

RCRA Inspection Report

1) Inspector and Author of Report

Tarin Tischler
Life Scientist
Phone: 404-562-9702
tischler.tarin@epa.gov

U.S. Environmental Protection Agency, Region 4
Enforcement and Compliance Assurance Division
Chemical Safety and Land Enforcement Branch
RCRA Enforcement Section
61 Forsyth Street, S.W.
Atlanta, Georgia 30303

2) Facility Information

Bonnell Aluminum, Inc.
State Highway 53
Carthage, Tennessee 37030

EPA ID#: TND047000898
NAICS #: 331314 – Secondary smelting and
Alloying of Aluminum

3) Responsible Officials

Barry Cohoon
Environmental Manager
barry.cohoon@bonnellaluminum.com

4) Inspection Participants

Jacob Bowen, Bonnell

Cody Munday, TDEC
Tarin Tischler, USEPA

5) Date of Inspection

May 9, 2024, 9:36 AM

6) Applicable Regulations¹

Resource Conservation and Recovery Act (RCRA) Sections 3002 (42 U.S. Code – Annotated U.S.C.A. 6925 and 6927), and 40 Code of Federal Regulation (C.F.R.) Parts 260 - 270, 273, 278, & 279.

Tennessee Hazardous Waste Management Act of 1977, Tennessee Code Annotated (Tenn. Code Ann.) § 68-212-101 *et seq.*, and Chapter 0400-12-01 of the Rules and Regulations of the State of Tennessee (Tenn. Comp. R. & Regs.)

Pursuant to Tenn. Comp. R. & Regs. 0400-12-01-.03(4)(e)2. [40 C.F.R. § 262.34(a) (2016)], a large quantity generator (LQG) may accumulate hazardous waste on-site for 90 days or less

¹ As the State's authorized hazardous waste program operates in lieu of the federal RCRA program, the citations of those authorized provisions will be to the authorized State program. However, for ease of reference, the federal citations will follow in brackets.

without a permit or without having interim status, as required by Section 68-212-108 of the THWMA, Tenn. Code Ann. § 68-212-108 [Section 3005 of RCRA, 42 U.S.C. § 6925], provided that the generator complies with the conditions listed in Tenn. Comp. R. & Regs. 0400-12-01-.03(4)(e)2.(i)-(v) [40 C.F.R. § 262.34(a)(1)-(4) (2016)] (hereinafter referred to as the "LQG Permit Exemption").

Pursuant to Tenn. Comp. R. & Regs. 0400-12-01-.03(4)(e)5.(i) [40 C.F.R. § 262.34(c)(1)], a generator may accumulate as much as 55 gallons of 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 68-212-108 of the THWMA, Tenn. Code Ann. § 68-212-108 [Section 3005 of RCRA, 42 U.S.C. § 6925], and without complying with Tenn. Comp. R. & Regs. 0400-12-01-.03(4)(e)2. [40 C.F.R. § 262.34(a) (2016)], provided that the generator complies with the satellite accumulation area (SAA) conditions listed in Tenn. Comp. R. & Regs. 0400-12-01-.03(4)(e)5.(i)(I)-(II) [40 C.F.R. § 262.34(c)(I)(i)-(ii)] (hereinafter referred to as the "SAA Permit Exemption").

7) Purpose of Inspection

The purpose of this inspection was to conduct an unannounced compliance evaluation inspection to determine Bonnell Aluminum, Inc.'s compliance with the applicable requirements of RCRA and the corresponding Tennessee regulations. This was an EPA lead inspection.

8) Facility Description

Bonnell Aluminum (hereinafter Bonnell or "facility") is a manufacturer of custom aluminum parts. Bonnell produces on average 1.5 million pounds of aluminum per week. The facility began operating at its current location in 1968. Bonnell occupies a 10-acre building on a 97.4 acres property. Bonnell operates at some capacity 24/7 and employs approximately 400 staff.

The casting line starts with aluminum logs that are heated in one of two high temperature furnaces. The casting line then saws off the ends of the logs and cuts them down into smaller rods called billets. The billets are then brought to the extrusion press to extrude aluminum into various shapes by pushing the heated aluminum through a shaped die. After extrusion the aluminum is aged and then can be anodized, painted, or shipped as is depending on the customer specifications. The facility has various painting options but does not conduct high detail finishes. Other finishing processes include the application of a thermal polyurethane barrier. This is a polyamide and nylon strip coating produced by several different vendors.

Bonnell manages an oil water separator. Bonnell also operates a D007 chrome treatment system, which operates as its own wastewater treatment system. The chromium is reduced during the wastewater treatment and F009 sludge is collected in a roll off container.

Bonnell operates as a large quantity generator of hazardous waste, a small quantity handler of universal waste, and a generator of used oil. Wastes generated at the facility include aluminum sodium, hydroxide sludge, paint booth dripping exhibiting hazardous toxicity for chromium, aerosol waste exhibiting the hazardous characteristic of ignitability, universal waste batteries,

and used oil. Bonnell operates a wastewater treatment plant (NPDES Permit TN0002593), Class II landfill (Permit IDL800000072) at the facility. Bonnell also manages a health clinic on the property that facility personnel stated does not operate under the Bonnell Aluminum, Inc. EPAID. EPA and TDEC were unable to determine the status of the health clinic following the inspection. This is an area of concern.

9) Previous Inspection History

Tennessee Department of Environment and Conservation (TDEC) has conducted two RCRA CEIs at the subject facility between 2017 and 2021 and found 10 violations during those inspections.

On May 12, 2021, TDEC conducted the most recent RCRA CEI at the subject facility and found one apparent violation of RCRA's requirements for a missing used oil label. This was corrected during the inspection.

10) Opening Conference

On May 9, 2024, EPA inspector Tarin Tischler, accompanied by TDEC inspector Cody Munday, arrived at Bonnell at approximately 9:30AM. Barry Cohoon, Environmental Manager, immediately received the inspectors. The inspectors introduced themselves, showed their credentials to Barry Cohoon and explained the purpose of the visit.

The inspectors described the anticipated use of equipment (iPad) during the inspection and provided a request for records. The EPA inspector explained that the Small Business Regulatory Enforcement Fairness Act's classification of a "small business" is generally set by the Small Business Administration using the business' SIC/NAICS code and annual receipts or number of employees. A copy of the EPA's information sheet for small businesses can be found at <https://www.epa.gov/sites/production/files/2017-06/documents/smallbusinessinfo.pdf>. The EPA inspector also discussed the company's ability, pursuant to 40 C.F.R. § 2.203, to assert a business confidentiality claim for information submitted to EPA. The company did not assert a business confidentiality claim.

Barry Cohoon provided an overview of the facility's history and current operations during the opening conference. The inspection participants also discussed health and safety protocols and required personal protective equipment before facility representative led the inspectors on a tour of the Bonnell operations.

11) Inspection Observations

Casting line

The casting line was operating at the time of the CEI, and inspectors were not able to walk through this area due to two high temperature furnaces and molten metal. However, the casting line was viewed through the window of a staging area outside the casting line.

The casting of 18.5-foot aluminum rods is conducted in this area. The casting line heats the aluminum logs in the furnace and saws them into smaller billets. Inspectors observed piles of aluminum saw fines consisting of thin metal scraps in the casting line (Photo 1). Bonnell

representatives informed inspectors that these scraps are sent for recycling and are not able to be reheated and consolidated because they will volatilize and evaporate in the furnace due to their size. Peanut oil is used to lubricate the dies and hydraulic oil is used to lubricate the equipment. No hazardous waste is generated in this area.

Bonnell representatives informed inspectors that emissions from the furnaces are not controlled and receive testing every five years to meet Schedule 2 air requirements. The furnaces are up for retesting in winter 2024.

Extrusion Press

Bonnell manages five extrusion presses for different sizes of aluminum pieces, either aluminum logs, billets, or smaller pieces. Extrusion presses one through four are located in the main building while extrusion press five is located outside the building due to its large size. During the extrusion process, the aluminum is heated in an oven to temperatures up to 900-1000 degrees Fahrenheit. The heated aluminum logs or billets are then forced through a circular metal plate with a unique shaped hole called a die (Photo 2). This shapes the aluminum into the appropriate shape for its intended use. The pH of the metal is raised with sodium hydroxide and ammonia used during the process is removed before discharge from the extrusion press.

When the dies are switched out in the presses, aluminum is pumped out from the old die with sodium hydroxide and steel blast in their wastewater treatment unit. This process is referred to as the die burnout process. Sodium hydroxide is used in the die burnout process until no longer effective. It is then shipped off as hazardous waste or sent to the wastewater treatment process. This is one of several points of generation of aluminum sodium hydroxide sludge at the facility.

Inspectors observed a drain beneath each press. Facility representatives explained that this drain led to the facility's oil water separator, and any equipment located at the facility that uses oil sits above a drain to the oil water separator. This area also manages a steel blaster (Photo 3). Inspectors observed a 55-gallon container attached to the steel blaster. Bonnell representatives informed inspectors that the shop dust collected in this container and is managed as special waste (Permit 8009012022a). The material is pure steel and is sent for recycling. A fire extinguisher, eye wash station, and emergency shower were observed in this area.

Inspectors observed a SAA container for aerosol waste in this area. This was a 55-gallon container connected to an aerosol can puncture device. This container was labeled with the words "Hazardous Waste" and a DOT regulated flammable placard. Empty cans are placed in a trash bin next to the container after puncturing.

Die Shop

The die shop conducts tweaks to dies by hand for fine tuning the mold shapes. Inspectors observed rows of dies in various sizes cut into various shapes. Die shop personnel file and scrap the metal to smooth out the die. Waste generated in the Die Shop includes oily rags which are managed as special waste (Permit No. 7506102016eR2) and sent to a municipal landfill. This area also conduct die burn outs for smaller dies than in the extrusion press. Dies are washed in

a caustic mixture to remove aluminum and rinsed with clean water and sand. Wastewater from this process is sent to the wastewater treatment plant.

Inspectors observed two machines called the Nitriter in this area. Die cells lose carbon rigidity over time, so this machine treats them with nitrogen and ammonia under high heat. This material is absorbed into the die.

Oil Water Separator

Inspectors observed the oil water separator outside of the main building. Facility representatives informed inspectors that additional tanks were added here for additional storage. The facility tries to reuse as much oily water as possible and has almost a 100% recycling rate. Sodium hydroxide is drained here into a pit in the oil water separator from the die burnout process.

Inspectors observed a small tank farm in secondary containment outside of the oil water separator. Inspectors observed two 3,000-gallon tanks labeled "Used Oil." Inspectors observed an open 5-gallon container full of liquid with dangerous when wet and corrosive DOT regulated placards (Photo 4). Based on the large amount of rain at the facility with the preceding 12 hours and discussion with Mr. Cohoon, this was determined to be rainwater. Inspectors also observed rainwater in the secondary containment.

Inspectors observed a 55-gallon container of water glycol (Photo 5). This container had an open bung hole at the top and had accumulated rainwater. Facility representative informed inspectors that this container was staged to be added to the used oil tank.

Scrap metal comes into the facility by truckload and are dumped into scrap area around the outside of the facility. Inspectors also observed outside storage for clean aluminum to be heated in the furnace. Facility representatives informed inspectors that a stack test is required when recycled aluminum is heated in the furnace, but not clean aluminum.

10,000-gallon Used Oil Tank

Inspectors observed a 10,000-gallon tank labeled "Used Oil" and a 3,000-gallon tank of virgin oil outside the extrusion press area. Facility representatives informed inspectors that the used oil tank is usually empty as it is only used as additional storage for oil when the presses are being cleaned. The tank holds oil to be reused in the system after the cleaning is done, not used oil to be shipped for disposal. Inspectors also observed containers of liquid nitrogen used in the extrusion process. Blue nitrogen is used to keep oxygen out to prevent oxidation.

Landfill:

Bonnell manages a nonactive landfill outside of the facility. This area is used for staging only and does not actively accept waste. The landfill is inspected by TDEC monthly. The aluminum sodium hydroxide sludge used to go into this landfill when it was active. Now the sludge is sent to Middle Lake Landfill when shipped as waste or it is sent as a commercial product to make aluminum sulfate for the chicken industry.

Mobile Equipment / Maintenance Area:

The mobile equipment area is used to conduct some equipment repair, however most of the newer equipment is electrical and doesn't use combustible engines, so this area is used less frequently. Inspectors observed a tow motor battery on a pallet in this area waiting contractor servicing. This area was equipped with fire extinguishers.

Inspectors observed a 55-gallon closed SAA container for aerosols (Photo 6). This container was labeled with words "Hazardous waste." The container was not marked with an indication of hazards.

Pursuant to Tenn. Comp. R. & Regs. 0400-12-01-.03(1)(f)1.(v) [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 (ii) with an indication of the hazards of the contents.

Inspectors observed one partially full and two empty 55-gallon containers outside of the mobile equipment / maintenance area. The partially full container was rusted and marked with an illegible label. Facility representatives informed inspectors that this container most likely held oil, but they couldn't say for sure. Inspectors requested a waste determination on the material in the container.

Pursuant to Tenn. Comp. R. & Regs. 0400-12-01-.03(1)(b) [40 C.F.R. § 262.11], a person who generates a solid waste, as defined in [Tenn. Comp. R. & Regs. 0400-12-01-.02(1)(b)] [40 C.F.R. § 261.2], must 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 articulated in [Tenn. Comp. R. & Regs. 0400-12-01-.03(1)(b)] [40 C.F.R. § 262.11].

Inspectors observed lead acid batteries stored in a covered cage in this area. The cage was labeled with the words "Universal Waste Batteries" and dated November 5, 2023.

Inspectors observed a 275-gallon tank labeled "Used Oil" and a hopper of used oil filters. The tank sat in secondary containment with a drain connected to the oil water separator.

Thermal Barrier

A thermal barrier is applied to certain pieces after the extrusion press, depending on the material's intended use. Isocyanate and Baydor TB Chemical is mixed into a polyurethane barrier and coated on the shaped aluminum by pouring it into the grooves. Waste generated in this area consists of dried and hardened thermal chemical and gel, which is nonhazardous and sent to a landfill as special waste (Permit 7506102016hR2).

Wastewater Treatment

The facility's wastewater treatment plant conducts two processes – treatment of chromate solution generated in the paint shop and elementary neutralization treatment of caustic

wastes. Sodium hydroxide water is reused in this area from the die burnout process to regulate pH.

The end of the caustic treatment line treats ammonia with lime so fluoride can bond with the calcium. The fluoride is used in the production process to etch aluminum. Ammonia is used to regulate pH, and the rinsewater is treated in the wastewater treatment plant to remove the fluoride and ammonia. The wastewater flows through stripper to remove the fluoride and ammonia. Clean water is sent back through wastewater treatment plant. Filter presses are connected to the tanks in the wastewater treatment process to collect solids. Ammonia waste is collected in filter presses within the system and these filters are changed twice a year. Waste filters are managed as special waste (Permit 7505232018aR2) and shipped off-site to a landfill.

Anodizing Line:

The anodizing line consisted of a series of dip tanks. These open top tanks treat the aluminum pieces after the extrusion process (Photo 7). Facility representatives informed inspectors that most baths held rinsewater but some were acid etch tanks.

Caustic material from the die burnout process is stored in three tanks and reused in this area and as burnout reuse water. The caustics are used to etch the extruded aluminum part which removes some aluminum from the surface to give a dull appearance for the customer. Three anodizing tanks use electricity to grow an oxide layer on the metal to protect the aluminum from deterioration. Desmut tanks hold a sulfuric acid mix which cleans the dark appearance of the metal caused by previous baths. The color tank can color aluminum in a range from champagne to black depending on how long the material is left in the bath. Aluminum is brought to the sealant tanks last for a nickel seal and water seal which seals the pores of the metal to keep it from oxidizing or changing colors. Coated metal is sent directly to shipping or brought to thermal barrier or painting for additional coating.

Paint Line

If the aluminum requires painting following the anodizing line, it is brought to the paint line. Aluminum parts are treated with a chromate coating before painting. Waste chromate and rinsewater from this coating is treated in the facility's wastewater treatment plant. Solids are removed with a filter press and shipped as D007 toxic hazardous waste. Inspectors observed a roll off container in containment in an enclosed building near the paint line collecting the filter cake. This container is managed as a central accumulation area (CAA) container and was labeled with the words "Hazardous waste" and dated 4/17/2024. The roll off container was not marked with an indication of the hazards of its contents (Photo 8).

Pursuant to Tenn. Comp. R. & Regs 0400-12-01-.03(1)(h)1.(v)(I)II. [40 C.F.R. § 262.17(a)(5)(i)], which is a condition of the LQG Permit Exemption, a generator must mark or label its containers with an indication of the hazards of the contents.

The Bonnell paint line consists of aluminum pieces hanging from hooks on a conveyor belt to run the pieces through the line (Photo 9). These hooks accumulate paint over time, which is removed by heating the hooks in an oven near the paint line. The paint turns to ash which

exhibits the hazardous characteristic of toxicity for chromium. Inspectors observed a 55-gallon SAA container of hook ash in this area labeled “Hazardous Waste” (Photo 10). The word toxic was marked on the label, but facility representatives informed inspectors they would add a placard for clearer indication.

After pretreatment, aluminum is painted in one of four paint booths. Each paint booth consists of a closed room to capture paint overspray in gutters, which are connected to two 55-gallon SAA containers in each booth (Photo 11). The floor and walls of the paint booth are covered in paper and cleaned out after use. Foam rollers are used within the paint booths to coating equipment and sponge paint drippings. These rollers get rinsed and reused 3-4 times. Each booth is attached to a recirculating air system so air is constantly filtered in the booths. Filters are removed and managed as hazardous waste exhibiting toxicity for chromium. Paint used in the paint booths is nonhazardous. Chromium waste is generated from the pretreatment coating.

At the time of the CEI, each of the eight SAA containers in the paint booths were marked with the words “hazardous waste, toxic,” however, the container lids that were sitting on top of the containers did not make complete contact with the container rim and were not sealed with a locking ring (Photos 12-13). The SAA containers were connected to a hose piped directly to the gutters collecting paint spray. Some of these hose connections were not properly sealed closed (Photo 14).

Pursuant to Tenn. Comp. R. & Regs 0400-12-01-.03(1)(f)1(iv) [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.

Paint Mixing Area:

The paint mixing area was not intrinsically safe and could not be entered with electronics. The paint mixing room consisted of a small room where paint mixing is conducted to meet customer requirements for paint composition and color specifications. Paint lines are cleaned by flushing solvent and collecting flush waste in a floor trough. This solvent is hard piped from the floor trough to a hazardous waste tank.

Inspectors observed two SAA containers in this area. One was labeled “hazardous waste, aerosol can liquid” and the other “hazardous waste, paint filters.” Both containers were marked with the word “toxic.”

Tank Farm

The tank farm consists of four tanks: one hazardous waste tank and three product storage tanks. The product storage tanks were labeled as clean solvent, texanol, and xylene. Each tank was marked with an NFPA diamond to indicate the hazard. Inspectors also observed two smaller tanks for kerosene and gasoline in this area. All tanks were located within containment.

Inspectors observed the 7,500-gallon hazardous waste tank. At the time of the CEI, this tank was labeled “Hazardous Waste Storage,” marked with an NFPA diamond, and dated 5/2/2024 (Photos 15-16). This tank stores solvent waste generated in the paint mixing room. This waste stream is manifested offsite for solvent recovery. All BB equipment connected to the hazardous waste tank was marked with blue identification numbers on the equipment piping’s white paint. (Photos 17-18).

CAA for Containers

The Central accumulation area for hazardous waste was located in an adjacent building (Photo 19). The CAA was marked with signage that read “Danger: No Smoking.” Inspectors observed fire extinguishers and a spill kit in this area. Inspectors observed four rows of product containers wrapped in saran wrap on pallets and two rows of waste containers in storage. Adequate aisle space was observed in this area.

- Row One

Inspectors observed eighteen hazardous waste containers on pallets in waste row one at the time of the inspection. All containers in row one were marked with the words “hazardous waste,” a Class 9: Miscellaneous DOT regulated placard, the word “toxic,” and dated (Photo 20). The oldest dated on a container in row one was 3/17/2024.

Pallet 1: three paint booth filters.

Pallet 2: one container of hook ash, one container of paint drippings, and one container of paint filters.

Pallet 3: four container of paint filters.

Pallets 4 and 5: four containers of scrap paint.

- Row Two

Inspectors observed one hazardous waste container on a pallet in waste row two at the time of the inspection. This container was marked with the words “hazardous waste, scrap paint” the word “toxic” and dated 4/30/2024. Bonnell was also storing a tote for storage of universal waste lamps and a 55-gallon SAA container for storage of broken lamps (Photos 21-22). The universal waste lamp container was empty at the time of the inspection. The 55-gallon container for broken lamps was labeled “Hazardous waste, toxic” and was partially full.

The CAA is equipped with an internal radio communication capable of providing immediate emergency instruction to facility personnel; it is equipped with a device capable of summoning emergency assistance from local police departments, fire departments, or state or local emergency response teams; it is equipped with portable fire extinguishers, fire control equipment, spill control equipment, and decontamination equipment; and it is equipped with water to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray system.

- Records Review

Contingency Plan and Quick Reference Guide (QRG):

The actions that facility personnel should take in response to an emergency are described in the facility's Integrated Contingency Plan (ICP) which originally created in December 2021 and was last updated on 3/14/2024.

The plan describes actions facility personnel must take in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility.

Appendix A of the ICP describes arrangements agreed to with the Bonnell Security, Smith County Local Emergency Planning Committee, Smith County Fire Department, and Riverview Regional Medical Center.

The plan lists the names and emergency telephone numbers for persons identified as emergency coordinators. Brett Burris is listed as the primary emergency coordinator, and the other five individuals are listed in the order in which they will assume responsibility as alternates.

The plan includes a list of all emergency equipment at the facility. The list includes fire extinguishing systems, spill control equipment, communications and alarm systems, and decontamination equipment. The list appears up to date. The plan includes 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 signals to be used to begin evacuation, evacuation routes, and alternate evacuation routes.

Inspectors reviewed certified mail receipts documenting that a copy of the contingency plan (and its quick reference guide) was submitted to the local authorities.

The quick reference guide is located in Appendix I of the ICP and 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; the identification of any hazardous wastes where exposure would require unique or special treatment by medical or hospital staff; a map of the facility showing where hazardous wastes are generated, accumulated and treated and routes for accessing these wastes; a street map of the facility in relation to surrounding businesses, schools and residential areas; the locations of water supply; the identification of on-site notification systems; and the name of the emergency coordinator(s) and emergency telephone number(s).

Training Records:

The inspectors reviewed facility job descriptions and employee names that were provided for hazardous waste operator positions. The facility provided three separate documents for descriptions of the positions, information on required training, and name of person filling the position. Inspectors informed the facility that the job descriptions should be maintained at the facility and readily available for records review.

Pursuant to Tenn. Comp. R. & Regs. 0400-12-01-.03(1)(h)1.(vii)(IV)II. [40 C.F.R. 262.17(a)(7)(iv)], The large quantity generator must maintain the following documents and records at the facility: (A) The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job; (B) A written job description for each position listed under paragraph (a)(7)(iv)(A) of this section. This description may be consistent in its degree of specificity with descriptions for other similar positions in the same company location or bargaining unit, but must include the requisite skill, education, or other qualifications, and duties of facility personnel assigned to each position; (C) A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position listed under paragraph (a)(7)(iv)(A) of this section; (D) Records that document that the training or job experience, required under paragraphs (a)(7)(i), (ii), and (iii) of this section, has been given to, and completed by, facility personnel.

Inspectors observed the up-to-date hazardous waste and DOT training records for 36 facility personnel in 2024. Facility representatives informed inspectors that all facility personnel receive hazardous waste training during onboarding, but annual training is only required for positions that manage hazardous waste.

Waste Manifest and Land Disposal Restriction (LDR) Records:

The inspectors reviewed available hazardous waste manifest records and land disposal restriction forms for shipments of hazardous waste sent since the date of the last TDEC inspection. Hazardous waste manifest records show that D007 hazardous waste filters are routinely shipped by Safety-Kleen, Inc. (EPAID: TXR000081205) to Clean Harbors La Porte (EPAID: TXD982290140) or Clean Harbors Deer Park (EPAID: TXD05514137). F019 hazardous waste solids are routinely shipped by US Ecology Transportation (EPAID: MIK93743838) to Envirite of Illinois, Inc (EPAID: ILD000666206). Other waste (F003, F005, D001, D005, D006, D007) is transported by Safety Kleen, Inc. (EPAID: TXR000081205) to Safety-Kleen in Smithfield KY.

All manifests included the signed final copy and applicable Land Disposal Restrictions. The facility has recently filed an exception report for manifest tracking number 009005715SKS which shipped 3/20/2024. The facility received the signed copy during the inspection.

Universal Waste Shipment Records:

Lithium and lead acid batteries are transported for disposal by Southeast Recycling in Carthage, TN. The facility schedules universal waste pickups once a year. Inspectors observed documentation of universal waste battery shipments on the following dates:

- Ordered 3/8/2024, picked up 3/18/2024
- Ordered 3/8/2023, picked up 3/21/2023
- Ordered 3/7/2022, picked up 4/13/2022

Inspectors recommended increasing the frequency of pickups to avoid going over a year accumulation time limit for universal waste.

Used Oil Records:

Used oil is transported from Bonnell by Universal Environmental Services LLC. The most recent used oil pickup occurred on 4/30/2024.

Weekly Inspection Records:

The inspectors reviewed Bonnell's available records of inspections of the hazardous waste central accumulation area (CAA) since January 2021. The inspection log includes a checklist to record observations about leaking containers and for deterioration of containers caused by corrosion or other factors. The weekly container and daily tank inspections were stored in the wastewater treatment plant control room. The weekly inspection list includes the CAA and roll off CAA container, SAAs, and universal waste container. The inspection log includes a checklist to record observations about aisle space, visible container labels, legible container labels, complete container labels, closed lids and bungs, material on outside of container, rings tight, rings turned down, and condition of containers.

Inspectors observed the facility went 8 calendar days for weekly inspections between 6/18/2023 and 6/26/2023.

Pursuant to Tenn. Comp. R. & Regs. 0400-12-01-.03(1)(h)1.(i)(V)I. [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 containers and for deterioration of containers caused by corrosion or other factors.

Inspectors observed that the inspection documentation for the week between 9/11/2023 and 9/25/2023 was missing a date and signature. All other weekly inspections were signed and dated.

Pursuant to Tenn. Comp. R. & Regs. 0400-12-01-.03(1)(h)1.(i)(V)II., these records must include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions.

Daily tank inspections were missing on 3/18/2023 and 3/26/2023.

Pursuant to Tenn. Comp. R. & Regs. 0400-12-01-.05(10)(f)2. [40 C.F.R. 265.195], the owner or operator must inspect, where present, at least once each operating day, data gathered from monitoring and leak detection equipment (e.g., pressure or temperature gauges, monitoring wells) to ensure that the tank system is being operated according to its design.

The daily tank inspection for 3/10/2023 was missing the signature of the inspector.

Pursuant to Tenn. Comp. R. & Regs. 0400-12-01-.03(1)(h)1.(ii)(II), at a minimum, these records must include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions.

Inspectors also observed a log of the chromium tank treatment as part of the facility's wastewater treatment plant. pH calibration checks are also recorded.

Waste Determination Records:

Inspectors reviewed the TCLP analysis available for oily rags and absorbents and the hardened polyurethane generated in the thermal barrier area. Both analyses demonstrated that the materials are not RCRA hazardous.

RCRA Organic Air Emissions Records:

Inspectors reviewed the LDAR documentation for the facility's hazardous waste tank. LDAR monitoring is performed quarterly by a contractor. The most recent monitoring occurred on 5/25/2024. Inspectors observed the no detectable emissions log for the pump on the hazardous waste tank for 2021-2023. The facility began LDAR monitoring in 2008. The determination for BB/CC requirements was made based on generator knowledge.

Annual Waste Reports:

Inspectors review the Bonnell annual waste reports required by TDEC for 2021, 2022, and 2023.

The following deficiencies were identified on the 2023 annual hazardous waste report:

- Form G-FDS Part 1 Section II. incorrectly identified Bonnell as having not accumulated any hazardous waste on site prior to being shipped offsite.
- Form HN-EA did not identify universal waste and wastewater activity.
- Waste Stream Report (WSR) for waste stream (WS) 14 Section 2. Waste Stream Constituents did not properly identify xylene and toluene as constituents. WSR for WS 14 Section 1h did not identify F005 as a waste code although it is on the manifests when shipped offsite.
- WSR for WS 24 Section 1a Waste Stream Name – has the number “2025”. In the past this waste stream has been identified as “paint booth drippings”. In a May 21, 2024, email, facility representatives confirmed this as a mistake and that the waste stream still refers to paint booth drippings.

Pursuant to Tenn. Comp. R. & Regs. 0400-12-01-.03(2)(d)1.ii, Small and large quantity generators shall be responsible for maintaining an up-to-date notification file by: Reviewing the most current notification information on file with the Commissioner, as made available by the Commissioner with the annual report, correcting inaccurate data or supplying all the information needed to ensure the Commissioner is maintaining an accurate notification file. The updated or corrected information shall be returned to the Commissioner by March 1st following the receipt of the notification information on file or as instructed otherwise by the Commissioner.

Pursuant to Tenn. Comp. R. & Regs. 0400-12-01-.03(2)(a)2., if the conglomerate waste stream delivered by the collection system to the on-site wastewater treatment facility or to the

POTW is a hazardous waste as defined in subparagraph (1)(c) of Rule 0400-12-01-.02, then the generator must notify with regard to that waste stream and file an annual report in accordance with subparagraph (5)(b) of this rule.

Pursuant to Tenn. Comp. R. & Regs. Rule 0400-12-01-.03(5)(b)1.(iii), For each hazardous waste stream (i.e., each separate waste but not necessarily each batch or shipment of such waste) generated by the generator during the reporting year, except for those wastes identified in part 4 of this subparagraph, the following information: (I) A descriptive name of the waste and the appropriate waste code(s) from Rule 0400-12-01-.02;

12) Closing Conference

The inspectors conducted the exit meeting at 5:15 with Barry Cohoon and Jacob Bowen, Customer Account Representative. During this meeting, the inspectors stated their preliminary conclusions of the inspection. Facility representatives agreed to submit photo documentation of corrections to things noted during the inspection.

13) List of Attachments

Attachment 1 – Photo Log:

14) Signed

TARIN TISCHLER Digitally signed by TARIN
TISCHLER
Date: 2024.07.18 17:23:21 -04'00'

Tarin Tischler
Life Scientist

15) Concurrence

ALAN NEWMAN Digitally signed by ALAN
NEWMAN
Date: 2024.07.18 17:25:34 -04'00'

Alan R. Newman
Acting Chief
RCRA Enforcement Section

Attachment 1 – Photo Log

22 Photos taken on: 5/9/2024

Photos taken by: Tarin Tischler

Photos taken with: EPA iPad

EPA Property Tag: SS8852



Photo 1: Casting Line with metal piles of saw shavings to be sent for recycling.



Photo 2: Row of Dies used to shape heated aluminum in extrusion press.



Photo 3 – Steel Blaster in the extrusion press area.



Photo 4 – 5-gallon open container of rainwater in the containment of the oil water separator.



Photo 5 – 55-gallon container of water-glycol that was open and accumulating rainwater.



Photo 6 – Aerosol liquid SAA in the equipment maintenance area. This container was not marked with an indication of hazards of the contents.



Photo 7 – Tanks of chemical baths in the anodizing area.



Photo 8 – Roll off container label missing indication of the hazards of its contents.



Photo 9 – Aluminum pieces hanging from hooks in the paint line.



Photo 10 – SAA container for hook ash generated in the paint line.



Photo 11 – SAA container of paint in each paint booth.



Photo 12 – Open SAA container in paint booth.



Photo 13 - SAA container in paint booth. The lid was sitting on top and not sealed.



Photo 14 – Hose connected to SAA in paint booth with gaps.



Photo 15 – Tank farm signage



Photo 16 – Hazardous waste solvent tank. This tank was marked with an NFPA diamond on the other side.



Photo 17 – BB equipment tagging on the hazardous waste tank equipment



Photo 18 – BB equipment tagging on the hazardous waste tank equipment



Photo 19 – Bonnell Central accumulation area



Photo 20 – hazardous waste stored in the CAA.



Photo 21 – Tote for Universal Waste Lamps in CAA



Photo 22 – Container of broken mercury containing lamps in the CAA.