RCRA Inspection Report

1) Inspector and Author of Report

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2) Facility Information

Daikin America Inc.
905 State Docks Road
Decatur, Alabama 35601
Morgan County

EPA ID: ALD983192253
NAICS: 325211 - Plastics Material and Resin Manufacturing

3) Responsible Official

Arash Ghoja
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4) Inspection Participants

Arash Ghoja, Daikin America Inc.
John Jackson, Daikin America Inc.
Allan Britnell, Daikin America Inc.
Veronica Roth, Daikin America Inc.

Andrea Slay, ADEM
Novelle Smith, US EPA Region 4 Atlanta
Paula Whiting, US EPA Region 4 Atlanta

5) Date and Time of Inspection

November 12, 2024, at 10:30 a.m. CST

6) Applicable Regulations[1]

Resource Conservation and Recovery Act (RCRA) Sections 3002, 3005 and 3007 (42 U.S.C. §§ 6922, 6925 and 6927), and the regulations promulgated pursuant thereto at 40 Code of Federal Regulations (C.F.R.) Parts 260-270, 273 and 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

[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.

Environmental Management (ADEM) Administrative Code (ADEM Admin. Code)

Pursuant to ADEM Admin. Code 335-14-1-.02-(1)(a)111. [40 C.F.R. § 260.10], a large quantity generator of hazardous waste (LQG) is a generator who generates greater than or equal to 1,000 kilograms (2,200 pounds) of non-acute hazardous waste in a calendar month.

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

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 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) or (7)(a)) [40 C.F.R. § 262.16(b) or §262.17(a)], except as required in ADEM Admin. Code r. 335-14-3-.01(5)(a)7 and 8) [40 C.F.R. § 262.15(a)(7) and (8)], provided that the generator complies with the satellite accumulation area conditions listed in ADEM Admin. Code r. 335-14-3-.01(5)(a) [40 C.F.R. § 262.15(a)] (hereinafter referred to as the "SAA Permit Exemption").

Pursuant to ADEM Admin. Code r. 335-14-11-.02(1)(a)244. [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.

7) Purpose of Inspection

The purpose of this inspection was to conduct an unannounced compliance evaluation inspection to determine Daikin America Inc. compliance with EPA ID Number: ALD983192253, the applicable requirements of RCRA and the corresponding ADEM regulations. This was an EPA lead inspection.

8) Facility Description

Daikin America was established in 1991 and is a developer and manufacturer of fluorochemical products. Daikin's fluoropolymers and chemicals, with their wide range of unique properties, are ideally suited for use in aerospace, architecture, automotive, consumer cookware, energy storage, filtration, home goods, industry, medical, nonwovens, optics and displays, paper and

packaging, oil and gas, renewable energy, semiconductor, textile and fabric treatments and wire and cable. The Decatur facility does the production of fluorochemicals.

Daikin started a joint venture facility between 3M and Daikin America called MDA. This facility comprising of 20 acres is also located on the contiguous property at 905 State Docks Road in Decatur, Morgan County, Alabama. MDA produces Chlorodifluoromethane (R-22) refrigerant/ propellant, tetrafluoroethylene (TFE) and Hexafluoropropylene (HFP). Approximately seven years ago, DAI became the sole owner of the joint venture through a buyout of 3M's interest in the project. However, MDA continues to operate as a separate facility. In 2021, the EPA and ADEM inspected both DAI and MDA and asked whether the facilities' management would be combining the two facilities under one EPA identification number. As of November 12, 2024, CEI, no decision has been made.

Daikin America Inc. employs 380 employees with 125 employees handling hazardous waste. The facility operates two shifts, 12 hours a day, seven days per week.

Daikin America, Inc.'s most recent Hazardous Waste Generator Notification (EPA Form 8700-12) dated February 27, 2024, characterized the facility as a Large Quantity Generator (LQG) of hazardous waste. Daikin America, Inc. may generate hazardous waste streams, spent aerosol cans, used solvent, used oil, universal lamps and batteries, paint waste and other wastes. This facility was last inspected on June 29, 2021, by ADEM.

9) Previous Inspection History

ADEM has conducted thirteen RCRA CEIs at the subject facility between 1996 and 2021 and found sixteen violations during those inspections.

On June 29, 2021, the EPA and ADEM conducted the most recent RCRA CEI at the subject facility and found no apparent violations of the RCRA's requirements.

10) Findings

On November 12, 2024, EPA inspectors Paula Whiting and Novelle Smith, accompanied by Alabama Department of Environmental Management (ADEM) inspector Andrea Slay arrived at Daikin America Inc. at approximately 10:30 a.m. CST. The inspectors entered the facility and was escorted to a conference room. Arash Ghoja, Plant Environmental Manager, immediately received the inspectors. Arash Ghoja and the inspectors were joined by John Jackson, Senior Environmental Engineer, for the opening conference. The inspectors introduced themselves, showed their credentials to Arash Ghoja and explained the purpose of the visit.

The inspectors described the anticipated use of a digital camera during the inspection and provided a request for records. The EPA inspector explained that the Small Business Regulatory

Enforcement Fairness Act's classification of a "small business" is generally set by the Small Business Administration using the business' SIC/NAICS code and annual receipts or number of employees. A copy of the EPA's information sheet for small businesses can be found at https://www.epa.gov/sites/production/files/2017-06/documents/smallbusinessinfo.pdf. 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 the EPA. The company did not assert a business confidentiality claim.

Arash Ghoja and John Jackson provided an overview of the facility's history and current operations during the opening conference. The inspection participants also discussed health and safety protocols and required personal protective equipment before facility representative led the inspectors on a tour of the facility operations. Below is a description of the observations made during the inspection.

11) Inspection Observations

This CEI only covers Daikin America, Inc (DAI). MDA was not inspected at this time.

11.1 DAI 90-Day Hazardous Waste Storage

The tour began at the DAI less than 90-day central accumulation area (CAA) (Pictures 1-6). DAI manages a hazardous waste CAA in the Building B1 Gas Plant Control Area. The CAA was identified with a sign which read "danger, hazardous waste storage." DAI manages ignitable, corrosive, and toxic wastes in this CAA, and the inspectors did not observe "No Smoking" signs on the front gate or posted on the enclosure fencing. However, the front gate did have a "Storage Area Flammable Material" sign posted.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)1.(vi)(II) [40 C.F.R. § 262.17(a)(1)(vi)(B)], which is a condition of the LQG Permit Exemption, a generator is required to prevent accidental ignition or reaction of ignitable or reactive waste. This waste must be separated and protected from sources of ignition or reaction including but not limited to the following: Open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant heat. While ignitable or reactive waste is being handled, the large quantity generator must confine smoking and open flame to specially designated locations. "No Smoking" signs must be conspicuously placed wherever there is a hazard from ignitable or reactive waste.

The DAI facility is equipped with an internal communications or alarm system capable of providing immediate emergency instruction to facility personnel. The staff carries cellphones which are used for summoning emergency assistance from local police departments, fire departments, or state or local emergency response teams. The CAA is equipped with portable fire extinguishers, fire control equipment, spill control equipment, and decontamination equipment; and it is equipped with water to supply water hose streams, or foam producing

equipment, or automatic sprinklers, or water spray system.

The inspectors observed the CAA was divided into two areas containing non-hazardous and hazardous wastes. There were 17 55-gallon non-hazardous waste containers, one blue 55-gallon container of AFF solution, 13 used oil and/or used oil debris containers in 55-gallon containers, four used oil totes, and one aerosol can puncture system on a 55-gallon container. All containers in this area were observed closed, labeled, and stored on wooden pallets.

There were 21 250-gallon totes of hazardous waste containing either waste formic acid or waste methanol. The inspectors also observed four 55-gallon containers of fluoroalkylacrylate polymer, Unidyne B-12 solids, and Methane/terpene wastes. All containers were observed, closed, labeled "Hazardous Waste," labeled with a hazard identification, and dated. No issues were observed in this area and the oldest hazardous waste container was dated October 17, 2024.

Arash Ghoja further explained that all waste is sent for Waste-to-Energy recycling including the wastes generated at MDA, and the sludge from both DAI and MDA generated from the R22 dirty hydrochloric acid from the neutralization process and waste hydrochloric acid. This waste was recently shipped out in October 2024.

11.2 B1 TFE Plant SAAs

The B1 TFE Plant satellite accumulation areas were located near the CAA. The inspectors observed four yellow clamshells with secondary containment that were locked (Pictures 7-13). The containers inside the clamshells were marked with waste profile numbers, labeled with the waste code, were labeled "Hazardous Waste," and identified with a hazard identification. Unless otherwise noted, the containers were closed.

The inspectors observed the following inside the clamshells:

- DAI Clamshell 1 held three 55-gallon containers of lab and plant waste with the waste profile numbers of DAI-005 (methane/terpene) and DAI-006 (lab waste).

- MDA Clamshell 2 held two 55-gallon containers of MDA-002 (HCL Antimony J1 lab bottles) and MDA-003 (Antimony Pentachloride contaminated rags). At the time of the inspection, the blue 55-gallon container was not closed and was filled with J1 lab bottles (Pictures 11-12). Arash Ghoja and John Jackson immediately tried to close the container but realized it was too full to properly close. In addition, the inspectors inquired as to why the MDA SAA containers were stored in the DAI area. Arash Ghoja explained it was convenient for personnel to bring the waste containers to this satellite storage area. However, the two 55-gallon containers were not at or near the point of generation.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(5)(a)4 [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 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 [§262.17(a)], except as required in ADEM Admin. Code r. 335-14-3-.01(6)(b)7. and 8. [40 C.F.R. § 262.15(a)(7) and (8)], provided that the generator complies with the satellite accumulation area conditions listed in ADEM Admin. Code r. 335-14-3-.01(5)(a) [40 C.F.R. § 262.15(a)] (hereinafter referred to as the "SAA Permit Exemption").

- DAI Clamshell 3 held a 55-gallon container of DAI-008 (methanol/terpene solids) and a 55-gallon container of used oil.
- DAI Clamshell 4 held a 55-gallon container of DAI-014 (Waste Flammable Liquids) and a 55-gallon container of used oil.

11.3 J1/J2 Lab

The J1/J2 lab services both DAI and MDA. The inspectors observed a catalyst sample container in a fume hood incorrectly labeled as "Wasted." Arash Ghoja stated that the container was a sample and not waste. Arash Ghoja had the bottle immediately corrected by removing the word "Wasted." A yellow flammable storage cabinet was located inside the lab. At the time of the inspection the inspectors observed a medium sized plastic tub with six bottles ranging from 0.5 liters to 1 liter was marked "DISPOSE" (Pictures 14-15). The bottles were not marked with waste profile numbers, labeled with the waste codes, were not labeled with the words "Hazardous Waste," and were not identified with hazard identifications. However, the containers were closed. In the past, the facility had not identified the tub with bottles as a SAA. Arash Ghoja at the request of the inspectors placed a hazardous waste label on the tub.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(6)(b)6.(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" and (ii) with an indication of the hazards of the contents.

11.4 Maintenance Shop Area

The Maintenance Shop Area had a yellow SAA clamshell outside of the shop. The clamshell held three 55-gallon hazardous waste containers and one non-hazardous waste container (Pictures 16-17). The hazardous waste containers inside the clamshell were marked with waste profile

number, labeled with the waste code and the words" Hazardous Waste," and identified with a hazard identification. Unless otherwise noted, the containers were closed.

Inside the Maintenance Shop, the inspectors observed a spent aerosol can of O'Reilly Brake Parts Cleaner in the trash can (Picture 18). John Jackson immediately retrieved the spent aerosol can for proper disposal. The inspectors also observed a 7.5-gallon white container of unknown green liquid in a corner (Picture 19). The container was not closed and not labeled. Arash Ghoja immediately had maintenance personnel retrieve the container. Arash Ghoja stated that personnel believed it to be Simple Green parts washer liquid brought in by a former employee.

Pursuant ADEM Admin. Code r. 335-14-11-.02(4)(e)1. [40 C.F.R. § 273.13(e)(1)], a SQHUW must accumulate universal waste aerosol cans in a container that is structurally sound, compatible with the contents of the aerosol cans, lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions, and is protected from sources of heat.

Pursuant ADEM Admin. Code r. 335-14-11-.02(5)(f) [40 C.F.R. § 273.14(f)], a SQHUW must label or mark universal waste aerosol cans (i.e., each aerosol can), or a container in which the aerosol cans are contained, clearly with any of the following phrases: "Universal Waste— Aerosol Can(s)," "Waste Aerosol Can(s)," or "Used Aerosol Can(s)."

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].

11.5 N1 TFE Plant

The inspectors toured the N1 TFE plant and observed a yellow clamshell with a 55-gallon container of DAI-005 (methanol/terpene liquid) (Picture 20). The container inside the clamshell was marked with waste profile number, labeled with the waste code, was labeled with the words "Hazardous Waste," identified with a hazard identification, and closed. At the time of the inspection, the inspectors observed overspill inside the secondary containment that needed to be cleaned out (Picture 21).

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)6 [40 C.F.R. § 262.17(a)(6)], which incorporates ADEM Admin. Code r. 334-14-3-.14(2) [40 C.F.R. § 262.251], and is a condition of the LQG 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.

11.6 SMT OPTOOL SAAs

On the way to SMT, the inspectors observed three Ironclad Environmental vacuum boxes being used to collect DAI-355, coolant cleanout.

OPTOOL Unidyne area had four yellow clamshells SAAs (Pictures 22-25). The containers inside the clamshells were marked with waste profile number, labeled with the waste code and the words "Hazardous Waste," and identified with a hazard identification. Unless otherwise noted, the containers were closed.

The inspectors observed the following inside the clamshells:

- DAI Clamshell 1 held a 55-gallon container of DAI-006 and a 55-gallon container of DAI-253.
- DAI Clamshell 2 held a 55-gallon container of DAI-223 (OPTOOL Solid Waste) and a 55-gallon container of KOH for recycle.
- DAI Clamshell 3 held a 55-gallon container of DAI-236 and a 55-gallon container of DAI-237.
- DAI Clamshell 4 held a 55-gallon container of DAI-007 and a 55-gallon container of DAI-008.

11.7 SMT Unidyne SAA

The inspectors observed a yellow clamshell with a black 55-gallon container of DAI-238, a blue 55-gallon container of DAI-095 and an empty container (Picture 26). The containers inside the clamshell were marked with waste profile numbers, labeled with the waste codes, had the hazardous waste names listed, identified with hazard identifications, and closed. Beside the clamshell was a 275-gallon tote of Unidyne wastewater. Arash Ghoja stated that the wastewater was non-hazardous.

11.8 E15 Building

The E15 Building was a new addition to the facility. It currently houses the universal waste, used oil container, and lubricant oils. The inspectors observed the following universal waste stored on shelves (Pictures 27-29):

- One 4-foot fiberboard container of spent fluorescent lamps dated August 1, 2024, labeled and closed
- One 4-foot box of spent fluorescent lamps dated November 8, 2024, labeled, and closed
- A 7.5-gallon container of lead acid batteries not dated but closed and labeled
- A box of lead acid batteries not dated but closed and labeled.

John Jackson immediately called the front office and obtained the missing date of August 30, 2024, for the universal waste batteries.

Pursuant to ADEM Admin. Code r. 335-14-11-.02(6)(a) and (c) [40 C.F.R. § 273.15(a) and (c)], 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.

Next to the building entrance were 5-gallon and 55-gallon used oil containers (Pictures 30-39). At the time of the inspection, the inspectors observed the following:

- Used oil released on top of one 55-gallon container
- Oil dri absorbent soaked in used oil on top of a container
- Used oil rags to be discarded on top of a container
- Used oil dripped on the floor from the removal of the drain tube left in the open funnel
- Used oil filters in plastic garbage bag left on top of a container
- Two 55-gallon containers of solid waste contaminated with oil not labeled
- Four 55-gallon containers of used oil, at least one container is not closed or labeled
- Eight 5-gallon containers of used oil and grease not closed or labeled
- Three 5-gallon containers of discarded lube oil with tubing inside that are not closed or labeled
- One 5-gallon container of used oil and oily debris and/or unknown material not closed or labeled
- One cut-out container bottom of oily fluid not closed or labeled

Pursuant to ADEM Admin. Code r. 335-14-17-.03(4)(a)1. Used oil generators shall not store used oil in units other than used oil tanks, containers, or units subject to regulation under Chapters 335-14-5 and 335-14-6. A container holding used oil must always be closed during storage, except when it is necessary to add or remove used oil.

Pursuant to ADEM Admin. Code r. 335-14-17-.03(4)(c)1. [40 C.F.R. § 279.22(c)(1)], containers and aboveground tanks used to store used oil at generator facilities must be labeled or marked clearly with the words "Used Oil."

Pursuant to ADEM Admin. Code r. 335-14-17-.03(4)(d) [40 C.F.R. § 279.22(d)], upon detection of a release of used oil to the environment, the facility must clean up and manage properly the released used oil and other materials.

11.9 B12 Packaging SMT SAA

The inspectors observed a yellow clamshell with a 55-gallon container of DAI-240 (MEK) and a 55-gallon container of DAI-238 (Unidyne) (Picture 40). The containers inside the clamshell were marked with waste profile numbers, labeled with the waste codes, had the hazardous waste names listed, identified with hazard identifications, and closed.

11.10 U1-V613 Hazardous Waste Tank

The inspectors observed a hazardous waste tank labeled as U1-V613, Spent Solvent Storage Tank, Waste MEK, with the waste codes D001, D035 and F005 and last emptied on October 10, 2024 (Picture 41). The tank valves and flanges had metal leak detection and repair (LDAR)

identification tags, and the secondary containment was clean and free of cracks and gaps (Pictures 42-43). Arash Ghoja stated that the tank held a limited amount of waste but was currently active.

11.11 N1 Polymer Waste

The N1 area had three yellow clamshell SAAs. The N1 SAA held a black 55-gallon non-hazardous waste container (Picture 44). The N1A Polymer Waste SAA held a 55-gallon container of DAI-007 (Picture 45), and the N1 Polymer Waste SAA held a used oil tote (DAI-004) that was closed and labeled (Picture 46). The N1A container was marked with waste profile number, labeled with the waste code, had the hazardous waste name listed, identified with hazard identification, and closed.

12) Records Review

Contingency Plan and Quick Reference Guide (QRG)

The actions that facility personnel should take in response to an emergency are described in the facility's RCRA Contingency Plan, which was last updated on September 25, 2023.

The plan describes actions facility personnel must take in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility.

The plan describes arrangements agreed to with the local police department, fire department, other emergency response teams, emergency response contractors, equipment suppliers, local hospitals, or the Local Emergency Planning Committee (LEPC). However, the plan is currently undergoing updating and the most recent revision dated September 25, 2023, has not been sent to the local authorities.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)6 [40 C.F.R. § 262.17(a)(6)], which incorporates ADEM Admin. Code r. 334-14-3-.14(10)(a) [40 C.F.R. § 262.262(a)], and is a condition of the LQG Permit Exemption, A copy of the contingency plan and all revisions to the plan must be maintained at the large quantity generator and a copy of the contingency plan and all revisions must be submitted to all local emergency responders (i.e., police departments, fire departments, hospitals and State and local emergency response teams that may be called upon to provide emergency services). This document may also be submitted to the Local Emergency Planning Committee, as appropriate.

The plan lists the names and emergency telephone numbers for persons identified as emergency coordinators. However, the contact list is not up to date.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)6 [40 C.F.R. § 262.17(a)(6)], which incorporates ADEM Admin. Code r. 334-14-3-.14(11) [40 C.F.R. § 262.263(d)], and is a

condition of the LQG Permit Exemption, a generator is required to review and immediately amend its contingency plan, if necessary, whenever the list of emergency coordinator changes.

The plan includes a list of all emergency equipment at the facility. The list includes spill control equipment, communications and alarm systems, and decontamination equipment. The list appears to be up to date. The plan includes the location and a physical description of each item on the list, and a brief outline of its capabilities. However, the plan does not include a fire extinguishing system.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)6 [40 C.F.R. § 262.17(a)(6)], which incorporates ADEM Admin. Code r. 334-14-3-.14(9) [40 C.F.R. § 262.261(e)] and is a condition of the LQG Permit Exemption the contingency plan must include a list of all emergency equipment at the facility where this equipment is required, and this list must be kept up to date.

The plan includes an evacuation plan for personnel. This plan describes signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes.

A copy of the RCRA Contingency Plan (and its quick reference guide) was most recently submitted to the police department, fire department, and hospital, on May 25, 2022.

The quick reference guide include the types/names of hazardous waste in layman's terms and the associated hazard associated with each hazardous waste present at any one time; the estimated maximum amount of each hazardous waste that may be present at any one time; the identification of any hazardous wastes where exposure would require unique or special treatment by medical or hospital staff; a map of the facility showing where hazardous wastes are generated, accumulated and treated and routes for accessing these wastes; a street map of the facility in relation to surrounding businesses, schools and residential areas; the identification of on-site notification systems; and the name of the emergency coordinator(s) and emergency telephone number(s). However, quick reference guide is missing the locations of water supply.

Please note that ADEM Admin. Code r. 334-14-3-.14(10)(b) [40 C.F.R. § 262.262(b)] requires an LQG that is amending its contingency plan to submit a quick reference guide of the contingency plan to the local emergency responders. The required contents of the contingency plan are specified in ADEM Admin. Code r. 334-14-3-.14(9) [40 C.F.R. § 262.261], and the required contents of the quick reference guide are specified in ADEM Admin. Code r. 334-14-3-.14(10)(b) [40 C.F.R. § 262.262(b)].

Training Records

The inspectors reviewed facility job descriptions and employee names that were provided for

Warehouse Operator, Gas Operator, and Environmental Technician. Each description included the requisite skill, education, or other qualifications, and duties of facility personnel assigned to that position.

DAI provided a written description of the type and amount of both introductory and continuing training to be given to each person filling the positions listed above. The inspectors reviewed records of employee hazardous waste training completed in 2023-2024. However, training year 2022 was not available at the time of the inspection.

Waste Manifest and Land Disposal Restriction (LDR) Records
The inspectors reviewed available hazardous waste manifest records and land disposal restriction forms for shipments of hazardous waste sent since January 2022 to November 2024. Hazardous waste manifest records show that solvent waste, paint related waste, used oil and universal waste, are routinely shipped to Clean Harbors LaPorte LLC (EPA ID TXD982290140), Safety Kleen Systems Smithfield (EPA ID KYD053348108), and Clean Harbors El Dorado LLC (EPA ID ARD0697481920). The land disposal restriction forms were reviewed.

The waste profile for the waste MEK DAI-0224B was reviewed. The hazardous waste is shipped to Clean Harbors for incineration.

Weekly Inspection Records
The inspectors reviewed DAI's available records of inspections of the hazardous waste central accumulation area (CAA) since January 2022-November 2024. The inspection log includes a checklist to record observations about leaking containers and for deterioration of containers caused by corrosion or other factors. The facility had a three-page inspection checklist that was not being fully filled out, the inspection time per area was missing, the container count was missing, and the CAA inspection time was missing. The inspectors recommended updating the inspection checklist and streamlining the date information on page 1.

The records include the date and time of the inspection and the name, signature and initials of the employee conducting the inspection. Employees do routinely record inspection observations and subsequent follow-up actions on the inspection log.

The daily tank inspection records for 2022-2024 were reviewed. The inspectors observed that the hazardous waste tank had 33,000 pounds (4925 gallons) pumped out on October 10, 2024, and sent to Clean Harbors. The remaining volume in the tank was 493 gallons. The initial level of the tank per the control room was 4463 gallons, however based on the daily tank records the increase and decrease in the tank volume was not consistent. Arash Ghoja stated that changes in temperature could affect the volume of the tank however what was shipped was not consistent with what was recorded in the tank. Arash Ghoja stated that control room personnel said it was a SENSOR ERROR but needed to further investigate the issue. On November 26, 2024, John Jackson stated via email that the MEK waste tank was documented as being empty,

however the area log sheets showed the levels to fluctuate daily. An investigation found that the level transmitter (sonar) will react sporadically when the tank is empty. The following is an explanation from the production engineer of the area: "*After the MEK waste was unloaded on 10/10/2024, we observed abnormal tank level fluctuations, ranging from 7 lbs to 82,000 lbs, even though the plant remained in shutdown. During this time, B12 (B12 is the building where the waste MEK would have been produced) had no production. The abnormal levels continued throughout the shutdown and ceased after production resumed on 10/19/2024. The level sensor is reading normal now*."

Pursuant to ADEM Admin. Code r. 335-14-3-.01(a)(7) [40 C.F.R. § 262.17(a)(2)], which incorporates ADEM Admin. Code r. 335-14-6-.10(6)(d) [40 C.F.R. § 265.195(e)], and is a condition of the LQG Permit Exemption, a generator accumulating hazardous waste in tanks must conduct daily inspections of tank ancillary equipment that is not provided with secondary containment.

The 2022-2024 leak detection and repair records for the hazardous waste tank ancillary piping were reviewed. The inspectors observed that the report HW00032 was provided using Smart Browser software. The last LDAR monitoring was conducted on April 24, 2024, by Jonathan Murphee (no longer employed). The report showed the backgrounds were zero and the net results were zero using Monitor 20200013. No issues were observed. The tank was installed on April 14, 2015.

13) Closing Conference

The inspectors conducted the exit meeting at 5:00 PM CST with Allan Britnell, Arash Ghoja, John Jackson, and Veronica Roth. During this meeting, the inspectors stated their preliminary conclusions of the inspection. DAI agreed to provide 2022 training records and explanation for the discrepancy in the tank daily inspection levels and the manifests by November 26, 2024.

On November 25, 2024, Arash Ghoja provided the following records below in an email to Paula Whiting, Novelle Smith, and Andrea Slay.

- Visual evidence (Photos before and after) of all corrections made during the visit attached in a PowerPoint.
- 2022 Training Records for those employees that handle hazardous waste as well as job titles and job descriptions. (Attached in the email were training certificates, attached Job Description, and example Cornerstone training)
- A list of all fire extinguishers and an updated quick reference map showing all fire hydrants. These will be added to the Contingency Plan as recommended.

14) Summary of Observations

During the inspection, observations were made concerning the following RCRA requirements:

DAI manages ignitable, corrosive, and toxic wastes in this CAA, and the inspectors did not observe "No Smoking" signs on the front gate or posted on the enclosure fencing. However, the front gate did have a "Storage Area Flammable Material" sign posted.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)1.(vi)(II) [40 C.F.R. § 262.17(a)(1)(vi)(B)], which is a condition of the LQG Permit Exemption, a generator is required to prevent accidental ignition or reaction of ignitable or reactive waste. This waste must be separated and protected from sources of ignition or reaction including but not limited to the following: Open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant heat. While ignitable or reactive waste is being handled, the large quantity generator must confine smoking and open flame to specially designated locations. "No Smoking" signs must be conspicuously placed wherever there is a hazard from ignitable or reactive waste.

MDA Clamshell 2 held a blue 55-gallon container of MDA-002 (HCL Antimony J1 lab bottles) was not closed and was filled with J1 lab bottles.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(5)(a)4 [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.

MDA Clamshell 2 held two 55-gallon containers of MDA-002 (HCL Antimony J1 lab bottles) and MDA-003 (Antimony Pentachloride contaminated rags) that were not at or near the point of generation.

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 [§262.17(a)], except as required in ADEM Admin. Code r. 335-14-3-.01(6)(b)7. and 8. [40 C.F.R. § 262.15(a)(7) and (8)], provided that the generator complies with the satellite accumulation area conditions listed in ADEM Admin. Code r. 335-14-3-.01(5)(a) [40 C.F.R. §

262.15(a)] (hereinafter referred to as the "SAA Permit Exemption").

A medium sized plastic tub with six bottles ranging from 0.5 liters to 1 liter was marked "DISPOSE." However, the bottles were not marked with waste profile numbers, labeled with the waste codes, did not have hazardous waste labels, and were not identified with hazard identifications.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(6)(b)6.(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" and (ii) with an indication of the hazards of the contents.

Inside the Maintenance Shop, a spent aerosol can of O'Reilly Brake Parts Cleaner was found in the trash can.

Pursuant ADEM Admin. Code r. 335-14-11-.02(4)(e)1. [40 C.F.R. § 273.13(e)(1)], a SQHUW must accumulate universal waste aerosol cans in a container that is structurally sound, compatible with the contents of the aerosol cans, lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions, and is protected from sources of heat.

Pursuant ADEM Admin. Code r. 335-14-11-.02(5)(f) [40 C.F.R. § 273.14(f)], a SQHUW must label or mark universal waste aerosol cans (i.e., each aerosol can), or a container in which the aerosol cans are contained, clearly with any of the following phrases: "Universal Waste—Aerosol Can(s)," "Waste Aerosol Can(s)," or "Used Aerosol Can(s)."

The inspectors also observed a 7.5-gallon white container of unknown green liquid in a corner. The container was not closed and not labeled.

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 N1 TFE plant SAA had an overspill inside the secondary containment that needed to be cleaned out.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)6 [40 C.F.R. § 262.17(a)(6)], which incorporates ADEM Admin. Code r. 334-14-3-.14(2) [40 C.F.R. § 262.251], and is a condition of the LQG 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.

In E15 Building a 7.5-gallon container of universal waste lead acid batteries not dated but closed and labeled, and a box of universal waste lead acid batteries not dated but closed and labeled.

Pursuant to ADEM Admin. Code r. 335-14-11-.02(6)(a) and (c) [40 C.F.R. § 273.15(a) and (c)], 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.

Next to the E15 Building entrance were 5-gallon and 55-gallon used oil containers that were not closed and/or labeled.

Pursuant to ADEM Admin. Code r. 335-14-17-.03(4)(a)1. Used oil generators shall not store used oil in units other than used oil tanks, containers, or units subject to regulation under Chapters 335-14-5 and 335-14-6. A container holding used oil must always be closed during storage, except when it is necessary to add or remove used oil.

Pursuant to ADEM Admin. Code r. 335-14-17-.03(4)(c)1. [40 C.F.R. § 279.22(c)(1)], containers and aboveground tanks used to store used oil at generator facilities must be labeled or marked clearly with the words "Used Oil."

Pursuant to ADEM Admin. Code r. 335-14-17-.03(4)(d) [40 C.F.R. § 279.22(d)], upon detection of a release of used oil to the environment, the facility must clean up and manage properly the released used oil and other materials.

The Contingency Plan is currently undergoing updating and the most recent revision dated September 25, 2023, has not been sent to the local authorities.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)6 [40 C.F.R. § 262.17(a)(6)], which incorporates ADEM Admin. Code r. 334-14-3-.14(10)(a) [40 C.F.R. § 262.262(a)], and is a condition of the LQG Permit Exemption, A copy of the contingency plan and all revisions to the plan must be maintained at the large quantity generator and a copy of the contingency plan and all revisions must be submitted to all local emergency responders (i.e., police departments, fire departments, hospitals and State and local emergency response teams that may be called upon to provide emergency services). This document may also be submitted to the Local Emergency Planning Committee, as appropriate.

The Contingency Plan contact list is not up to date.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)6 [40 C.F.R. § 262.17(a)(6)], which incorporates ADEM Admin. Code r. 334-14-3-.14(11) [40 C.F.R. § 262.263(d)], and is a condition of the LQG Permit Exemption, a generator is required to review and immediately amend its contingency plan, if necessary, whenever the list of emergency coordinator changes.

The RCRA quick reference guide is missing the locations of water supply.

Pursuant to ADEM Admin. Code r. 334-14-3-.14(10)(b) [40 C.F.R. § 262.262(b)] requires an LQG that is amending its contingency plan to submit a quick reference guide of the contingency plan to the local emergency responders. The required contents of the contingency plan are specified in ADEM Admin. Code r. 334-14-3-.14(9) [40 C.F.R. § 262.261], and the required contents of the quick reference guide are specified in ADEM Admin. Code r. 334-14-3-.14(10)(b) [40 C.F.R. § 262.262(b)].

The daily tank inspection records showed increases and decreased in the tank volume that was not consistent. The control room personnel found and repaired a sensor error.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(a)(7) [40 C.F.R. § 262.17(a)(2)], which incorporates ADEM Admin. Code r. 335-14-6-.10(6)(d) [40 C.F.R. § 265.195(e)], and is a condition of the LQG Permit Exemption, a generator accumulating hazardous waste in tanks must conduct daily inspections of tank ancillary equipment that is not provided with secondary containment.

15) List of Attachments

Attachment A – Photo Log: Daikin America Inc.

16) Signed

PAULA WHITING

Digitally signed by PAULA WHITING
Date: 2025.01.23 08:50:32 -05'00'

Paula A. Whiting
Environmental Engineer

17) Concurrence

BROOKE YORK

Digitally signed by BROOKE YORK
Date: 2025.01.23 09:40:24 -05'00'

Brooke York
Acting Chief
RCRA Enforcement Section

ATTACHMENT A

DAIKIN AMERICA INC.

DECATUR, ALABAMA

COMPLIANCE EVALUATION INSPECTION PHOTOGRAPHS

NOVEMBER 12, 2024

Photos taken by Paula A. Whiting
Camera Type: Olympus Tough
Serial Number: SC7374

Picture 1 – DAI Hazardous Waste Storage Area

Picture 2 – Hazardous Waste Storage Area

Picture 3 – Hazardous Waste Storage Area – HW

Picture 4 – Hazardous Waste Storage Area - HW

Picture 5 – Hazardous Waste Storage Area – non-HW

Picture 6 – Hazardous Waste Storage Area – non-HW

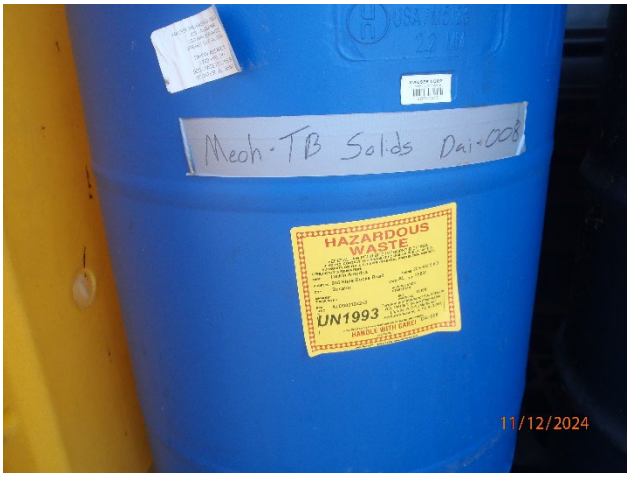
Picture 7 – BI TFE Plant SAAs

Picture 10 – BI TFE Plant SAAs

Picture 8 – BI TFE Plant SAAs

Picture 11 – BI TFE Plant SAAs

Picture 9 – BI TFE Plant SAAs



Picture 12 – BI TFE Plant SAAs

Picture 13 – BI TFE Plant SAAs

Picture 16 – Maintenance Shop Outside SAA

Picture 14 – J1 Lab Flammable Cabinet SAA - no label

Picture 17 – Maintenance Shop Outside SAA

Picture 15 – J1 Lab Flammable Cabinet SAA - label

Picture 18 –Maintenance Shop Inside trashcan – spent aerosol can

Picture 19 –Maintenance Shop Inside – 5-gal container of identified as Simple Green

Picture 20 – TFE N1 Plant SAA

Picture 21 – TFE N1 Plant SAA secondary containment needs cleanout

Picture 22 – OPTOOL SAA#1

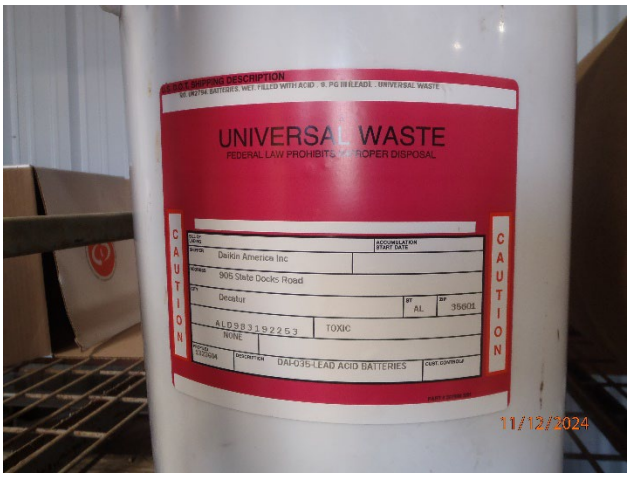
Picture 23 – OPTOOL SAA#2

Picture 24 – OPTOOL SAA#3

Picture 25 – OPTOOL SAA#4

Picture 26 – SMT Unidyne SAA

Picture 27 – E15 Building UW Storage Area



Picture 28 – E15 Building UW Storage Area – not dated

Picture 29 – E15 Building UW Storage Area – not dated

Picture 30 – E15 Building Used Oil containers and release

Picture 31 – E15 Building Used Oil containers

Picture 34 – E15 Building Used Oil containers

Picture 32 – E15 Building Used Oil containers

Picture 35 – E15 Building Used Oil and debris in container

Picture 33 – E15 Building Used Oil filters

Picture 36 – E15 Building unlabeled and open Used Oil container

Picture 37 – E15 Building unlabeled and open Used Oil container

Picture 38 – E15 Building unlabeled and open Used Oil container

Picture 39 – E15 Building unlabeled and open Used Oil container

Picture 40 – B-12 Packaging SMT SAA

Picture 41 – U1-V613 Hazardous Waste Tanks

Picture 42 – U1-V613 Hazardous Waste Tank BB tags

Picture 43 – U1-V613 Hazardous Waste Tank connection ports

Picture 44 – N1 SAA – non-hazardous waste

Picture 45 – N1A SAA – polymer waste

Picture 46 – N1 Polymer Waste SAA