RCRA Inspection Report

1) Inspector and Author of Report

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2) Facility Information

Hyundai Motor Manufacturing Alabama, LLC
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Montgomery County

EPA ID No.: ALR000025486

3) Responsible Officials

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4) Inspection Participants

Mr. Stephen Tunnell, Hyundai Motor Manufacturing Alabama, LLC
Mr. Ron Bishop, Hyundai Motor Manufacturing Alabama, LLC
Mr. Keith Rollan, Hyundai Motor Manufacturing Alabama, LLC
Ms. Judy Thomas, Hyundai Motor Manufacturing Alabama, LLC
Mr. Soladine Harris, Hyundai Motor Manufacturing Alabama, LLC
Mr. Brandon Evans, Hyundai Motor Manufacturing Alabama, LLC
Mr. Caleb Selfridge, Hyundai Motor Manufacturing Alabama, LLC
Mr. Lathan Addison, Univar Solutions
Ms. Stephanie Scott, Abednego
Mr. Gerardo Pantaleon, TRIDIM
Craig Schimmer, Alabama Department of Environmental Management
William Kappler, Environmental Protection Agency, Region 4

5) Date and Time of Inspection

July 26, 2021 at 1:05 p.m. and July 27, 2021 at 9:10 a.m.

6) Applicable Regulations

Alabama Hazardous Waste Management and Minimization Act of 1978 (AHWMMA), Ala. Code § 22-30-1 *et seq.*, [Resource Conservation and Recovery Act (RCRA) Sections 3002 - 3005, (42 U.S. Code - Annotated U.S.C.A. 6925 and 6927)] 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) [40 Code of Federal Regulation (C.F.R.) Parts 260-270, 273 and 279].

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 July 26 and 27, 2021, Environmental Protection Agency, Region 4 inspector William Kappler accompanied by Alabama Department of Environmental Management (ADEM) inspector Craig Schimmer conducted an unannounced compliance evaluation inspection (CEI) at Hyundai Motor Manufacturing Alabama, LLC (hereinafter, "Hyundai" or the "facility") to determine its compliance status with the RCRA and the State of Alabama regulations. This was an EPA-lead inspection. The inspectors arrived at the Hyundai security gate, presented their credentials, and proceeded unescorted to the Hyundai Administration Building. The inspectors were greeted by facility representatives and signed-in to receive a visitor badge from security. Inspectors were then escorted to a conference room, introduced themselves, showed credentials, exchanged business cards, and explained the purpose of the visit during an opening conference. EPA explained the health and safety procedures, general areas for inspection, equipment that will be used, and the RCRA records needed for review. Hyundai representatives identified themselves, provided an overview of the facility's history and current process operations, health and safety procedures, and record review information.

The EPA inspector described the possible use of a digital camera during the inspection and the facility's ability, pursuant to 40 C.F.R. §2.203, to assert a business confidentiality claim for information submitted to the EPA. The facility did not assert a business confidentiality claim. Hyundai does not appear 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. Required personal protective equipment was discussed. Ron Bishop and Keith Rollan of Hyundai led the inspectors on a tour of the facility's operations.

8) Facility Description

Hyundai is located at 700 Hyundai Boulevard, Montgomery, Montgomery County, Alabama. The facility has been at this location since 2006. The facility is located on 1,742 acres of property and is owned by Hyundai. Approximately 400 acres is under roof. The facility employs

approximately 3,500 people and operates seven days per week, 24 hours per day, on three eight-hour shifts. The facility consists of seven buildings with approximately 3 million square feet of manufacturing space. The City of Montgomery provides potable water and the domestic waste services. The primary NAICS code for the facility is 336111, Automotive Manufacturing and 336112, Light Truck/SUV Manufacturing.

Hyundai submitted its most recent notification of its regulated waste activity to ADEM on December 30, 2020, notifying as a large quantity generator of hazardous waste (LQG) a large quantity handler of universal waste (LQHUW) and a used oil generator.

9) General Process Description

Hyundai is an automobile manufacturing facility assembling the Sonata and Elantra sedans, the Santa Fe Sport and Tucson utility vehicles, and the Santa Cruz truck. The facility process operations consist of; undercoat, primer, top coat and clear coat painting of the vehicle in the Paint Building, assembly of the main components (manufactured by third party suppliers) into the vehicle body in the Assembly Building, wastewater treatment in the Wastewater Treatment Plant, crushing vehicles for recycle in the outdoor Car Crushing Area, a Contractor Operations Area, manufacturing engines in the Engine Buildings 1, 2, and 3, raw metal stamping and shaping of the vehicle body and components in the Metal Stamping Building, welding vehicle components to form the body in the Welding Building, and ancillary assembly and testing areas.

10) Previous Inspection History

Hyundai was last inspected by the EPA and the ADEM on February 23 and 24, 2016. The facility was cited for not maintaining the equipment shown on a list attached to the spill kit located in the Paint Department 90-day accumulation area, for not keeping a 55-gallon and a 5-gallon satellite accumulation area (SAA) container closed, and for not keeping four 55-gallon containers accumulating used oil contaminated absorbents closed.

11) Findings

The information in this RCRA inspection report is based on the EPA's July 26 and 27, 2021, RCRA CEI.

Paint Building

Soladine Harris is the Paint Building Manager, Brandon Evans and Caleb Selfridge EHS Specialists, joined the inspectors in the Paint Building. The inspectors were issued a one-piece protective cover-all, prior to entering the process floor. Painting process operations include inspection areas on the first floor, robotic spray paint operations on the second floor, curing oven systems on the third floor, and the building ventilation system on the fourth floor. The vehicle's body is painted in robotic paint booths. The vehicle body is initially pretreated and baked in an oven system to prepare it for treatment with a corrosion inhibitor and baked a second time in an oven system. The vehicle is first painted with a water-related primer coat, then a water-related topcoat and a final application with a solvent-related clear coat. Hazardous waste is accumulated in 90-day or less accumulation areas (90-Day Areas) located in the contractor paint area, the solvent and water-related paint mix rooms, the spot repair area, the kettle purge tank area, and the topcoat two area. Hazardous waste containers are accumulated in locked flammable cabinets

constructed with secondary containment, on poly containment pallets or on wooden pallets. At least one Team Leader is given access to the combination lock for each flammable cabinet assigned.

Contractor Paint 90-Day or Less Accumulations Area

TRIDUM is Hyundai's contractor that manages hazardous waste in the contractor 90-Day Area. Mr. Gerado Pantaleon, the TRIDUM Site Manager, joined the inspectors for the inspection of this area. The inspectors observed a locked yellow flammable two-door cabinet in the contractor paint area posted with warning and security signs. Inspectors observed a 55-gallon container in the cabinet accumulating waste "betaseal mixture" (paint, methanol and methyl ethyl ketone, D001, D035, F005). Inspectors observed assorted equipment, tools, strainers, filters, several unused 5-gallon containers, container lids, and other materials stored in the cabinet. The inspectors observed spills in the cabinet's secondary containment system and on the cabinet inside walls and doors (Photograph 2). The inspectors observed a latching funnel attached to the top of the container was closed. The container was observed in good condition, labeled with the words "hazardous waste", labeled with a DOT Class 3 flammable hazard indicator, and marked with the date July 7, 2021. The inspectors observed the additional equipment, tools and other materials in the cabinet appeared not to allow for an adequate visual inspection (Photograph 2).

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7) [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) [40 C.F.R. § 262.17] (hereinafter referred to as the "LQG Permit Exemption").

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)1.(v) [40 C.F.R. § 262.17(a)(1)(v)], which is a condition of the LQG Permit Exemption, at least weekly, the large quantity generator must inspect central accumulation areas weekly. The large quantity generator must look for leaking containers and for deterioration of containers caused by corrosion or other factors.

The inspectors observed several 55-gallon containers on wooden pallets along the wall accumulating solid waste. The inspectors observed three 55-gallon containers accumulating Ed Trench Sludge, one 55-gallon container accumulating waste paint chips, and one 5-gallon container accumulating waste robotic paint socks placed in an empty 55-gallon container (Photograph 1). Mr. Pantaleon indicated the solid waste was non-hazardous. The inspectors also observed four 55-gallon containers accumulating waste sealer, spent rags, and glass on a poly pallet. The inspectors observed the containers were closed, in good condition, and labeled with the words "Non-RCRA Material".

The inspectors observed seven additional 55-gallon containers on wooden pallets along the wall accumulating various amounts of solid waste. Mr. Pantaleon indicated one 55-gallon container was accumulating non-hazardous waste sealer and two 55-gallon containers appeared to be accumulating water and trash. The inspectors observed four 55-gallon containers appeared to be accumulating waste paint related liquid (Photographs 3, 4, and 5).

Mr. Pantaleon indicated the contents of the four 55-gallon containers could not be confirmed.

Documentation that an accurate waste determination was performed on the solid waste accumulating in the four 55-gallon containers was not observed in the record review.

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].

Universal Waste Accumulation Area

The inspectors observed a Universal Waste Accumulation Area next to the contractor 90-Day Area. The inspectors observed five four-foot boxes accumulating waste fluorescent lamps. The boxes were closed, labeled with the words "universal waste", and marked with the dates January 27, 2021, February 14, 2021, or April 30, 2021.

Paint Mix Rooms

The paint mix operations are divided into two rooms: the water-related paint mix room and the solvent-related paint mix room. The solvent-related paint mix room operates a solvent side 90-Day Area and a purge recovery side 90-Day Area

Water-Related Paint Mix Room

Water-related paint waste is accumulated in this room. The inspectors observed 22 55-gallon containers on one-side of the room and 19 55-gallon containers on the opposite side accumulating water-related paint waste. The containers were on wooden pallets, closed and labeled with the words "non-RCRA regulated material". The inspectors also observed one closed 55-gallon container of used oil labeled with the words "used oil".

Solvent-Related Paint Mix Room – Solvent Side 90-Day Area

Solvent-related paint waste is accumulated in two 90-Day Areas. The inspectors observed warning and security signs posted in the locked room. The inspectors observed two 55-gallon containers on a secondary containment pallet near the entrance to the room accumulating waste paint and solvent (D001, F003). The containers were closed with a latching container funnel or a latching container lid, in good condition, with aisle space, labeled with the words "hazardous waste", labeled with a DOT Class 3 flammable hazard indicator, and marked with the dates June 10, 2021 and July 18, 2021 (Photograph 7).

Solvent-Based Paint Mix Room – Purge Recovery Side 90-Day Area

Located in the Purge Recovery 90-Day Area, the inspectors observed two 55-gallon containers on secondary containment pallets next to the wall. The inspectors observed warning and security signs posted in this area. The containers were accumulating a "mix of solvent-borne waste" (D001, F003) from cleaning the paint lines. Waste paint and solvent is pumped from the Kettle Purge Tanks through pipelines to these 55-gallon containers. The containers were in the process of receive hazardous waste, in good condition, with aisle space, labeled with the words hazardous waste, labeled with a DOT Class 3 flammable hazard indicator, and marked with the dates July 21, 2021 and July 23, 2021 (Photograph 6).

The inspectors observed both pipelines to the 55-gallon containers were identified with tags marked as WS-MR, A051 (Photograph 6).

Spot Repair Area – 90-Day Area

The inspectors observed a locked yellow flammable cabinet located in the spot repair area posted with warning and security signs. The inspectors observed two 55-gallon containers in the cabinet accumulating solvent contaminated absorbents, wipes, and personal protective equipment (PPE). The containers were closed, in good condition, with aisle space, labeled with the words "hazardous waste", marked with the waste codes D001 and D035, labeled with a DOT Class 3 flammable hazard indicator, and both marked with the date July 15, 2021 (Photographs 8 and 9).

Kettle Purge Tanks

The inspectors observed two 35-gallon Kettle Purge Tanks 1 and 2 (Tanks) and their ancillary equipment, Purge Tank Lines 1 and 2 in this area. The Tanks are constructed of stainless-steel, on a coated concrete floor, surrounded by coated concrete berms and are underlain by shallow metal catch pans, which are lined with absorbent pads. The Tanks accumulate spent solvent and paint generated from cleaning/purging Paint Lines 1 and 2 each time the paint color is changed.

The hazardous waste is circulated in the Tanks to prevent solidification and pumping begins when the Tanks are 70 percent full and pumping stops when the Tanks are 60 percent full. The hazardous waste is pumped by pipeline to two 55-gallon containers in the Solvent-Related Paint Mix Room. The inspectors observed the Tanks were closed, in good condition, labeled with the words "hazardous waste", and marked with the waste codes D00l and F003. The inspectors observed the Tanks were not marked or labeled with an indication of the hazards (Photographs 10 and 12).

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)5.(i)b., [40 C.F.R. § 262.17(a)(5)(ii)(B)], a large quantity generator accumulating hazardous waste in tanks must do the following: Mark or label its tanks with an indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704).

The inspectors observed the Tanks pipe connections, flanges, valves, and pumps appeared to be identified with an octagonal-shaped lock-out tag, marked with the letters designating either chemical (CC), pneumatic (P), or electrical (E) followed by a number sequence. The inspectors also observed four-sided diamond shaped yellow labels (RC1).

The inspectors observed the Tanks ancillary equipment components (pipe connections, flanges, valves, pumps) appeared not to be marked in a manner that could be distinguished readily from other pieces of equipment (Photographs 10, 11, 12, 13, 14 and 15). Mr. Ron Bishop indicated that the Tanks and ancillary equipment were regulated under Subpart W - National Emission Standards for Hazardous Air Pollutants (NESHAP).

Topcoat Two Area – 90-Day Area

The inspectors observed a locked yellow flammable cabinet located in the topcoat two area posted with warning and security signs. The inspectors observed one 55-gallon container in the

cabinet accumulating solvent-saturated absorbents, wipes, and PPE. The container was covered with a plastic "Profit Lid", that did not securely keep the container closed. The inspectors observed the container was in good condition, with aisle space, labeled with the words "hazardous waste", marked with the waste codes D00l and F003, labeled with a DOT Class 3 flammable hazard indicator, and marked with the date July 22, 2021 (Photograph 18).

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)1.(iv) [40 C.F.R. § 262.17(a)(1)(iv)], which is a condition of the LQG Permit Exemption, a container holding hazardous waste must always be closed during accumulation, except when it is necessary to add or remove waste.

The inspectors also observed four 55-gallon containers accumulating solvent-saturated absorbents, wipes, and PPE on secondary containment pallets. The inspectors observed warning and security signs posted in this area. The containers were closed, in good condition, with aisle space, labeled with the words "hazardous waste", marked with dates July 19, 2021, July 20, 2021, or July 21, 2021. The inspectors observed the access was not restricted to the four 55-gallon containers accumulating hazardous waste in the topcoat two 90-day storage area. The inspectors observed one 55-gallon container was not marked or labeled with a hazard indicator and not marked with EPA waste codes (Photographs 16 and 17). The facility marked the word "ignitable" and the EPA waste codes on the one 55-gallon container's label, prior to inspectors leaving this area.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)5.(i)b., [40 C.F.R. § 262.17(a)(5)(i)(B)], which is a condition of the LQG Permit Exemption, A large quantity generator must mark or label its containers with the following: An indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704).

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)5.(i)d., which is a condition of the LQG Permit Exemption, A large quantity generator must mark or label its containers with the following: All appropriate EPA hazardous waste numbers associated with the hazardous waste as specified in 335-14-2-.03 and 335-14-2-.04.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)10., which is a condition of the LQG Permit Exemption, The large quantity generator must prevent the unknowing entry, and minimize the possibility for the unauthorized entry, of persons or livestock into the central accumulation area, unless physical contact with the waste, structures, or equipment will not injure unknowing or unauthorized persons or livestock which may enter the central accumulation area, and disturbance of the waste or equipment, by the unknowing or unauthorized entry of persons or livestock into the central accumulation area will not cause a violation of the requirements of 335-14-3.

General Assembly Building
The main components are assembled into the vehicle body in this building. The general assembly building accumulates hazardous waste in 90-Day Areas located in the trim three beta seal area, the general assembly maintenance shop, and the heavy repair area. All 90-Day Areas were in a caged or walled enclosure.

Trim Three Beta Seal Area – 90-Day Area
The inspectors observed one 55-gallon container accumulating waste absorbent, aerosol cans and PPE and one 55-gallon container accumulating waste "betaseal glass primer" on poly pallets inside a locked wire enclosure posted with warning and security signs. The inspectors observed the containers were closed, in good condition, with aisle space, labeled with the words "hazardous waste", marked with waste codes (D001, D035), and labeled with a hazard indicator. The containers were marked with the dates July 18, 2021 and July 10, 2021, respectively (Photographs 19 and 20).

The inspectors also observed five 55-gallon container of non-RCRA material and used oil. The containers were labeled and closed.

General Assembly Maintenance Shop – 90-Day Area
The inspectors observed one 55-gallon container accumulating waste aerosol cans and two 55-gallon containers accumulating used oil on poly pallets inside a plexiglass walled enclosure and posted with warning and security signs. The inspectors observed the containers were closed, in good condition, with aisle space, labeled with the words "hazardous waste" or with the words "used oil". The container accumulating waste aerosol cans was marked with the waste code D001, labeled with a hazard indicator, and marked with the date July 10, 2021.

The inspectors also observed a part washer in this area which uses "Simple Green All Purpose Cleaner".

Heavy Repair/Pre-Departure Inspection Area – 90-DayArea
The inspectors observed one 55-gallon container accumulating waste gasoline and four 55-gallon containers accumulating "betaseal" contaminated absorbents, PPE, and cans on poly pallets inside a plexiglass walled enclosure and posted with warning and security signs. The inspectors observed the containers were closed, in good condition, with aisle space, labeled with the words "hazardous waste", marked with waste codes, labeled with a hazard indicator, and marked with the dates June 5, 2021, July 12, 2021, July 14, 2021, July 19, 2021, and July 25, 2021.

Wastewater Treatment Plant
The wastewater treatment plant (WWTP) is operated by Hyundai's contractor Abindigo. Stephanie Scott, the wastewater treatment operator, escorted the inspectors. Ms. Scott indicated that the WWTP uses phosphate and electrodeposit treatments to separate non-hazardous solids from the wastewater generated in the Paint Building. Three holding tanks and two plate clarifiers are used in the treatment process. The wastewater effluent from the clarifiers is discharged to the City of Montgomery sanitary sewer system. Solids are accumulated in a holding tank and filtered in two plate and frame presses. The waste solids are accumulated in a one-cubic yard container approximately one-time per day. The waste solids are transported to Salem Waste Disposal, located in Opelika, Alabama.

The inspectors observed three 55-gallon containers accumulating used oil on secondary containment pallets in a covered and gated area located outdoors. The containers were closed and labeled with the words "used oil".

Car Crush Area

The car crush area is operated by Hyundai's contractor Schnitzer, a scrap metal recycler, where they crush test vehicles or vehicles that do not meet quality standards for recycle. Components removed from the vehicle, prior to crushing include fluids, tires, batteries, gas tanks, air bags, and other items. The car crush area is fenced-in and located outside next to the contractor yard. The car crush area is operated on an as needed basis by the contractor. The inspectors observed the 90-Day Area is a covered and gated accumulation area. The inspectors observed secondary containment pallets and a stack of empty gas tanks. The inspectors did not observe hazardous waste accumulating in the 90-Day Area at the time of inspection.

Contractor Yard

The contractor yard housed several trailers used by various Hyundai contractors (TIDUM, Sys-Con, AEAC, Yesac) for equipment maintenance and fabrication. The inspectors did not observe hazardous waste accumulating in these areas at the time of inspection.

Engine Buildings

Hyundai operates three engine buildings to manufacture, assemble, and test engines. Judy Thomas, the engine shop manager, escorted the inspectors. Engine Building One and Two manufacture the engine blocks, heads, and crankshafts for assembly of several four and six-cylinder engines. Engine Building Three manufactures the heads and conducts some assembly operations. The machining process operation is automated. Hazardous waste generated in Engine Building One and Two is accumulated in 90-Day flammable containment cabinets. Waste coolant and used oil is generated from the numerous machining operations.

Engine Building One

Machine coolant is managed in aboveground tanks constructed in each engine building. Three 30,000 to 50,00-gallon tanks are operated for the recovery and recirculation of the coolant to the process operation. Two 20,000-gallon aboveground tanks are operated for the accumulation of waste coolant. Ms. Thomas indicated the coolant has a recirculation and recovery lifespan of approximately three years. The waste coolant is filtered in a press to remove the liquid grease and oil generating carbon steel fines. The carbon steel fines are accumulated in a 0.5 cubic yard container as scrap metal (Photographs 21 and 22).

The inspectors observed one 55-gallon container accumulating waste aerosol cans in a locked metal cabinet constructed with secondary containment and posted with warning/security signs in the 90-Day Area. The container was closed, in good condition, with aisle space, labeled with the words "hazardous waste", marked with waste code (D001), labeled with a hazard indicator, and marked with the date July 21, 2021

Engine Building Two

Waste coolant generated in this building is managed using the same process as Engine Building One. The carbon steel fines are accumulated in a 0.5 cubic yard container as scrap metal (Photograph 23).

The inspectors observed one 55-gallon container accumulating waste aerosol cans, one box of waste fluorescent lamps, and one 5-gallon container of used batteries in a locked metal cabinet constructed with secondary containment and posted with warning/security signs in the 90-Day Area. The 55-gallon container of waste aerosol cans was closed, in good condition, with aisle space, labeled with the words "hazardous waste", marked with a waste code, labeled with a hazard indicator, and marked with the date June 2, 2021 (Photograph 26).

The box of waste fluorescent lamps was closed, labeled, and marked with the date December 2, 2020. The 5-gallon container of used batteries was not labeled with the words universal waste and not marked with a date (Photographs 24 and 25). The facility labeled the container with the words universal waste and marked it with a date, prior to inspectors leaving this area.

Pursuant to ADEM Admin. Code r. 335-14-1-.02(1)(a)244 [40 C.F.R. § 273.9], a Large Quantity Handler of Universal Waste (LQHUW) is a universal waste handler who accumulates 5,000 kilograms or more total of universal waste (batteries, pesticides, mercury-containing equipment, lamps, or aerosol cans calculated collectively) at any time. This designation as a large quantity handler of universal waste is retained through the end of the calendar year in which the 5,000-kilogram limit is met or exceeded.

Pursuant to ADEM Admin. Code r. 335-14-11-.03(5)(a) [40 C.F.R. § 273.34(a)], a large quantity handler of universal waste must label or mark the universal waste to identify the type of universal waste as specified below: Universal waste batteries (i.e., each battery), or a container or tank in which the batteries are contained, must be labeled or marked clearly with any one of the following phrases: "Universal Waste Battery(ies)", or "Waste", or "Used Battery(ies)".

Pursuant to ADEM Admin. Code r. 335-14-11-.03(6)(c) [40 C.F.R. § 273.35(c)], a large quantity handler of universal waste 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 also observed three 55-gallon containers accumulating used oil on secondary containment pallets in this area. The containers were closed and labeled with the words "used oil".

<u>Engine Building Three</u>
Machine coolant in this building is managed using the same process as Engine Building One and Two. The carbon steel fines are accumulated in a 0.5 cubic yard container as scrap metal.

Ms. Thomas indicated to inspectors that hazardous waste is not generated in Engine Building Three. The inspectors observed the facility generates used oil in the headline areas, in the cylinder area and the coolant area. The inspectors observed two 55-gallon containers accumulating used oily rags and adsorbents on secondary containment pallets in the headline area, one 55-gallon container accumulating used oil on a secondary containment pallet in the clear tank cylinder head area, and six 55-gallon containers accumulating used oil on secondary containment pallets in the coolant end area. The containers were closed and labeled with the words "used oil".

12) Waste Management Practices

Hazardous waste paint and solvent (D001, D035, F003, F005) is generated from painting operations in the Paint Building, waste glass primer (D001, D035), waste car fluid (D001, D018, D021) and waste aerosol paint cans (D001) are generated in the Vehicle Assembly Area. Spent fluorescent lamps, used batteries, and spent electronics are generated throughout the facility and managed as universal waste. Ed Trench Sludge is generated from applying a corrosion inhibitor in the Paint Building, used oil, and used oil filters are generated in the facility's Maintenance Shop areas. Carbon steel fines is generated from filtering coolants in the Engine Buildings. Wastewater treatment sludge is generated from the treatment operations in the WWTP. Scrap metal is generated in the fabrication areas. Hazardous waste generated is accumulated in 55-gallon containers in eighteen 90-Day Areas. Universal waste lamps, batteries, and electronics are accumulated in boxes or 5-gallon containers and used oil and used oil filters are accumulated in 55-gallon containers in or near a 90-Day Area. Scrap metal is accumulated in various cubic yard containers.

Hazardous wastes are removed by Univar Solutions USA Inc. (TXR000084869) and delivered to Clean Earth of Alabama (ALD981020894) or to Giant Resource Recovery (ALD070513767). Universal wastes are removed by Univar Solutions USA Inc. (TXR000084869) and delivered to Lighting Resources LLC (TNR000039925). Used Oil and oil filters are removed by Univar Solutions USA Inc., (TXR000084869) and delivered to VLS Armor (TND981920119). Wastewater treatment sludge is removed by Waste Management and disposed of at the Salem Waste Disposal Center. Scrap metal is sold to Schnitzer scrap metal recycling.

Hazardous waste is shipped approximately one to two times per week. The facility prepares the hazardous waste for packaging and on-site management, prior to shipping the hazardous waste using the manifest system to a treatment, storage or disposal facility (TSDF).

Hyundai used the following transporters in 2019 through 2021.
Univar Solutions USA Inc. - TXR000084869
Robbie D. Wood – ALD067138891
Lighting Resources LLC - TNR000039925
Lighting Resources LLC – GAR000054049
Nexeo Solutions – TXR000084869

Hyundai used the following TSDF in 2019 through 2021.
Clean Earth of Alabama - ALD981020894)
Giant Resource Recovery - ALD070513767
VLS Armor - TND981920119
Lighting Resources LLC – TNR000024273

13) Record Review

Manifests
The inspectors reviewed the manifests for the shipment of hazardous waste from January 2019 to July 2021. Nine hazardous waste manifests were reviewed using the EPA's E-Manifest Record System, from March 2021 to April 2021.

Universal Waste Manifests
The inspectors reviewed several universal wase manifests for the shipment of spent lamps and batteries.

Waste Determination/Profiles/Safety Data Sheets (SDS)
The inspectors reviewed copies of the waste determination, generator waste profile, laboratory analysis and SDS documents.

The inspectors reviewed SDSs for 36464 Hydropurge used in the Paint Building Paint Mix Area to clean water-based paint lines and Simple Green Al Purpose Cleaner used in the Assembly Building Maintenance Shop to clean equipment in a part washer.

The inspectors reviewed the waste determinations conducted on Ed Trench Sludge generated from the clean out of electro-deposit or e-coat bath tanks in the Paint Building and on filter media generated from filtering waste coolant used in the robotic machining operation in the Engine Buildings.

Contingency Plan
The facility's contingency plan (Plan) was reviewed. The Plan was revised on November 6, 2019. Ron Bishop is the primary emergency coordinator and Stephan Tunnell is the first alternate emergency coordinator.

Arrangements with Local Authorities
The inspectors reviewed the arrangement with the local authorities.

Weekly Container Inspection Records
The inspectors reviewed the weekly container inspection records from January 2019 to July 2021.

Personnel Training
Approximately 100 employees handle and manage hazardous waste at the facility. RCRA training is conducted by each employee using a training hand-out. The inspectors reviewed RCRA training given in 2020 and 2021. The inspectors reviewed the records for the RCRA training given to Hyundai employees in the Paint Building, Assembly Building and Engine Buildings. The inspectors reviewed the records for the RCRA training given to employees of TRIDUM, a contractor in the Paint Building. The inspectors reviewed the RCRA job titles and position descriptions.

Daily Tank Inspection Records
The inspectors reviewed the daily tank records for inspections conducted on the two 35-gallon Tanks and the ancillary equipment. The inspectors reviewed the daily inspection logs from January 2020 to July 2021.

The inspectors observed daily inspections were not recorded from June 17, 2020 to June 23, 2020, from August 12, 2020 to August 21, 2020, from September 9, 2020 to September 15, 2020, from October 21, 2020 to October 27, 2020. A daily inspection was not recorded for July 27, 2020 and December 1, 2020. Daily inspections for the month of November 2020 appear not to be recorded.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)2. [40 C.F.R. § 262.17(a)(2)], which incorporates ADEM Admin. Code r. 335-14-6-.10 [40 C.F.R. § 265.195], and is a condition of the LQG Permit Exemption, a generator accumulating hazardous waste in tank systems must inspect and document, where present, at least once each operating day, (a) data gathered from monitoring and leak detection equipment; (b) overfill/spill control equipment, above ground portions of the tank system, construction materials and the area immediately surrounding the externally accessible portion of the tank system; (e) ancillary equipment that is not provided with secondary containment; and (f) cathodic protection systems.

Assessment and Integrity - Tank TF3-342

The inspectors reviewed the facility's assessment and certification by a professional engineer for the two 35-gallon Tanks (D001, F003) on June 18, 2008.

RCRA Organic Air Emissions

The inspectors requested the RCRA organic air emission records for the monitoring of the two 35-gallon Tanks and for the leak detection and repair (LDAR) of the ancillary equipment.

Mr. Bishop indicated the air emissions from the tanks and equipment are regulated under the Title V air permit's NESHAPs and the monitoring of the tanks and equipment for leak detection are conducted using engineering calculations, and thus not subject to 40 C.F.R. § 265 Subpart BB. However, an ADEM and EPA internal review of the Title V (Major Source) Operating Permit (209-0090), which incorporates air emission control requirements found in 40 C.F.R. Part 61 and 63, it was observed that the Tanks are subject to LDAR monitoring requirements. RCRA Section 1006(b) requires that RCRA standards be consistent but not duplicative of Clean Air Act (CAA) standards. Equipment operated with air emission controls in accordance with CAA requirements under 40 C.F.R. Parts 60, 61, and 63 are exempt from Subpart BB requirements provided the equipment is operated, monitored, and repaired in accordance with an applicable, CAA standard, and appropriate records are kept to that effect.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)2. [40 C.F.R. § 262.17(a)(1)(i))], which incorporates ADEM Admin. Code r. 335-14-6-.29 (Subpart CC) [40 C.F.R. § 265.1090(j)], and is a condition of the LQG Permit Exemption, For each hazardous waste management unit not using air emission controls specified in 40 C.F.R. § 265.1085 through 40 C.F.R. § 265.1088 of this subpart in accordance with the provisions of 40 C.F.R. § 265.1080 (b)(7) of this subpart, the owner and operator shall record and maintain the following information:

(1) Certification that the waste management unit is equipped with and operating air emission controls in accordance with the requirements of an applicable Clean Air Act regulation codified under 40 CFR part 60, part 61, or part 63.

(2) Identification of the specific requirements codified under 40 C.F.R. part 60, part 61, or part 63 with which the waste management unit is in compliance.

Documentation the facility complied with the requirement mentioned above was not observed in the record review.

Waste Minimization Report
The waste minimization report was reviewed.

Biennial Report
The biennial report was reviewed

Land Disposal Restriction Notice
The land disposal restriction documents were reviewed.

14) Exit-Briefing

Upon conclusion of the inspection, a closing conference was conducted in the presence of Hyundai Motor Manufacturing Alabama, LLC representatives. The facility was informed of the findings at the time of the inspection.

15) Sampling Overview

Sampling was not conducted at this facility.

16) Conclusion/Summary of Violations

Based on the CEI conducted on July 26 and 27, 2021, Hyundai Motor Manufacturing Alabama, LLC was inspected as a large quantity generator of hazardous waste, a large quantity handler of universal waste and used oil generator.

17) Signed

WILLIAM KAPPLER

Digitally signed by WILLIAM KAPPLER
Date: 2021.10.06 15:58:40 -04'00'

William Kappler
Physical Scientist

Date

18) Concurrence

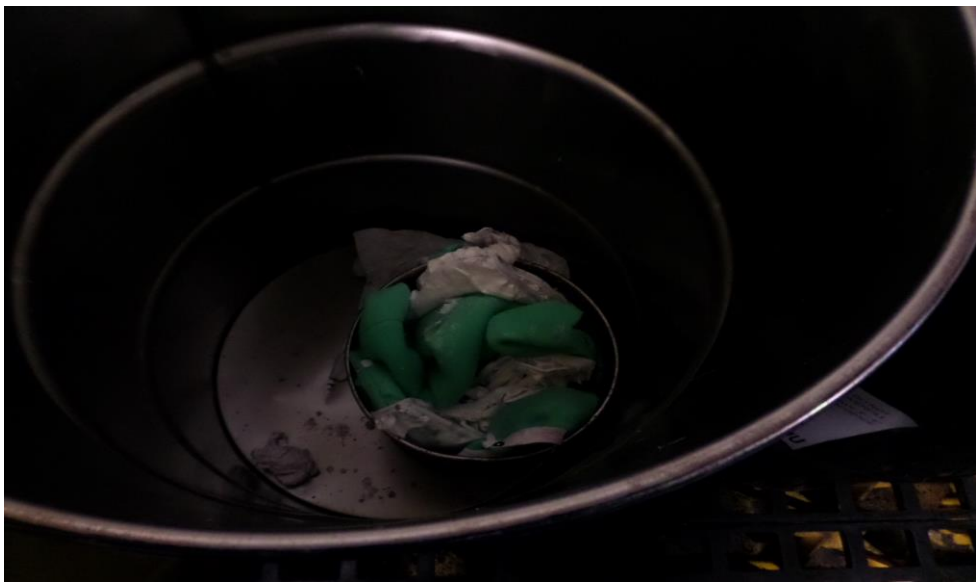
ARACELI CHAVEZ

Digitally signed by ARACELI CHAVEZ
Date: 2021.10.06 16:17:31 -04'00'

Araceli B. Chavez
Chief
RCRA Enforcement Section

Date

Hyundai Motor Manufacturing Alabama, LLC
EPA ID.: ALR000025486
RCRA CEI Photographs
July 26 and 27, 2021
Photographs by William Kappler
Camera Model: Samsung WB250F
Property Tag #: S75917



Hyundai Motor Manufacturing Al, LLC (Hyundai). Contractor Paint Area. Inspectors observed an open 5-gallon container inside an open 55-gallon container accumulating waste robotic paint socks. Inspectors observed the 5-gallon container was full, not marked/labeled with the words hazardous waste and not marked/labeled with a hazard indication. Photograph 1 taken July 26, 2021 at 2:33 p.m.

Hyundai. Contractor Paint Area. Inspectors observed a 55-gallon container in a yellow two door cabinet accumulating waste Betaseal Mixture. Inspectors observed equipment, tools, strainers, filters, empty containers, container covers, and other assorted materials stored in the cabinet. Inspectors did not observe aisle space and observed spills in and out of the cabinet's secondary containment system. Photograph 2 taken July 26, 2021 at 2:39 p.m.

Hyundai. Contractor Paint Area. Inspectors observed seven 55-gallon containers on pallets along the wall accumulating solid waste. Three containers appeared to have non-hazardous waste (water-based paint and waste sealer). Photograph 3 taken July 26, 2021 at 3:00 p.m.

Hyundai. Contractor Paint Area. Inspectors observed seven 55-gallon containers on pallets along the wall accumulating unknown solid waste. One open container was accumulating waste liquid and trash (paper towels and cups). Inspectors observed four containers were accumulating various amounts solid waste. Photograph 4 taken July 26, 2021 at 3:03 p.m.

Hyundai. Contractor Paint Area. Inspectors observed seven 55-gallon containers on pallets along the wall accumulating solid waste. Three containers appeared to have non-hazardous waste (water-based paint and waste sealer). Inspectors observed four containers appeared to be accumulating solid waste. Photograph 5 taken July 26, 2021 at 3:03 p.m.

Hyundai. Purge Recovery 90-Day Area. Inspectors observed two 55-gallon containers accumulating solvent-borne waste from the two 35-gallon “Kettle” Purge Tanks. The containers were marked with dates in July 2021. Photograph 6 taken July 26, 2021 at 3:20 p.m.

Hyundai. Paint Mix Room - Solvent Side. Inspectors observed two 55-gallon containers accumulating waste paint and solvent and solvent-borne waste from mixing paints and solvents. The containers were marked with dates in June and July 2021. Photograph 7 taken July 26, 2021 at 3:20 p.m.

Hyundai. Spot Repair 90-Day Area. Inspectors observed two 55-gallon containers accumulating absorbents, PPE and cans contaminated with Betaseal Mixture. The containers were marked with dates in July 2021. Photograph 8 taken July 26, 2021 at 3:32 p.m.

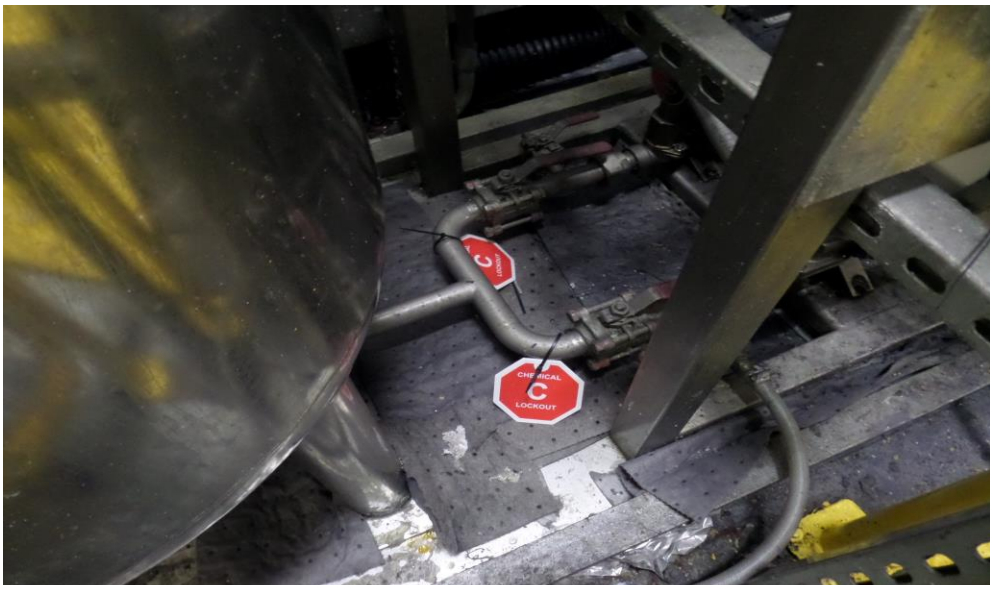
Hyundai. Spot Repair 90-Day Area. Inspectors observed a locked two-door yellow cabinet for two 55-gallon containers accumulating absorbents, PPE and cans contaminated with Betaseal Mixture identified in Photograph 8. Inspectors observed signs indicating a hazardous waste storage area. Photograph 9 taken July 26, 2021 at 3:32 p.m.

Hyundai. Kettle Purge Tank 1 Area. Inspectors observed a 35-gallon purge tank (tank 1) accumulating waste paint and solvent. The inspectors observed the tank was not marked/labeled with an indication of the hazards. Inspectors observed red octagonal shaped lockout tags and yellow diamond shaped tags designated with the letters C, P, E or RC and followed by a number (1, 2, or 3) secured by plastic cable ties to the tanks and the tank's ancillary equipment (valves, pumps, flanges, connectors, electrical and pneumatic equipment). Photograph 10 taken July 26, 2021 at 3:44 p.m.

Hyundai. Kettle Purge Line 1 Area. Inspectors observed red octagonal shaped lockout tags and yellow diamond shaped tags designated with the letters C, P, E or RC and followed by a number (1, 2, or 3) secured by plastic cable ties to the tanks and the tank's ancillary equipment (valves, pumps, flanges, connectors, electrical and pneumatic equipment). Photograph 11 taken July 26, 2021 at 3:44 p.m.

Hyundai. Kettle Purge Tank 2 Area. Inspectors observed a 35-gallon purge tank (tank 2) accumulating waste paint and solvent. The inspectors observed the tank was not marked/labeled with an indication of the hazards. Inspectors observed red octagonal shaped lockout tags and yellow diamond shaped tags designated with the letters C, P, E or RC and followed by a number (1, 2, or 3) secured by plastic cable ties to the tanks and the tank's ancillary equipment (valves, pumps, flanges, connectors, electrical and pneumatic equipment). Photograph 12 taken July 26, 2021 at 3:50 p.m.

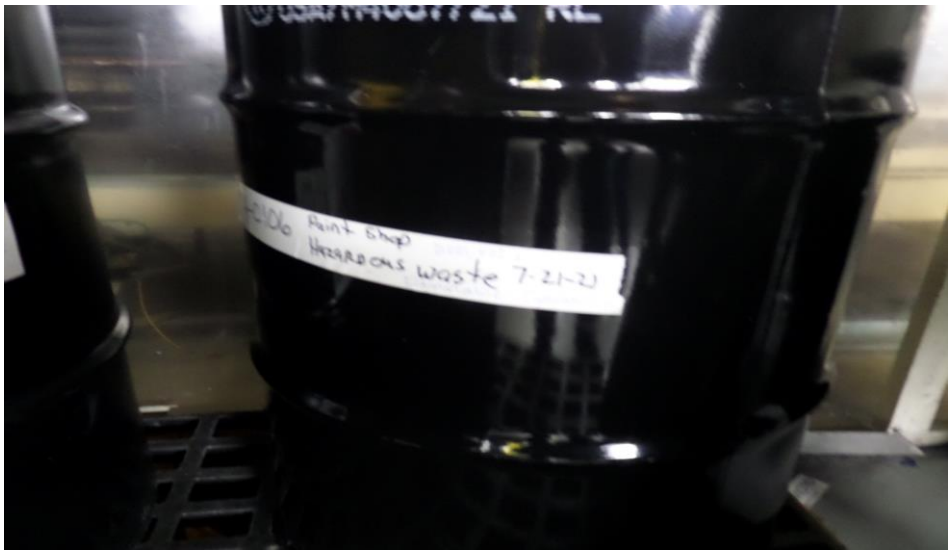
Hyundai. Kettle Purge Line 2 Area. Inspectors observed red octagonal shaped lockout tags and yellow diamond shaped tags designated with the letters C, P, E or RC and followed by a number (1, 2, or 3) secured by plastic cable ties to the tanks and the tank's ancillary equipment (valves, pumps, flanges, connectors, electrical and pneumatic equipment). Photograph 13 taken July 26, 2021 at 3:50 p.m.



Hyundai. Kettle Purge Line 2 Area. Inspectors observed red octagonal shaped lockout tags and yellow diamond shaped tags designated with the letters C, P, E or RC and followed by a number (1, 2, or 3) secured by plastic cable ties to the tanks and the tank's ancillary equipment (valves, pumps, flanges, connectors, electrical and pneumatic equipment). Photograph 14 taken July 26, 2021 at 3:50 p.m.

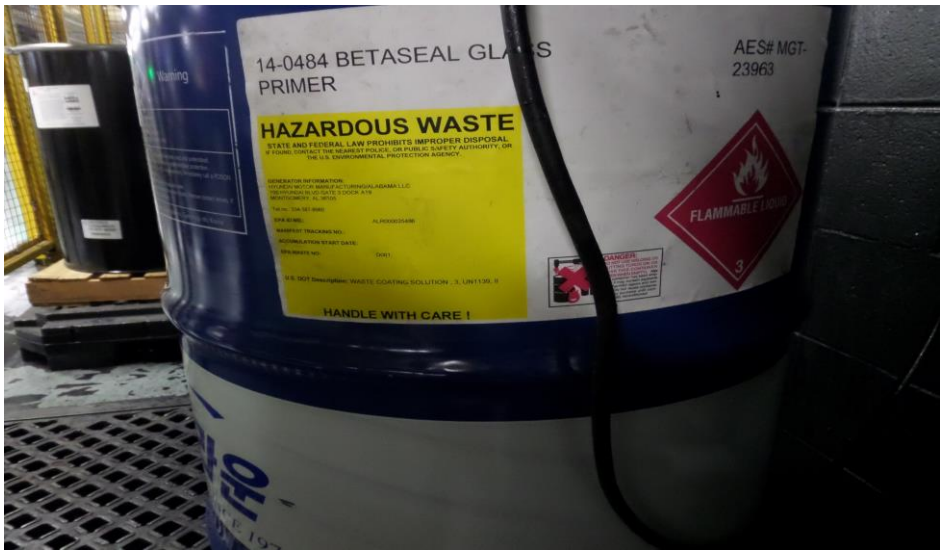
Hyundai. Kettle Purge Line # Area. Inspectors observed red octagonal shaped lockout tags and yellow diamond shaped tags designated with the letters C, P, E or RC and followed by a number (1, 2, or 3) secured by plastic cable ties to the tanks and the tank's ancillary equipment (valves, pumps, flanges, connectors, electrical and pneumatic equipment). Photograph 15 taken July 26, 2021 at 3:50 p.m.

Hyundai. Top-Coat 90-Day Area. The inspectors observed four 55-gallon containers accumulating hazardous waste on a poly pallet. One container was not marked/labeled with a hazard indication and not marked with waste codes. The facility marked the container with an ignitability indication and with the waste codes D001, F003. Photograph 16 taken July 26, 2021 at 3:59 p.m.



Hyundai. Top-Coat 90-Day Area. The inspectors observed four 55-gallon containers accumulating hazardous waste on a poly pallet. One container was not marked/labeled with a hazard indication and marked with waste codes. The facility marked the container with an ignitability indication and with the waste codes D001, F003. Photograph 17 taken July 26, 2021 at 3:59 p.m.

Hyundai. Top-Coat Flammable Locker. The inspectors observed one 55-gallon containers accumulating hazardous waste in a yellow locker on a poly pallet. The inspectors observed the container was not kept closed by a plastic “Profit Lid”. Photograph 18 taken July 26, 2021 at 4:06 p.m.



Hyundai. General Assembly Building - Trim Three Beta Seal 90-Day Area. The inspectors observed two 55-gallon containers accumulating hazardous waste absorbent and PPE and hazardous waste Betaseal on a poly pallet inside a locked wire cage enclosure. One container was dated July 18, 2021, the second container was marked with the date July 10, 2021, shown in Photograph 20. Photograph 19 taken July 26, 2021 at 4:23 p.m.

Hyundai. General Assembly Building - Trim Three Beta Seal 90-Day Area. The inspectors observed one 55-gallon containers accumulating hazardous waste Betaseal on a poly pallet inside a locked wire cage enclosure. The inspectors observed the container was marked with the date July 10, 2021. Photograph 20 taken July 26, 2021 at 4:23 p.m.

Hyundai. Engine Building 1. Inspectors observed a container accumulating metal solids, grease and oily grime from filtering coolant used in the engine machining operation. The filtered metal solids are accumulated in a 0.5 cubic yard container. Photograph 21 taken July 27, 2021 at 11:09 a.m.

Hyundai. Engine Building 1. Inspectors observed a container accumulating metal solids, grease and oily grime from filtering coolant used in the engine machining operation. The filtered metal solids are accumulated in a 0.5 cubic yard container. Photograph 22 taken July 27, 2021 at 11:09 a.m.

Hyundai. Engine Building 2. Inspectors observed a container accumulating metal solids, grease and oily grime from filtering coolant used in the engine machining operation. The filtered metal solids are accumulated in a 0.5 cubic yard container. Photograph 23 taken July 27, 2021 at 11:28 a.m.

Hyundai. Engine Building 2 90-Day Area. Inspectors observed a 5-gallon container accumulating waste batteries in a metal storage locker with secondary containment. The inspectors observed the container was not marked/labeled with the words universal waste and not marked with a date. The facility corrected the deficiency by labeling the container with the words universal waste. Photograph 24 taken July 27, 2021 at 11:30 a.m.

Hyundai. Engine Building 2 90-Day Area. Inspectors observed a 5-gallon container accumulating waste batteries in a metal storage locker. The inspectors observed the container was not marked/labeled with the words universal waste and not marked with a date. The facility corrected the deficiency by labeling the container with the words universal waste. Photograph 25 taken July 27, 2021 at 11:30 a.m.

Hyundai. Engine Building 2 90-Day Area. Inspectors observed a 55-gallon container accumulating waste aerosol cans in a metal storage locker with secondary containment. The inspectors observed the container was closed, in good condition with aisle space, labeled with the words hazardous waste, labeled with a hazard indication and marked with the date June 27, 2021. Photograph 26 taken July 27, 2021 at 11:32 a.m.