

RCRA Inspection Report

1) Inspector and Author of Report

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2) Facility Information

TE Connectivity
719 Pegg Road
Greensboro, North Carolina 27409

EPA ID#: NC0000202523
NAICS #: 336320 – Motor Vehicle Electrical
and Electronic Equipment Manufacturing

3) Responsible Officials

Michelle Kareis
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4) Inspection Participants

Michelle Kareis, TE Connectivity
Jennifer Paster, TE Connectivity
Carter Estes, TE Connectivity
Caleb Davis, TE Connectivity

Tyler Baugusf, TE Connectivity
Daniel Girdner, NCDEQ
Laurie Benton, USEPA
Sarah Rowell, USEPA

5) Date of Inspection

March 4, 2025, 9:20 AM

6) Applicable Regulations¹

Resource Conservation and Recovery Act (RCRA) Sections 3002 (42 U.S. Code – Annotated U.S.C.A. 6925 and 6927), and 40 Code of Federal Regulation (C.F.R.) Parts 260 - 270, 273, 278, & 279; and the North Carolina Solid Waste Management Law, N.C.G.S. § § 130A-17 to -28 and 130A-290 to - 310.22, and North Carolina Hazardous Waste Management Rules, 15A NCAC 13A .0101 to .0119.

¹ As the State's authorized hazardous waste program operates in lieu of the federal RCRA program, the citations of those authorized provisions will be to the authorized State program. However, for ease of reference, the federal citations will follow in brackets.

Pursuant to 15A NCAC 13A .0102(b) [40 C.F.R. § 260.10], a large quantity generator of hazardous waste (LQG) is a generator who generates greater than or equal to 1,000 kilograms (2,200 pounds) of non-acute hazardous waste in a calendar month.

Pursuant to 15A NCAC 13A .0119(a) [40 C.F.R. § 273.9], a small quantity handler of universal waste (SQHUW) is a universal waste handler who does not accumulate 5,000 kilograms or more of universal waste (batteries, pesticides, mercury-containing equipment, lamps, or aerosol cans, calculated collectively) at any time.

Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.15(a)], a generator may accumulate as much as 55 gallons of non-acute hazardous waste in containers at or near any point of generation where wastes initially accumulate, which is under the control of the operator of the process generating the waste, without a permit or without having interim status, as required by Section 130A-294(c) and (g) of the NCSWML, NCGS § 130A-294(c) to (g) [Section 3005 of RCRA, 42 U.S.C. § 6925], and without complying with 15A NCAC 13A .0107(a) [40 C.F.R. § 262.16(b) or § 262.17(a)], except as required in 15A NCAC 13A .0107(a) [40 C.F.R. § 262.15(a)(7) and (8)], provided that the generator complies with the satellite accumulation area (SAA) conditions listed in 15A NCAC 13A .0107(a) [40 C.F.R. § 262.15] (hereinafter referred to as the “SAA Permit Exemption”).

Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.17], an LQG may accumulate hazardous waste on-site for 90 days or less without a permit or without having interim status, as required by Section 130A-294(c) and (g) of the NCSWML, NCGS § 130A-294(c) to (g) [Section 3005 of RCRA, 42 U.S.C. § 6925], provided that the generator complies with the conditions listed in 15A NCAC 13A .0107(a) [40 C.F.R. § 262.17] (hereinafter referred to as the “LQG Permit Exemption”).

Pursuant to 15A NCAC 13A .0106(a) [40 C.F.R. § 261.4(b)(18)], solvent-contaminated wipes, except for wipes that are hazardous waste due to the presence of trichloroethylene, that are sent for disposal are not hazardous wastes from the point of generation, provided that the conditions listed in 15A NCAC 13A .0106(a) [40 C.F.R. § 261.4(b)(18)] are met (hereinafter referred to as the “Solvent-Contaminated Disposable Wipe Exclusion”).

Pursuant to 15A NCAC 13A .0106(a) [40 C.F.R. § 261.4(a)(26)], solvent-contaminated wipes that are sent for cleaning and reuse are not solid wastes from the point of generation, provided that the conditions listed in 15A NCAC 13A .0106(a) [40 C.F.R. § 261.4(a)(26)] are met (hereinafter referred to as the “Solvent-Contaminated Reusable Wipe Exclusion”).

7) Purpose of Inspection

The purpose of this inspection was to conduct an unannounced compliance evaluation inspection to determine TE Connectivity’s compliance with the applicable requirements of RCRA and the corresponding North Carolina regulations. This was an EPA lead inspection.

8) Facility Description

TE Connectivity (TE) is a global electronics company that designs and manufactures electric and electrical sensor and connectivity products which are used to connect and protect the flow of

data, power and signal in electric vehicles, aircraft, digital factories, smart homes, medical devices, utility networks, and the global communications infrastructure. TE has more than 85,000 employees and over 100 manufacturing and engineering centers around the world. The subject facility specializes in the manufacture of equipment used in motor vehicles; has approximately 580 employees; and operates twenty-four hours per day, seven days per week.

TE performs four primary operations at the subject facility: stamping, plating, molding, and assembly. Finished equipment, which is made from intermediate and final products manufactured here, includes plastic connection devices containing small metal-coated sensors. The sensors are made from stamping specific shapes from strips of metal (mostly copper). Each stamping press uses a certain oil to lubricate moving parts within the machinery. The selected oil depends on the press and on the metals associated with the product, and used oil may be generated when the configuration of the press is changed. According to personnel, TE strives to minimize changes to the press configurations, and changes are typically limited to less than two per week for each press. The stamped metal shapes that will form the sensors are coated with nickel, tin, gold, or silver by either plating the small shapes after stamping or plating the metal strips before stamping. Plastic connection devices are made by molding plastic pellets into the desired shape to house the sensors. The finished equipment is created by assembling stamped, coated, metal sensor pieces with the associated molded connection device.

Although the subject facility has been operating as a large quantity generator (LQG) of hazardous waste for nearly thirty years, TE first notified as the owner and operator of the facility in 2012. Hazardous wastes generated on-site include:

- characteristically ignitable wastes (D001), which may also be characteristically toxic for benzene (D018), methyl ethyl ketone (MEK)(D035), or other constituents;
- characteristically corrosive wastes (D002);
- characteristically reactive wastes (D003), including waste containing cyanide solutions that are not one of the F-listed hazardous wastes from electroplating baths;
- characteristically toxic wastes for chromium (D007), lead (D008), silver (D011) or other metals;
- F-listed hazardous waste spent cyanide plating baths solutions (F007), which may also be characteristically corrosive, toxic, or reactive;
- F-listed hazardous waste spent plating bath residues from the bottom of electroplating baths where cyanide was used (F008), which may also be characteristically corrosive, toxic, or reactive;
- U-listed hazardous waste unused materials with one or more of the hazardous waste characteristics; and
- Characteristically reactive (D003) and toxic for silver (D011) wastewater treatment sludge generated from dewatering the contents of the Evaporator Feed Tank.

The D003, D011 sludge from the evaporator, spent filters, and any other liquid waste streams that contain economically significant amounts of gold and silver are shipped for reclamation and recovery of precious metals. The remaining hazardous wastes are sent off-site for treatment, storage or disposal.

According to the most recent biennial report, which was submitted on February 29, 2024, TE generated the following hazardous wastes at this facility during calendar year 2023:

Description of Hazardous Waste	EPA Hazardous Waste Code(s)	Quantity
Waste silver cyanide solution (potassium silver cyanide) for metals reclamation	D003 D011 F007	81,647 pounds
No 445 PTU Concentrate, caustic (TYCO #34) from plating process	D002 F008	38,148 pounds
No 224 Tin bath solutions (TYCO WS #50) from plating bath change	D002 D007 D008	19,930 pounds
No 701 Resist wastes caustic (TYCO WS #50) from discarding of process material	D002	16,980 pounds
Aerosols, flammable from used or unused materials	D001	3,716 pounds
Waste gold solution (waste cyanide solution (potassium gold cyanide)) for metals reclamation	D003 D011 F007	3,123 pounds
Floor scrubbing water with trace amounts of cleaner from floor clean up	D011	2,855 pounds
Waste gold cyanide solids for metals reclamation	D003 D011 F007	2,830 pounds
Waste silver cyanide solid for metals reclamation	D003 D011 F007	1,345 pounds
Tin bath solution sludge and debris from debris from plating line and cleaning sludge	D002 D007 D008	1,228 pounds
Exhaust waste debris from exhaust cleaning / ventilation replacement	D003 D007 D008 D011 F007	931 pounds
Cells contaminated with trace tin bath from dismantling of tin bath line	D007 D008	655 pounds
Isopar and Nyetact mixture from unused material	D001	613 pounds
Flammable lubricant from unused	D001	422 pounds
Bismuth bath solution from plating bath change	D002	387 pounds
Flam liquid loosepack (packed by Heritage) from outdated, off spec or unused material	D001	228 pounds
Consolidation of small chemical containers from consolidation and cleanup (Profile #53)	D001 D035	137 pounds

Description of Hazardous Waste	EPA Hazardous Waste Code(s)	Quantity
Flammable liquids in consumer packaging from outdated, off spec or unused material (Profile #105)	D001 D018 D035 D038 D043 U002 U019 U037 U057 U108 U112 U154 U159 U161 U196 U220 U239	115 pounds

9) **Previous Inspection History**

The North Carolina Department of Environmental Quality (NCDEQ) has conducted three RCRA CEIs at the subject facility over the past ten years and found violations during only one of those CEIs.

On December 7, 2022, NCDEQ conducted the most recent RCRA CEI at the subject facility and found five apparent violations of RCRA's requirements for recording weekly inspections of central accumulation area(s), identifying the locations where hazardous wastes are managed on a facility map in the quick reference guide, providing annual review of hazardous waste training, making an accurate hazardous waste determination, and keeping containers of excluded solvent-contaminated wipes closed. As a result, NCDEQ issued a Ticket Notice of Violation to TE on May 3, 2023, and later verified that the facility had returned to compliance during a compliance scheduled evaluation on June 9, 2023.

10) **Opening Conference**

On March 4, 2025, EPA inspectors Laurie Benton and Sarah Rowell, accompanied by NCDEQ inspector Dan Girdner, arrived at TE Connectivity at approximately 9:20 AM. The inspectors were initially unable to locate a representative of TE Connectivity in the unattended lobby, but eventually stopped a passing employee who agreed to contact the Environmental, Health and Safety Department or a member of management on the inspectors' behalf. Michelle Kareis, Environmental, Health and Safety Manager, received the inspectors and asked if it was possible to reschedule the inspection. The inspectors introduced themselves, showed their credentials to Michelle Kareis, explained the purpose of the visit, and stated that it was not possible to reschedule the unannounced inspection. The inspectors offered to proceed with another representative from the facility, but Michelle Kareis stated that she would stay until 2:00 pm to assist during the inspection. Michelle Kareis escorted the inspectors to a conference room for the opening conference, and they were joined by Jennifer Pastern, EHS Analyst, and Carter Estes, EHS Analyst.

The inspectors described the anticipated use of equipment (digital camera) during the inspection and provided a request for records. The EPA inspector explained that the Small Business Regulatory Enforcement Fairness Act's classification of a "small business" is generally set by the Small Business Administration using the business' SIC/NAICS code and annual receipts or number of employees. A copy of the EPA's information sheet for small businesses can be found at <https://www.epa.gov/sites/production/files/2017->

06/documents/smallbusinessinfo.pdf. The EPA inspector also discussed the company's ability, pursuant to 40 C.F.R. § 2.203, to assert a business confidentiality claim for information submitted to EPA. The company did not assert a business confidentiality claim.

Michelle Kareis provided an overview of the facility's history and current operations during the opening conference. The inspection participants also discussed health and safety protocols and required personal protective equipment before Michelle Kareis, Jennifer Pastern, and Carter Estes led the inspectors on a tour of the Facility operations.

11) Inspection Observations

Scrap Room:

TE stores containers of lubrication oil products and accumulates used oil in the area referred to as the Scrap Room. The inspectors observed containers of new and used oil, a used oil storage tank (Photo 1), an emergency eyewash and shower station, and a fire extinguisher in this area. Michelle Kareis explained that used oil is accumulated in a small container at each stamping press. According to Michelle Kareis, TE personnel bring those small containers to this area and pour their contents into a funnel that drains into a 55-gallon used oil accumulation container (Photo 2) next to the shelving unit that holds the used oil tank. Used oil is then pumped from the 55-gallon used oil accumulation container into the used oil storage tank. The inspectors observed that the 55-gallon accumulation container and the storage tank were each labeled with the words "used oil."

Michelle Kareis stated that the floors in the Stamping and Molding areas of the facility are mopped at the end of every shift, and the dirty mop water is brought to the Scrap Room where it is transferred into an oil/water separator. The oily layer is pumped from the oil/water separator to the used oil tank, and the watery layer passes through a filter to remove metal. The recovered metal is sent off-site for recycling, and the filtered water remains on-site for reuse. According to Michelle Kareis, TE adds soap to the filtered water so that it can be used again to mop the floors.

The inspectors observed two additional 55-gallon containers, which also appeared to be storing used oil, in this area. One of the containers was labeled with the words "used waste oil" and identified with a DOT flammable liquid hazard sticker (Photo 3). This container was approximately $\frac{3}{4}$ full and the bung was completely open. The second container was brought to this area by TE personnel during the inspection. The container was also identified with a DOT flammable liquid hazard sticker, and the employee used a universal waste label to identify the contents of the container as "waste oil DTE 24" (Photo 4).

Containers of lubrication oil products were observed on a metal shelf beneath the used oil tank and on a secondary containment pallet near the door into the Scrap Room. The room is equipped with a secondary containment sump that was visible beneath the portion of the floor constructed of a metal grate and that appears to fill the entire length of the room beneath the oil containers and storage tank. Michelle Kareis explained that the secondary containment sumps are washed out and pumped to the nonhazardous waste storage tanks located outside of the building. She also explained that TE is able to pump liquid from the secondary containment sump to the oil/water separator so that the oil can be accumulated in the used oil

tank and the water can be accumulated in the nonhazardous waste tanks, but that the facility rarely performs this activity. She also stated that Heritage Environmental Services may pump directly from the secondary containment sump one or two times each year.

The inspectors noted an oily film on the floor in the Scrap Room, which made the surface very slick to walk upon, and observed used oil on the lid of the 55-gallon used oil accumulation container. The inspectors also observed oily liquid in the room's secondary containment sump, and in the secondary containment pallet beneath the oil product containers (Photo 5). Michelle Kareis stated that the liquid in the secondary containment pallet will be pumped into the used oil tank.

Pursuant to 15A NCAC 13A.0118(c) [40 C.F.R. § 279.22(c)(1)], containers and aboveground tanks used to store used oil at generator facilities must be labeled or marked clearly with the words "Used Oil."

Pursuant to 15A NCAC 13A.0118(c) [40 C.F.R. § 279.22(d)(3)], upon detection of a release of used oil to the environment, a generator must clean up and manage properly the released used oil and other materials.

In addition to lubrication oil products and used oil, TE also manages containers of universal waste in the Scrap Room. The inspectors observed a red mobile cart holding containers of universal waste that was staged near the entrance into the room (Photo 6). The cart held one 5-gallon container labeled "universal waste lead acid batteries" and dated August 6, 2024; one 5-gallon container labeled "universal waste alkaline batteries" and dated May 16, 2024; one 5-gallon container labeled "universal waste lithium batteries" and dated January 24, 2025; and one 5-gallon container labeled "universal waste nickel-cadmium batteries" and dated January 24, 2025.

Two cubic yard cardboard boxes were also observed behind a pallet of material from the Quality Department in the far corner of the room. One box was labeled "universal waste aerosol cans" and dated February 18, 2025; the other box was labeled "alum cans." It appears that TE intended to use one box for accumulating used aerosol spray cans, and the other for accumulating empty aluminum cans (such as beverage cans). However, the inspectors observed used aerosol cans of WD-40 in both the universal waste container (Photo 7) and in the aluminum can container (Photo 8), and four used aerosol cans of WD-40 on the floor near the boxes (Photo 9).

Pursuant to 15A NCAC 13A .0119(b) [40 C.F.R. § 273.13(e)(1)], a SQHUW must accumulate universal waste aerosol cans in a container that is structurally sound, compatible with the contents of the aerosol cans, lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions, and is protected from sources of heat.

Pursuant to 15A NCAC 13A .0119(b) [40 C.F.R. § 273.14(f)], a SQHUW must label or mark or label universal waste aerosol cans (*i.e.*, each aerosol can), or a container in which the aerosol cans are contained clearly with any of the following phrases: "Universal Waste – Aerosol Can(s)," "Waste Aerosol Can(s)," or "Used Aerosol Can(s)."

Stamping:

To make the sensors, TE stamps specific shapes from strips of metal (mostly copper). According to Michelle Kareis, two employees are assigned to simultaneously run three stamping units at any given time. All stamped pieces manufactured here will be used to make electrical connectors for vehicles. Stamped pieces may be shipped directly to customers, or they may be sent to the Plating or Assembly areas for further processing on-site. The remaining portions of the metal strips that are left after stamping out the pieces are sent to Wallicks Scrap Metal for metals recycling.

Although most solvent contaminated wipes are generated when cleaning molds in the Mold Shop, TE's Aramark Towel Manager (ATM) is located in the Stamping Area. The ATM stores clean towels that are used on-site and soiled towels that are shipped to Vestis Uniforms, 200 E. J.J. Drive, Greensboro, NC, to be laundered and re-used. The inspectors observed the ATM, which was closed and labeled "excluded solvent contaminated wipes, 40 C.F.R. § 261.4(a)(26)" (Photo 10).

Molding Tool Room:

TE makes plastic connection devices to house the sensors by molding plastic pellets into the desired shape and color. According to Michelle Kareis, one employee can simultaneously run up to eight molding presses at any given time. Maintenance activities, such as mold cleaning and sharpening, are performed by personnel in the Molding Tool Room. These activities generate solvent contaminated reusable wipes and solvent contaminated disposable wipes.

Contaminated cloth towels are accumulated in the ATM, which was observed in the Stamping Area, and contaminated paper towels are accumulated in 20-gallon flammable cans, which were observed in the Molding Tool Room. The inspectors observed two 20-gallon flammable cans in the Molding Tool Room (Photo 11). Each can was labeled with the words "excluded solvent contaminated wipes, 40 C.F.R. § 261.4(a)(26)."

Note that, while the container labeling requirements found in the Solvent-Contaminated Disposable Wipe Exclusion are identical to those found in the Solvent-Contaminated Reusable Wipe Exclusion (i.e. each require containers to be labeled "excluded solvent-contaminated wipes"), the conditions of the Solvent-Contaminated Disposable Wipe Exclusion are found in 15A NCAC 13A .0106(a) [40 C.F.R. § 261.4(b)(18)], not in 15A NCAC 13A .0106(a) [40 C.F.R. § 261.4(a)(26)], as indicated on the labels on the containers of disposable excluded solvent-contaminated wipes observed in the Molding Tool Room.

The inspectors also observed a red mobile cart holding containers of universal waste in the Molding Tool Room (Photo 12). The cart held one 5-gallon container labeled "universal waste lead acid batteries" and dated April 8, 2024; one 5-gallon container labeled "universal waste alkaline batteries" and dated December 3, 2024; one 5-gallon container labeled "universal waste lithium batteries" and dated April 8, 2024; and one 5-gallon container labeled "universal waste nickel-cadmium batteries" and dated April 8, 2024.

Plating Storage Closets Central Accumulation Area (CAA):

The inspection participants were joined by Caleb Davis in the Plating Area, and he provided them with access to the Flammable Chemical Storage Room, the Hazardous Waste Storage Room, the Caustic Chemical Storage Room, and the Acidic Chemical Storage Room. Each room was identified with a sign outside the door indicating the characteristics of the materials inside (flammable, caustic, acidic, hazardous waste). According to Michelle Kareis, two 55-gallon containers of Glycol Ether DPM that were observed in the Flammable Chemical Storage Room, were expired when they arrived at the facility. She stated that these containers will either be returned to the chemical manufacturer or placed into a labpack for disposal. The remaining containers observed in the Flammable Chemical Storage Room, the Caustic Chemical Storage Room, and the Acidic Chemical Storage Room held raw materials to be used on-site.

The inspectors observed signs stating “danger, hazardous waste storage” and “no smoking” just outside of the door to the Hazardous Waste Storage Room. The room is equipped with a spill kit, an overpack container, and a fire sprinkler system. According to TE personnel, employees carry TE-provided cellular telephones for emergency communication while working in this area. Signs on the walls inside the room identify specific areas for storing similar wastes. The inspectors observed two signs for “acidic hazardous waste storage: Tin Filters, Tin Solutions, Bath Filters;” one sign indicating “max # of 55-gallon drums allowed in HW room is 23;” and a sign for “caustic hazardous waste storage: PTU concentrate and mask stripper waste.”

Caleb Davis explained that most containers stored in the Hazardous Waste Storage Room contain preventative maintenance rinse waters. He stated that analytical results indicate 99% of the rinse waters are not regulated as hazardous waste, but that every batch is sampled and analyzed for tin and RCRA metals. The inspectors observed the following containers inside the Hazardous Waste Storage Room:

- Three 55-gallon containers labeled “8715 Tin Rinse from PM on hold pending analysis;”
- One 55-gallon container labeled “non-DOT hazardous material No 630 Nickel filters Tyco Waste #9” and dated February 18, 2025;
- One 55-gallon container labeled “non-DOT hazardous material No 342 Tin Bath Filters (Tyco Waste #16A)” and dated February 18, 2025;
- One 55-gallon container labeled “Tin Solution test for chromium 8711 Tin PM on hold pending analysis” and dated February 4, 2025;
- One 55-gallon container labeled “Tin Solution test for chromium 8711 Tin PM on hold pending analysis,” dated February 4, 2025, and identified with a DOT corrosive hazard sticker;
- Two 55-gallon containers labeled “non-DOT hazardous empty drum (Tyco #61);”
- One 5-gallon container labeled “nonRCRA UN 2809 mercury switches” and dated August 20, 2024;
- One 55-gallon container labeled “SN sludge Tin Tooling – hoses, on hold pending analysis” and dated March 3, 2025;
- One 55-gallon container labeled “Tin Wastewater Tin 60100 corrosive DOT on hold pending analysis” and dated February 20, 2025;
- One 55-gallon container labeled “Tin Wastewater Tin 80100 on hold pending analysis” and dated February 20, 2025;

- One 55-gallon container labeled “non-DOT hazardous material No 630 Nickel Filters (Tyco #9);”
- One 55-gallon container labeled “nonDOT hazardous material No 342 tin bath filters (16A)” and dated February 24, 2025;
- One 55-gallon container labeled “nonDOT nonRCRA empty drum (61)” and dated February 26, 2025; and
- Several smaller containers identified for lab-packing. The inventory list associated with the lab-pack material identified thirteen containers, and the container labels observed by the inspectors included Weld-on 790 multi-purpose, DPM solvent, Solderon ST400 additive, and Solderon ST200 secondary. None of the containers had been identified as hazardous waste, nonhazardous waste, or waste pending analysis.

Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.11], a person who generates a solid waste 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.

Note that the LQG Permit Exemption requires a container holding hazardous waste to be marked or labeled with the words “Hazardous Waste,” with an indication of the hazards of its contents, and with the date that the waste began accumulating. If analysis confirms that any container marked “pending analysis” or that any container identified for lab-packing was holding a hazardous waste, those containers should have been labeled and marked as required by LQG Permit Exemption at the time of the inspection.

Plating Area (SAAs and CAAs):

The stamped metal shapes that will form the sensors are coated with nickel, tin, gold, or silver by either plating the small shapes after stamping or plating the metal strips before stamping. TE manages two SAA and two CAAs for accumulating and storing hazardous wastes generated in the Plating Area. The area was equipped with emergency shower and eyewash equipment.

Small drips, spills and releases of potassium gold cyanide plating bath liquids are accumulated in the first SAA. The inspectors observed approximately 5-10 gallons of hazardous waste in one 55-gallon container in this SAA (Photo 13). The container was labeled as UN1935 hazardous waste cyanide solutions (potassium gold cyanide); it was marked with EPA hazardous waste numbers D003 and F007; and it was identified with a DOT hazard sticker indicating that the contents are toxic.

Small drips, spills and releases of potassium silver cyanide plating bath liquids are accumulated in the second SAA. The inspectors observed one 55-gallon container in this SAA (Photo 14). The container was labeled as UN1935 hazardous waste cyanide solutions (potassium silver cyanide); it was marked with EPA hazardous waste numbers D003 and F007; and it was identified with a DOT hazard sticker indicating that the contents are toxic.

Used wipes, filters, PPE and other solids contaminated with plating bath solutions are accumulated and stored in the first CAA, which is identified by a clam-shell storage locker attached to the air handling equipment to manage off-gasses from the waste containers (Photo 15). The clam shell held two 55-gallon containers: one labeled as Ag filters, identified as toxic, and dated February 20, 2024, and one labeled as gold filters, identified as toxic, and dated

February 20, 2024. Neither container was labeled with the words “hazardous waste,” but the clam shell was labeled as “UN 1588 hazardous waste cyanides (potassium gold cyanide) D003, F007” and “UN 1588 hazardous waste cyanides (potassium gold cyanide) D003, F007.”

Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.17(a)(5)(i)(A)], which is a condition of the LQG Permit Exemption, a LQG accumulating hazardous waste in containers must mark or label its containers with the words “Hazardous Waste.”

TE manages a second CAA in the Plating Area for accumulating and storing old process material that will be sent off-site to Sipi Metals Corporation (ILD005121439) or to Abington Reldan Metals, LLC (PAR000521294) for precious metals reclamation. The inspectors observed three 55-gallon containers in this CAA (Photo 16):

- One 55-gallon container of AgS-341, which was labeled as UN1935 hazardous waste potassium silver cyanide, identified as DOT toxic, marked with EPA hazardous waste numbers D003, D011, and F007, and dated February 28, 2025;
- One 55-gallon container of AgS-342, which was labeled as UN1935 hazardous waste potassium silver cyanide, identified as DOT toxic, marked with EPA hazardous waste numbers D003, D011, and F007, and dated February 28, 2025; and
- One 55-gallon container of AgS-340, which was labeled as UN1935 hazardous waste potassium silver cyanide, identified as DOT toxic, marked with EPA hazardous waste numbers D003, D011, and F007, and dated February 28, 2025.

12) Records Review

Contingency Plan and Quick Reference Guide (QRG):

The actions that facility personnel should take in response to an emergency are described in the Facility Emergency Response Plan. The quick reference guide, which was reviewed on-site during the inspection, was dated August 16, 2024. The most recent Facility Emergency Response Plan found on the Guilford County LEPC ePlan online filing was dated May 30, 2018.

The 2018 Facility Emergency Response Plan describes actions facility personnel must take in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility; it describes arrangements agreed to with the local police department, fire department, other emergency response teams, emergency response contractors, equipment suppliers, local hospitals or the Local Emergency Planning Committee; it lists the names and emergency telephone numbers for persons identified as emergency coordinators (although this list was not up-to-date); and it includes an evacuation plan. The 2018 Facility Emergency Response Plan references, but it does not include, a list of all emergency equipment at the facility. The evacuation plan within the 2018 Facility Emergency Response Plan references, but it does not describe, signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes.

Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.17(a)(6)], which incorporates 15A NCAC 13A .0107(i) [40 C.F.R. § 262.261(e) and (f)] and is a condition of the LQG Permit Exemption, the contingency plan must include (e) a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems

(internal and external), and decontamination equipment) where this equipment is required. This list must be kept up to date. In addition, the plan must include the location and a physical description of each item on the list, and a brief outline of its capabilities. And (f) an evacuation plan for generator personnel where there is a possibility that evacuation could be necessary. This plan must describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste or fires).

The 2024 quick reference guide includes the types/names of hazardous waste in layman's terms and the associated hazard associated with each hazardous waste present at any one time; the estimated maximum amount of each hazardous waste that may be present at any one time; the identification of any hazardous wastes where exposure would require unique or special treatment by medical or hospital staff; a map of the facility showing where hazardous wastes are generated, accumulated and treated and routes for accessing these wastes; a street map of the facility in relation to surrounding businesses, schools and residential areas; the locations of water supply; and the name and emergency telephone numbers of the individuals identified as the primary and alternate emergency coordinators. The 2024 quick reference guide does not include the locations of fire hydrants and flow rates or the identification of on-site notification systems.

Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.17(a)(6)], which incorporates 15A NCAC 13A .0107(i) [40 C.F.R. § 262.262(b)(6) and (7)] and is a condition of the LQG Permit Exemption, a LQG must submit a quick reference guide of the contingency plan to local responders. The quick reference guide must include the identification of the locations of water supply (e.g., fire hydrant and its flow rate) and on-site notification systems (e.g. a fire alarm that rings off site, smoke alarms).

In the 2018 Facility Emergency Response Plan, TE identified Kelli Swain as the primary emergency coordinator and identified Jimmy Lively and James Sharp as the alternate emergency coordinators. In the 2024 quick reference guide, TE identified Michelle Kareis as the primary emergency coordinator and identified Rick Tobin and Ramon Bosco as the alternate emergency coordinators. TE did not provide any records to show that the 2018 Facility Emergency Response Plan had been revised and then resubmitted to the Guilford County LEPC when the list of emergency coordinators changed, or that the quick reference guide had been submitted to the Guilford County LEPC.

Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.17(a)(6)], which incorporates 15A NCAC 13A .0107(i) [40 C.F.R. § 262.263(d)] and is a condition of the LQG Permit Exemption, the contingency plan must be reviewed, and immediately amended, if necessary, whenever the list of emergency coordinators changes.

Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.17(a)(6)], which incorporates 15A NCAC 13A .0107(i) [40 C.F.R. § 262.262(b)(7)] and is a condition of the LQG Permit Exemption, a LQG must submit a quick reference guide of the contingency plan to local responders.

Training Records:

The inspectors reviewed facility job descriptions and employee names that were provided for the EHS Manager, the EHA Analyst, the Plating Chemical Laboratory Supervisor, and the Plating Operators. Each description included the requisite skill, education, or other qualifications, duties of facility personnel assigned to that position, and the type and amount of training to be given to each person filling the position. TE Connectivity provides in-house training and computer-based training modules for hazardous waste management through a learning management system. On April 8, 2025, Michelle Kareis provided a table summarizing hazardous waste training completion dates. The NCDEQ strictly interprets the requirement for annual training to be once every 365 days. Over 365 days elapsed between the annual training dates for the Plating Chemical Lab Supervisor, who completed hazardous waste training on February 16, 2023, and March 15, 2024 (393 days); and for another supervisor, who completed hazardous waste training on January 28, 2023, February 4, 2024 (372 days), and February 14, 2025 (376 days).

Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.17(a)(7)(iii)], which is a condition of the LQG Permit Exemption, facility personnel must take part in an annual review of the initial training required in paragraph (a)(7)(i) of this section.

Waste Manifest and Land Disposal Restriction (LDR) Records:

The inspectors reviewed available hazardous waste manifest records and land disposal restriction forms for shipments of hazardous waste sent during calendar year 2024. According to the records in the eManifest system, hazardous wastes sent from TE Connectivity included, but were not limited, to the following annual estimates in calendar years 2022, 2023, and 2024:

- Thirteen shipments of D001 waste aerosols (paint, lubricants) per year during calendar years 2022 (3,400 pounds total), 2023 (3,900 pounds total), and 2024 (3,900 pounds total).
- Approximately fourteen shipments of D002 waste caustic alkali liquids (ammonia, monoethanolamine) in 2022 (26,000 pounds total), in 2023 (17,000 pounds total), and 2024 (16,000 pounds total).
- Nineteen shipments of D002, D007 D008 waste corrosive liquid, acidic (methanesulfonic acid) in 2022 (49,000 pounds total), twenty-two shipments in 2023 (21,000 pounds total), and sixteen shipments in 2024 (16,100 pounds total).
- Four shipments of D002, F008 waste corrosive liquids (potassium silver cyanide, sodium hydroxide) in 2022 (75,500 pounds total), nine shipments in 2023 (37,600 pounds total), and eight shipments in 2024 (33,600 pounds total).
- Thirteen shipments of D003, D011, F007 waste cyanide solutions (potassium silver cyanide) in 2022 (39,500 pounds total), nine shipments in 2023 (33,300 pounds total), and eight shipments in 2024 (23,100 pounds total).
- Nine shipments of D003, F007 waste cyanide solutions (potassium gold cyanide) in 2022 (4,200 pounds total), seven shipments in 2023 (5,000 pounds total), and eight shipments in 2024 (4,300 pounds total).
- Five shipments of D007, D008 waste solid (chromium, lead) in 2023 (600 pounds total), and three shipments in 2024 (250 pounds total).

Weekly Inspection Records:

The inspectors reviewed TE's available records of inspections of the hazardous waste CAAs since January 2023. The inspection log includes a checklist to record observations about leaking containers and for deterioration of containers caused by corrosion or other factors. The inspections are recorded using an electronic system that identifies the date each inspection is scheduled, completed, reviewed, and closed. Records of weekly inspections were available for all reviewed weeks, except the week of February 24, 2025. Although the electronic record indicated that an inspection was scheduled for February 25, 2025, the record did not indicate that an inspection was completed, reviewed, or closed during the week of February 24, 2025.

Pursuant to 15A NCAC 13A .0107(a) [40 C.F.R. § 262.17(a)(1)(v)], which is a condition of the LQG Permit Exemption, a generator is required to, at least weekly, inspect central accumulation areas looking for leaking containers and for deterioration of containers caused by corrosion or other factors.

Pursuant to 15A NCAC 13A .0107(d), which is more stringent than the federal requirement found in 40 C.F.R. § 262.40 through 262.44, a generator shall keep records of inspections and results of inspections required by 40 C.F.R. § 262.17 for three years from the date of the inspection.

Excluded Solvent-Contaminated Wipes:

In an email dated March 13, 2025, Michelle Kareis provided the name and address of the facility, Vestis Uniforms, 200 E. J.J. Drive, Greensboro, NC, where solvent-contaminated reusable wipes are routinely sent off-site for laundering or dry-cleaning. The email stated that the Vestis Uniforms route driver examines the container of solvent-contaminated reusable wipes to ensure that it does not contain free liquids at the time of collection, and that any bag containing free liquids would be returned to TE for separate disposal. However, TE did not provide any shipment records for solvent-contaminated reusable wipes or any documentation that the 180-day time limit in 15A NCAC 13A .0106(a) [40 C.F.R. § 261.4(a)(26)(ii)] is being met.

Pursuant to 15A NCAC 13A .0106(a) [40 C.F.R. § 261.4(a)(26)(v)(B)], which is a condition of the Solvent Contaminated Reusable Wipes Exemption, solvent contaminated wipes that are sent for cleaning and reuse are not solid wastes from the point of generation, provided that the generator maintains documentation that the 180-day accumulation time limit is being met.

TE documents the amount of time that solvent-contaminated disposable wipes are stored on-site by maintaining an inventory log on an index card affixed to each solvent-contaminated disposable wipes container. However, TE did not provide any records for shipments of solvent-contaminated disposable wipes being sent off-site for disposal; documentation of the name and address of the landfill or combustor that is receiving the solvent-contaminated disposable wipes; or a description of the process TE is using to ensure the solvent-contaminated disposable wipes contain no free liquids at the point of being transported off-site for disposal.

Pursuant to 15A NCAC 13A .0106(a) [40 C.F.R. § 261.4(b)(18)(v)], which is a condition of the Solvent-Contaminated Disposable Wipes Exemption, solvent contaminated wipes, except wipes that are hazardous waste due to the presence of trichloroethylene, that are sent for

disposal are not hazardous wastes from the point of generation, provided that the generator maintains documentation of the name and address of the landfill or combustor that is receiving the solvent-contaminated wipes; and a description of the process the generator is using to ensure solvent-contaminated wipes contain no free liquids at the point of being transported for disposal.

13) Closing Conference

The inspectors conducted the exit meeting with Michelle Kareis, Jennifer Pastern, and Carter Estes. During this meeting, the inspectors stated their preliminary conclusions of the inspection, and requested the following records:

- A written description of the process for ensuring that solvent-contaminated wipes contain no free liquids at the point of being transported off-site for laundering, dry cleaning, or disposal;
- The name of the facility where reusable solvent contaminated wipes are laundered;
- The name of the facility where disposable solvent contaminated wipes are disposed;
- Job descriptions, employee names, and training records for employees managing hazardous waste;
- Records of shipments of oily water;
- The current contingency plan and quick reference guide, and records to show that these documents had been submitted to local emergency response entities;
- Results of waste determinations for the containers of waste pending analysis observed during the inspection.

As a follow-up to the closing conference, Dan Girdner sent an email to Michelle Kareis on March 5, 2025. The email documented the inspectors' request for the following records:

- The job title for each position at the facility related to hazardous waste management and the name of the employee filling each job;
- A job description for each position listed above;
- A written description of the type and amount of training for each person filling the positions;
- Records documenting that the training has been completed;
- Used oil receipts for the last two years;
- The name and address of the laundry, dry cleaner, landfill, and/or combustor destination facility for excluded solvent-contaminated wipes;
- Documentation that the 180-day time limit is being met for the excluded solvent-contaminated wipes;
- A written description of the process to meet the "no free liquids" condition of the solvent-contaminated wipes exclusion(s);
- Documentation of the final waste determination for all containers of waste pending analysis observed during the CEI; and
- The details of the process generating each container of waste pending analysis and why that waste is not a listed hazardous waste.

On March 13, 2025, Michelle Kareis provided, via email:

- The EHS Manager, EHS Analyst, Plating Chemical Laboratory Supervisor, and Plating Operator job titles and the name(s) of the employee(s) filling each job;
- A job description, which identified the type and amount of required training, for the EHS Manager, EHS Analyst, Plating Chemical Laboratory Supervisor, and Plating Operator; and
- The name and address of Vestis Uniforms, the facility that collects, receives, launders, and returns excluded solvent-contaminated reusable wipes at the TE facility.

On April 8, 2025, Michelle Kareis provided a table summarizing hazardous waste training completion dates.

To date, the inspectors have not received:

- Used oil receipts for the last two years;
- The name and address of the landfill, and/or combustor destination facility for excluded solvent-contaminated disposable wipes;
- Documentation that the 180-day time limit is being met for the reusable excluded solvent-contaminated wipes;
- A written description of the process to meet the “no free liquids” condition of the disposable solvent-contaminated wipes exclusions;
- Documentation of the final waste determination for all containers of waste pending analysis observed during the CEI; and
- The details of the process generating each container of waste pending analysis and why that waste is not a listed hazardous waste.

14) List of Attachments

Attachment 1 – Photo Log

15) Signed

LAURIE BENTON Digitally signed by LAURIE BENTON
Date: 2025.05.07 12:51:36 -04'00'

Laurie Benton
Environmental Engineer

16) Concurrence

ARACELI CHAVEZ Digitally signed by ARACELI CHAVEZ
Date: 2025.05.07 14:53:31 -04'00'

Araceli B. Chavez
RCRA Enforcement Section

Attachment 1 – Photo Log

16 Photos taken on: March 4, 2025

Photos taken by: Laurie Benton

Photos taken with: Panasonic DMC TS-5

EPA Property Tag: S09533



Photo 1: Used oil storage tank stored at the top of a shelving unit holding oil products in the Scrap Room.



Photo 2: 55-gallon container accumulating used oil in the Scrap Room. Personnel bring containers of used oil to this area and pour their contents through the funnel into the 55-gallon container. The contents of the container are pumped to the used oil storage tank.



Photo 3: 55-gallon container labeled "used waste oil" observed in the Scrap Room.



Photo 4: Container of used oil that was brought to the Scrap Room by TE personnel during the inspection. The container was identified with a DOT flammable liquid hazard sticker, and the employee used a universal waste label to identify the contents of the container as “waste oil DTE 24.”



Photo 5: Secondary containment pallet beneath oil product containers near the door of the Scrap Room. The pallet was nearly full of liquid.



Photo 6: A red mobile cart holding containers of universal waste that was staged near the entrance into the Scrap Room. The cart held one 5-gallon container labeled “universal waste lead acid batteries” and dated August 6, 2024; one 5-gallon container labeled “universal waste alkaline batteries” and dated May 16, 2024; one 5-gallon container labeled “universal waste lithium batteries” and dated January 24, 2025; and one 5-gallon container labeled “universal waste nickel-cadmium batteries” and dated January 24, 2025.



Photo 7: One of two cubic yard cardboard boxes observed behind a pallet of material from the Quality Department in the far corner of the Scrap Room. The box was labeled "universal waste aerosol cans" and dated February 18, 2025.



Photo 8: One of two cubic yard cardboard boxes observed behind a pallet of material from the Quality Department in the far corner of the Scrap Room. The box was labeled "alum cans," but contained used aerosol cans of WD-40 as well as aluminum cans.

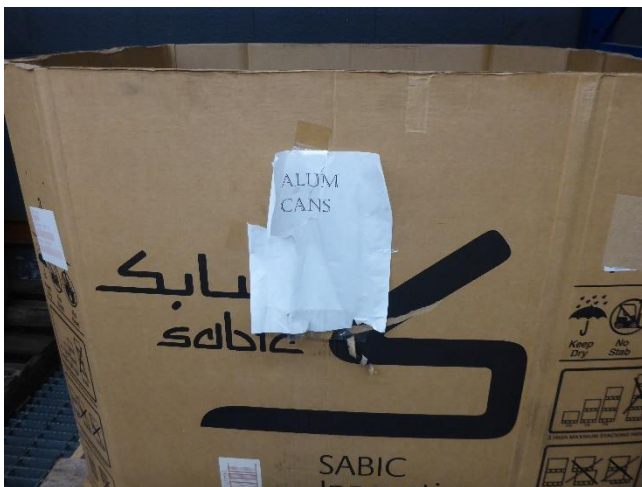


Photo 9: One of two cubic yard cardboard boxes observed behind a pallet of material from the Quality Department in the far corner of the Scrap Room. The box was labeled "alum cans."



Photo 10: Aramark Towel Manager (ATM) in the Stamping Area. Unit was closed and labeled "excluded solvent contaminated wipes, 40 C.F.R. § 261.4(a)(26)."



Photo 11: One of two 20-gallon flammable cans observed in the Molding Tool Room. Each can was labeled with the words "excluded solvent contaminated wipes, 40 C.F.R. § 261.4(a)(26)."



Photo 12: A red mobile cart holding containers of universal waste observed in the Molding Tool Room. The cart held one 5-gallon container labeled "universal waste lead acid batteries" and dated April 8, 2024; one 5-gallon container labeled "universal waste alkaline batteries" and dated December 3, 2024; one 5-gallon container labeled "universal waste lithium batteries" and dated April 8, 2024; and one 5-gallon container labeled "universal waste nickel-cadmium batteries" and dated April 8, 2024.



Photo 13: One 55-gallon container observed in the first SAA in the Plating Area. The container was labeled as UN1935 hazardous waste cyanide solutions (potassium gold cyanide); it was marked with EPA hazardous waste numbers D003 and F007; and it was identified with a DOT hazard sticker indicating that the contents are toxic.



Photo 14: One 55-gallon container in the second SAA in the Plating Area. The container was labeled as UN1935 hazardous waste cyanide solutions (potassium silver cyanide); it was marked with EPA hazardous waste numbers D003 and F007; and it was identified with a DOT hazard sticker indicating that the contents are toxic.



Photo 15: CAA for accumulating and storing used wipes, filters, PPE and other solids contaminated with plating bath solutions. The clam shell held two 55-gallon containers: one labeled as Ag filters, identified as toxic, and dated February 20, 2024, and one labeled as gold filters, identified as toxic, and dated February 20, 2024. Neither container was labeled with the words “hazardous waste,” but the clam shell was labeled as “UN 1588 hazardous waste cyanides (potassium gold cyanide) D003, F007” and “UN 1588 hazardous waste cyanides (potassium gold cyanide) D003, F007.”



Photo 16: CAA in the Plating Area for accumulating and storing old process material that will be sent off-site for reclamation.