

RCRA Inspection Report

1) Inspector and Author of Report

William Kappler
Physical Scientist
Phone: (404) 562-8498
Kappler.William@epa.gov

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

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

2) Facility Information

Cape Canaveral Space Force Station
45 CES/CEIE
1224 Jupiter Street, MS 9125, Patrick SFB, Brevard County, Florida 32925-3343

EPA ID #: FL2800016121
NAICS #: 928110 - National Security

3) Responsible Official

Laurie Fisher
Chief, Environmental Compliance

(321) 494-7288
laurie.fisher@spaceforce.mil

4) Inspection Participants

Heather Goslin, 45 CES/CEIE Cape Canaveral Space Force Station
Thomas Czarniak, 45 CES/CEIE Cape Canaveral Space Force Station
Rebecca Fafard, Chenega Corporation
Thor Peterson, Chenega Corporation
Michael Hovanic, Patrick F2F
Sarah Brock, Patrick F2F
Michael Eckoff, Florida Department of Environmental Protection
Tarin Tischler U. S. Environmental Protection Agency, Region 4
William Kappler, U. S. Environmental Protection Agency, Region 4

5) Date of Inspection

March 13, 2024

6) Applicable Authority¹

Resource Conservation and Recovery Act (RCRA) Sections 3002 (42 U.S. Code – Annotated

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.

U.S.C.A. §§ 6925 and 6927), Chapter 403 of the Florida Statutes, Fla. Stat. § 403.702 *et seq.*, and rules 62.710.210 -.901, and 62-730 *et seq.* of the Florida Administrative Code Annotated (Fla. Admin. Code Ann.) [40 Code of Federal Regulation (C.F.R.) Parts 260 - 270, 273, 278, & 279], and the Florida Department of Environmental Protection RCRA Permit 70725-008-HO, for the operation of hazardous waste storage facilities, miscellaneous thermal treatment units and continuation of site wide corrective action.

Pursuant to Florida Administrative Code Annotated (F.A.C.) Chapter 62-730.160(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 F.A.C. Chapter 62-730.160(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 the point of generation where wastes initially accumulate, which is under the control of the operator of the process generating the waste, without a permit or without having interim status, as required by Chapter 403 of the Florida Statutes, Fla. Stat. § 403.702 *et seq.*, [Section 3005 of RCRA, 42 U.S.C. § 6925], and without complying with F.A.C. Chapter 62-730.160(1), [40 C.F.R. § 262.16(b) or § 262.17 (a)], except as required in F.A.C. Chapter 62-730.160(1), [40 C.F.R. § 262.15(a)(7) and (8)], provided that the generator complies with the satellite accumulation area conditions listed in F.A.C. Chapter 62-730.160(1), [40 C.F.R. § 262.15(a)] (hereinafter referred to as the “SAA Permit Exemption”).

Pursuant to F.A.C. Chapter 62-730.160(1) [40 C.F.R. § 262.17], a generator of 1,000 kilograms or greater of hazardous waste in a calendar month is a large quantity generator (LQG) and may accumulate hazardous waste on-site for 90 days or less without a permit or without having interim status, as required by Chapter 403 of the Florida Statutes, Fla. Stat. § 403.702 *et seq.*, [Section 3005 of RCRA, 42 U.S.C. § 6925], provided that the generator complies with the conditions listed in F.A.C. Chapter 62-730.160(1) [40 C.F.R. § 262.17] (hereinafter referred to as the “LQG Permit Exemption”).

Pursuant to F.A.C. Chapter 62-730.185(1), [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 the inspection was to conduct a joint unannounced compliance evaluation inspection to determine the Cape Canaveral Space Force Station (hereinafter, “CCSFS” or the “facility”) compliance with the conditions of its RCRA Hazardous Waste Facility Operating Permit and the applicable requirements of the Resource Conservation and Recovery Act (RCRA) and the corresponding Florida Department of Environmental Protection (FDEP) regulations. This was an EPA lead inspection.

8) **Facility Description**

CCSFS is in Brevard County, Florida, Latitude 28.500964, and Longitude -80.575552. The facility has been at its present location since 1948 and consists of approximately 15,000 acres. The property is owned by the U.S. Government. The facility operates 24 hours a day, seven days per week. The facility consists of numerous buildings and approximately 53 buildings are identified as generating hazardous waste. The City of Cocoa provides potable water and Cape Canaveral provides sanitary sewer services. CCSFS does not have residential housing and does not operate a residential auto/hobby shop, bowling alley, golf course, and hospital.

CCSFS is an active Space Force Station. Missiles, satellites, and other defense related products are prepared and launched at the station. Operations conducted at CCSFS include painting, sandblasting, vehicle maintenance and washing, measuring equipment services and calibration, space vehicle assembly, space vehicle fueling, naval ship maintenance, armory maintenance and service, and laboratory operations.

Chenega Corporation (Chenega) is responsible for hazardous waste management at CCSFS including contingency plans, site inspections, internal and external manifests, off-site and internal shipments of hazardous waste. The facility accumulates hazardous waste at numerous central accumulation areas and satellite accumulation areas prior to transferring the waste to the permitted storage areas. Hazardous waste is characterized and profiled prior to being shipped off-site. The waste is staged in one of the central accumulation areas until the result of the waste analysis is complete. Generally, sample results are returned to the generator within 30 to 60 days of the day sampling is originally requested.

Hazardous waste generated at CCSFS includes, but is not limited to: solvents and waste paint related materials from painting activities; solvents, vehicle fluids, and spent batteries from the repair and maintenance of vehicles and equipment; sample residues and reagents from laboratory and testing operations; isopropanol used in cleaning operations; sodium hydroxide; solvent mixtures and wipes contaminated with solvents used in degreasing and cleaning operations; and acids and caustics from miscellaneous operations. Universal waste, used oil, and used oil filters are also generated at the facility.

EPA hazardous waste codes identified at CCSFS consist of characteristic waste D001-D011, D016, D018, D019, D021-D043, listed waste F001-F006, and several U-listed and P-listed hazardous waste.

The facility accumulates hazardous waste in SAAs and stores hazardous waste for 90-days or less in central accumulation areas. Hazardous waste stored in central accumulation areas are generally shipped off-site to a designated facility from the central accumulation area.

CCSFS recently submitted a RCRA Subtitle C Site Identification Form, 8700-12FL, of its regulated waste activity to FDEP, on September 18, 2023. The facility notified as a LQG of hazardous

waste, an operating non-commercial treatment, storage or disposal facility, and a small quantity handler of universal waste (SQHUW).

CCSFS was issued Hazardous Waste Permit Number 70725-007-HO for the storage of hazardous waste in containers, for the open burning and open detonation of reactive material in thermal treatment units and the continuation of site wide corrective action. The permit was issued on March 19, 2020, and it expires on March 3, 2025. CCSFS was issued a permit modification 70725-008-HO on September 23, 2022, for an updated facility name and address, an updated description of permitted activities for the open burn unit to require as-builts after in-kind replacement of the burn boxes, updated list of documents, updates to reflect base template revisions, the addition of Table of Permit Modifications, added reference to revised sections of the permit application, and grammatical edits.

9) Previous Inspection History

CCSFS was inspected by the FDEP on September 18, 2023, for compliance with its hazardous waste permit and state and federal hazardous waste regulations. Potential violations were not observed at that time.

CCSFS was inspected by the EPA on March 22, 2017, for compliance with its hazardous waste permit and state and federal hazardous waste regulations. Potential violations were not observed at that time.

10) Opening Conference

On March 13, 2024, EPA inspectors William Kappler and Tarin Tischler, accompanied by FDEP inspector, Michael Eckoff, arrived at CCSFS at approximately 8:50 a.m.

The inspectors were received by Heather Goslin, EMS Coordinator and Thomas Czarniak, Hazardous Waste Program Manager with the 45 CES/CEIE Patrick Space Force Base (PSFB) at the CCSFS Visitor Center. Heather Goslin prearranged a visitors pass to escort the inspectors onto the CCSFS property. The inspectors were escorted by Heather Goslin to a conference room in Building 01704 to meet with CCSFS representatives.

Heather Goslin, Thomas Czarniak, and the inspectors were joined by Chenega representatives Rebecca Fafard, Hazardous Waste Site Manager, Thor Peterson Hazardous Waste Lead, and Michael Hovanic, PSFB (CCSFS representatives) for an opening conference. The inspectors introduced themselves, showed their credentials and explained the purpose of the visit.

The inspectors described the anticipated use of a digital camera during the inspection and provided a written list of the records needed for review. The EPA inspectors 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/smallbusinessinfo.pdf>. The EPA inspector also discussed facility's ability, pursuant to 40 C.F.R. §

2.203, to assert a business confidentiality claim for information provided to the EPA. CCSFS did not assert a business confidentiality claim.

The EPA inspectors described the use of equipment (ipad) to conduct and document the inspection electronically, as well as, by logbook.

CCSFS 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 CCSFS representatives escorted the inspectors on a tour of the facility operations.

11) Inspection Observations

Permitted Storage Building 44200

Hazardous waste permitted for storage in this building includes waste corrosives. The building is permitted for a maximum storage capacity of 64 55-gallon drums, or 3,520 gallons, of hazardous waste. The inspectors observed danger, warning, no smoking signs, and placards identifying the building as storing hazardous waste (Photographs 1, 2 and 6). The storage building's concrete floor was sealed and in good condition. The permitted storage unit is inspected for leaks, container condition, emergency equipment, container inventory accuracy, and observations inside and outside storage area conditions.

Acidic Waste Bay

The inspectors observed one five-gallon container storing corrosive and toxic hazardous waste (D002, D007) and one 20-gallon container of corrosive hazardous waste (D002) on a containment spill pallet. The containers were closed, in good condition with aisle space, labeled with the words hazardous waste, labeled with an indication of the hazards, and marked with a storage date less than one year. The five-gallon container was not marked or labeled with an indication of the hazard for toxicity (Photograph 3). The inspectors observed CCSFS representatives mark the container with a toxic hazard indicator.

CCSFS's permit application, under Inspection Procedures of APPLICATION FOR A HAZARDOUS WASTE PERMIT PART II B. Containers dated 6/3/2019 states, "The weekly inspection will at a minimum document: • All containers are labeled and have an accumulation start date (262.31 & 262.17)."

Pursuant to Chapter 403 of the Florida Statutes, Fla. Stat. § 403.727(1)(c), it is unlawful for any hazardous waste generator, transporter, or facility owner or operator to: Fail to comply with a permit.

Pursuant to Part II Subpart A – General Operating Conditions of the State of Florida Department of Environmental Protection Hazardous Waste Permit Number 70725-008-HO, the Permittee is required to maintain compliance with the requirements of 40 C.F.R. 268 as adopted in F.A.C. Chapter 62-730.160(1) [40 C.F.R. § 262.17(a)(9)], which incorporates F.A.C.

Chapter 62-730.183 [40 C.F.R. § 268.50(a)(2)(i)(C)], an owner/operator of a hazardous waste treatment, storage, or disposal facility stores such wastes in tanks, containers, or containment buildings solely for the purpose of the accumulation of such quantities of hazardous waste as necessary to facilitate proper recovery, treatment, or disposal and, each container is clearly marked to identify its contents and with an indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (*i.e.*, ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704).

Basic Waste Bay

The inspectors did not observe hazardous waste stored in this area at the time of the inspection.

The inspectors observed three 55-gallon containers accumulating used oil. The containers were closed and labeled with the words used oil.

The inspectors observed the location of emergency equipment, fire extinguishers, shower and eyes wash stations, and phones.

Permitted Storage Building 44205

Hazardous waste permitted for storage in this building includes ignitable waste, toxic waste, halogenated solvent waste, waste lithium batteries (reactive), and spent low-pressure sodium lamps. The building is permitted for a maximum storage capacity of 200 55-gallon drums, or 11,000 gallons, of hazardous waste. The inspectors observed danger, warning, no smoking signs, and placards identifying the building as storing hazardous waste. The storage building's concrete floor was sealed and in good condition. The permitted storage unit is inspected for leaks, container condition, emergency equipment, container inventory list accuracy, and inside and outside storage area conditions. The inspectors observed an overhead fire suppression system in this building.

Halogenated Solvent Waste Bay

The inspectors observed one 20-gallon container storing flammable and corrosive hazardous waste (D001, D002), one five-gallon container storing flammable hazardous waste (D001), and two 30-gallon containers storing flammable and toxic hazardous waste (D001, D004-D010, F003, F005) on a containment spill pallet. The containers were closed, in good condition with aisle space, labeled with the words hazardous waste, labeled with an indication of the hazards, and marked with a storage date less than one year. The CCSFS representatives marked the containers with a toxic hazard indicator at the time of the inspection.

Ignitable Waste Bay

The inspectors observed five 55-gallon containers storing flammable and toxic hazardous waste

(D001, D005, D007, D008, D011, D018, D019, D021, D035, D039, D040 and one 30-gallon container storing flammable and toxic hazardous waste (D001, D005-D008, D018, D035, D039, D040) on containment spill pallets. The containers were closed, in good condition with aisle space, labeled with the words hazardous waste, labeled with an indication of the hazards, and marked with a storage date less than one year. The CCSFS representatives marked the containers with a toxic hazard indicator at the time of the inspection.

Toxic Waste Bay

The inspectors observed four 55-gallon containers storing hazardous waste solids (F002, F005, D005, D007, D008, D018, D022, D023, D028, D035, D039, D040) on containment spill pallets. The containers were closed, in good condition with aisle space, labeled with the words hazardous waste, labeled with a DOT Class 9 hazard indicator, and marked with a storage date less than one year (Photograph 4). The inspectors observed the four containers were not marked or labeled with an indication of the hazard for toxicity. The CCSFS representatives marked the containers with a toxic hazard indicator at the time of the inspection.

The inspectors also observed two five-gallon containers, one 10-gallon container and one 15-gallon container (all marked with waste codes D004, D005, D006, D007, D008, D010, D018, D023, D035, D039, and/or D040), of hazardous waste liquids and solids on a containment spill pallet. The containers were closed, in good condition with aisle space, labeled with the words hazardous waste, labeled with an indication of the hazards, and marked with a storage date less than one year (Photograph 5). The CCSFS representatives marked the containers with a toxic hazard indicator at the time of the inspection.

The inspectors observed the location of emergency equipment, fire extinguishers, shower and eyes wash stations, and phones.

Central Accumulation Area (CAA) Building 44210

Hazardous waste is stored in the CAA for 90-days or less in a pole barn type building. The CAA is located outdoors adjacent to the permitted storage area and is used to store hazardous waste, used oil, petroleum contact water, waste pending a determination, and “controlled” waste. The inspectors observed danger, warning signs and placards identifying the building as a 90-day storage area (Photograph 7). The CAA’s concrete floor was in good condition. The inspectors observed the location of emergency equipment, fire extinguishers, and shower and eyes wash stations.

The inspectors observed two 30-gallon containers and seven 55-gallon containers accumulating nonhazardous controlled waste on spill containment pallets. The inspectors also observed three 55-gallon containers and four 30-gallon containers accumulating petroleum solid waste on spill containment pallets. The containers were closed, in good condition with aisle space, labeled, marked with a date, and marked with the waste profile number. The inspectors randomly chose waste profile numbers for the record review.

Explosive Ordnance Detonation (EOD) Range - Open Burn Area

Andrew Butler, EOD Support Specialist, arrived with EOD records and escorted the inspectors to the EOD range (Photograph 8). The inspectors observed danger no smoking and danger authorized access only signs posted. Open burning takes place in two steel burn boxes. The burn boxes are supported by a 2.5-inch-thick fire brick pad and surrounded by a concrete slab. Low explosives, flares, munitions, separation motors and other items, are burned in the burn boxes. The burn boxes were recently replaced per the issued permit modification 70725-008-HO. One burn box is used for CCSFS, and the second burn box is used for NASA. The inspectors observed the burn boxes and supporting brick and concrete slab were in good condition and the burn boxes were covered. The inspectors observed the burn boxes were empty. A waste determination is conducted on waste ash removed from the burn box from each burn. Hazardous waste ash is accumulated in a 55-gallon SAA container, located inside a yellow poly-pack igloo adjacent to the burn area. Andrew Butler opened the igloo. The inspectors observed one 55-gallon SAA container on a spill containment pallet. The inspectors observed the container was closed, in good condition, labeled with the words hazardous waste (D004, D005, D006, D008), and labeled with an indication of the hazard for toxicity.

EOD Range - Open Detonation Area

Military explosives are used to detonate items such as grenades, flares and other reactive waste. The permit limits no more than 100 pounds (net explosive weight) of non-fragmenting explosive wastes to be treated. The permit limits no more than 25 pounds (net explosive weight) of fragmenting explosive waste to be treated. The detonation occurs on the ground covered by a sand surface or in an excavated sand pit depending on the size of the explosive, the amount, the type of explosive, the charge necessary to ensure destruction, and the method of priming. The reactive waste is placed on the sand (surface or pit) and remotely detonated. The open detonation area is near the beach on the Atlantic Ocean, located just east of the open detonation area. A large soil mound is immediately west of the open detonation area. The metals fragments generated from the detonation are segregated for recycling. The remote detonation area is in a bunker to the west of the large soil mound.

Andrew Butler indicated that the square footage of the open detonation area is approximately defined by two tires placed on the ground linearly spaced along the sandy area (Photograph 9). Andrew Butler indicated that the open detonation area is maintained by occasional grading. No detonation occurred and no apparent hazardous waste was observed in the open detonation area at the time of the inspection. The inspectors observed one-to-two-inch metal fragments on the sand of the open detonation area.

Pursuant to Chapter 403 of the Florida Statutes, Fla. Stat. § 403.727(1)(c), it is unlawful for any hazardous waste generator, transporter, or facility owner or operator to: Fail to comply with a permit.

Pursuant to Part II Subpart C – Specific Operating Conditions for Open Burn and Open Detonation Units, specific operating condition 19, the Permittee shall inspect Open Detonation Unit for remaining debris, fragments, and residues at the conclusion of each open

detonation treatment operation. If the remaining materials are unsafe due to their energetic nature the Permittee shall immediately, detonate the remaining materials in place. If the materials are not dangerous due to an energetic nature, the Permittee shall collect and dispose of the remaining materials within two (2) weeks of the open detonation treatment operation.

Records

The EOD records are maintained at the EOD office Building 56620. Andrew Butler provided records for inspectors to review at the EOD range. The inspectors reviewed the internal controlled waste manifests for June, September, and December 2023. The inspectors reviewed the RCRA training certificates for 14 people and the job titles and position description records. The training was completed in December 2023, November 2023, or August 2023. Andrew Butler completed training on April 7, 2023. The position description did not describe the open burning and open detonation activities performed by the trained personnel. The inspectors asked CCSFS to add language to the position description identifying the work tasks performed by EOD range personnel.

The operating record for burning and detonation activities is kept electronically but Andrew Butler provided a print-out for inspectors to review. The operating record include the information required by the permit. The last open burn entered in the log was February 14, 2024, and the last open detonation entered in the log was February 29, 2024.

The inspectors were escorted to the EOD range office Building 56620 to confirm the contingency plan is maintained electronically.

US Air Force Chemistry Laboratory Building 54800

Geoffrey Giarmo is the Laboratory Chief for the Chemistry Laboratory. The chemistry laboratory operates with a total of eight employees including seven chemists. The chemistry laboratory conducts analysis on hypergolic fuel, jet and petroleum fuels. The chemistry laboratory stores hazardous waste in SAA containers and in several 90-day or less storage areas.

Solvent/Oxidizer Main 90-Day or Less Area

Hazardous waste is stored outdoors in a locked cage constructed next to the building. The 90-day or less area is constructed against the building outside wall, with a concrete sump and with a metal grated floor.

The inspectors observed two 30-gallon containers (D001, D004-D011, D019, D022, F002, F003, F005) and one five-gallon container (P078) accumulating hazardous waste flammable liquid, identified with several RCRA characteristic and listed waste codes. The containers were closed, in good condition with aisle space, labeled with the words hazardous waste, labeled with an indication of the hazards, and marked with the storage dates February 1, 2024, March 6, 2024, and March 13, 2024. The inspectors observed the three containers were not marked or labeled with an indication of the hazard for toxicity (Photographs 10 and 11). The inspectors observed CCSFS representatives mark the containers with a toxic hazard indicator.

Pursuant to F.A.C. Chapter 62-730.160(1) [40 C.F.R. § 262.17(a)(5)(i)(B)], which is a condition of the LQG Permit Exemption, a generator must mark or label its containers with an indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704).

The inspectors also observed three 55-gallon containers accumulating fuel for recycling. The containers were labeled with the words recyclable fuel.

Hydrazine 90-Day or Less Area

Hazardous waste is stored outdoors in a locked igloo next to the building. The inspectors observed one five-gallon container accumulating hazardous waste solids (U098, U133, P068) on a containment spill pallet. The container was closed, in good condition with aisle space, labeled with the words hazardous waste, labeled with an indication of the hazards, and marked with the storage date February 15, 2024.

Hydrazine Room 108 90-Day or Less Area

Hazardous waste is stored indoors in a fume hood. The inspectors observed a no smoking sign. The inspectors observed a one-quart container accumulating hazardous waste methylhydrazine (D001, D002, U098, U133, P068). The container was closed, in good condition with aisle space, labeled with the words hazardous waste, labeled with an indication of the hazards, and marked with the storage date January 24, 2024.

The inspectors observed one five-gallon SAA container in the front corner of the room accumulating hazardous waste flammable and corrosive liquid (D001, D002). The container was closed, in good condition, labeled with the words hazardous waste, and labeled with an indication of the hazards.

Records

The Chemistry Laboratory records are maintained at Building 54800. The inspectors requested to review three years of records. The inspectors reviewed the weekly container inspection logs for the 90-day or less areas from December 2020 to March 2024, internal controlled waste manifests for the pickup of hazardous waste from December 2021 to February 2024, the RCRA training records and the job titles and position descriptions for 2022, 2023, and 2024, and the contingency plan. The inspectors observed a copy of the quick reference guide was not available in hard copy or electronically.

The inspectors observed the quick reference guide (QRG) was not complete. The inspectors observed the QRG and identified the emergency coordinator and waste information.

Pursuant to F.A.C. Chapter 62-730.160(1) [40 C.F.R. § 262.17(a)(6)], which incorporates F.A.C. Chapter 62-730.160(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.

US Department of Homeland Security – US Coast Guard Armory (USCGA) Building 5951

The inspectors arrived at the front gate of Building 5951 and proceeded into the building. The inspectors identified themselves and explained the purpose of the visit. The inspectors were asked to sign a visitor's log.

The USCGA is a district armory for weapons storage, repair, and maintenance consisting of but not limited to nine-millimeter, 556 rifles, 40 caliber and 50 caliber arms. The USCGA conducts transport services of ammunition to other on-site units and pick up weapons to conduct maintenance and repair and return of the weapons. Maintenance operations on the weapons are conducted weekly.

Jacob Haccon and Bryan Kautzman, (weapon bay officers) and CCSFS representatives described the weapons maintenance process to inspectors. The full maintenance on the weapon includes disassembling the entire weapon by removing all metal parts. The metal part is next cleaned using Chem-Crest 235, a liquid detergent in an Ultrasonic-Cleaning (UC) tank with heat and vibration. The metal part is next lubricated using Chem-Crest 400-L, a synthetic lubricant in a dip tank constructed next to the UC tank. A wipe and/or rag may be used to remove access detergent and/or lubricant after each step. The Chem-Crest 235 is removed from the UC tank

when it becomes discolored and is accumulated as a hazardous waste (D008) in a container. Waste solids accumulated in the bottom of the UC tank are removed with a rag and accumulated as a hazardous waste in a container. The Chem-Crest 400-L is removed from the tank when it becomes dirty and discolored and is accumulated as a used oil in a container. The weapon officers indicated that a part washer may be used to clean individual parts if the entire weapon is not disassembled. A wipe and/or rag may be used to remove the excess part washer fluid.

The weapon bay officers indicated that weapons repair and maintenance may be conducted by whoever is available.

The inspectors observed one 55-gallon container accumulating petroleum solids, waste rags. The container was closed and labeled with the words non-hazardous waste. The inspectors observed one 10-gallon container accumulating waste lubricant. The container was closed and labeled as used oil. The inspectors observed one five-gallon SAA container accumulating hazardous waste solids and rags (D008) generated from cleaning the UC tank. The container was closed and labeled with the words hazardous waste. The inspectors did not observe a container accumulating waste detergent generated from the UC tank at the time of this inspection.

Records

The USCGA records are maintained at Building 5951. The inspectors requested to review three years of records. The inspectors reviewed the RCRA training records and the job titles and position descriptions. USCGA maintains a sign in sheet for personnel given annual hazardous waste training. Bryan Kautzman was given RCRA/DOT training on February 14, 2024, and Jacob La Mere was given RCRA/DOT training on March 13, 2023, on June 27, 2022, and on June 27, 2021. Eight people identified on the sign in sheet also received RCRA/DOT training. The most recent RCRA/DOT training given for the eight people was for Levi Myers on September 15, 2021. Allan Kalen, Randolph McKee, and Joshua Harris were not identified on the sign in sheet and a record of the date RCRA/DOT training was given to them was not provided. The inspectors reviewed the job title and position description for Bryan Kautzman. A record of the job title and position description for the other employees was not available.

Pursuant to F.A.C. Chapter 62-730.160(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 F.A.C. Chapter 62-730.160(1) [40 C.F.R. § 262.17(a)(7)(iv)(A)(B)], which is a condition of the LQG Permit Exemption, the large quantity generator must maintain the following documents and records at the facility: The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job.

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.

The inspectors observed the quick reference guide (QRG) was not complete. The inspectors observed the QRG identified the emergency coordinator and provided waste information.

Pursuant to F.A.C. Chapter 62-730.160(1) [40 C.F.R. § 262.17(a)(6)], which incorporates F.A.C. Chapter 62-730.160(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.**

The inspectors reviewed the waste profile for the non-hazardous petroleum solids, waste rags generated from possibly wiping metal parts. CCSFS representatives indicated waste gun cleaning patches generated from cleaning the most contaminated metal part of the weapon was determined as non-hazardous waste and mixed with the petroleum solids, waste rags in the same container. It appears a waste determination was made by applying knowledge of the hazardous characteristic of the waste gun cleaning patches and not for each solid waste at the point of waste generation, before any dilution, mixing, or other alteration of the waste had occurred.

Pursuant to F.A.C. Chapter 62-730.160(1) [40 C.F.R. § 262.11], a person who generates a solid waste, as defined in F.A.C. Chapter 62.730.030(1) [40 C.F.R. § 261.2], must use the steps articulated in F.A.C. Chapter 62-730.160(1) [40 C.F.R. § 262.11] to make an accurate determination as to whether that waste is a hazardous waste in order to ensure wastes are properly managed according to applicable RCRA regulations.

12) TSD Records

The inspectors reviewed the hazardous waste manifests and land disposal restriction notifications from August 2023 to February 2024, the RCRA permitted storage weekly inspection logs from August 2023 to February 2024, the contingency plan, the quick reference guide, the RCRA training given to employees and the job titles and position descriptions, the September 2023 waste minimization report, and the 2023 biennial report.

The inspectors reviewed the waste determination/waste profile (WP) for waste purge water from monitoring wells (NC0042F), unused anerobic sealing compound (NJ0025), expired unused artillery grease (ND003), waste excess product used for atmospheric removal in subs (NJ9020), petroleum contaminated debris-gun cleaning patches (ND0003), used weapons part washer fluid (HC0026), and waste lubricant from weapon parts (UR001). The waste lubricant was sampled, and laboratory tested for RCRA metals. The reported result for the lubricant had a lead concentration level of 7.29 mg/L exceeding the regulatory maximum concentration of 5 mg/L. The waste lubricant is shipped as a used oil.

13) Closing Conference

The inspectors conducted a closing conference with CCSFS representatives minus Thomas Czarniak. Sarah Brock attended in person and Laurie Fisher attended via telephone. During the meeting, the inspectors stated their preliminary conclusions of the inspection.

14) Summary of Observations

The following RCRA requirements were discussed with CCSFS representatives.

Pursuant to Part II Subpart A – General Operating Conditions of the State of Florida Department of Environmental Protection Hazardous Waste Permit Number 70725-008-HO, the Permittee is required to maintain compliance with the requirements of 40 CFR 268 as adopted in F.A.C. Chapter 62-730.160(1) [40 C.F.R. § 262.17(a)(9)], which incorporates F.A.C. Chapter 62-730.183 [40 C.F.R. § 268.50(a)(2)(i)(C)], an owner/operator of a hazardous waste treatment, storage, or disposal facility stores such wastes in tanks, containers, or containment buildings solely for the purpose of the accumulation of such quantities of hazardous waste as necessary to facilitate proper recovery, treatment, or disposal and, each container is clearly marked to identify its contents and with an indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (*i.e.*, ignitable, corrosive, reactive, toxic); hazard communication consistent

with the Department of Transportation requirements at 49 CFR part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704).

Pursuant to Part II Subpart C – Specific Operating Conditions for Open Burn and Open Detonation Units, specific operating condition 19, the Permittee shall inspect Open Detonation Unit for remaining debris, fragments and residues at the conclusion of each open detonation treatment operation. If the remaining materials are unsafe due to their energetic nature the Permittee shall immediately, detonate the remaining materials in place. If the materials are not dangerous due to an energetic nature, the Permittee shall collect and dispose of the remaining materials within two (2) weeks of the open detonation treatment operation.

Pursuant to Chapter 403 of the Florida Statutes, Fla. Stat. § 403.727(1)(c), it is unlawful for any hazardous waste generator, transporter, or facility owner or operator to: Fail to comply with a permit.

Pursuant to F.A.C. Chapter 62-730.160(1) [40 C.F.R. § 262.17(a)(5)(i)(B)], which is a condition of the LQG Permit Exemption, a generator must mark or label its containers with an indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704).

Pursuant to F.A.C. Chapter 62-730.160(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 F.A.C. Chapter 62-730.160(1) [40 C.F.R. § 262.17(a)(7)(iv)(A)(B)], which is a condition of the LQG Permit Exemption, the large quantity generator must maintain the following documents and records at the facility: The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job.

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 F.A.C. Chapter 62-730.160(1) [40 C.F.R. § 262.17(a)(6)], which incorporates F.A.C. Chapter 62-730.160(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 F.A.C. Chapter 62-730.160(1) [40 C.F.R. § 262.11], a person who generates a solid waste, as defined in F.A.C. Chapter 62.730.030(1) [40 C.F.R. § 261.2], must use the steps articulated in F.A.C. Chapter 62-730.160(1) [40 C.F.R. § 262.11] to make an accurate determination as to whether that waste is a hazardous waste in order to ensure wastes are properly managed according to applicable RCRA regulations.

15) Sampling Overview

Sampling was not conducted.

16) List of Appendices

Appendix 1 – Photograph Log:

Photos taken by: William Kappler on March 13, 2024

Samsung Camera (Model WB250F); EPA Property Tag# S75917

17) **Signed**

WILLIAM KAPPLER Digitally signed by WILLIAM KAPPLER
Date: 2024.04.19 17:15:45 -04'00'

William Kappler
Physical Scientist

TARIN TISCHLER Digitally signed by TARIN TISCHLER
Date: 2024.04.23 08:50:32 -04'00'

Tarin Tischler
Life Scientist

Concurrence

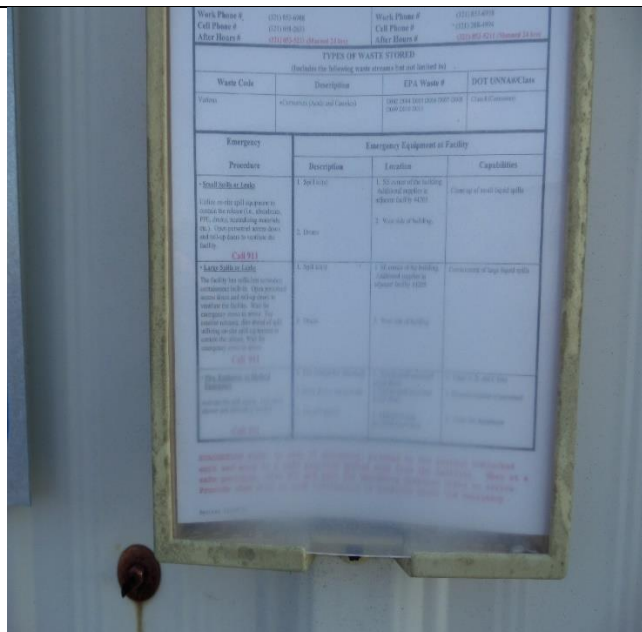
ALAN NEWMAN Digitally signed by ALAN NEWMAN
Date: 2024.04.25 14:54:44 -04'00'

Alan R. Newman, Acting Chief
RCRA Enforcement Section

Cape Canaveral Space Force Station RCRA CEI Photographs



Cape Canaveral Space Force Station (CCSFS). Permitted Storage Building 44200. The inspectors observed signs posted on the building. Photograph 1 taken at 10:14 a.m.



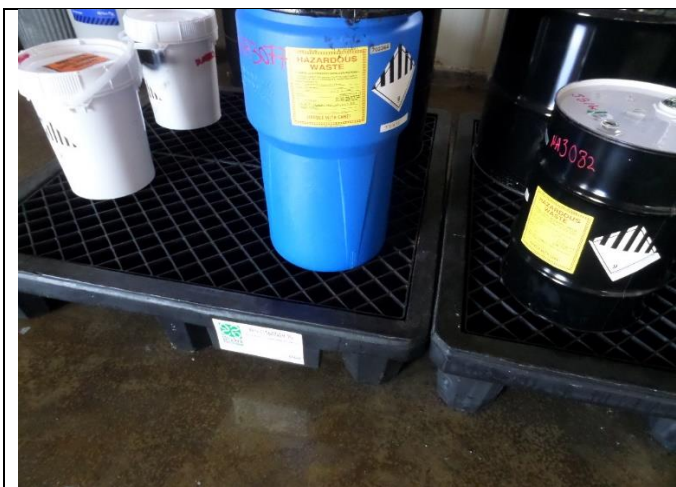
CCSFS. Permitted Storage Building 44200. The inspectors observed a summary of information from the CCSFS contingency plan response to spills and emergency procedures posted on the building. Photograph 2 taken at 10:14 a.m.



CCSFS. Permitted Storage Building 44200, Acidic Waste Bay. The inspectors observed a five-gallon container of hazardous waste (D002, D007) not marked or labeled with a toxic hazard indicator. Facility marked the word toxic on the container. Photograph 3 taken at 10:24 a.m.



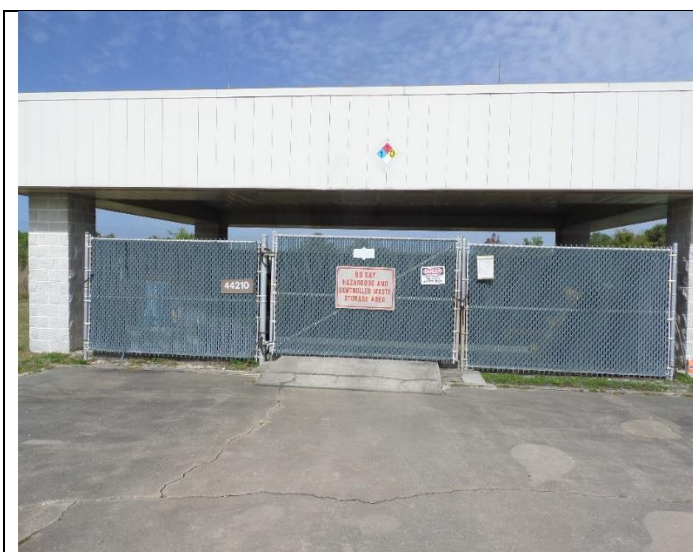
CCSFS. Permitted Storage Building 44205, Toxic Waste Bay. The inspectors observed four 55-gallon containers accumulating hazardous waste in this area. Photograph 4 taken at 10:49 a.m.



CCSFS. Permitted Storage Building 44205, Toxic Waste Bay. The inspectors observed two five-gallon containers, one 10-gallon container and one 15-gallon container of hazardous waste liquids and solids on a containment spill pallet. Photograph 5 taken at 10:52 a.m.



CCSFS. Permitted Storage Building 44200. The inspectors observed signs posted on side of the building. Photograph 6 taken at 10:55 a.m.



CCSFS. CAA Building 44210. The inspectors observed danger, warning signs and placards identifying the building as a 90-day or less storage area. Photograph 7 taken at 11:16 a.m.



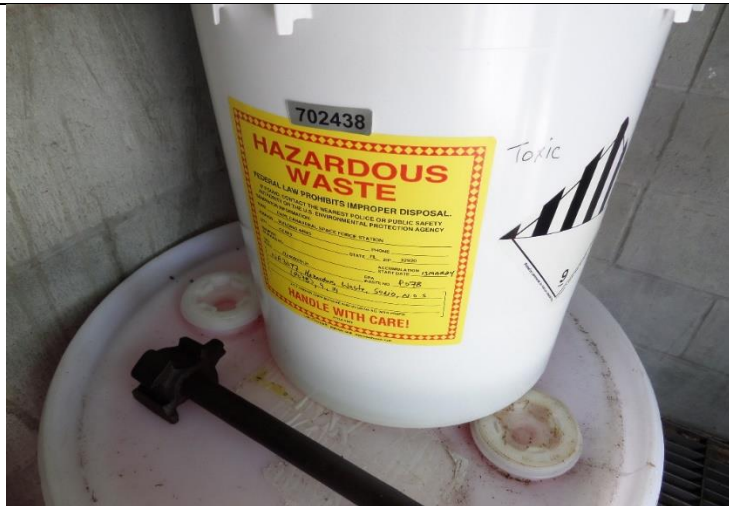
CCSFS. EOD Range Front Gate. Photograph 8 taken at 12:05 p.m.



CCSFS. EOD Open Detonation Area. The inspectors observed metal fragments on the sand of the open detonation area. Photograph 9 taken at 12:27 p.m.



CCSFS. Chemistry Laboratory, Petroleum Solvent/Oxidizer CAA. The inspectors observed two 30-gallon containers and one five-gallon container of hazardous waste not marked or labeled with a toxic hazard indicator. Facility marked the word toxic on the container. Photograph 10 taken at 2:02 p.m.



CCSFS. Chemistry Laboratory, Petroleum Solvent/Oxidizer CAA. The inspectors observed two 30-gallon containers and one five-gallon container of hazardous waste not marked or labeled with a toxic hazard indicator. Facility marked the word toxic on the container. Photograph 11 taken at 2:02 p.m.