

RCRA COMPLIANCE EVALUATION INSPECTION REPORT

1) Inspector and Author of Report

Daryl R. Himes
Environmental Engineer
Enforcement Compliance and Assurance Division
EPA Region 4, AFC-10th Floor
61 Forsyth Street
Atlanta, Georgia 30303
(404) 562-8614

2) Facility Information

AOC Aliancys-Tennessee Plant (AOC)
860 Highway 57 East
Collierville, Tennessee 38017
EPA ID: TND007037765

NAICS Code: 325211–Plastics Material and Resin Manufacturing

3) Primary Contact

Darrell Richardson
Environmental Health and Safety Coordinator

4) Inspection Participants

Darrell Richardson,	AOC
Jason Simpson	Tennessee Department of Environment and Conservation (TDEC)
Daryl Himes	EPA, Region 4

5) Date and Time of Inspection

June 29, 2022 9:30 a.m.

6) Applicable Regulations

RCRA Sections 3005 and 3007; 40 Code of Federal Regulations (C.F.R.) Parts 260-266, 268, 270, 273, and 279; Tennessee Hazardous Waste Management Act, Tennessee Code Annotated (T.C.A.) 68-212 part 1 & 3 and the Used Oil Collection Act of 1993, T.C.A. 68-21; the Tennessee Hazardous Waste Management Regulations, Tennessee Rule Chapter 0400–12-01.

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

This announced compliance evaluation inspection (CEI) was conducted to evaluate the facility's compliance with applicable requirements of RCRA and corresponding Tennessee Department of Environment and Conservation (TDEC) regulations.

8) Facility Description

AOC is a supplier of resin chemicals manufacturing various formulations of polyester and vinyl ester resins at this facility which are produced using mix tanks and reaction vessels.

Styrene is a major ingredient for the production of both resins. Applications for ultimate product use of these chemicals include wall coverings, recreational vehicles, boat hulls, bowling balls, bath fixtures, polyester resin solution and fiberglass applications. The facility was constructed in 1961 and consists of three operational areas which include a resins, colorants and research and development area. Production of the resins occurs using batch processes within five chemical reactors with sizes between five and sixteen thousand gallons. The resins are ultimately sold in drums, totes, tank wagons and rail cars.

The facility occupies approximately 113,000 square feet of building space on 30.52 acres.

The property which encompasses the facility is bordered on the northern edge by Highway 57 and on the western edge by Commerce Road. A rail line runs east/west through the property dividing it into northern and southern parts. The facility's chemical operations take place in buildings on the north side of the rail line. Building #5, located on the south side of the rail line is comprised of office and warehouse space. Immediately to the south of Building #5 is a metal roofed structure on a bermed concrete pad used for the accumulation of hazardous waste generated by facility operations on the north side of the rail line.

9) Previous Inspection History and Contiguous Property Discussion

On January 31, 2018, TDEC conducted a RCRA Compliance Evaluation Inspection (CEI) at AOC Aliancys. Generator and Universal Waste violations were observed during that inspection. A follow-up inspection was performed on March 9, 2018 in which violations observed during the initial inspection had been corrected. The January 31, 2018 TDEC CEI report included a discussion about the property on which the facility operates on the north and south sides of a rail line (Photos 6, 7 & 8) which dissects the property running east/west. The report discusses a variance received from TDEC in 2010 which allowed the property to the north and south of the rail line to be treated as one contiguous property in order that hazardous wastes generated within operations on the north side of the rail line could be transported onto Commerce Road and then into the property on the south of the rail line and to the 90-day accumulation area operated just south of Building #5 without the use of a hazardous waste manifest.

Prior to TDEC's issuance of the contiguous property variance to AOC Aliancys, it should be noted that on February 12, 1997, EPA promulgated a military munitions rule in the Federal Register (62 FR 6622) which set forth how military facilities could manage, treat, and transport various munitions at their facilities. While the rule did not change the definition of contiguous property, it did change the ability of a generator to transport hazardous waste on public and private right of ways within at the perimeter of its facility where it could only transport directly across a right of way previously.

Specifics within the February 12, 1997 Military Munitions Rule read as follows on page 6645:

“Therefore, the Agency is not finalizing the proposed modification of the definition of “on-site.” Instead, the Agency is adding new § 262.20(f) to 40 CFR Part 262, subpart B to exempt from the manifest requirements shipments of hazardous waste on right-of-ways on or between contiguous properties and along the perimeter of contiguous properties controlled by the same person. This manifest exemption is applicable to all generators, both military and non-military.

The rule, therefore, set forth a manifest exemption which spelled out how hazardous wastes, which include military munitions, could be transported on right-of-ways within and on the perimeter of contiguous properties. The rule became effective on August 12, 1997. As this rule was a base RCRA regulation, it was not immediately effective in Tennessee. On February 3, 1998, the State of Tennessee adopted the rule. On September 22, 2000, the state of Tennessee’s authorization status for the rule was published in the federal register. The State was effectively authorized for the rule On November 21, 2000.

It should be noted in particular that the 40 C.F.R. § 260.10 definition of “On-Site” reads in part as follows: “*On-site* means the same or geographically contiguous property which may be divided by public or private right-of-way”

It is important to note here that the definition of “On-site,” specifies that contiguous property may be divided by public and private right of ways which do not cause that contiguous property to be divided into more than one contiguous property. While rail lines are not discussed in any federal register or EPA background document, they would meet the definition of a private right of way. This interpretation was confirmed on June 30, 2022, during a phone conversation between Daryl Himes of EPA, Region 4 and Ken Shuster of EPA Headquarters. Mr. Jason Simpson of TDEC was present and privy to the phone conversation. It should be noted that Ken Shuster is identified in the February 12, 1997, federal register as the author of the Military Munitions Rule.

The specifics of the findings of the facility layout and the information cited above indicate that AOC Aliancys did not need a variance to transport hazardous waste from the north side of its facility to the south side on and after November 21, 2000.

10) Findings

On June 29, 2022, EPA inspector Daryl Himes, accompanied by Jason Simpson of the Tennessee Department of Environmental Conservation, arrived at AOC Aliancys at approximately 9:30 a.m. Darrell Richardson, Environmental Health and Safety Coordinator immediately received the inspectors and was shown their credentials. The inspectors were taken by Mr. Richardson to his office for an opening conference. The inspectors introduced themselves and explained the purpose of the visit. The inspectors described the anticipated use of cameras during the inspection and provided a request for records.

Prior to performing the walkthrough inspection, the facility representative provided the inspection team an overview of the facility’s history and current operations during the opening conference as described above in the facility overview.

The company appears 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 inspector will provide a copy of the agency's information sheet for small businesses, which can be found at <https://www.epa.gov/compliance/small-business-resources-information-sheet>.

Please note that during the walk-through inspection, containers of hazardous waste were observed within satellite accumulation areas (SAAs) and a less than 90-day accumulation area. Unless otherwise noted, each container observed within any SAA was observed to be closed and labeled with the words "Hazardous Waste" and an indication of the hazard contents of the container. Containers in any 90-day accumulation area were observed to be closed, marked with an accumulation start date of less than 90-days and labeled with the words "Hazardous Waste" and an indication of the hazard contents of the container.

In addition, containers of Universal Waste were observed to be properly labeled, dated, and closed at the time of the inspection, unless noted otherwise.

Process Area

Five Reactors, the largest being 16,000-gallons, were present in this area for the production of polyester resins.

At the time of the inspection, a five-gallon container (Photo 1) which had received a small amount of waste resin solids from a port on Reactor 5 was unlabeled at the time of the inspection. Facility officials determined that the material had a flashpoint of less than 140 degrees Fahrenheit.

Fifty-five-gallon containers of products used as ingredients and mixing tanks vessels were present throughout the process area containing the reactors.

SAA #2 was the location of three separate satellite accumulation containers in the process area (Photo 2). One 55-gallon container of spent acetone, one 55-gallon container of spent sharps containing resin and one 5-gallon container of broken mercury thermometers comprised the three separate satellite accumulation areas. The 5-gallon container of broken mercury thermometers was not labeled with the words "Hazardous Waste" at the time of the inspection.

Pursuant to Tenn. Comp. R. & Regs. 0400-12-01-.03 (1)(f)1. [40 C.F.R. § 262.15(a)], a generator may accumulate as much as 55 gallons of non-acute hazardous waste in containers at or near the point of generation where wastes initially accumulate, which is under the control of the operator of the process generating the waste, without a permit or without having interim status, as required by Section 68-212-108 of the THWMA, Tenn. Code Ann. § 68-212-108 [Section 3005 of RCRA, 42 U.S.C. § 6925], and without complying with Tenn. Comp. R. & Regs. 0400-12-01-.03(1)(g & h) [40 C.F.R. § 262.16(b) or § 262.17(a)], except as required in Tenn. Comp. R. & Regs. 0400-12-01-.03(1)(f)1.(v)(vii & viii) [40 C.F.R. § 262.15(a)(7) and (8)], provided that the generator complies with the satellite accumulation area conditions listed in Tenn. Comp. R. & Regs. 0400-12-01-.03(1)(f)1. [40 C.F.R. § 262.15(a)] (hereinafter referred to as the "SAA Permit Exemption").

Pursuant to Tenn. Comp. R. & Regs. 0400-12-01-.03 (1)(f)1.(v)(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 (i) with the words “Hazardous Waste.”

Satellite accumulation area (SAA) #3 (Photo 3) was the location of one satellite accumulation container managing a mixture of hazardous waste spent glacial methyl acrylate and GMAA additives (corrosive).

Raw Material Storage Tanks

In the area of a rail spur on the facility property were numerous storage tanks for the storage of ingredients including phthlate anhydride, styrene monomer and ethylene glycol used by the facility. No wastes were observed among these tanks.

Rail Spurs Off-loading Area

Three rail spurs (Photos 4 & 5) break off from the rail line that dissects the facility into an off-loading area in the southeastern area of the property to the north of the rail line. No hazardous wastes were observed in any of the loading/offloading areas associated with the rail spurs.

Reclaim Area (Photo 9)

Hazardous wastes resins and other liquid wastes were observed within three 55-gallon drums on a pallet outside of Building 1 in an area where materials are reclaimed.

While designated as a SAA, none of the containers were marked with accumulation start dates. One of the containers was not labeled with the words “Hazardous Waste” or an indication of the hazard contents of the container and one was open (missing bolt in lid fastener) at the time of the inspection.

Pursuant to Tenn. Comp. R. & Regs. 0400-12-01-.03(1)(f)1.(vi)(III)[40 C.F.R. § 262.15(a)(6)(iii)], which is a condition of the SAA Permit Exemption, a generator is required, during the three-consecutive-calendar-day period in which the SAA exceeds 1 kilogram of acute or 55-gallons of characteristic or listed hazardous wastes, comply with paragraphs (a)(1) through (5) of this section. The generator must mark or label the container(s) holding the excess accumulation of hazardous waste with the date the excess amount began accumulating.

Pursuant to Tenn. Comp. R. & Regs. 0400-12-01-.03(1)(f)1.(iv) [40 C.F.R. § 262.15(a)(4)], which is a condition of the SAA Permit Exemption, a generator is required to keep containers of hazardous waste closed at all times during accumulation, except when adding, removing, or consolidating waste; or when temporary venting of a container is necessary for the proper operation of equipment, or to prevent dangerous situations, such as build-up of extreme pressure.

Pursuant to Tenn. Comp. R. & Regs. 0400-12-01-.03(1)(f)1.(v) [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 (i) with the words “Hazardous Waste” and (ii) with an indication of the hazards of the contents.

One 55-gallon container of spent glacial methacrylic acid (GMAA) was observed within SAA #13 located within close proximity to the Reclaim Area.

Maintenance Area

Maintenance operations for the facility are performed in this area. Universal wastes generated within the facility are brought to a collection area in this location (Photo 12). At the time of the inspection, the inspection team observed two four-foot boxes of universal waste fluorescent tubes (Photo 11). Ten bulbs were observed in one box, 24 bulbs were observed in the other. Each box was open at the time of the inspection. One 10-foot box of Universal Waste fluorescent bulbs was also observed to be open in this area (Photo 10).

Pursuant to Tenn. Comp. R. & Regs. 0400-12-01-.12(1)(b) [40 C.F.R. § 273.9], a “Small Quantity Handler of Universal Waste” (SQHUW) is a Universal Waste handler who does not accumulate 5,000 kilograms or more of Universal Waste (batteries, pesticides, mercury-containing equipment, or lamps, calculated collectively) at any time.

Pursuant Tenn. Comp. R. & Regs. 0400-12-01-.12(2)(d)4 [40 C.F.R. § 273.13(d)], a SQHUW must manage universal waste lamps in a way that prevents releases of any universal waste or component of a universal waste to the environment.

One 275-gallon plastic tote of used oil was also observed in this area (Photo 13). The tote was closed and labeled with the words “Used Oil.”

Building 4 (Colorants)

Gel coats manufactured by the facility are made within this building. One 24,000-gallon and three 12,000-gallon water jacket cooled mixers are used for this process.

One 55-gallon container of hazardous waste (ignitable) spent gel coat filter bags was observed within SAA #7 in this area (Photo 14). The container was not labeled with the words “Hazardous Waste” or with an indication of the hazard associated with the waste at the time of the inspection.

Pursuant to Tenn. Comp. R. & Regs. 0400-12-01-.03 (1)(f)1.(v)(I & II)[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 (i) with the words “Hazardous Waste” and (ii) an indication of the hazards of the contents of the container.

One 55-gallon container of hazardous waste (ignitable) gel coat colorants was observed within SAA #9 in this area (Photo 15). The container was not labeled with the words “Hazardous Waste” at the time of the inspection.

Pursuant to Tenn. Comp. R. & Regs. 0400-12-01-.03 (1)(f)1.(v)(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 (i) with the words “Hazardous Waste.”

One 55-gallon container of hazardous waste (ignitable) pigment materials was observed within SAA #8 in this area (Photo 16). The container was open (Photo 17) and not labeled with the words “Hazardous Waste” at the time of the inspection. Facility personnel closed this container during the inspection.

Pursuant to Tenn. Comp. R. & Regs. 0400-12-01-.03 (1)(f)1.(v)(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 (i) with the words “Hazardous Waste.”

Pursuant to Tenn. Comp. R. & Regs. 0400-12-01-.03(1)(f)1.(iv) [40 C.F.R. § 262.15(a)(4)], which is a condition of the SAA Permit Exemption, a generator is required to keep containers of hazardous waste closed at all times during accumulation, except when adding, removing, or consolidating waste; or when temporary venting of a container is necessary for the proper operation of equipment, or to prevent dangerous situations, such as build-up of extreme pressure.

One 55-gallon container of hazardous waste (ignitable) resin materials was observed within SAA #14 in a loading bay within this area (Photo 18). The container was and not labeled with the words “Hazardous Waste” or an indication of the hazard contents of the container at the time of the inspection.

Pursuant to Tenn. Comp. R. & Regs. 0400-12-01-.03 (1)(f)1. (v)(I & II) [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 (i) with the words “Hazardous Waste” or (ii) with an indication of the hazard contents of the container.

One 55-gallon container of hazardous waste (ignitable) used materials was observed within SAA #10 in Building 4 (Photo 19). The container was not labeled with the words “Hazardous Waste” at the time of the inspection.

Pursuant to Tenn. Comp. R. & Regs. 0400-12-01-.03 (1)(f)1.(v)(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 (i) with the words “Hazardous Waste.”

One 5-gallon container of hazardous waste broken thermometers (toxic) was observed within SAA #6 in a Colorants Lab within Building 4. The container was not labeled with the words “Hazardous Waste” or with an indication of the hazard contents associated with the waste at the time of the inspection.

Pursuant to Tenn. Comp. R. & Regs. 0400-12-01-.03 (1)(f)1.(v)(I & II)[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 (i) with the words “Hazardous Waste” and (ii) an indication of the hazards of the contents of the container.

Research and Development Building

One 5-gallon container of hazardous waste broken thermometers was observed within SAA #4 in the Research and Development Building. This container was open. Facility personnel closed this container during the inspection.

Pursuant to Tenn. Comp. R. & Regs. 0400-12-01-.03(1)(f)1.(iv) [40 C.F.R. § 262.15(a)(4)], which is a condition of the SAA Permit Exemption, a generator is required to keep containers of hazardous waste closed at all times during accumulation, except when adding, removing, or consolidating waste; or when temporary venting of a container is necessary for the proper operation of equipment, or to prevent dangerous situations, such as build-up of extreme pressure.

One 55-gallon container of hazardous waste acetone (ignitable) was observed within SAA #1 in a chemical shed outside of the Research and Development Building (Photo 20).

Building 5 Hazardous Waste Warehouse

This building (Photo 21) consisted of a metal roof constructed on a concrete pad located just south of Building 5 which is located on the property south side of the rail line. The area was equipped with a fire extinguisher and spill equipment.

Sixty-nine 55-gallon containers, two 80-gallon overpack containers, and twelve 5-gallon containers of hazardous waste were observed on pallets in this area (Photo 23). One 55-gallon container of hazardous waste was observed to be without a label with the words “Hazardous Waste” and an accumulation start date (Photo 22).

Pursuant to Tenn. Comp. R. & Regs. 0400-12-01-.03 [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 Tenn. Comp. R. & Regs. 0400-12-01-.03 (1)(h) [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 68-212-108 of the THWMA, Tenn. Code Ann. § 68-212-108 [Section 3005 of RCRA, 42 U.S.C. § 6925], provided that the generator complies with the conditions listed in Tenn. Comp. R. & Regs. 0400-12-01-.03 (1)(h) [40 C.F.R. § 262.17] (hereinafter referred to as the “LQG Permit Exemption”).

Pursuant to Tenn. Comp. R. & Regs. 0400-12-01-.03 (1)(h)1.(v)(I)I. & III [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”; an indication of the hazards of the contents; and the date upon which each period of accumulation begins clearly visible for inspection on each container.

Record Review

The following hazardous waste records were reviewed at the time of the inspection:

- Last three years of Hazardous Waste Manifests.
- Last three years of Weekly Inspection Logs.
- Hazardous Waste and DOT Training for hazardous waste personnel.
- Hazardous Waste Contingency Plan.
- Last three years of Annual Hazardous Waste Stream Reports
- Hazardous Waste Reduction Plan updated in 2021

No discrepancies were observed upon reviewing the facility records listed above.

Closing Conference

The inspection team conducted an exit meeting at the end of the walk-through inspection and review of the facility's hazardous waste records with Darrell Richardson, Plant Manager Skip Swanner and Director of Regulatory Affairs Jeff Miller. During this meeting, the inspectors discussed their preliminary findings made during the inspection. The inspection team also discussed the contiguous property issue for which conclusions are stated above.

11) Signed

DARYL HIMES Digitally signed by DARYL HIMES
Date: 2022.07.25 00:10:54 -04'00'

Daryl R. Himes
Environmental Engineer

Date

12) Concurrence

**ARACELI
CHAVEZ** Digitally signed by ARACELI
CHAVEZ
Date: 2022.07.25 12:32:47
-04'00'

Araceli B. Chavez
Chief
RCRA Enforcement Section

Date

ATTACHMENT A

AOC Aliancys – Tennessee Plant

Collierville, Tennessee

COMPLIANCE EVALUATION INSPECTION

TND007037765

June 29, 2022

Photos taken by Daryl R. Himes

Photos taken with Canon Power Shot Elph 360 HS



Photo 1 – Five gallon container with waste resin.



Photo 2 - One 55-gallon container of spent acetone, one 55-gallon container of spent sharps containing resin and one 5-gallon container of broken mercury thermometers in the Process Area.



Photo 3 - One 55-gallon container of hazardous waste spent glacial methyl acrylate and GMAA additives acetone.in SAA #2



Photo 4 - Rail Spur shown (facing ESE) from rail line which dissects facility property



Photo 5 - Rail Spurs shown facility property in an off-loading area



Photo 6 - Rail line running east/west through property



Photo 7 - Rail line running east/west through property



Photo 8 - Rail line running east/west through property with spur to AOC property



Photo 9 – Reclaim Area outside Building 1



Photo 10 - SAA 13



Photo 11 – Four-foot boxes of universal waste fluorescent tubes in Maintenance Area



Photo 12 - Universal Waste accumulation area in Maintenance Area



Photo 13 – Tote containing used oil in Maintenance Area



Photo 14 – SAA # 7 in Building 4 Colorants Area



Photo 15 - SAA # 9 in Building 4 Colorants Area



Photo 16 - SAA # 8 in Building 4 Colorants Area



Photo 17 - Open latch on SAA # 8 in Building 4 Colorants Area



Photo 18 - SAA #14 in a loading bay within Building 4



Photo 19 - SAA #10 in Building 4



Photo 20 - SAA #1 in a chemical shed near the Research and Development Building



Photo 21 – Central Accumulation Area



Photo 22 – Unlabeled container in 90-day accumulation area.



Photo 23 - Central Accumulation Area