

REPORT OF RCRA COMPLIANCE EVALUATION INSPECTION

At

TESLA-URBANDALE

2601 104th Street
Urbandale, Iowa 50322
(515) 318-6048

EPA ID Number: None

On

June 6, 2023

By

U.S. ENVIRONMENTAL PROTECTION AGENCY

Region 7

Enforcement and Compliance Assurance Division

1.0 INTRODUCTION

At the request of the Enforcement and Compliance Assurance Division (ECAD), I conducted a Resource Conservation and Recovery Act (RCRA) compliance evaluation inspection (CEI) at Tesla-Urbandale, located in Urbandale, Iowa, on June 6, 2023. The CEI was conducted under the authority of Section 3007(a) of RCRA, as amended. During the inspection, I collected the information and data necessary to determine compliance with the applicable regulatory and statutory requirements. This inspection report and attachments present the results of the CEI.

2.0 PARTICIPANTS

Tesla-Urbandale:

- Mark Storm, General Manager (two years in role) (mstorm@tesla.com)
- Zachary Bertness, Service Advisor (one year in role)
- Dustin Cakerice, Service Tech (one year in role)

EPA:

- Mark Holcomb, Civil Investigator/Inspector (SEE)

3.0 INSPECTION PROCEDURES

On June 6, 2023, I arrived unannounced at the facility's main entrance at about 1000 hours. Initially, I conducted a visual reconnaissance of the facility searching for areas of concern observable from the adjacent public roadways and parking lots. I identified no environmental issues or concerns during this preliminary examination. I entered the facility through the main entrance and stopped at the front desk. I introduced myself and asked for the general manager or service manager. I was introduced to Mr. Bertness, the Service Advisor, and Mr. Storm, the

General Manager. Mr. Storm escorted me to their office/workroom area. Mr. Storm told me there were currently no specific COVID-19 visitor requirements and the only items of personal protective equipment (PPE) required for our visual inspection at this facility were protective boots and eye protection. Mr. Storm stated that he was the primary contact for hazardous waste at this facility and had been with the company for two years.

At the opening conference, I presented my EPA ID and credentials to Mr. Storm. I next explained the purpose and procedures of the inspection. I then presented Mr. Storm with a copy of RCRA Section 3007(a), which provides inspection authority. I explained my need to collect accurate information and presented him with a copy of Title 18 U.S. Code, Sections 1001 and 1002. He was made aware of his confidentiality rights, and I informed him that a Confidentiality Notice would be provided at the end of the inspection to make a confidentiality claim if he so desired. Mr. Storm acted as the official facility representative during the inspection.

The compliance evaluation inspection (CEI) consisted of a discussion of facility operations, waste generation, and waste management; a visual inspection of active waste generation and management areas; and a review of waste management records.

I conducted a visual inspection of the following areas:

- Service Intake
- Service Bays Shop Area
- Shipping & Receiving (East Outside Area)
- Receiving & Trash Island (East Outside Area)
- Bulk Fluid Storage

See Attachment #1 for the aerial/map views of the facility. Document photocopies and photographs were collected as inspection documentation (see Attachments #1-9 and Photos 1-20). The photo log is included as Attachment #2. Information collected during the inspection is documented on an Entry/Exit checklist, the hazardous waste compliance checklists, and in a notebook. I reviewed documents including the following: Safety Data Sheets (SDS), and asked about manifests, invoices, contingency plan, and staff training. I followed the inspection procedures detailed in the RCRA CEI Standard Operating Procedure 2321.01E, unless noted otherwise.

At the conclusion of the inspection, I summarized my findings and recommendations with Mr. Storm. I provided Mr. Storm with a Receipt for Documents (see Attachment #3), a Confidentiality Notice (see Attachment #4), and a Notice of Preliminary Findings (NOPF) (see Attachment #5), which he signed as acknowledgement of receipt. No claim of confidential business information was made by Mr. Storm.

I provided inspection and compliance assistance documents to Mr. Storm during the inspection, some as paper versions and some in electronic PDF via email post-inspection, that included the following:

- *RCRA Section 3007(a) (EPA Handout)*
- *Title 18 U.S. Code, Sections 1001 and 1002 (EPA Handout)*
- *Confidentiality Notice (Top page of the completed carbonless transfer set)*

- *Notice Regarding Proprietary/Confidential Business Information Submitted to or Collected by EPA In Connection with Inspections (EPA Handout)*
- *Receipt for Documents and Samples (Top page of the completed carbonless transfer set)*
- *NOPF with Instructions for Responding on back of form (top page of the completed carbonless transfer set)*
- *Instructions for Responding to a NOPF (EPA Handout)*
- *U.S. EPA Small Business Resource Information Sheet (EPA Handout)*
- *Solvent-Contaminated Wipes Final Rule Chart (EPA Handout)*
- *Recycling Electronics (Iowa Department of Natural Resources - IDNR Handout)*
- *Lead-Based Paint Activities (IDNR Handout)*
- *Excluded Solvent-Contaminated Wipe Rule (IDNR Handout)*
- *Battery Recycling/Disposal (IDNR Handout)*
- *Management of Fluorescent Lamps for Businesses (IDNR Handout)*
- *Incompatible Chemicals (IDNR Handout)*
- *Universal Wastes Including Aerosol Cans (IDNR Handout)*
- *TCLP Waste Determination Testing (IDNR Handout)*
- *Industry Sector Notebooks (EPA Handout)*
- *Environmental Compliance Assistance Centers (EPA Handout)*
- *e-Manifest Fact Sheet (EPA Handout)*
- *RCRA Online A Quick Reference Guide (EPA Handout)*
- *Requirements for Used Oil Management Standards (EPA Handout)*
- *Emergency Response Program (EPA Handout)*
- *Commercial Motor Vehicle Transportation System Security & Safety*
- *Security Awareness (EPA Handout)*
- *Chemical Facility Anti-Terrorism Standards (Homeland Security Handout)*
- *Iowa Life/Changing Iowa Department of Economic Development – Iowa Environmental Guide for Business*
- *How to Register for RCRAInfo Industry Application for Iowa Facilities*

Post inspection, on June 8, 2023, I sent an email to Mr. Storm and later attempted to contact him via phone on June 28, 2023, and June 29, 2023, to follow up on requested additional documents and information. On June 30, 2023, I visited with Mr. Bertness via phone regarding additional clarifications.

4.0 FINDINGS AND OBSERVATIONS

4.1 Facility Information and Operations

Tesla-Urbandale is a Tesla automotive leasing and service center. The facility is privately owned by Tesla and utilizes leased property. Mr. Storm stated that this Tesla facility is new to the Des Moines area and has only been open for about 18 months. They provide a Tesla vehicle show room floor for leasing and a service center at this location. The facility is open from 0800-1700 hours six days per week. The business employs ten staff. The service center serviced 825 vehicles first quarter of 2023. One of the service techs is appointed as an Environmental, Health, and Safety (EHS) captain and is responsible for providing hazardous waste handling

and safety training for the staff. They also have a regional EHS representative that visited the facility when they first opened and then visits semi-annually to help oversee their hazardous waste and safety programs. See Attachment #1 for the facility aerial map views. Photos 1-3 show an outside view of the facility as well as the Service Intake and Service Bays Shop Area.

4.2 RCRA Status

Tesla-Urbandale has not been inspected for RCRA compliance prior to this inspection. According to RCRAInfo, Tesla-Urbandale had not notified or obtained an EPA number. I verified the facility address and the site contact information with Mr. Storm and updated the EPA RCRA Notification Acknowledgement/Verification Report (see Attachment #6) to indicate the primary contact's name and contact information. At the time of this inspection, I determined Tesla-Urbandale to be a VSQG of D001 and F005 hazardous waste with less than 100 kg, or 220 lbs, of non-acute hazardous waste generated per month (note: they may be a non-generator of hazardous waste pending results of the waste determinations).

In addition, I determined Tesla-Urbandale to potentially be a small quantity handler of universal waste lithium batteries (both small low-voltage and large high-voltage batteries) pending the hazardous waste determinations. This facility does not perform typical oil changes, so the used oil it generates is not the type of used oil typical of internal combustion engines. The facility has full LED lighting, and I did not observe any spent fluorescent lamps. This facility does not have a paint booth or painting capabilities and does not use aerosol cans.

4.3 Facility Waste Streams and Management

Mr. Storm stated that the following waste streams are managed by Tesla-Urbandale:

Tesla High-Voltage Lithium Battery Packs - Tesla-Urbandale's service center generates on average about 15-20 of the large Tesla high-voltage battery packs per year. Mr. Bertness stated that the volume generated varies significantly and said that they did six high-voltage battery pack replacements the previous week and none the prior several months. These batteries weigh about 1200-1700 pounds (546-773 kg) each and cost between \$10,000-\$20,000 each depending on the model. Tesla warranties these battery packs for eight-ten years and only started selling electric vehicles a little over a decade ago, so most of the battery packs replaced were due to issues with the batteries, typically not maintaining a minimum of a 70% charge, which is rare until after 200,000 miles or ten years. The larger high-voltage battery packs power the electric drive motor(s). Tesla's have both one motor and two motor versions. Mr. Bertness stated that when they need a new replacement high-voltage battery pack, they request it from corporate Tesla via computer. When the new battery is scheduled to arrive, the service center has the owner of the Tesla vehicle bring in the vehicle for the battery pack swap. The old battery pack is unbolted and removed from under the vehicle and the new one installed. The old waste high-voltage battery pack is repacked into the wooden shipping crate that the new battery came in. The crate is labeled with the same UN3480 (Lithium-Ion Batteries) Department of Transportation (DOT) required warning labels. Mr. Storm stated that corporate Tesla arranges for the transportation, generally a third-party shipping company, to send the waste high-voltage battery pack back to Tesla for recycling. This is typically done the same or next business day.

During the visual inspection I observed no waste high-voltage battery packs in the facility. I did observe three new high-voltage batteries still in their wooden crates stored in the service bay area (see Photo 13).

In discussing the hazardous waste determination status of these batteries with Mr. Storm and Mr. Bertness, they were not clear if their facility had determined these batteries were hazardous waste, universal waste, or non-hazardous waste. A May 24, 2023, EPA memo states that when they are disposed, most lithium-ion batteries in use today are likely to be hazardous waste due to ignitability and reactivity (D001 and D003). The EPA also recommends that all lithium batteries be managed with care during use and at end of life and that businesses consider managing all of their used lithium batteries as hazardous waste under the federal “universal waste” regulations in Title 40 of the Code of Federal Regulations (CFR) Part 273.

I requested documents such as manifests, invoices, and/or bills of lading, to provide additional information on the transportation and off-site management of these battery packs. Mr. Storm informed me that he was attempting to locate these through Tesla’s internet portal and had phone calls in to his regional EHS staff, but apparently was unable to locate any additional documentation. Universal waste regulations do not require shipment using a hazardous waste manifest, but they do require that the waste be sent to a permitted hazardous waste disposal facility or a hazardous waste recycler as the final destination. Additionally, the facility appears to be a Small Quantity Handler of Universal Waste (SQHUW) but should its onsite accumulation of universal waste ever exceed 5000 kg (11,000 pounds) at one time, its status would change to a Large Quantity Handler of Universal Waste (LQHUW), which would mean it would need to meet the additional regulations for a LQHUW including the need to obtain an EPA ID number.

➤ **NOPF 1a: Failure to make a hazardous waste determination on the high-voltage lithium batteries as required in 40 CFR 262.11(a)**

Low-Voltage 12V Lithium Batteries - Tesla-Urbandale generates about six low-voltage 12V lithium batteries per month. Mr. Bertness explained that the smaller 12V batteries power the computers and accessory components of the vehicle. Mr. Bertness also explained that 12V lead-acid batteries were initially used in all pre-2022 models of Tesla vehicles and Tesla started using 12V lithium batteries in some 2022 models and all current models. Both the 12V lead-acid and 12V lithium batteries have the same functions in the vehicles. The lithium 12V batteries are so new they have just started seeing them in their service center in recent months. After servicing, the spent low-voltage 12V lithium batteries are stored next to the spent lead-acid batteries.

During the visual inspection I observed about ten 12V low-voltage lithium batteries (silver and smaller than the lead-acid batteries) stacked on top of and next to the lead-acid batteries in Photos 10-12. They all appeared to be free of damage or leaks.

Mr. Bertness stated they have only recently started generating the spent 12V low-voltage lithium batteries and have not disposed of any yet and are waiting for corporate Tesla to make a hazardous waste determination and advise them on the next steps to dispose of this waste. Assuming they are determined to be universal waste they may only accumulate the batteries for

up to one year and need to demonstrate a system of tracking the start of accumulation date or to avoid storage onsite for longer than 12 months. Since they just started accumulating these from post 2021 vehicles it appears that they most likely meet this requirement currently but will need to start tracking accumulation start dates.

- **NOPF 1b: Failure to make a hazardous waste determination on the low-voltage 12V lithium batteries as required in 40 CFR 262.11(a)**

Lead-Acid 12V Batteries - Tesla-Urbandale generates about ten low-voltage 12V lead-acid batteries per month, as part of the Tesla vehicle maintenance process discussed previously in the low-voltage 12V lithium batteries waste stream. As noted, Tesla started changing from the low-voltage 12V lead-acid batteries to the low-voltage 12V lithium batteries in post 2021 model vehicles. Mr. Storm stated that they store the spent batteries onsite and approximately quarterly take a batch of the batteries to O'Reilly's Auto Parts store to core swap so the batteries can be recycled. The spent lead-acid batteries are being managed under 40 CFR part 266, Subpart G.

During the visual inspection, I observed approximately 90 spent lead-acid 12V batteries, mostly AGM (absorbed glass mat non-spillable), stored on wooden pallets in the central service shop area. All of the batteries appeared to be in good condition with no sign of leakage.

Tesla Battery Heat Transfer Fluid - Tesla-Urbandale generates about 50 gallons per year of the Tesla battery heat transfer fluid as part of their Tesla vehicle maintenance process. Mr. Bertness stated that the battery heat transfer fluid is used to keep the battery pack at an optimal temperature and provides both cooling and warming of the battery as needed based on environmental conditions. He also stated that this fluid is considered a "lifetime fill" and does not require changing during the life of the vehicle unless there is a mechanical issue that requires them to drain the system for repairs. The SDS (see Attachment #9) states that the Tesla heat transfer fluid's primary constituent is 40-50% Ethanediol, more commonly referred to as Ethylene Glycol. It is manufactured by Valvoline and comes prediluted with 50% water. This fluid appears to analogous to common antifreeze used in internal combustion engine vehicles. Mr. Bertness stated that the tubing the fluid is circulated through is all aluminum or plastic and the chance of contamination with heavy metals or other contaminants is minimal. They have determined this waste to be non-hazardous due to product and process knowledge. The waste fluid is poured into a satellite 55-gallon drum located in the middle of the shop and once this drum is full it is moved to the Bulk Fluid Area (also the central accumulation area or CAA). Their plan is to use Veola North America LLC to transport the waste drum(s) for recycling. I was told that in the 18 months that the facility has been open, it just filled the first 55-gallon drum of this waste fluid and moved it to the Bulk Fluid Area a few weeks earlier and set up a new empty 55-gallon drum in the center of the shop. To date the facility has not actually used Veola to transport any waste fluids. Mr. Bertness stated that they use the same waste containers for both the waste Tesla battery heat transfer fluid and the waste Tesla electric drive fluid (EDF) discussed in the next waste stream.

During the visual inspection I observed the 55-gallon steel drum in the center of the shop used as a satellite accumulation area (SAA) for this Tesla battery heat transfer fluid as well as the Tesla electric drive fluid from the next waste stream. The two waste fluids are combined in the same

SAA and CAA drum. This SAA drum was empty and appeared to be in good condition and free of any obvious damage (see Photo 19). I observed a full 55-gallon black poly drum in the Bulk Fluid Area (see Photo 20). This drum appeared to be in good condition with no obvious damage or leaks.

Tesla Electric Drive Fluid (EDF) - Tesla-Urbandale generates about 20 gallons per year of the Tesla Electric Drive Fluid as part of their Tesla vehicle maintenance process. Mr. Bertness stated that the Electric Drive Fluid is used in conjunction with the electric motor and drive components. He also stated that this fluid is considered a “lifetime fill” and does not require changing during the life of the vehicle unless there is a mechanical issue that requires them to drain the system for repairs. He stated that they may also need to drain the system every 10-20 years for an inspection. The SDS (see Attachment #7) states that the Tesla Electric Drive Fluid’s primary constituent is 85-95% petroleum distillates or emulsified oil and 1-5% is mineral oil. This fluid appears to be analogous to common transmission fluid used in internal combustion engine vehicles. Mr. Bertness stated that the tubing the fluid is circulated through is all aluminum or plastic and the chance of contamination with heavy metals or other hazardous contaminants is minimal. They have determined this waste to be non-hazardous due to product and process knowledge. The waste fluid is poured into the same satellite 55-gallon drum located in the middle of the shop as the Tesla battery heat transfer fluid previous waste stream. Once this drum is full it is moved to the Bulk Fluid Area (also the container accumulation area or CAA). Their plan is to use Veola North America LLC to transport the waste drum(s) for recycling. I was told that in the 18 months that the service center has been open, it just filled the first 55-gallon drum of these waste fluids and moved it to the Bulk Fluid Area a few weeks earlier and set up a new empty 55-gallon drum in the center of the shop. At the time of the inspection the facility had not used Veola to transport any wastes out of this facility.

During the visual inspection I observed the 55-gallon steel drum in the center of the shop used as a satellite accumulation area (SAA) for this Tesla electric drive fluid as well as the Tesla battery heat transfer fluid from the previous waste stream. The two waste fluids are combined in the same SAA and CAA drum. This SAA drum was empty and appeared to be in good condition and free of any damage (see Photo 19). I observed a full 55-gallon black poly drum in the Bulk Fluid Area (see Photo 20). This drum appeared to be in good condition with no damage or leaks. A drum of new Tesla electric drive fluid (product) is shown in Photo 7.

Since this waste stream is essentially a synthetic oil, it appears to meet the classification of a used oil and the facility will need to comply with the used oil regulations in 40 CFR 279.22, which could minimally include adding the label of “Used Oil” on the SAA and CAA drums and maintaining storage drum integrity.

- **NOPF 2: Failure to label the waste Tesla Electric Drive Fluid drum(s) with the words “Used Oil” as required in 40 CFR 279.22(c)(1)**

EDF Oil Filters - Tesla-Urbandale generates about ten EDF oil filters per year as part of their Tesla vehicle maintenance process. As noted in the Tesla Electric Drive Fluid waste stream above, draining and replacing the fluid is rare and is not a routine part of Tesla maintenance, but when required the filter is replaced as well. Mr. Bertness stated that they consider them non-

hazardous due to product knowledge. Mr. Bertness stated that they puncture the filters and drain them into same SAA drum as the used Tesla Electric Drive Fluid. The waste filters are accumulated with the scrap metal, and some may end up in the general trash. Photo 20 shows one of the small waste EDF oil filters on top of a drum in the Bulk Fluid Area. **This may require additional EPA review.**

Cloth Rags – Tesla-Urbandale generates about 10-15 soiled cloth rags per month. Mr. Bertness stated that the cloth rags are used primarily in the cleaning and detailing of vehicles and cleaning tires and wheels in the tire mounting area. He stated that they are not used with any solvents. The rags are accumulated and washed in house as needed in the on-site washer and dryer located in the shop area (see Photo 16).

Disposable Paper Wipes - Tesla-Urbandale generates about ten disposable paper wipes per month during general maintenance operations. Mr. Bertness stated that they do not have any painting facilities and use very little, if any, oil, grease, or solvents. Occasionally, they may need to use a small amount of Brake Wash (brake cleaner solvent). Typically, this is done with a paper disposal wipe. Mr. Bertness stated that they are careful not to saturate the wipe and it is generally dry when it is disposed of in the general trash. Mr. Bertness was not sure if they had ever made a formal hazardous waste determination on this waste stream, but he indicated that they generally consider the “dry” soiled wipes to be non-hazardous.

During the visual inspection I observed a 55-gallon drum of new product labeled as: Brake Wash (non-chlorinated brake cleaner) made by Zip (see Photos 8-9) in the Bulk Fluid Area. The new product drum of brake cleaner appeared to be full, or mostly full, after being in use for 18 months. I also observed one blue plastic 50-gallon trash bin with a label indicating “Aerosol Waste,” which appeared to be empty. Service tech, Dustin Cakerice, stated that they do not use any aerosol cans, but they do use a 32-oz refillable spray bottle (pressurized with compressed air) of the brake cleaner solvent (see Photo 15). I also observed two red metal 10-gallon step cans, both appeared empty (see Photo 10). Mr. Bertness stated that they do not use the red step cans.

I requested the SDS for the brake cleaner solvent the facility uses. Mr. Storm provided a SDS for Brakleen® brake cleaner (see Attachment #8). In comparing the SDS with the label on the new product drum, it appears that the SDS is for a different product. The SDS states that it is Brakleen® Brake Parts Cleaner–Non-Chlorinated, made by CRC, not Zip. The SDS provided by Mr. Storm for the CRC Brakleen® lists the primary constituents as: 40-50% Methanol, 10-20% Toluene, 5-15% Acetone, and 5-10% Heptane, and indicates it highly flammable with a flashpoint of 0 deg F, which would make it a D001 ignitable waste code. These constituents are also listed as F003 and F005 waste codes. Additionally, I looked up the SDS for Zip’s brand Brake Wash product and the primary constituents were significantly different: 70-90% Naphtha (petroleum) hydrotreated, 5-10% Propan-2-ol (isopropyl alcohol), 1-3% Heptane, and indicates it too is highly flammable with a flashpoint of -18 deg C, again a D001 waste code, but I did not see the constituents listed on F003 or F005. I did note an important warning label on the Zip product drum: *“As of February 1, 2016, this product, due to its volatile organic compound content, is prohibited for sale or use, in the following [19] states...”* (see Photo 8). This list of states that this product is prohibited in did not include Iowa, but this emphasizes the importance of staff training. They may need to comply with the Solvent-Contaminated Wipes Final Rule

under 40 CFR 261.4(a)(26). The facility must make a hazardous waste determination on the disposable paper wipes.

➤ **NOPF 1c: Failure to make a hazardous waste determination on the disposable Paper Wipes as required in 40 CFR 262.11(a)**

Tires - Tesla-Urbandale generates about 40 nonhazardous spent tires per month due to regular vehicle maintenance. Mr. Bertness stated that the spent tires are stored out in the backlot. Periodically facility personnel take the waste tires to local Lakin Tires for recycling. During the visual inspection, I observed about 60-70 waste tires outside on the east side of the building near Trash Island (see Photo 5).

Scrap Metal - Tesla-Urbandale generates nonhazardous scrap metal from their maintenance repair processes, which includes replacing damaged auto parts. Mr. Bertness stated that the scrap metal is stored temporarily in a box in the Shop Area (see Photo 14) and outside in the backlot (see Photo 5). Mr. Storm stated that Tesla facilities management coordinates transport to Alter Metal Recycling in Des Moines, Iowa for recycling.

Electronic Waste - Tesla-Urbandale generates electronic waste from maintenance operations. This waste is determined to be nonhazardous based on product and process knowledge. It is also not mercury-containing universal waste. I did not ask details about the amount or disposition of this waste, but it was my understanding that the facility has been accumulating this e-waste for later recycling but has not actually had to dispose of any of it yet. During the visual inspection I observed two yellow (with black lids) 40-gallon containers in the mid-Service Bay Shop Area. Both containers were overflowing with waste electronic and plastic parts (see Photo 10 and 12).

Wood Pallets - Tesla-Urbandale annually generates about 100 nonhazardous wood pallets from maintenance operations. On site, the wood pallets are stored in the backlot (see Photo 5). Mr. Storm stated that Tesla facilities management coordinates transport to PRN Recycling for recycling.

Cardboard Recycling - Tesla-Urbandale generates nonhazardous cardboard from maintenance and facility operations. It estimates about ½ of an eight cubic foot dumpster per week. The waste cardboard is transported by Waste Connections of Iowa (see Photo 4) for recycling. During the visual inspection I observed one blue eight cubic yard dumpster in the east backlot about half full.

General Trash - Tesla-Urbandale generates nonhazardous general trash from maintenance and business operations. It estimates about ½ of an eight cubic foot dumpster per week. The waste trash is transported by Waste Connections of Iowa (see Photo 5) to the local landfill. During the visual inspection I observed one blue eight-cubic yard dumpster in the east backlot about half full.

During the visual inspection, I observed two 40-gallon gray plastic containers with black lids, one in the mid-Service Bay Shop Area and one in the Service Intake Area (see Photos 10, 17,

18). Both containers had a laminated sign/label duct taped to them that stated: “Contaminated Debris”. The label indicated suggestions such as:

- Non-empty containers of hazardous materials
- Materials contaminated with:
 - Oil
 - Antifreeze
 - Paint
 - Solvents
 - Chemical caulking
 - Sealant
 - Disinfectant containers

The large label also has a smaller yellow/red “Hazardous Waste” label that indicates:

- Contents: Contaminated debris
- Accumulation Start Date: Emptied Daily
- Flammable:- Yes
- Toxic:- Yes

The signage also indicates: “This container is emptied daily”. The container in the center of the Service Shop appeared approximately 1/2 full (see Photo 10). The container in the Service Intake area was about ¾ full (see Photos 17-18). The contents of the two “contaminated debris” containers appeared to be mostly general trash. I observed several PPE disposable gloves, a disposable paper wipe, paper, cardboard boxes, at least two soiled cabin air filters, empty plastic drink bottles, paper coffee cups, and wrappers (see Photo 18 for container interior view). Mr. Bertness explained that the two containers with the “contaminated debris” signage just showed up one day and since they do not really generate most of the items on the list, they just use these two containers as general trash cans. He also stated that they are not emptied daily as indicated on the label – they are only emptied as needed into the general trash bin in the east backlot. This appears to be potentially confusing to staff to have general trash containers labeled with hazardous waste labels. The facility must make a hazardous waste determination on the general trash.

- **NOPF 1d: Failure to make a hazardous waste determination on the general trash as required in 40 CFR 262.11(a)**

4.4 Other Areas Reviewed

Outside Facility Perimeter - I conducted a limited inspection of the outside perimeter of the facility and observed no hazardous waste storage tanks and containers except as noted above. See the aerial and map views in Attachment #1.

Preparedness and Prevention - Mr. Storm stated that Tesla-Urbandale has a full-time professional regional Environmental, Health and Safety (EHS) staff that visits their facility semi-annually. The facility has numerous fire extinguishers and a facility fire suppression system. I observed adequate spill response equipment near the Bulk Fluids Area (see Photo 6). They are not required to have a Contingency Plan, but Mr. Storm stated that they do have a companywide emergency plan they can access through their internet portal.

Personnel Training - As a VSQG or non-generator, documented staff hazardous waste training is not required, but a small quantity handler of universal waste must provide training and information for all employees who handle or have responsibility for managing universal waste that must describe proper handling and emergency procedures appropriate to the type(s) of universal waste handled at the facility. Mr. Storm stated that Tesla-Urbandale does provide basic hazardous waste and universal waste handling training via Tesla online training modules. I ask Mr. Storm for an outline of any training specific to universal waste handling, but he was unable to locate it.

5.0 SUMMARY OF FINDINGS

- **NOPF 1a:** Failure to make a hazardous waste determination on the high-voltage lithium batteries as required in 40 CFR 262.11(a)
- **NOPF 1b:** Failure to make a hazardous waste determination on the low-voltage 12V lithium batteries as required in 40 CFR 262.11(a)
- **NOPF 1c:** Failure to make a hazardous waste determination on the disposable Paper Wipes as required in 40 CFR 262.11(a)
- **NOPF 1d:** Failure to make a hazardous waste determination on the general trash as required in 40 CFR 262.11(a)
- **NOPF 2:** Failure to label the waste Tesla Electric Drive Fluid drum(s) with the words “Used Oil as required in 40 CFR 279.22(c)(1)

Other than the items specifically noted in this narrative, I observed no additional issues or potential findings. However, further EPA review may change or add to my findings.

MARK HOLCOMB
(Affiliate)

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Date: 2023.07.13 08:48:07
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Mark Holcomb
Civil Investigator, SEE
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Amber Whisnant
RCRA Section Chief, ECAD/Chemical Branch

Attachments:

- 1) Facility Aerial, Map (3 pages)
- 2) Photo Log (24 photos and 12 pages)
- 3) Receipt for Documents (1 page)

- 4) Confidentiality Notice (1 page)
- 5) NOPF (1 page)
- 6) EPA RCRA Notification Acknowledgement/Verification Report (1 page)
- 7) SDS- Tesla Electric Drive Fluid (7 pages)
- 8) SDS- Brakleen Brake Parts Cleaner (13 pages)
- 9) SDS- Tesla Battery Heat Transfer Fluid (22 pages)