

RCRA Inspection Report

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2) Facility Information

RTX Corporation, Pratt and Whitney
Division
8801 Macon Road
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Muscogee County

EPA ID#: GAD980711816
NAICS #: 336412 – Aircraft Engine and Engine
Parts Manufacturing

3) Responsible Officials

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4) Inspection Participants

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Summer Smith, GA EPD
Alan Newman, USEPA
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5) Date of Inspection

January 14, 2025; 8:20 a.m. – 5:30 p.m., January 15, 2025; 8:00 a.m. – 11:30 a.m.

6) Applicable Regulations¹

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

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.

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 (LQG) of hazardous waste 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-.07 [40 C.F.R. § 261.4(a)(26)], solvent-contaminated wipes that are sent for cleaning and reuse are not solid wastes from the point of generation, provided that the conditions listed in Ga. Comp. R. and Regs. 391-3-11-.07 [40 C.F.R. § 261.4(a)(26)] are met (hereinafter referred to as the “Solvent-Contaminated Reusable Wipe 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 [40 C.F.R. § 262.16(b) or § 262.17(a)], except as required in Ga. Comp. R. and Regs. 391-3-11-.08 [40 C.F.R. § 262.15(a)(7) and (8)], provided that the generator complies with the satellite accumulation area (SAA) conditions listed in Ga. Comp. R. and Regs. 391-3-11-.08 [40 C.F.R. § 262.15] (hereinafter referred to as the “SAA Permit Exemption”).

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08 [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 [40 C.F.R. § 262.17] (hereinafter referred to as the “LQG Permit Exemption”).

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.18 [40 C.F.R. § 273.9], a small quantity handler of universal waste (SQHUW) is a universal waste handler who does not accumulate 5,000 kilograms or more of universal waste (batteries, pesticides, mercury-containing equipment, lamps, or aerosol cans, calculated collectively) at any time.

7) Purpose of Inspection

The purpose of this inspection was to conduct an unannounced compliance evaluation inspection to determine Pratt and Whitney’s compliance with the applicable requirements of RCRA and the corresponding Georgia regulations. This was an EPA lead inspection.

8) Facility Description

RTX Corporation, Pratt & Whitney Division (hereafter P&W or the facility) is an aircraft engine manufacturing company and is a subsidiary of RTX Corporation, formerly Raytheon

Technologies. The company was founded in 1925 with the production of the first air cooled radial engine. They proceeded with development and production through World War II and began a jet propulsion initiative in 1944. P&W has a multitude of facilities across the world. The facility located in Columbus, GA is focused on aircraft engine maintenance and engine part manufacturing on 360 acres of land, though only 100 acres are developed. The facility is housed in five separate buildings based on the operations being conducted. The primary building houses the administrative offices, the blade forge section, the disc forge section, and the military engine maintenance section. The commercial engine maintenance and repair section, the wastewater treatment plant (WWTP), the primary Central Accumulation Area (CAA) building, and the power plant are housed in separate buildings. The facility operates 24 hours a day, 7 days a week with a workforce of approximately 2,100 employees. This facility provides component manufacturing for the P&W engine business line as well as maintenance and repair services for both military and commercial aircraft engines.

The facility only manufactures two product lines on site at this facility, discs and blades. The discs and blades are utilized in the jet engine to provide compression of the air flow through the engine to provide thrust. The discs are attached to a spinning shaft and the blades are attached to the discs. The discs are lined up in a progressively decreasing size on the shaft to provide intake and increased pressure as the air is forced through the engine. The facility manufactures the full range of sizes for both discs and blades. Due to the critical nature of these components, they are forged using methods which maintain the integrity of the material and provide for defect free parts.

The two components use the same type of raw stock metal, a nickel super alloy, but in different form factors to allow for shaping. The blades are forged using an isothermal forging method and chemical and conventional milling. The isothermal forging method attempts to maintain the metal at the required working temperature throughout the initial shaping process to reduce thermal stress and maintain the fine structure of the metal within. The chemical milling uses a combination of Hydrofluoric and Nitric acids to erode the metal for fine shaping of the blade. The discs are forged using a pressure forging method. In this method the part is created through a single step of pressing the metal in a hydraulic press until it heats and is shaped in the die that is placed in the press. This produces a single complete component which need only go through finishing to clean and polish the part.

The military engine maintenance area is a sectioned area in the same building as the disc forging process. This area is used in the maintenance of the engine for the F-16 and F-35 Lightning. Here the engines are brought in and broken down to various component parts to clean and repair parts as needed. The GTF (Geared Turbofan) Engine Testing and Maintenance is housed in a separate building and is used for the cleaning and maintenance of the GTF engine for Airbus aircraft. Here the engines are broken down into component parts for cleaning and repair. Additionally, this building houses two engine test cells. Here the engines are mounted and powered up to test the engines for proper function prior to shipping back to the customer.

The WWTP is housed in a separate building and is a multi-step process which includes pH adjustment and flocculation to remove metal contaminants. The sludge from the flocculation tank is pushed to a filter press. The resulting filter cakes are dropped into a 22' roll-off container. This container serves as one of the CAAs for the facility.

The primary CAA for plant hazardous waste is in a separate building. This building holds two gated sections which divides the waste materials into acids and bases. This area is managed by the facilities chemical waste department. These individuals are responsible for the movement and collection of waste materials from the various Satellite Accumulation Areas (SAAs) to the CAA. They are also responsible for the return and placement of proper containers to the various SAAs.

The powerhouse is a separate building from the main plant and houses the power generation units to provide independent power to the facility. They generate a small amount of waste and have an SAA for the collection of containers of various power plant hazardous wastes and universal wastes.

SAA management at the facility is a multi-level process. The overall SAA program is maintained by David Houser, an Environmental Technician with the facility. The operators of each SAA are required to conduct an inspection of their SAA each shift. These inspections are then reviewed, and the SAAs monitored by David Houser. He ensures they are removed when full, that new containers are placed when full, and that they are labeled correctly and in good condition.

The facilities most recent Biennial Report (BR) was filed on February 26, 2024, and their most recent Notification of Hazardous Waste Activity was filed on November 26, 2024, to update the Site Contact Person. The facility is identified as a Large Quantity Generator (LQG) and the primary sources of waste are process wastes at various manufacturing or maintenance workstations which include waste codes reported on the BR, D001 (Ignitable), D002 (Corrosive), D004 (Arsenic), D005 (Barium), D006 (Cadmium), D007 (Chromium), D008 (Lead), F002 (Halogenated solvent), F003 (Non- Halogenated solvent), F005 (Non-halogenated solvent), U002 (Acetone), and U057 (Cyclohexanone). The WWTP produces F006 (electroplate wastewater treatment sludges). The facility also generates an assortment of universal wastes including Waste Lamps, Waste Batteries, and Waste Aerosols.

9) Previous Inspection History

The Georgia Environmental Protection Division (GAEPD) conducted two (2) RCRA CEIs at P&W between 2012 and 2024, specifically in 2012 and 2016. GAEPD identified four violations during the 2016 inspection and no violations during the 2012 inspection. The violations identified during the August 31, 2016, inspection, included used oil and hazardous waste container labeling violations and open container violations. As a result, GAEPD issued an Informal Written Enforcement to P&W on September 12, 2016, documenting the violations and noting that all violations were returned to compliance on the day of the inspection. No further in-person inspections were conducted until the current inspection. This was EPA's first inspection at the P&W facility.

10) Opening Conference

On January 14, 2025, EPA inspectors George McBroom and Alan Newman, accompanied by GAEPD inspector Summer Smith, arrived at P&W at approximately 8:20 am. At the North entrance, security personnel were notified of the purpose of the visit, and they contacted Robert Smith. Robert Smith, the EH&S manager, immediately received the inspectors. Robert Smith and the inspectors were joined by Jeremy Daughtry, and Damian Bausman for the opening conference. The inspectors introduced themselves, showed their credentials to Robert Smith and explained the purpose of the visit.

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

Robert Smith and Damian Bausman provided an overview of the facility's history and current operations during the opening conference. The inspection participants also discussed health and safety protocols and required personal protective equipment before Robert Smith, Jeremy Daughtry, and Damian Bausman led the inspectors on a tour of the facility operations.

11) Inspection Observations

Disc Forging and Military Engine Maintenance Areas

The facility tour began at 10:05 am; the group was joined by P&W's David Houser. Inspectors began with a tour of the Points of Generation (POGs), some of which were SAAs, located within the primary building. The inspection team began their tour in the Disc Forge section of the plant. This area of the plant contains the equipment for disc production including pressure forges, quenching baths, cleaning baths, and sonic testing units. The parts are forged, quenched, cleaned, polished, and tested for imperfections. There was no hazardous waste generated in this area, but there was universal waste, used oil, and excluded solvent wipes at various POGs.

The Military Engine Maintenance area contained various benches, cradles, and machinery for the disassembly and maintenance of engine components. This includes an acid bath line used to clean the parts of grease and debris. This area held POGs for hazardous waste, used oil, universal waste, and excluded contaminated solvent wipes.

Table 1 includes a list of containers in POGs inspected in these areas which were in good condition, closed, labeled, and marked with accumulation start dates within regulatory limits (Photographs 1-10).

Table 1 – List of POGs in the Disc Forging and Military Engine Maintenance Areas

Location Marker	POG #	Waste Type	Container Type
B-19	4027	Used Oil	Steel Container
E-28	N/A	Pads/Wipers	Poly Container
G-28	N/A	Used Wipers	Poly Container
C-14	2023B	Used Oil	Steel Container
G-16	1012	Hazardous Waste	Steel Container
F-14	4075C	Used Oil	Steel Container
F-26	1010	Universal Waste	Fiberboard

The following POGs in this area had observations noted. In POG 2507 at column G-28, P&W was storing three (3) 5-gallon plastic containers of universal waste batteries. One container was solely accumulating alkaline batteries. These containers were closed and in good condition. All three containers were labeled with two different universal waste labels. P&W personnel stated that one was the old label and the other was new label. The new labels were each marked with accumulation start dates of April 2, 2024. P&W should review containers and ensure accurate labeling (Photographs 11-15).

In POG 2126B at column C-14, inspectors observed two containers; the first was a 30-gallon fiberboard container containing broken and/or crushed waste fluorescent lamps, the second was a 55-gallon fiberboard container containing intact fluorescent lamps. Both containers were labeled as “Universal Waste Lamps”, in good condition, and dated with accumulation start dates of less than one year. The 55-gallon container was considered open because the lid was not clamped down or fully seated on the rim of the container. The 30-gallon container was also labeled as broken lamps. Photographs 28-31 and 34).

Pursuant Ga. Comp. R. and Regs. 391-3-11-.18 [40 C.F.R. § 273.13(d)(1)], a SQHUW must contain any lamp in containers or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. Such containers must remain closed and lack evidence of leakage, spillage, or damage.

In POG 1009 at column E-13, inspectors observed a 55-gallon steel container which was storing “Solids with MEK or 2-Ethoxyethanol, Waste Profile 5721F”; this container was in good condition and closed. This container was labeled with the words “Hazardous Waste”, with waste codes D001, D007, D035, and F005 and with hazard indicator labels for Toxic, Flammable Gas, Flammable Liquid, and Flammable Solid. P&W representative, David Houser, stated that this was a solid waste (Photographs 35-37). It appears that there were incorrect hazard indicators on this container. P&W removed the indicators of flammable liquid and flammable gas during the inspection.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.15(a)(5)], which is a condition of the SAA Permit Exemption, a generator is required to mark or label its containers (ii) with an indication of the hazards of the contents.

In POG 1008 at column E-12, inspectors observed a 55-gallon steel container which was labeled as “Hazardous Waste”, Paint Burn Liq Flam, Waste Profile 5401, with waste codes D001, F003, D007, D035, and F005. The container was in good condition and closed. Inspectors observed a hazard indicator of flammable liquid. It was not observed to be placarded or labeled with the Toxic hazard (Photographs 38-39). Facility provided photo documentation of correction in an email on February 3, 2025.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.15(a)(5)], which is a condition of the SAA Permit Exemption, a generator is required to mark or label its containers (ii) with an indication of the hazards of the contents.

Table 2 – List of POGs in the Disc Forging and Military Engine Maintenance Areas with observations noted.

Location Marker	POG #	Waste Type	Container Type	Observation Noted?
G-28	2507	Universal Waste	Plastic Containers	AOC
C-14	2126B	Universal Waste	Fiberboard Container	Yes
C-14	2126B	Broken Lamps	Fiberboard Container	Yes
E-13	1009	Hazardous Waste	Steel Container	Yes
E-12	1008	Hazardous Waste	Steel Container	Yes

Blade Forging Area

The Blade Forging Area contains all the necessary equipment for the isothermal forging of the various blade types and sizes. Located within this area was forging machinery, quenching baths,

cleaning baths, and the Precision Electro-Chemical Machining (PECM) room. The PECM room is where they utilize hydrofluoric and nitric acids to conduct chemical machining of blades. Next to the PECM room is the PECM Electrolyte / Filtration equipment, which is fenced in for controlled access. This system reconditions the fluid used in the PECM machines to remove particulate and balance the electrolytes for the process. This includes a filter press, which creates a non-hazardous solid waste material. Robert Smith stated that P&W tested this material weekly for approximately a year and it was determined to be non-hazardous. P&W continues to test every other month with similar results. Further, this area of the building contains the Maintenance Shop section. P&W identified multiple SAAs for hazardous waste, used oil, universal waste, and excluded solvent wipes in this production and maintenance area.

Table 3 lists all containers in SAAs inspected in this area which were compatible, in good condition, closed, and labeled.

Table 3 - List of SAAs in the Blade Forging Area

Location Marker	POG #	Waste Type	Container Type
PECM	1033	Hazardous Waste	Steel Container
R-09	1018	Hazardous Waste	Steel Container

The inspectors noted observations at the POGs in Table 4. In PECM, POG 1032B, inspectors observed a 55-gallon poly container with a latched funnel installed on the lid. Upon entering the room, inspector Alan Newman noted that the lid to the funnel was open; P&W's David Houser closed the lid. The container was labeled as "Hazardous Waste", Wastewater with Chromium, Waste Profile 5213M, and waste code D007 (Photographs 41 - 43). The container was in good condition.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.15(a)(4)], which is a condition of the SAA Permit Exemption, a generator is required to keep containers of hazardous waste closed at all times during accumulation, except when adding, removing, or consolidating waste; or when temporary venting of a container is necessary for the proper operation of equipment, or to prevent dangerous situations, such as build-up of extreme pressure.

In PECM Filter, POG 1033 (labeled as POG 2554 on facility plan) inspectors observed a 55-gallon steel container with a vacuum top lid. The container was labeled as "Hazardous Waste", Hazardous Waste Solids, D007, and had a "Toxic" indication of the hazard label. This container was used in the electrolyte balancing and filter area to suck up hazardous waste from the various maintenance processes. The vacuum on top of the container was open due to the hole in the vacuum (Photographs 46-48).

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.15(a)(4)], which is a condition of the SAA Permit Exemption, a generator is required to keep containers of

hazardous waste closed at all times during accumulation, except when adding, removing, or consolidating waste; or when temporary venting of a container is necessary for the proper operation of equipment, or to prevent dangerous situations, such as build-up of extreme pressure.

In POG 1019 at column Q-10, inspectors observed a 55-gallon steel container labeled “Hazardous Waste”, Paint Burn Liq Flam, D001, F003, D007, D035, and F005, and was labeled with a hazard indicator of Flammable Liquid. The container was in good shape and was closed. There was no “Toxic” hazard indicator observed on the container (Photographs 52-54).

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.15(a)(5)], which is a condition of the SAA Permit Exemption, a generator is required to mark or label its containers (ii) with an indication of the hazards of the contents.

In POG 4019 at column P-09, inspectors observed a 55-gallon poly container labeled “hazardous waste”, Parts Washer Fluid w/ Metals, D008. The container was in good shape and closed. There was no indication of the toxic hazard on the container (Photograph 55). P&W representative noted the hazard indicator had fallen off the container and was lying on the floor nearby. P&W provided photo documentation of correction on February 3, 2025.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.15(a)(5)], which is a condition of the SAA Permit Exemption, a generator is required to mark or label its containers (ii) with an indication of the hazards of the contents.

Table 4 - List of SAAs in the Blade Forging Area which had observations noted.

Location Marker	POG #	Waste Type	Container Type
PECM	1032B	Hazardous Waste	Poly Container
PECM/Filter	2554	Hazardous Waste	Steel Container
Q-10	1019	Hazardous Waste	Steel Container
P-09	4019	Hazardous Waste	Poly Container

Chem Waste Central Accumulation Area (CAA)

The Chem Waste building is the primary CAA for storage of the wastes removed from the SAAs throughout the facility, as well as additional universal waste. The area is divided into two sections for bases and acids. There is a solid concrete wall dividing the areas to prevent any interaction between the materials in the event of release. The areas were marked with appropriate signage and had all necessary fire protection, decontamination, and spill control equipment (Photographs 56, 82, and 83).

Base Side

The base side of the CAA contained several 55-gallon containers and 300-gallon poly containers, placed under and on four industrial racks along both sides and on pallets along the back wall (Photographs 56 – 59).

Inspectors observed (2) 55-gallon fiberboard containers which were labeled “Universal Waste – Aerosol Cans”; these containers were closed, in good condition, and marked with accumulation start dates of less than one year (Photograph 62).

Inspectors observed two (2) 55-gallon, steel containers labeled with the words “Hazardous Waste”, Solids with MEK or 2-Ethoxyethanol and Chrome, and waste codes D001, D007, D035, and F005. The containers were labeled with multiple labels indicating flammable solid, flammable liquid, and/or flammable gas. Neither were labeled with an indication of “Toxic”. Each container was marked with an accumulation date of less than 90 days (Photographs 60 – 61 and 63 – 65). Inspectors also observed one (1) 55-gallon steel container labeled “Hazardous Waste”, Paint Burn Liq Flam, and waste codes D001, D007, D035, F003, and F005. It was labeled with a flammable liquid hazard indicator, but did not have “Toxic” indicator. The container had an accumulation start date of 1/10/2025. The container was closed, in good condition, and had no observable leaks.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(5)(i)(B)], which is a condition of the LQG Permit Exemption, a generator must label its containers with an indication of the hazards of the contents.

One (1) 300-gallon poly container labeled “Hazardous Substance”, Uncharacterized Waste – Pending Analysis, and had no hazard indicators. The container was closed, in good condition, and had no observable leaks. The container had an accumulation start date of 1/10/2025.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(5)(i)], which is a condition of the LQG Permit Exemption, a generator must (A) label its containers with the words “Hazardous Waste” and (B) label its containers with an indication of the hazards of the contents.

One (1) 55-gallon poly container of Bonderite C-AK LS NP-LT Aero Alkaline Cleaner. The container had a label that showed the expiration as 3/2019. Facility staff could not explain its presence there other than the thought it was expired waste product but were unsure if this was still a viable product. The container was in good condition (Photographs 75 and 76).

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 in order to ensure wastes are properly managed according to applicable RCRA regulations articulated in Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.11].

Many of the containers were stored against the wall and packed together on pallets or directly next to one another under industrial shelving providing no aisle space for inspection or emergency access. Additionally, it was observed that many of the containers were stored on pallets in a manner which caused the labels to be turned inward or obscured from view from the outside (Photographs 66, 67, and 72). The facility provided photo documentation of corrections to this observation.

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. § 262.255], and is a condition of the LQG Permit Exemption, a generator is required to maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless aisle space is not needed for any of these purposes.

Acid Side

The acid side of the CAA contained multiple 55-gallon containers and 300-gallon containers, placed under and on several industrial racks along both side and back walls. The area contained a mixture of non-hazardous waste and hazardous waste containers.

Inspectors observed one (1) 8' box labeled "Universal Waste – Bulbs" and one (1) 4' box labeled "Universal Waste – Fluorescent Lights, Uncrushed". The boxes were in good condition and closed, with accumulation start dates less than 1 year (Photographs 77 – 80). Additionally, there was one (1) 30-gallon fiberboard container labeled "Universal Waste – Electronic Scrap". There are no requirements at this time to manage electronic waste as Universal Waste.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.18 [40 C.F.R. § 273.14(e)], a SQHUW must label or mark each lamp or container of lamps clearly with one of the following phrases: "Universal Waste-Lamp(s)," or "Waste Lamp(s)," or "Used Lamps."

Inspectors observed one (1) 300-gallon poly tote which was closed, labeled correctly, and had an accumulation start date of less than 90 days. The container was bulging out of its frame. (Photograph 81). Facility provided photo documentation of correction on February 3, 2025, material was removed and placed into four (4) 55-gallon poly containers which were labeled appropriately and ready for shipment.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(1)(ii)], which is a condition of the LQG Permit Exemption, if a container holding hazardous waste is not in good condition, or if it begins to leak, the generator must immediately transfer the hazardous waste from this container to a container that is in good condition, or immediately manage the waste in some other way that complies with the LQG Permit Exemption.

Four (4) 55-gallon poly containers labeled as "Hazardous Substance", Uncharacterized – Pending Analysis, and had no hazard indication. They were closed, in good condition, with no

observable leaks. They were placed in a manner which did not provide adequate access to all sides of the container.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(5)(i)], which is a condition of the LQG Permit Exemption, a generator must (A) label its containers with the words “Hazardous Waste” and (B) label its containers with an indication of the hazards of the contents.

Powerhouse

The facility maintains its own powerplant for operations. The powerhouse contains POG 2123 which is used as an SAA and universal waste storage location for the powerhouse. At the time of inspection there was one container of hazardous waste and several universal waste containers.

Inspectors observed the following universal waste containers in this area with concerns. One (1) 8’ box, two (2) 4’ boxes, and one (1) 55-gallon fiberboard container, all labeled “Universal Waste – Bulbs”. The box openings were not secured in a fashion that would constitute closure. The boxes and containers were in good condition and had accumulation start dates of less than 1 year (Photographs 84-86). The facility provided photo documentation of label correction on boxes on February 3, 2025.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.18 [40 C.F.R. § 273.14(e)], a SQHUW must label or mark each lamp or container of lamps clearly with one of the following phrases: “Universal Waste-Lamp(s),” or “Waste Lamp(s),” or “Used Lamps.” Pursuant Ga. Comp. R. and Regs. 391-3-11-.18 [40 C.F.R. § 273.13(d)(1)], a SQHUW must contain any lamp in containers or packages that are structurally sound, prevent breakage, and are compatible with the contents of the lamp. Such containers or packages must remain closed and lack evidence of leakage, spillage, or damage which could allow leakage.

Lab

The only waste container is a discharge vessel for the Inductively Coupled Plasma (ICP) analysis unit. This material is the result of running wastewater samples through to test for metals. This is placed back into the wastewater stream. The facility aims for 50% of the permitted limits and all results were observed to be under the permitted limit.

Wastewater Treatment Plant

This is comprised of tanks for settling of solids and pH adjustments. The sludge is passed into a filter press unit which is mounted over a large roll-off container. The waste solids are dropped into the roll off container. The roll-off container is managed as one of the CAAs at the facility. This container is kept covered and is labeled “Hazardous Waste”, Metal Hydroxide Sludge, waste code F006, an indication of toxic hazard, and an accumulation start date of 11/17/2024.

The container was in good shape and had no observable leaks. The area was labeled as “No Smoking” and had all necessary safety equipment (Photographs 87-89).

GTF Test and Maintenance

This area is a separate building where the maintenance and testing of commercial Airbus engines takes place. This area held POGs for hazardous waste, used oil, universal waste, and excluded solvent wipes.

Table 5 includes a list of all containers in the POGs inspected in this area which were in containers which were in good condition, closed, labeled, and marked with accumulation start dates within regulatory limits.

Table 5 – List of SAAs in the GTF Test and Maintenance Area which did not have observations.

Location Marker	POG #	Waste Type	Container Type	Qty
O-4	4082	Used Oil	Steel Container	1
O-4	4082	Recyclable Material	Steel Container	1
O-4	4082	Solvent Excluded Wipes	Poly Container	1
O-4	4082	Used Oil	Steel Container	1
D-4	4049	Hazardous Waste	Steel Container	1
D-4	4049	Universal Waste	Fiberboard Container	1
D-4	4049	Used Oil	Steel Container	2
D-4	4049	Excluded Solvent Wipes	Poly Container	3
A-9.6	2575A	Hazardous Waste	Plastic Container	1

The following POGs have observations noted. In POG 2578, at column F-8, inspectors observed one (1) 30-gallon steel container labeled as “Hazardous Substance – Pending Analysis”, no waste codes, and no indication of hazards. Sherre-Ann Wallace (Safety Manager for Maintenance Facility) and Robert Smith explained that this container was for a piece of testing equipment immediately adjacent to the SAA. The equipment does not produce a large amount of waste, but Robert Smith stated he thought there was enough waste available in the container to obtain a sample for analysis.

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 in order to ensure wastes are properly managed according to applicable RCRA regulations articulated in Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.11].

In AA-9.6, POG 2550, inspectors observed a 5-gallon plastic container labeled “Hazardous Waste”, Alkali Sludge, waste code D002, and an indication of both corrosive and toxic hazards. The container was closed, in good condition and had an accumulation start date of 8/01/2023 (Photographs 93-94).

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.

In POG 2551 at column D-9, inspectors observed one (1) 55-gallon steel container labeled “Hazardous Waste”, Solids w/ MEK or 2-Ethoxyethanol w/ Chrome, waste codes D001, D007, D035, and F005, and had hazard indications of flammable liquid and flammable solid. It did not have an indication of a Toxic hazard. The container was closed, in good condition, and had no observable leaks (Photographs 95-96). Facility provided photo documentation of correction on February 3, 2025.

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.

Table 6 - List of SAAs in the GTF Test and Maintenance Area which had observations noted

Location Marker	POG #	Waste Type	Container Type	Qty	Observation Noted?
O-4	4082	Used Absorbent	Poly Container	1	Yes
D-4	4049	Used Absorbent	Poly Container	3	Yes
AA-9.6	2550	Hazardous Waste	Plastic Container	1	Yes
F-8	2578	Hazardous Waste	Steel Container	1	AOC
Location Marker	POG #	Waste Type	Container Type	Qty	Observation Noted?
D-9	2551	Hazardous Waste	Steel Container	1	Yes

12) Records Review

Contingency Plan and Quick Reference Guide (QRG):

The contingency plan contained actions to take in an emergency, the type, location and description of all emergency equipment, and the arrangements with local authorities. The only observation was an outdated emergency contact list. The facility explained that this was due to the former contact recently leaving the facility. The facility did not provide an adequate QRG and will need to provide a completed QRG in compliance with the applicable regulations. The facility provided a map on February 3, 2025, which appeared to be a combined map meeting several requirements between the Contingency Plan evacuation and QRG access and water source maps.

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(d)], and is a condition of the LQG Permit Exemption, the plan must list the name and telephone numbers of all persons qualified to act as emergency coordinator (see 264.264), and this list must be kept up to date.

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], and is a condition of the LQG Permit Exemption, must submit a quick reference guide (QRG) of the contingency plan to the local emergency responders. The QRG should include 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.

Training Records:

The inspectors reviewed facility job descriptions and employee names that were provided for all personnel who manage hazardous waste and sign manifests for hazardous waste shipments. Each description included the requisite skill, education, or other qualifications, and duties of facility personnel assigned to that position.

P&W provided a written description of the type and amount of both introductory and continuing training to be given to each person filling the positions listed above. The inspectors reviewed records of employee hazardous waste training completed in 2024. It was observed

that Robert Smith was not on any of the training rosters. When asked he stated that he gives the training and as such did not think he had to attend as a student. Facility provided documentation of the correction on February 3, 2025.

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.17(a)(7)(i)(B)], which is a condition of the LQG Permit Exemption, the personnel training program required under this part must be directed by a person trained in hazardous waste management procedures, and must include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed.

Waste Manifest and Land Disposal Restriction (LDR) Records:

The inspectors reviewed available hazardous waste manifest records and land disposal restriction forms for shipments of hazardous waste sent for 2022, 2023, and all available for 2024. During the inspection of manifests, it was noted that the facility generated D010 (Selenium), D035 (Methyl Ethyl Ketone), U159 (MEK), and U213 (Tetrahydrofuran), which were not reported on the BR. Hazardous waste manifest records revealed several observations. An area of concern is the presence of waste code D010 on LDRs and packing summaries associated with the manifests in Table 4.

Table 7 – Manifests with D010 waste code on LDR / Packing Summary

Manifest #	Date
001193454VES	01/04/2024
001193445VES	01/18/2024
002409354VES	11/22/2024

Further, inspectors observed multiple manifests with waste codes that were not reported on the most recent Biennial report. Table 8 provides the manifest number, date, and waste codes which were not reported.

Table 8 – Manifests with additional unreported waste codes

Manifest #	Date	Waste Code(s)
001193456VES	01/03/2024	U159, U213
001193041VES	03/12/2024	D035
001193100VES	04/09/2024	U159, U213

001961793VES	05/14/2024	D035
002409235VES	07/29/2024	U159, U213
002409167VES	09/24/2024	D010
002409268VES	09/09/2024	U159, U213
002284681VES	10/29/2024	D010
002409353VES	11/22/2024	U159, U213

Pursuant to Ga. Comp. R. and Regs. 391-3-11-.08(1) [40 C.F.R. § 262.41(a)] a generator who is a large quantity generator for at least one month of an odd-numbered year (reporting year) who ships any hazardous waste off-site to a treatment, storage or disposal facility within the United States must complete and submit EPA Form 8700-13 A/B to the Regional Administrator by March 1 of the following even-numbered year and must cover generator activities during the previous year.

All required LDRs were reviewed with the manifests.

Weekly Inspection Records:

Inspectors reviewed the weekly inspection records for 2022, 2023, and all available for 2024 for the CAAs during the physical inspection of both the Chem Waste building and the WWTP. The forms were composed of separate forms for the Base Side and Acid Side. All inspections appeared thorough and complete. The logs for 2022, 2023, and all available for 2024 were reviewed. All appeared thorough and complete.

13) Closing Conference

The exit meeting started at 11:00 AM on January 15, 2025. The meeting involved EPA inspectors Alan Newman and George McBroom. The facility staff present at the meeting were Robert Smith, Jeremy Daughtry, David Houser, and Damian Bausman. Additional staff from the facility and the company took part virtually; Harland Miller, Jamie Bates, Melanie Perkins, Gregory Hopkins, Dan Herlihy, Sherre-Ann Wallace, Jason Kosmos, and Robert Hupfer.

In the meeting EPA inspector Alan Newman explained the inspection process that took place and provided information on the various observations that were made with the SAAs, CAAs, and documentation. It was brought up during the meeting that while Robert Smith had been conducting regular training, he himself did not have an official training on file.

Inspectors outlined items that they would like to receive, which were the determination of the used product in the base CAA area, training information for Robert Smith, an updated contingency plan and QRG, last used oil shipment, information about handling of any subpart P drugs, and updated notification to add additional waste codes missing from manifests.

On February 3, 2025, inspectors received documentation of the training for Robert Smith, updates to the QRG and contingency plan maps, and Subpart P handling information. There are outstanding documentation items which are updates to the Contingency Plan and QRG, the last used oil shipment, determination on the expired Bonderite product, confirmation of receipt of updated contingency plan and QRG from local emergency agencies, and updated state notification for missing waste codes.

14) List of Attachments

Attachment 1 – Photo Log:

15) Signed

ALAN NEWMAN

Digitally signed by ALAN NEWMAN
Date: 2025.03.21 07:55:52 -04'00'

Alan Newman
Environmental Engineer

GEORGE MCBROOM

Digitally signed by GEORGE MCBROOM
Date: 2025.03.21 07:33:10 -04'00'

George McBroom
Life Scientist

16) Concurrence

ARACELI CHAVEZ

Digitally signed by ARACELI CHAVEZ
Date: 2025.03.21 11:04:23 -04'00'

Araceli B. Chavez
RCRA Enforcement Section

Attachment 1 – Photo Log

96 Photos taken on: January 14, 2025

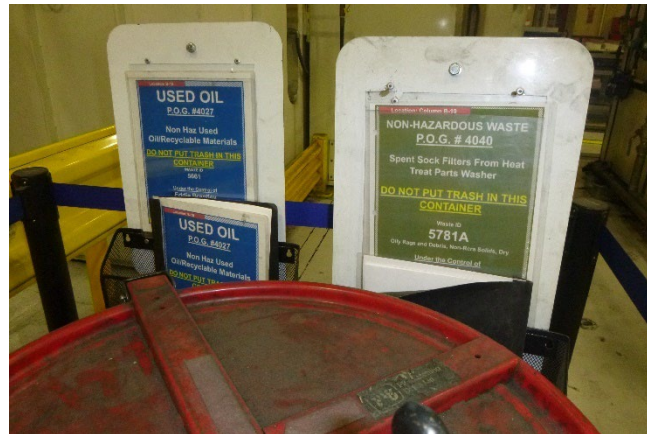
Photos taken by: George McBroom

Photos taken with: Lumix Digital

EPA Property Tag: S75870



Photograph 1. POG 4027 and 4040



Photograph 2. POG 4027 and 4040 signage



Photograph 3. POG 4027 Used Oil Container Label



Photograph 4. POG 4027 Used Oil Container Overall



Photograph 5. G28 - Used Absorbents



Photograph 6. G28 - Clean Absorbents and Wipes



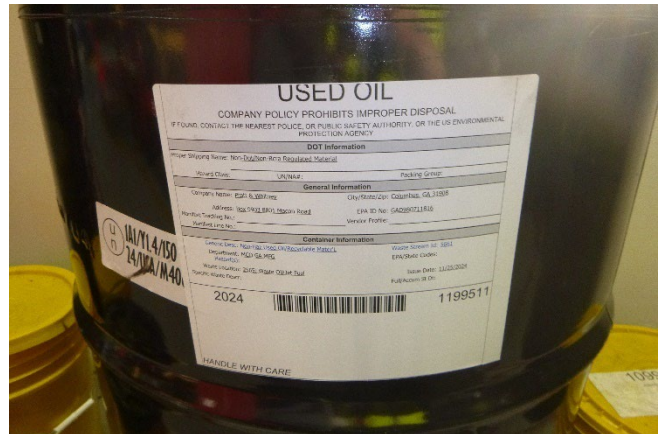
Photograph 7. G-28 Excluded Solvent Contaminated Wipes



Photograph 8. G-28 Used Oil Container (empty)



Photograph 9. POG 2507 Used Oil Container



Photograph 10. POG 2507 Used Oil Container Label



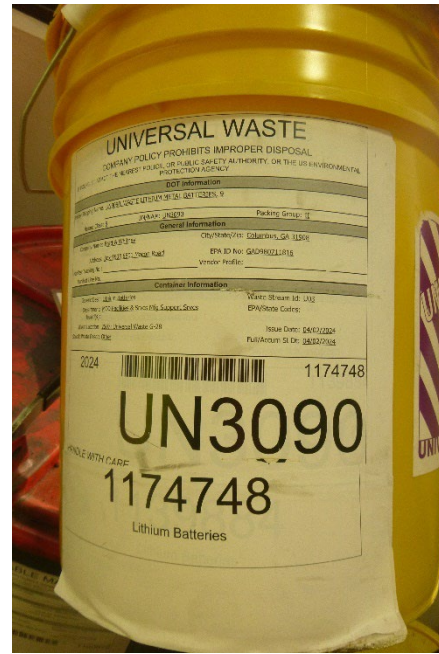
Photograph 11. POG 2507 Universal Waste Batteries



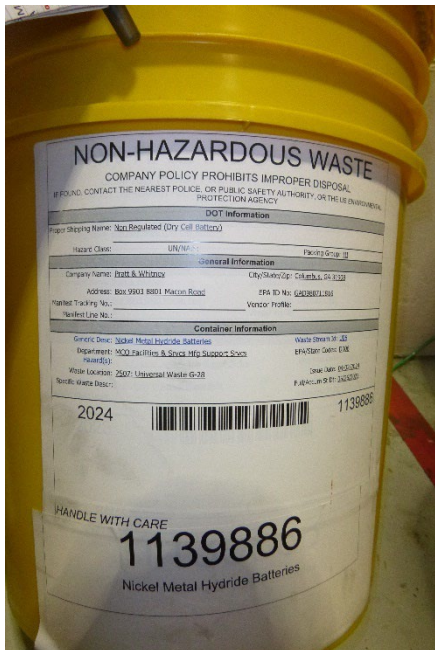
Photograph 12. POG 2507 Universal Waste batteries (old label)



Photograph 13. POG 2507 Universal Waste Batteries (old label)



Photograph 14. POG 2507 Universal Waste Batteries (new label)



Photograph 15. POG 2507 Universal Waste Batteries (new label)



Photograph 16. POG 1010 Universal Waste Aerosol Cans



Photograph 17. POG 1010 Universal Waste Aerosol Cans label



Photograph 18. POG 1010 Universal Waste Aerosol Cans label



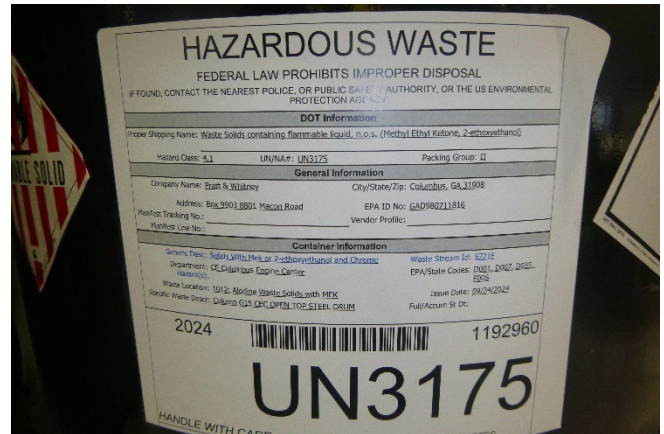
Photograph 19. POG 1010 Flammable Cabinet



Photograph 20. POG 1012 Flammable Solids



Photograph 21. POG 1012 Flammable Solids Label



Photograph 22. POG 1012 Flammable Solids Label

SOLIDS POG INSPECTION CHECKLIST - TO BE COMPLETED ONCE PER CALENDAR WEEK
DATE: 9-10-24

Insert Inspection Date Here (month)

LOCATION / POG No.	9-20-24 Week 1			9-27-24 Week 2			10-4-24 Week 3			10-11-24 Week 4			Remarks/Action
	YES	NO	N/A	YES	NO	N/A	YES	NO	N/A	YES	NO	N/A	
POG Owner: 012 1012													
Is POG area clean & free of trash / debris?													
Are containers in good condition?													
Is physical condition: No leaks, No (busts)?													
Is label present, legible, facing outward?													
Can you easily read the label?													
Does label have a description of the waste, including Name.													
Are there signs of any spillage, leakage, breakage?													
(This includes on lid or sides of the container)													
Is the container closed properly?													
Is drum full/bulbs in good shape? Box													
If full, is date recorded?													
Universal Waste cannot exceed 10 months from receipt													
If full, has 72 hour limit elapsed?													
(Universal Waste cannot exceed 10 months from receipt)													
Is area access clear and aisles maintained?													
Is any action needed?													
Estimated quantity of material in the container?	5/16/24 5/16/24 5/16/24 mT												

RECORD ALL ACTIONS REQUIRED/TAKEN ON BACK OF FORM

OPERATOR MUST MAINTAIN A MINIMUM OF 3 MONTHS OF INSPECTION RECORDS. THESE RECORDS MAY BE MAINTAINED BY THE SUPERVISOR, BUT MUST BE AVAILABLE FOR REVIEW.

Photograph 23. Weekly POG Inspection Sheet



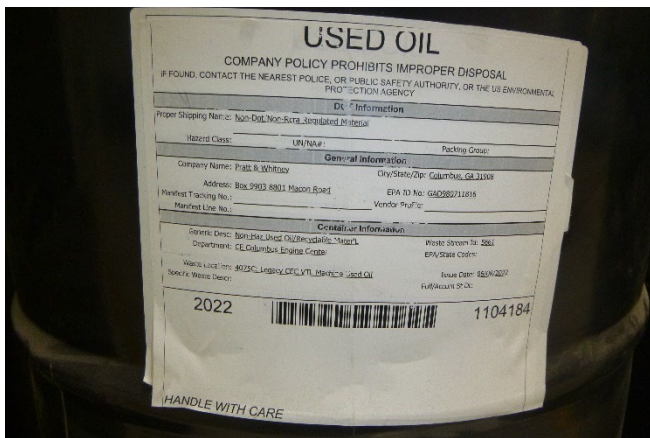
Photograph 24. F-14 Multiple POGs



Photograph 25. F-14 Excluded Solvent Contaminated Wipes



Photograph 26. POG 4075C Used Oil



Photograph 27. POG 4075C Used Oil Label



Photograph 28. POG 2126B Universal Waste Lamps



Photograph 29. POG 2126B Universal Waste Lamps Label



Photograph 30. POG 2126B Broken Lamps labeled Universal Waste



Photograph 31. POG 2126B Broken Lamps labeled Universal Waste



Photograph 32. POG 2023A Used Absorbents



Photograph 33. Multi-POG signage



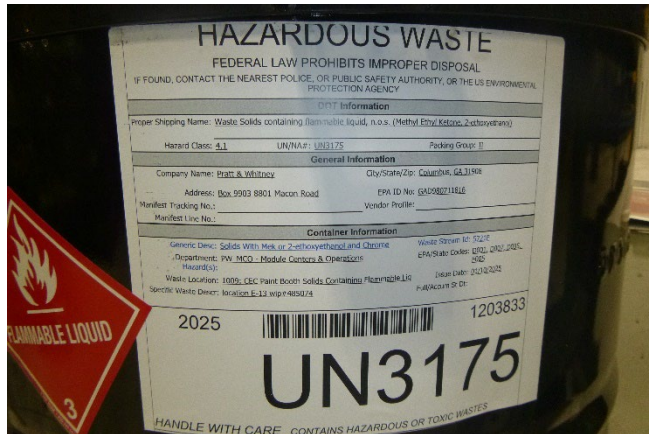
Photograph 34. POG 2126B Open Universal Waste Lamp Container



Photograph 35. POG 1009 HW Container

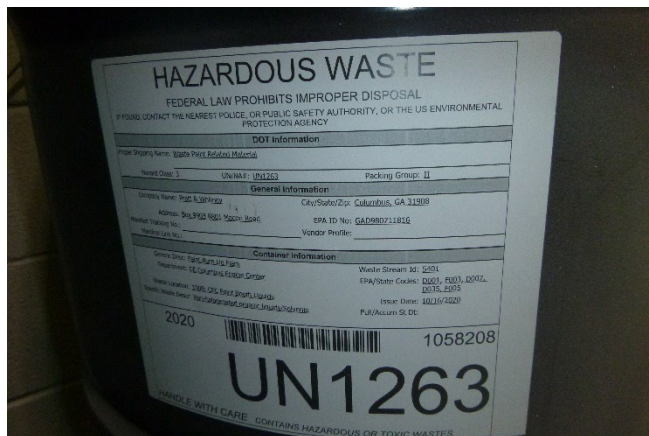


Photograph 36. POG 1009 HW Container indicators



Photograph 37. POG 1009 Hazardous Waste Label

Photograph 38. POG 1008 HW Container



Photograph 39. POG 1008 HW Container Label

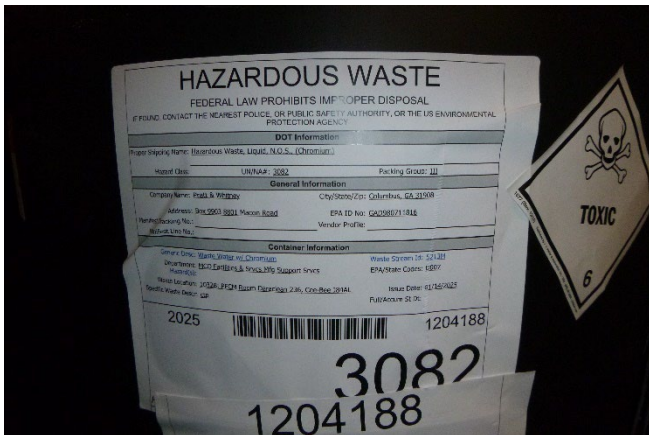
Photograph 40. Paint Booth “day container”



Photograph 41. POG 1032B and 1033



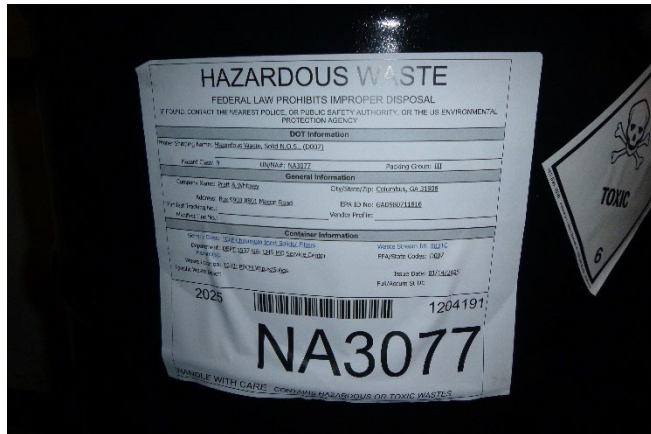
Photograph 42. POG 1032B HW Container



Photograph 43. POG 1032B HW Container Label



Photograph 44. POG 1033 HW Container



Photograph 45. POG 1033 HW Container Label

Photograph 46. POG 2554 Vacuum Top Container



Photograph 47. POG 2554 HW Container Label

Photograph 48. POG 2554 HW Container Vacuum lid



Photograph 49. POG 1018 HW Container



Photograph 50. POG 1018 HW Container Indicators



Photograph 51. POG 1018 HW Container Label



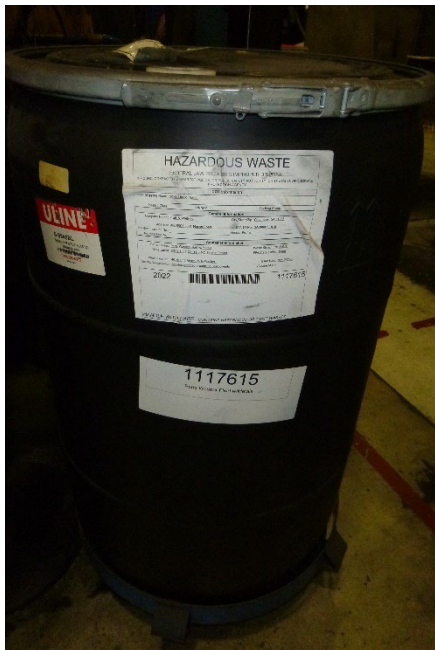
Photograph 52. POG 1019 HW Container



Photograph 53. POG 1019 HW Container Indicators



Photograph 54. POG 1019 HW Container Label



Photograph 55. POG 4019 HW Container



Photograph 56. Chem Waste CAA Base Side Signage



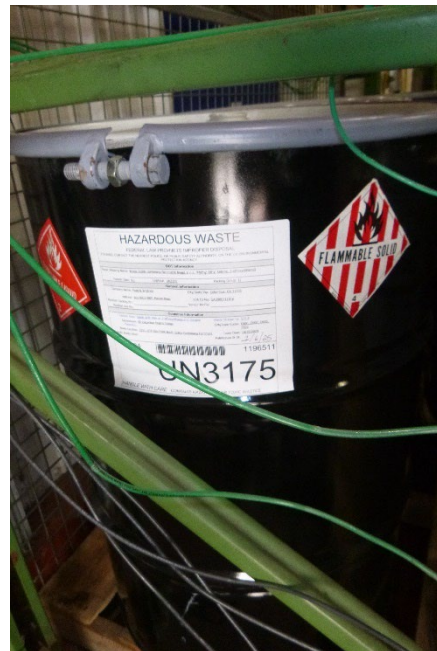
Photograph 57. CAA Base Side Layout



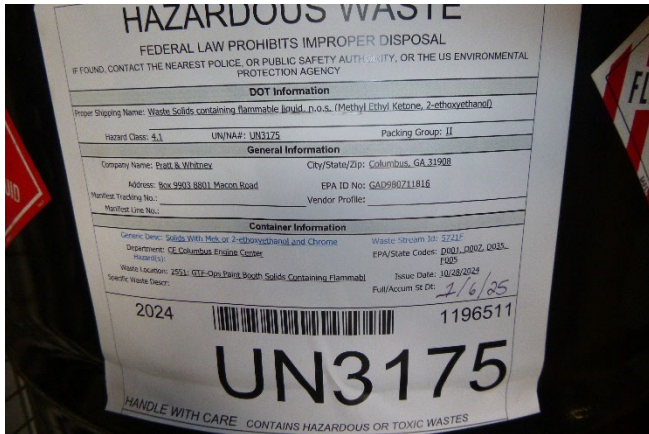
Photograph 58. CAA Base Side Layout



Photograph 59. CAA Base Side Layout



Photograph 60. CAA Base Side HW Container



Photograph 61. CAA Base Side HW Container Label



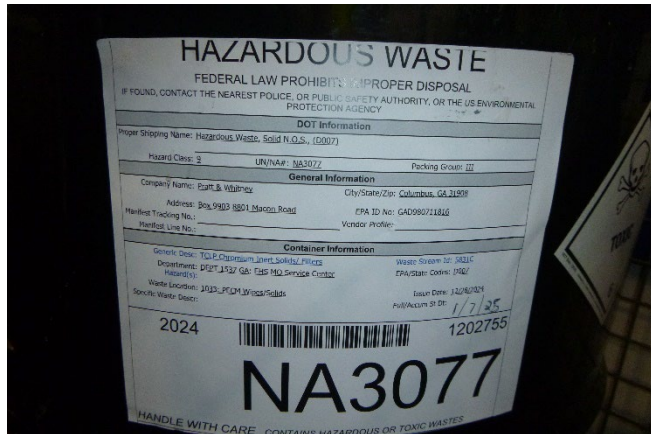
Photograph 62. CAA Base Side container storage



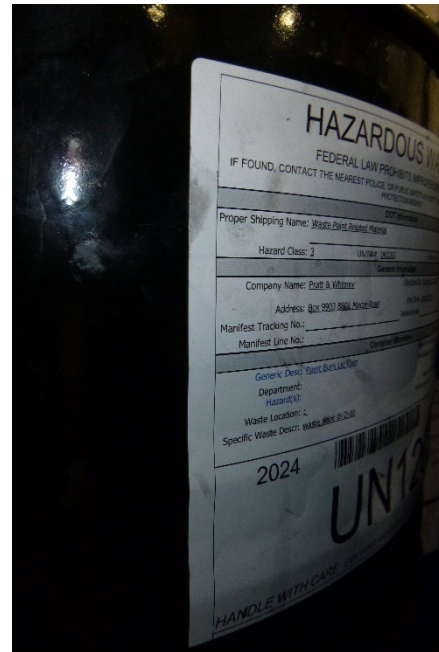
Photograph 63. CAA Base Side HW Container Indicators



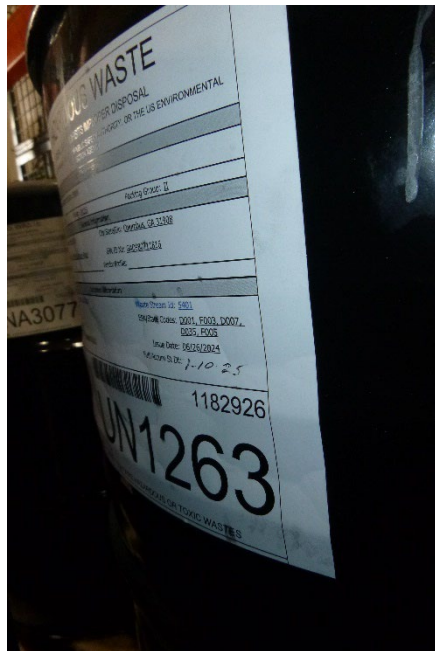
Photograph 64. CAA Base Side HW Container Indicator



Photograph 65. Base Side HW Container Label



Photograph 66. Base Side HW Container Label



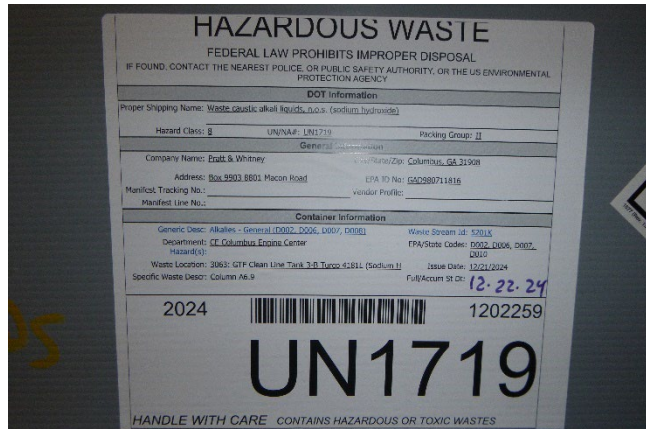
Photograph 67. Base Side HW Container Label



Photograph 68. Base Side HW Container Indicator



Photograph 69. Base Side HW Container Indicator



Photograph 70. Base Side 300-gallon Container Label



Photograph 71. Base Side 300-gallon Container



Photograph 72. Base Side Palletized Containers



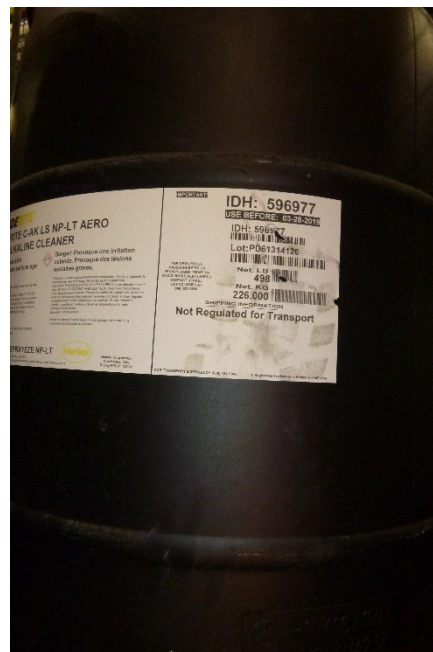
Photograph 73. Base Side Uncharacterized Waste



Photograph 74. Base Side Uncharacterized Waste Label



Photograph 75. Base Side Expired Product



Photograph 76. Base Side Expired Product Label



Photograph 77. CAA Acid Side Universal Waste Lamps



Photograph 78. CAA Acid Side Universal Waste Lamps



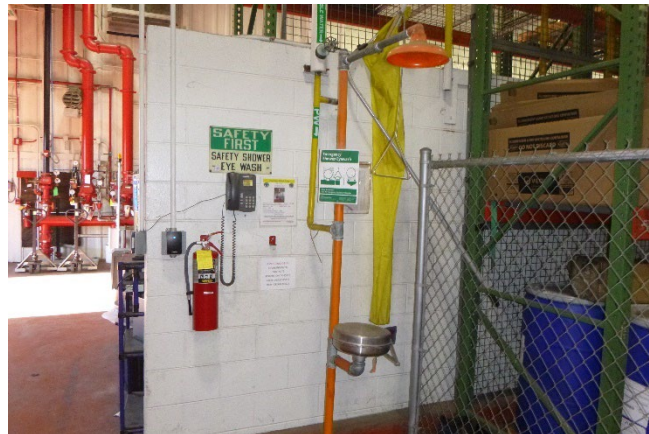
Photograph 79. CAA Acid Side Universal Waste Lamps



Photograph 80. CAA Acid Side Universal Waste Lamps label



Photograph 81. Acid Side Bulging 300-gallon Container



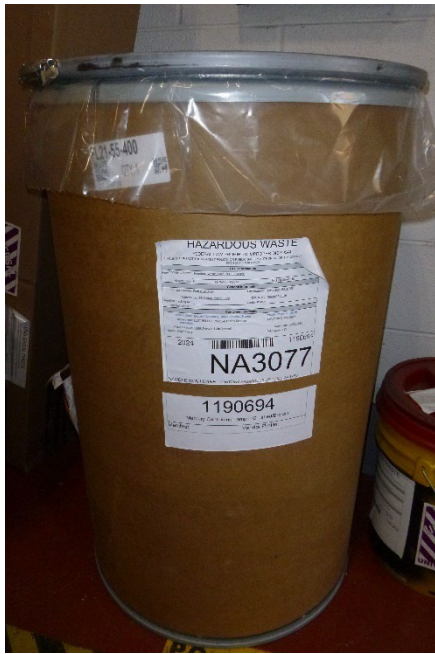
Photograph 82. CAA Decontamination Equipment



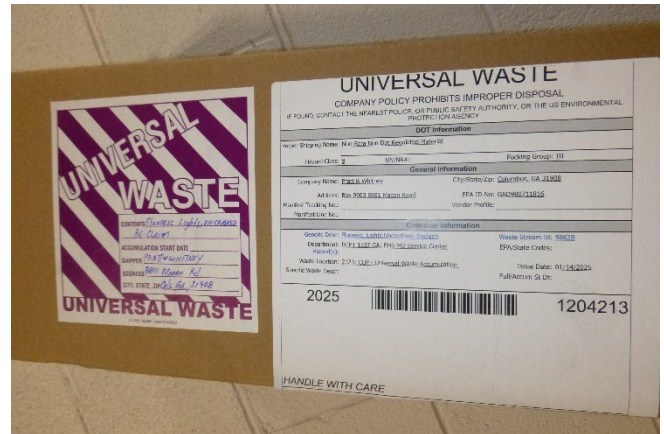
Photograph 83. CAA Spill Kit



Photograph 84. Powerplant Satellite Area



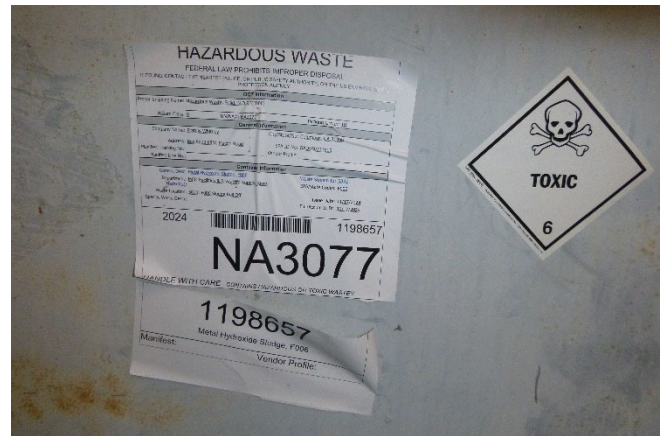
Photograph 85. Powerhouse HW Broken Lamps



Photograph 86. Powerhouse UW “Fluorescent Lights” Label



Photograph 87. WWTP CAA Container



Photograph 88. WWTP CAA Container Label



Photograph 89. WWTP CAA Decontamination Equipment



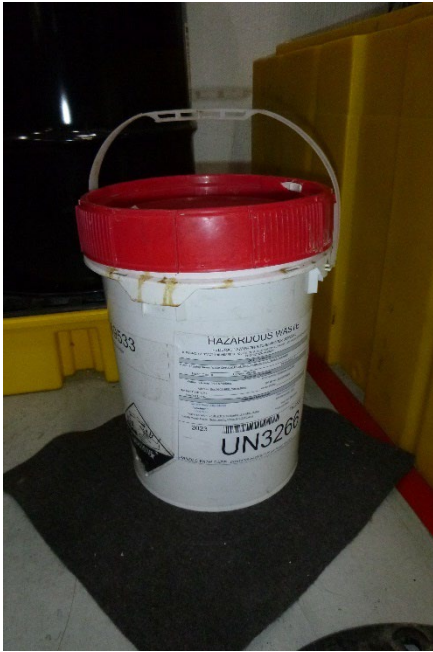
Photograph 90. POG 4082 Used Oil Container



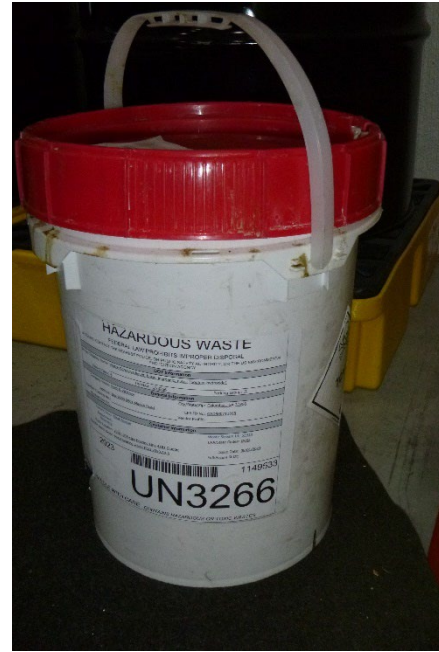
Photograph 91. POG 4082 Used Oil Label



Photograph 92. POG 4082 Used Oil Container



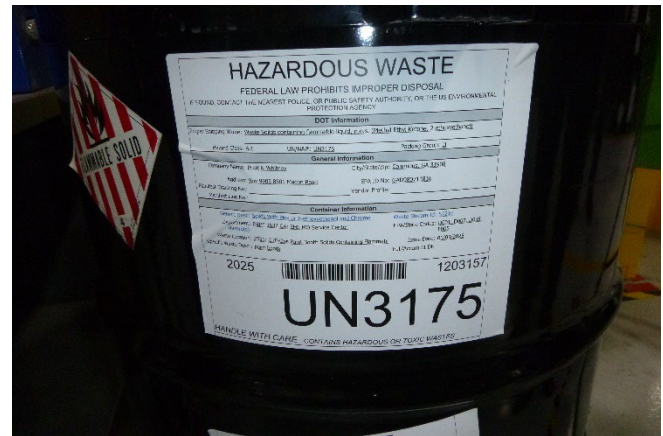
Photograph 93. POG 2250 HW Container Indicator and label



Photograph 94. POG 2250 HW Container



Photograph 95. POG 2551 HW Container



Photograph 96. POG 2551 HW Container Label