

RCRA Inspection Report

1) Inspector and Author of Report

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2) Facility Information

Aalberts Integrated Piping Systems - Americas	dba Conbraco Industries, Inc.
1509 Van L Mungo Blvd	Bypass Facility
Pageland, South Carolina 29728	EPA ID SCR000006155

3) Responsible Officials

Marty Stewart, EHS Manager

4) Inspection Participants

Marty Stewart, Conbraco	Tom Richmond, SCDHEC
Steve Peebles, Conbraco	Earle Watson, SCDHEC
Dale Hurt, Conbraco	Laurie Benton DiGaetano, USEPA
Chris Mitchell, Southern Logistics Environmental	

5) Date of Inspection

February 9, 2021

6) Applicable Regulations

Resource Conservation and Recovery Act (RCRA) Sections 3002 (42 U.S. Code – Annotated U.S.C.A. 6925 and 6927), South Carolina Hazardous Waste Management Regulations (SCHWMR) R.61-79, 260 through 270, 273, 278, & 279; and 40 Code of Federal Regulation (C.F.R.), Parts 260 - 270, 273, 278, & 279.

7) Purpose of Inspection

The purpose of this inspection was to conduct an unannounced compliance evaluation inspection to determine compliance of Aalberts Integrated Piping Systems – Americas, dba Conbraco Industries, Inc. (“Conbraco”) with the applicable requirements of RCRA and the corresponding SCDHEC regulations. This was an EPA lead inspection.

8) **Previous Inspection History**

SCDHEC has conducted five RCRA CEIs at the subject facility since 1999. On 10/26/2001, the EPA and Conbraco entered into a Consent Agreement and Final Order to resolve potential violations of making a proper hazardous waste determination that were alleged during a joint RCRA CEI conducted on 02/08/2000 by the EPA and SCDHEC.

On 03/14/2008, SCDHEC issued a formal enforcement action at the facility to address numerous potential violations observed during a RCRA CEI that was conducted on 11/27/2006. These potential violations included making a proper waste determination, hazardous waste container management, universal waste management, used oil management, hazardous waste manifesting, and hazardous waste training.

The most recent RCRA CEI at the subject facility was conducted by SCDHEC on 04/13/2015, and no violations were noted during that inspection.

9) **Facility Description**

Conbraco Industries, Inc. manufactures brass components at the subject foundry facility in Pageland, South Carolina. These components are used in various types of valves, regulators, and other flow control products. They are manufactured using a green sand brass casting process, which involves pouring molten brass into a single-use sand mold, allowing the metal to cool and solidify, separating the brass casting from the foundry sands, and machining the casting to create the finished component. The subject facility began operations in 1997, and currently occupies approximately 85,000 square feet with almost 200 employees. The facility operates under the NAICS code 332911 for Industrial Valve Manufacturing and 332919 for Other Metal Valve and Pipe Fitting Manufacturing. Operations generally consist of melting furnaces, sand molding systems, metal pouring operations and finishing operations.

Conbraco has been operating as a large quantity generator (LQG) of hazardous waste at this location for well over twenty years. The company most recently notified as an LQG of hazardous waste as part of the biennial report on 01/01/2019. Hazardous wastes identified in the report include: D008 lead-contaminated sand from product processing and D008 sludge with brass chips from cleaning equipment.

The green sand brass casting process used at the subject facility uses a single-use mold which is formed by pressing “mold sand” inside a molding box to create a negative image of the exterior of the casting. The interior (core) of the casting is created using a core mold made of “core sand” that has been solidified into shape using a binding agent. The core mold piece is placed inside the molding box prior to casting. Molten brass is poured into the molding box, where it fills the void between the mold sand and the core sand and then cools and solidifies to form a metal casting of the flow control component.

After cooling, the contents of the molding box are emptied onto a vibratory conveyor (“shakeout”) device where the majority of the mold sand and the core sand (collectively referred to as “foundry sand”) and extraneous non-cast brass pieces are separated from the casting.

Castings are taken from the shakeout device and placed into the 34 Wheelabrator shot blast device where residual sand remaining on the exterior and interior of the casting is removed by metal shot. From there, the casting is sent to the machining side of the facility for trimming, turning, and machining of the final component product.

In order to control the pour temperature and maintain consistency from mold to mold, molten metal is automatically poured into the molding boxes using a heated vessel and a computer-controlled stopper rod system. Brass arrives at the plant in small ingots, which are melted and combined with zinc and diphosphorus copper to form the molten metal used in the casting process. Scraps of cast brass generated from broken or scrapped castings, excess casting material, and finishing waste from trimming, turning, and machining operations are recovered on-site and melted with the brass ingots for reuse in the casting process. The Melt Furnace is connected to an air exhaust and baghouse system, which collects furnace ash as baghouse dust.

Mold sand is a combination of silica sand, clay, wood cellulose, and water, which can be recovered and reused on-site. Loose foundry sand is recovered in the shakeout device and then passed through an inline rotary screen, which is referred to as the Kason Screen Process, to roughly separate it from the brass metal pieces. Recovered loose foundry sand is accumulated in a metal hopper and then returned to the mold sand tank for reuse. Conbraco employees replenish the mold sand tank with fresh mold sand, and routinely make room for additional fresh mold sand by diverting mold sand from the tank into a super sack or 55-gallon drum in the Bleed-off area. The diverted material is managed as D008 hazardous waste lead-contaminated sand from product processing.

Core molds are made by solidifying core sand with a binding agent in a variety of automated core making equipment. Excess core sand that has not been set with the binding agent can be recovered and reused in the core making process. Core sand that has been set into shape with the binding agent can no longer be recovered or reused on-site, so broken cores or otherwise molded core sand that is not suitable for use in the casting process becomes a waste. Waste molded core sand and molded cores that have not gone through the casting process are taken to a shaker, which separates cores or waste molded core sand from the loose core sand so that the loose core sand can be recovered and reused on-site. Waste molded core sand that is generated in the core molding process is managed as non-hazardous solid waste because this molded core sand has not come into contact with molten brass. In contrast, waste molded core sand that is generated after the casting process is managed as D008 hazardous waste lead-contaminated sand, because the molded core sand comes into contact with molten brass during the casting process.

As the shakeout device separates cast bronze from foundry sands, employees manually retrieve the casting products from the conveyor belt. The castings are accumulated in metal hoppers and then brought to the 34 Wheelabrator unit, where shot blast is used to remove residual foundry sands from the interior and exterior of the metal casting. The clean metal casting is then sent to the machining side of the facility for further processing. The 34 Wheelabrator unit is designed to retain and continuously reuse metal shot within the unit. A mixture of waste foundry sand, pieces of brass metal, and some residual shot blast media is discharged from the unit and sent to the Ball Mill for further processing.

The mixture of waste foundry sand, brass metal pieces and residual shot blast media that is generated in the 34 Wheelabrator unit and brass metal pieces and residual foundry sand that is segregated from the loose foundry sand in the Kason Screen Process is processed in the Ball Mill. Brass pieces, waste foundry sand, and reusable shot blast media are segregated from one another by crushing the brass pieces and mechanically separating the three types of materials. Brass pieces that are recovered by this process are accumulated for remelting and reuse on-site; waste foundry sand that is separated by this process is accumulated for disposal as D008 hazardous waste lead-contaminated foundry sand; and reusable shot blast media that is recovered by this process is accumulated for reuse in the 34 Wheelabrator unit.

The air exhaust and baghouse systems accumulate foundry sand and furnace ash as bag house dust. The Baghouse area, which is located just outside of the foundry building, is divided into three baghouse systems: the Sand System Baghouse, the Travel Vent System Baghouse, and the Furnace System Baghouse. The Sand System Baghouse has two hoppers and points of generation for baghouse dust; the Travel Vent System Baghouse has one point of generation for baghouse dust; and the Furnace System Baghouse has four hoppers and points of generation of furnace ash. The Sand System Baghouse manages baghouse dust accumulated in two hoppers from the air exhaust systems of the 34 Wheelabrator, the Sand System Shaker, the Return Sand Belt, the Prepared Sand Belt, and the Mullor A and B Discharge Belt. According to facility personnel, every supersack of waste dust from the Sand System Baghouse or the Travel Vent System Baghouse is sampled and analyzed for heavy metals using the TCLP laboratory procedure. These supersacks are stored on-site near the Baghouse area for approximately 7-10 days until the sample results are returned from the laboratory. Supersacks of baghouse dust with samples that pass the TCLP are placed into a roll-off container and shipped off-site as non-hazardous waste. Supersacks of baghouse dust with samples that fail the TCLP for lead are placed into a separate roll-off container and shipped off-site as D008 hazardous waste lead-contaminated sand from product processing. The facility no longer performs any manipulation of the waste or sends it to Canada. The hazardous waste baghouse dust is shipped to Clean Earth Environmental in Calvert City, Kentucky. Facility representatives stated that Conbraco does not sample or analyze the supersacks of furnace ash, because they are sold as zinc for use off-site. More information about the furnace system ash is necessary in order to evaluate compliance with the RCRA regulations.

Other hazardous wastes generated in the facility include water filters, air filters, floor sweepings and debris. Water from the hand sinks in the facility restrooms are directed through a filter system before it is discharged to the local POTW. When the filters become clogged, an alarm sounds to alert personnel that the filters require changing. Used filters from the hand sink drainage system are accumulated as D008 hazardous waste. Floor sweeping and debris (including baghouse filters) are managed as D008 hazardous waste lead contaminated debris shavings oil, grease and clean ups. The carbide present in certain tools used in the Machining area contains cadmium. A vacuum system is used to collect dust and debris generated when sharpening these tools, and the air filters used in this system are accumulated as D006 hazardous waste solids.

The CNC Machining area generates brass turnings and debris during the process of threading, turning, punching or otherwise machining brass castings. Although both leaded and lead-free material is managed in this area, all floor sweepings and debris are accumulated in designated

satellite accumulation areas (SAAs) as D008 hazardous waste liquid (lead shavings, oil/grease, and water). Brass chips and turnings are accumulated for reuse on-site. First, these chips and turnings are cleaned with a benzene solvent, and then they are pressed into a metal puck. The metal pucks are sent to the foundry side of the facility for remelting and reuse in the casting process. The solvent is recirculated and reused for several cycles before it is drained from the system and accumulated in an IBC tote as D018 hazardous waste Martron Martex 2008.

Conbraco does not manage a designated SAA for accumulating hazardous waste Martron Martex 2008. Instead, the full and partially full totes of D018 hazardous waste Martron Martex 2008 are stored in the Machining area's designated hazardous waste central accumulation area (CAA), which is located inside a portion of a metal outbuilding near the washing unit. When it is time to change the solvents, the IBC tote is brought to the washing system to accumulate the spent solvents, and then transferred back to the CAA. Containers of hazardous wastes generated in other areas of the machining side of the facility are moved from the designated SAAs and stored in the CAA before shipment off-site.

The Maintenance Department manages used aerosol cans, used oil, and universal waste. All floor drains throughout the facility lead to a wastewater holding tank at the facility. The contents of the tank are shipped to HOH Industrial wastewater treatment plant approximately once each week.

10) Opening Conference

On February 9, 2021, EPA inspector Laurie Benton DiGaetano, accompanied by SCDHEC inspectors Tom Richmond and Earle Watson, arrived at Conbraco Industries at approximately 9:30 a.m. Mr. Marty Stewart, EHS Manager, immediately received the inspectors. The inspectors were joined by Mr. Dale Hurt, Foundry manager, Mr. Steve Peebles, Machining Manager, Ms. Amber Belk, EHS Manager, and Mr. Chris Mitchell, Environmental Consultant for the opening conference. The inspectors introduced themselves, showed their credentials to the facility representatives, and explained the purpose of the visit. The inspectors discussed the company's ability, pursuant to 40 C.F.R. §2.203, to assert a business confidentiality claim for information submitted to EPA. The company did not assert a business confidentiality claim. Mr. Stewart provided each inspector with a flash drive containing electronic records of quarterly reports and hazardous waste manifests, the contingency plan, hazardous waste training records, and documentation that the contingency plan had been provided to local response entities. The inspection participants also discussed the tentative inspection plan (including potential camera usage and photographs), health and safety protocols and required personal protective equipment before Mr. Stewart and Mr. Mitchell led the inspectors on a tour of the facility operations. Mr. Hurt joined the leaders during the tour of foundry operations and Mr. Peebles joined the leaders during the tour of the machining operations.

Facility representatives provided an overview of the facility's history and current operations during the opening conference. Apollo Valves has thirty locations in fourteen countries, and does not appear to meet the Small Business Regulatory Enforcement Fairness Act's classification of a "small business," which is generally set by the Small Business Administration using the business' SIC/NAICS code and annual receipts or number of employees. Therefore, the EPA

inspector did not provide a copy of the agency's information sheet for small businesses, which can be found at <https://www.epa.gov/sites/production/files/2017-06/documents/smallbusinessinfo.pdf>.

11) **Findings**

34 Wheelabrator CAA: The inspection tour began at the 34 Wheelabrator unit, where inspectors observed a blue box on one side of the unit, and a supersack on the other side of the unit. The box was labeled D008 hazardous waste solid containing copper, lead and zinc (Photo 1) and dated 01/11/2021. The lid on the box was not completely closed. The facility representatives explained that the box and the supersack both contain a mixture of foundry sand (mold sand and core molds) and brass parts that will be brought to the Reclaim Room for further processing.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.17 [40 C.F.R. § 262.17], a large quantity generator may accumulate hazardous waste on-site for 90 days or less without a permit or without having interim status, as required by Section 44-56-60(a)(2) and (b)(3) of the SCHWMA, S.C. Code Ann. § 44-56-60(a)(2) and (b) [Section 3005 of RCRA, 42 U.S.C. § 6925], provided that the generator complies with the conditions listed in 25 S.C. Code Ann. Regs. 61-79.262.17 [40 C.F.R. § 262.17] (hereinafter referred to as the "LQG Permit Exemption").

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.17(a)(1)(iv)(A) [40 C.F.R. § 262.17(a)(1)(iv)(A)], which is a condition of the LQG Permit Exemption, a container holding hazardous waste must always be closed during accumulation, except when it is necessary to add or remove waste.

In an email dated 03/02/2021, Mr. Stewart provided photographs of this area which show that a supersack has been placed inside the metal hopper. This change allows employees to secure the supersack to the outfall duct and improve control over the transfer of the material from the process unit into the storage container. Mr. Stewart stated that each area has been identified as a hazardous waste CAA, the supersacks are each labeled and marked with an accumulation start date, and the facility has implemented the weekly inspection protocol at each location.

Excess System Sand / Bleed-out CAA: Next, the inspection participants visited the Bleed-out area, where used mold sand is removed from the storage unit in order to make room to replenish the supply with new sand. Representatives explained that the system operator will periodically push a button to remove used mold sand from the storage tank and send it through a chute where it is deposited into a collection container. The inspectors observed a supersack attached to one bleed-out chute (Photo 2), and a 55-gallon drum beneath another bleed-out chute (Photo 3). The supersack was labeled as D008 hazardous waste solid containing copper, lead and zinc, and it was dated 02/08/2021. The 55-gallon drum was labeled as D008 hazardous waste solid containing copper, lead and zinc, and it was dated 02/09/2021. The inspectors also observed a third 55-gallon drum in this area (Photo 4). The third 55-gallon drum was also labeled D008 hazardous waste solid containing copper, lead and zinc. All three of these containers held used mold sand that had been discharged from the storage tank so that the tank could be replenished with new sand. Neither drum had a lid, and the contents of the second drum were overflowing

the top of the drum, resulting in a release. The inspectors observed more released overflow material on the ground near the supersack and first 55-gallon drum (Photo 5).

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.17(a)(1)(iv)(A) [40 C.F.R. § 262.17(a)(1)(iv)(A)], which is a condition of the LQG Permit Exemption, a container holding hazardous waste must always be closed during accumulation, except when it is necessary to add or remove waste.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.17(a)(6) [40 C.F.R. § 262.17(a)(6)], which incorporates 25 S.C. Code Ann. Regs. 61-79.262.251 [40 C.F.R. § 262.251], and is a condition of the LQG Permit Exemption, an LQG must maintain and operate its facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.90, which is a condition of the LQG Permit Exemption, an LQG must clean up any hazardous waste discharge that occurs during generation or processing or storage and take such other action as may be required or approved by Federal, State or local officials so that the hazardous waste discharge no longer presents a hazard to human health or the environment.

In an email dated 03/02/2021, Mr. Stewart provided photographs of this area which show that each of the two bleed-out chutes had been fitted with a supersack for accumulating D008 hazardous waste bleed-out sand. The photograph also shows that the overflow bleed-out sand on the floor in this area has been cleaned up. Mr. Stewart stated that the area has been identified as a hazardous waste CAA, the supersacks are labeled and marked with an accumulation start date, and the facility has implemented the weekly inspection protocol here.

Conveyor Belt Sand CAA: The inspection participants observed a green hopper used to automatically accumulate excess used foundry sand from the conveyor belt (Photo 6). The hopper was labeled as D008 hazardous waste containing copper, lead and zinc, and it was dated 02/08/2021. However, facility representatives explained that this material is dumped back into the foundry sand storage tank for reuse in the process. The inspectors observed spilled sand on the floor surrounding the hopper and on top of the hopper lid, and the facility representatives stated that this material will be swept up and also placed back into the storage tank for reuse in the process.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.17(a)(1)(iv)(A) [40 C.F.R. § 262.17(a)(1)(iv)(A)], which is a condition of the LQG Permit Exemption, a container holding hazardous waste must always be closed during accumulation, except when it is necessary to add or remove waste.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.17(a)(6) [40 C.F.R. § 262.17(a)(6)], which incorporates 25 S.C. Code Ann. Regs. 61-79.262.251 [40 C.F.R. § 262.251], and is a condition of the LQG Permit Exemption, an LQG must maintain and operate its facility to minimize the possibility of a fire, explosion, or any unplanned

sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.90, which is a condition of the LQG Permit Exemption, an LQG must clean up any hazardous waste discharge that occurs during generation or processing or storage and take such other action as may be required or approved by Federal,, State or local officials so that the hazardous waste discharge no longer presents a hazard to human health or the environment.

In an email dated 03/02/2021, Mr. Stewart provided photographs of this area which show that the metal hopper has been replaced with a supersack. The photograph also shows that the overflow sand on the floor in this area has been cleaned up. Mr. Stewart stated that the area has been identified as a hazardous waste CAA, the supersack is labeled and marked with an accumulation start date, and the facility has implemented the weekly inspection protocol here.

Rotary Screen Sand CAA near Maintenance Area: The inspection participants observed a green hopper used to accumulate a mixture of foundry sand and brass parts near the Maintenance Area. In an email dated 03/04/2021, Mr. Stewart explained that foundry sand and brass parts are separated in a Kason Screen Process, and that this area generates mostly brass parts with some excess sand. The mixture is sent to the Reclaim Room for further processing.

At the time of the inspection, the hopper was labeled as D008 hazardous waste containing copper, lead and zinc; it was dated 02/08/2021; and it was not closed. Facility representatives stated that this material will be processed to recover brass for reuse on-site. The foundry sand will then be disposed of as hazardous waste.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.17(a)(1)(iv)(A) [40 C.F.R. § 262.17(a)(1)(iv)(A)], which is a condition of the LQG Permit Exemption, a container holding hazardous waste must always be closed during accumulation, except when it is necessary to add or remove waste.

In an email dated 03/02/2021, Mr. Stewart provided photographs of this area which show that the metal hopper has been replaced with a supersack. Mr. Stewart stated that the area has been identified as a hazardous waste CAA, the supersack is labeled and marked with an accumulation start date, and the facility has implemented the weekly inspection protocol here.

Workstation: The inspection participants observed a 55-gallon drum at a workstation in the Foundry area. The drum was labeled as D008 hazardous waste containing copper, lead, and zinc. The drum was open without a lid, and it contained broken cores and core sand. However, Mr. Hurt explained that the container should not be labeled as hazardous waste, because the contents have not come into contact with molten brass. The contents will be separated into reusable core sand and nonhazardous waste core molds.

Inside Grinding Wheelabrator Baghouse SAA: The Grinding Wheelabrator is located just inside the facility door near the Reclaim Room. Facility personnel explained that the Grinding Wheelabrator uses shot blast media to separate foundry sand from metal pieces coming from the

34 Wheelabrator unit. Separated metals are accumulated in a metal hopper at the Grinding Wheelabrator, and this metal is sold.

The inspection participants observed the Grinding Baghouse just inside of the facility door near the Grinding Wheelabrator. Conbraco manages a satellite accumulation SAA at the Grinding Baghouse to accumulate material generated in the Grinding Wheelabrator. The inspectors observed two 55-gallon drums in this SAA. One 55-gallon drum was positioned under the baghouse to accumulate material generated in the Grinding Wheelabrator, which contains metals, shot blast media and abrasive sand (Photo 7), and a second 55-gallon drum was observed near the first one. During the inspection, personnel explained that this material is separated in the Reclaim Room.

Both drums were open, and the inspectors observed that they were only partially full. It did not appear that the total volume of waste in this SAA exceeded 55 gallons, but please note that 25 S.C. Code Ann. Regs. 61-79.262.15(a)(6)(i) and (ii) [40 C.F.R. § 262.15(a)(6)(i) and (ii)] requires that a generator who accumulates an excess of 55-gallons of hazardous waste at or near any point of generation must comply within three consecutive calendar days with the applicable CAA regulations or remove the excess from the SAA within three consecutive calendar days to either a CAA, an on-site interim status or permitted treatment, storage, or disposal facility, or an off-site designated facility. Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.15(a)(6)(iii) [40 C.F.R. § 262.15(a)(6)(iii)], the generator must mark or label the container(s) holding the excess accumulation of hazardous waste with the date the excess amount began accumulating and continue to comply with the requirements of the SAA Permit Exemption during the three-consecutive-calendar-day period. Neither drum was labeled with the words “hazardous waste” or with an indication of the hazards of the contents.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.15(a) [40 C.F.R. § 262.15(a)], a generator may accumulate as much as 55 gallons of non-acute hazardous waste in containers at or near the point of generation where wastes initially accumulate, which is under the control of the operator of the process generating the waste, without a permit or without having interim status, as required by Section 44-56-60(a)(2) and (b)(3) of the SCHWMA, S.C. Code Ann. § 44-56-60(a)(2) and (b) [Section 3005 of RCRA, 42 U.S.C. § 6925], and without complying with 25 S.C. Code Ann. Regs. 61-79.262.16(b) or R.61-79.262.17(a) [40 C.F.R. § 262.16(b) or § 262.17(a)], except as required in 25 S.C. Code Ann. Regs. 61-79.262.15(a)(7) and (8) [40 C.F.R. § 262.15(a)(7) and (8)], provided that the generator complies with the satellite accumulation area conditions listed in 25 S.C. Code Ann. Regs. 61-79.262.15(a) [40 C.F.R. § 262.15(a)] (hereinafter referred to as the “SAA Permit Exemption”).

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.15(a)(4) [40 C.F.R. § 262.15(a)(4)], which is a condition of the SAA Permit Exemption, a generator is required to keep containers of hazardous waste closed at all times during accumulation, except when adding, removing, or consolidating waste; or when temporary venting of a container is necessary for the proper operation of equipment, or to prevent dangerous situations, such as build-up of extreme pressure.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.15(a)(5) [40 C.F.R. § 262.15(a)(5)], which is a condition of the SAA Permit Exemption, a generator is required to mark or label its containers (i) with the words “Hazardous Waste” and (ii) with an indication of the hazards of the contents.

Foundry sand that is separated in the Reclaim Room is accumulated for disposal as D008 hazardous waste lead-contaminated sand; brass pieces that are recovered in this room are accumulated for remelting and reuse on-site; and shot blast media that is recovered in this room is accumulated for reuse in the Grinding Wheelabrator unit. In an email dated 03/02/2021, Mr. Stewart provided photographs of this area and explained that the abrasive material observed in these drums is placed back into the Grinding Wheelabrator for reuse along with new abrasive material.

It appeared that the total volume of material in these two 55-gallon drums was less than 55-gallons. Please note, however, that 25 S.C. Code Ann. Regs. 61-79.262.15(a)(6)(i) and (ii) [40 C.F.R. § 262.15(a)(6)(i) and (ii)] requires that a generator who accumulates an excess of 55-gallons of hazardous waste at or near any point of generation must comply within three consecutive calendar days with the applicable CAA regulations or remove the excess from the SAA within three consecutive calendar days to either a CAA, a on-site interim status or permitted treatment, storage, or disposal facility, or an off-site designated facility. Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.15(a)(6)(iii) [40 C.F.R. §262.15(a)(6)(iii)], the generator must mark or label the container(s) holding the excess accumulation of hazardous waste with the date the excess amount began accumulating and continue to comply with the requirements of the SAA Permit Exemption during the three-consecutive-calendar-day period.

Reclaim Room (CAA on the Map): The inspectors observed one hopper, labeled as D008 hazardous waste containing copper, lead and zinc and dated 02/09/2021, on the floor in the middle of the Reclaim Room (Photo 8). The hopper appeared to contain cores and core sand for processing (Photo 9). A second hopper, labeled as D008 hazardous waste containing copper, lead and zinc and dated 12/08/2020, was observed on an elevated stand next to the processing unit (Photo 10).

The inspectors observed a third hopper and a 55-gallon drum, both containers were labeled D008 hazardous waste containing copper, lead and zinc (Photo 12) and dated 02/08/2021, beneath the processing unit in this room (Photo 11). The drum contained metal shavings (Photo 13) and the hopper contained fine material that had been separated in the reclaim process (Photo 14).

The inspectors also observed ten more hoppers inside this room (Photos 15 and 16). Eight of these hoppers appeared to be empty, but the other two were not empty. The hoppers were stacked two-high along the wall near the entrance. The empty and full hoppers were all labeled D008 hazardous waste containing copper, lead and zinc, and marked with an accumulation start date. The oldest date observed on any of these containers was 02/01/2021. Facility personnel could not confirm if these hoppers contained material that was staged for processing, or that had already been processed in this area.

None of the hopper lids appeared to make a complete seal on the top of the container.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.17(a)(1)(iv)(A) [40 C.F.R. § 262.17(a)(1)(iv)(A)], which is a condition of the LQG Permit Exemption, a container holding hazardous waste must always be closed during accumulation, except when it is necessary to add or remove waste.

The inspectors also observed numerous 55-gallon drums in the corner of the Reclaim Room (Photo 17). It was not clear if these drums were staged in this room so that the contents could be processed, or if the drums contained materials that had already been processed on-site. The drums were all open, none were labeled, and they were not stored with adequate aisle space to allow the unobstructed movement of personnel in an emergency or inspection to identify leaking containers or deterioration of containers.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.11 [40 C.F.R. § 262.11], a person who generates a solid waste, as defined in 25 S.C. Code Ann. Regs. 61-79.261.2 [40 C.F.R. § 261.2], must use the steps articulated in 25 S.C. Code Ann. Regs. 61-79.262.11 [40 C.F.R. § .11] to make an accurate determination as to whether that waste is a hazardous waste in order to ensure wastes are properly managed according to applicable RCRA regulations.

Outside Baghouses near Grinding Wheelabrator: The inspection participants observed one 55-gallon drum connected to the Grinding Baghouse (Photo 18), one 55-gallon drum connected to the Wheelabrator Baghouse (Photo 19), and one 55-gallon drum stored in the area of the Wheelabrator Baghouse (Photo 20). None of the drums were labeled with the words “hazardous waste” or with an indication of the hazards of their contents. The 55-gallon drum stored in the area of the Wheelabrator Baghouse was completely open, unlabeled, and undated.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.11 [40 C.F.R. § 262.11], a person who generates a solid waste, as defined in 25 S.C. Code Ann. Regs. 61-79.261.2 [40 C.F.R. § 261.2], must use the steps articulated in 25 S.C. Code Ann. Regs. 61-79.262.11 [40 C.F.R. § 262.11] to make an accurate determination as to whether that waste is a hazardous waste in order to ensure wastes are properly managed according to applicable RCRA regulations.

Forging Room: The inspection participants visited the Forging Room where metal rods are formed using heated and mechanical processes. The metal pieces are heated and sheared to the desired length before they are clamped into a mold to form the desired shape. Facility representatives stated that no hazardous wastes are generated in this process. Mr. Hurt left the inspection tour after visiting this area.

Machining Area SAAs: Mr. Peeples joined the inspection tour at the start of visiting the machining side of the facility. Conbraco accumulates floor sweepings in designated SAAs throughout the Machining area of the facility. The inspectors observed a 55-gallon drum on a secondary containment pallet at one of these SAAs (Photo 21). Waste materials were observed inside the secondary containment pallet (Photo 22), and facility personnel stated that the unit is

not cleaned out on a set schedule. The secondary containment pallet is not a closed and labeled container, and it is not suitable to contain stored hazardous waste. Spilled material should be removed from the secondary containment and placed into the hazardous waste accumulation container. The inspectors noted that the drum was labeled D008 hazardous waste liquid (lead shavings, oil/grease, and water), and identified with a DOT class 9 hazard placard. The inspectors also noted that the ring on the lid was not secured to the drum. Mr. Peebles immediately closed the container by securing the lid using the ring.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.15(a)(4) [40 C.F.R. § 262.15(a)(4)], which is a condition of the SAA Permit Exemption, a generator is required to keep containers of hazardous waste closed at all times during accumulation, except when adding, removing, or consolidating waste; or when temporary venting of a container is necessary for the proper operation of equipment, or to prevent dangerous situations, such as build-up of extreme pressure.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.15(a)(5) [40 C.F.R. § 262.15(a)(5)], which is a condition of the SAA Permit Exemption, a generator is required to mark or label its containers (i) with the words “Hazardous Waste” and (ii) with an indication of the hazards of the contents.

The inspectors observed one 55-gallon drum on a secondary containment pallet at another SAA in the Machining area (Photo 23). The drum was closed and labeled D008 hazardous wastes air filters and identified with the code NA3077. Facility personnel stated that the container is used to accumulate floor sweepings, and at the time of the inspection, new hazardous waste label was placed onto the container. The new label indicated that the container held D008 hazardous waste contaminated debris, and it was marked with the word “toxic” to indicate the hazards of the waste.

Tool Crib SAAs: Conbraco manages a SAA in the Tool Crib area for managing D006 hazardous waste generated from sharpening machining tools that contain cadmium. Each sharpening station is equipped with a vacuum hose, which pulls fine materials generated during the process and sends them through an air filter. The filters in the air handling device are periodically changed out and used filters are accumulated in this SAA as D006 hazardous waste. The inspectors observed one 55-gallon drum in this SAA (Photo 24). The drum was located near the sharpening stations, and it was equipped with a metal lid, which was secured with a metal ring. The drum was labeled D006 hazardous waste solid lead and identified with the word “toxic” on the hazardous waste label. Please note that the hazardous waste label was incorrect. It should have indicated that the D006 hazardous waste solid contains cadmium. Before this material is offered for transportation off-site, Conbraco should verify that the material does not also exhibit the characteristic of toxicity due to elevated concentrations of lead pursuant to 25 S.C. Code Ann. Regs. 61-79.262.11 [40 C.F.R. § 262.11].

Conbraco manages a second SAA for managing old work gloves and contaminated debris in the Tool Crib area. Facility personnel explained that employees must turn in their used work gloves in order to get a new pair. The used gloves are accumulated as D008 hazardous waste contaminated debris containing lead. The inspectors observed one 55-gallon drum in this SAA.

The drum was located behind a shelf near the door to the Tool Crib area. The drum was labeled D008 hazardous waste, but it was not marked with an indication of the hazards of its contents.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.15(a)(5)(ii) [40 C.F.R. § 262.15(a)(5)(ii)], which is a condition of the SAA Permit Exemption, a generator is required to mark or label its containers with an indication of the hazards of the contents.

Hand Sink SAA: Water from the hand sinks in the facility restrooms are directed through a filter system before it is discharged to the local POTW. When the filters become clogged, an alarm sounds to alert personnel that the filters require changing. The inspectors observed a SAA for accumulating used filters and mop heads as D008 hazardous waste contaminated debris. The inspectors observed one 55-gallon drum on a portable secondary containment unit in this SAA (Photo 25). The drum was closed; it was labeled as D008 hazardous waste contaminated debris; and it was identified with a DOT hazard class 9 label.

The inspectors also observed two shop vacuums located on the wall just outside of the breakroom. Personnel explained that these vacuums are used to clean employee clothing prior to leaving the production area. It is believed that the vacuum dust contained in these units would exhibit the D008 characteristic of toxicity due to elevated levels of lead. The inspectors did not observe an accumulation container dedicated to accumulating used PPE, which may also exhibit the D008 characteristic of toxicity due to elevated levels of lead.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.11 [40 C.F.R. § 262.11], a person who generates a solid waste, as defined in 25 S.C. Code Ann. Regs. 61-79.261.2 [40 C.F.R. § 261.2], must use the steps articulated in 25 S.C. Code Ann. Regs. 61-79.262.11 [40 C.F.R. § 262.11] to make an accurate determination as to whether that waste is a hazardous waste in order to ensure wastes are properly managed according to applicable RCRA regulations.

Machining Area Hazardous Waste Storage Shed CAA: Containers of hazardous waste that are generated in the machining side of the facility are brought to a CAA located in a hazardous waste storage shed. The area was identified with a sign which read “caution, hazardous waste storage area.”

Personnel working in this area carry cellular phones or hand-held radios, which are used to alert security and initiate an internal alarm to provide emergency instruction to facility personnel and to summon emergency assistance from local police departments, fire departments, or state or local emergency response teams. The area is equipped with spill response and control equipment.

The inspectors observed four portable secondary containment pallets in one bay of the storage shed. The pallets held a total of eleven 55-gallon drums of hazardous waste. Ten of the drums were labeled D008 hazardous waste liquid shavings, oil/grease, and water, and identified as NA3082 with a DOT class 9 hazard placard. The last drum was labeled D008 hazardous waste solid air filters and identified as NA3077 with a DOT class 9 hazard placard. All of the drums were marked with an accumulation start date, and the oldest drum was dated 01/02/2021.

The inspectors observed two portable secondary containment pallets in the next bay of the storage shed. One pallet held a 300-gallon tote and the other held a 280-gallon tote. Both totes were labeled D018 hazardous waste Martron Martex 2008 and identified as NA3082 with a DOT class 9 hazard placard. Both totes were marked with an accumulation start date, and the older tote was dated 02/08/2021.

Brass Chips and Turnings Washing Area: Brass chips and turnings generated in the Machining area are cleaned with a benzene solvent in a washing unit near the CAA storage shed before they are pressed into a metal puck for remelting and reuse in the Casting area. The solvent is recirculated and reused for several cycles before it is drained from the system and accumulated in an IBC tote as D018 hazardous waste Martron Martex 2008. Facility personnel stated that the solvent in the washing unit is changed out about every two weeks, and the IBC tote is brought to the washing unit for accumulating the waste. Once the spent solvents have been transferred into the IBC tote, the tote is moved to the CAA storage shed. No waste containers were observed next to the washing unit during the inspection.

Spent solvents containing, before use, a total of ten percent or more (by volume) of benzene are listed as F005 hazardous waste, and a solid waste that exhibits the characteristic of toxicity for elevated levels of lead is a characteristic hazardous waste with the EPA hazardous waste number D008. Conbraco did not provide records to show why the waste Martron Martex 2008 is identified with only the EPA hazardous waste number D018 and not with the EPA hazardous waste numbers D008 or F005.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.11 [40 C.F.R. § 262.11], a person who generates a solid waste, as defined in 25 S.C. Code Ann. Regs. 61-79.261.2 [40 C.F.R. § 261.2], must use the steps articulated in 25 S.C. Code Ann. Regs. 61-79.262.11 [40 C.F.R. § 262.11] to make an accurate determination as to whether that waste is a hazardous waste in order to ensure wastes are properly managed according to applicable RCRA regulations.

Foundry Maintenance Shop / UHW Area: Conbraco manages universal waste bulbs in the Foundry Maintenance Shop. No records of universal waste shipments were provided. The inspectors observed one box of 8-foot used fluorescent bulbs, two boxes of 4-foot used fluorescent bulbs, and three boxes of used miscellaneous bulbs in this area during the inspection (Photos 26, 27 and 28). The boxes were all open, and none of the containers were labeled as universal hazardous waste or marked with an accumulation start date.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.273.9 [40 C.F.R. § 273.9], a Small Quantity Handler of Universal Waste (SQHUW) is a universal waste handler who does not accumulate 5,000 kilograms or more total of universal waste (batteries, pesticides, mercury-containing equipment, or lamps, calculated collectively) at any time.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.273.13(d)(1) [40 C.F.R. § 273.13(d)(1)], a SQHUW must contain any lamp in containers or packages that are structurally

sound, adequate to prevent breakage, and compatible with the contents of the lamps. Such containers and packages must remain closed and must lack evidence of leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.273.14(e) [40 C.F.R. § 273.14(e)], a SQHUW must label or mark each lamp or container or package in which such lamps are contained clearly with one of the following phrases: “Universal Waste - Lamp(s),” or “Waste Lamp(s),” or “Used Lamp(s).”

Pursuant to 25 S.C. Code Ann. Regs. 61-79.273.15(c) [40 C.F.R. § 273.15(c)], a small quantity handler of universal waste who accumulates universal waste must be able to demonstrate the length of time that the universal waste has been accumulated from the date it becomes a waste or is received.

Baghouses and CAA: The Baghouse area, which is located just outside of the foundry building, is divided into three baghouse systems: the Sand System Baghouse, the Travel Vent System Baghouse, and the Furnace System Baghouse. The Sand System Baghouse has two hoppers and points of generation for hazardous sand; the Travel Vent System Baghouse has one point of generation for hazardous sand; and the Furnace System Baghouse has four hoppers and points of generation of furnace ash. At the time of the inspection, each of these generation points was equipped with a supersack for accumulating hazardous sand or furnace ash. None of the bags were labeled or marked with an accumulation start date.

The inspectors observed four supersacks connected to the Furnace System Baghouse and numerous full supersacks under and near this baghouse (Photos 29, 30 and 31). The Furnace System Baghouse supersacks were identified with a DOT class 9 hazard placard and 3077, but they were not labeled. Facility personnel explained that the spray-painted numbers observed on many of the supersacks indicated the weight of the container, and that these supersacks contain furnace ash, which is sold. Personnel also stated that the supersacks of furnace ash are not sampled or analyzed, because they are sold off-site. More information about the furnace system ash is necessary in order to evaluate compliance with the RCRA regulations.

The inspectors observed two supersacks in use under the Sand System Baghouse (Photo 32), one supersack in use under the Travel Vent System Baghouse (Photo 33), and numerous full supersacks under and near these Baghouse areas. None of these supersacks were labeled or marked with an accumulation start date. The supersacks in use under the Baghouses were not closed. According to facility personnel, every supersack of waste baghouse dust from the Sand System Baghouse or the Travel Vent System Baghouse is sampled and analyzed for heavy metals using the TCLP laboratory procedure. These supersacks are stored on-site near the Baghouse area for approximately 7-10 days until the sample results are returned from the laboratory. The supersacks are not labeled as hazardous waste or marked with an accumulation start date while the sample results are pending. Facility personnel explained that supersacks of baghouse dust with samples that pass the TCLP are placed into a roll-off container and shipped off-site as non-hazardous waste. Supersacks of baghouse dust with samples that fail the TCLP for lead are placed into a separate roll-off container and shipped off-site as D008 hazardous

waste lead-contaminated sand from product processing.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.17(a)(1)(iv)(A) [40 C.F.R. § 262.17(a)(1)(iv)(A)], which is a condition of the LQG Permit Exemption, a container holding hazardous waste must always be closed during accumulation, except when it is necessary to add or remove waste.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.17(a)(5)(i) [40 C.F.R. § 262.17(a)(5)(i)], which is a condition of the LQG Permit Exemption, a generator is required to mark or label containers with the words “Hazardous Waste;” with an indication of the hazards of the contents; and with the date upon which each period of accumulation begins clearly visible for inspection on each container.

In an email dated 03/02/2021, Mr. Stewart provided photographs of the Sand System Baghouse area which show that supersacks used to accumulate hazardous sand have been secured to each baghouse hopper chute using a metal restricting band. Mr. Stewart stated that the area has been identified as a hazardous waste CAA, each supersack is labeled and marked with an accumulation start date, and the facility has implemented the weekly inspection protocol here.

Outside Storage Shed and Roll-off Containers CAA: The inspection participants observed two hazardous waste roll-off containers in the facility yard (Photo 34). The containers are stored on a concrete pad beneath a metal roof. Both containers were labeled as D008 hazardous waste solid (contains copper, lead and zinc), and identified with the code UN3077. At the time of the inspection, one container was closed and staged beneath the metal roof. The other container had been moved out from under the roof in preparation for loading (Photo 35). The tarp cover for this container was open, and facility personnel were in the process of weighing supersacks of D008 hazardous waste from the baghouses (Photo 36), which will be placed into the open roll-off container. The open roll-off was dated 02/09/2021, and the closed roll-off was dated 02/08/2021.

This part of the covered area was identified with a hazardous waste storage sign, and the inspectors observed shovels and brooms in this area.

Contingency Plan: The actions that facility personnel should take in response to an emergency are described in the facility’s Emergency Response Plan, which was last updated in January 2021. The plan describes actions facility personnel must take in response to fire, medical / first aid, evacuation, and hazardous material incident, tornado / severe storm, power failure, bomb threat, and active shooter emergencies. The plan describes arrangements with the local police department and fire department, and it lists the telephone numbers for emergency response contractors, local hospitals, and national, state and local emergency response entities.

The plan lists the names and emergency telephone numbers for persons identified as emergency coordinators. Elvis Torres is listed as the primary emergency coordinator, and Amber Belk is listed as the alternate emergency coordinator. Other individuals are listed in the order in which they will assume responsibility as on scene commanders and/or evacuation directors.

The plan includes a list of all emergency equipment at the facility. The list includes fire control

systems, spill control equipment, internal and external communications and alarm systems, personal protective equipment, and first aid equipment. The plan includes a brief outline of the capabilities for each item on the list, but it does not include the location of each item.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.17(a)(6) [40 C.F.R. § 262.17(a)(6)], which incorporates 25 S.C. Code Ann. Regs. 61-79.262.261(e) [40 C.F.R. § 262.261(e)], and is a condition of the LQG Permit Exemption, the contingency plan must include a list of all emergency equipment at the facility where this equipment is required. This list must be kept up to date. In addition, the plan must include the location and a physical description of each item on the list, and a brief outline of its capabilities.

The plan includes an evacuation plan for personnel. This plan describes signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes.

A copy of the Emergency Response Plan (and its quick reference guide) was most recently submitted to the Pageland Police Department, Pageland Fire Department, and Chesterfield County Emergency Management / Local Emergency Planning Committee on 02/08/2021.

The quick reference guide includes the types/names of hazardous waste in layman's terms and the associated hazard associated with each hazardous waste present at any one time; the estimated maximum amount of each hazardous waste that may be present at any one time; a map of the facility; a street map of the facility in relation to surrounding businesses, schools and residential areas; the identification of on-site notification systems; and the name of the emergency coordinator(s) and emergency telephone number(s). However, the quick reference guide did not include a map of the facility showing where hazardous wastes are generated and routes for accessing these wastes or the location of the water supply.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.17(a)(6) [40 C.F.R. § 262.17(a)(6)], which incorporates 25 S.C. Code Ann. Regs. 61-79.262.262(b)(4) and (6) [40 C.F.R. § 262.262(b)(4) and (6)], and is a condition of the LQG Permit Exemption, an LQG must submit a quick reference guide of the contingency plan to the local emergency responders. The quick reference guide must include (4) a map of the facility showing where hazardous wastes are generated, accumulated, and treated and routes for accessing these wastes; and (6) the locations of water supply (e.g. fire hydrant and its flow rate).

Training Records: The inspectors reviewed facility job descriptions that were provided for the Emergency Coordinator (Facility Manager), Emergency Response Personnel, Hazardous Materials Manager (EHS Manager), Hazardous Materials Handler, and First Aid Responder. Each description included the requisite skill, education, or other qualifications, and duties of facility personnel assigned to that position, and the proposed training for each position, but the records did not include the name(s) of employees filling each position.

Conbraco provided a written description of the type and amount of both introductory and continuing training to be given to each person filling the positions listed above. The inspectors

reviewed records of employee hazardous waste training completed in November 2017 and in February 2021, but no records were provided for calendar years 2018, 2019 and 2020.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.17(a)(7)(i)(A) and (a)(7)(iii) [40 C.F.R. § 262.17(a)(7)(i)(A) and (a)(7)(iii)], which is a condition of the LQG Permit Exemption, facility personnel must successfully complete a program of classroom instruction, online training, or on-the-job training that teaches them to perform their duties in a way that ensures compliance with this part, and must take part in an annual review of the initial program.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.17(a)(7)(iv)(A) and (D) [40 C.F.R. § 262.17(a)(7)(iv)(A) and (D)], which is a condition of the LQG Permit Exemption, the LQG must maintain the following documents and records at the facility: the name of the employee filling each job related to hazardous waste management; and records that document that the training or job experience, required in this section, has been given to, and completed by, facility personnel.

Waste Manifest Records: The inspectors reviewed available hazardous waste manifest records and land disposal restriction forms for shipments of hazardous waste sent since January 2018. Hazardous waste manifest records show that approximately 30,000 pounds of D008 hazardous waste solids have been routinely shipped to Clean Earth of Calvert City, KY (KYD985073196) about 1-3 times each week since May of 2020, and the most recent shipment was made on 02/04/2021. Prior to that, these shipments were sent to Chemical Waste Management (ALD000622464) about 1-4 times per week. Records also show that shipments of D008 hazardous waste liquid and D018 hazardous waste liquid have been sent to DART, A Clean Earth Company (NCD121700777) about once each month since April 2020. Prior to that, shipments of D008 hazardous waste liquid were sent once every 1-3 months to Clean Harbors Reidsville (NCD000648451).

During Quarters 2 and 3 of 2020, Conbraco's quarterly reports did not include a waste index line for shipments of D018 hazardous waste liquids sent to DART (NCD121700777) under manifest number 01/3176109FLE on 07/17/2020, and under manifest 013176012FLE on 06/22/2020.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.41(a)(5) and (6) [40 C.F.R. § 262.41(a)], an LQG who ships hazardous waste off-site to a treatment, storage or disposal facility within the United States must prepare and, no later than thirty days after the end of each calendar quarter submit a written report to the Department including, but not limited to (5) a description, the EPA hazardous waste number, DOT hazardous class, and quantity of each hazardous waste shipped off-site for shipments to a treatment, storage or disposal facility within the United States, and (6) the types and quantities of such wastes shipped for off-site treatment and disposal.

Inspection Records: The inspectors reviewed Conbraco's records of inspections of the hazardous waste CAAs conducted since January 2018. The inspection logs include a checklist to record observations about leaking containers and for deterioration of containers caused by corrosion or

other factors. The inspection logs also include a checklist to record observations about general housekeeping, waste signage, emergency contact list, spill control / cleanup materials, condition of containers, containers closed (hoppers covered), hazardous waste labels, WHMIS label, DOT placards, EPA waste code(s), accumulation start date, storage <90 days, adequate aisle space, and two-container high stacking limit. The logs also include a checklist to record observations about labeling and storage within the 1-year limit for universal waste lamps, batteries, and mercury thermostats. The records include the date and time of the inspection and the name, signature and initials of the employee conducting the inspection.

Conbraco identified the following hazardous waste CAAs on the inspection records for the foundry side of the facility: Rotary Screen Sand/Metal Hopper; Excess System Sand Outlet Bagged sand; Wheelabrator Shotblast Sand/Metal Hopper; Wheelabrator Shotblast Bagged Sand; Ball Mill Room Sand/Metal Hoppers from Rotary S; Ball Mill Room Sand Hopper; Ball Mill Room Bagged Baghouse Sand; Shipping Bagged Sand; and Outside Storage Shed Roll-off Containers. Conbraco identified one hazardous waste CAA and five SAAs on the machining side of the facility. The SAAs identified on the machining side are located in the Chucking area, the CNC area, the Tool Crib area (2 SAAs), and the chips washer unit. The records also identified universal waste storage areas on both the foundry side and the machining side of the facility.

It appears that the areas included on the weekly inspection records correspond to the Rotary Screen CAA, the Bleed-out CAA, the 34 Wheelabrator CAA, the Reclaim Room CAA, and the Outside Storage Shed and Roll-off Containers CAA. However, the records did not appear to identify CAAs at the Conveyor Belt Sand CAA, the Machining Area Hazardous Waste Storage Shed CAA, or the Baghouses CAAs. In addition, no records were available for any CAAs during one week between 12/20/2018 and 01/03/2019, for one week between 12/19/19 and 01/02/20, for one week between 11/12/2020 and 11/25/2020, and for two weeks between 12/17/20 and 01/04/21.

Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.17(a)(1)(v) [40 C.F.R. § 262.17(a)(1)(v)], which is a condition of the LQG Permit Exemption, a generator is required to, at least weekly, inspect central accumulation areas looking for leaking container and for deterioration of containers caused by corrosion or other factors.

12) Closing Conference

The inspectors conducted the exit meeting with Marty Stewart, Conbraco, and Chris Mitchell, Southern Logistics Environmental. During this meeting, the inspectors stated their preliminary conclusions of the inspection. Mr. Stewart and Mr. Mitchell agreed to provide a waste profile and description of the wastes generated in the Baghouse areas, of wastewaters shipped to HOH Industrial, a determination of whether the materials observed in the Reclaim Room are waiting to be processed or if they have already been processed, records of inspections for the CAAs, and LDR notifications for any wastes shipped off-site since calendar year 2019.

On 03/02/2021, Mr. Stewart provided photographs of the hazardous waste CAAs identified at the Sand System Baghouse outside, the 34 Wheelabrator area, the Bleed-out area, the conveyor belt sand area, and the conveyor belt molds area, and photographs of the area outside of the Reclaim Room, the metal grinding fines collection area, and the furnace ash collection area. Mr. Stewart

indicated that the containers in the identified CAAs were all closed and labeled, and that the weekly inspection protocols have been implemented in these areas.

13) Inspection Findings

Based on the observations made during the inspection, Conbraco was apparently deficient with the following RCRA requirements:

- Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.11 [40 C.F.R. § 262.11], a person who generates a solid waste, as defined in 25 S.C. Code Ann. Regs. 61-79.261.2 [40 C.F.R. §261.2], must use the steps articulated in 25 S.C. Code Ann. Regs. 61-79.262.11 [40 C.F.R. § 262.11] to make an accurate determination as to whether that waste is a hazardous waste in order to ensure wastes are properly managed according to applicable RCRA regulations.
- Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.15(a)(4) [40 C.F.R. § 262.15(a)(4)], which is a condition of the SAA Permit Exemption, a generator is required to keep containers of hazardous waste closed at all times during accumulation, except when adding, removing, or consolidating waste; or when temporary venting of a container is necessary for the proper operation of equipment, or to prevent dangerous situations, such as build-up of extreme pressure.
- Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.15(a)(5) [40 C.F.R. § 262.15(a)(5)], which is a condition of the SAA Permit Exemption, a generator is required to mark or label its containers (i) with the words “Hazardous Waste” and (ii) with an indication of the hazards of the contents.
- Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.17(a)(1)(iv)(A) [40 C.F.R. §262.17(a)(1)(iv)(A)], which is a condition of the LQG Permit Exemption, a container holding hazardous waste must always be closed during accumulation, except when it is necessary to add or remove waste.
- Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.17(a)(1)(v) [40 C.F.R. § 262.17(a)(1)(v)], which is a condition of the LQG Permit Exemption, a generator is required to, at least weekly, inspect central accumulation areas looking for leaking container and for deterioration of containers caused by corrosion or other factors.
- Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.17(a)(5)(i) [40 C.F.R. § 262.17(a)(5)(i)], which is a condition of the LQG Permit Exemption, a generator is required to mark or label containers with the words “Hazardous Waste;” with an indication of the hazards of the contents; and with the date upon which each period of accumulation begins clearly visible for inspection on each container.
- Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.17(a)(6) [40 C.F.R. § 262.17(a)(6)], which incorporates 25 S.C. Code Ann. Regs. 61-79.262.251 [40 C.F.R. § 262.251], and is a condition of the LQG Permit Exemption, an LQG must maintain and

operate its facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

- Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.17(a)(6) [40 C.F.R. § 262.17(a)(6)], which incorporates 25 S.C. Code Ann. Regs. 61-79.262.261(e) [40 C.F.R. § 262.261(e)], and is a condition of the LQG Permit Exemption, the contingency plan must include a list of all emergency equipment at the facility where this equipment is required. This list must be kept up to date. In addition, the plan must include the location and a physical description of each item on the list, and a brief outline of its capabilities.
- Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.17(a)(6) [40 C.F.R. § 262.17(a)(6)], which incorporates 25 S.C. Code Ann. Regs. 61-79.262.262(b)(4) and (6) [40 C.F.R. § 262.262(b)(4) and (6)], and is a condition of the LQG Permit Exemption, an LQG must submit a quick reference guide of the contingency plan to the local emergency responders. The quick reference guide must include (4) a map of the facility showing where hazardous wastes are generated, accumulated, and treated and routes for accessing these wastes; and (6) the locations of water supply (e.g. fire hydrant and its flow rate).
- Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.17(a)(7)(i)(A) and (a)(7)(iii) [40 C.F.R. § 262.17(a)(7)(i)(A) and (a)(7)(iii)], which is a condition of the LQG Permit Exemption, facility personnel must successfully complete a program of classroom instruction, online training, or on-the-job training that teaches them to perform their duties in a way that ensures compliance with this part, and must take part in an annual review of the initial program.
- Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.17(a)(7)(iv)(A) and (D) [40 C.F.R. § 262.17(a)(7)(iv)(A) and (D)], which is a condition of the LQG Permit Exemption, the LQG must maintain the following documents and records at the facility: the name of the employee filling each job related to hazardous waste management; and records that document that the training or job experience, required in this section, has been given to, and completed by, facility personnel.
- Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.41(a)(5) and (6) [40 C.F.R. § 262.41(a)], an LQG who ships hazardous waste off-site to a treatment, storage or disposal facility within the United States must prepare and, no later than thirty days after the end of each calendar quarter submit a written report to the Department including, but not limited to (5) a description, the EPA hazardous waste number, DOT hazardous class, and quantity of each hazardous waste shipped off-site for shipments to a treatment, storage or disposal facility within the United States, and (6) the types and quantities of such wastes shipped for off-site treatment and disposal.
- Pursuant to 25 S.C. Code Ann. Regs. 61-79.262.90, which is a condition of the LQG

Permit Exemption, an LQG must clean up any hazardous waste discharge that occurs during generation or processing or storage and take such other action as may be required or approved by Federal,, State or local officials so that the hazardous waste discharge no longer presents a hazard to human health or the environment.

- **Pursuant to 25 S.C. Code Ann. Regs. 61-79.273.13(d)(1) [40 C.F.R. § 273.13(d)(1)], a SQHUW must contain any lamp in containers or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. Such containers and packages must remain closed and must lack evidence of leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions.**
- **Pursuant to 25 S.C. Code Ann. Regs. 61-79.273.14(e) [40 C.F.R. § 273.14(e)], a SQHUW must label or mark each lamp or container or package in which such lamps are contained clearly with one of the following phrases: “Universal Waste - Lamp(s),” or “Waste Lamp(s),” or “Used Lamp(s).”**
- **Pursuant to 25 S.C. Code Ann. Regs. 61-79.273.15(c) [40 C.F.R. § 273.15(c)], a small quantity handler of universal waste who accumulates universal waste must be able to demonstrate the length of time that the universal waste has been accumulated from the date it becomes a waste or is received.**

14) List of Appendices

Appendix 1: Photo Log
36 Photos taken on: February 9, 2021
Photos taken by: Laurie Benton DiGaetano
Photos taken with: Panasonic DMC TS-5 Digital Camera
EPA Property Tag: S09533

15) Signed

Laurie Benton DiGaetano
Senior Enforcement and Compliance Specialist

Date

Concurrence

Araceli B. Chavez
Chief
RCRA Enforcement Section

Date

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Photo 1: Blue box for accumulating core mold pieces that will be sent for brass recovery on-site. Box is labeled hazardous waste solid D008 contains copper, lead and zinc and marked with an accumulation start date of 01/11/2021.



Photo 2: Supersack under one of the bleed-out chutes used to accumulate mold sand that is discharged from the storage tank so that the tank can be replenished with new sand. Supersack is labeled D008 hazardous waste solid contains copper, lead and zinc, and marked with an accumulation start date of 02/08/2020.



Photo 3: 55-gallon drum behind supersack shown in Photo 1. Drum is positioned under the other bleed-out chute and contains mold sand that was discharged from the storage tank so that the tank could be replenished with new sand. The drum has no lid. It is labeled D008 hazardous waste solid contains copper, lead and zinc, and marked with an accumulation start date of 02/09/2021.



Photo 4: The third 55-gallon drum near Bleed-out area. The drum is labeled D008 hazardous waste containing copper, lead and zinc, and it is marked with an accumulation start date of 02/08/2021. The drum is overfilled, and it has no lid.



Photo 5: Pile of used mold sand on the floor next to the bleed-out bag and 55-gallon drum in the Bleed-out area.



Photo 6: Green hopper containing excess used mold sand coming off the conveyor belt. Facility personnel stated that this material is dumped back into the system for reuse on-site. The container was labeled D008 hazardous waste containing copper, lead and zinc, and it was marked with an accumulation start date of 02/08/2021.



Photo 7: 55-gallon drum of used shot blast and debris generated by the Grinding Wheelabrator unit. Used shot blast and metals are reclaimed. Shot blast that is recovered in the Reclaim Room is reused on-site in the Wheelabrator; metals that are recovered in the Reclaim Room are remelted and reused in the casting process; foundry sand that is segregated in the Reclaim Room is disposed of as D008 hazardous waste. The container was open and it was not labeled.



Photo 8: One hopper of on the floor in the middle of the Reclaim Room. Hopper was labeled as D008 hazardous waste containing copper, lead and zinc. It was dated 02/09/2021. The hopper appeared to contain cores and core sand for processing in the Reclaim Room. Shot blast that is recovered in the Reclaim Room is reused on-site in the Wheelabrator; metals that are recovered in the Reclaim Room are remelted and reused in the casting process; foundry sand that is segregated in the Reclaim Room is disposed of as D008 hazardous waste.



Photo 9: Close up of contents in hopper observed on the floor in the middle of the Reclaim Room shown in Photo 8. Hopper was labeled as D008 hazardous waste containing copper, lead and zinc. It was dated 02/09/2021. The hopper appeared to contain cores and core sand for processing in the Reclaim Room. Shot blast that is recovered in the Reclaim Room is reused on-site in the Wheelabrator; metals that are recovered in the Reclaim Room are remelted and reused in the casting process; foundry sand that is segregated in the Reclaim Room is disposed of as D008 hazardous waste.



Photo 10: Metal hopper on elevated stand in the Reclaim Room. The hopper appears to be staged for processing. Shot blast that is recovered in the Reclaim Room is reused on-site in the Wheelabrator; metals that are recovered in the Reclaim Room are remelted and reused in the casting process; foundry sand that is segregated in the Reclaim Room is disposed of as D008 hazardous waste. The hopper was labeled as D008 hazardous waste containing copper, lead and zinc, and dated 12/08/2020.



Photo 11: Metal hopper and 55-gallon drum for accumulating separated material that has been processed in the Reclaim Room. The hopper is labeled D008 hazardous waste 02/08/2021 and appears to contain used foundry sand. The 55-gallon drum is labeled D008 hazardous waste 02/08/2021 and appears to contain metal shavings.

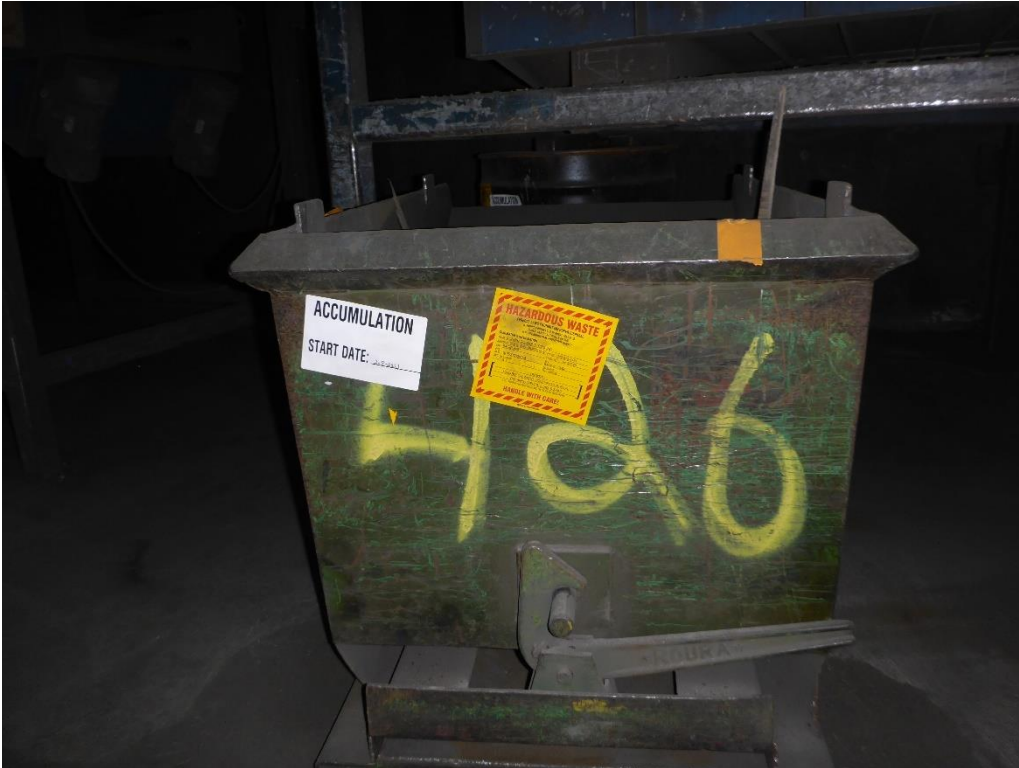


Photo 12: Metal hopper for accumulating separated material that has been processed in the Reclaim Room. The hopper is labeled D008 hazardous waste 02/08/2021 and appears to contain used foundry sand.



Photo 13: 55-gallon drum for accumulating separated material that has been processed in the Reclaim Room. The 55-gallon drum is labeled D008 hazardous waste 02/08/2021 and appears to contain metal shavings.



Photo 14: Metal hopper for accumulating separated material that has been processed in the Reclaim Room. The hopper is labeled D008 hazardous waste 02/08/2021 and appears to contain used foundry sand.



Photo 15: Metal hoppers near the door in the Reclaim Room. This area contained a total of ten metal hoppers. Eight of the hoppers were empty, and all were labeled D008 hazardous waste and marked with an accumulation start date. The oldest hopper was dated 02/01/2021. Personnel did not know if the hoppers contained material ready for reclamation or material that had already gone through the separation process.



Photo 16: Metal hoppers near the door in the Reclaim Room. This area contained a total of ten metal hoppers. Eight of the hoppers were empty, and all were labeled D008 hazardous waste and marked with an accumulation start date. The oldest hopper was dated 02/01/2021. Personnel did not know if the hoppers contained material ready for reclamation or material that had already gone through the separation process.



Photo 17: 55-gallon drums in the Reclaim Room. No labels, and could not determine if contents will be processed here or have already been processed.



Photo 18: 55-gallon drum under Grinding Baghouse. The drum is not labeled.



Photo 19: 55-gallon drum under Wheelabrator Baghouse. The drum is not labeled.



Photo I: 55-gallon drum under Wheelabrator Baghouse. The drum is not closed or labeled.

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Photo 21: SAA for accumulating floor sweepings generated in part of the Machining area. 55-gallon drum labeled D008 hazardous waste liquid (lead shavings, oil/grease and water) and identified with a DOT class 9 hazard placard. Ring was not secured on the drum, so Mr. Peebles closed the drum by securing the lid with the ring.



Photo 22: SAA for accumulating floor sweepings generated in part of the Machining area as D008 hazardous waste liquid (lead shavings, oil/grease and water). Material observed inside the secondary containment pallet.



Photo 23: SAA for accumulating floor sweepings generated in part of the Machining area. 55-gallon drum labeled D008 hazardous waste air filters. Personnel immediately relabeled as D008 hazardous waste contaminated debris.

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Photo 24: SAA for accumulating air filters generated in the air handling vacuum system in the Tool Crib area. The drum was labeled D006 hazardous waste solid led and identified with the word “toxic” on the hazardous waste label. Not that the D006 hazardous waste characteristic is toxic for elevated levels of cadmium, not lead.



Photo 25: SAA for accumulating mop heads and used filters generated in the filter system for the hand sinks. 55-gallon drum labeled D008 hazardous waste contaminated debris and identified with a DOT class 9 hazard placard.



Photo 26: Box of used bulbs in the universal waste storage area. Box open and not labeled.

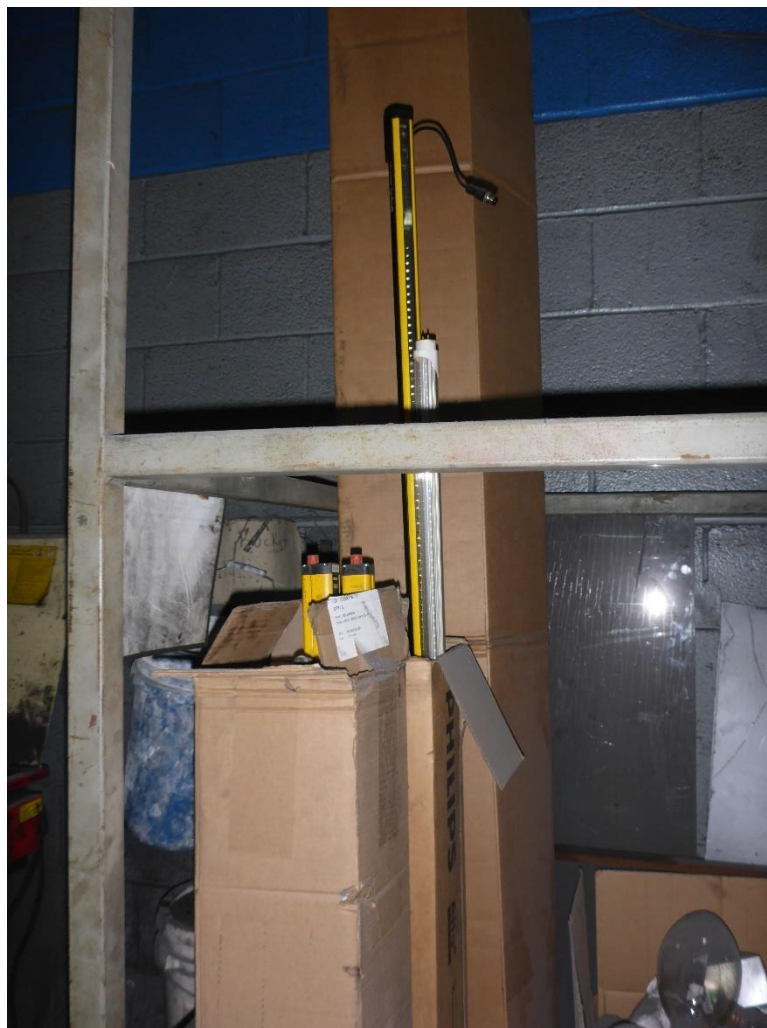


Photo 27: Boxes of used bulbs in the universal waste storage area. Boxes open and not labeled.



Photo 28: Boxes of used bulbs in the universal waste storage area. Boxes open and not labeled.



Photo 29: Four supersacks observed connected to the Furnace Baghouse. Additional supersacks stored in this area. Bags identified with DOT class 9 hazard placard, but not labeled. Personnel stated that the bags contain furnace ash, which is sold as zinc.



Photo 30: Supersacks observed in the Baghouse area. Bags were not labeled, but facility personnel stated they contain zinc material that will be sold for use off-site. Spray painted numbers indicate the weight of the bag.



Photo 31: Supersacks observed in the Baghouse area. Bags were not labeled, but facility personnel stated they contain zinc material that will be sold for use off-site. Spray painted numbers indicate the weight of the bag.



Photo 32: Two supersacks observed connected to the Sand System Baghouse. Bags are not closed, labeled as hazardous waste, or marked with an accumulation start date.

Additional supersacks are also stored in this area. These bags are also not labeled as hazardous waste or marked with an accumulation start date. Facility personnel explained that the full bags are staged here while they await analytical testing to determine if they exhibit the D008 hazardous waste characteristic of toxicity due to elevated levels of lead.



Photo 33: Supersack observed under the Travel Vent Baghouse. Bag is not closed, labeled as hazardous waste, or marked with an accumulation start date.



Photo 34: Two roll-off containers used to store and ship supersacks of D008 hazardous waste baghouse dust. One roll-off staged and open to receive supersacks, and the other stored under the metal roof. Both containers were labeled D008 hazardous waste solid (contains copper, lead and zinc) and identified with the UN3077. The open container was dated 02/09/2021, and the closed container was dated 02/08/2021.



Photo 35: Roll-off container staged to receive supersacks of D008 hazardous waste baghouse dust. The container was labeled D008 hazardous waste solid (contains copper, lead and zinc) and identified with the UN3077. The container was dated 02/09/2021.



Photo 36: Supersacks of D008 hazardous waste baghouse dust staged on the scale for weighing before being placed into open roll-off container for storage and shipment.