RCRA Inspection Report

1) Inspector and Author of Report

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

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

2) Facility Information

DAK Americas, LLC Cooper Rive Site (DAK)
3350 Cypress Gardens Road
Moncks Corner, South Carolina 29461

EPA ID# SCR000761882

3) Responsible Officials

John Saxon
Site Director
john.saxon@alpekpolyester.com

4) Inspection Participants

Stanley Webber	DAK
Torrez Jones	DAK
Jason Goins	DAK
Gerald Shealy	South Carolina Department of Health and Environmental Control (Columbia)
Daryl R. Himes	US EPA Region 4 Atlanta

5) Date of Inspection

December 14, 2022, at 9:15 a.m. EDT

6) Applicable Regulations[1]

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

[1] As the State's authorized hazardous waste program operates in lieu of the federal RCRA program, the citations of those authorized provisions will be to the authorized State program. However, for ease of reference, the federal citations will follow in brackets.

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

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

Pursuant to S.C. Code Ann. Regs. 61-79.262.15(a) [40 C.F.R. § 262.15(a)], a generator may accumulate as much as 55 gallons of non-acute hazardous waste in containers at or near any point of generation where wastes initially accumulate, which is under the control of the operator of the process generating the waste, without a permit or without having interim status, as required by Section 44-56-60(a)(2) and (b) of the SCHWMA, S.C. Code Ann. § 44-56-60(a)(2) and (b) [Section 3005 of RCRA, 42 U.S.C. § 6925], and without complying with S.C. Code Ann. Regs. 61-79.262.16(b)(2) or [40 C.F.R. § 262.16(b) or § 262.17(a)], except as required in S.C. Code Ann. Regs. 61-79.262.15(a)(7) and (8) [40 C.F.R. § 262.15(a)(7) and (8)], provided that the generator complies with the satellite accumulation area conditions listed in S.C. Code Ann. Regs. 61-79.262.15(a) [40 C.F.R. § 262.15(a)] (hereinafter referred to as the "SAA Permit Exemption").

7) Purpose of Inspection

The purpose of this inspection was to conduct an unannounced compliance evaluation inspection to determine DAK Americas' compliance with the applicable requirements of RCRA and the corresponding SCDHEC regulations. This was an EPA lead inspection.

8) Facility Description

DAK Americas (DAK) is owned by Alpek, S.A. de C. V., a division of Alfa, which is a Mexican owned company. The company has several manufacturing facilities located within the United States. All of its manufacturing facilities make textiles including fibers, monomers, and resins. More specifically, they manufacture Terephthalic Acid (TPA), polyester fibers, and polyester resins.

This DAK facility, located at the Cooper River Site in Moncks Corner South Carolina manufactures polyester resin, called PET, for use as plastic in the food and drink industry. The facility is located approximately seven miles from the city of Moncks Corner and is situated on approximately 200 acres of land. The facility was built in 1976, which at the time, was operated by E.I. Dupont de Nemours (DuPont) until 2000, when a portion of the facility was leased to DAK. DAK provides Dupont with power services such as steam, cooling water and compressed air along with processing all site wastewater, which discharges to the Cooper River via an NPDES permit.

DAK manufactures polyester fiber and PET from TPA and ethylene glycol, which are received via railcar and stored in a silo and in tanks, respectively. The manufacturing process is a continuous polymerization process. The raw ingredients are combined and heated with select additives/finishes depending on product specification, such as color or static control. The liquid polymer is then diverted to production line "L2". Previously, DAK had an L1 production line that was used for polyester yarn. The L1 line is no longer utilized.

L2 is a PET line. The liquid PET is extruded, cooled with water and cut into chips. The chip, called the "amorphous chip" is then conveyed onto the solid-state polycondensation unit, where it is heated and allowed to cool, producing a higher strength chip. The chips are then consolidated into bins.

Until May of 2022, the DAK operated the S1 and S2 polyester fiber lines. The polyester fiber line process was performed using spinnerets, air cooling devices, drawing, crimpers, cutting mechanisms, and balers. In May of 2022, the facility began the process of decommissioning both of these lines. At that time, the facility changed their hazardous waste generator classification from small quantity generator to that of a large quantity generator to account for any type of cleanout wastes generated during the decommissioning of the equipment.

In addition to the manufacturing process, the facility has a quality control laboratory and a maintenance facility that includes truck maintenance. Hazardous waste is generated in the laboratory and in the air conditioning (AC) maintenance shop, the shipping/receiving department, truck maintenance, and the "90-day" central accumulation building.

DAK's most recent Hazardous Waste Generator Notification (EPA Form 8700-12) dated May 9, 2022, described the facility as a Large Quantity Generator (LQG) of hazardous waste. The notification listed the following EPA Waste Codes: D001, D002, D003, D005-D008, D011, D018, D022, D035, D038, D039 and D040; F002, F003 and F005; P030 & P105; and U004, U044, U080, U088, U154, U161, U188, U213 and U214.

9) Previous Inspection History

This facility was last inspected on February 3, 2017, by SCDHEC. No violations were observed during that inspection.

10) Opening Conference

On December 14, 2022, EPA inspector Daryl Himes, accompanied by SCDHEC inspector Gerald Shealy, arrived at DAK at approximately 9:15 a.m. Jason Goins, the facility's Environmental Manager, immediately received the inspectors in the lobby of the facility's main office building. The inspectors presented their credentials and were escorted to a conference room for an opening conference and discussion of facility operations. The inspectors were joined in the conference room by Stanley Webber, the facility's Environmental Senior Specialist and by Torrez Jones, Environmental Coordinator. Introductions were conducted and the inspectors explained the purpose of their visit and stated their desire to see all active generation

and accumulation locations of hazardous waste in addition to the facility's hazardous waste records.

The inspectors described the anticipated use of a digital camera during the inspection and provided a request for records. DAK exceeds the number of employees to be considered a small business. The EPA inspector also discussed the company's ability, pursuant to 40 C.F.R. §2.203, to assert a business confidentiality claim for information submitted to EPA. The company did not assert a business confidentiality claim.

11) Inspection Observations

A walk-through inspection of the facility was then performed.

Unless notes otherwise, all containers of hazardous waste observed within SAAs were closed, labeled with the words "Hazardous Waste," and marked with an indication of the hazard(s) associated with the waste contained.

In addition, unless noted otherwise, all containers of hazardous waste observed within central accumulation areas (CAAs) for less than 90 days were closed, marked with an accumulation start date, labeled with the words "Hazardous Waste," and marked with an indication of the hazard(s) associated with the waste contained.

Also, unless noted otherwise, all containers of universal wastes were observed to be closed, labeled with appropriate universal waste language and dated with an accumulation start date of less than one year.

Central Accumulation Area

The facility operated a hazardous waste central accumulation area (CAA) in a metal structure constructed on a concrete pad with dimensions of approximately 40 feet wide by 30 feet deep.

At the time of the inspection, only one container of nonhazardous waste (diesel fuel contaminated with water) was observed in this area. The area was equipped with a fire extinguisher and spill equipment.

Water Treatment Plant

The facility currently performs water treatment activities on water sent to its boilers for use in steam production through reverse osmosis treatment units. Up until approximately one year ago, water treatment activities were performed using cation and anion exchange units. Recharging of these units was performed using sulfuric acid and sodium hydroxide, respectively. This recharging resulted in the generation of acidic and caustic wastewaters which were subsequently sent to a neutralization tank before being discharged to a wastewater treatment pond.

Fibers Solution Prep Area in Fibers Building

This area included containers within SAAs for the following:
One 55-gallon container for the contents of punctured aerosol cans
One 55-gallon container for universal waste aerosol cans
One 55-gallon container of universal waste foam and pesticide containers
One 55-gallon container of scrap metal empty cans
One cubic yard box of e-waste computer monitors
One four-foot cardboard tube of universal waste fluorescent tubes

Quality Assurance Lab for the Fibers Building

Chemical testing for product made in the Fibers Building is performed in this laboratory.

A 5-gallon container of D001/F003 hazardous waste and a 5-gallon container of D001/F003/F005 hazardous waste were found in separate SAAs in this lab as the result of solvents used for product testing.

Air Conditioning Shop in the Fibers Building

One 5-gallon container used for the collection of universal waste aerosol cans was observed in this area. The can was not labeled with an accumulation start date at the time of the inspection.

Pursuant to S.C. Code Ann. Regs. 61-79.273.15(a) [40 C.F.R. § 273.15(a), a SQHUW may accumulate universal waste no longer than one year and must to be able to demonstrate the length of time that the universal waste has accumulated from the date that it became a waste or was received.

The inspectors observed one 55-gallon container of used oil generated from the maintenance of AC units at the facility in this area. Because the chlorine content within the waste oil is greater 1000 ppm chlorine, DAK manages the used oil as hazardous waste in accordance with the rebuttable presumption for used oil found at 40 C.F.R. § 279.10(b)(1)(ii).

Fibers Warehouse

This area of the Fibers Building, where lines S1 and S2 are being decommissioned, was currently being used as a staging area for various containers of solid wastes, hazardous wastes and wastes waiting on testing results for characterization.

In one area, six 275-gallon plastic totes and twenty-four 55-gallon containers of solid wastes were staged while waiting on toxicity characteristic leaching procedure test results for a hazardous waste determination. Samples were taken from the containers in the past week. Facility personnel had labels ready to attach to the containers if testing indicates the contents are hazardous.

Eleven 5-gallon containers of D001/F003 hazardous waste were observed within a SAA.

Record Review

After the walkthrough, the inspectors requested and reviewed the facility's applicable training records, contingency plan, inspection records and manifests.

The facility's hazardous waste training records indicated that March 23, 2021, was the last date of any hazardous waste training performed by Jason Goins.

No records existed to show that other facility personnel received hazardous waste training since the facility's status changed from a small to a large quantity generator of hazardous waste.

Pursuant to S.C. Code Ann. Regs. 61-79.262.17(a)(7) [40 C.F.R. § 262.17(a)(7)], which is a condition of the LQG Permit Exemption, (i) 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 (Note: This training requirement became effective when the facility changed its hazardous waste generation status.)

Closing Conference

Following the walk-through inspection and review of the facility's hazardous waste records, the inspection team conducted an exit meeting with facility personnel who were present for the opening conference and with Renee O'Connor, who manages the facility's training records.

During this meeting, the inspectors discussed their preliminary findings made during the inspection.

12) Signed

DARYL HIMES Digitally signed by DARYL HIMES Date: 2023.01.05 19:35:06 -05'00'

Daryl R. Himes
Environmental Engineer

Date

13) Concurrence

ARACELI CHAVEZ Digitally signed by ARACELI CHAVEZ Date: 2023.01.06 14:41:29 -05'00'

Araceli B. Chavez
Chief
RCRA Enforcement Section

Date