicing are managed by their service contractor.

Scrap metal, primarily steel and specialty alloys, is generated during fabrication and forming of product components. Scrap metal includes stock saw cuttings, grinding dust and machine turnings, maintenance scrap pieces, and scrap utility carts. Borghi considers scrap metal excluded from the definition of solid waste. Scrap metal is accumulated inside the plant in wheeled tubs and transferred to a 20-cubic-yard open roll-off container on a concrete staging pad. I did not determine the scrap metal generation rate during the CEI; however, Mr. Brakeville explained that the generation rate was variable with a typical 20-cubic-yard roll-off container collection of once per week. He estimated scrap metal generation at approximately 2 tons per month. Scrap metal is collected by Alter Scrap Services in Cedar Rapids, Iowa, for recycling.

During the CEI, I observed several scrap metal accumulation containers (tip hoppers) within the facility and two outdoor roll-off containers used for scrap metal accumulation (Attachment 7, Photographs 15, 16, 34, 45, and 56). In addition to these scrap metal containers, I observed a 20-cubic-yard container that was intended for collection of wood waste/scrap dunnage but instead held scrap metal (Attachment 7, Photograph 46). Aside from an errant placement of scrap metal

into a scrap wood roll-off container, I noted no deficiencies with management of scrap metal during the CEI.

Wood waste/scrap dunnage consists of used and broken pallets and other wooden crates that have not been treated or coated. The facility generates an estimated 4 to 6 tons of wood waste/scrap dunnage per month. Borghi considers the waste to be nonhazardous based on product and process knowledge. Wood waste/scrap dunnage is accumulated in stacks in shipping areas and in wheeled containers distributed throughout the facility. Wood waste/scrap dunnage is transferred to an open 20-cubic-yard roll-off container on the outside concrete pad adjacent to the scrap metal containers. Reusable shipping pallets are staged on an outside concrete pad. Wood waste/scrap dunnage is transported to the Des Moines County Landfill in Burlington, Iowa, for landfill disposal.

During the CEI, I observed the 20-cubic-yard roll-off container for wood waste/scrap dunnage (Attachment 7, Photographs 43 and 46). The container held scrap metal that was added in error. I observed wood waste/scrap dunnage in wheeled containers throughout the facility and noted no deficiencies.

I also observed storage of reusable plastic dunnage owned by Stellantis Automotive on the outdoor staging pad (Attachment 7, Photographs 63 through 65). According to facility representatives, Borghi is trying to get Stellantis Automotive to take the unused plastic dunnage back.

Waste cardboard and packaging plastic are generated during packaging and unpacking products and materials. The facility generates less than 300 pounds of waste cardboard and packaging plastic per month. The facility considers waste cardboard and packaging plastic to be nonhazardous based on product and process knowledge. Waste cardboard and plastic are collected in various containers in the production and shipping departments. The wastes are transferred to a general trash compactor and 42-cubic-yard roll-off container on the northwest corner of the building. The general trash container is transported by Lavine Sanitation to the Des Moines County Landfill in Burlington, Iowa, for landfill disposal. During the CEI, I observed the general trash compactor and roll-off container (Attachment 7, Photograph 42) and noted no deficiencies with management of waste cardboard and packaging plastic.

Cloth PPE and utility rags consist of soiled gloves and shop rags (oily rags) used for general cleaning and spill cleanup of nonhazardous materials or wastes. The facility generates approximately 80 gallons of cloth PPE and utility rags per week. Borghi considers cloth PPE and utility rags to be nonhazardous based on product and process knowledge. The waste is accumulated in dedicated containers for collection by a commercial launderer (Aramark Services) in supplied bags. Cleaned items are returned to the facility for reuse.

During the CEI, I observed several 8-gallon containers used for accumulation of cloth PPE and utility rags (Attachment 7, Photographs 5 and 6). The PPE and rags appeared to be dry, and no free liquids were observed within the containers. I noted no deficiencies with management of cloth PPE and utility rags during the CEI.

Oil-contaminated spill booms and pads are generated from routine maintenance and spill clean-up activities in the maintenance areas, plating and cutting/ forming areas of the facility. The primary contaminant is hydraulic and lubricating oils (Attachment 7, Photograph 14). The facility generates approximately 25 to 30 pounds of oil-contaminated spill booms and pads per week. Borghi considers the waste to be nonhazardous based on product and process knowledge. Oil-contaminated spill booms and pads are collected in dedicated containers and are collected by Closed Loop Recycling in St. Louis, Missouri, for recycling.

During the CEI, I observed accumulation of oil-contaminated spill booms and pads in the forming/cutting areas (Attachment 7, Photograph 7) and noted no deficiencies.

Used oils/coolant mixtures are generated during scheduled equipment maintenance and support (typically once per year) or equipment failures. Borghi manages used oils/coolant mixtures as used oil according to provisions of 40 CFR Part 279. The facility generates less than 160 gallons of used oils/coolant mixtures per year. Used oils/coolant mixtures are collected by Environmental Services for recycling through a regional used oil recycler. I did not observe accumulation of used oils/coolant mixtures during the CEI.

Waste aerosol cans consist of a low number of spent aerosol can products sporadically generated from administrative and maintenance functions. Mr. Brakeville stated that Borghi had historically managed waste aerosol cans as general trash as allowed for VSQG facilities. However, the facility will manage waste aerosol cans as universal waste according to provisions of 40 CFR Part 273 as long as the facility is a LQG of hazardous waste. I did not observe waste aerosol cans in accumulation during the CEI.

General trash consists of general paper, plastic and food waste generated from production and maintenance activities. I did not determine a generation rate during the CEI. However, Mr. Brakeville reported that the general trash is typically collected on a monthly schedule. Borghi has determined that general trash is nonhazardous based on product and process knowledge. General trash is accumulated in various containers throughout the facility and transferred to an onsite general trash compactor and 42-cubic-yard roll-off container on the northwest corner of the building. The general trash container is transported by Lavine Sanitation to the Des Moines County Landfill in Burlington, Iowa, for landfill disposal.

During the CEI, I observed several general trash accumulation containers throughout the facility (Attachment 7, Photographs 33, 34, and 42) and noted no apparent deficiencies.

4. Other Observations

During the CEI, I observed an unmarked 5-gallon container reported to be holding a cleaning detergent solution of AxxaWash (Attachment 7, Photograph 12). The solution is used to clean oily surfaces of tube stock and cutting machines. The facility considers spent AxxaWash solution to be nonhazardous waste. A copy of the SDS for AxxaWash is in Attachment 13. Based on the SDS and product use, the hazardous waste determination for spent AxxaWash appears to be adequate.

During the CEI, I observed two partially filled 5-gallon containers of unidentified material near a saw cutting machine (Attachment 7, Photograph 13). The containers bore illegible labels and were not completely sealed. The material was presumed to be waste according to Mr. Brakeville. I determined that the facility failed to make a hazardous waste determination for the presumed waste, as required by 40 CFR 262.11 (**NOPF No. 2**).

At the request of EPA, I observed and photographed the outdoor staging pad and locations where waste accumulation was observed during the October 19, 2022, CEI. It appeared that the waste observed during the October 19, 2022, CEI had been shipped off site. Areas adjacent to the staging pad where soil removal occurred had been backfilled and seeded. No evidence of staining or release was noted on the surface of the staging pad or surrounding grounds. Photographs of the outdoor staging pad and surrounding area are in Attachment 7, Photographs 40 through 68.

5. Required Response Equipment and Hazard Management

Per 40 CFR 262.15(a)(8) and 262.17(a)(6), an LQG facility 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 interim HWCAA, and no evidence of spills or leaks in the area. I observed acid neutralizer, absorbent booms, and two multi-purpose fire extinguishers in the immediate area of the HWCAA. I observed similar emergency response equipment and materials distributed at three locations within the facility. I noted no deficiencies with required response equipment and hazardous management during the CEI.

In response to corrective action imperatives of the CAFO, Borghi installed an updated spill control berm to contain possible releases from the plating circuit and chemical tanks located in that area. Mr. Brakeville pointed out the improved structure during the CEI. I observed the construction and noted that it appeared to be structurally sound.

6. HWCAA

At the time of the CEI, the interim HWCAA held two containers that were marked “hazardous waste” and held liquid waste marked as “Tank #39.” These containers are described in Section 3 of this report. I asked Mr. Brakeville if the HWCAA is inspected. He stated that two specific production personnel perform weekly inspections of the HWCAA, emergency equipment, and exterior waste staging area. The weekly inspections are documented on checklists and copied electronically. Copies of select inspection checklists are included as Attachment 14 as examples. I reviewed the hard copy inspection records from October 2023, through August 14, 2024, and noted no missed inspections or identification of significant findings.

7. Manifests, Bills of Lading, Biennial Report

Borghi generated seven uniform hazardous waste manifests over the past 2 years. I reviewed all manifests and associated LDR notifications during the CEI. A copy of a Waste Management Summary Table documenting all shipments of waste in 2024 is in Attachment 15, and the 2024 Hazardous Waste Disposal Report is in Attachment 16. Copies of select hazardous waste and

nonhazardous waste manifests from 2024 are in Attachments 17 through 19. I also reviewed the facility's 2023 Hazardous Waste Biennial Report (Attachment 10).

I noted only one discrepancy during my review of manifests and Biennial Report. Manifest 001291868WAS, dated February 3, 2023, shows shipment of 1,200 pounds of D002 waste corrosive liquid (Attachment 20). The RCRAInfo database entry for this manifest shows a shipping weight of approximately 10,000 pounds (5 tons). There appears to be a 10-fold discrepancy between the hard copy manifest and the entry in RCRAInfo, apparently related to the mistaken entry of 1,200 pounds of liquid waste rather than 1,200 gallons.

8. 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. Brakeville. He explained that all personnel who handle hazardous materials receive hazard communication training.

Mr. Brakeville explained that RCRA-specific training was initiated in 2022, with additional Department of Transportation (DOT) hazmat training in 2023. During the inspection, I observed sign-in sheets for unspecified training dated "Thursday, July 20, 2022," and quizzes for DOT hazmat training dated July 20, 2023 (Attachment 22). Because July 20, 2022, was actually a Thursday, it is possible that the sign-in sheets were actually for training provided in 2023. Regardless, no annual refresher training had been provided in more than a year. According to Mr. May, he had not received RCRA-specific training relative to manifest use despite his assignment as a signatory to hazardous and non-hazardous waste shipping documents.

Mr. Brakeville was unable to locate a written training plan that detailed job descriptions for personnel assigned to handle hazardous waste, qualifications, duties, and required training. He provided a copy of an environmental training module titled "*RCRA/DOT Training For Handlers of Hazardous Waste*" (Attachment 21). I reviewed content of the basic training module during the CEI. The training covered topics such as fundamental statutes governing solid waste management, waste identification, basic characterization of hazardous waste, spent solvent wipe management and basic generator status thresholds and hazardous waste management aspects. The module did not include more comprehensive subjects such as storage, container selection, spill response, contingency plan implementation, labeling, or use of the uniform manifest.

Based upon the absence of a written training plan, personnel interviews, current training documents, and the training module provided, I concluded that Borghi failed to maintain written training plan elements required by 40 CFR 262.17(a)(7)(iv) (**NOPF No. 3**). I also determined that the facility failed to adequately train all personnel who manage hazardous waste, as required by 40 CFR 262.17(a)(7) (**NOPF No. 4**).

9. Preparedness and Prevention and Contingency Plan

As an LQG, Borghi 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. The Contingency Plan (Emergency Response Plan) provided for my review was last updated in May 2023. A copy of the Emergency Response Plan is included as Attachment 23.

I noted the Contingency Plan included a description of actions needed to respond to fires, explosions, and spills; a description of arrangements with the local emergency agencies; a list of emergency response equipment (including capabilities and location); and a cursory evacuation plan with a description of the signals to be used, as required by 40 CFR 262.17(a)(6) referencing 262.261(a, c, e, and f). The Contingency Plan also included names and telephone numbers of a primary coordinator (Gayle Gonyaw) and alternate EC (Tammy Salmon), as required by 40 CFR 262.17(a)(6) referencing 262.261(d). However, there were no documents presented that demonstrate the current coordinators have received requisite training, as described in NOPF 4 in Section 8, and have the authority to commit resources necessary to respond to spills, fires, explosions or other releases.

I also reviewed the facility's Quick Reference Guide, required by 40 CFR 262.17(a)(6) referencing 262.262(b). The Quick Reference Guide included a list with descriptions and maximum quantities of hazardous wastes onsite and identification of special hazards posed by the listed waste types. The appendices to the QRG contained maps showing hazardous wastes locations, overall facility location, and water supplies identification of notification as well as available communication equipment and EC contact information. A copy of the facility's Quick Reference Guide cover sheet, updated May 8, 2023, is included as Attachment 24. The Emergency Response/Contingency Plan and Quick Reference Guide were sent to emergency response agencies via certified mail. Mr. Brakeville provided copies of the notification letters and certified mail receipts that the facility retains to document submittal of contingency plan/QRG documents. Copies of letters and certified mail receipts are included in this report as Attachment 25.

Both the Emergency Response Plan and the QRG were found to contain contact information for emergency coordinators that are no longer at the facility. Mr. Brakeville stated that the plans and documents were currently being updated by their environmental consulting contractor and would be directed to emergency services providers as soon as updates were completed. He stated that he would be the designed primary coordinator for the facility. Based on this observation, I concluded after the inspection that the facility had failed to update the emergency coordinator contact list in accordance with 40 CFR 262.17 (a)(6) referencing 262.261(d) (**NOPF No. 5**). I notified the facility of the additional finding by email on October 15, 2024.

I stated that all designated emergency coordinators were required to have appropriate training in the implementation, content, and procedures specified in the Contingency Plan that current training documents do not support. I determined that the facility failed to adequately train all personnel who act as emergency coordinators, as required by 40 CFR 262.17(a)(7) (**NOPF No. 4**).

10. 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 an 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. Borghi is not subject to the Subpart AA regulations because the facility does not have process vents listed above.

If an 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. Borghi USA is not subject to the Subpart BB regulations because it does not have equipment that contains, or comes in contact with, volatile organic 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. Borghi is not subject to Subpart CC regulations because it does not generate wastes with VOCs.

11. Summary of Preliminary Findings

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

1. Failure to label two HWACs with an indication of the nature of hazard, as required by 40 CFR 262.17(a)(5)(i)(B) (**NOPF No. 1**)
2. Failure to make a hazardous waste determination for the presumed waste, as required by 40 CFR 262.11 (**NOPF No. 2**)
3. Failure to maintain written training plan elements, as required by 40 CFR 262.17(a)(7)(iv) (**NOPF No. 3**)
4. Failure to train all personnel who manage hazardous waste annually, as required by with 40 CFR 262.17(a)(7) (**NOPF No. 4**).
5. Failure to update the emergency coordinator contact list, as required by 40 CFR 262.17 (a)(6) referencing 262.261(d) (**NOPF No. 5**)

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.

Steve A.
Johnson

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Steve A. Johnson
Field Inspector
CLAENE Group, LLC.

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 Finding (1 Page)
5. Facility Maps (3 Pages)
6. Google Earth Aerial Photograph (1 Page)
7. Photographic Documentation (68 Photos and Photolog) (39 Pages)
8. Plating Process Diagram (1 Page)
9. Weekly Wastewater Discharge Analytical Report (9 Pages)
10. 2023 Hazardous Waste Biennial Report (7 Pages)
11. Waste Stream Summary (1 Page)
12. Filter Cake Shipping Documents (4 Pages)
13. SDS for AxxaWash (10 Pages)
14. Weekly Inspection Logs (12 Pages)
15. Waste Management Summary Table 2024 (3 Pages)
16. 2024 Hazardous Waste Disposal Report (6 Pages)
17. Manifest and LDR for Hazardous Waste Shipment June 13, 2024 (7 Pages)
18. Manifests for Nonhazardous Waste Shipments in 2024 (14 Pages)
19. Manifest for Nonhazardous Debris (2 Pages)
20. Manifest 001291868 WAS (1 Page)
21. RCRA/DOT Training Slides (18 Pages)
22. Training Attendance Sheets 2022-2023 (26 Pages)
23. Hazardous Waste Operations and Emergency Response Plan (27 Pages)
24. Quick Reference Guide Cover Sheet (1 Page)
25. Contingency/Emergency Plan Notification Letters and Receipts (6 Pages)