

RCRA Inspection Report

1) Inspector and Author of Report

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U.S. Environmental Protection Agency, Region 4
Enforcement and Compliance Assurance Division
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RCRA Enforcement Section
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2) Facility Information

Ascend Elements, Inc.
9176 Industrial Drive, NE
Covington, GA 30014
Newton County

EPA ID#: GAR000094110
NAICS #: 335910 – Battery Manufacturer

3) Responsible Official

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4) Inspection Participants

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Kayla Acosta, USEPA
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5) Date of Inspection

January 17, 2024, at 8:50 a.m.

6) Applicable Authority¹

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; Georgia Hazardous Waste Management Act, Ga. Code Ann. § 12-8-60 *et seq.*, and Georgia Hazardous Waste Management Rules, Ga. Comp. R. and Regs. 391-3-11.01 to 391-3-11.18 (2016 and 2018).

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.02(1) [40 C.F.R. § 260.10], a large quantity generator of hazardous waste (LQG) is a generator who generates greater than or equal to 1,000 kilograms (2,200 pounds) of non-acute hazardous waste in a calendar month.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.18 [40 C.F.R. § 273.9], a large quantity handler of universal waste (LQHUW) means a universal waste handler who accumulates 5,000 kilograms or more total of universal waste (batteries, pesticides, mercury-containing equipment, lamps, or aerosol cans, calculated collectively) at any time. This designation as a large quantity handler of universal waste is retained through the end of the calendar year in which the 5,000-kilogram limit is met or exceeded.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 261.2(c)(3)], materials are solid wastes if they are *recycled*—or accumulated, stored, or treated before recycling—as specified in paragraphs (c)(1) through (4) of this section.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 261.4(a)(24)], hazardous secondary material that is generated and then transferred to a verified reclamation facility for the purpose of reclamation is not a solid waste, and may be accumulated without a permit or without having interim status, as required by Section 12-8-66 of the GHWMA, Ga. Code Ann. § 12-8-66, [Section 3005 of RCRA, 42 U.S.C. § 6925], provided that the material complies with conditions listed in Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 261.4(a)(24)(i-v, vi, and vii)] (hereinafter referred to as the “Hazardous Secondary Materials Exclusion”).

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [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 any 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 12-8-66 of the GHWMA, Ga. Code Ann. § 12-8-66 [Section 3005 of RCRA, 42 U.S.C. § 6925], and without complying with Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.16(b) or § 262.17(a)], except as required in Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.15(a)(7) and (8)], provided that the generator complies with the satellite

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.

accumulation area (SAA) conditions listed in Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.15(a)] (hereinafter referred to as the “SAA Permit Exemption”).

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17], an LQG may accumulate hazardous waste on-site for 90 days or less without a permit or without having interim status, as required by Section 12-8-66 of the GHWMA, Ga. Code Ann. § 12-8-66 [Section 3005 of RCRA, 42 U.S.C. § 6925], provided that the generator complies with the conditions listed in Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17] (hereinafter referred to as the “LQG Permit Exemption”).

7) Purpose of Inspection

The purpose of this inspection was to conduct an unannounced compliance evaluation inspection to determine Ascend Elements, Inc., (hereinafter AEI or facility) compliance with the applicable requirements of RCRA and the corresponding Georgia Environmental Protection Division regulations. This was an EPA lead inspection.

8) Facility Description

AEI is located at 9176 Industrial Drive, NE, Covington, Newton County, Georgia at Latitude 33.614133, and Longitude -83.844056. The facility has been operating at this location since January 2022. The total property consists of approximately 20 acres that is owned by Covington Industrial, LLC, C/O Silverpoint Properties, 157 East New England Avenue, Suite 400, Winter Park, Florida. AEI is located on 4 acres of the property. The facility employs approximately 135 people and operates seven days per week, 24 hours per day on several shifts. The facility consists of one large building which is shared with “Mytex Polymers”. AEI’s operation occupies approximately 154,000 square feet of the building space. The City of Covington provides potable water and sanitary sewer services.

AEI submitted a RCRA site notification form (EPA Form 8700-12) of its regulated waste activity to the Georgia Environmental Protection Division (GAEPD) on May 24, 2023, notifying as a large quantity generator (LQG) of hazardous waste (D001, D002, D003, D004, D006-D009, D011), a large quantity handler of universal waste (LQHUW), and a hazardous secondary material (HSM) handler. AEI originally notified of their HSM activities on February 18, 2022.

AEI submitted a variance application to the GAEPD in October 2022, for the storage of unused lithium-ion batteries prior to recycling the battery as a hazardous secondary material. AEI submitted an amended variance application on or about November/December 2022 (“the variance”), with financial assurance documents to the GAEPD. AEI received a Verified Recycler Variance (“the VRV”), from the GAEPD on December 12, 2022, to store unused wet lithium-ion batteries.

AEI constructed a wastewater treatment system to concentrate and remove non-hazardous salts for resale or for off-site disposal. The City of Covington, Georgia issued AEI an Industrial

Wastewater Discharge Permit to discharged treated wastewater generated from the lithium-ion battery process and for its utility operations. The permit was effective on November 9, 2023, and expires at midnight on July 1, 2028.

GAEPD issued AEI an Air Quality Permit for the construction and operation of a lithium-ion battery recycling facility. The air permit allows for the operation of boilers, the metal recovery line, wet and dry shredders, a regenerative thermal oxidizer, a scrubber system, and several dust collectors. The permit was issue on December 6, 2022.

AEI operates several existing process tanks. The tanks are used in the wastewater treatment system for the wet process line, for the process reactor, and tanks for the holding and leaching processes, and raw chemical storage. Recycled materials are stored in one cubic yard bags and various size containers.

AEI operates one outdoor aboveground tank to store hazardous waste.

Emergency Incident Reports:

AEI responded to five emergency incidents between March 3, 2023, and December 1, 2023. The fire department responded to each incident.

- On March 3, 2023, dry cathode material processed in the shredder reacted resulting in a fire on a conveyor. AEI activated the fire suppression system, but the fire could not be extinguished. The fire department responded and contained the fire;
- On June 6, 2023, wet cells thermally reacted to rainwater in a supersack contained in an intermediate bulk container (IBC) tote;
- On August 7, 2023, dry cathode material processed in the shredder reacted resulting in a fire on a conveyor. AEI suppressed the fire using fire extinguishers;
- On August 20, 2023, a small fire was observed in the bagging station at the dry shredding line. AEI suppressed the fire using fire extinguishers; and
- On December 1, 2023, cathode rolls reacted on the wet shredding line resulting in a thermal event without a fire.

AEI indicated batteries that are processed that consist of only aluminum and no graphite overheat in the process resulting in a fire and heavy smoke that is difficult to extinguish.

AEI installed new safety systems consisting of a thermal coupler, four automatic shutoff temperature sensors, and a CO₂ and water fire suppression system to the dry process line.

AEI receives unused dry end-of-life, off-specification, recalled, and scrap lithium-ion batteries in the form of “waste jelly rolls” (part number RM-SK-JR-811). AEI receives unused wet end-of-life, off-specification, recalled, and scrap charged and non-charged lithium-ion batteries in the form of “waste cells” (RM-SK-CELL-811 and RM-ML-CELL), and “waste modules” (RM-SK-MDL-811). AEI receives the unused dry and wet end-of-life, off-specification, recalled, and scrap lithium-ion batteries (battery(ies)) primarily from SK Battery America (SKBA). The battery is delivered

via truck, unloaded, sorted, and stored in the battery receiving and storage area before processing.

According to the variance, AEI recycles lithium-ion batteries, specifically nickel, manganese, and cobalt (NMC) batteries, which use a nickel, manganese, and cobalt compound as its cathode and graphite as its anode. AEI will not accept lithium metal batteries, nickel-cadmium batteries, and lead-acid batteries for recycle.

Dry batteries are transferred to the dry shredding line and processed through a series of mechanical and magnetic operations (e.g., disassembly, crushing, screening, magnetic separation, sieving) that separates and sorts the battery components into plastic, metallic shells, anode foils, cathode foils, and anode/cathode material (black mass). The recycling process produces waste anode powder (RM-SK-ANP), aluminum, copper, plastic mix (FG-Al, Cu, Plastic Mix and FG-ITC-Al, Cu, Plastic Mix), plastic shred material from ITC jelly rolls (FG-ITC Plastic), ITC aluminum from cathode foils (FG-ITC-Al, Shredded), type 3 black mass from cathode foils (FG-ITC-BM-TYPE3), and plastic shred (FG-Plastic Shred).

Wet batteries containing the organic electrolyte solvent (electrolyte) are transferred to the wet shredding line. The charged battery is discharged to ensure safe handling and is next processed through a series of mechanical and magnetic operations (e.g., disassembly, crushing, screening, magnetic separation, sieving) that separates and sorts the battery components into plastic, metallic shells, anode foils, cathode foils, and anode/cathode material (black mass). The electrolyte is recovered in process holding tanks, electrically heated dryers, and condensers. This process is conducted in sealed, dust tight, and atmosphere-controlled machines. The condensed electrolyte is stored in an outdoor aboveground tank prior to off-site shipment as a hazardous waste. The recycling process produces wet black mass, not otherwise specified (FG-WTL BM, NOS), wet copper, aluminum, and plastic mix (FG-WTL Cu, Al, Plastic Mix), and wet plastic shred (FG-WTL Plastic, Light).

According to the variance, the recycled lithium phosphate, cobalt sulfate, and nickel sulfate is sold as products to battery manufacturers for use as raw materials in the production of rechargeable electric batteries.

According to the variance, the black mass is processed in the metal recovery line using inorganic acids to convert metal oxide into metal sulfate and metal phosphate using a series of leaching, precipitation, and extraction processes. Although the Variance includes a description of the metal recovery line, AEI has decommissioned the line, and the process operation is not currently performed at the facility.

According to the variance, the recovered mixed metals and plastics are shipped to facilities for reuse. Plastics from the wet and dry shredding process that are not recyclable will be disposed as non-hazardous waste.

According to the variance, AEI is exploring buyers for the recovered electrolyte and if a buyer cannot be secured, the electrolyte will be managed as a hazardous waste and shipped off-site for fuel blending at a permitted facility.

According to the variance, the wastewater treatment system will include the concentration and removal of non-hazardous salts for resale or for off-site disposal.

According to the variance, the wastewater treatment system will generate sodium chloride, sodium sulfate, a mixture of magnesium, iron, calcium, and copper hydroxides, manganese/copper sludge, calcium fluoride, and oil residue. The sodium sulfate, the mixed metal hydroxides (magnesium, calcium, copper, and iron), and manganese/copper sludge will be sold for recycling.

According to the variance, the graphite will be sold for recycling, or it will be upgraded to battery grade graphite at a future AEI facility. The aluminum hydroxide will be sold for further recycling.

According to the variance, the calcium fluoride, oil residue, and the sodium chloride are non-hazardous waste.

Hazardous waste generated include broken or damaged batteries containing electrolyte (D001, D003), waste scrubber cleanup debris containing electrolyte (D001, D002), scrubber water from scrubber secondary containment cleanup (D002), black mass from research and development operations. Laboratory waste generated include waste corrosives (acids), waste sodium hydroxide, waste cathode material contaminated with sodium hydroxide or lithium hydroxide, waste laboratory debris, and waste residue from cleaning laboratory equipment and personal protective equipment. Floor scrubber wastewater and scrubber wastewater are non-hazardous waste.

AEI's inbound battery standard operating procedure (SOP) requires SKBA to provide the product identification, packaging photographs, safety data sheets (SDS), and a completed incoming material identification form compliant with the AEI SOP prior to AEI receiving the battery from SKBA. The AEI account manager verifies the incoming battery on the incoming material identification form is correct and the information is next reviewed by manufacturing for acceptance. If a battery shipment arrives without proper documents AEI holds the shipment for up to six hours, until the account manager obtains proper documents for the shipment. If the proper documents are not received on time, AEI may reject the shipment.

AEI has an agreement with SKBA on mislabeled inbound batteries and the mislabeled batteries are sent back if not corrected. AEI indicated SKBA visits them on a quarterly basis to review what they have shipped to AEI. AEI representative indicated everything that they have received is what they were authorized to receive.

AEI receives the battery by truck and trailer in one cubic yard bags (supersacks), 250-gallon open top totes, and cardboard boxes in the battery receiving and storage area. The battery is unloaded onto the loading dock, visually and manually inspected, and the battery is compared to the paperwork/bill of lading. The battery is next moved to the battery staging area for inventory. The battery is labeled, marked with the weight, tagged, and barcoded. The tag is marked with the date received, storage location, quantity (lbs/kgs), marked with the type of battery (dry or wet), marked as raw, processed, or finished, and marked with the initials of the person conducting the inventory. If needed, the battery is wiped with a rag to remove dirt or residue prior to storage. The battery is next stored on pallets on the floor and in four-foot by four-foot spaces within racks constructed of heavy-duty steel columns and rows, several levels high (racks). AEI representatives indicated there are approximately 480 spaces in the battery receiving and storage area. The racks are labeled with bar codes to scan for information on the battery. The battery is stored in the available space of first in first out. Charged wet batteries are separated from dry and non-charged wet batteries and are stored in a separate rack location. Dry and non-charged wet batteries are stored in different areas from each other on available rack space but may be stored in the same rack location. AEI has not developed an official policy on how long the battery is stored prior to recycling. AEI documents the battery storage information electronically in a database.

AEI representatives indicated that wet batteries received as a sealed cell are assumed to be charged and are segregated from the remaining wet battery. AEI uses a voltage meter to determine the voltage. AEI documents the voltage reading, the battery serial number, pallet number, and a photograph of the battery in a log. AEI representatives indicated they hold the voltage meter over a few of the sealed cells to determine if they are charged. AEI representatives indicated if they receive a charged battery the procedure is to document the receipt of the charged battery and to contact Environmental Health Safety. AEI decides whether to store the charged battery for recycle or to return the charged battery to the supplier.

AEI representatives indicated a transport record accompanying a mislabeled battery shipment from the supplier is changed by the supplier to correctly document the battery shipment. If the mislabeled battery shipment cannot be corrected, AEI has the authority to reject it.

9) Previous Inspection History

AEI has never previously been inspected by the GAEPD or by the EPA for compliance with the federal and the State of Georgia hazardous waste regulations.

10) Opening Conference

On January 17, 2024, EPA inspectors William Kappler, Tarin Tischler, and Kayla Acosta accompanied by GAEPD inspectors Holly Nelson, Sharon Priyadarshini, and Andrea Kemberling (inspectors), arrived at AEI at approximately 8:50 AM. The inspectors were stopped at the entrance of the facility by a guard and inspectors announced the purpose of the visit. The guard asked for the inspector's names and recorded the EPA GOV tag number. The inspectors

proceeded to the AEI main office. The inspectors were greeted at the front lobby reception area by Shawanda Clements. The inspectors identified themselves and explained the purpose of the visit to Shawanda Clements who asked inspectors to sign-in. Tracy Ellis Environmental Health Safety (EHS) Manager received the inspectors and escorted inspectors to a conference room. The inspectors were joined in the conference room by Mike Maupin Director of Operations, Jake Birdsall Production Manager, Scott Plickert Plant Manager, and Apia Charlemagne Senior Environmental Coordinator (AEI representatives) for the opening conference. The inspectors introduced themselves, showed their credentials to the AEI representatives and explained the purpose of the visit.

The inspectors described the anticipated use of a digital camera and the use of an iPad to conduct and document the inspection electronically as well as by logbook. The EPA provided a list of records for review. The EPA inspector described information on Small Business Resources. 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/small_business_info.pdf. The EPA inspector also discussed the facility's ability, pursuant to 40 C.F.R. § 2.203, to assert a business confidentiality claim for information submitted to EPA. AEI did not assert a formal business confidentiality claim.

AEI representatives provided an overview of the facility's history and current operations during the opening conference. Inspectors requested a diagram or a site map that identifies the areas in the building, storage units, sources, and processes relevant to battery storage and waste generation and management (SAAs, CAAs, UW). AEI representatives indicated process line schematics were submitted with the Variance and there are no changes from a high-level perspective, of the processes and units described in the Variance. The process line schematics described by the AEI representatives did not identify waste generation, storage, and management. AEI has a 3D model of the facility tank system, but they indicated the model may be undergoing revision.

AEI representatives also indicated they are looking to construct a sister facility in Kentucky to process the metals from black mass to possibly produce a precursor cathode active material ("pCAM").

The opening conference participants also discussed health and safety protocols and required personal protective equipment before AEI representatives led the inspectors on a tour of the facility operations.

11) Inspection Observations

Battery Receiving and Storage Area

The battery receiving and storage area (BRSA) is used for the storage of dry, wet non-charged, and wet charged batteries, black mass, damaged and non-recyclable batteries, and waste battery related material. The area is constructed with a fire suppression system. Inbound

batteries are barcoded and numbered; and the information is entered into an electronic system.

The inspectors randomly inspected the dry, wet non-charged, and wet charged BRSA. The inspectors observed the batteries are received in a variety of quality and some of the dry and wet non-charged batteries did not appear in good condition (Attachment 2 Photograph 1 through 5).

AEI representatives indicated their response to a spill or a broken battery depends on the type of battery and if electrolyte has been released. The response is to segregate the battery, contain the spill or release of the battery or electrolyte using emergency kits, and to follow emergency procedures. Broken battery material is stored in a container. AEI representatives indicated there are four spill kits in the BRSA. The inspectors observed a red container storing waste personal protective equipment (PPE) in the BRSA. The inspectors observed the container was closed and labeled with the words, "PPE Disposal Only" (Attachment 1 Photographs 1 and 2). The inspectors requested the waste determination record.

The inspectors observed four 250-gallon totes storing floor scrubber wastewater in the BRSA. The inspectors requested the waste determination record.

The inspectors observed 36 pallets of supersacks containing black mass. The inspectors requested the waste determination record.

The inspectors observed several 55-gallon black containers marked as damaged/defective and recalled lithium-ion batteries (damaged batteries) in rack spaces in the rear of the BRSA. AEI representatives indicated the damaged batteries are returned to the battery manufacturer. The inspectors observed the 55-gallon containers were not labeled or marked clearly with the words Hazardous Waste, Universal Waste, or Hazardous Secondary Material.

On January 29, 2024, AEI responded by email to the EPA's request to provide the waste determination/waste profile records on several black 55-gallon containers of damaged batteries. AEI indicated the material was sent from the closed Ascend Elements Worcester plant as a sample from the commercial department before internal shipping protocols were established. AEI indicated the material is not considered waste and will be sent back to the parent company. AEI provided photographs of the material in the containers. One photograph indicated the packaging included fire suppressant material and one photograph identified the container content with a label marked as "LI-Ion EV Cells, Used Batteries" and dated October 27, 202 (year was cut-off). An invoice provided by AEI indicated several thousand pounds of batteries were shipped from the Ascend Elements Worcester plant to AEI on April 4, 2022.

Dry Process Line

AEI representatives indicated the dry process line is operating at full capacity but limited by the amount of dry battery feed stock they receive for processing. The jelly roll is the main type of battery processed in the dry process line. The jelly roll has not undergone cell formation and

has not been manufactured into a battery module. The jelly roll is a capsule of graphite, aluminium, and plastic. Nothing larger than a six-to-fourteen-inch jelly roll is processed in the dry line. AEI also receives the black mass and mixed metals from SKBA. Batteries processed in the dry line are loaded in a feed hopper and conveyor belt system. Employees fitted with respirators manually sort the battery to identify and remove foreign material. The battery is next conveyed to a shredder that consists of a three-stage hammer mill that is the beginning of the comminution process to reduce the battery material particle size by fracturing, grinding, and milling. The battery is next processed through two screw conveyors that sort, screen, and bag the battery. The first screw conveyor processes the black mass to a storage hopper and next into a supersack. The second screw conveyor processes the metals and plastic to separate storage hoppers and next to separate supersacks.

A spill or a release of black mass, mixed metal, and plastic dust is recovered by physical means of sweeping, brooming, and mechanical water scrubbers.

The inspectors observed an open cardboard box near the feed hopper conveyor accumulating floor sweepings and black mass. The cardboard box was labeled with the words “floor sweepings and black mass waste product.”

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.11], a person who generates a solid waste, as defined in Ga. Comp. R. and Regs. 391-3-11-.07(1) [40 C.F.R. § 261.2], must make an accurate determination as to whether that waste is a hazardous waste following the methods articulated in Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.11].

The inspectors also observed a cardboard box in this area accumulating wet cells. The cardboard box was labeled with the words “wet cells from dry line”. The inspectors observed the cardboard box was not labeled or marked clearly with words identifying the content of the container.

Wet Process Line

AEI representatives indicated they are conducting System Assessment Testing (SAT) of the wet process line to debug and test for final refinement. The wet process line operates occasionally.

AEI processes wet non-charged and wet charged batteries differently. Batteries for processing are determined if the supplier has discharged the battery.

Wet charged batteries are first processed under a fire suppression/saltwater bath system to prepare the battery for discharge. The saltwater is accumulated as waste. The discharged battery is then processed in the wet process line.

Wet non-charged batteries containing electrolyte or residue of electrolyte are loaded in a one-ton feed hopper and elevator/conveyor belt system. The battery is next automatically conveyed to a shredder operated in a negative oxygen atmosphere that is the beginning of the

comminution process to reduce the battery material particle size by fracturing, grinding, and milling. The battery is next processed in a Hazard Room (H₃) in a series of bunkers prior to the separation of the black mass, mixed metals, and plastic from the liquid electrolyte. Bunker number one and number two use hydrofluoric acid on the shredded battery, prior to drying in an electrically powered dryer system to convert the electrolyte from a liquid state to a gaseous state. The battery is next processed in a separate bunker to separate the heavy from the light battery fractions. The battery is next processed through two screw conveyors that sort, screen, and bag the battery. The first screw conveyor processes the black mass to a storage hopper and then to a supersack. The second screw conveyor processes the metal and plastic to separate storage hoppers and then to separate supersacks.

The gaseous electrolyte is transferred to the Hazard Room and condensed in a series of condensers to a liquid. The liquid electrolyte is transferred to an outdoor aboveground 9,941-gallon capacity storage tank. Emissions from the drying process are scrubbed using liquid sodium hydroxide to neutralize the waste generated from the process. The waste scrubber water (pH around 10.55- 11) is stored in a 250-gallon tote and shipped off-site as nonhazardous waste. The resulting air emission is captured per the air quality permit.

Control Room

The control room monitors the wet process.

Hallway Outside the Control Room

The inspectors observed a 250-gallon tote labeled with the words nonhazardous waste in a hallway outside the control room accumulating scrubber water (Attachment 1 Photograph 3).

Dust accumulated on the floor in the process areas is collected by manually sweeping and mechanical scrubbing of the floor. Wastewater generated from the scrubbing operation is accumulated in 250-gallon totes and stored in the wastewater treatment tank farm.

The inspectors observed four 250-gallon totes storing floor scrubber water generated from mechanically scrubbing the floor (Attachment 1 Photograph 4).

Hallway Area Outside the Scrubber Room

The inspectors observed a 250-gallon tote in the hallway outside the scrubber room accumulating scrubber water. The 250-gallon tote was labeled with the words nonhazardous waste (Attachment 1 Photograph 5).

Scrubber Room

Emissions from the drying process are neutralized in a scrubber using liquid sodium hydroxide. The inspectors observed one 55-gallon SAA container on a spill containment pallet storing waste sodium hydroxide and water from cleanup of containment pallet spills. The inspectors observed the container was closed, in good condition, labeled with the words hazardous waste, labeled with the word's sodium hydroxide waste, and marked with the date September 9, 2023. The inspectors observed the container was not marked or labeled with an indication of the

hazards (Attachment 1 Photograph 6 and Attachment 2 Photographs 6 and 7). AEI representatives indicated the date was marked on the container to track the amount of time and waste needed to fill the container, and that the container was not full and was continuing to accumulate waste.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [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.

On January 29, 2024, AEI emailed the EPA a photograph of the Scrubber Room SAA identifying it as a “Hazardous Waste Satellite Accumulation Area”, the SAA container was labeled with an indication of the hazards, and the SAA container was not marked with a date. A SAA container log sheet was also identified in the submittal.

Condenser Room

AEI representatives explained access to the condenser room should be limited due to hazard conditions unless fitted with proper personnel protective equipment (PPE). The inspectors observed the room from the doorway. The inspectors observed three process bunkers (tanks) and condensers in this room. The inspectors requested to review the waste determination record conducted of the electrolyte’s volatile organic concentration at the point of waste origination.

The inspectors observed the condensers, pumps, valves, flanges, connections, and pipe connections (components) were not marked to identify each piece of equipment. The inspectors requested to review the records for the determination made for each piece of equipment that contains or contacts a hazardous waste with organic concentration that equals or exceeds 10 percent by weight. The liquid electrolyte is stored in an outdoor aboveground tank.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(6)], which incorporates Ga. Comp. R. and Regs. 391-3-11-.10(1) [40 C.F.R. § 265.1050(c)], a condition of the LQG Permit Exemption requires that each piece of equipment to which 40 C.F.R. § 265 - Subpart BB applies shall be marked in such a manner that it can be distinguished readily from other pieces of equipment.

On January 31, 2024, AEI emailed the EPA photographs of the components in the Condenser Room appeared marked in such a manner that it can be distinguished readily from other pieces of equipment.

Central Accumulation Area (CAA)

This area accumulates hazardous waste for 90-days or less and is located against a wall in the Hallway adjacent to the Condenser Room. The inspectors observed two 30-gallon containers of waste electrolyte cleanup solids, one 5-gallon container of nonhazardous waste gear oil, and one empty 15-gallon container (Attachment 1 Photograph 7). The inspectors observed the two

55-gallon containers of waste electrolyte were closed, in good condition with aisle space, labeled with the words hazardous waste (D001, D002), labeled with an indication of the hazards, and each marked with the date January 3, 2024. The inspectors observed a no smoking sign was not posted in the CAA while storing an ignitable hazardous waste (Attachment 2 Photograph 8, 9, 10, 11, and 12).

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(1)(vi)(B)], which is a condition of the LQG Permit Exemption, the large quantity generator must take precautions to prevent accidental ignition or reaction of ignitable or reactive waste. This waste must be separated and protected from sources of ignition or reaction including but not limited to the following: Open flames, smoking, cutting, and welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), spontaneous ignition (*e.g.*, from heat-producing chemical reactions), and radiant heat. While ignitable or reactive waste is being handled, the large quantity generator must confine smoking and open flame to specially designated locations. “No Smoking” signs must be conspicuously placed wherever there is a hazard from ignitable or reactive waste.

On January 29, 2024, AEI emailed the EPA a photograph of the Condenser Room’s door, adjacent to the CAA, that showed a no smoking sign posted on the door and a photograph of the CAA with a sign on the wall marked as a “Hazardous Waste Central Accumulation Area”.

Tank T-3030

Tank T-3030 (Tank) was constructed on or about May/June 2022 and stores waste electrolyte from the wet process line. The Tank is constructed on a concrete base, on top of a concrete pad and surround by a three-to four-foot-high concrete secondary containment wall. The Tank is constructed with a rooftop manway, a four-inch conservation vent/flame arrester, an eight-inch emergency relief valve, and with a two-inch inlet pipe. The Tank operates with a nitrogen blanket at atmospheric pressure. The inspectors observed the Tank was not labeled or marked with the words hazardous waste and not marked with a date. The inspectors observed the Tank pumps, valves, flanges, connections, and other pipe connections (Tank components) were not marked to identify each piece of equipment. The inspectors observed the Tank was labeled with an indication of the hazards (Attachment 1 Photographs 8, 9, 10, 11 and Attachment 2 Photograph 13).

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(5)(ii)(A)], which is a condition of the LQG Permit Exemption, a large quantity generator must mark or label its tanks with the words “Hazardous Waste”.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(6)], which incorporates Ga. Comp. R. and Regs. 391-3-11-.10(1) [40 C.F.R. § 265.1050(c)], a condition of the LQG Permit Exemption requires that each piece of equipment to which 40 C.F.R. § 265 - Subpart BB applies shall be marked in such a manner that it can be distinguished readily from other pieces of equipment.

The inspectors also observed five 250-gallon totes storing scrubber water on the concrete pad next to the Tank. The concrete pad is constructed with a sump along the pad's length. The totes were closed, in good condition, and labeled with the words nonhazardous waste (Attachment 1 Photograph 8).

On January 29, 2024, AEI responded to the EPA's request to identify the date waste electrolyte was initially stored in the tank. AEI indicated they began storing the waste electrolyte in July 2023, during the commissioning and testing of equipment. AEI indicated the first off-site shipment of waste electrolyte was on September 28, 2023.

On January 29, 2024, AEI emailed the EPA photographs of the Tank labeled with the words "hazardous waste".

Container of Black Mass Near North End of the Wet Shredding Line

The inspectors observed a 55-gallon container with a small hole in the container's top against the indoor wall near the Wet Shredding Line. AEI representatives opened the container and it appeared to contain black mass. AEI representatives indicated the black mass was sent from the Ascend Elements Westborough, Massachusetts research and development (R&D) program. The container was labeled with the words nonhazardous waste and marked with the words "Battery waste." AEI representatives indicated they could not ship the container back to the R&D program because they did not have documentation on the container's content (Attachment 1 Photographs 12 and 13).

On January 29, 2024, AEI responded to the EPA's request to identify who shipped the 55-gallon container of black mass and the date it was shipped to AEI. AEI indicated the 55-gallon container was accumulating wet black mass and it was shipped from the Ascend Elements Westborough facility on April 5, 2023, to be sold to support the black mass pilot demand.

Paint Contractor Area

The inspectors observed several one-gallon to 5-gallon containers of paint related material on three pallets generated by a paint contractor in a room near the Metal Recovery Line. The inspectors observed full and partially full containers of wet paint. Several containers were open accumulating wet paint. The inspectors observed a trash container accumulating waste paint related debris (Attachment 1 Photographs 14, 15, and 16) and (Attachment 2 Photographs 14 and 15).

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.11], a person who generates a solid waste, as defined in Ga. Comp. R. and Regs. 391-3-11-.07(1) [40 C.F.R. § 261.2], must make an accurate determination as to whether that waste is a hazardous waste following the methods articulated in Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.11].

On January 29, 2024, AEI responded to the EPA's request to provided records of the waste determination/waste profile on waste paint and debris near the Metal Materials Line. AEI

indicated the paint contractor was Amcon and that the paint was labeled; the remaining buckets were used and/or removed by Amcon. AEI indicated that they instructed Amcon to label all secondary containers, provide proper storage of containers, and provide proof of training of their personnel on the RCRA regulations. A waste determination record of the wet paint and of the waste paint related debris was not provided.

QC Laboratory

AEI representatives indicated the laboratory is a clean room and requested only two inspectors enter to inspect. The laboratory conducts product validation testing for moisture, pH, and ICP analysis. Samples are also obtained and shipped to an AEI facility in Michigan. AEI is waiting for the delivery of a hood for proper ventilation during test procedures and was not operating at the time of the inspection. The inspectors observed a one-gallon container was connected by a tube to a laboratory instrument. The inspectors observed the container was labeled with the words hazardous waste, marked with the words mixed metals, H₂SO₄, HNO₃, and marked with the date January 7, 2024. The inspectors observed the container was not closed and marked or labeled with a hazard indicator (Attachment 2 Photograph 16). The inspectors observed waste did not appear to be stored in the container at the time of the inspection. The inspectors suggested that the container should be kept closed if storing hazardous waste.

Metal Recovery Line

AEI has decommissioned the metal recovery line; and the process was not operating at the time of the inspection. The inspectors observed non-operating tanks and piping.

Wastewater Treatment System

AEI representatives indicated the wastewater treatment system is not fully operational until February 2024. Wastewater is recycled to remove a metal bearing product for sale. The wastewater generated is pH adjusted and discharged to the City of Covington sanitary sewer. AEI representatives indicated no wastewater or waste solids have been generated or discharged to date.

Air Quality System

GAEPD issued AEI an Air Quality Permit to operate boilers, the Metal Recovery Line, wet and dry shredders, Regenerative Thermal Oxidizer, a scrubber system, and several dust collectors. The dust collectors filter air borne particulate matter and recover black mass. AEI representatives indicated they conducted air quality testing.

Black Mass

AEI representatives indicated the black mass contains nickel magnesium and cobalt and needs to be recycled to capture the metal products. AEI has profiled the black mass contaminated material. AEI's short-term goal is to manage the black mass as a byproduct and sell it back to the same customer. AEI's long-term goal is to process the black mass at the future Ascend Elements Kentucky facility to produce a new battery material called "p-CAM".

HQ Research and Development Black Mass

AEI headquarters located in Westborough, Massachusetts (HQ) has conduct research and development of black mass for recycling. The excess black mass received from HQ is currently stored in the warehouse since the Summer of 2023 under fire suppression. AEI representatives indicated they are determining the exact composition of the black mass to dispose of the material.

Rotary Kiln

The inspectors observed an electrically powered rotary kiln installed near the decommissioned Metals Recovery Line. AEI representatives indicated the rotary kiln was installed in November 2023 and will take the place of the decommissioned Metals Recovery Line.

12) Record Review

RCRA site notification form (EPA Form 8700-12)

AEI submitted a RCRA site notification form (EPA Form 8700-12) of its regulated waste activity to the GAEPD on May 24, 2023. AEI notified as a LQG of hazardous waste, a LQHUW, and a HSM handler. The facility did not specifically notify as handling universal waste batteries. The facility should renotify to the GAEPD for the type of universal waste they will handle.

Inbound Battery Standard Operating Procedure

AEI's inbound battery standard operating procedure (SOP) requires SKBA to provide the product identification, packaging photographs, safety data sheets (SDS), and a completed incoming material identification form compliant with AEI's SOP prior to receiving the battery.

AEI's provided SOPs for inbound batteries:

- SOP for, Receiving Raw Material, document number 20220609-01, which identifies the procedures for receiving material for processing in the dry line, wet line, and chemical line;
- SOP for, Procedure, Inbound Shipment Requirements, document number COR-PRO-8.2-02, which identifies a general process for inbound shipments, for receiving incoming batteries, and the Incoming Material Identification Form; and
- SOP for, Pre-Feed Safety Inspection for SK Material, document number COV-CML-003, which identifies the safe steps for inspection of material.

Manifest/Bill of Lading

Batteries are shipped to AEI on a manifest and/or on a bill of lading with a packing list and AEI's SOP required paperwork. On January 30, 2024, and February 5, 2024, AEI emailed the EPA the Teahouse shipping records and other shipping records for batteries received by AEI. AEI representatives indicated the teahouse records identify the transfer record of batteries from AEI to the AEDDF warehouse at 10157 Industrial Drive, Covington, Georgia. AEI provided:

- a Uniform Straight Bill of Lading for the shipment of 44,000 pounds of scrap lithium-ion batteries (UN2923) from the AEI Worcester, Massachusetts facility to AEI;
- an excel spreadsheet identifying the Stock Transfer Orders Teahouse to Base 1. The excel spreadsheet was provided without data; and
- teahouse records for the shipment of batteries from SKBA to AEI from August 14, 2023, to December 31, 2023, and for January 11, 2024, and January 17, 2024.

The teahouse record identifies the battery shipping facility, the battery receiving facility, the shipping and receiving date, the billing reference number, the number and weight of each intermediate bulk container (IBC) of cells, jelly rolls, and modules, the bulk weight of batteries AEI received, the packing list identifying the shipping and receiving facility, the billing reference number, the count number, and the pallet number.

Manifest/Bill of Lading - Recovered Material

AEI ships material recovered from the battery processing lines to Interco Trading Company. On January 29, 2024, AEI emailed the EPA Uniform Straight Bill of Lading records for 12 shipments of recovered material from the wet process line in January 2024. The shipments were for black mass ranging from 987 kilograms to 19,881 kilograms, mixed metals from 1,158 kilograms to 6,850 kilograms, one shipment of plastic for 2,435 kilograms, and one shipment of copper for 4,836 kilograms.

Waste Determination Records

On January 29, 2024, AEI emailed the EPA waste determination records, consisting of waste profile (WP) records, safety data sheets (SDS), and laboratory report(s).

Safety Data Sheets (SDS)

AEI provided SDSs for LG Vista 2.0 Battery Pack (GM Bolt MC), revised on July 30, 2019, for LG Chem., Ltd., Lithium-Ion Polymer Battery, dated February 1, 2017, and for AEI's SDS for black mass wet, dated August 9, 2022. The flash point for black mass wet is reported at 80 degrees Fahrenheit.

AEI provided Product Information Sheets and SDSs for the Apple & Beats cell phone lithium-ion batteries.

Nonconforming Reports/Rejected Battery Shipments

AEI receives dry batteries in the form of "waste jelly rolls" (part number RM-SK-JR-811). AEI receives wet charged and wet non-charged batteries in the form of "waste cells" (RM-SK-CELL-811 and RM-ML-CELL), and "waste modules" (RM-SK-MDL-811). The inspectors observed wet charged and wet non-charged batteries stored in the AEI Battery Receiving and Storage Area. AEI representatives indicated voltage testing is not conducted on every single battery but scanned over a few of the batteries to determine if the batteries are charged. AEI's SOP "Pre-Feed Safety Inspection for SK Material (section 5.4) indicates "if material is enclosed inside of mylar packaging, assume that it's a live cell, segregate from the remaining cells, and follow these step". The SOP refers to steps in section 5.4.1 and 5.4.2. AEI representatives indicated to

the inspectors that their customer agreements state AEI cannot accept any charged batteries. The language in AEI's SOP should be amended to accurately identify the procedures for charged batteries.

On January 29, 2024, AEI emailed the EPA the nonconforming report form, nonconforming guideline information, and records of rejected loads.

AEI provided two nonconforming reports documenting they rejected two shipments of charged cells on December 28, 2023.

The nonconforming reports indicate that batteries were shipped without prior authorization and AEI did not have sufficient storage space under fire suppression for the batteries. AEI rejected the shipment due to violations of company policies.

Internal Shipping Documents

The inspectors requested to review records tracking batteries shipped from the AEDDF Warehouse (GAR000096420) to AEI (GAR000094110) for storage and processing. AEI representatives indicated that shipments from the AEDDF Warehouse to AEI are electronically tracked in AEI's internal system. It appears that paper records (manifest, bill of lading, other shipping documents) are not maintained. At the time of the inspection the inspectors requested AEI provide a screen shot or print out or explanation of AEI's internal tracking system.

On January 29, 2024, AEI emailed the EPA its written response ("1-24-2024 EPA Audit Responses AEDDF 7-12"), to the EPA's request for records of each shipment of universal waste from AEDDF to other facilities for 3 years from the date of shipment. AEI, indicated in its response that "the AEDDF has functioned solely to receive and store batteries from 8/14/2023 until 1/4/2024, at which point AEDDF began internal transfers of the batteries to other facilities". AEI indicated that the records are provided by month in a Folder titled "AEDDF Outbound" in several Excel spreadsheet files, documenting the batteries shipped from AEDDF to the AEI facility.

On January 30, 2024, and February 5, 2024, AEI emailed the EPA several "Teahouse Records" for the months from September 2023 to January 2024. It appears these records document the shipment of batteries from SKBA to AEI. AEI also emailed the EPA an excel spreadsheet titled "Teahouse to Base 1 STOs", which did not contain data. AEI indicated in its January 31, 2024, email response to the EPA that "teahouse" refers to transfer records from AEI to the AEDDF Warehouse. AEI also provided:

- Ascend Elements Receiving History (record), from August 14, 2023, to January 28, 2024.

The record documents the type of dry or wet battery received from SKBA, the date it was received, the order number, the weight, and the cost. The receiving facility is not clearly identified on the record.

Contingency Plan

AEI prepared an Emergency Preparedness and Response Plan for Management of Excluded Hazardous Secondary Materials (Emergency Plan), preparing the Plan based that the facility is accumulating 6,000 kilograms or greater of hazardous secondary material.

The Emergency Plan has a facility description, material handling practices, personnel responsibilities, arrangements with outside responders, emergency and pollution prevention systems, evacuation plan, emergency response procedures, notification determination, training, and inspections.

Personnel Training

According to AEI's Emergency Plan, HSM training must be provide to personnel responsible for hazardous secondary material handling and related emergency response activities.

The Emergency Plan indicates, specific training will be given to Emergency Coordinators and Plant Supervisors and may include spill response, fire extinguisher uses and other fire-fighting procedures, and medical response.

The Emergency Plan indicates, emergency response team members will be given HSM training and OSHA HAZWOPER training.

The Emergency Plan indicates, all personnel will be given training as needed on instructions on hazardous secondary materials handling with emphasis on specific materials, that the employee handles, location and operation of spill control, fire, and safety equipment, personal protective equipment use and maintenance on the emergency evacuation plan, including signals and location of exits.

The Emergency Plan indicates, employees directly involved in HSM transportation and storage activities will be trained within six months of their hiring date and must also be given an annual review of topics covered in the initial training.

The inspectors reviewed the 24-hour HAZWOPER training record listing 19 personnel that were given training in March and October 2023. The training record included the person's name, work shift, date trained, and job title consisting of nine people in production, one in environmental health and safety, one in quality, two in shipping and receiving, one in engineering, one in maintenance, and four in material handling. The training record indicated Jamira Britt, EHS Coordinator was given HAZWOPER training on March 13, 2023. Charlemagne Apia, Senior Environmental Coordinator was not identified on the 24-hour HAZWOPER training record.

The inspectors reviewed sign-in sheets that identified a list of 38 people given training in the Emergency Action Plan (EAP) on November 28, 2023, and November 30, 2023. The sign-in sheets included the person's name, department, shift, and person's signature. The departments listed on the sign-in sheet included people in production, warehouse, office, quality,

maintenance, discharge, and in engineering. Personnel in environmental health and safety were not identified on the sign-in sheet.

The inspectors reviewed a sign-in sheet that identified a list of 31 people given training in the Roles and Responsibilities of the EAP on October 30, 2024, October 31, 2024, and on several dates in November 2023. The sign-in sheet included the person's name, date completed, and employee initials. The sign-in sheet did not identify the person's job title or department. Personnel in environmental health and safety were not identified on the sign-in sheet.

At the time of the inspection AEI did not provide documentation that HSM training had been given to personnel.

On January 29, 2024, AEI emailed the EPA a "Hazardous Secondary Materials Annual Training Plan" for HSM training to be given to employees in 2024. The training plan was dated June 11 and 12, 2024. It appears that Charlemagne Apia, Senior Environmental Coordinator is not on the HSM Training Plan to be given HSM handler training. It is not clear from review of the HSM Annual Training Plan if all emergency coordinators and all environmental health and safety personnel will be given HSM training.

On January 29, 2024, AEI emailed the EPA the Environmental Training Excel Spreadsheet listing 100 active personnel given training in various courses. The spreadsheet identified training given to personnel titled as production operators, production supervisors, production operator team leads, laboratory technicians, warehouse associates, warehouse team leads, warehouse supervisors, shipping receiving, mechanical and electrical maintenance techs, engineers, EHS coordinators, construction program, program, material planning, maintenance, plant, quality, EHS managers and other miscellaneous technical, human resources, and administrative positions.

Training courses listed on the spreadsheet consisted of emergency evacuation, emergency preparedness, emergency response, environmental regulations, personal protective equipment micro course, spill prevention & control, emergency action plan, waste management training, various OSHA related courses, hazard communications, and laboratory specific courses. The course agenda for environmental regulations and waste management training was not identified in the submittal.

Inspectors reviewed the training for the following AEI personnel:

- Charlemagne Apia, Senior Environmental Coordinator was given waste management training on March 5, 2023;
- Thamara Pena, EHS Coordinator does not appear to have been given 24-hour HAZWOPER, environmental regulations, and waste management training;
- Jordan Evens Desir, EHS Technician, was given waste management training on January 25, 2023;
- Tracy Ellis, EHS Manager and Emergency Coordinator, was given hazard communications training on June 27, 2022. It appears Tracy Ellis was not given training in environmental

regulations and waste management;

- Jacob Birdsall, Production Manager and Emergency Coordinator, was given hazard communications training on May 26, 2022, and May 27, 2022. It appears Jacob Birdsall was not given training in environmental regulations and waste management; and

- It appears Scott Plickert, Plant Manager and listed in the contingency as an Emergency Coordinator was not given training in environmental regulations and waste management.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 260.31(d)(4)], the intermediate or reclamation facility must have the equipment and trained personnel needed to safely manage the hazardous secondary material and must meet emergency preparedness and response requirements under 40 CFR part 261 subpart M.

Personnel Training Records

According to AEI's Emergency Plan, training records will be maintained and will include the name, job title, and job description of persons trained. The date of training and the topic of training and an outline of the training syllabus or other indication of course content.

The inspectors reviewed the training records and observed the name of the person, the job title or the department was documented. The employee job description was not available at the time of the inspection.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 260.31(d)(4)], the intermediate or reclamation facility must have the equipment and trained personnel needed to safely manage the hazardous secondary material and must meet emergency preparedness and response requirements under 40 CFR part 261 subpart M.

LQG Records

Manifests

The inspectors reviewed three uniform hazardous waste manifests and the land disposal restriction (LDR) notification forms for the shipment of hazardous waste flammable liquid, corrosive (D001, D002) from Tank T-3030. AEI shipped 4,600-gallon of hazardous waste on September 28, 2023 (025416119 JJK), 4,188 gallons of hazardous waste on November 2, 2023 (010668155 JJK), and 4,987-gallons of hazardous waste on December 13, 2023 (025423165 JJK). The shipment of hazardous waste on manifest (025423165 JJK) identify AEI as a VSQG and not with AEI's EPA identification number in box 1 (GAR000094110). The hazardous waste was transported by STAT, Inc (NCD908799142) to Tradebe Treatment and Recycling (TND000772186).

AEI representatives indicated the facility is scheduled for a fourth shipment of waste electrolyte for the week of January 22, 2024.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.20(a)(1)], a generator that offers for transport a hazardous waste for offsite treatment, storage, or disposal must

prepare a Manifest (OMB Control number 2050-0039) on EPA Form 8700-22, and, if necessary, EPA Form 8700-22A. According to the Hazardous Waste Manifest Instructions, generators must enter the Generator's Mailing Address and the Generator's Site Address (if different than the mailing address) in Item 5. In addition, generators must enter the Transporter or Transporters used in Item 6 and 7.

Waste Determination Records

On January 17-18, 2024, AEI provided the inspectors waste determination records, including waste profile (WP) records, safety data sheets (SDS), and laboratory report(s). A waste determination was conducted on battery wash water (WP date September 23, 2022), black mass (no WP date), dry process dust collector filters (WP date February 8, 2023), contaminated dirt, spilled (WP date February 9, 2023), and sodium hydroxide and water from cleanup of containment pallet spills (no WP date). The laboratory analysis for sodium hydroxide and water from cleanup of containment pallet spills reported a pH greater than or equal to 12.5.

On January 17-18, 2024, AEI provided the inspectors the Pace Analytical Services (PAS) laboratory report dated May 1, 2023, for the analysis of scrubber wastewater sampled on April 20, 2023. The scrubber wastewater was tested for RCRA toxicity characteristic (TC) metals, TC volatile organics, TC semivolatile organics, pH, and flashpoint.

On January 29, 2024, AEI emailed the EPA a "Profile Chart" identifying the change in the waste naming convention from an "old waste name" to a "new waste name".

Profile Chart

Old waste name	New waste name
Contaminated dirt	Black mass debris Used PPE
Black mass	Black Mass Black mass floor sweepings
Battery wash water	Battery wash water Black Mass Water AC Condensate Floor Scrubbing Wastewater Wet Line Scrubber Wastewater

On January 29, 2024, AEI emailed the EPA waste determination records, including waste profile (WP) records, safety data sheets (SDS), and laboratory report(s).

Waste Profiles

AEI provided waste profiles records for floor scrubbing wastewater, black mass AC condensate, battery wash wastewater, black mass floor sweepings, black mass debris, used PPE, wet line scrubber wastewater, and waste black mass. The waste profile records were dated January 19, 2024, and January 22, 2024. The waste profile record for waste black mass was dated December 19, 2023. The waste profile for floor scrubbing wastewater, black mass AC condensate, battery wash wastewater, and wet line scrubber wastewater is report with a pH

range between 1-10. An accurate pH result should be reported for the profiled waste and not reported as a pH range.

Laboratory Reports

On June 11, 2024, AEI emailed the GAEPD the PAS laboratory report dated January 3, 2024, for the analysis of scrubber wastewater and Zamboni floor wastewater. The scrubber wastewater and floor wastewater were sampled on December 2, 2023, for RCRA TC metals, total metals, volatile organics, semivolatile organics, flashpoint, specific gravity, odor, and reactive cyanide/sulfide.

On January 29, 2024, AEI emailed the EPA the PAS laboratory report dated January 26, 2024, for the analysis of black mass in nine supersacks (SB01-SB09) transported by AEI to the AEDDF warehouse for storage. The black mass was sampled on January 19, 2024, for RCRA TC metals, total metals, volatile organics, semivolatile organics, pH, flashpoint, specific gravity, and reactive cyanide/sulfide.

On January 29, 2024, AEI emailed the EPA the PAS laboratory report dated January 26, 2024, for the analysis of samples from two 55-gallon containers (LD01-LD02) in the AEDDF Warehouse labeled with the words non-hazardous waste and marked with the words "battery water" and for a sample from one 55-gallon container (55GD01/LD03) of wet black mass received by AEI from AEI's Westborough facility. The battery water and wet black mass were sampled on January 19, 2024, for RCRA TC metals, total metals, volatile organics, semivolatile organics, pH, flashpoint, specific gravity, and reactive cyanide/sulfide.

On February 5, 2024, AEI emailed the EPA the PAS laboratory report dated August 22, 2023, for the analysis of waste electrolyte sampled from the Tank. The waste electrolyte was sampled on August 8, 2023, for RCRA TC metals, total metals, volatile organics, semivolatile organics, pH, flashpoint, odor, and specific gravity. The flashpoint result was 89.6 degrees Fahrenheit.

Contingency Plan

AEI's Emergency Plan did not include minimizing the potential hazards to human health and the environment from fires, explosions, or unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(6)], which incorporates Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.261], and is a condition of the LQG Permit Exemption, the contingency plan must describe the actions facility personnel must take to comply with §§ 262.260 and 262.265 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.

Quick Reference Guide

AEI did not have a quick reference guide (QRG) available at the time of the inspection in accordance with all the elements in Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.262(b)].

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(6)], which incorporates Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.262(b)], and is a condition of the LQG Permit Exemption, a large quantity generator that first becomes subject to these provisions after May 30, 2017 or a large quantity generator that is otherwise amending its contingency plan must at that time submit a quick reference guide of the contingency plan to the local emergency responders identified at paragraph (a) of this section or, as appropriate, the Local Emergency Planning Committee. The quick reference guide must include the following elements:

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

On January 29, 2024, AEI emailed the EPA a QRG that identified the facility information, emergency contacts, and hazardous waste information.

Personnel Training

Inspectors reviewed the syllabus for mandatory hazardous waste management training required for personnel and the hazardous waste regulatory training given by Heritage Group Safety. The training did not include universal waste and hazardous secondary material training. Inspectors requested hazardous waste and universal waste training records for AEI personnel following the inspection.

The inspectors reviewed the 24-hour HAZWOPER training record listing 19 personnel that were given training in March and October 2023. The training record included the person's name,

work shift, date trained, and job title consisting of nine people in production, one in environmental health and safety, one in quality, two in shipping and receiving, one in engineering, one in maintenance, and four in material handling. The record indicated Jamira Britt, EHS Coordinator was given HAZWOPER training on March 13, 2023. Charlemagne Apia, Senior Environmental Coordinator was not identified on the 24-hour HAZWOPER training record.

The inspectors reviewed sign-in sheets that identified a list of 38 people given training in the Emergency Action Plan (EAP) on November 28, 2023, and November 30, 2023. The sign-in sheets included the person's name, department, shift, and person's signature. The departments listed on the sign-in sheet included people in production, warehouse, office, quality, maintenance, discharge, and in engineering. Personnel in environmental health and safety were not identified on the sign-in sheet.

The inspectors reviewed a sign-in sheet that identified a list of 31 people given training in the Roles and Responsibilities of the EAP on October 30, 2024, October 31, 2024, and on several dates in November 2023. The sign-in sheet included the person's name, date completed, and employee initials. The sign-in sheet did not identify the person's job title or department. Personnel in environmental health and safety were not identified on the sign-in sheet.

On January 29, 2024, AEI emailed the EPA the Environmental Training Excel Spreadsheet listing 100 active personnel given training in various courses. The spreadsheet identified training given to personnel titled as production operators, production supervisors, production operator team leads, laboratory technicians, warehouse associates, warehouse team leads, warehouse supervisors, shipping receiving, mechanical and electrical maintenance techs, engineers, EHS coordinators, construction program, program, material planning, maintenance, plant, quality, EHS managers and other miscellaneous technical, human resources, and administrative positions.

Training courses consisted of emergency evacuation, emergency preparedness, emergency response, environmental regulations, personal protective equipment micro course, spill prevention & control, emergency action plan, waste management training, various OSHA related courses, hazard communications, and laboratory specific courses. The course agenda for environmental regulations and waste management training was not identified in the submittal. The inspectors reviewed the training for the following AEI personnel:

- Charlemagne Apia, Senior Environmental Coordinator was given waste management training on March 5, 2023;
- Jamira Britt, EHS Coordinator was given 24-hour HAZWOPER training on March 13, 2023;
- Thamara Pena, EHS Coordinator does not appear to have been given 24-hour HAZWOPER, environmental regulations, and waste management training;
- Jordan Evens Desir, EHS Technician, was given waste management training on January 25, 2023;
- Tracy Ellis, EHS Manager and Emergency Coordinator, was given hazard communications

training on June 27, 2022. It appears Tracy Ellis was not given training in environmental regulations and waste management;

- Jacob Birdsall, Production Manager and Emergency Coordinator, was given hazard communications training on May 26, 2022, and May 27, 2022. It appears Jacob Birdsall was not given training in environmental regulations and waste management;

- It appears Scott Plickert, Plant Manager and Emergency Coordinator was not given training in environmental regulations and waste management;

- It appears Ianna Renee Horton, Quality Lead was given waste management training on August 19, 2022; and

- It appears that Angelic Holston, Laboratory Tech has not been given training, Sydney Howard, and Katelyn Grace Johnson Laboratory Techs were given waste management training on September 16, 2022, and on November 8, 2022.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(7)(i)(A)], which is a condition of the LQG Permit Exemption, facility personnel must successfully complete a program of classroom instruction, online training (e.g., computer-based, or electronic), or on-the-job training that teaches them to perform their duties in a way that ensures compliance with this part. The large quantity generator must ensure that this program includes all the elements described in the document required under paragraph (a)(7)(iv) of this section.

Personnel Training Records

The sign-in sheet for personnel given HAZWOPER training and EAP training was reviewed. The sign-in sheets included the job title or the department title. The employee job description was not available at the time of the inspection.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(7)(iv)(B)], which is a condition of the LQG Permit Exemption, the large quantity generator must maintain the following documents and records at the facility: 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.

Weekly Container Inspection Logs

AEI conducts weekly hazardous waste inspections of the SAA and the CAA using a checklist. On January 29, 2024, AEI emailed the EPA the weekly hazardous waste inspection checklist (checklist). AEI provided 10 logs from October 2, 2023, to November 29, 2023. There was a duplicated log provided for the inspections conducted on November 22, 2023, and November 29, 2023. At the time of the inspection inspectors observed two 55-gallon containers of hazardous waste electrolyte (D001, D002) marked with the date January 3, 2024. Weekly inspection records were not provided. The checklist includes the facility name, date, time, and the name of the person conducting the inspection. The checklist includes inspecting that the area is free of debris and other materials, the ground is clean and dry, free from spills or leaks, containers are in good condition (free of dents and corrosion, not bulging, or otherwise

deteriorating), containers are properly sealed, closed, labeled as hazardous waste, the label legibly filled out and facing forward, incompatible wastes are properly segregated, wastes are stored in compatible containers, adequate secondary containment, spill response equipment is adequate and accessible, an eyewash station is accessible and ready for use, a fire extinguisher is in place and clearly visible, all waste containers stored inside the waste storage area, and the total volume of waste stored is below the facility's generator status.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(1)(v)], which is a condition of the LQG Permit Exemption, at least weekly, the large quantity generator must inspect central accumulation areas. The large quantity generator must look for leaking containers and for deterioration of containers caused by corrosion or other factors. See paragraph (a)(1)(ii) of this section for remedial action required if deterioration or leaks are detected.

Daily Tank Inspections

AEI conducts monthly inspections of the Tank using a "Monthly Facility SPCC Inspection Checklist" (monthly checklist). AEI provided seven monthly checklists from June 30, 2023, to December 11, 2023. The monthly checklist documents the facility name, the name and location of the Tank, the oil related equipment, oil storage containers, month, date, and the name of the person conducting the inspection. The monthly checklist documents the inspection conducted on the virgin extractant fluid tanks, on the Tank, the Tank appurtenances, and on the oil-filled manufacturing and operational equipment and other oil storage containers. At the time of the inspection it appears AEI did not have daily tank inspection records.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(2)], which incorporates Ga. Comp. R. and Regs. 391-3-11-.10(1) [40 C.F.R. § 265.195(a)], and is a condition of the LQG Permit Exemption, the owner or operator must inspect, where present, at least once each operating day, data gathered from monitoring and leak detection equipment to ensure that the tank system is being operated according to its design.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(2)], which incorporates Ga. Comp. R. and Regs. 391-3-11-.10(1) [40 C.F.R. § 265.195(b)], and is a condition of the LQG Permit Exemption, except as noted under the paragraph (c) of this section, the owner or operator must inspect at least once each operating day: overfill/spill equipment to ensure that it is in good working order; above ground portions of the tank system, if any, to detect corrosion or releases of waste and; the construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system to detect erosion or signs of releases of hazardous waste.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(2)], which incorporates Ga. Comp. R. and Regs. 391-3-11-.10(1) [40 C.F.R. § 265.195(e)], and is a condition of the LQG Permit Exemption, a generator accumulating hazardous waste in tanks

must conduct daily inspections of tank ancillary equipment that is not provided with secondary containment.

On January 29, 2024, AEI emailed the EPA a “daily waste solvent (electrolyte) AST inspection checklist” (daily checklist) for inspecting the Tank. AEI provided the daily checklist for the month of January 2024 documenting they began daily Tank inspections on January 16, 2024, to January 26, 2024. The inspectors observed the daily checklist documents the facility name, date, and the name of the person performing the inspection. The inspectors observed the daily checklist inspects that the tank system is operated according to its design, the tank overfill and spill control equipment is in good working order, the tank system is free of corrosion and evident damage or released/spilled waste, are pipes, valves, and pumps free of leaks and in good condition, the secondary containment is free of erosion or waste/liquid, the tank is labeled “HAZARDOUS WASTE”, all label information legible, and have wastes been disposed of within allowable accumulation times. The daily checklist did not indicate if the ancillary equipment that is not provided with secondary containment, as described in 40 C.F.R. § 265.193(f)(1) through (4), is inspected at least once each operating day.

Tank Assessment

Records that a written assessment reviewed and certified by a qualified professional engineer was conducted were not available at the time of the inspection.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(2)], which incorporates Ga. Comp. R. and Regs. 391-3-11-.10(1) [40 C.F.R. § 265.192(a)], and is a condition of the LQG Permit Exemption requires that (a) Owners or operators of new tank systems or components must ensure that the foundation, structural support, seams, connections, and pressure controls (if applicable) are adequately designed and that the tank system has sufficient structural strength, compatibility with the waste(s) to be stored or treated, and corrosion protection so that it will not collapse, rupture, or fail. The owner or operator must obtain a written assessment reviewed and certified by a qualified Professional Engineer in accordance with § 270.11(d) of this chapter attesting that the system has sufficient structural integrity and is acceptable for the storing and treating of hazardous waste. This assessment must include the following information:

- (1) Design standard(s) according to which the tank(s) and ancillary equipment is or will be constructed.**
- (2) Hazardous characteristics of the waste(s) to be handled.**

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(2)], which incorporates Ga. Comp. R. and Regs. 391-3-11-.10(1)], [40 C.F.R. § 265.192(g)], and is a condition of the LQG Permit Exemption, the owner or operator must obtain and keep on file at the facility written statements by those persons required to certify the design of the tank system and supervise the installation of the tank system in accordance with the requirements of paragraphs (b) through (f) of this section to attest that the tank system was properly designed and installed and that repairs, pursuant to paragraphs (b) and(d) of this section

were performed. These written statements must also include the certification statement as required in R.6 I- 79.270.11 (d).

RCRA Organic Air Emissions

RCRA organic air emission records were not available at the time of the inspection. AEI began storing waste electrolyte in the Tank in July 2023. The Tank and Tank's components consisting of pumps, valves, flanges, joints, pipe connections, and pressure relief devices, were not documented in an operating record.

Subpart BB Standards

Monthly records for monitoring of pumps and valves and conducting visual inspections were not available at the time of the inspection.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(1)(i)], which incorporates Ga. Comp. R. and Regs. 391-3-11-.10(1) [40 C.F.R. § 265.1052(a)], and is a condition of the LQG Permit Exemption, a generator accumulating hazardous waste in tanks must comply with the RCRA Subpart BB organic air emission standards for equipment leaks, including, but not limited to, ensuring each pump in light liquid service is monitored monthly to detect leaks by the methods specified in S.C. Code Ann. Regs. 61-79.265.1063(b) [40 C.F.R. § 265.1063(b)] and is checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(1)(i)], which incorporates Ga. Comp. R. and Regs. 391-3-11-.10(1) [40 C.F.R. § 265.1057(a)], and is a condition of the LQG Permit Exemption, a generator accumulating hazardous waste in tanks must comply with the RCRA Subpart BB organic air emission standards for equipment leaks, including, but not limited to, ensuring each valve in gas/vapor or light liquid service is monitored monthly to detect leaks by the methods specified in S.C. Code Ann. Regs. 61-79.265.1063(b) [40 C.F.R. § 265.1063(b)].

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(1)(i)], which incorporates Ga. Comp. R. and Regs. 391-3-11-.10(1) [40 C.F.R. § 265.1058(a)], and is a condition of the LQG Permit Exemption, a generator accumulating hazardous waste in tanks must comply with the RCRA Subpart BB organic air emission standards for equipment leaks, including, but not limited to, ensuring pressure relief devices in light liquid service and flanges and other connectors are monitored within 5 days by the method specified in S.C. Code Ann. Regs. 61-79.265.1063(b) [40 C.F.R. § 265.1063(b)] if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method.

The record requirements for Subpart BB were not available at the time of the inspection.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(1)(i)], which incorporates Ga. Comp. R. and Regs. 391-3-11-.10(1) [40 C.F.R. § 265.1064(b)(1)], and is a condition of the LQG Permit Exemption, a generator accumulating hazardous waste in tanks

must comply with the RCRA Subpart BB organic air emission standards for equipment leaks, including, but not limited to, recording the following information in the facility operating record and for each piece of equipment to which subpart BB of part 265 applies: equipment identification number and hazardous waste management unit identification; approximate locations within the facility; type of equipment; percent-by-weight total organics in the hazardous waste stream at the equipment; hazardous waste state at the equipment; and the method of compliance with the standard.

Subpart CC - Tank Standards

RCRA organic air emission records were not available at the time of the inspection. The Tank began storing waste electrolyte in July 2023.

A determine the average volatile organic (VO) concentration of a hazardous waste at the point of waste origination was not available at the time of the inspection.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(6)], which incorporates Ga. Comp. R. and Regs. 391-3-11-.10(1) [40 C.F.R. § 265.1084(a)], a condition of the LQG Permit Exemption requires a waste determination procedure to determine average volatile organic (VO) concentration of a hazardous waste at the point of waste origination.

The level of tank controls that apply to the Tank to control the air emissions was not available at the time of the inspection.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(1)(i)], which incorporates Ga. Comp. R. and Regs. 391-3-11-.10(1) [40 C.F.R. § 265.1085(c)(1-4)], and is a condition of the LQG Permit Exemption, a generator accumulating hazardous waste in tanks must comply with the RCRA Subpart CC organic air emission standards for tanks, including, but not limited to, controlling air pollutant emissions from a tank using Tank Level 1 controls meeting the requirements specified in S.C. Code Ann. Regs. 61-79.265.1085(c)(1-4) [40 C.F.R. § 265.1085(c)(1-4)]: the owner or operator shall determine the maximum organic vapor pressure for a hazardous waste to be managed in the tank using Tank Level I controls before the first time the hazardous waste is placed in the tank. The maximum organic vapor pressure shall be determined using the procedures specified in S.C. Code Ann. Regs. 61-79.265.1084(c) [40 C.F.R. § 265.1084(c)] of this subpart; the tank shall be equipped with a fixed roof designed to meet the specifications in S.C. Code Ann. Regs. 61-79.265.1085 (c)(2)(i-iv) [40 C.F.R. § 265.1085(c)(2)(i-iv)]; whenever a hazardous waste is in the tank, the fixed roof shall be installed with each closure device secured in the closed position as specified in 25 S.C. Code Ann. Regs. 61-79.265.1085(c)(3)(i-iii) [40 C.F.R. § 265.1085(c)(2)(i-iii)]; and the fixed roof and its closure devices shall be visually inspected by owners or operators using Tank Level I control requirement to check for defects that could result in air pollutant emissions at least once every year and shall maintain a record of the inspection in accordance with the requirements specified in S.C. Code Ann. Regs. 61-79.265.1090(b) [40 C.F.R. § 265.1090(b)].

The record requirements for Subpart CC were not available at the time of the inspection.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(1)(i)], which incorporates Ga. Comp. R. and Regs. 391-3-11-.10(1) [40 C.F.R. § 265.1090], and is a condition of the LQG Permit Exemption, a generator accumulating hazardous waste in tanks must comply with the RCRA Subpart CC organic air emission standards for tanks, including, but not limited to, each owner or operator of a facility subject to requirements in this subpart shall record and maintain the information specified in paragraphs (b) through G) of this section, as applicable to the facility.

Leak Detention and Repair (LDAR)

RCRA LDAR records were not available at the time of the inspection.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(1)(i)], which incorporates Ga. Comp. R. and Regs. 391-3-11-.10(1) [40 C.F.R. § 265.1064(g)], a condition of the LQG Permit Exemption requires that the following information pertaining to all equipment subject to the requirements in §§ 265.1052 through 265.1060 shall be recorded in a log that is kept in the facility operating record: (2)(ii) The designation of this equipment as subject to the requirements of §§ 265.1052(e), 265.1053(i), or 265.1057(f) shall be signed by the owner or operator. (4)(i) The dates of each compliance test required in §§ 265.1052(e), 265.1053(i), 265.1054, and 265.1057(f). (4)(ii) The background level measured during each compliance test. (4)(iii) The maximum instrument reading measured at the equipment during each compliance test.

On January 29, 2024, AEI emailed their response to the EPA's request for RCRA organic air emission Subpart BB and Subpart CC information and supporting records. AEI provided:

- an inspection history report, report date January 31, 2024, of all Tank components and components inspected;
- an LDAR monitoring report, report date January 31, 2024, for all Tank components and components in light liquid service;
- a monthly component monitoring checklist for 2024, for the Tank components and components;
- a master component detail list, report date January 31, 2024, for Tank components and components in light liquid service;
- work orders from AEI's contractor "TEAM" to establish a LDAR database, the tagging, identification, and monitoring of Tank components and components;
- email from TEAM to AEI summarizing the scope of LDAR work to conduct;
- a certificate of erection for the Tank components physically, mechanically, and electrically installed, connected, tested, cleaned, and checked; and
- photographs of the components marked with a numbered tag to identify each piece of equipment.

The documents submitted on January 29, 2024, from AEI indicated the work was conducted on January 29-31, 2024.

Hazardous Waste Reduction Plan

On January 31, 2024, and February 5, 2024, AEI emailed the EPA its 2024 hazardous waste reduction plan (HWRP). The HWRP was dated January 26, 2024.

13) Closing Conference

The inspectors conducted a closing conference with AEI representatives. During this meeting, the inspectors stated their preliminary conclusions of the inspection.

14) Summary of Observations

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.11], a person who generates a solid waste, as defined in Ga. Comp. R. and Regs. 391-3-11-.07(1) [40 C.F.R. § 261.2], must make an accurate determination as to whether that waste is a hazardous waste following the methods articulated in Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.11].

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [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.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(5)(ii)(A)], which is a condition of the LQG Permit Exemption, a large quantity generator must mark or label its tanks with the words “Hazardous Waste”.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(1)(vi)(B)], which is a condition of the LQG Permit Exemption, the large quantity generator must take precautions to prevent accidental ignition or reaction of ignitable or reactive waste. This waste must be separated and protected from sources of ignition or reaction including but not limited to the following: Open flames, smoking, cutting, and welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), spontaneous ignition (*e.g.*, from heat-producing chemical reactions), and radiant heat. While ignitable or reactive waste is being handled, the large quantity generator must confine smoking and open flame to specially designated locations. “No Smoking” signs must be conspicuously placed wherever there is a hazard from ignitable or reactive waste.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(6)], which incorporates Ga. Comp. R. and Regs. 391-3-11-.10(1) [40 C.F.R. § 265.1050(c)], a condition of the LQG Permit Exemption requires that each piece of equipment to which 40 C.F.R. § 265 - Subpart BB applies shall be marked in such a manner that it can be distinguished readily from other pieces of equipment.

Records

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 260.31(d)(4)], the intermediate or reclamation facility must have the equipment and trained personnel needed to safely manage the hazardous secondary material and must meet emergency preparedness and response requirements under 40 CFR part 261 subpart M.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.20(a)(1)], a generator that offers for transport a hazardous waste for offsite treatment, storage, or disposal must prepare a Manifest (OMB Control number 2050-0039) on EPA Form 8700-22, and, if necessary, EPA Form 8700-22A. According to the Hazardous Waste Manifest Instructions, generators must enter the Generator's Mailing Address and the Generator's Site Address (if different than the mailing address) in Item 5. In addition, generators must enter the Transporter or Transporters used in Item 6 and 7.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(6)], which incorporates Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.261], and is a condition of the LQG Permit Exemption, the contingency plan must describe the actions facility personnel must take to comply with §§ 262.260 and 262.265 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.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(6)], which incorporates Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.262(b)], and is a condition of the LQG Permit Exemption, a large quantity generator that first becomes subject to these provisions after May 30, 2017 or a large quantity generator that is otherwise amending its contingency plan must at that time submit a quick reference guide of the contingency plan to the local emergency responders identified at paragraph (a) of this section or, as appropriate, the Local Emergency Planning Committee. The quick reference guide must include the following elements:

- (1) The types/names of hazardous wastes in layman's terms and the associated hazard associated with each hazardous waste present at any one time (*e.g.*, toxic paint wastes, spent ignitable solvent, corrosive acid);
- (2) The estimated maximum amount of each hazardous waste that may be present at any one time;
- (3) The identification of any hazardous wastes where exposure would require unique or special treatment by medical or hospital staff;
- (4) A map of the facility showing where hazardous wastes are generated, accumulated, and treated and routes for accessing these wastes;
- (5) A street map of the facility in relation to surrounding businesses, schools, and residential areas to understand how best to get to the facility and also evacuate citizens and workers;
- (6) The locations of water supply (*e.g.*, fire hydrant and its flow rate);

- (7) The identification of on-site notification systems (*e.g.*, a fire alarm that rings off site, smoke alarms); and
- (8) The name of the emergency coordinator(s) and 7/24-hour emergency telephone number(s) or, in the case of a facility where an emergency coordinator is continuously on duty, the emergency telephone number for the emergency coordinator.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(7)(i)(A)], which is a condition of the LQG Permit Exemption, facility personnel must successfully complete a program of classroom instruction, online training (*e.g.*, computer-based, or electronic), or on-the-job training that teaches them to perform their duties in a way that ensures compliance with this part. The large quantity generator must ensure that this program includes all the elements described in the document required under paragraph (a)(7)(iv) of this section. Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(7)(iv)(B)], which is a condition of the LQG Permit Exemption, the large quantity generator must maintain 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.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(1)(v)], which is a condition of the LQG Permit Exemption, at least weekly, the large quantity generator must inspect central accumulation areas. The large quantity generator must look for leaking containers and for deterioration of containers caused by corrosion or other factors. See paragraph (a)(1)(ii) of this section for remedial action required if deterioration or leaks are detected.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(2)], which incorporates Ga. Comp. R. and Regs. 391-3-11-.10(1) [40 C.F.R. § 265.192(a)], and is a condition of the LQG Permit Exemption requires that (a) Owners or operators of new tank systems or components must ensure that the foundation, structural support, seams, connections, and pressure controls (if applicable) are adequately designed and that the tank system has sufficient structural strength, compatibility with the waste(s) to be stored or treated, and corrosion protection so that it will not collapse, rupture, or fail. The owner or operator must obtain a written assessment reviewed and certified by a qualified Professional Engineer in accordance with § 270.11(d) of this chapter attesting that the system has sufficient structural integrity and is acceptable for the storing and treating of hazardous waste. This assessment must include the following information:

- (1) Design standard(s) according to which the tank(s) and ancillary equipment is or will be constructed; and
- (2) Hazardous characteristics of the waste(s) to be handled.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(2)], which incorporates Ga. Comp. R. and Regs. 391-3-11-.10(1)], [40 C.F.R. § 265.192(g)], and is a

condition of the LQG Permit Exemption, the owner or operator must obtain and keep on file at the facility written statements by those persons required to certify the design of the tank system and supervise the installation of the tank system in accordance with the requirements of paragraphs (b) through (f) of this section to attest that the tank system was properly designed and installed and that repairs, pursuant to paragraphs (b) and (d) of this section were performed. These written statements must also include the certification statement as required in R.6 I- 79.270.11 (d).

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(2)], which incorporates Ga. Comp. R. and Regs. 391-3-11-.10(1) [40 C.F.R. § 265.195(a)], and is a condition of the LQG Permit Exemption, the owner or operator must inspect, where present, at least once each operating day, data gathered from monitoring and leak detection equipment to ensure that the tank system is being operated according to its design.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(2)], which incorporates Ga. Comp. R. and Regs. 391-3-11-.10(1) [40 C.F.R. § 265.195(b)], and is a condition of the LQG Permit Exemption, except as noted under the paragraph (c) of this section, the owner or operator must inspect at least once each operating day: overfill/spill equipment to ensure that it is in good working order; above ground portions of the tank system, if any, to detect corrosion or releases of waste and; the construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system to detect erosion or signs of releases of hazardous waste.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(2)], which incorporates Ga. Comp. R. and Regs. 391-3-11-.10(1) [40 C.F.R. § 265.195(e)], and is a condition of the LQG Permit Exemption, a generator accumulating hazardous waste in tanks must conduct daily inspections of tank ancillary equipment that is not provided with secondary containment.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(1)(i)], which incorporates Ga. Comp. R. and Regs. 391-3-11-.10(1) [40 C.F.R. § 265.1052(a)], and is a condition of the LQG Permit Exemption, a generator accumulating hazardous waste in tanks must comply with the RCRA Subpart BB organic air emission standards for equipment leaks, including, but not limited to, ensuring each pump in light liquid service is monitored monthly to detect leaks by the methods specified in S.C. Code Ann. Regs. 61-79.265.1063(b) [40 C.F.R. § 265.1063(b)] and is checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(1)(i)], which incorporates Ga. Comp. R. and Regs. 391-3-11-.10(1) [40 C.F.R. § 265.1057(a)], and is a condition of the LQG Permit Exemption, a generator accumulating hazardous waste in tanks must comply with the RCRA Subpart BB organic air emission standards for equipment leaks, including, but not limited to, ensuring each valve in gas/vapor or light liquid service is

monitored monthly to detect leaks by the methods specified in S.C. Code Ann. Regs. 61-79.265.1063(b) [40 C.F.R. § 265.1063(b)].

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(1)(i)], which incorporates Ga. Comp. R. and Regs. 391-3-11-.10(1) [40 C.F.R. § 265.1058(a)], and is a condition of the LQG Permit Exemption, a generator accumulating hazardous waste in tanks must comply with the RCRA Subpart BB organic air emission standards for equipment leaks, including, but not limited to, ensuring pressure relief devices in light liquid service and flanges and other connectors are monitored within 5 days by the method specified in S.C. Code Ann. Regs. 61-79.265.1063(b) [40 C.F.R. § 265.1063(b)] if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(1)(i)], which incorporates Ga. Comp. R. and Regs. 391-3-11-.10(1) [40 C.F.R. § 265.1064(b)(1)], and is a condition of the LQG Permit Exemption, a generator accumulating hazardous waste in tanks must comply with the RCRA Subpart BB organic air emission standards for equipment leaks, including, but not limited to, recording the following information in the facility operating record and for each piece of equipment to which subpart BB of part 265 applies: equipment identification number and hazardous waste management unit identification; approximate locations within the facility; type of equipment; percent-by-weight total organics in the hazardous waste stream at the equipment; hazardous waste state at the equipment; and the method of compliance with the standard.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(6)], which incorporates Ga. Comp. R. and Regs. 391-3-11-.10(1) [40 C.F.R. § 265.1084(a)], a condition of the LQG Permit Exemption requires a waste determination procedure to determine average volatile organic (VO) concentration of a hazardous waste at the point of waste origination.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(1)(i)], which incorporates Ga. Comp. R. and Regs. 391-3-11-.10(1) [40 C.F.R. § 265.1085(c)(1-4)], and is a condition of the LQG Permit Exemption, a generator accumulating hazardous waste in tanks must comply with the RCRA Subpart CC organic air emission standards for tanks, including, but not limited to, controlling air pollutant emissions from a tank using Tank Level 1 controls meeting the requirements specified in S.C. Code Ann. Regs. 61-79.265.1085(c)(1-4) [40 C.F.R. § 265.1085(c)(1-4)]: the owner or operator shall determine the maximum organic vapor pressure for a hazardous waste to be managed in the tank using Tank Level I controls before the first time the hazardous waste is placed in the tank. The maximum organic vapor pressure shall be determined using the procedures specified in S.C. Code Ann. Regs. 61-79.265.1084(c) [40 C.F.R. § 265.1084(c)] of this subpart; the tank shall be equipped with a fixed roof designed to meet the specifications in S.C. Code Ann. Regs. 61-79.265.1085 (c)(2)(i-iv) [40 C.F.R. § 265.1085(c)(2)(i-iv)]; whenever a hazardous waste is in the tank, the fixed roof shall be installed with each closure device secured in the closed position as specified in 25 S.C. Code Ann. Regs. 61-79.265.1085(c)(3)(i-iii) [40 C.F.R. § 265.1085(c)(2)(i-iii)]; and the fixed roof and its closure devices shall be visually inspected by owners or operators using Tank Level I control requirement to check for defects that could result in air pollutant emissions at least

once every year and shall maintain a record of the inspection in accordance with the requirements specified in S.C. Code Ann. Regs. 61-79.265.1090(b) [40 C.F.R. § 265.1090(b)].

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(1)(i)], which incorporates Ga. Comp. R. and Regs. 391-3-11-.10(1) [40 C.F.R. § 265.1090], and is a condition of the LQG Permit Exemption, a generator accumulating hazardous waste in tanks must comply with the RCRA Subpart CC organic air emission standards for tanks, including, but not limited to, each owner or operator of a facility subject to requirements in this subpart shall record and maintain the information specified in paragraphs (b) through G) of this section, as applicable to the facility.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(1)(i)], which incorporates Ga. Comp. R. and Regs. 391-3-11-.10(1) [40 C.F.R. § 265.1064(g)], a condition of the LQG Permit Exemption requires that the following information pertaining to all equipment subject to the requirements in §§ 265.1052 through 265.1060 shall be recorded in a log that is kept in the facility operating record: (2)(ii) The designation of this equipment as subject to the requirements of §§ 265.1052(e), 265.1053(i), or 265.1057(f) shall be signed by the owner or operator. (4)(i) The dates of each compliance test required in §§ 265.1052(e), 265.1053(i), 265.1054, and 265.1057(f). (4)(ii) The background level measured during each compliance test. (4)(iii) The maximum instrument reading measured at the equipment during each compliance test.

15) **List of Attachments**

Attachment 1 – Photograph Log:

Attachment 2 – Photograph Log:

16) **Signed**

**WILLIAM
KAPPLER**

Digitally signed by
WILLIAM KAPPLER
Date: 2024.07.23
10:41:54 -04'00'

William Kappler
Physical Scientist

**TARIN
TISCHLER**

Digitally signed by
TARIN TISCHLER
Date: 2024.07.23
14:42:05 -04'00'

Tarin Tischler
Life Scientist

**KAYLA
ACOSTA**

Digitally signed by
KAYLA ACOSTA
Date: 2024.07.23
15:02:34 -04'00'

Kayla Acosta
Physical Scientist

17) **Concurrence**

ALAN
NEWMAN

Digitally signed by ALAN
NEWMAN
Date: 2024.07.24
11:32:34 -04'00'

Alan Newman
Acting Section Chief
RCRA Enforcement Section

ATTACHMENT 1 – PHOTOGRAPH LOG

ASCEND ELEMENTS INC.

COVINGTON, GEORGIA

COMPLIANCE EVALUATION INSPECTION PHOTOGRAPHS

JANUARY 17, 2024

**Photographs taken by William Kappler
Samsung Camera (Model WB250F)
EPA Property Tag# S75917**



Ascend Elements, Inc. (AEI). Battery Receiving and Storage Area. The inspectors observed a 10-gallon container of waste PPE next to an emergency spill kit. AEI determined the solid waste is nonhazardous waste. The inspectors requested the record of the waste determination. Photograph 1 taken at 10:54 a.m.



AEI. Battery Receiving and Storage Area. The inspectors observed a 10-gallon container of waste PPE next to an emergency spill kit. AEI determined the solid waste is nonhazardous waste. The inspectors requested the record of the waste determination. Photograph 2 taken at 11:00 a.m.



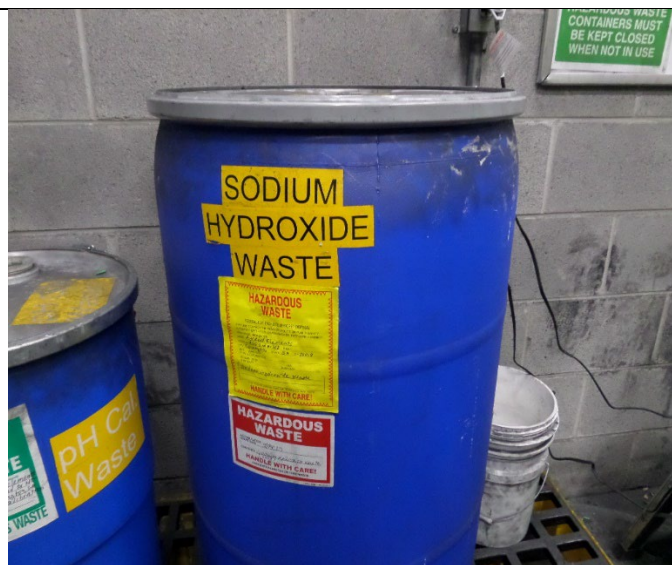
AEI. Outside the Control Room. The inspectors observed a 250-gallon tote outside the control room area accumulating scrubber water labeled with the words nonhazardous waste. Photograph 3 taken at 11:01 a.m.



AEI. Outside of Control Room. The inspectors observed four 250-gallon totes accumulating floor scrubber water generated from mechanically scrubbing the floor. Photograph 4 taken at 11:01 a.m.



AEI. Outside the Scrubber Room. The inspectors observed a 250-gallon tote outside the scrubber room area accumulating scrubber water labeled with the words nonhazardous waste. Photograph 5 taken at 11:47 a.m.



AEI. Scrubber Room. The inspectors observed one 55-gallon SAA container accumulating waste sodium hydroxide from cleanup of the scrubber unit. The inspectors observed the container was not marked or labeled with an indication of the hazards. Photograph 6 taken at 12:00 p.m.



AEI. Central Accumulation Area (CAA). The inspectors observed the CAA was storing ignitable hazardous waste and not identified with the words "no smoking" Photograph 7 taken at 12:13 p.m.



AEI. Tank T-3030. The inspectors observed five 250-gallon totes accumulating scrubber water. Tank T-3030 is in the background. Photograph 8 taken at 12:17 p.m.



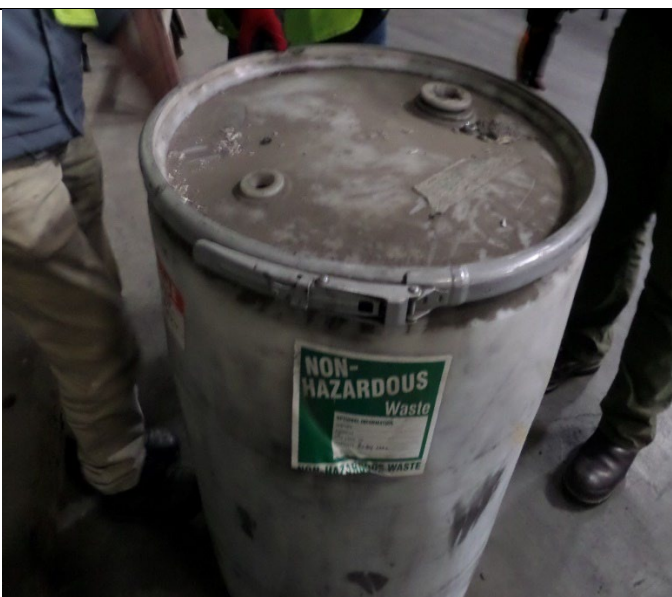
AEI. Tank T-3030. The inspectors observed the tank pumps, valves, and flanges and other pipe connections were not marked to identify each piece of equipment. The inspectors observed the tank was not labeled or marked with the words hazardous waste and not marked with a date. Photograph 9 taken at 12:19 p.m.



AEI. Tank T-3030. The inspectors observed the tank pumps, valves, and flanges and other pipe connections were not marked to identify each piece of equipment. The inspectors observed the tank was not labeled or marked with the words hazardous waste and not marked with a date. Photograph 10 taken at 12:19 p.m.



AEI. Tank T-3030. The inspectors observed the tank pumps, valves, and flanges and other pipe connections were not marked to identify each piece of equipment. The inspectors observed the tank was not labeled or marked with the words hazardous waste and not marked with a date. Photograph 11 taken at 12:19 p.m.



AEI. Container of Black Mass Near Wastewater Treatment System. The inspectors observed a 55-gallon container with a small hole in the container's top near the wastewater treatment system. AEI representatives opened it and indicated the contents was black mass was sent from AEI's Westboro, Massachusetts research and development program. Photograph 12 taken at 12:32 p.m.



AEI. AEI. Container of Black Mass Near Wastewater Treatment System. The inspectors observed a 55-gallon container with a small hole in the container's top near the wastewater treatment system. AEI representatives opened it and indicated the contents was black mass was sent from AEI's Westboro, Massachusetts research and development program. Photograph 13 taken at 12:32 p.m.



AEI. Paint Contractor. The inspectors observed several one-gallon to 5-gallon containers of paint related material generated by a paint contractor near the Metal Recovery Line. The inspectors observed full and partially full containers of wet paint. Several containers were open. The inspectors observed a trash container accumulating waste paint related debris. Photograph 14 taken at 12:39 p.m.



AEI. Paint Contractor. The inspectors observed several one-gallon to 5-gallon containers of paint related material generated by a paint contractor near the Metal Recovery Line. Several containers were open. Photograph 15 taken at 12:39 p.m.



AEI. Paint Contractor. The inspectors observed a trash container accumulating waste paint related debris. Photograph 16 taken at 12:39 p.m.

ATTACHMENT 2 – PHOTOGRAPH LOG

ASCEND ELEMENTS INC.

COVINGTON, GEORGIA

COMPLIANCE EVALUATION INSPECTION PHOTOGRAPHS

JANUARY 17, 2024

Photographs taken by Tarin Tischler



AEI			IMG-2024011711100810876120.jpg
01/17/2024 11:10 AM (ET)	No CBI	No PII	Photographer: Tarin Tischler
Photograph 1 Battery Receiving and Storage Area			33.6123164, -83.84243672
The inspectors observed dry and wet (charged and noncharged) batteries in storage. Back of tag has lot number with date of shipment, marked with identification number for shipping records, bill of lading, and stamped with date received. Attached list of material that came in shipment and the number of pieces shipped.			



AEI			IMG-20240117111015101573386.jpg
01/17/2024 11:10 AM (ET)	No CBI	No PII	Photographer: Tarin Tischler
Photograph 2 Battery Receiving and Storage Area			33.6123563, -83.84236214
The inspectors observed dry and wet (charged and noncharged) batteries in storage. Back of tag has lot number with date of shipment, marked with identification number for shipping records, bill of lading, and stamped with date received. Attached list of material that came in shipment and the number of pieces shipped. Rack identification number and bar code.			



AEI			IMG-20240117111852185292338.jpg
01/17/2024 11:18 AM (ET)	No CBI	No PII	Photographer: Tarin Tischler
Photograph 3 Battery Receiving and Storage Area			33.61239606, -83.84241933
The inspectors observed dry and wet (charged and noncharged) batteries in storage. AEI internal tag attached to battery identifies the date received, storage location, quantity, marked with the type of battery, marked as raw, processed, or finished, and marked with the persons initials.			



AEI			IMG-20240117111859185972533.jpg
01/17/2024 11:18 AM (ET)	No CBI	No PII	Photographer: Tarin Tischler
Photograph 4 Battery Receiving and Storage Area			33.61239327, -83.84241769
The inspectors observed dry and wet (charged and noncharged) batteries in storage. AEI internal tag attached to battery identifies the date received, storage location, quantity, marked with the type of battery, marked as raw, processed, or finished, and marked with the persons initials.			



AEI			IMG-2024011711190519589664.jpg
01/17/2024 11:19 AM (ET)	No CBI	No PII	Photographer: Tarin Tischler
Photograph 5 Battery Receiving and Storage Area			33.61238548, -83.84238511
AEI Internal label and bar code.			



AEI			IMG-2024011711500750780276.jpg
01/17/2024 11:50 AM (ET)	No CBI	No PII	Photographer: Tarin Tischler
Photograph 6 Scrubber Room			33.61272665, -83.84245484
The inspectors observed one 55-gallon SAA container. The container was not marked or labeled with an indication of the hazards.			



AEI			IMG-20240117115013501384162.jpg
01/17/2024 11:50 AM (ET)	No CBI	No PII	Photographer: Tarin Tischler
Photograph 7 Scrubber Room			33.61274063, -83.84245221
The inspectors observed one 55-gallon SAA container. The container was not marked or labeled with an indication of the hazards.			



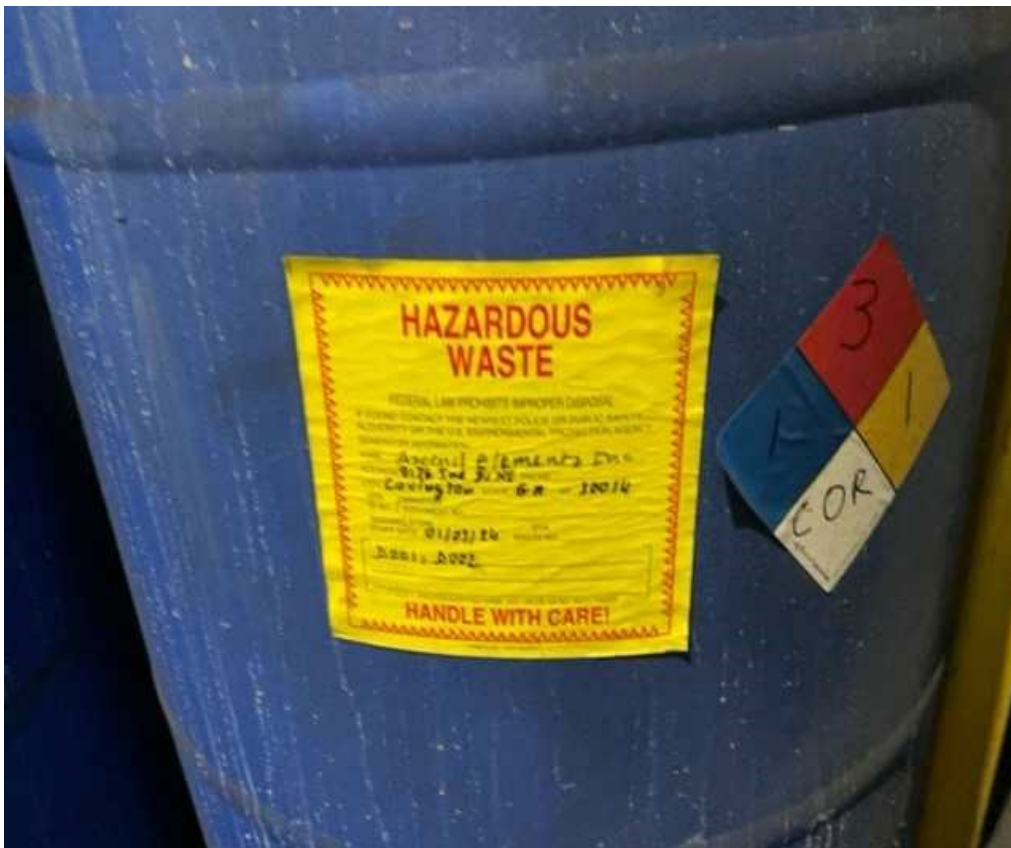
AEI			IMG-20240117121035103580478.jpg
01/17/2024 12:10 PM (ET)	No CBI	No PII	Photographer: Tarin Tischler
Photograph 8 Central Accumulation Area			33.61272151, -83.8424565
The inspectors observed two 30-gallon containers of hazardous waste electrolyte cleanup solids, one 5-gallon container of nonhazardous waste gear oil, and one empty 15-gallon drum. The inspectors observed the CAA is storing ignitable hazardous waste and not identified with the words “no smoking”.			



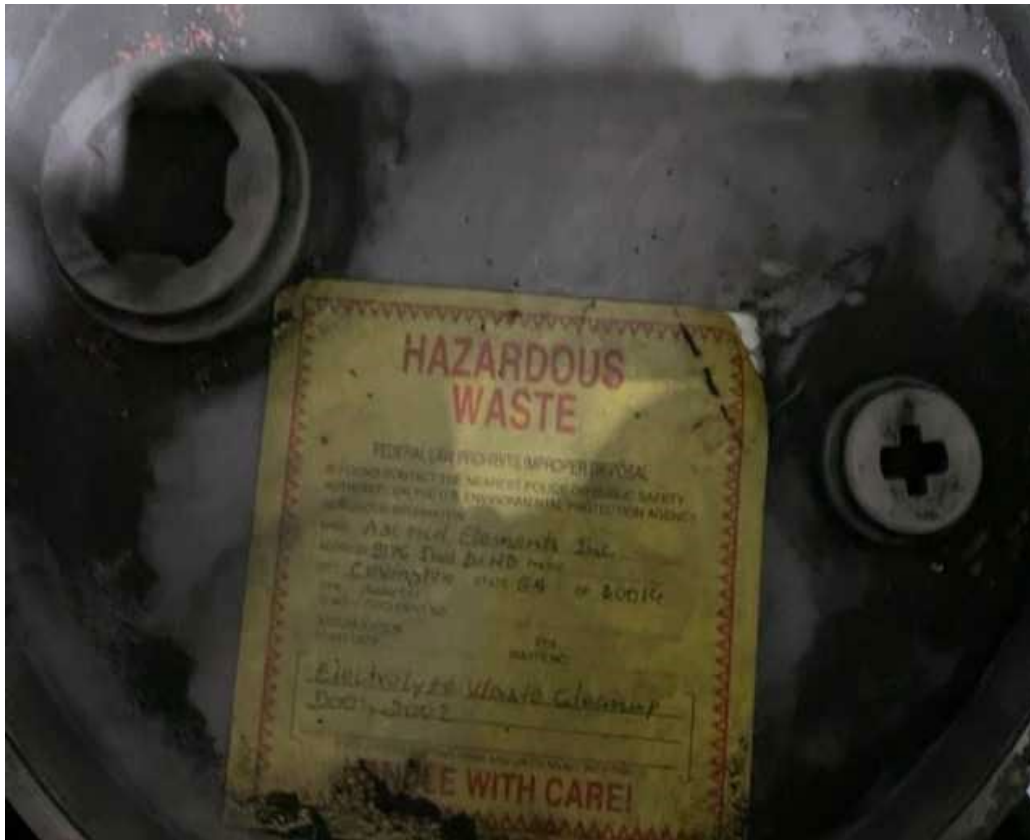
AEI			IMG-20240117121036103689132.jpg
01/17/2024 12:10 PM (ET)	No CBI	No PII	Photographer: Tarin Tischler
Photograph 9 Central Accumulation Area			33.61272151, -83.8424565
The inspectors observed two 30-gallon containers of hazardous waste electrolyte cleanup solids, one 5-gallon container of nonhazardous waste gear oil, and one empty 15-gallon drum. The inspectors observed the CAA is storing ignitable hazardous waste and not identified with the words "no smoking".			



AEI			IMG-20240117121041104173800.jpg
01/17/2024 12:10 PM (ET)	No CBI	No PII	Photographer: Tarin Tischler
Photograph 10 Central Accumulation Area			33.61272413, -83.84246386
The inspectors observed two 30-gallon containers of hazardous waste electrolyte cleanup solids, one 5-gallon container of nonhazardous waste gear oil, and one empty 15-gallon drum. The inspectors observed the CAA is storing ignitable hazardous waste and not identified with the words "no smoking".			



AEI			IMG-20240117121048104872772.jpg
01/17/2024 12:10 PM (ET)	No CBI	No PII	Photographer: Tarin Tischler
Photograph 11 Central Accumulation Area			33.61274268, -83.84242837
The inspectors observed two 30-gallon containers of hazardous waste electrolyte cleanup solids, one 5-gallon container of nonhazardous waste gear oil, and one empty 15-gallon drum. The inspectors observed the CAA is storing ignitable hazardous waste and not identified with the words "no smoking".			



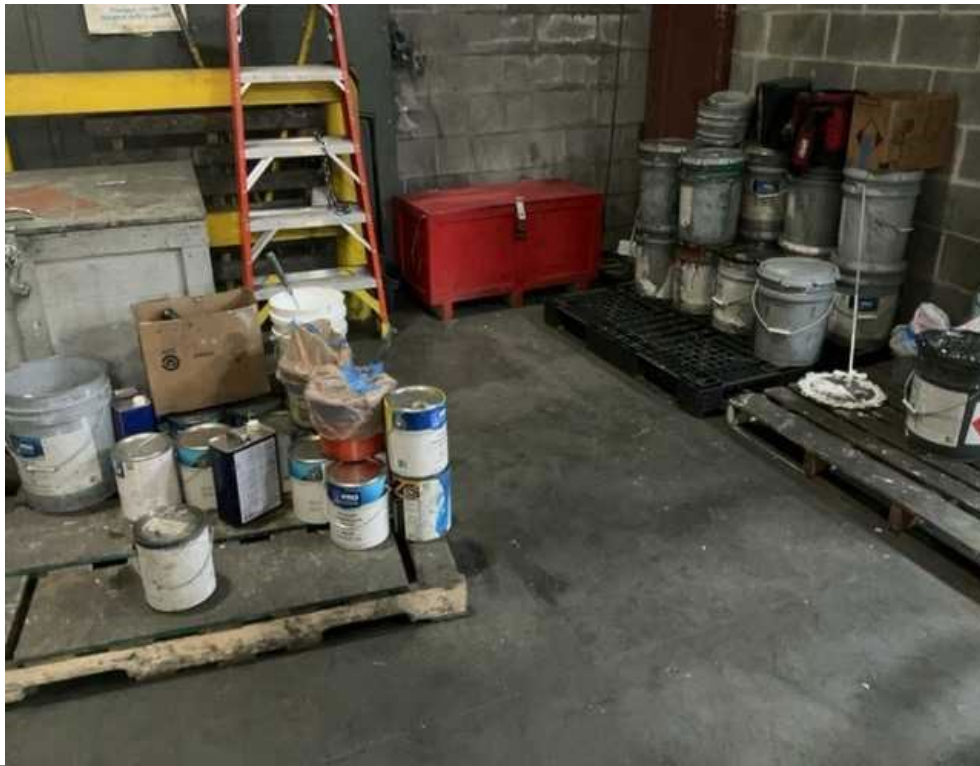
AEI			IMG-20240117121054105454550.jpg
01/17/2024 12:10 PM (ET)	No CBI	No PII	Photographer: Tarin Tischler
Photograph 12 Central Accumulation Area			33.61277689, -83.84243157
The inspectors observed the label on the empty 15-gallon container was marked with the words electrolyte waste cleanup.			



AEI			IMG-20240117122904294109601.jpg
01/17/2024 12:29 PM (ET)	No CBI	No PII	Photographer: Tarin Tischler
Photograph 13 Tank T-3030			33.61255942, -83.84333319
The inspectors observed the tank pumps, valves, and flanges and other pipe connections were not marked to identify each piece of equipment. The inspectors observed the tank was not labeled or marked with the words hazardous waste and not marked with a date.			



AEI			IMG-20240117124034403493043.jpg
01/17/2024 12:40 PM (ET)	No CBI	No PII	Photographer: Tarin Tischler
Photograph 14 Paint Contractor Area			33.61295318, -83.84229153
The inspectors observed several one-gallon to 5-gallon containers of paint related material. Several containers were open accumulating wet paint. The inspectors observed a trash container accumulating waste paint related debris.			



AEI			IMG-20240117124047404787365.jpg
01/17/2024 12:40 PM (ET)	No CBI	No PII	Photographer: Tarin Tischler
Photograph 15 Paint Contractor Area			33.61307618, -83.84231641
The inspectors observed several one-gallon to 5-gallon containers of paint related material. Several containers were open accumulating wet paint. The inspectors observed a trash container accumulating waste paint related debris.			



AEI			IMG-20240117171855185563942.jpg
01/17/2024 05:18 PM (ET)	No CBI	No PII	Photographer: Tarin Tischler
Photograph 16 QC Laboratory.			33.61249474, -83.84253434
The inspectors observed a one-gallon container connected by a tube to a laboratory instrument that was not operating. The inspectors observed the container was not closed and not marked or labeled with an indication of the hazards.			