ENVIRONMENTAL PROTECTION AGENCY
REGION 1 – NEW ENGLAND
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MASSACHUSETTS 02109-3912

June 2, 2023

Mr. Jason Hyde, EHS Manager
Fiber Materials, Inc.
5 Morin Street
Biddeford, ME 04005

Re: U.S. EPA-Region 1 Inspection Report of Fiber Materials, Inc. March 28-29, 2023

Dear Mr. Hyde:

In accordance with current policy, I am providing you with a copy of the final inspection report summarizing observations made during the March 28-29, 2023 inspection of your facility.

This inspection was conducted under the authority of RCRA.

Please contact me at 617-918-1760 or wilkinson.cheryl@epa.gov if you have any questions.

Sincerely,

CHERYL WILKINSON Digitally signed by CHERYL WILKINSON
Date: 2023.06.02 14:56:55 -04'00'

Cheryl Wilkinson, Life Scientist
Waste and Chemical Compliance Section

cc: Cherrie Plummer, ME DEP

Disclaimer: Unless otherwise noted, this report describes conditions at the facility/property as observed by EPA inspector(s), and/or through records provided to and/or information reported to EPA inspector(s) by facility representatives and as understood by the inspector(s). This report may not capture all operations or activities ongoing at the time of the inspection. This report does not make final determinations on potential areas of concern. Nothing in this report affects EPA's authorities under federal statutes and regulations to pursue further investigation or action.

ENVIRONMENTAL PROTECTION AGENCY
REGION 1 – NEW ENGLAND
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MASSACHUSETTS 02109-3912

RCRA Compliance Inspection of:

Fiber Materials, Inc.
5 Morin Street
Biddeford, ME 04005

March 28-29, 2023
Date of Inspection

CHERYL WILKINSON Digitally signed by CHERYL WILKINSON Date: 2023.06.02 14:57:45 -04'00'

Cheryl Wilkinson, Life Scientist
Waste and Chemical Compliance Section

June 2, 2023
Date Inspection Report Approved

MARY ODONNELL Digitally signed by MARY ODONNELL Date: 2023.06.02 14:38:47 -04'00'

Mary Jane O'Donnell, Manager
Waste and Chemical Compliance Section

June 2, 2023
Date Inspection Report Finalized

June 2, 2023
Date Inspection Report Transmitted to Facility

Disclaimer: Unless otherwise noted, this report describes conditions at the facility/property as observed by EPA inspector(s), and/or through records provided to and/or information reported to EPA inspector(s) by facility representatives and as understood by the inspector(s). This report may not capture all operations or activities ongoing at the time of the inspection. This report does not make final determinations on potential areas of concern. Nothing in this report affects EPA's authorities under federal statutes and regulations to pursue further investigation or action.

RCRA HAZARDOUS WASTE INSPECTION REPORT

I. GENERAL INFORMATION

a. **Facility Name:** Fiber Materials, Inc. ("Fiber Materials" or the "Facility")

b. **Inspection Date:** March 28-29, 2023

c. **Inspection Type:** RCRA Compliance Evaluation Inspection (CEI)

d. **EPA Inspectors:** Cheryl Wilkinson, Life Scientist
Linda Brolin, Environmental Engineer

e. **EPA ID Number:** MED048268890

f. **NAICS:** 335991- Carbon and Graphite Production Manufacturing

g. **Street Address:** 5 Morin Street, Biddeford, ME 04005

h. **Mailing Address:** 5 Morin Street, Biddeford, ME 04005

i. **Facility Contacts:** Jason Hyde
EHS Manager
Phone: (207) 282-7046 or (207)-245-2077
Email: Jason.hyde@spiritaero.com

Liv Reiners
EHS Specialist
Phone: (207)-282-7038 or (207)-298-4972
Email: Elizabeth.m.reiners@spiritaero.com

j. **Generator Status (per RCRAInfo):** Large Quantity Generator (LQG)

k. **Date first notified as a generator (per RCRAInfo):** 08/18/1980

l. **Date of most recent notification in RCRAInfo:** 08/01/2018

m. **Current Property Owner:** Edgewater Capital Partners, 5005 Rockside Road #840, Independence, OH 44131

n. **Current Operator:** Spirit Aerosystems

o. **Wastes generated (per most recent RCRAInfo notification)**:
Waste codes on Biennial Report Notification: D001 D002 D009 F003 U002;
Waste codes on RCRAInfo e-manifests; D003 D008 D011 D018 D035 D039 F005 U125 U213

Report Attachments:

ATTACHMENT 1 – Digital photo log

II. FACILITY DESCRIPTION

Spirit AeroSystems purchased Fiber Materials, Incorporated in January 2020. Spirit Aerosystems is one of the world's largest manufacturers of aerostructures for commercial airplanes, defense platforms, and business/regional jets. They have expertise in aluminum and advanced composite manufacturing. Their core products include fuselages, integrated wings and wing components, pylons, and nacelles. The company is headquartered in Wichita, Kansas and has facilities in the U.S., U.K., France, Malaysia and Morocco.

Fiber Materials, Biddeford, Maine manufactures high temperature materials and composites. The focus in Maine is on multidirectional reinforced carbon/carbon (c/c) and ceramic matrix composites (CMCs) that enable high-temperature components such as: thermal protection systems, re-entry vehicle nose tips as well as rocket motor throats and nozzles. The facility is located in an industrial area.

III. INSPECTION IN-BRIEF

The EPA inspection team, Cheryl Wilkinson and Linda Brolin arrived at Fiber Materials at 5 Morin Street, Biddeford, Maine at 11:45am on Tuesday, March 28, 2023. The inspection team rang the intercom at the entrance and requested to speak Jason Hyde, EHS Manager. The inspection team was brought into the facility to sign in, and Mr. Hyde met the inspection team at that time. The inspection team presented their EPA IDs and were provided temporary badges. Mr. Hyde then escorted the inspection team to a conference room on the second floor. The inspection team met Liv Reiners, EHS Specialist in the conference room. The inspection team conducted an in-brief in the conference room. The following personnel were present for all or part of the in-brief:

EPA:	Cheryl Wilkinson, Life Scientist Linda Brolin, Environmental Engineer
Fiber Materials:	Jason Hyde, EHS Manager Liv Reiners, EHS Specialist

The inspection team explained that they would be conducting an LQG CEI under the authority of the resource conservation and recovery act, (RCRA). Inspector Wilkinson explained that if, at any time, Mr. Hyde or Ms. Reiners felt that the information the inspection team was requesting was confidential business information, to please let the inspection team know so that it may be handled appropriately. Inspector Wilkinson provided Mr. Hyde and Ms. Reiners a document which explains CBI, how to make a CBI claim, and frequently asked questions. Mr. Hyde explained the company requires non-disclosure forms to be signed for anyone who enters the manufacturing floor. Mr. Hyde discussed the non-disclosure form with Fiber Materials security and learned that because the inspection team are Federal Government employees, they are not required to sign the non-disclosure form. The inspection team explained that they would be taking photos during the inspection, and that the photos would be shared with the facility after the inspection.

Mr. Hyde and Ms. Reiners informed the inspection team of the following information about the facility during the in-brief:

Spirit Aerosystems purchased Fiber Materials in January of 2020. Mr. Hyde has been working at the facility for approximately five years, and Ms. Reiners approximately one and half years. Mr. Hyde explained that he and Ms. Reiners are working on updating the RCRA program and there may be areas that are not updated. He explained they are in the process of hiring a new person to improve their processes and update their systems. Mr. Hyde explained that the contingency plan hasn't been updated since 2018, other than names of personnel in 2021.

Mr. Hyde and Ms. Reiners explained that the facility manages hazardous waste in 55-gallon containers, not in hazardous waste tanks. They manage five or six satellite accumulation areas (SAAs) and one hazardous waste storage area (HWSA). The facility uses Veolia as their hazardous waste transporter. They manage aerosol cans and used oil in 55-gallon containers. The facility manages universal waste batteries also. The facility manages a non-hazardous waste stream for personal protective equipment (PPE) in boxes around the facility which was put in place due to the COVID-19 pandemic.

Mr. Hyde and Ms. Reiners explained that there are 250 employees on-site, and of that 250, fifteen of them receive hazardous waste training. Mr. Hyde explained the employees who receive hazardous waste training are the four shift leads, two supervisors, three employees on his team and the employees who work in the shipping area. The three employees on Mr. Hyde's team are, himself, Ms. Reiners and Melissa Richardson. Ms. Richardson is an EH&S specialist who works at their other Spirit Aerosystems/Fiber Materials site close by, but with a separate EPA ID number. Mr. Hyde explained that Ms. Richardson performs some EH&S duties at the 5 Morin St. location when Ms. Reiners and himself are unavailable. Mr. Hyde explained that the facility has had training issues over the last two years. Mr. Hyde explained that when the company was owned by Fiber Materials, a contractor conducted their hazardous waste training, and wrote their contingency plan. Leslie Arnson, a contractor, would come on-site to conduct the hazardous waste training. In year 2020, due to COVID-19 concerns, Leslie Arnson stopped coming on-site to conduct the training and she sent training slides to the facility. A former employee of Fiber Materials, Hailey had planned on presenting the hazardous waste training slides to employees, but she left the company.

Mr. Hyde explained that when Spirit Aerosystems purchased Fiber Materials, in January 2020, they informed the facility that the employees would receive hazardous waste training through their internal learning system, Spirit Learning System (SLS). Mr. Hyde explained that facility personnel did not receive access to the SLS training site until November 2022, therefore, hazardous waste training was not conducted for years 2020 and 2021. Mr. Hyde explained that for year 2023, the hazardous waste training is scheduled for the month of May.

Mr. Hyde and Ms. Reiners explained that hazardous waste determinations are made based on analysis of waste stream conducted by Veolia Environmental Services. Except for the solid dust and coke waste streams, which Katahdin Labs conducts the analysis for. Waste determinations are made when a new process begins or when a process changes.

Mr. Hyde and Ms. Reiners explained that they and Melissa Richardson sign the hazardous waste manifests. Mr. Reiners explained that the facility sends their paper manifests to Maine Department of Environmental Protection (ME DEP) for them to upload their manifests to the e-manifest system. Inspector Wilkinson discussed that during a pre-inspection review of manifest information, pulled from EPA's e-Manifest database, she found that the Biennial Report did not contain some of the hazardous waste codes the facility has on their hazardous waste manifests. Mr. Hyde and Ms. Reiners were not familiar with the Biennial Report.

Mr. Hyde and Ms. Reiners explained that the facility has not had any spills or releases of hazardous waste recently. The facility does not manage any Subpart AABBCC equipment, it does not import or export hazardous waste, and it does not have a wastewater treatment permit, and that only the sanitary water gets discharged to POTW.

Mr. Hyde explained that the local Fire Department comes on-site and is familiar with the processes and waste generated at the facility. Mr. Hyde and Ms. Reiners explained that all but one of the departments operate five days a week, with one or two shifts. The Densification Department, operates 24 hours a day, 7 days a week all year long on a four days on and four days off schedule, with four shifts, A, B, C and D.

Mr. Hyde and Ms. Reiners explained that the site consists of four solid structured buildings for manufacturing, and one building for the HWSA. The four manufacturing buildings are split into six areas that they refer to as buildings. One of the four manufacturing buildings is split into three areas, referred to as buildings 1, 2 and 6. The other three are each their own buildings, Building 3, Building 4, and Building 5. Mr. Hyde and Ms. Reiners explained that the facility is growing, and they are in the process of doubling in size. The following is a breakdown of operations Mr. Hyde and Ms. Reiners described for each of the six manufacturing buildings:

Building 1: Under construction, no manufacturing is currently occurring in this building.

Building 2: The impregnation process and the carbonizer process are performed in this building.

> Impregnation: After the part has completed the carbon fiber weaving process, it goes to the impregnation process. This process uses an impregnation vessel, which the part gets

placed into with crushed coal tar pitch. The vessel gets heated, melting the coal tar pitch. The melted coal tar pitch soaks into the part and fills in any gaps from the weaving process. This process generates a spent liquid coal tar pitch hazardous waste stream, which is managed in 55-gallon containers at SAAs. Additionally, there is a non-hazardous solid coal tar pitch waste stream generated from this process.

Carbonizer: Once the part has been impregnated, it then goes through the carbonizer process which hardens the part. This process uses argon gas to heat the part and harden it. There is no hazardous waste generated from this process.

Building 6: The "PIC" process, and the start of the phenolic impregnated carbon ablator, PICA process is performed in building 6. There is one SAA for hazardous waste in this building.

PIC: The PIC process uses a pressurized induced vessel to pressurize the part to 16,000psi. The PIC process also uses a scrubber with argon gas and water. The liquid generated from the scrubber is managed as hazardous waste. The liquid scrubber hazardous waste is managed in 55-gallon containers and is pumped directly from the scrubber.

PICA: Patrick Sullivan, an operator for the PICA process, explained that this process consists of mixing the following four chemicals, SC-1008, ethylene glycol, hexamethyltetramine (HMTA), and distilled water to make a resin. Once the resin is made, it gets cured. The excess resin generated during the process, gets pumped into 55-gallon containers. There is a waste resin solution from this process which is managed as hazardous waste. During full production of PICA, there is approximately 500 pounds per run that is discarded, with a maximum of 1000 pounds a month.

Building 3: Carbon fiber form casting process, part of the PICA process, and graphitization process take place in Building 3. There is no hazardous waste generated in this building.

Graphitization: The last step in the manufacturing process is graphitization, which consists of using a natural gas incinerator to "cook" the part further. This process burns off by-products from previous processes, including any organic material.

Carbon fiber form casting: During this process, white rayon is placed into baskets, cooked in an oven, and then ground up. The ground up rayon is placed in a casting mold, is mixed with Varcum, a phenolic resin and gets cooked. Once cooked, the part is sent to be shaped. The fiber form process generates non-hazardous waste.

Building 4: Building 4, consists of two floor levels. Located on the second floor is the administrative office area. On the second floor, there is one universal waste battery collection area. Located on the first floor of Building 4, is the X-Ray area, the Energy Materials Testing Laboratory, EMTL, Carbon Fiber Weaving process area, and Pultrusion process area. The following is a breakdown of each area:

X-Ray: Where an x-ray machine used to x-ray parts, looking for defects. One silver contaminated waste stream is generated from the process of developing the film for the x-ray images. A scrubber, equipped with filters is used to collect the excess silver. The contaminated filters are sent out for reclamation of the silver. The filters have not been collected and sent for reclamation of the silver for at least the last 5 years, according to Mr. Hyde.

EMTL: This area is where the facility tests parts for customers, they conduct heat and electrical stress tests on the parts. There are no chemical processes and no hazardous waste generated in this area.

Carbon Fiber Weaving: This process consists of using a carbon fiber yard to weave with. No hazardous waste is generated during this process.

Pultrusion: This process consists of a carbon fiber yard run through a resin line, which coats the fiber yard, to create a rod. This process generates a resin waste stream and an Acrastrip waste stream. The process was using acetone to clean the parts, but the facility switched from using acetone to Acrastrip. Both of these waste streams are managed in 55-gallon containers as non-hazardous waste in an SAA.

Additionally, in Building 4, on the first floor there is an e-waste collection area and a used oil SAA.

Building 5: The Machine shop is located in Building 5. Parts from all manufacturing processes, expect the PICA process go to the machine shop to be cut to the correct sizes. The process of cutting the pieces generates a dust waste stream that is managed as non-hazardous. There is one SAA in building 5 for used oil.

IV. FACILITY TOUR

The physical tour of the facility took place on Wednesday, March 29, 2023. See Attachment 1 for a digital photo log of photos taken throughout the inspection. The following personnel were present for all or part of the tour:

EPA:	Cheryl Wilkinson
	Linda Brolin
Fiber Materials:	Jason Hyde
	Liv Reiners

The tour of the facility began at Building 4, on the first floor in Room 133. The inspection team observed one area for electronic waste collection, and universal waste battery collection. The inspection team observed a “E-waste only*-*No hard drives” sign at the area. The inspection team observed one 4ft x 4ft cardboard box, open with electronic waste inside. And one 12in x

18in cardboard box with used batteries inside. The inspection team did not observe a label or a date on either of the boxes, *(See Attachment 1, Photos #1, #2 and #3)*. Mr. Hyde explained that the box holding used batteries has been at this location for approximately 30 days.

The inspection team observed one SAA for used oil on the first floor of building 4, in Room 133. The area had a sign, "HAZARDOUS WASTE SATELLITE ACCUMULATION AREA". Mr. Hyde explained all containers less than 5-gallon will be made into a lab pack, and that lab packs are done approximately every four months. The inspection team observed two containers with hazardous waste labels. The remaining containers had no label, or a product label. The inspection team observed the following containers, sitting in a secondary containment at the SAA, *(See Attachment 1, Photos #4-#9)*:

- One empty 5-gallon container
- Two, 5-gallon closed containers Mr. Hyde stated were waste oil.
- Two, 5-gallon closed containers of waste oil labelled with hazardous waste labels, one label stated, "waist oil, 9/22/22".
- One approximately 2.5-gallon white container, open with some residual used oil at the bottom of the container.
- Two, 1-gallon containers of oil, in original containers, closed.
- One 1-quart container of synthetic vacuum oil, closed.
- Four, 500-cc containers of diffusion pump fluid, two of which had a manufacturers label that stated they were the "704" brand, whereas two stated, "702" brand. All four containers were closed.
- One open 5-gallon container with solid absorbant material inside
- One 128-fluid ounces of hydraulic oil, closed.

The inspection team exited Room 133 and continued the inspection in the weaving department. The inspection team observed the weaving process. Mr. Hyde and Ms. Reiners explained the carbon fiber waste generated here is non-hazardous and is disposed of in the general trash. The inspection team did not observe any hazardous waste in the weaving department.

The inspection team continued the inspection in the EMTL Mechanical Lab #2. The inspection team observed one 5-gallon white container, closed with a hazardous waste label that stated, "Hydraulic oil, 3/6/2023". The container was staged on the floor in the area, not in a designated SAA, *(See Attachment 1, Photo #10).* Mr. Hyde and Ms. Reiners explained that the container was supposed to be moved to the hazardous waste storage area.

The inspection team continued the inspection in the Thermal Lab in EMTL. Prior to entering the Thermal lab, the inspection team observed a refrigerator for chemical storage. Inside the refrigerator the inspection team observed one container of material containing mercury. The inspection team questioned where the mercury product was being used. Mr. Hyde and Ms. Reiners explained that the mercury product is used in the EMTL Thermal Lab. The inspection team met, Rachel Harman, a lab technician who works in the EMTL Thermal Lab. Ms. Harman explained that there is a flammable locker cabinet where the mercury product, and a container for mercury waste is stored. The inspection team observed the flammable cabinet, and the contents inside, *(See Attachment 1, Photo #11)*. The inspection team observed the container for mercury waste, which is a grey metal cylindrical container. Neither the container, nor the flammable

waste locker had a hazardous waste label on them. Ms. Harman explained that it takes approximately two years to fill the mercury waste container. Additionally, Ms. Harman explained that when the mercury product is used, mercury contaminated PPE gloves and rags are generated. Ms. Harman explained they place the contaminated gloves and rags in a 5-gallon container in the area. The inspection team requested to see the container, but there was no container in the area at the time of the inspection. The inspection team observed the area where the container would normally be stored, the inspection team did not observe any SAA sign in the area.

The inspection team continued the inspection in the Technical Development area. There is no waste generated in this area. The inspection team continued the inspection on the second floor of Building 4.

The inspection team observed one open, 3-gallon cardboard box with a universal waste label, which stated, "Alkaline Batteries, 4/6/21", in Room 210, *(See Attachment 1, Photos #12 and #13)*. Mr. Hyde explained that the box was reused after the recent pick up of waste by Veolia.

The inspection team left Building 4, and continued the inspection in Building 2, in the Impregnation area. The inspection team observed a SAA, that had one, "CAUTION HAZARDOUS WASTE SATELLITE ACCUMULATION POINT UNAUTHORIZED EMPLOYEES KEEP OUT" sign, and three containers in the SAA. The following is a description of the containers, *(See Attachment 1, Photos #14 - #19)*:

1. One empty black metal, 55-gallon container
2. One grey, metal, 55-gallon container equipped with a closed funnel, with a non-hazardous waste label that stated the waste was, "NON REGULATED LIQUID" and "FMI-119 VACUUM PUMP OIL/HYDRAULIC OIL".
3. One black, metal 55-gallon container with a loose drum locking ring, with a non-hazardous waste label that stated the waste was, "ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, n.o.s., (BENZO(A)PYRENE, DIBENZ(A)ANTHRACENE), 9, III", and "FMI-118 COAL TAR PITCH"

Inspector Wilkinson questioned Mr. Hyde and Ms. Reiners on what the contents were in drum #3 at the SAA, and if the contents were hazardous considering the label is a non-hazardous waste label, *(See Attachment 1, Photo #19)*. Mr. Hyde explained Veolia had been providing the hazardous and non-hazardous waste labels for the facility, but approximately two or three months earlier, the facility began a new internal program to print its own labels. Mr. Hyde explained that the facility printed 500 labels, all with the designation, non-hazardous waste on the labels, for all waste streams at the facility, both non-hazardous waste streams and hazardous waste streams. Mr. Hyde explained that drum number 3 in the SAA is holding hazardous waste, coal tar pitch and that the non-hazardous waste designation is incorrect. Ms. Reiners explained that when Veolia picks the waste up from the facility, they relabel each container.

The inspection team observed a 55-gallon container equipped with a funnel, and no label, to the left of the SAA in the Impregnation area, with black residue on the floor in the area *(See Attachment 1, Photo #20-#23)*. The inspection team questioned what the container was being used for. Mr. Hyde explained this container is used to collect the waste coal tar pitch residue

from the process equipment. Mr. Hyde explained that the residue from the equipment goes into a "trap" and is pumped out of the trap and placed into a 55-gallon container at the area, not in the nearby SAA. Mr. Hyde and Ms. Reiners explained that the coal tar pitch residue is hazardous waste coming from the "trap". The inspection team requested to speak with an operator in the area, and met Oscar Delgado, a maintenance technician who works in the Coal Tar Pitch area. Mr. Delgado confirmed that the trap collects the coal tar pitch residue in the process equipment piping. He explained that the process equipment is under vacuum, and the vacuum pumps are pulling material to keep the process lines clear. Mr. Delgado explained the coal tar pitch residue is drained from the trap daily, sometimes a couple of times a day. Mr. Delgado explained that they drain the coal tar pitch residue into either a 2.5-gallon, or 5-gallon container located under the trap itself, and they then pour the coal tar pitch into the 55-gallon container, equipped with the funnel *(See Attachment 1, Photo #24)*. The trap has a filter inside of it, which when spent, gets placed into an SAA container. The inspection team observed another 55-gallon container, with coal tar pitch contaminated rags, debris and PPE, staged to the right of the trap. The container was open and not labelled, *(See Attachment 1, Photo #25 and #26)*. Mr. Hyde and Ms. Reiners placed a cover on the open 55-gallon container and placed a label on both the 55-gallon container of contaminated debris and the coal tar pitch residue container. The waste description on the label stated, waste coal tar distillates, flammable, 3, II, RQ (coal tar distillates).

The inspection team continued the inspection at the vacuum pumps, in the room next to the coal tar pitch process, *(See Attachment 1, Photo #27)*. The inspection team observed three, 55-gallon containers, each hard piped to individual vacuum pumps, collecting coal tar pitch distillates from the vacuum systems attached to the coal tar pitch process, *(See Attachment 1, Photo #28 and #30)*. All three containers were closed and had labels on them. Two of the containers had the date 3/28/23 on the label, *(See Attachment 1, Photo #31 and #32)*. One container was not dated. There was one SAA sign at the area. The inspection team observed one filter on a vacuum pump that stated the filter was changed on 01/19/23. The inspection team observed three 5-gallon, open, unlabeled containers, one at each vacuum pump station, collecting used oil from the vacuum system, *(See Attachment 1, Photo #29)*. The inspection team observed spill control equipment and a fire extinguisher in the area.

The inspection team continued the inspection downstairs in Building 2, which is referred to as Building 6, where the PICA process is performed. The inspection team observed the Maintenance area that had a parts washer, managed by Safety-Kleen.

The inspection team continued the inspection outside of Building 6, at the Scrubber Room, where the scrubber is located. Mr. Hyde explained that the scrubber generates a hazardous waste stream that gets discharged directly from the scrubber into 55-gallon containers.

The inspection team continued the inspection in the K4 Hydropack Room, in Building 6. The inspection team observed one SAA with two 55-gallon containers. The inspection team observed a SAA sign in the area. Both SAA containers were 55-gallon grey metal containers, both were closed, one was equipped with a funnel. Both containers were labeled with hazardous waste labels that stated, "WASTE COAL TAR DISTILLATES, FLAMMABLE, 3, II, RQ (COAL TAR DISTILLATES), and a waste profile description of "FMI-113 SCRUBBER/TRAP RESIDUE". Inspector Wilkinson questioned why the waste from the coal tar pitch process is

stored in a separate building from the process. Mr. Hyde explained that these containers are not holding the coal tar distillate waste, as this waste is not generated in this area, and that the waste in these containers is the scrubber waste, *(See Attachment 1, Photos #33-#35)*. Mr Hyde explained the facility is planning to remove this SAA, and instead of storing the scrubber waste containers here, they intend to move them directly to the HWSA.

The inspection team left Building 2 and continued the inspection in Building 3, where the graphitize ovens are located. The inspection team observed three graphitize ovens. This process utilizes Varcum, water and a coal/graphite and generates a combustible carbon and graphite dust that is managed as non-hazardous. The facility is equipped with a dust cleaning system and program. The inspection team observed two 55-gallon non-hazardous waste containers of waste description FM-126 Fiber Form process water. The inspection team did not observe any hazardous waste in this area.

The inspection team continued to the Respirator Room. The inspection team observed one 55-gallon container used to collect waste aerosol cans, which was labeled as, "HAZ-WASTE AEROSOL CANS ONLY". The container was closed, *(See Attachment 1, Photo #36)*.

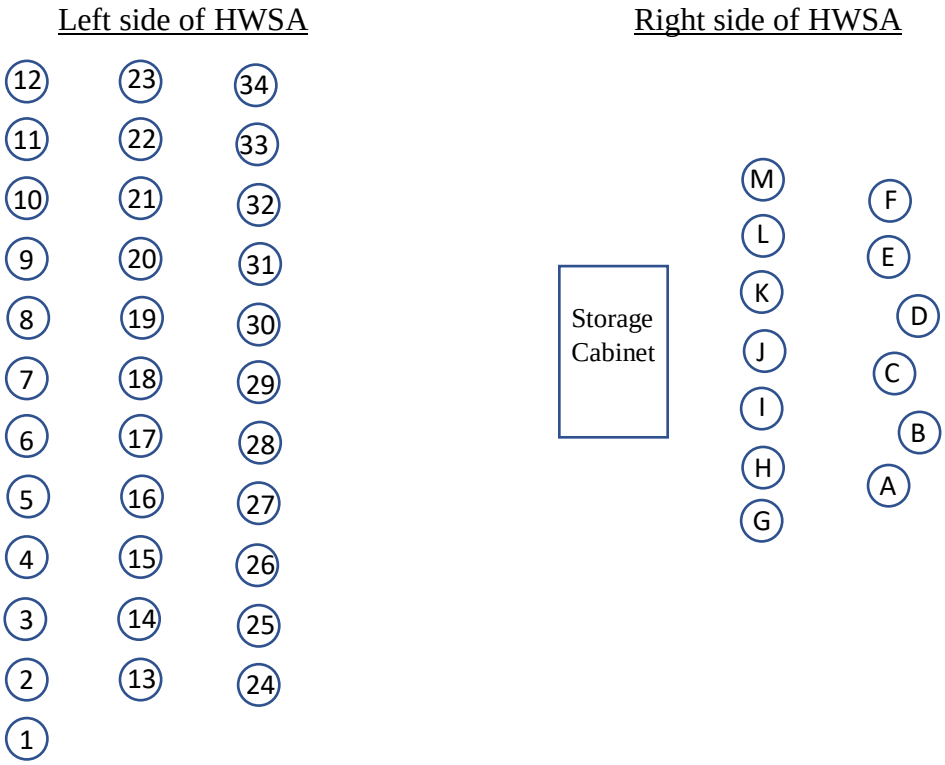
The inspection team left Building 3 and continued the inspection at Building 5, at the Machine Shop. The inspection team observed a SAA for used oil. There was one 55-gallon container, equipped with an open funnel. The container was labelled with, "NON-RCRA REGULATED WASTE", and "WASTE NAME: "USED OIL"". There was a SAA sign in the area, which stated, "CAUTION SATELLITE WASTE ACCUMULATION AREA", *(See Attachment 1, Photos #37 and #38)*.

The inspection team left Building 5 and continued the inspection in Building 4, on the first floor, in the Pultrusion area. The inspection team observed one SAA with one 55-gallon container, closed with no label, sitting on a secondary containment skid. Next to the 55-gallon container was a trash bag with solid waste material. In front of the 55-gallon container, on the floor was a waste can, *(See Attachment 1, Photos #39 and #41)*. The inspection team requested to speak with an operator in the area and met Corey Tanguay. Mr. Tanguay explained that the waste in the 55-gallon container was Acrastrip liquid used in the ultrasonic cleaner. Mr Tanguay explained that the Arcrastip waste drains into the container directly from the ultrasonic cleaner. Mr. Tanguay explained that the bag sitting next to the 55-gallon container came from the smaller waste can, where they place the solid contaminated waste material. Mr. Tanguay explained they usually place the full bag from the can into a second 55-gallon container, but that container wasn't there when the can was full, so they placed the bag on the secondary containment pallet. Mr. Hyde explained that these waste streams are hazardous because they use acetone in the process. Ms. Reiners explained that Mr. Hyde was incorrect, and that they have switched from using acetone to using Acrastrip in its place, and the waste is now non-hazardous. Ms. Reiners explained that all the containers in this SAA are managed as non-hazardous waste now, since they no longer use acetone in the process. Mr. Hyde placed a non-hazardous waste label on the container that stated the waste stream was, "NON-RCRA AND DOT NON-REGULATED LIQUID", and "ACRASTRIP CLEANING SOLUTION W/RESIN", *(See Attachment 1, Photo #40)*.

The inspection team left Building 4 and continued the inspection in the HWSA building. The inspection team observed that the HWSA building was locked, and there is a sign on the outside, which stated, "HAZARDOUS WASTE STORAGE AREA UNAUTHORIZED PERSONS KEEP OUT", *(See Attachment 1, Photo #42)*. The inspection team did not observe a no-smoking sign on the outside of the building. Upon entry, the inspection team observed the floor of the building is unsealed wood with seams between the wood pieces, *(See Attachment 1, Photo #54)*. Mr. Hyde explained that under the wood, there is concrete. The inspection team observed spill control material, radios for communication, a fire pull, and fire extinguishers.

Upon inspecting the containers, the inspection team observed two labels on each container of waste. One label was a white, non-hazardous label and the other was a red hazardous waste label. On some containers, the hazardous waste label was placed over the words, "non-hazardous" on the white labels. Mr. Hyde explained the reason for both labels is because they have the incorrect designation of "non-hazardous" on their labels, even when the material is hazardous. Therefore, they placed the red hazardous waste label on the containers, in addition to the white, non-hazardous waste label. Mr. Hyde explained they placed the red hazardous waste labels on the containers earlier that day of the inspection.

The following is a description of the containers the inspection team observed in the HWSA, *(See Attachment 1, Photos #43 - #61)*:



Note: Each circle above represents the configuration of each container located in the HWSA. The letters and numbers were assigned arbitrarily be inspectors for the purpose of marking notes on their contents. Images of the configuration of the left and right side of the HWSA can be seen in Attachment 1, photos #43 through #45, and photos #55 through #57, respectively.

Left side of HWSA:

1. 55-gallon container, closed and dated 03/20/23. Container had two labels, one hazardous waste, with a waste description, "WASTE COAL TAR DISTILLATES, FLAMMABLE, 3, ii, RQ (COAL TAR DISTILLATES), and "FMI-113 SCRUBBER/TRAP RESIDUE". One non-hazardous waste label that had a waste description, scrubber trap/residue, *(See Attachment 1, Photo #46).*
2. 55-gallon container, closed and dated 03/08/23, hazardous waste label, with a waste description of "LS-81k".
3. 55-gallon container, closed and dated 03/10/23, hazardous waste label, with a waste description of coal tar pitch.
4. 55-gallon container, closed and dated 03/10/23, hazardous waste label, with a waste description of coal tar pitch.
5. 55-gallon container, closed and dated 03/10/23, hazardous waste label, with a waste description of coal tar pitch.
6. 55-gallon container, closed and dated 03/09/23, hazardous waste label, with a waste description of coal tar pitch.
7. 55-gallon container, closed and dated 03/05/23, hazardous waste label, with a waste description P3 resin waste.
8. 55-gallon container, closed and dated 03/05/23, hazardous waste label with a waste description of coal tar pitch. And a non-hazardous waste label that states, environmentally hazardous substance, solid, n.o.s., (benzo(a)pyrene, dibenz(a)anthracene).
9. 55-gallon container, closed and dated 03/07/23, Container had two labels, one hazardous waste, with a waste description, coal tar pitch. And one non-hazardous waste label that had a waste description, "ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, n.o.s., (BENZO(A)PYRENE, DIBENZ(A)ANTHRACENE), 9, III", and "COAL TAR PITCH SOLIDS" *(See Attachment 1, Photo #48)*.
10. 55-gallon container, closed and dated 03/08/23, hazardous waste label, with a waste description of coal tar pitch solids.
11. 55-gallon container, closed and dated 03/03/23, non-hazardous waste label, with a waste description of resin waste.
12. 55-gallon container, closed and dated 02/23/23, non-hazardous waste label, with a waste description of resin waste.
13. 55-gallon container, closed and dated 03/28/23, hazardous waste label, with a waste description of coal tar pitch.
14. 55-gallon container, closed and dated 03/25/23, hazardous waste label, with a waste description of coal tar pitch.
15. 55-gallon container, closed and dated 03/26/23, hazardous waste label, with a waste description of coal tar pitch.
16. 55-gallon container, closed and dated 03/16/23, hazardous waste label, with a waste description of coal tar pitch.
17. 55-gallon container, closed and dated 03/15/23, hazardous waste label, with a waste description of coal tar pitch.
18. 55-gallon container, closed and dated 03/16/23, hazardous waste label, with a waste description of coal tar pitch.

19. 55-gallon container, closed and dated 03/16/23, non-hazardous waste label, with a waste description of resin waste.
20. 55-gallon container, closed, with no date on container. Had a non-hazardous waste label, with a waste description, "ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, n.o.s., (BENZO(A)PYRENE, DIBENZ(A)ANTHRACENE), 9, III", and "COAL TAR PITCH SOLIDS. And a hazardous waste label that had no information on it, *(See Attachment 1, Photo #50).*
21. 55-gallon container, closed and dated 03/08/23, non-hazardous waste label, with a waste description of resin Acrastrip.
22. 55-gallon container, closed and dated 03/02/23, hazardous waste label, with a waste description of coal tar pitch.
23. 55-gallon container, closed and dated 03/04/23, hazardous waste label, with a waste description of coal tar pitch.
24. 55-gallon container, closed and dated 03/28/23, hazardous waste label with a waste description of pump oil.
25. 35-gallon cardboard container, closed, hazardous waste label, with a waste description of hexamethylene tetramine expired material.
26. 55-gallon container, closed and dated 03/28/23, non-hazardous waste label with a waste description, "NON REGULATED LIQUID", and "FMI-25-PICA LIQUID". Inspector Wilkinson questioned the material in the container, and Mr. Hyde explained that the waste is hazardous, and placed a hazardous waste label on the container, *(See Attachment 1, Photo #51).*
27. 55-gallon container, closed and dated 03/28/23, hazardous waste label, with a waste description of hexamethylene tetramine.
28. 55-gallon container, closed and dated 03/28/23, non-hazardous waste label, with a waste description, "NON REGULATED LIQUID", and "FMI-25-PICA LIQUID". Inspector Wilkinson questioned the material in the container, and Mr. Hyde explained that the waste is hazardous, and placed a hazardous waste label on the container, *(See Attachment 1, Photo #53).*
29. 55-gallon container, closed and dated 02/15/23, labeled B-1 Graphite and poly dust. Mr. Hyde explained that this is mixed dust from the dust system, and they were waiting for Veolia to get back to them on if the material is hazardous or not.
30. 55-gallon container, closed and dated 03/23/23, non-hazardous waste label, with a waste description of EPON resin.
31. 55-gallon container, closed and dated 03/20/23, hazardous waste label, with a waste description of coal tar pitch.
32. 55-gallon container, closed and dated 03/18/23, hazardous waste label, with a waste description of coal tar pitch.
33. 55-gallon container, closed and dated 03/18/23, hazardous waste label, with a non-hazardous waste label with the waste description coal tar pitch.
34. 55-gallon container, closed and dated 03/17/23, hazardous waste label, with a waste description of coal tar pitch.

Right side of HWSA:

A. 5-gallon container, closed and dated 03/06/23, hazardous waste label, with a waste description hydraulic oil

B. 5-gallon container, closed and dated 03/01/23, non-hazardous waste label, with a waste description lead
C. 5-gallon container, hand sanitizer product
D. 5-gallon container, closed, hazardous waste label, with a waste description antifreeze
E. 5-gallon container, closed, hazardous waste label, with a waste description antifreeze
F. 5-gallon container, closed and dated 10/04/19, non-hazardous waste label, with a waste description fiber form casting water sample
G. 55-gallon container, closed and dated 03/28/23, hazardous waste label with a waste description of vacuum oil.
H. 55-gallon container, closed and dated 03/28/23, non-hazardous waste label with a waste description of non-RCRA solid, n.o.s. WIP#1016092, epoxy resin solids/pucks, resin waste.
I. 55-gallon container, closed and dated 03/28/23, hazardous waste label with a waste description of scrubber trap residue, UN1136, waste coal tar distillates, flammable, 3, II, RQ (coal tar distillates) flammable liquid.
J. 55-gallon container, closed and dated 03/28/23, hazardous waste label with a waste description of coal tar pitch. And non-hazardous waste label, "ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, n.o.s., (BENZO(A)PYRENE, DIBENZ(A)ANTHRACENE), 9, III", and "COAL TAR PITCH SOLIDS", FMI-1118 coal tar pitch.
K. 55-gallon container, closed and dated 03/28/23, hazardous waste label with a waste description of coal tar pitch. And non-hazardous waste label, "ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, n.o.s., (BENZO(A)PYRENE, DIBENZ(A)ANTHRACENE), 9, III", and "COAL TAR PITCH SOLIDS", FMI-1118 coal tar pitch.
L. 55-gallon container, closed and dated 03/28/23, hazardous waste label with a waste description of coal tar pitch. And non-hazardous waste label, "ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, n.o.s., (BENZO(A)PYRENE, DIBENZ(A)ANTHRACENE), 9, III", and "COAL TAR PITCH SOLIDS", FMI-1118 coal tar pitch.
M. 55-gallon container, closed and dated 03/12/23, hazardous waste label with a waste description of coal tar pitch. And non-hazardous waste label, "ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, n.o.s., (BENZO(A)PYRENE, DIBENZ(A)ANTHRACENE), 9, III", and "COAL TAR PITCH SOLIDS", FMI-1118 coal tar pitch solids.

<u>Storage Cabinet in HWSA:</u>
The inspection team observed a storage cabinet in the HWSA, *(See Attachment 1, Photo #58).* On the top shelf of the storage cabinet, the inspection team observed three plastic, approximately one-quart bottles of "Resbond 931 Binder", each bottle in its own plastic bag. On the outside of each plastic bag was a sticker which stated, "shipped date: 2/1/19 use within 6 months USE BY: 8/1/19". Mr. Hyde explained the plastic bags the bottles were in, and the sticker on the bags were placed there by the manufacturer. Each of the three plastic bottles were indented, *(See Attachment 1, Photos #59-#61).*

The inspection team left the HWSA and continued the inspection in the Universal Waste Storage area. The Universal Waste Storage area is in the same building as the HWSA but accessed through a separate locked door, *(See Attachment 1, Photo #62)*. The inspection team observed the following universal waste containers in the universal waste area:

- One tall cardboard box with a universal waste label, with a description of fluorescent light bulbs, closed and dated 03/10/23, *(See Attachment 1, Photo #63)*.
- One approximately 5-gallon cardboard box with a universal waste label, with a description of fluorescent light bulbs, closed and dated 03/01/23.
- One approximately 5-gallon cardboard box with a universal waste label, with a description of mercury switches, closed and dated 01/31/23.
- One approximately 5-gallon cardboard box with a universal waste label, with a description of lithium-ion batteries, closed with no date. There was one battery in the box *(See Attachment 1, Photos #64 and #65)*.

At this time, the facility walk-through ended, and the inspection team followed Mr. Hyde and Ms. Reiners back the conference room to conduct a records review.

V. RECORDS REVIEW

The inspection team conducted a records review on-site as part of the inspection. The inspection team reviewed the following documents:

<u>Weekly HWSA and SAA Inspection Logs</u>
The inspection team reviewed the inspection logs for all SAAs, Universal Waste area, and the HWSA for year 2022.

The inspection team observed that there was no area on the inspection logs to document conclusions or results of each inspection

The inspection team observed there was no documented weekly inspections completed for the following weeks:

HWSA:

Week of Monday, May 23, 2022
Week of Monday, May 30, 2022
Week of Monday, June 6, 2022
Week of Monday, June 13, 2022
Week of Monday, June 20, 2022
Week of Monday, July 4, 2022
Week of Monday, July 11, 2022
Week of Monday, July 18, 2022
Week of Monday, July 25, 2022
Week of Monday, August 1, 2022
Week of Monday, August 8, 2022
Week of Monday, September 19, 2022
Week of Monday, October 31, 2022

B5: Bullard SAA:

Week of Monday, September 19, 2022
Week of Monday, October 31, 2022
Week of Monday, November 21, 2022

Weaving Hallway, e-waste SAA:

Week of Monday, May 23, 2022
Week of Monday, May 30, 2022
Week of Monday, June 13, 2022
Week of Monday, June 20, 2022
Week of Monday, June 27, 2022
Week of Monday, July 4, 2022
Week of Monday, July 18, 2022
Week of Monday, July 25, 2022
Week of Monday, August 1, 2022
Week of Monday, August 8, 2022
Week of Monday, September 5, 2022
Week of Monday, September 19, 2022
Week of Monday, October 31, 2022

EMTL Room 114 SAA:

Week of Monday, May 23, 2022
Week of Monday, May 30, 2022
Week of Monday, June 13, 2022
Week of Monday, June 20, 2022
Week of Monday, June 27, 2022
Week of Monday, July 4, 2022
Week of Monday, July 18, 2022
Week of Monday, July 25, 2022
Week of Monday, August 1, 2022
Week of Monday, August 8, 2022
Week of Monday, August 29, 2022
Week of Monday, September 19, 2022
Week of Monday, October 31, 2022

K4 SAA:

Week of Monday, May 23, 2022
Week of Monday, May 30, 2022
Week of Monday, June 13, 2022
Week of Monday, June 20, 2022
Week of Monday, June 27, 2022
Week of Monday, July 4, 2022
Week of Monday, July 18, 2022
Week of Monday, July 25, 2022
Week of Monday, August 1, 2022

Week of Monday, August 8, 2022
Week of Monday, September 19, 2022
Week of Monday, October 31, 2022

Ms. Reiners explained that the inspections were done, but not documented. Ms. Reiners explained that Mr. Hyde and herself typically do the inspections on Fridays at 5:00pm. It was stated during the inspection, that when Mr. Hyde and Ms. Reiners are unable to complete the weekly inspections, that Ms. Richardson completes them. The inspection logs that were available for review were signed by one of the three individuals stated doing the inspections, with Ms. Richardson's signature having completed at least half of the weekly inspections in year 2022.

Hazardous Waste Training Records

The inspection team requested proof of hazardous waste training for years 2020, 2021 and 2022, the hazardous waste training plan and a list of employees with hazardous waste responsibilities. The inspection team received and reviewed the list of employees with hazardous waste responsibilities, and proof of training records for employees for year 2022. In year 2022, the training was provided by Spirit Aerosystems. The inspection team received and reviewed the slides used for hazardous waste training prior to January 2020, when the facility was trained under Fiber Materials. Additionally, the inspection team reviewed the outline for hazardous waste training in the contingency plan. The inspection team had the following observations during its review:

- No hazardous waste training was conducted in years 2020 and 2021. Mr. Hyde explained that the facility did not gain access to Spirit Aerosystems training documents immediately after the company was purchased in January 2020. In addition, Mr. Hyde explained that Spirit did not want employees to be in the same room to conduct the training during the COVID-19 pandemic.
- All employees with hazardous waste responsibilities received hazardous waste training in year 2022.
- Hazardous waste training does not incorporate how employees should perform their duties in a way that ensures the facility's compliance with the hazardous waste generated on-site.

Hazardous Waste Contingency Plan and documentation of transmittal to local authorities

The inspection team reviewed the contingency plan.

- The contingency plan was most recently updated January 30, 2021
- The contingency plan does not list the addresses for the Emergency Coordinators
- Does not specifically state that the emergency coordinator has the authority to commit resources if an event occurred.

Hazardous Waste Manifests and Land Disposal Restriction Notices

The inspection team reviewed the hazardous waste manifests and LDRs for the most recent year. Additionally, the inspection team reviewed the shipping summaries Veolia Environmental Services provides to Fiber Materials.

- No comment

Waste Determination Documentation

The inspection team reviewed the SDS's, waste profiles and analytical documents for the following generated wastes:

- Non-woven rayon staple fiber SDS
- Varcum 29217 Phenolic One Step Resin SDS
- Fiberform process water waste profile
- Coal Tar Pitch SDS
- Scrubber/trap residue liquid, waste profile; shipping name: coal tar distillates, flammable
- Coal tar pitch solids waste profile; shipping name: (environmentally hazardous substance, solid. DOT description benzo(a)pyrene, dibenz(a)anthracene
- Acrastrip
- Casting water analytical data

VI. INSPECTION OUTBRIEF

The following personnel were present for the out-brief:

EPA:	Cheryl Wilkinson, Life Scientist Linda Brolin, Environmental Engineer
Fiber Materials:	Jason Hyde, EHS Manager Liv Reiners, EHS Specialist

The inspection team discussed the following areas of concern that were observed during the inspection:

- Hazardous waste training was not conducted in years 2020 and 2021
- Weekly inspection logs do not have an area to document conclusions or results of each inspection
- A "No Smoking" sign was not at the HWSA
- Greater than 55-gallons of coal tar pitch was stored at the SAA in the Coal Tar Pitch area
- The floor of the HWSA is made of wood, not an impervious surface
- Non-hazardous waste labels were seen throughout the facility on waste containers, even when the waste was hazardous.
- The inspection team observed containers at SAAs, with no hazardous waste label or incorrect labels on them.
- In the HWSA there were containers with no label and/or incorrect hazardous waste labels.
- In the HWAA, there were three containers in a flammable cabinet that were indented, were not labelled as hazardous waste, and had past expiration dates.
- In the HWSA there was one 55-gallon container with no date.
- In universal waste areas there were containers with no cover, no labeling and/or no date.
- The inspection team observed SAA containers with dates on them.

- In the used oil SAA, there were waste containers with no labeling and/or labeled as hazardous waste.
- The inspection team observed one area where mercury waste was generated, and no hazardous waste labelling was observed at the area nor on the waste container.
- No addresses are listed for the emergency coordinators in the contingency plan
- Inspection logs are missing weeks for inspections at SAAs and the HWSA

The inspection team asked if Ms. Reiners and Mr. Hyde had any questions after the discussion. Based on discussions throughout the inspection, Ms. Reiners and Mr. Hyde were not surprised by the areas of concern stated. The inspection team had discussed the areas, as they were observed throughout the inspection.

The inspection team explained the next steps in the inspection process, and how an inspection report will be written and provided to the facility within 60 days of the inspection. Once complete, the inspection team will discuss the areas of concern with management and determine if any violations were found. Once a violation determination is made, a decision on what enforcement follow will be appropriate based on violations found will be made. The inspection team explained that the agency has the following options for potential enforcement, lowest would be a notice of violation; next highest would be an enforcement action, with or without penalty; and in egregious situations a deferral to the Department of Justice or Criminal could be made.

The inspection team stated that if the facility makes any changes as a result of the areas of concern, to please inform and send documentation to Inspector Wilkinson. The inspection team thanked Mr. Hyde and Ms. Reiners for their time, the inspection team signed out of the facility, and left the site.