

RCRA Compliance Evaluation Inspection Report

1) Inspector and Author of Report

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2) Facility Information

Carfair Composites USA, Inc. (Carfair)
EPA ID Number: ALR000059410
NAICS Code: 336211

Physical Address: 1861 Electronics Drive
Anniston, Alabama 36207
Calhoun County

3) Responsible Officials

Kerry Ledbetter, Production Team Lead, Carfair
Jerry Dempsey, Environmental Health and Safety Manager - New Flyer America

4) Inspection Participants

Kerry Ledbetter, Production Team Lead, Carfair
Jerry Dempsey, Environmental Health and Safety Manager - New Flyer America
Drew Phillips, Environmental Scientist, ADEM
Raj Aiyar, U.S. EPA, Region 4

5) Date and Time of Inspection

March 16, 2022, 9:00 a.m.

6) Applicable Regulations

Resource Conservation and Recovery Act (RCRA) Sections 3002, 3004, 3005, 3007 and 3008,
(42 U.S.C. §§ 6922, 6924, 6925, 6927 and 6928)

40 Code of Federal Regulations (C.F.R.) Parts 260-266, 270, 273, 279

Alabama Hazardous Waste Management and Minimization Act of 1978, Ala. Code § 22-30-1 et seq., 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).

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.

7) **Purpose of Inspection**

On March 16, 2022, inspectors from the U.S. Environmental Protection Agency, Region 4, and the Alabama Department of Environmental Management (ADEM) conducted an unannounced compliance evaluation inspection (CEI) at Carfair Composites USA Inc. (hereinafter, "Carfair" or the "facility") to determine its compliance status with the RCRA and the State of Alabama regulations.

8) **Facility Description**

Carfair Composites, USA Inc. formerly known as Carlson Engineered Composites has been in operation since 1980. The facility's head office is in Manitoba, Canada. Carfair has five production facilities in Canada and United States. Carfair manufactures fiberglass reinforced polymer (FRP) components primarily for original manufacturing equipment (OME). The production facility in Anniston, Alabama has been in operation since 2015 and currently employs 60 people. The facility is approximately 60,000 square feet and operates from 6:00 am until 4:30 pm Monday through Thursday.

The Carfair facility in Anniston manufactures various fiberglass reinforced plastics components for bus assembly plants of New Flyer America. Parts are made by injecting a resin into both open and closed molds. A catalyst is then added to cure the liquid resin into solid parts in the shape of the molds. Some parts are then painted or receive a polyuria bed liner. In its most recent notification of hazardous waste activity (ADEM Form 8700-12, dated February 22, 2021), Carfair notified to ADEM as small quantity generator of hazardous waste (D001, F003).

Carfair uses Research Solution Group Inc. (EPA ID# ALD072095189) as transporter and Clean Earth of Alabama (EPA ID# ALD981020894) for waste disposal purposes.

9) **Previous Inspection History**

Carfair was inspected by ADEM on July 11, 2018. Several deficiencies were observed during the inspection regarding marking, waste generation and container management. A Notice of Violation (NOV) was issued by ADEM on August 4, 2018. Carfair responded to the NOV on September 6, 2018. A follow up inspection was conducted by ADEM on October 10, 2018, for determining the facility's return to compliance. There was no prior EPA inspection at the Carfair facility.

10) Findings

Inspectors arrived at the facility at approximately 9:00 a.m. and were greeted by the facility's human resources manager who directed us to a conference room. She then contacted Mr. Kerry Ledbetter (Maintenance Team Lead) and Jerry Dempsey (EHS Manager, New Flyer America) to meet us in the conference room. Once Carfair representatives met us, we conducted a formal introduction, showing our credentials and stated the purpose of our visit. Mr. Ledbetter and Mr. Dempsey gave us a general description of the on-site activities at the facility. Mr. Ledbetter further explained the facility's waste minimization effort in reducing the quantity of waste acetone and resin generated at the facility had resulted in the facility no longer operating as a large quantity generator of hazardous waste (D001, F003). The inspectors were later joined by Mr. Ledbetter and Mr. Dempsey during the walk-through inspection of the facility.

1. Production Floor

a. Resin Transform Molding Area

The first process that occurs on the production floor is called Resin Transform Mold (RTM). The RTM process comprises of two molds (Open Mold and Closed Mold). In this process, the fiberglass sheet is cut into "A Mold" (Top), the bottom portion as "B Mold". Each of these portions then receive a resin/epoxy gelcoat on their exterior surface. Once the gelcoat sets, the A Mold and B Mold are put together to form a hollow shell of a specific bus part. A resin gun is used to pump resin into the closed mold at one of the several resin pumping stations. A vacuum pump is attached to the resin pumping station to pull any air pockets out and to completely fill all spaces of the mold (Photo-1). A methyl ethyl ketone peroxide (MEKP) catalyst is used to speed up the process of the resin forming a complete solid component. Any excess resin is captured in a disposable bucket shaped liner within the resin pumping machine. Once cured, the solid parts are removed from the molds using a mold release chemical and the bucket liner of now solid resin is disposed of as solid waste.

The "open mold" process is similar except that the mold that remains open at all times is laminated and filled with resin manually by the employees. Each time a resin gun is used to pump resin into a mold it is flushed with acetone to keep any residue resin from solidifying in the gun. According to Mr. Ledbetter, there are a total of five-gun cleaning stations throughout the various production areas (Photo-2). At these stations, acetone is pumped through the resin gun and the spent solvent is collected in an open five-gallon container. The spent material collected in the containers is in a liquid state but later cures into a solid material due to the resin remaining in the mixture (Photo-3).

Pursuant to ADEM Admin. Code r. 335-14-3-.01(2) [40 C.F.R. § 262.11], a person who generates a solid waste, as defined in ADEM Admin. Code r. 335-14-2-.01(2) [40 C.F.R. § 261.2], must make an accurate determination as to whether that waste is a hazardous waste in order to ensure wastes are properly managed according to applicable RCRA regulations articulated in ADEM Admin. Code r. 335-14-3-.01(2) [40 C.F.R. § 262.11].

The inspectors observed several five-gallon satellite accumulation area (SAA) containers in the production area containing solvent-contaminated Wipes/Rags (F003) (Photo-4). The five-

gallon containers were observed to be closed and labeled as “Hazardous Waste”. According to Mr. Ledbetter, rags with acetone are used to spot clean and to remove excess mold in the mold release process. The rags stored in the SAA container did not appear to contain any free liquids. ***The inspectors recommended Mr. Ledbetter to consider managing the solvent-contaminated wipes sent for disposal pursuant to 40 CFR 261.4(b)(18) provided the conditions of the exclusions are met which includes storage requirements, labeling, accumulation time limits and recordkeeping.***

b. Painting Operation/Paint Booth

Some parts from the production area are sent for painting at the facility’s Paint Booth. Waste Paint/Thinner mixture are generated in the Paint Booth area from cleaning resin guns and mixing paint. The inspector observed one 55-gallon SAA drum containing waste paint thinner on a containment pallet (Photo-5). The drum was observed to be closed and labeled as “Hazardous Waste”. The drum also had a hazard indication label as “Flammable”. The drum was observed to be intact and nonleaking at the time of inspection.

c. Polyurea Coating/ Full Metal Jacket (FMJ) Area

According to Mr. Ledbetter, some parts receive a polyurea coating in the FMJ Area. The material is similar to bedliners in trucks. Step wells and the articulating pieces that allow the bus to bend are coated in the FMJ Area to provide protection from the weather elements and increase traction for those entering and exiting the bus. The polyurea coating is created by the chemical reaction of the mixture comprising of two materials known as “Part A (“isocyanates”) and Part B (“amines”)”. According to Mr. Ledbetter, the excess Part A/Part B generated as part of the coating process are managed as hazardous waste. The inspectors observed two SAA 55-gallon drums with funnel adapters staged on a containment pallet in the FMJ satellite storage area (Photo-6). One SAA drum was used to store waste from excess Part A and the adjacent SAA drum contained waste from excess Part B (D002). The inspectors observed waste liquid residue on the lids of the Part A and Part B SAA drums. The inspectors observed visible stain on the floor near the containment pallet staging the two SAA drums (Photo-6). According to Mr. Ledbetter, Part B is “corrosive” and is shipped offsite as a hazardous waste. The drum storing excess Part B was observed to be closed and labeled. The drum was observed to be full and did not have an accumulation start date on the container.

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)(b) [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) [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-.03(5)(c)1.(ii) [40 C.F.R. § 262.34(c)(2)], which is a condition of the SAA Permit Exemption, a generator who accumulates either hazardous waste or acutely hazardous waste listed in §261.31 or §261.33(e) in excess of the amount listed in paragraph (c)(1) of this section at or near any point of generation must, with respect to that amount of excess waste, comply within three days with paragraph (a) of this section or other applicable provisions of this chapter. During the three-day period the generator must continue to comply with paragraph (c)(1)(i) and (ii) of this section. The generator must mark the container holding the excess accumulation of hazardous waste with the date the excess amount began accumulating.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(6)(b)8.(i) [40 C.F.R. § 262.16(b)(8)(i)], which is a condition of the SQG Permit Exemption, a generator is required to maintain and operate its facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

2. Central Hazardous Waste Storage Area

The Central Hazardous Waste Storage Area comprises of a concrete pad enclosed with a corrugated metal roof structure at the rear of the production building (Photo-7). The gate was closed, and the warning signs were posted at the entrance. At the time of the inspection there were three 55-gallon drums of waste solvent/resin and one 55-gallon drum of waste “Part B” from the polyurea coating area. All the four drums were observed to be closed, labeled and on pallets. Two of the hazardous waste drums were staged on a raised metal rack (Photo-8). The inspectors could not access the hazardous waste containers stored on the metal rack to determine the condition of the containers. The inspectors observed that none of the hazardous waste drums had accumulation start dates and EPA Waste Codes. The labels on the containers including hazard indication labels were observed to be weathered and peeling. There were no leaks or spills observed in the storage area. The storage area was observed to be equipped with fire extinguisher and spill kits.

The inspectors recommended Mr. Ledbetter to store hazardous waste drums such that the owner or operator can inspect the hazardous waste containers for leaks and deterioration of containers caused by corrosion or other factors.

Pursuant to ADEM Admin. Code r. 335-14-3-.03(5)(d) [40 C.F.R. § 262.34(d)], a generator of greater than 100 kilograms but less than 1,000 kilograms of hazardous waste in a calendar month is a Small Quantity Generator (SQG) and may accumulate hazardous waste on-site for 180 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-.03(5)(d)2. [40 C.F.R. § 262.34(d)(1)-(5)] (hereinafter referred to as the “SQG Permit Exemption”).

Pursuant to ADEM Admin. Code r. 335-14-3-.01(6)(b)6(i) [40 C.F.R. § 262.16(b)(6)(i)], which is a condition of the SQG Permit Exemption, a generator must mark or label its containers with the date upon which each period of accumulation begins clearly visible for inspection on each container.

11) **Record Review**

Once we completed the walkthrough of the facility, we returned to the office area to conduct a review of the required documentation. The records reviewed for a three-year period (2019-2021) included the following:

- Records of initial hazardous training provide by JJ Keller and Associate for those handling hazardous waste
- Contact information for the facility’s emergency coordinators was available and posted throughout the facility.
- Weekly Hazardous Waste Inspection Log
- Hazardous Waste Manifests

Based on the review of the records, the records appeared to be complete.

12) **Out-Briefing**

An exit briefing was conducted at the conclusion of the inspection. Mr. Ledbetter and Mr. Dempsey participated in the exit briefing. Based on the site inspection and the records review, the facility appeared to be a small quantity generator of hazardous waste. The observations made during the inspection were discussed and the inspection was concluded.

13) **Signed**

RAJAGOPAL AIYAR Digitally signed by RAJAGOPAL AIYAR
Date: 2022.04.18 12:19:27 -04'00'

Raj Aiyar
Environmental Engineer

Date

14) Concurrence

ARACELI CHAVEZ Digitally signed by ARACELI CHAVEZ
Date: 2022.04.18 12:47:35 -04'00'

Araceli B. Chavez

Date

Chief

RCRA Enforcement Section

Attachment A

CARFAIR COMPOSITES USA, INC.

ANNISTON, ALABAMA

EPA ID # ALR000059410

MARCH 16, 2022

Photos taken by EPA and ADEM
Camera Type: WB250F
EPA Tag No.: S75912



Photo-1 Resin Pumping Station



Photo-4 Solvent Wipes



Photo-2 Resin Gun Cleaning Station



Photo-5 SAA Drum near the Paint Booth



Photo-3 Waste Liquid requiring waste determination



Photo-6 Leak in the SAA (FMJ Area)



Photo-7 Central Hazardous Waste Storage Area



Photo-8 Hazardous Waste Drums of Metal
Racks