

RCRA Inspection Report

1) Inspectors and Authors of Report

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2) Facility Information

GE Aviation Ceramic Matrix Composites
25235 One Aviation Way, SW
Madison, Alabama 35756
Madison County
EPA ID No. ALR000061796

3) Responsible Officials

Ms. Tiffany Dutton
EHS Specialist

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4) Inspection Participants

Tiffany Dutton, GE Aviation Ceramic Matrix Composites
Jamie Schagene, GE Aviation Ceramic Matrix Composites
April Hinson, GE Aviation Ceramic Matrix Composites
Stephen French, GE Aviation Ceramic Matrix Composites
Corey Holmes, Alabama Department of Environmental Management
William Kappler, U. S. Environmental Protection Agency, Region 4

5) Date of Inspection

January 27, 2022

6) Applicable Regulations

Alabama Hazardous Waste Management and Minimization Act of 1978 (AHWMMA), Ala. Code § 22-30-1 *et seq.*, [Resource Conservation and Recovery Act (RCRA) Sections 3002 - 3005, (42 U.S. Code - Annotated U.S.C.A. 6925 and 6927)] and rules 335-14-1 to 335-14-17 (2016 and 2018) of the Alabama Department of Environmental Management (ADEM) Administrative Code (ADEM Admin. Code) [40 Code of Federal Regulation (C.F.R.) Parts 260-270, 273 and 279].

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

Pursuant to ADEM Admin. Code r. 335-14-3-.01(5)(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 the point of generation where wastes initially accumulate, which is under the control of the operator of the process generating the waste, without a permit or without having interim status, as required by Section 22-30-12(b) of the AHWMMA, Ala. Code § 22-30-12(b) [Section 3005 of RCRA, 42 U.S.C. § 6925], and without complying with ADEM Admin. Code r. 335-14-3-.01(6) and (7) [40 C.F.R. § 262.16(b) or §262.17(a)], except as required in ADEM Admin. Code r. 335-14-3-.01(5)(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 ADEM Admin. Code r. 335-14-3-.01(5)(a) [40 C.F.R. § 262.15(a)] (hereinafter referred to as the "SAA Permit Exemption").

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7) [40 C.F.R. § 262.17], a LQG may accumulate hazardous waste on-site for 90 days or less without a permit or without having interim status, as required by Section 22-30-12(b) of the AHWMMA, Ala. Code § 22-30-12(b) [Section 3005 of RCRA, 42 U.S.C. § 6925], provided that the generator complies with the conditions listed in ADEM Admin. Code r. 335-14-3-.01(7) [40 C.F.R. § 262.17] (hereinafter referred to as the "LQG Permit Exemption").

7) Purpose of Inspection

The purpose of this inspection was to determine GE Aviation Ceramic Matrix Composites (hereinafter, "GE Aviation" or the "facility") compliance with the applicable requirements of RCRA and the corresponding Alabama Department of Environmental Management (ADEM) regulations. This was an EPA lead inspection.

8) Previous Inspection History

GE Aviation has never previously been inspected by the EPA and by the ADEM for compliance with the federal and the State of Alabama hazardous waste regulations.

9) Facility Description

GE Aviation is located at 25235 One Aviation Way, SW, Madison, Madison County, Alabama. Construction on the property began in November of 2017. The facility is located on 100 acres of property and is owned by Scannell Properties. The facility employs approximately 204 people and operates seven days per week, 24 hours per day, on four rotating 12-hour shifts. The facility consists of one large building (tape/tow and fiber) with approximately 256,000 square feet of manufacturing space and a Slurry Building where an additional coating for the tape manufacturing operation is conducted. Limestone County provides potable water, and the City of Huntsville provides sanitary sewer services. The primary NAICS code for the facility is 336412 Aircraft Engine and Engine Parts Manufacturing.

GE Aviation submitted its most recent notification of its regulated waste activity to ADEM on February 3, 2021, notifying as a large quantity generator of hazardous waste (LQG) a small quantity handler of universal waste (SQHUW) and a used oil generator.

GE Aviation manufactures silicon carbide tow (bundles of fibers) and ceramic matrix composite materials for aircraft engine parts. Raw silicon carbide tow is received by the facility from a manufacturer, and it is rewound on cores and sized for the equipment. The tow is then fed through a vacuum chemical vapor deposition process to add three slurry coatings. The slurry coated tow is then transferred to a fourth coating area where another slurry coat is applied in an inert atmosphere. Slurry coated tow is then processed into tapes using a drum winder. In the tape making process, a set of slurry coated tow is impregnated with a fifth proprietary slurry coating in a dip process. The set of slurry coated tow is then wound onto drums forming sheets, then dried and processed into uniform sheets referred to as tape.

GE Aviation generates various hazardous waste, universal waste and used oil waste streams from its manufacturing operation.

10) Opening Conference

On January 27, 2022, EPA inspector William Kappler, accompanied by ADEM inspector Corey Holmes, arrived at GE Aviation at approximately 8:45 am. The inspectors identified themselves and explained the purpose of the visit to security at the front lobby visitor's station. The inspectors were asked to watch a 10-minute health and site safety video, while GE Aviation environmental staff were contacted. Ms. Jamie Schagene, Industrial Hygienist received the inspectors in the lobby and proceeded to a conference room. The inspectors were joined by Ms. April Hinson, Environmental Health Safety (EHS) Leader and Mr. Stephen French, Executive Plant Leader. Ms. Tiffany Dutton, EHS Specialist, attended the opening conference by telephone. The inspectors introduced themselves, presented their credentials and explained the purpose of the visit. The inspectors described the anticipated use of a digital camera during the inspection, and discussed the company's ability, pursuant to 40 C.F.R. §2.203, to assert a business confidentiality claim for information submitted to the EPA. The company did not assert a business confidentiality claim. The company does not appear to meet the Small Business Regulatory Enforcement Fairness Act's classification of a "small business," which is generally set by the Small Business Administration using the business' SIC/NAICS code and annual receipts or number of employees. Therefore, the EPA inspectors did not provide a copy of the agency's information sheet for small businesses, which can be found at <https://www.epa.gov/sites/production/files/2017-06/documents/smallbusinessinfo.pdf>.

Facility representatives provided an overview of the facility's history and current operations during the opening conference. Ms. Hinson indicated GE Aviation began generating hazardous waste on or about July 2019. The inspection participants also discussed health and safety protocols and the required personal protective equipment. The inspectors were issued a one-piece protective cover-all, prior to Ms. Hinson and Ms. Schagene leading the inspectors on a tour of the facility operations.

11) **Findings**

Slurry Building - 90-Day or Less Accumulation Area

The Slurry Building is constructed of metal with an interior concrete floor and coated with an epoxy sealant. The inspector observed “No Smoking” and “Unauthorized Personnel Keep Out” signs posted at the entrance to the building. The door to the building can only be unlocked by keycard and the bay door can only be opened from the inside. The inspector observed employees were moving containers into the building at the time of the inspection. The 90-Day or Less Accumulation Area (90-Day) is in the front area of the Slurry Building. Chemical products are also stored in this building. Communication is conducted by two-way radio and cell phone. The inspector observed nineteen 55-gallon containers storing hazardous waste slurry debris/waste. The containers were closed, in good condition, with aisle space, labeled with the words “Hazardous Waste”, each marked with an accumulation start date less than 90 days, and labeled with a flammable hazard indicator. The inspector observed the containers were not marked or labeled with EPA hazardous waste numbers (Photographs 1, 2, and 3).

Pursuant to ADEM Admin. Code r. 335-14-3-.01 (7)(a)5.(i)(d), which is a condition of the LQG Permit Exemption, a large quantity generator must mark or label its containers with the following: All appropriate EPA hazardous waste numbers associated with the hazardous waste as specified in 335-14-2-.03 and 335-14-2-.04.

On January 29, 2022, the EPA received an email from the facility with photographs showing the containers storing hazardous waste were marked with the EPA hazardous waste numbers.

Slurry Building Solvent Recovery – Rear Area

In this area the slurry that is used to coat the tape is produced and the facility conducts distillation operations to reclaim solvent. The inspector observed two 5-gallon solvent distillation units (Photograph 10). The distillation unit emissions are vented to the outdoors (Photograph 9). Still bottoms generated from the distillation operation is accumulated in the containers of hazardous waste slurry debris/waste in the 90-Day.

Located next to the distillation units the inspector observed four 55-gallon containers storing waste solvent. The inspector observed the containers were closed, in good condition, with aisle space, labeled with a flammable hazard indicator and were marked with the words “spent acetone”. The inspector observed the containers were not marked or labeled with the words “Hazardous Waste”, not marked with an accumulation start date and not marked or labeled with EPA hazardous waste numbers (Photographs 4 and 5). Ms. Hinson indicated that the spent acetone is generated and accumulated in various facility satellite accumulation area (SAA) containers, prior to transferring for distillation. Ms. Hinson indicated that weekly container inspection records of the area were not available. The inspector observed secondary containment, restricted unauthorized entry and signs posted at the entrance to the building.

Pursuant to ADEM Admin. Code r. 335-14-3-.01 (7)(a)5.(i) [40 C.F.R. § 262.17(a)(5)(i)], which is a condition of the LQG Permit Exemption, a generator must mark or label its containers with the following: the words “Hazardous Waste”; and the date upon which each period of accumulation begins clearly visible for inspection on each container.

Pursuant to ADEM Admin. Code r. 335-14-3-.01 (7)(a)5.(i)(d), which is a condition of the LQG Permit Exemption, a large quantity generator must mark or label its containers with the following: All appropriate EPA hazardous waste numbers associated with the hazardous waste as specified in 335-14-2-.03 and 335-14-2-.04.

It appears GE Aviation has not notified the ADEM as a hazardous secondary material handler.

On January 29, 2022, the EPA received an email from the facility with photographs showing the containers storing hazardous waste were labeled with the words hazardous waste, marked with a date, marked with the EPA hazardous waste numbers, and moved to the 90-Day.

Slurry Building Cleaning Booth

The equipment used to produce the slurry is cleaned in this booth. The inspector observed one 5-gallon SAA red safety container under the cleaning booth storing hazardous waste solids. The inspector observed the container was closed, in good condition, labeled with a hazard indicator. The inspector observed the container was not marked or labeled with the words “Hazardous Waste” (Photograph 7).

Pursuant to ADEM Admin. Code r. 335-14-3-.01(5)(a)5.(i) [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 with the words “Hazardous Waste”.

Slurry Building Slurry Booth

The slurry booth is used for producing the slurry. The inspector observed one 55-gallon SAA container storing hazardous waste slurry debris. The inspector observed the container was closed, in good condition, labeled with the words “Hazardous Waste” and labeled with a flammable solids hazard indicator (Photograph 6). The inspector observed one 5-gallon SAA container in this area storing hazardous waste solids. The inspector observed the container was closed, in good condition, labeled with a hazard indicator. The inspector observed the container was not marked or labeled with the words “Hazardous Waste”.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(5)(a)5.(i) [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 with the words “Hazardous Waste”.

Slurry Building Bottle Area

In the rear corner of the Slurry Building the inspector observed one 55-gallon SAA container storing hazardous waste slurry liquid from the cleaning booth and the slurry booth. The inspector observed the container was closed, in good condition, labeled with the words “Hazardous Waste” and labeled with a flammable hazard indicator (Photograph 8).

One Cubic Yard Container Outside of the Slurry Building

The inspector observed a general trash container labeled with the words “Excluded Solvent-Contaminated Wipes Only” on an asphalt area in front of the Slurry Building. Ms. Hinson indicated the solvent contaminated wipes are accumulated in 5-gallon containers throughout the facility. When full, they are transferred in plastic bags to the trash container, prior to off-site

disposal. The inspector observed the trash container was empty and appeared dry (Photograph 11).

The inspector also observed two 55-gallon used oil containers in a secondary containment shell. The containers were closed and labeled with the words “Used Oil”.

Plant Control Center Hallway

The inspector observed one 55-gallon SAA container storing waste aerosol cans. The inspector observed the container was closed, in good condition, labeled with the words “Hazardous Waste”, marked with the EPA hazardous waste number (D001), and labeled with a flammable hazard indicator.

Drum Winding

In this area, the slurry produced in the Slurry Building is coated onto the tape. The inspector observed five 5-gallon SAA containers storing spent solvent wipes. The inspector observed the 5-gallon containers were not marked or labeled with the words “Excluded Solvent-Contaminated Wipes”.

Pursuant to ADEM Admin. Code r. 335-14-2-.01(4)(a)26. [40 C.F.R. § 261.4(a)(26)] solvent-contaminated wipes are excluded from being solid waste and may be accumulated without a permit or without having interim status, provided that the generator complies with the conditions listed in ADEM Admin. Code r. 335-14-2-.01(4)(a)26.(i)-(vi) [40 C.F.R. § 261.4(a)(26)(i)-(vi)] (hereinafter referred to as the “Solvent-Contaminated Wipes Exclusion”).

Pursuant to ADEM Admin. Code r. 335-14-2-.01(4)(b)18.(i) [40 C.F.R. § 261.4(b)(18)(i)], which is a condition of the Solvent-Contaminated Wipes Exclusion, the solvent-contaminated wipes, when accumulated, stored, and transported, are contained in non-leaking, closed containers that are labeled “Excluded Solvent-Contaminated Wipes.”

On January 29, 2022, the EPA received an email from the facility with photographs showing the red safety containers storing solvent-contaminated wipes were labeled with the words hazardous waste.

Drum Winding – Sacrificial Parts Area

The inspector observed two 55-gallon SAA containers storing waste liquid and waste solid (acetone and isopropanol) from cleaning the slurry baths. The containers were closed, labeled with the words “Hazardous Waste”, labeled with a flammable hazard indicator, and marked with the EPA hazardous waste numbers D001 and F003.

Quality Laboratory

The inspector observed one 55-gallon SAA container that was empty. The empty container was closed, labeled with the words “Hazardous Waste”, and marked with a hazard indicator. The inspector also observed two 55-gallon SAA containers in this area. One 55-gallon container was storing waste slurry liquid in a secondary containment pallet and one 55-gallon container was storing waste slurry debris. The containers were closed, labeled with the words “Hazardous

Waste”, labeled with a flammable hazard indicator, and marked with the EPA hazardous waste numbers D001 and F003.

The inspector observed a closed one-gallon metal SAA container in a fume hood storing waste magnesium perchlorate gloves. The container was not marked or labeled with the words “Hazardous Waste” (Photograph 13).

Pursuant to ADEM Admin. Code r. 335-14-3-.01(5)(a)5.(i) [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 with the words “Hazardous Waste”.

Located under a laboratory table the inspector observed one 5-gallon SAA container for waste magnesium perchlorate that appeared empty. The container was closed and labeled with the words “Hazardous Waste” (Photograph 12).

The inspector also observed under the laboratory table four closed 5-gallon SAA containers storing hazardous waste. One 5-gallon SAA container was not marked or labeled with the words “Hazardous Waste”.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(5)(a)5.(i) [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 with the words “Hazardous Waste”.

Carbon Coating

The inspector observed two 5-gallon containers storing spent solvent wipes. The containers were not labeled “Excluded Solvent-Contaminated Wipes. The inspector also observed two one-gallon containers storing mercury contaminated devices. The containers were closed, labeled with the words “Universal Waste”, and marked with dates less than one year. The oldest date was February 21, 2021.

Pursuant to ADEM Admin. Code r. 335-14-2-.01(4)(b)18.(i) [40 C.F.R. § 261.4(b)(18)(i)], which is a condition of the Solvent-Contaminated Wipes Exclusion, the solvent-contaminated wipes, when accumulated, stored, and transported, are contained in non-leaking, closed containers that are labeled “Excluded Solvent-Contaminated Wipes.”

ITC Area

The inspector observed three one-gallon containers storing universal waste. The containers were closed, labeled with the words “Universal Waste”, and marked with dates less than one year. The oldest date was May 10, 2021.

Fiber Quality Laboratory Hallway

The inspector observed one 55-gallon SAA container storing waste aerosol cans. The inspector observed the container was closed, in good condition, labeled with the words “Hazardous Waste”, and labeled with a flammable hazard indicator (Photograph 14).

Fiber Quality Laboratory

The inspector observed two 55-gallon SAA containers storing waste THF liquid and waste THF debris from laboratory operations. The containers were closed, labeled with the words “Hazardous Waste”, and labeled with a flammable hazard indicator.

Waste Management

GE Aviation generates hazardous waste from its manufacturing operations and maintenance operations. Based on the most recent notification of its regulated waste activity and from its hazardous waste manifests the facility generates ignitable (D001), corrosive (D002), toxic (D006, D035) and listed hazardous waste (F003, F005). The facility generates universal waste lamps, batteries and used oil.

The facility prepares the hazardous waste for packaging and on-site management, prior to shipping the hazardous waste using the manifest system to an off-site treatment, storage, or disposal facility (TSDF).

GE Aviation used the following transporters from 2019 to 2022

Valicor Environmental Services, LLC – OHR000200386
EQ Industrial Services – MIK435642742
Safety Kleen Systems Inc – TXR000081205
Clean Harbors Environmental Services – MAD039322250
A.R. Paquette Co – FLD982105884

GE Aviation used the following TSDFs from 2019 to 2022

Valicor Environmental Services, LLC – ALR000052019
US Ecology Sulligent Inc – ALD983177015
Clean Harbors Lone Mt., LLC – OKD065438376

Records Review

The inspector reviewed the 2020 and 2021 Notification of Regulated Activity, 8700-12 forms, GE Aviation submitted to ADEM. The inspector observed GE Aviation did not notify ADEM as a hazardous secondary material handler.

Pursuant to ADEM Admin. Code r. 335-14-2-.01(4)(a)27.(vi)(I), both the hazardous secondary material generator and the remanufacturer must: Notify the Director and update the notification annually in accordance with 335-14-1-.03(22).

On January 29, 2022, the EPA received an email from the facility with an amended 8700-12 application notifying ADEM as a hazardous secondary material handler.

The inspector reviewed the hazardous waste manifests, land disposal restriction notifications, universal waste manifests and non-hazardous waste manifests from March 2019 to January 2022. The inspector reviewed one hazardous waste manifest from the EPA’s E-Manifest Record System, dated December 7, 2021.

The inspector reviewed the waste determination records consisting of waste profiles and

laboratory analysis reports on wastewater, waste carbon fiber, waste tape, and waste slurry. The facility determined the waste slurry is an ignitable hazardous waste (D001).

The inspectors reviewed the contingency plan (Plan). The Plan was revised on December 15, 2020.

The inspector reviewed the quick reference guide (QRG). The inspector observed the QRG did not include the estimated maximum amount of each hazardous waste that may be present at any one time and did not include the location of all satellite accumulation areas at the facility.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)6 [40 C.F.R. § 262.17(a)(6)], which incorporates ADEM Admin. Code r. 334-14-3-.14(10) [40 C.F.R. § 262.262(b)], and is a condition of the LQG Permit Exemption, a large quantity generator must have a quick reference guide with the following elements: The estimated maximum amount of each hazardous waste that may be present at any one time and where hazardous waste SAA containers are located.

On January 29, 2022, the EPA received an email from the facility with an updated quick reference guide.

The inspector reviewed the records on the arrangements with the local authorities. The facility revised the contingency plan on December 15, 2020. The inspector observed the facility did not have records on the attempt to make arrangements with the police, fire, hospital and with State and local emergency response teams on the revised contingency plan.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)6 [40 C.F.R. § 262.17(a)(6)], which incorporates ADEM Admin. Code r. 335-14-3-.14(7)(a) [40 C.F.R. § 262.256(a)], and is a condition of the LQG exemption, the large quantity generator must attempt to make arrangements with the local police and fire departments, other emergency response teams, and local hospitals, taking into account the types and quantities of hazardous wastes handled at the facility.

On January 29, 2022, the EPA received an email from the facility with documentation that the contingency plan was previously submitted to the Huntsville - Madison County EMA, to the Huntsville police and fire departments on November 13, 2017. The facility indicated documentation would be sent to the ADEM Decatur Field Office and the Huntsville Hospital via Fedex on January 29, 2022.

The weekly container inspection records were reviewed for the 90-Day from September 13, 2018, to January 24, 2022. The inspector observed the weekly inspection between July 17, 2020, and July 31, 2020, was not recorded. Weekly inspections records were not available at the time of the inspection for the four 55-gallon containers storing hazardous waste in the Slurry Building Solvent Recovery – Rear Area.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)1.(v) [40 C.F.R. § 262.17(a)(1)(v)], which is a condition of the LQG Permit Exemption, a generator is required to, at least

weekly, inspect central accumulation areas looking for leaking containers and for deterioration of containers caused by corrosion or other factors.

The inspectors requested the RCRA introductory and continuing training given to employees managing hazardous waste and the job titles and position description for the previous three years. At the time of the inspection, it appeared not all RCRA training records for the employees handling and managing hazardous waste were available for review.

RCRA training records were not available to document the RCRA training given to employees in the Slurry Building.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)7 [40 C.F.R. § 262.17(a)(7)], which is a condition of the LQG Permit Exemption, facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the regulations; (ii) Facility personnel must complete personnel training within six months of being hired or of being assigned to a new position at the Facility; (iii) Facility personnel must take part in an annual review of the initial training required by this section; and/or (iv) the generator must maintain training records that include, among others: 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; a written description of the type and amount of both introductory and continuing training that will be given to each person filling a position; and records documenting that the required training has been given to and completed by Facility personnel.

On January 29, 2022, the EPA received an email from the facility with RCRA training records consisting of GE Aviation RCRA and DOT training courses, job titles, position descriptions, training requirements and a history of the RCRA training given to employees handling and managing hazardous waste.

The inspector requested records on the management of excluded solvent-contaminated wipes. The inspector observed the facility did not label containers of solvent wipes with the words “excluded solvent-contaminated wipes”, did not document the solvent wipes were being removed from the site before the 180-day time limit, and did not maintain a description of the process used to ensure solvent-contaminated wipes contain no free liquids at the point of being transported for disposal.

Pursuant to ADEM Admin. Code r. 335-14-2-.01(4)(a)26. [40 C.F.R. § 261.4(a)(26)] solvent-contaminated wipes are excluded from being solid waste and may be accumulated without a permit or without having interim status, provided that the generator complies with the conditions listed in ADEM Admin. Code r. 335-14-2-.01(4)(a)26.(i)-(vi) [40 C.F.R. § 261.4(a)(26)(i)-(vi)] (hereinafter referred to as the “Solvent-Contaminated Wipes Exclusion”).

Pursuant to ADEM Admin. Code r. 335-14-2-.01(4)(b)18.(ii) [40 C.F.R. § 261.4(b)(18)(ii)], which is a condition of the Solvent-Contaminated Wipes Exclusion, the solvent-

contaminated wipes may be accumulated by the generator for up to 180 days from the start date of accumulation for each container prior to being sent for disposal.

Pursuant to ADEM Admin. Code r. 335-14-2-.01(4)(b)18.(v)(III) [40 C.F.R. § 261.4(b)(18)(v)(c)], which is a condition of the Solvent-Contaminated Wipes Exclusion, a description of the process the generator is using to ensure solvent-contaminated wipes contain no free liquids at the point of being transported for disposal.

Pursuant to ADEM Admin. Code r. 335-14-2-.01(4)(b)18.(v)(IV), which is a condition of the Solvent-Contaminated Wipes Exclusion, the generator must maintain in their onsite records, documentation that verifies that “no free liquids” were present in the container, prior to shipment. These records must be kept for at least three years from the date of shipment. At a minimum, these records must include the date and time of the verification, the name of the person verifying and a notation of the volume of free liquids removed from the container, if present.

The inspector observed the facility had a waste minimization plan.

12) Closing Conference

Upon conclusion of the inspection, a closing conference was conducted in the presence of Ms. April Hinson, Ms. Jamie Schagene, Mr. Stephen French, and Ms. Tiffany Dutton. Ms. Dutton attended by telephone. The inspector informed the facility of the preliminary conclusions based on the areas inspected. The inspector requested the facility electronically submit the additional RCRA records and photographs showing corrections conducted for review.

13) Inspection Findings

GE Aviation was inspected as a large quantity generator of hazardous waste, a small quantity handler of universal waste and used oil generator. Based on the observations during the inspection, GE Aviation was apparently deficient with the following RCRA requirements:

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)5.(i)(d), which is a condition of the LQG Permit Exemption, a large quantity generator must mark or label its containers with the following: All appropriate EPA hazardous waste numbers associated with the hazardous waste as specified in 335-14-2-.03 and 335-14-2-.04.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)5.(i) [40 C.F.R. § 262.17(a)(5)(i)], which is a condition of the LQG Permit Exemption, a generator must mark or label its containers with the following: the words “Hazardous Waste”; and the date upon which each period of accumulation begins clearly visible for inspection on each container.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(5)(a)5.(i) [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 with the words “Hazardous Waste”.

Pursuant to ADEM Admin. Code r. 335-14-2-.01(4)(b)18.(i) [40 C.F.R. § 261.4(b)(18)(i)], which is a condition of the Solvent-Contaminated Wipes Exclusion, the solvent-contaminated wipes, when accumulated, stored, and transported, are contained in non-leaking, closed containers that are labeled “Excluded Solvent-Contaminated Wipes.”

Pursuant to ADEM Admin. Code r. 335-14-2-.01(4)(a)27.(vi)(I), both the hazardous secondary material generator and the remanufacturer must: Notify the Director and update the notification annually in accordance with 335-14-1-.03(22).

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)6 [40 C.F.R. § 262.17(a)(6)], which incorporates ADEM Admin. Code r. 334-14-3-.14(10) [40 C.F.R. § 262.262(b)], and is a condition of the LQG Permit Exemption, a large quantity generator must have a quick reference guide with the following elements: The estimated maximum amount of each hazardous waste that may be present at any one time and where hazardous waste SAA containers are located.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)6 [40 C.F.R. § 262.17(a)(6)], which incorporates ADEM Admin. Code r. 335-14-3-.14(7)(a) [40 C.F.R. § 262.256(a)], and is a condition of the LQG exemption, the large quantity generator must attempt to make arrangements with the local police department, other emergency response teams, and local hospitals, taking into account the types and quantities of hazardous wastes handled at the facility.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)1.(v) [40 C.F.R. § 262.17(a)(1)(v)], which is a condition of the LQG Permit Exemption, a generator is required to, at least weekly, inspect central accumulation areas looking for leaking containers and for deterioration of containers caused by corrosion or other factors.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)7 [40 C.F.R. § 262.17(a)(7)], which is a condition of the LQG Permit Exemption, facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the regulations; (ii) Facility personnel must complete personnel training within six months of being hired or of being assigned to a new position at the Facility; (iii) Facility personnel must take part in an annual review of the initial training required by this section; and/or (iv) the generator must maintain training records that include, among others: 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; a written description of the type and amount of both introductory and continuing training that will be given to each person filling a position; and records documenting that the required training has been given to and completed by Facility personnel.

Pursuant to ADEM Admin. Code r. 335-14-2-.01(4)(b)18.(ii) [40 C.F.R. § 261.4(b)(18)(ii)], which is a condition of the Solvent-Contaminated Wipes Exclusion, the solvent-contaminated wipes may be accumulated by the generator for up to 180 days from the start date of accumulation for each container prior to being sent for disposal.

Pursuant to ADEM Admin. Code r. 335-14-2-.01(4)(b)18.(v)(III) [40 C.F.R. § 261.4(b)(18)(v)(c)], which is a condition of the Solvent-Contaminated Wipes Exclusion, a description of the process the generator is using to ensure solvent-contaminated wipes contain no free liquids at the point of being transported for disposal.

Pursuant to ADEM Admin. Code r. 335-14-2-.01(4)(b)18.(v)(IV), which is a condition of the Solvent-Contaminated Wipes Exclusion, the generator must maintain in their onsite records, documentation that verifies that “no free liquids” were present in the container, prior to shipment. These records must be kept for at least three years from the date of shipment. At a minimum, these records must include the date and time of the verification, the name of the person verifying and a notation of the volume of free liquids removed from the container, if present.

14) **List of Appendices**

Appendix 1 – Photograph Log:
Photos taken on: January 27, 2022
Photos taken by: William Kappler
Samsung Camera (Model WB250F)
EPA Property Tag# S75917

15) **Signed**

William Kappler
Physical Scientist

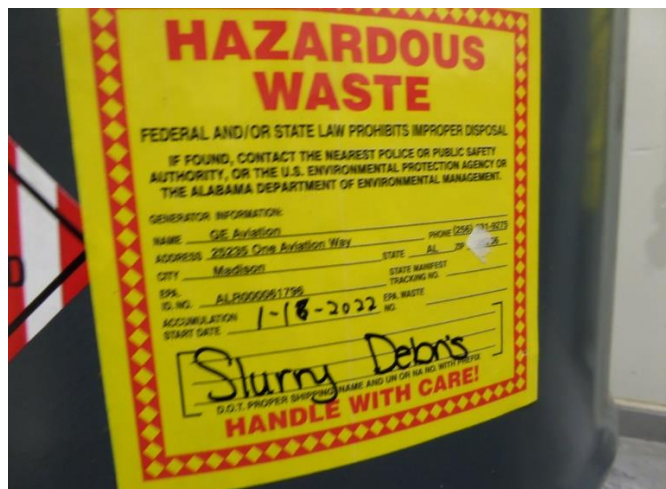
Date

Concurrence

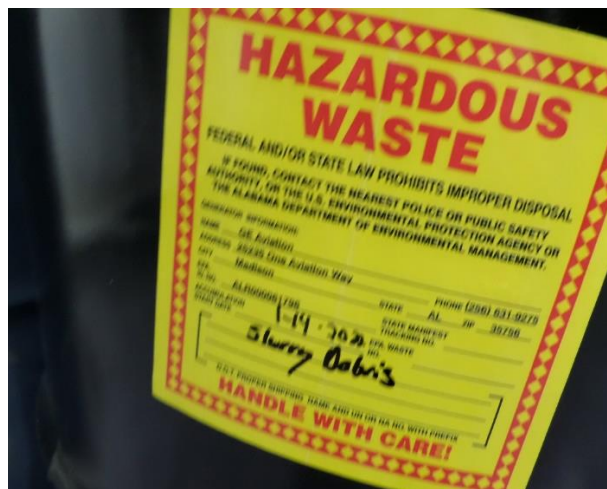
Araceli B. Chavez
Chief
RCRA Enforcement Section

Date

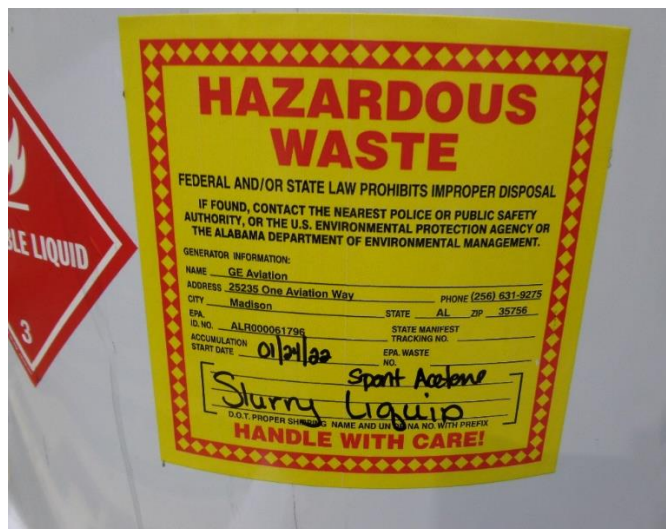
GE Aviation Ceramic Matrix Composites
RCRA CEI Photographs
William Kappler, US EPA



Slurry Building 90-Day or Less Accumulation Area. The inspector observed 19 55-gallon containers accumulating hazardous waste. The 19 containers were not marked with waste codes. Photograph 1 taken at 10:45 a.m.



Slurry Building 90-Day or Less Accumulation Area. The inspector observed 19 55-gallon containers accumulating hazardous waste. The 19 containers were not marked with waste codes. Photograph 2 taken at 10:45 a.m.



Slurry Building 90-Day or Less Accumulation Area. The inspector observed 19 55-gallon containers accumulating hazardous waste. The 19 containers were not marked with waste codes. Photograph 3 taken at 10:45 a.m.



Slurry Building Solvent Recovery Area. The inspector observed four 55-gallon containers accumulating spent acetone in the rear area. The containers were not marked/labeled as HW, not marked with dates, and not marked with waste codes. Photograph 4 taken at 10:59 a.m.

GE Aviation Ceramic Matrix Composites
RCRA CEI Photographs
William Kappler, US EPA



Slurry Building Solvent Recovery Area. The inspector observed four 55-gallon containers accumulating spent acetone in the rear area. The containers were not marked/labeled as HW, not marked with dates, and not marked with waste codes. Photograph 5 taken at 10:59 a.m.



Slurry Building Slurry Cleaning Station. The inspector observed one 55-gallon SAA container accumulating HW slurry debris. Photograph 6 taken at 11:02 a.m.



Slurry Building Slurry Cleaning Station. The inspector observed one 5-gallon SAA container accumulating acetone contaminated rags. The container was not marked or labeled with the words Hazardous Waste. Photograph 7 taken at 11:06 a.m.



Slurry Building Slurry Bottle Area. The inspector observed one 55-gallon SAA container accumulating hazardous waste slurry. Photograph 8 taken at 11:10 a.m.

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Slurry Building Outdoor Vent System. The inspector observed a ventilation system to exhaust emissions from the distillation units. Photograph 9 taken at 11:13 a.m.



Slurry Building Distillation Area. The inspector observed two distillation units to recover spent acetone. Emissions are vented outdoors. Photograph 10 taken at 11:17 a.m.



Area Adjacent to Slurry Building The inspector observed a trash container for solvent contaminated wipes. Photograph 11 taken at 11:23 a.m.



Quality Laboratory. The inspector observed one 5-gallon SAA container for waste magnesium perchlorate. The container receives waste from a container in the fume hood. Photograph 12 taken at 1:13 p.m.

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Quality Laboratory. The inspector observed a one-gallon container for waste magnesium perchlorate in a fume hood. The container was not marked or labeled with words Hazardous Waste. Photograph 13 taken at 1:15 p.m.



Fiber Quality Laboratory – Hallway. The inspector observed one 55-gallon SAA container accumulating aerosol cans. Photograph 14 taken at 1:39 p.m.