

INSPECTION REPORT

Inspection Entry Date/Time	10/23/2024 09:00 AM (CT)	Announced: No	
Inspection Exit Date/Time	10/24/2024 04:25 PM (CT)	Access: Granted	
Regulatory Program	Resource Conservation and Recovery Act (RCRA)		
Type of Inspection	Compliance Evaluation Inspection (CEI)		
Facility or Site Name	Ecovyst Catalyst Technologies LLC		
Facility/Site Identifier	KSD000203711		
Facility/Site Physical Address	1700 Kansas Ave		
City, State, Zip Code	Kansas City, KS 66105		
County/Borough	Wyandotte		
Generator Status	Large Quantity Generator (LQG)		
NAICS	32518		
Type of Operation	Industrial Catalyst Manufacturer		
Geographic Coordinates	39.08742, -94.64768		
Mailing Address/Secondary Address			
City, State, Zip Code			
Permit Number (If Applicable)	Not Applicable		
Lead Inspector:	AMY		
Amy Thompson	THOMPSON	Digitally signed by AMY THOMPSON Date: 2024.11.15 15:21:30 -06'00'	[Date]
	EPA REGION 7	Thompson.Amy@epa.gov	(913) 551-7384
Supervisor Review:	AMBER WHISNANT		
Amber Whisnant	[Signature]	Digitally signed by AMBER WHISNANT Date: 2024.12.20 13:52:29 -06'00'	[Date]
	EPA REGION 7	whisnant.amber@epa.gov	

SECTION I – INTRODUCTION

Site Entry and Purpose of the Inspection

Type of inspection: CEI

At the request of the Enforcement Compliance and Assurance Division, I conducted an unannounced RCRA CEI at Ecovyst Catalyst Technologies (the “Site” or “Facility”), located at 1700 Kansas Avenue in Kansas City, Kansas 66105, at 9:00 AM (CT) on October 23, 2024, accompanied by Donald Melton. I presented credentials to and informed Ryan Parks, Mike Wey, and Felicia Najera-Paxton that this was an EPA Region 7 inspection to determine compliance with the RCRA. The CEI was conducted under the authority of Section 3007(a) of RCRA, as amended. I collected the information and data necessary to determine compliance with the applicable regulatory and statutory requirements. The inspection report and attachments present the results of the CEI. In addition, information gathered prior or subsequent to the Inspection from a review of USEPA, State, and public

records may be included in this report. The CEI consisted of a discussion of facility operations, waste generation, and waste management; a review of waste management records; and a visual inspection of waste generation and management areas. Document photocopies and photographs were collected as inspection documentation (Appendix 1). A total of 21 photographs were collected and a photolog was prepared (Appendix 1). I followed the inspection procedures discussed in the RCRA CEI Standard Operating Procedure (No. 2321.1E), unless noted differently. Any authorized Federal regulatory citations noted in this report are adopted by reference in the authorized Kansas regulations. A drive-by of the facility was conducted prior to entering the building. No areas of concern were noted. I entered the facility's security building and introduced myself and Donald Melton as EPA inspectors to conduct a RCRA compliance inspection and requested to see Ryan Parks who is listed as the site contact. Ryan Parks introduced himself along with Mike Wey and Felicia Najera-Paxton and I provided my credentials to them and discussed the reason and general procedures of the inspection. The facility was last inspected for RCRA compliance on May 14, 2024, by Kansas Department of Health and Environment (KDHE). No violations were cited at that inspection.

Attendees

Title/Organization	Name	Phone	Email	Opening Conf.	Closing Conf.
Lead Inspector/EPA REGION 7	Amy Thompson	(913) 551-7384	Thompson.Amy@epa.gov	Yes	Yes
Case Officer/EPA Region 7	Donald Melton	913-551-5021	melton.donald@epa.gov	Yes	Yes
Environmental Specialist /Ecovyst Catalyst Technologies LLC	Felicia Najera-Paxton			Yes	Yes
Environmental Consultant/MW Environmental Solutions LLC	Mike Wey		mike.vey@ecovyst.com	Yes	Yes
Site Manager/Ecovyst Catalyst Technologies LLC	Ryan Parks			Yes	Yes
Operator/Ecovyst Catalyst Technologies LLC	Carl McMackin			No	No
Lab Manager/Ecovyst Catalyst Technologies LLC	Paul Schoenecker			No	No

Opening Conference

I explained the purpose and procedures of the inspection and presented Mike Wey, Ryan Parks, and Felicia Najera-Paxton with a copy of RCRA Section 3007(a), which provides inspection authority. I explained my need to collect accurate information and presented a copy of Title 18 U.S. Code, Sections 1001 and 1002 regarding false statements and documents. I discussed their confidentiality rights and informed the facility inspection party that a Confidentiality Notice would be provided at the end of the inspection to make a confidentiality claim, if desired.

I asked Mr. Parks to review the EPA RCRA Handler Information Report (Appendix 2 - Attachment 2), which I provided during the inspection. According to the EPA RCRA Handler Information Report, Ecovyst Catalyst Technologies operates as a LQG of characteristic (D001, D002, D007, and D035) and listed hazardous wastes (F003). He indicated that there were no changes to be made to the verification report. Based on my review of their monthly hazardous waste generation rate and manifest data, the facility generates greater than 2,200 pounds of hazardous waste per month and is therefore operating as a LQG. See Process Description Section for discussion of their monthly hazardous waste generation.

Facility/Site Information

Number of employees	141
Length of Facility at Location	1915
Operating Hours	24/7 four operating shifts, two shifts per day
Safety Training Provided to Inspector(s)?	Yes
Size of Facility	25 acres
What type of generator facility notified?	LQG
What type of generator facility verified as?	LQG
Weather Conditions	Sunny, warm

Process Description

Ecovyst operates a chemical manufacturing facility. They produce and package various types of silica gel catalysts and zeolites. Two entities occupy the facility; Ecovyst Catalyst Technologies and Zeolyst International, although Ecovyst is the primary operator. Zeolyst International is a joint venture with Ecovyst Catalyst Technologies and Shell Criterion. Ecovyst operates out of building 25 and the remainder of the facility is occupied by Zeolyst International. Since the last inspection buildings 38 and 39 were added and Tank 310 was decommissioned. A site diagram is included in Appendix 2 - Attachment 1.

There are four hazardous waste tanks on site. The wastes generated in the tanks vary depending on the raw materials used in the process; but are usually ignitable, corrosive, or toxic for chromium. They are in the following buildings:

- Building 25, Hazardous Waste Tank (T-309)
- Building 21, Hazardous Waste Tank (T-2042)
- Building 28, Hazardous Waste Tanks (T-8042 and T-8442)

Along the northeastern exterior of the ICD plant there are two fire resistant sheds used to accumulate hazardous waste. One shed is used for flammable wastes and the other is used for solids and non-flammable wastes. The sheds are inspected weekly.

I conducted a visual inspection of all areas of the plant including buildings 19, 21 ,22, 25, 28, 30A, 33, 38, and 39.

The following description (in *italics*) is from Ecovyst's contingency plan except solvent information was removed due to business confidentiality concerns, but is available upon request from Ecovyst:

WASTES GENERATED

The site generates hazardous waste in the following manufacturing units:

- *Silica Catalyst Plant*
- *Zeolyst Plant*
- *Lab (Satellite accumulation of small quantities from lab samples)*

The Silica Catalyst plant manufactures silica catalysts used in plastics manufacturing by the following process: hydrogel is washed in a tank with methanol, water and solvent are drained off to the distillation system, the solvent laden gel is dried in a dryer, the dried gel is milled and screened, the gel is coated with a chrome +3 solvent solution and dried, then the material is packaged.

The Silica Catalyst wastes are accumulated in the following areas: Unusable solvent is accumulated from the distillation column. Chrome contaminated silica catalyst is accumulated in the coating prep room of the Silica Catalyst plant from the baghouse.

Hazardous wastes generated in the Silica Catalyst plant are stored on-site under a shed roof on the south side of the Silica Catalyst plant. This storage area is a designated 90- day hazardous waste storage area. Other 90-Day storage areas near the Silica Catalyst plant include the chrome catalyst drum located in the prep room. These wastes can be characterized as follows:

WASTE NAME	VOLUME ONSITE	HANDLING METHOD	EMERGENCY GUIDE #	EPA CODE
Unusable Solvent	0-10,000 Gal	Drum / Tote/Tank	131	D001 F003
Chrome Contaminated Silica Catalyst	0-90 Dr	Drum	171	D007

The Zeolyst unit manufactures Sodium Aluminosilicate (Zeolite). This is a batch plant. Processes used in the plant include mixing, crystallization in an autoclave, filtration, ion exchange, flash drying, and calcination. Products are packaged in super sacks.

Hazardous wastes are generated when flammable or listed materials are used in the synthesis of the zeolite. Liquids flashed from the autoclave or washed from the press could be flammable or contain small amounts or toxic listed materials.

The Zeolyst unit accumulates hazardous waste from truck loading/unloading and samples in a drum located in a shed to the southeast of the Zeolyst unit that serves as a satellite accumulation area. A satellite accumulation drum is also present during some production runs in the autoclave room on the first floor. Full drums are relocated to the 90-day storage area in the Silica Catalyst plant. Flash condensate is accumulated and stored in T-2042, located in the autoclave room. Mother liquor from the filter presses containing toxic hazardous wastes are accumulated in T-2162 and T-2163.

Hazardous waste is also generated in building 28 of Zeolyst. A satellite accumulation drum is present during

certain production runs in the autoclave room on the first floor. Full drums are relocated to the 90 day storage area in the Silica Catalyst Plant. Flash condensate from the autoclaves is accumulated and stored in T-8442 and T-8042 located in Building 28.

WASTE NAME	VOLUME ONSITE	HANDLING METHOD	EMERGENCY GUIDE #	EPA CODE
Flammable Template Solution	0-20,000 Gal	Drum & Tank	132	D001 D002 D038
Aqueous Solution	0-8,000 Gal	Tank and Container	171	D038
Aqueous Solution	0-8,000 Gal	Tank and container	154	D002
Template Containing Materials	0-5 Dr	Drum	132	D001 D002 D038

The facility maintains a special waste disposal authorization for amorphous sodium silicate along with other compatible waste chemicals. There are red chemical dumpsters throughout the facility for this waste stream.

Further discussion on waste streams is available in the waste stream table included in Appendix 2 - Attachment 3. Process information is discussed in further detail in the building descriptions.

Building(s)

Building/Area/Sub-area	Process Description	Area of Concern
Building 19	Filtration and drying operations are conducted in this building. No hazardous waste is generated there. There are process tanks, two boilers, and two filter presses in this building. Waste water and product spills are generated here.	No
Building 21	Building 21 manufactures zeolites. The processes used in building 21 include mixing, crystallization in an autoclave, filtration, ion exchange, flash drying, and calcination. The resulting products are dry crystalline powders. The manufacturing process begins with the introduction of the template and other product specific materials into the autoclaves. The materials are heated and mixed over a period of hours to produce the desired zeolite crystals. At the completion of this step, the pressure is released and the unreacted template, water, etc., flash evaporates, and is conveyed through a closed vent system to condensers. The condensate is collected by gravity flow in a receiver tank. The condensate may be reused in the process by being pumped to a raw material tank or determined to be a waste and is drained by	Yes

	gravity to a hazardous waste accumulation tank. Ecovyst has determined through process knowledge that this condensate is a hazardous waste when a raw material is ignitable, corrosive, or contains toxicity characteristic constituents. At other times depending on the raw materials the waste is not a hazardous waste based upon process knowledge. The hazardous waste accumulation tank, T-2042, is in the autoclave room of Building 21. The tank is approximately a 5,000-gallon vertical steel tank. The autoclave room provides secondary containment for the tank. The hazardous wastes described as Flammable Template Solution contains more than 500 ppm volatile organic concentration by process knowledge (based upon ignitability) and make T-2042 subject to the air emission requirements of 40 CFR Part 265, Subpart CC and BB.	
Building 22	Building 22 is a warehouse used to store raw materials. No hazardous waste is generated there.	No
Building 25	Building 25 is also referred to as the Silica Catalyst Plant and is the only building entirely occupied by Ecovyst Catalyst Technologies. There is a 90-day hazardous waste storage area in the prep room, which is captures chrome dust. There is one 9,000-gallon double wall horizontal steel hazardous waste tank (T-309) on the west exterior side of the building, in a tank farm with various process tanks.	Yes
Coater 2	Hazardous waste solvent is generated here.	Yes
Coating Prep Room	There is one hazardous waste accumulation container capturing chrome dust in the coating prep room.	No
Building 28	The primary process occurring in this building is crystallization, where raw materials are flashed through a condenser. The process results in a nonhazardous aqueous waste stream which is discharged to the Publicly Owned Treatment Works. Flammable and corrosive material may be a waste stream from this process. Whether or not the waste generated is hazardous depends on the raw materials used in the crystallization process and the amine type structures which are formed. There are two tanks used in this process which may contain hazardous wastes; T-8042 and T-8442.	No
Building 30A	Building 30A is a warehouse used for maintenance storage, such as spare parts. The facility also uses this building for universal waste storage, including batteries, lamps, and mercury containing equipment. Aerosol cans are also kept in this	Yes

	building.	
Building 31	The primary processes occurring in this building are drying and calcination. There was a spray dryer present here, which has not been in operation for 3-5 years that previously handled flammable materials. As a result, hazardous waste is no longer generated here. At the time of the inspection this building was used for product storage and the primary location at the facility for used oil storage and accumulation.	Yes
Building 33	Building 33 is the laboratory for the facility. The laboratory conducts dry and wet chemistry to determine particle size. In the Laboratory, there is a 2-gallon day-accumulation in a fume hood. The waste is transferred to a 55-gallon satellite accumulation container located just outside the lab in an electrically classified room. Additionally, the facility has a 55-gallon satellite accumulation container designated for samples from the manufacturing process that exhibits the toxicity characteristic for chromium (D007). When full, the container is transferred to the hazardous waste container storage area under a shed roof on the south side of the Silica Catalyst plant. There are two ICP Units each had a 5-gallon container for water waste containing 1% hydrochloric acid. The waste is transferred to the facility's wastewater treatment process. Occasionally, lab-pack wastes are generated from expired or off specification lab chemicals.	Yes
Lab Retain Storage Room	Retain samples generated from the laboratory are stored here.	Yes
Building 38	The primary processes occurring in this building are drying and calcination. There is some product and raw material storage in this building. No hazardous waste is generated in this building	No
Building 39	The primary processes occurring in this building are filtration and drying. There is an outdoor tank farm for raw material storage. Inside the building there is intermediate product storage and product storage. There are no hazardous wastes generated in this building. Building 39 is new and was constructed in 2021.	No
ICD Plant	The ICD Plant is the original manufacturing plant at the site, although it has been largely abandoned since 2011. There are two raw material storage tanks inside the building. Along the west exterior wall of the ICD plant there are two 55-gallon satellite accumulation containers of hazardous	No

	waste containing ignitable liquid drippings (D001, D002) from loading and unloading the tanker truck and associated solids and PPE (D002). The satellite accumulation containers are kept in an locked cabinet controlled by the operators in this area.	
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SECTION II – OBSERVATIONS

Building: Building 21			
Observation #:	Date:	Contains AOC:	Contains CBI:
AT4-OB-001	10/23/2024	Yes	No
In building 21, I observed one unmarked 5-gallon container holding approximately 2-gallons of used oil that was not marked with the words “Used Oil.” The container was staged next to one 55-gallon container of used oil which was appropriately marked. See photo 1. Notice of Preliminary Findings (NOPF) 12a: 40 CFR 279.22(c) - Failure to mark containers of used oil with the words “Used Oil” a) one 5-gallon container in building 21.			
Photo(s) 1. IMG-2024102311084184186722.jpg			

Building: Building 25/Coating Prep Room			
Observation #:	Date:	Contains AOC:	Contains CBI:
AT4-OB-002	10/23/2024	No	No
The inspection party went into the coating prep room on the first floor of building 25 to view the hazardous waste accumulation container collecting chrome baghouse dust through a chute. I observed what appeared to be green dust on the floor. It appeared that it may be possible that the lighting in the area caused the dust to appear green, however I did not observe any lights with a green color. I asked Mr. Parks what the dust was. Mr. Parks stated that he believed the dust was chromium contaminated dust, that would be managed as a hazardous waste and some of the dust was non-hazardous silica dust. I asked if it was possible that the lighting in the room caused the dust to appear green. Mr. Parks repeated that he thought the dust was chrome dust. I asked how the facility prevented the chrome dust from migrating outside of the room. Mr. Parks stated that the employees working in the area would use a vacuum pump to remove the dust and place it into the hazardous waste accumulation container in the coating prep room. Carl McMackin, an operator in the area, joined the inspection party to answer questions about the spilled chrome dust. Mr. McMackin confirmed that the dust was contaminated with chromium. He explained that the chrome chute had been cleaned the preceding night and that some dust had fallen from the chute onto the ground. Mr. McMackin stated that it was not routine for there to be chrome dust on the floor and that when the spills occurred, they were usually cleaned within one day. A hot work permit was required to bring electronic devices into the coating prep room. I obtained the work permit to bring in my iPad to document the spilled chrome dust. See photos 3-5. NOPF 5: 40 CFR 265.31 - Failure to minimize the possibility of a release of hazardous waste - chrome dust/contamination in building 25.			
Photo(s) 1. IMG-2024102314483948392096370.jpg 2. IMG-202410231449074971986745.jpg 3. IMG-202410231450035032396572.jpg			

Building: Building 25/Coater 2

Observation #: AT4-OB-003 **Date:** 10/23/2024 **Contains AOC:** Yes **Contains CBI:** No

In the coater 2 room on the second floor of building 25, I observed one open unmarked 5-gallon container holding less than one gallon of process material containing chromium from a knockout pot vent which was marked "V-6413." I asked Mr. Parks if the contents of the container could be reused within the process or if they would be disposed. Mr. Parks stated that the contents of the container could not be reused in the process, but that it was not intended to be a waste. I asked if it would be managed as a waste. Mr. Parks indicated that it would be managed with the rest of the hazardous waste containing chromium. I explained to Mr. Parks that containers of hazardous waste must be marked with the words "Hazardous Waste" and must be kept closed.

NOPF 2: K.A.R. 28-31-262(c)(7) - Failure to mark one satellite accumulation container of hazardous waste (5-gallon container in building 25) with the words "Hazardous Waste."

NOPF 4: 40 CFR 265.173(a) - Failure to close one satellite accumulation container of hazardous waste (container described in NOPF 2).

In the coater 2 room, I observed green chromium staining from a spill of hazardous waste chromium on a gear box. There appeared to be less than 5-gallons in total that had spilled. Mr. Wey told me that this was a spill that the facility had cleaned up and documented but could not remove the stain from the gear box. I did not obtain photographs of this area because a hot work permit was required to bring electronics into the area.

On a balcony outside coater 2 room, I observed a pipe coming out of the building with green splatter stains emanating from the pipe, covering an area approximately 2 feet by 2 feet. See photos 6-7. I asked Mr. Wey and Mr. Parks what the substance was. Mr. Parks and Mr. Wey followed the pipe back inside the facility. The pipe was connected to the knockout pot which was marked "V-6413." Mr. Wey stated that this substance contained chromium but was not corrosive. Mr. Wey stated that the substance was not intended to be released and was not intended to be a waste. I did not receive further clarification about the release.

On the second floor of building 25, I observed less than one cup of green dust on the floor, in an area that did not permit electronic devices. Mr. Parks confirmed that the dust contained chromium and could not be reused once it was on the floor. While walking through the facility Donald Melton and I observed approximately 5-10 similar piles of green chromium dust on the floor. I did not observe any mechanisms at the facility to prevent the chrome dust from migrating outside of building 25. All the areas I observed were inside of rooms requiring a hot work permit to take photographs. As the piles were randomly spread out over a large area, and to respect the time of the facility staff, I did not obtain a work permit to collect photographs of the chrome dust. I made a verbal note of how pervasive the piles of chrome dust were to the inspection party.

The facility required wearing gloves as personal protective equipment throughout the facility. After walking through building 25, Donald Melton and I noticed that the off-white gloves we had been provided by the facility had green stains present, consistent with the chrome dust we had observed in building 25. I showed the inspection party the stains on the gloves. Mr. Parks and Mr. Wey stated that they believed that the green that Donald and I observed was yellow paint from the handrailing in building 25. Mr. Parks showed me his gloves, which were clearly stained yellow, consistent with the yellow paint from the handrailing. I did not agree that the green stains on my gloves resembled the yellow from the handrailing. Mr. Wey and Mr. Parks maintained that they believed it was yellow paint from the handrailing. I expressed concern that chrome dust was possibly present throughout building 25 in a thin layer on many of the surfaces including handrails. White silica dust was present on the floor and on many surfaces throughout building 25.

NOPF 5: 40 CFR 265.31 - Failure to minimize the possibility of a release of hazardous waste - chrome dust/contamination in building 25.

Photo(s)

1. [IMG-2024102315395039501578027.jpg](#)
2. [IMG-202410231540004003060178.jpg](#)

Building: Building 31

Observation #: AT4-OB-004 **Date:** 10/23/2024 **Contains AOC:** Yes **Contains CBI:** No

In building 31, I observed two unmarked 5-gallon containers holding approximately 2-gallons of used oil that were not marked with the words "Used Oil." The containers were staged next to one used oil tank which was marked with the words "Used Oil." See photos 8-9.

Throughout the facility, I observed between 10-20 unmarked containers of various sizes which were empty, but which had used oil residue on the bottom and sides of the containers. As the containers were empty, I did not include these as a finding. However, I explained to the inspection party during the exit briefing that all containers of used oil regardless of their size, must be marked with the words "Used Oil." I expressed a general concern with the management of used oil at the facility.

NOPF 12b: 40 CFR 279.22(c) - Failure to mark containers of used oil with the words "Used Oil" b) two 5-gallon containers in building 31.

Photo(s)

1. [IMG-202410231557015713096082.jpg](#)
2. [IMG-202410231557095794076829.jpg](#)

Building: Building 33/Lab retain storage room

Observation #: AT4-OB-005 **Date:** 10/23/2024 **Contains AOC:** Yes **Contains CBI:** No

On October 23, 2024, the inspection party entered building 33. In building 33 in the laboratory retain storage room, I observed one unmarked box containing 38 containers of various laboratory chemicals. I asked Mr. Wey what the containers of laboratory chemicals were. Mr. Wey summoned an employee in the laboratory who explained to the inspection party that the containers were expired chemical standards that had been removed for disposal during a routine audit. See photo 10. Mr. Wey explained that the containers would be moved to another part of the facility for disposal. A contractor would then sort the waste chemicals into appropriate lab packs and the wastes would either be managed as hazardous or nonhazardous waste at that time. Mr. Wey picked up one of the containers and noted that it was a corrosive waste, so at least one of the expired chemical standards would be managed as hazardous waste. He explained that some of the standards would be hazardous waste, and some would be nonhazardous waste. On October 24, 2024, I requested that the inspection party return to building 33 to gather more information about the expired lab standards. I spoke to Paul Schoenecker, Lab Manager, regarding the expired standards. Mr. Schoenecker stated that the audit occurred on September 17, 2024, which is when the facility determined that the chemical standards were waste. I told Mr. Wey that the facility needed a clear process to ensure that a hazardous waste determination was conducted on expired lab standards in a timely manner. I took photographs of each of the waste chemicals in the box. The waste chemical standards present are discussed in more detail in the photo descriptions. See photos 12-17.

NOPF 1: 40 CFR 262.11 - Failure to determine if a waste is hazardous (38 <1-gallon containers of expired chemical standards in building 33).

Photo(s)

1. [IMG-2024102316114911492276795.jpg](#)
2. [IMG-2024102316193819383674318.jpg](#)
3. [IMG-2024102409413641362274969.jpg](#)
4. [IMG-2024102409421942192312565.jpg](#)
5. [IMG-2024102409425942592126843.jpg](#)
6. [IMG-2024102409434743472206397.jpg](#)
7. [IMG-2024102409441644162125427.jpg](#)
8. [IMG-2024102409444244422338245.jpg](#)

Building: Building 30A

Observation #: AT4-OB-006 **Date:** 10/24/2024 **Contains AOC:** Yes **Contains CBI:** No

Building 30A was predominantly used for equipment storage, although universal waste is stored in the southeast corner of the building. There were universal waste lamps, mercury containing equipment, and batteries of various types.

There was one 5-gallon container holding one piece of mercury containing equipment that was marked "Mercury Switches Universal Waste" and an accumulation start date of "12/5/2022." I explained to Mr. Wey that the regulations state that universal waste mercury containing equipment must be marked "Universal Waste Mercury Containing Equipment," "Waste Mercury Containing Equipment," or "Used Mercury Containing Equipment." I explained to Mr. Wey that universal waste must be kept on site no longer than one year. Mr. Wey was unaware of this requirement. Mr. Wey was unfamiliar with the specific verbiage required to mark containers of universal waste. See photo 18.

Universal waste batteries were stored in containers separated by the type of battery (i.e. lithium-ion batteries were in a separate container than Ni-Cad batteries.) There was one 5-gallon container of alkaline batteries marked "Universal Waste Alkaline Batteries" with an accumulation start date of 5/6/24, one 5-gallon container of Ni-Cad batteries marked "Used Ni-Cad Batteries started 5/6/24" and one 5-gallon container of lithium-ion batteries marked "Universal Waste Used lithium-ion batteries" with an accumulation start date of 3/4/24 and one container of lead acid batteries marked "Universal Waste Lead Acid Batteries" with an accumulation start date of 3/28/24. See photos 20-21.

There was one container marked "Universal Waste Spent HPS, Fluorescent compact, Metal Halide Bulbs" which held one halide bulb. The container was marked with an accumulation start date of "8/1/22" which had been marked through. I asked Mr. Wey if he considered the date marked on the container to be accurate, or if he considered the container to be undated. Mr. Wey replied that he considered the container to be undated since the date was marked through. I explained to Mr. Wey that the accumulation start date of universal waste must be tracked by some means by the facility. See photo 19.

NOPF 9: 40 CFR 273.14(d) - Failure to mark universal waste mercury containing equipment with the words "Universal Waste Mercury Containing Equipment," "Waste Mercury Containing Equipment," or "Used Mercury Containing Equipment."

NOPF 11: 40 CFR 273.15(a) - Accumulation of universal waste mercury containing equipment longer than one year.

NOPF 10: 40 CFR 273.15(c) - Failure to track the accumulation time of universal waste lamps.

Photo(s)

1. [IMG-202410241005565562065047.jpg](#)
2. [IMG-202410241006166161958277.jpg](#)
3. [IMG-20241024100909991278196.jpg](#)
4. [IMG-202410241009279271250089.jpg](#)

SECTION III – RECORDS REVIEW

Record: Manifests		AOC: Yes
Ref #: AT4-RR-001	Reviewed By: Amy Thompson	Reviewed Date: 10/24/2024
Donald Melton reviewed all uniform hazardous waste manifests dating back to three years prior to the inspection start date. Mr. Melton showed me one uniform hazardous waste manifest which was missing the EPA ID number of the designated facility. The number had been written in pen on the initial manifest, but not the final copy of the manifest signed by the designated facility. See Appendix 2 - Attachment 5. Mr. Melton did not observe any additional concerns with the uniform hazardous waste manifests. NOPF 3: 40 CFR 262.20(a) - Failure to include the EPA ID number of the designated facility on one hazardous waste manifest.		
Record: Land Disposal Restriction (LDR) Notices/Documents		AOC: No
Ref #: AT4-RR-002	Reviewed By: Amy Thompson	Reviewed Date: 10/24/2024
LDR notices were reviewed with the uniform hazardous waste manifests. No concerns were observed with the LDR notices.		
Record: Contingency Plan		AOC: Yes
Ref #: AT4-RR-003	Reviewed By: Amy Thompson	Reviewed Date: 10/24/2024
I reviewed the facility contingency plan, which was last revised in March of 2023. Mr. Wey told me that the contingency plan had not been updated when Ryan Parks replaced Tony Larson as the primary emergency coordinator in January of 2024. I asked if there had been any changes to the rest of the list of emergency coordinators. Mr. Wey stated that Robert Barnes, one of the secondary emergency coordinators listed in the contingency plan, was no longer an emergency coordinator. Mr. Wey did not know how long it had been since Mr. Barnes was no longer an emergency coordinator. I noticed that the contingency plan listed a primary emergency coordinator and three secondary emergency coordinators. I explained to Mr. Wey that the emergency coordinators must be listed in the order in which they would be called. I told Mr. Wey that I would consider this sufficient, but this may be added as a finding after the report was reviewed. I asked Mr. Wey to show me where the contingency plan described emergency actions that the facility personnel must take to respond to fires, explosions, or releases of hazardous waste. Mr. Wey showed me the description of emergency actions that facility personnel must take to respond to fires and releases of hazardous waste, but stated that the contingency plan did not contain emergency actions to respond to explosions. I asked Mr. Wey if explosions were a risk at the facility. Mr. Wey stated that he believed the risk of an explosion at the facility was small but possible. Mr. Wey explained further that responses to explosions were described in a different emergency action plan that the facility maintained but not in the contingency plan. The emergency action plan was not referenced in the contingency plan. During the exit briefing, Mr. Wey told me that he found some language in the contingency plan which referenced explosions, but that it was likely insufficient to meet		

the requirement.

I asked Mr. Wey to show me the evacuation plan in the contingency plan. The evacuation plan stated that employees would take the “shortest safe route” to exit a building if the contingency plan was implemented. Mr. Wey explained that it was impractical for the facility to have specific evacuation routes given that a spill or fire could come from many parts of the facility and that other factors, such as wind direction, could cause a specific route to become unsafe. I told Mr. Wey that ideally the contingency plan would be more descriptive of specific routes and signals in the evacuation plan.

The Contingency Plan is included in Appendix 2 - Attachment 4.

NOPF 6: 40 CFR 265.54(d) - Failure to update the contingency plan when the list of emergency coordinators changed.

NOPF 7: 40 CFR 265.52(a) - Failure to include a description of actions taken to respond to an explosion in the contingency plan.

Record: Air Emission Subparts AA/BB/CC related documents **AOC:** No

Ref #: AT4-RR-004 **Reviewed By:** Amy Thompson **Reviewed Date:** 10/24/2024

I reviewed the Leak Detection and Repair (LDAR) program and related records at the facility. The facility maintains a contract with Trinity Consultants to manage the LDAR program. I reviewed weekly visual inspections and monthly inspections following Method 21.

I reviewed the annual tank inspection records.

I did not observe any concerns with the LDAR program or CC requirements.

Record: Waste Determination Documents **AOC:** No

Ref #: AT4-RR-005 **Reviewed By:** Amy Thompson **Reviewed Date:** 10/24/2024

Mr. Wey showed me how the facility documents hazardous waste determinations. I reviewed a sample of the hazardous waste determinations for several waste streams including some hazardous and nonhazardous waste streams. I did not observe any concerns.

Record: Personnel Training **AOC:** No

Ref #: AT4-RR-006 **Reviewed By:** Amy Thompson **Reviewed Date:** 10/24/2024

I reviewed job descriptions for all positions at the facility that managed hazardous waste. The job descriptions appeared to be compliant with the regulations. I asked Mr. Wey for hazardous waste training for the facility. I reviewed the topics covered in the training. Mr. Wey stated that all employees at the facility received annual hazardous waste training and initial hazardous waste training. I selected a sample of approximately 3-5 employees who required annual hazardous waste training and verified that they had received annual hazardous waste training. I did not observe any issues with hazardous waste training or job descriptions.

Record: Tank Documents **AOC:** Yes

Ref #: AT4-RR-007 **Reviewed By:** Amy Thompson **Reviewed Date:** 10/24/2024

I asked Mr. Wey to provide me with daily hazardous waste tank inspection records. Mr. Wey provided me with some of the records. However, Mr. Wey explained that the facility only maintained paper records of the daily

hazardous waste tank inspections. The paper records were kept in boxes, which were comingled with other records of various types, which made finding the records difficult. Mr. Wey had asked an employee to retrieve the paper records and the employee was unable to locate the following records:

- November and December of 2021 and January through June of 2022 for tank T-8842
- October through December of 2021, January through July of 2022, and August of 2024 for T-2047
- November and December of 2021 and January through June of 2022 for T-8442
- February of 2023 for T 8042

This information was written on a sticky-note attached to the paper records and is included as Appendix 2 - Attachment 6. I reviewed the records to verify this information. In addition to what was recorded on the sticky note, I observed that T-309 had incomplete inspections on the form for September 2023, incomplete inspections on the form for June of 2023, and entirely missing records for January through September of 2022. Refer to Appendix 2 - Attachment 7. Mr. Wey stated the records could be missing because there was no hazardous waste in T-309 during those timeframes, rendering an inspection unnecessary. He showed me shipping records which indicated the first shipment of hazardous waste for T-309 in 2022 was in December, with no shipments in 2021. This indicated that it was possible that there was no hazardous waste in T-309 until after September of 2022. There was no hazardous waste shipped from T-309 in 2023. On some of the daily hazardous waste tank inspection records that I reviewed, it was noted on the form when the tank did not hold hazardous waste and a date which indicated when the tank started holding hazardous waste again. This information was not included during the missing timeframes described. Mr. Wey stated that he had discussed this issue with the supervisors and staff who conduct the daily inspections. There was some disagreement about whether the inspections should be conducted when there was no hazardous waste present in the tank, which had caused some confusion among employees. Mr. Wey believes that no inspections were conducted during these timeframes because the employees had considered it unnecessary since there was no hazardous waste in the tank. I could not verify this information.

NOPF 8: 40 CFR 265.195(g) - Failure to document daily hazardous waste tank inspections.

SECTION IV – AREA OF CONCERN

The presentation of Area(s) of Concern does not constitute a formal compliance determination or violation.

Building: Building 33	Area: Lab Retain Storage Room	Sub-area:
AT4-OB-005		
NOPF 1: 40 CFR 262.11 - Failure to determine if a waste is hazardous (38 <1-gallon containers of expired chemical standards in building 33).		
Building: Building 25	Area: Coater 2	Sub-area:
AT4-OB-003		
NOPF 2: K.A.R. 28-31-262(c)(7) - Failure to mark one satellite accumulation container of hazardous waste (one 5-gallon container in building 25) with the words "Hazardous Waste."		
Building: Building 25	Area: Coater 2	Sub-area:
AT4-OB-003		

NOPF 4: 40 CFR 265.173(a) - Failure to close one container satellite accumulation of hazardous waste (container described in NOPF 2).		
Building: Building 25	Area: Coater 2	Sub-area:
AT4-OB-003		
NOPF 5: 40 CFR 265.31 - Failure to minimize the possibility of a release of hazardous waste - chrome dust/contamination in building 25.		
Building: Building 30A	Area:	Sub-area:
AT4-OB-006		
NOPF 9: 40 CFR 273.14(d) - Failure to mark universal waste mercury containing equipment with the words "Universal Waste Mercury Containing Equipment," "Waste Mercury Containing Equipment," or "Used Mercury Containing Equipment."		
Building: Building 30A	Area:	Sub-area:
AT4-OB-006		
NOPF 10: 40 CFR 273.15(c) - Failure to track the accumulation time of universal waste lamps.		
Building: Building 30A	Area:	Sub-area:
AT4-OB-006		
NOPF 11: 40 CFR 273.15(a) - Accumulation of universal waste mercury containing equipment longer than one year.		
Building: Building 21	Area:	Sub-area:
AT4-OB-001		
NOPF 12a: 40 CFR 279.22(c) - Failure to mark containers of used oil with the words "Used Oil" a) one 5-gallon container in building 21.		
Building: Building 31	Area:	Sub-area:
AT4-OB-004		
NOPF 12b: 40 CFR 279.22(c) - Failure to mark containers of used oil with the words "Used Oil" b) two 5-gallon containers in building 31.		

Record: Manifests
AT4-RR-001
NOPF 3: 40 CFR 262.20(a) - Failure to include the EPA ID number of the designated facility on one hazardous waste manifest.
Record: Contingency Plan

AT4-RR-003
NOPF 6: 40 CFR 265.54(d) - Failure to update the contingency plan when the list of emergency coordinators changed.
Record: Contingency Plan
AT4-RR-003
NOPF 7: 40 CFR 265.52(a) - Failure to include a description of actions taken to respond to an explosion in the contingency plan.
Record: Tank Documents
AT4-RR-007
NOPF 8: 40 CFR 265.195(g) - Failure to document daily hazardous waste tank inspections.

SECTION V – CLOSING CONFERENCE AND FOLLOW UP

Closing Conference

I summarized the findings and recommendations with Mike Wey, Ryan Parks, and Felicia Najera-Paxton. I provided Mr. Parks with a Confidentiality Notice which he signed as acknowledgement of receipt (Appendix 2 - Attachment 8); Mr. Parks made no confidentiality claims. I also provided Mr. Parks with a Receipt for Documents and Samples and NOPF, which Mr. Parks signed as acknowledgement of receipt (Appendix 2 - Attachments 9 & 10) No compliance assistance documents were provided to the facility at the conclusion of the CEI.

SECTION VI – SAMPLING ACTIVITIES AND ANALYTICAL RESULTS

No sampling was conducted.

SECTION VII – LIST OF APPENDICES

1. Photo Log
2. Attachments
 - 1) Site Diagram (2 pages)
 - 2) Hazardous Waste Site Information Verification Report (2 pages)
 - 3) Waste Stream Table (1 page)
 - 4) Contingency Plan (13 pages)
 - 5) Hazardous Waste Manifest Missing Designated Facility EPA ID Number (1 page)
 - 6) Missing Daily Hazardous Waste Tank Inspection Note (1 page)
 - 7) Daily Hazardous Waste Tank Inspection Records (3 pages)
 - 8) Confidentiality Notice (1 page)
 - 9) Receipt for Documents and Samples (1 page)
 - 10) Notice of Preliminary Findings (3 pages)