

RCRA Inspection Report

1) Inspector and Author of Report

Daryl Himes
Environmental Engineer
RCRA Enforcement Section
Phone: 404-562-8614
himes.daryl@epa.gov

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

2) Facility Information

Joint Base Charleston Air Force Base (Joint Base)
628 CES/CEIE
210 West Stewart Avenue
Charleston, South Carolina 29404
Charleston County
EPA ID: SC3570024460

3) Responsible Officials

Barry K. Lewis
Chief, Environmental Element
barry.lewis.4@us.af.mil

4) Inspection Participants

[REDACTED] - Joint Base

[REDACTED] - Joint Base

Gerald Shealy – South Carolina Department of Health and Environmental Control (Columbia)
Daryl R. Himes - US EPA Region 4 Atlanta

5) Date of Inspection

December 13, 2022 at 9:20 a.m. EDT

6) Applicable Regulations¹

Resource Conservation and Recovery Act (RCRA) Sections 3002 (42 U.S. Code – Annotated U.S.C.A. 6925 and 6927), and 40 Code of Federal Regulation (C.F.R.) Parts 260 - 270, 273, 278, & 279; South Carolina Hazardous Waste Management Act, S.C. Code Ann. § 44-56-10 *et seq.*, and South Carolina Hazardous Waste Management Regulations (SCHWMR), S.C. Code Ann. Regs. 61-79.260-270, 61-79.273 and 61-79.279; and Hazardous Waste Permit SC3570024460.

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.

Pursuant to S.C. Code Ann. Regs. 61-79.260.10 [40 C.F.R. § 262.10], a Large Quantity Generator (LQG) is a generator who generates greater than or equal to 1,000 kilograms (2200 lbs) of non-acute hazardous waste in a calendar month.

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

Pursuant to S.C. Code Ann. Regs. 61-79.262.15(a) [40 C.F.R. § 262.15(a)], a generator may accumulate as much as 55 gallons of non-acute hazardous waste in containers at or near 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 44-56-60(a)(2) and (b) of the SCHWMA, S.C. Code Ann. § 44-56-60(a)(2) and (b) [Section 3005 of RCRA, 42 U.S.C. § 6925], and without complying with S.C. Code Ann. Regs. 61-79.262.16(b)(2) or [40 C.F.R. § 262.16(b) or § 262.17(a)], except as required in S.C. Code Ann. Regs. 61-79.262.15(a)(7) and (8) [40 C.F.R. § 262.15(a)(7) and (8)], provided that the generator complies with the satellite accumulation area conditions listed in S.C. Code Ann. Regs. 61-79.262.15(a) [40 C.F.R. § 262.15(a)] (hereinafter referred to as the “SAA Permit Exemption”).

7) Purpose of Inspection

The purpose of this inspection was to conduct an unannounced compliance evaluation inspection to determine Joint Base’s compliance with the conditions of its RCRA Hazardous Waste Facility Operating Permit SC3570024460, the applicable requirements of RCRA and the corresponding SCDHEC regulations. This was an EPA lead inspection.

8) Facility Description

The Joint Base Charleston AFB is one of 12 Department of Defense (DoD) Joint Bases and is host to over 60 DoD and Federal agencies. The joint base mission consists of six different focus areas: installation support, airlift and airdrop operations, training Naval nuclear operators, deployable logistics, multi-mission warfighter support and inter-agency cooperation.

The 628th Air Base Wing serves as the host unit of Joint Base Charleston AFB and is comprised of two operational groups and a wing staff directorate. The 628th Air Base Wing delivers installation support to a total force of over 90,000 Airmen, Sailors, Soldiers, Marines, Coast Guardsmen, civilians, dependents, and retirees across four installations which include the Charleston Air Base and the Naval Weapons Station. The base property includes three seaports, two civilian-military airfields, 39 miles of rail and 22 miles of coastline totaling almost 24,000 acres. Joint Base Charleston provides installation support missions that include the harbor security patrol, the transportation isolation system, and the Cooper River dredging.

Charleston Air Force Base (Charleston AFB) and the Naval Weapons Station make up Joint Base Charleston. The base hosts several units including the 437th Airlift Wing, which maintains a current fleet of 54 C-17A Globemaster III aircraft. The 437th Airlift Wing is comprised of two operational groups: the 437th Operations Group, which provides direct delivery, airdrop and air refueling; and the 437th Maintenance Group, which performs organizational and intermediate-level maintenance on all assigned C-17 aircraft and provides loading and unloading expertise for all cargo and personnel.

Charleston AFB is located on 3,500 acres and operates 24 hours per day and seven days a week. There are 4,500 military employees and 7,000 civilian employees on site. Around 2,000 employees handle hazardous waste across seven less than 90-day central accumulation areas (CAAs) and 25 satellite accumulation areas (SAAs).

Charleston AFB's most recent Hazardous Waste Generator Notification (EPA Form 8700-12) dated January 21, 2021, characterized the facility as a treatment, storage and disposal facility (TSDF), a large quantity generator (LQG) of hazardous waste and a small quantity handler of universal waste (SQHUW). Currently, Charleston AFB may generate hazardous waste, used oil and universal wastes (such as spent batteries and certain types of lamps), waste solvent, spent aerosol cans, paint waste and other wastes. The hazardous wastes codes which identify these wastes include: D001-D011, D018, D026, D035, D040, F001-F005, P001, P042, P081, U002, U060, U075, U080, U151, U154, U159, U162, U220, U226, U228 and U239.

9) Previous Inspection History

This facility was last inspected on June 2, 2022, by SCDHEC. No violations were found during that inspection.

10) Opening Conference

On December 13, 2022, EPA inspector Daryl Himes, accompanied by SCDHEC inspector Gerald Shealy arrived at USAF Charleston Joint Base at approximately 9:20 a.m. Danielle Allen-Blome and [REDACTED], Hazardous Waste Program Managers for the facility, immediately received the inspectors outside of the facility's main security gate. The inspectors presented their credentials and were escorted onto the base through the main gate. The inspectors were escorted to a break room for an informal opening conference in which the inspectors introduced themselves, explained the purpose of the visit and stated their desire to see select hazardous waste generation, accumulation and storage locations from a list provided by the facility personnel.

The inspectors described the anticipated use of digital cameras during the inspection and provided a request for records. No discussion was held with the facility about being a small business as it is a U.S. military base. A brief statement was given to facility personnel to inform them of the facility's ability, pursuant to 40 C.F.R. § 2.203, to assert a business confidentiality claim for information submitted to EPA.

The facility representatives stated that, for the most part, operations at the facility remained the same as those observed in previous inspections.

11) **Inspection Observations**

Unless noted otherwise, all containers of hazardous waste observed within any SAA were closed, labeled with the words “Hazardous Waste,” and marked with an indication of the hazard(s) associated with the waste contained.

Containers and tanks observed in any CAA were observed to be closed, marked with an accumulation start date of less than 90-days, labeled with the words “Hazardous Waste” and an indication of the hazards of the contents.

In addition, any containers of Universal Waste which may have been observed during the walk-through inspection were properly labeled, dated, and closed at the time of the inspection, unless noted otherwise. Also, containers of used oil were observed to be labeled as “Used Oil.”

Following is a list of buildings and areas inspected during the walk-through inspection.

[REDACTED] – Dental Clinic – SAA #32

In a SAA in Building 364, the inspectors observed one 5-gallon plastic container of D009 hazardous waste amalgams collected from traps and filters in the dental clinic.

[REDACTED] – Pharmacy – SAA #33

No hazardous waste pharmaceuticals were observed within the pharmacy at the time of the inspection.

[REDACTED] -Aircrew Flight Equipment – SAA #14

Patch repairs to aircraft life-rafts are performed in this building. One 35-gallon container of D001/F003/F005 hazardous waste, one 5-gallon container of D001/D035 hazardous waste and one 2.5-gallon container of D001/D035 hazardous waste were observed within SAA #14 in this building for the collection of hazardous waste solvents generated during patch repairs.

[REDACTED] -Aircrew Flight Equipment – SAA #28

Patch repairs to aircraft parachutes and facemasks are performed in this building.

One 10-gallon container of D001 hazardous waste patch sealant was observed within SAA #28 in this building for the collection of hazardous waste solvents generated during patch repairs.

In addition, one 4-foot cardboard tube for the accumulation of universal waste fluorescent lamps and one 5-gallon container of universal waste lithium batteries were observed at the time of the inspection.

[] - Electro-Environmental Area – SAA #9

Battery maintenance for the base is performed in this building.

Two 5-gallon containers of D002/D006/D008 hazardous waste were observed within SAA #9 in this building at the time of the inspection.

One 4-foot cardboard tube for the accumulation of universal waste fluorescent lamps was also observed in this building at the time of the inspection.

[] – Wheel and Tire

Maintenance on rims and tires of various aircraft is performed in this building. Both a SAA (#6) and a CAA (#2) were utilized in this area for the accumulation of hazardous waste.

Within CAA #2, the inspection team observed one 55-gallon container of D005/D006/D007 characteristic hazardous waste which was generated from the use of two large washing machines. One of the washing machines is used to wash rims, and the other is used to wash bearings. Each machine generates hazardous waste and deposits it through four separate outfall ports into containers with volumes of approximately 5-gallons. The hazardous waste that is generated during the overnight cleaning cycle is placed into a 55-gallon drum in a SAA every morning.

Two separate 55-gallon containers of D005/D007 characteristic hazardous waste were observed in SAA #6. Each of these containers was used for the collection of D005/D007 characteristic hazardous waste. One of the containers is used to accumulate liquids, and the other is used to accumulate solids including rags and personal protective equipment.

[] – Painting/Sanding

Metal working and painting operations are performed on aircraft in this building. CAA #4 was observed in this area.

Within CAA #4, four 55-gallon containers, one 35-gallon container and two 5-gallon containers were used to accumulate various characteristic and listed hazardous wastes generated from metal and painting operations performed in the building.

[] – Painting

Painting operations, including the use of a paint booth, are performed in this building. Two SAAs (#13A & #13B) and one CAA (#15) were observed in this area.

One 55-gallon drum of D001/D007/F003/F005 characteristic and listed hazardous waste was observed in CAA #15 within a hanger in which painting operations are performed.

SAA #13A and #13B include separate 55-gallon containers for clothing and PPE worn during operations performed in this building. The clothing is placed in the individual containers located in the mens' and womens' dressing rooms of the building.

[REDACTED]

This building consisted of a 15-foot by 8-foot metal shed located within the facility's permitted storage area. This shed is used to accumulate any wastes generated onsite that are not included on the permit for storage in the permitted area. No hazardous or universal wastes were observed in this building at the time of the inspection.

[REDACTED] – 628 CES/CEI Hazardous Waste Storage

Building 691 is the collection area for hazardous waste, universal waste, used oil, polychlorinated biphenyls (PCBs) and various waste streams generated by the base. The inspectors observed the following in this area:

- Bay G – Universal waste batteries were stored in five containers ranging in size from 1-gallon to 5-gallons. All containers were labeled with universal waste labels and were marked with start dates of less than one year.
- The hazardous waste streams were separated by characteristics and observed in these Cells at the time of the inspection:
 - Cell A – Flammable: Two 55-gallon, six 30-gallon, one 15-gallon, one 5-gallon and a one-gallon container
 - Cell B – Ignitable: Nine 85-gallon, thirteen 55-gallon, two 30-gallon and one 5-gallon containers
 - Cell C – Toxic: Thirty-one 55-gallon containers
 - Cell D – Toxic: Thirty 55-gallon, two 30-gallon, twelve 5-gallon and one 1-gallon container
 - Cell E – Toxic: One 5-gallon container
 - Cell F – Corrosive: One 55-gallon container
 - Cell F – Universal waste batteries: four 55-gallon, twenty-six 5-gallon containers

All containers in the permitted area were closed, labeled with the words "Hazardous Waste" and an indication of the hazards associated with the hazardous waste within the container and marked with a storage start date of less than one year.

The inspectors reviewed the inspection logs for the Permitted Storage Facility for the past six months when the last inspection was performed.

One 5000-gallon tank for the collection of used oil was observed in this area. The tank was labeled with the words "Used Oil."

Eight cardboard tubes and one 5-gallon plastic container of universal waste fluorescent lamps were also observed in this area.

 – Fuel/Fire Truck MT – SAA #32

The inspectors observed one 55-gallon container of D018 (benzene) characteristic hazardous waste within a SAA (#18) outside of the building in which fire trucks are fueled. The container is used for the collection of pads and booms used to collect any fuel spilled during filling events.

Record Review

After the walk-through, the inspectors requested and reviewed the facility's applicable training records, contingency plan, inspection records and manifests. During the walk-through, the inspection and training records associated with the CAAs that were visited were reviewed.

Closing Conference

After the walk-through inspection and review of the facility's hazardous waste records, the inspection team conducted an exit meeting with facility personnel who included Danielle Allen-Blome and . During this conference, the inspectors discussed their preliminary findings made during the inspection.

12) Signed

Daryl R. Himes
Environmental Engineer

Date

13) Concurrence

Araceli B. Chavez
Chief
RCRA Enforcement Section

Date