

REPORT OF RCRA COMPLIANCE EVALUATION INSPECTION

At

**Katecho, Inc.
4020 Gannett Avenue
Des Moines, Iowa 50321
(515) 244-1212**

EPA ID Number: IAR000509299

On

February 23, 2022

By

**U.S. ENVIRONMENTAL PROTECTION AGENCY
Region 7
Enforcement and Compliance Assurance Division (ECAD)**

1.0 INTRODUCTION

At the request of the Enforcement and Compliance Assurance Division, I conducted a Resource Conservation and Recovery Act (RCRA) compliance evaluation inspection (CEI) at Katecho, Inc. (Katecho) located in Des Moines, Iowa, on February 23, 2022. Katecho was previously inspected for RCRA compliance on April 4, 2012. This CEI was conducted under the authority of Section 3007(a) of RCRA, as amended. During the CEI, 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.

2.0 PARTICIPANTS

Katecho:

Chris Gunsaulus, Vice President of Operations, approximately nine years with the company and approximately four years in his current position.

Steve Beenken, Facility Manager, approximately five years with the company.

Jason Keuck, Shipping Supervisor, approximately 12 years with the company.

John Bindie, Materials Control Manager, approximately six and one-half years with the company.

John Warning, Quality Lead IV, approximately nine years with the company.

Kestrel-Tellevate:

Becky Wehrman-Andersen, Senior Consultant, approximately 30 years of environmental

management consulting experience.

U.S. Environmental Protection Agency (EPA):

H. D. “Doug” Bryant, CPP, PCI, Civil Investigator (SEE), ECAD/Chemical Branch/RCRA Section

3.0 INSPECTION PROCEDURES

Prior to beginning the inspection, I conducted a visual reconnaissance of Katecho on February 23, 2022, searching for areas of concern observable from the adjacent roadway. No environmental issues or areas of concern were observed during this preliminary examination.

I arrived at Katecho at approximately 0830 hours, February 23, 2022. I entered a lobby featuring an administrative counter/kiosk staffed by a receptionist. I was asked to sign a visitor log. I asked for Mr. John Hughes, identified as the facility contact. The receptionist responded that Mr. Hughes had recently retired. Mr. Gunsaulus was summoned to the entrance lobby where we briefly exchanged pleasantries. We proceeded to a large conference room that was used throughout this inspection.

Mr. Gunsaulus explained that Mr. Hughes had recently retired unexpectedly and his duties and responsibilities were currently being shared by three personnel. He added that Katecho receives hazardous waste (HW) management consulting services from Ms. Wehrman-Andersen. He asked that she be included during this CEI.

Ms. Wehrman-Andersen was contacted and arrived on-site approximately 30 minutes thereafter. She joined us in the conference room, and I presented my EPA credentials and Mr. Gunsaulus, Ms. Wehrman-Andersen and I exchanged business cards (Attachment 1). Mr. Gunsaulus participated throughout all facets of the CEI, and Ms. Wehrman-Andersen participated in all facets of the CEI except the visual inspection of the facility.

I next presented Mr. Gunsaulus and Ms. Wehrman-Andersen a copy of RCRA section 3007(a), which provides inspection authority. I explained my need to collect accurate information and presented them a copy of Title 18 U.S. Code, Sections 1001 and 1002. They were made aware of Katecho’s confidentiality rights and Mr. Gunsaulus was informed that a Confidentiality Notice would be provided at the end of the inspection to make or not to make any claims. Mr. Gunsaulus acted as the official facility representative during the inspection and acknowledged receipt of documentation provided during the exit briefing.

The inspection consisted of an entry briefing, a discussion of facility operations, waste generation and waste management, a review of waste management records, emergency preparedness and planning, and a visual inspection of the waste generation and management areas. I was provided a site map and diagram of the facility (Attachment 2).

Document photocopies and 22 photographs were collected as inspection documentation (Attachments 1-17). Information collected during the CEI was recorded on a checklist and in field notes. I followed the inspection procedures discussed in the RCRA Compliance Evaluation Inspection Standard Operating Procedure (No. 2321.1C), unless noted differently.

At the conclusion of the inspection, I conducted an exit briefing, during which I summarized my findings and recommendations with Mr. Gunsaulus and Ms. Wehrman-Andersen. I provided Mr. Gunsaulus a *Confidentiality Notice*, which he signed, indicating no confidentiality claims were made by the facility (see Attachment 3). I provided Mr. Gunsaulus a *Receipt of Documents and Samples* and *Notice of Preliminary Findings* which he signed acknowledging receipt (Attachments 4 and 5 respectively).

The following inspection documents and compliance assistance handouts were left with the facility:

Section 3007 Inspections Sheet (EPA Handout)
RCRA Facility Access Information Sheet (EPA Handout)
United States Code Annotated (EPA Handout)
Notice Regarding Proprietary/Confidential Business Information Submitted to or Collected by EPA in Connection with Inspections (EPA Handout)
Notice of Preliminary Findings (EPA Handout)
Instructions for Responding to a Notice of Preliminary Findings (NOPF) (Reverse of NOPF)
U.S. EPA Small Business Resource Information Sheet (EPA Handout)
Solvent-Contaminated Wipes Final Rule Chart (EPA Handout)
Lead-Based Paint Activities (IDNR Handout)
Excluded Solvent-Contaminated Wipe Rule (IDNR Handout)
Battery Recycling/Disposal (IDNR Handout)
Universal Wastes Including Aerosol Cans (IDNR Handout)
TCLP Waste Determination Testing (IDNR Handout)
Environmental Compliance Assistance Centers (EPA Handout)
e-Manifest Fact Sheet (EPA Handout)
RCRA Online A Quick Reference Guide (EPA Handout)
Emergency Response Program (EPA Handout)
Security Awareness (EPA Handout)
Managing Your Hazardous Waste: A Guide for Small Business (EPA Handout)

4.0 FINDINGS AND OBSERVATIONS

4.1 Facility Information and Operations

The Katecho facility is located in the southwestern portion of Des Moines, Iowa, in a light industrial and business area. Katecho has operated at this location since 2004. Katecho employs approximately 500 personnel, working 12-hour shifts Monday-Saturday days

(06:00-18:00) and 12-hour shifts Monday-Wednesday evenings (18:00-06:00). Sundays are worked as overtime when business requires. Katecho operates in a building with approximately 106,000 square feet under roof. The facility houses administrative offices, laboratory, production, storage, and maintenance (Attachment 2). The North American Industry Classification System (NAICS) code for this facility is 334510 – Electromedical and Electrotherapeutic Apparatus Manufacturing.

Katecho manufactures pads for defibrillation (defib) units. Mr. Gunsaulus stated that Katecho contracts with various defib manufacturers to produce pads complying with their individual specifications. Mr. Gunsaulus stated that Katecho manufactures Hydrogel (i.e., conductive adhesive for the pads) to each customer's specifications. He stated that all other parts, such as ink, adhesive, foam pad backing, tin web forms, wire, and connectors, are purchased from various off-site manufacturers and vendors. Mr. Gunsaulus stated that the Hydrogel is applied to the foam backing and all of the additional parts are then attached to the pad.

4.2 RCRA Status

Katecho was previously inspected April 4, 2012 for RCRA compliance as a conditionally exempt small quantity generator (CESQG) of D001 and D035 characteristic and F005 listed HW. No findings were documented during that inspection.

The facility notified the EPA on May 7, 2017, that it is a small quantity generator (SQG) of D001, D002, D003, D011, and D035 characteristic, F003 and F005 listed, and U002, U154, U159, and U162 HW (Attachment 6). A review of uniform hazardous waste manifests (UHW) spanning the previous three years confirmed that Katecho routinely generates more than 100 and less than 1000 kg/month of D001, D007, D010, D011, D035 characteristic and F003 and F005 listed HW. Therefore, I inspected them as a SQG of HW. The facility has converted portions of lighting to light emitting diode (LED) fixtures throughout the administrative office and various plant operations areas. Several plant operations areas still use fluorescent lighting and spent fluorescent lamps are managed as universal waste (UW). Katecho also manages spent batteries as UW, therefore I inspected Katecho as a small quantity handler of universal waste (SQHUW). Katecho does not generate any used oil.

I asked Mr. Gunsaulus if Katecho had re notified the EPA that it was a SQG of HW prior to September 1, 2021, to which he responded that he was not aware of any such notification. He spoke to Mr. Hughes telephonically and determined that Katecho had not re notified the EPA as required of a SQG of HW prior to September 1, 2021.

Katecho must renotify the EPA of hazardous waste activity every four years, starting September 1, 2021, in accordance with 40 CFR §262.18(d)(1), NOPF #2, Attachment 5.

4.3 Facility Waste Streams and Management

Katecho has contracted Tradebe Treatment and Recycling, LLC (Tradebe) for HW

management. HW shipments are picked up and transported by Tradebe Transportation (INR000123497) and transported to the Tradebe Treatment and Recycling (IND000646943) designated facility for appropriate management.

After the CEI, Mr. Gunsaulus provided additional information regarding the HW streams generated by Katecho. This explanation is attached (Attachment 13). He also provided an explanation of the procedures Katecho follows to conduct hazardous waste determinations and manage HW internally. The email thread and the two procedures described by Mr. Gunsaulus are found at Attachments 14, 15, and 16 and discussed below.

Mr. Gunsaulus stated that HW is primarily generated from printing machinery operations conducted in the printing area. The waste ink and solvent, waste conductive ink and waste parts washer streams described below are combined in one 55-gallon drum located inside the printing area. Isopropanol is used in the Hydrogel production process and is generated as a waste stream. Acrylic acid is used to produce polymers in the Hydrogel production process and is generated as a waste stream. The profile for these waste streams is attached (Attachment 7). He added that expired and off-specification chemicals are also managed as HW and are stored in an area in the Warehouse designated as a hazardous waste central accumulation area (HWCAA). The following waste streams are generated by Katecho:

Waste Ink and Solvent: Mr. Gunsaulus stated that printing is applied to the foam backing of each pad using solvent based printing ink (Attachment 8). Methyl Ethyl Ketone (MEK) solvent (Attachment 9) is routinely used to clean the printing machinery. MEK is also used in the parts washer discussed below. This waste stream is collected in small plastic containers by printing machinery operators and transported to a 55-gallon satellite accumulation area (SAA) container located inside a flammable cabinet located nearby the printing machinery. Katecho combines this waste stream with waste solvent generated in the parts washer and waste conductive ink waste and solvent streams described below. Approximately 30-35 gallons of this combined waste stream is generated monthly and is profiled as UN1992, Waste Flammable Liquids and managed as D001, D007, D010, D011 and D035 characteristic and F003 and F005 listed HW by virtue of product and process knowledge. When full, the 55-gallon drum of HW is moved from the printing area to the HWCAA designated area located in the Warehouse. Tradebe picks up and transports this HW stream off site for fuel blending at its facility.

Waste Conductive Ink and Solvent: Mr. Gunsaulus stated that conductive ink is applied to products using silver/silver chloride ink (Attachment 10). The conductive printing is a screening process that uses this flexible silver ink. The screens are cleaned in a parts washer using MEK solvent. The waste stream is combined as previously discussed and is profiled as UN 1992, Waste Flammable Liquids and managed as D001, D007, D010, D011 and D035 characteristic and F003 and F005 listed HW by virtue of product and process knowledge. Tradebe picks up and transports this HW stream off site for fuel blending at its facility.

Waste Hydrogen Peroxide: Mr. Gunsaulus stated that Katecho generates approximately 20 gallons of waste hydrogen peroxide every two to three months. The waste hydrogen peroxide is profiled as UN 3103, Waste Organic Peroxide and is managed as D001 characteristic HW by virtue of product and process knowledge and is segregated from other HW streams. Tradebe picks up and transports this HW stream off site where this waste is stored/bulked and transferred with no treatment or recovery at its facility.

Waste Parts Washer Solvent: Mr. Gunsaulus stated that Katecho cleans printing machinery parts and screens in a 40–50-gallon parts washer filled with MEK located in the printing area. The solvent used in the parts washer is filtered using special filters to remove impurities and prolong solvent viability. When spent, waste parts washer solvent is removed from the parts washer using plastic containers, the contents of which are poured into the 55-gallon SAA container described above. This combined waste stream is profiled as UN 1992, Waste Flammable Liquids and is managed as D001, D007, D010, D011 and D035 characteristic and F003 and F005 listed HW by virtue of product and process knowledge. Tradebe picks up and transports this HW stream off site for fuel blending at its facility.

Waste Parts Washer Filters: Mr. Gunsaulus stated that Katecho generates approximately 40 pounds of waste parts washer filters annually. The waste parts washer filters are profiled as UN 3175, Waste Solids Containing Flammable Liquid and managed as D001, D007, D010, D011 and D035 characteristic and F003 and F005 listed HW by virtue of product and process knowledge. The waste parts washer filters are placed in a separate 55-gallon drum and are manifested off-site as waste solids containing flammable liquid, UN3175. Tradebe picks up and transports this HW stream off site for fuel blending at its facility.

Waste Absorbent Drip Pads: Mr. Gunsaulus stated that Katecho generates one to two waste absorbent drip pads in the Printing Area monthly. The waste absorbent drip pads are profiled as UN 3175, Waste Solids Containing Flammable Liquid and managed as D001, D007, D010, D011 and D035 characteristic and F003 and F005 listed HW by virtue of product and process knowledge. The waste absorbent drip pads are combined with the waste parts washer filters described above. The waste parts washer filters and waste absorbent drip pads are placed in a separate 55-gallon drum and are manifested off-site as waste solids containing flammable liquid, UN3175. Tradebe picks up and transports this HW stream off site for fuel blending at its facility.

Waste Acrylic Acid: Mr. Gunsaulus stated that Katecho generates 20-30 gallons of waste acrylic acid monthly during Hydrogel production activities. The waste acrylic acid is profiled as UN 2218, Waste Acrylic Acid, Stabilized and is managed as D001 and D002 characteristic HW by virtue of product and process knowledge. The waste acrylic acid is picked up by Tradebe and transported to its site where it is stored/bulked and transferred with no treatment or recovery.

Waste Isopropanol: Mr. Gunsaulus stated that Katecho generates 20-30 gallons of waste isopropanol monthly during Hydrogel production activities. The waste isopropanol is profiled as UN 1219, Waste Isopropanol and managed as D001, D007, D010, D011 and D035 characteristic and F003 and F005 listed HW by virtue of product and process knowledge. Tradebe picks up and transports this HW stream off site for fuel blending at its facility.

Waste Laboratory Chemicals: Mr. Gunsaulus stated that Katecho generates less than one kg of waste laboratory chemicals and reagents in the Analysis Laboratory monthly. The waste laboratory chemicals are managed as listed HW and are managed as U002, Acetone; U154, Methanol; U159, Butanone; and U162, Methyl methacrylate by virtue of product and process knowledge. Mr. Gunsaulus stated that the small containers of waste laboratory chemicals are combined in a lab pack and are picked up and transported off-site by Tradebe for fuel blending.

Waste Chemicals (Expired and Off-Specification): Mr. Gunsaulus stated that Katecho generates between 20-40 pounds of various expired and off-specification waste chemicals annually. Mr. Gunsaulus explained that Katecho is a medical device manufacturing facility with research/development focus as well. He explained that new processes are constantly being tried, new products are developed, and product changes are undertaken to improve customer support. Some of the waste chemicals are generated from expired chemicals, or chemicals that were damaged in transit and some are from research and development projects that never moved on to production. He added that some of the chemicals are from intentional reduction in the use of one chemical in favor of another and some were from production of off-specification products that could not be recovered. Therefore, waste codes vary, depending upon the type of waste generated. Containers of HW waste chemicals are combined in a laboratory pack by Tradebe and manifested off-site for fuel blending by Tradebe.

Waste Hydrogel: Mr. Gunsaulus stated that Katecho produces Hydrogel using a variety of mixture specifications. Small batches of Hydrogel are tested in the Analysis Laboratory to satisfy contractual specifications. When testing is completed for a specific customer, the test batches become waste Hydrogel. Mr. Gunsaulus stated that the Hydrogel manufactured by Katecho is comprised of natural polymers and has been determined to be non-RCRA hazardous by virtue of product and process knowledge. He added that the Hydrogel has a pH anywhere between 5-10, is not flammable, and contains no metals. Small amounts of waste Hydrogel are disposed through laboratory sinks to the sanitary sewer system.

Waste Foam: Mr. Gunsaulus stated that Katecho generates less than 50 pounds of waste foam monthly, consisting of cut foam strips generated when cutting the purchased foam to apply to the pads. The waste foam has been determined to be non-RCRA hazardous, by virtue of product and process knowledge and is disposed in the general trash.

Cloth Shop Rags (Cloth Solvent-Contaminated Wipes): Cloth shop rags are used to absorb fluids generated in the printing area. Mr. Keuck stated that Katecho generates approximately 20 cloth shop rags weekly. Mr. Gunsaulus stated that the cloth shop rags are managed as solvent-contaminated wipes and are laundered and returned by City Clean and Simple, 1700 S. Frederick Avenue, Oelwein, Iowa. Mr. Gunsaulus explained that Katecho has developed internal policies and procedures intended to properly manage cloth solvent-contaminated wipes and other wastes. This topic was the subject of an email thread that can be found at Attachment 14. Mr. Gunsaulus explained that internal written work instructions state that no free liquids are allowed in the Excluded Solvent-Contaminated wipes containers.

Waste Paper Disposable Wipes/Personal Protective Equipment (PPE): Waste paper disposable wipes and PPE are generated throughout the facility. The waste paper disposable wipes are used for general cleaning of dirt and grime, outside of the printing area. The waste PPE is generated throughout the plant, to include laboratories. The waste paper disposable wipes and PPE are disposed in general trash. Mr. Keuck estimated that Katecho generates between 200-500 waste paper disposable wipes and 50 nitrile gloves weekly. Mr. Gunsaulus explained that Katecho conducts waste determinations on its waste streams, in accordance with an internal procedure (Attachment 15). He stated that Section 4.2.3 of this document describes procedures for managing debris, PPE, disposable wipes, etc. that have been contaminated with HW. These procedures describe how such waste is managed as HW as appropriate. Mr. Gunsaulus also provided an internal memorandum (Attachment 16) that documents Katecho's HW disposal policies. Any contaminated debris, PPE, disposable wipes, etc. is combined in a 55-gallon drum used to contain the waste parts washer filters previously discussed. This combined waste stream is profiled as UN 3175, Waste Solids Containing Flammable Liquid and managed as D001, D007, D010, D011 and D035 characteristic and F003 and F005 listed HW. Tradebe picks up and transports this HW stream off site for fuel blending at its facility.

Waste Liquid Vinyl Acetate: Mr. Gunsaulus stated that Katecho generates approximately two 55-gallon drums of waste liquid vinyl acetate every two to three months. The waste liquid vinyl acetate has been determined to be non-RCRA hazardous by virtue of product and process knowledge. The waste liquid vinyl acetate is picked up and manifested off site as non-hazardous DOT-RCRA waste. Tradebe picks up and transports the waste liquid vinyl acetate off-site for disposition.

Waste Flex Bond Adhesive: Mr. Gunsaulus stated that Katecho generates waste Flex Bond KET921 adhesive. He was not able to estimate the amount of generation but added that the adhesive is similar to "Elmer's Glue" and is wiped off products using paper disposable wipes. Mr. Gunsaulus stated that the waste Flex Bond adhesive had been determined to be non-RCRA hazardous by virtue of product and process knowledge. The waste Flex Bond adhesive and paper disposable wipes are disposed in the general trash.

General Trash: Mr. Gunsaulus stated that Katecho generates approximately two 30 cubic yard containers of compacted general trash weekly. The general trash consists of waste office paper, lunch wastes, and miscellaneous packing materials. Mr. Gunsaulus

stated that the general trash has been determined to be non-RCRA hazardous, by virtue of product and process knowledge. The general trash is compacted on-site. The compacted general trash is picked up twice weekly by Ankeny Sanitation, 7002 SE Delaware Avenue, Ankeny, Iowa, and transported off-site to the South Dallas County Landfill located in Adel, Iowa for sanitary landfill disposal.

Waste Cardboard: Mr. Keuck stated that Katecho generates approximately one trailer of waste cardboard weekly. The waste cardboard has been determined to be non-RCRA hazardous, by virtue of product and process knowledge. The waste cardboard is picked up and transported off-site by Diversified Solutions, Inc. (Diversified), P.O. Box 57131, Des Moines, Iowa, for recycling (Contact: Fred Davis, diversified317@gmail.com, Work: (317) 504-8542, Cell: (515) 313-7320).

Scrap Metal: Mr. Gunsaulus stated that Katecho manufactures medical devices that contain tin, silver, and gold. He stated that the primary devices manufactured are defibrillator electrodes, which have wires and either purchased tin or printed silver conductive pads affixed to gel backings. An email thread describing scrap metal generation is attached (Attachment 17). He explained that when the pads are trimmed out of stock material, the trimmed material remaining is reclaimed to recover economically significant amounts of gold and silver for recycling. He added that additional scrap metal is generated from wire trimmings, off-specification products, and various other metal device components. Mr. Gunsaulus stated that Katecho generates approximately 3,000 pounds of scrap containing tin, approximately 2,000 pounds of scrap containing silver, and 25 pounds of scrap containing gold weekly. The scrap tin and silver metal is collected in three-cubic yard Gaylord tote containers and the gold scrap is collected in a smaller container. The scrap metal containers are picked up and transported off-site weekly by Diversified for recycling and metal recovery. Mr. Gunsaulus stated that the recyclable materials are reclaimed to recover economically significant amounts of precious metals.

Waste Fluorescent Lamps: Mr. Gunsaulus stated that Katecho generates approximately 30-40 waste fluorescent lamps annually. The waste fluorescent lamps are stored in cardboard containers located in the Warehouse HWCAA and are managed as UW. The UW-lamps are picked up and manifested off-site annually by Tradebe, for recycling.

UW Batteries: Mr. Gunsaulus stated that Katecho generates approximately four to five waste uninterrupted power supply (UPS) batteries every three to five years. The waste batteries are collected in a five-gallon container that is managed as UW. The UW-Batteries are picked up and manifested off-site by Tradebe for recycling.

Lead-Acid Batteries: Mr. Gunsaulus stated that Katecho operates 12 electric plant vehicles that are maintained on-site by Crown Lift Trucks (Crown), 5877 NE Industry Drive, Des Moines, Iowa. Mr. Gunsaulus stated that approximately one lead-acid battery is removed, exchanged, and replaced by Crown every three to four years. Mr. Gunsaulus stated that the lead-acid batteries are exchanged in accordance with the provisions of the 40 CFR §266, Subpart G exemption.

Electronic Waste: Mr. Gunsaulus stated that Katecho generates between 500-700 pounds of electronic waste (E-waste) annually. The E-waste is picked up and manifested off-site by Tradebe, for recycling.

Waste Wooden Pallets: Mr. Keuck stated that Katecho generates approximately 150 waste wooden pallets weekly. The waste wooden pallets are picked up and transported off-site by Diversified, for recycling.

4.4 Visual Inspection of Facility Waste Stream Management

A visual inspection of the facility was conducted to observe waste stream management practices and document regulatory compliance. Photographs, checklists, and field notes were used to document observations made during the visual inspection. A Photo Log was created, and photos taken during the inspection appear in Attachment 11.

I observed a flammable cabinet located in the print area identified as a “Satellite Waste Accumulation Area” as shown in Photo 1, Attachment 2. A 55-gallon drum labeled as hazardous waste was located inside the flammable cabinet (Photos 2 and 3, Attachment 2). The 55-gallon drum was approximately $\frac{3}{4}$ -full of the combined waste stream of ink/solvent/screen wash that is managed as D001, D007, D010, D011 and D035 characteristic and F003 and F005 listed HW. A funnel affixed to the top of the drum was OPEN, as shown in Photo 4, Attachment 2. **Failure to keep containers of HW closed when not adding waste or for temporary venting is not in accordance with the provisions of 40 CFR §262.15(a) (4), NOPF #3, Attachment 5.**

Mr. Gunsaulus immediately latched the lid of the funnel during this inspection, thus CLOSING the container, as evidenced by Photo 5, Attachment 2. I observed that the lid did not appear to seat properly even when latched and recommended during the exit briefing that a new seal be affixed to the lid to ensure that the funnel functioned in the manner intended.

I observed a Katecho Emergency Response document affixed to the door of the flammable cabinet (Attachment 12). Mr. Gunsaulus stated that the purpose of the document was to satisfy the provisions of 40 CFR §262.16(b)(9)(ii) requiring posting of the emergency coordinator’s name and phone number, fire department’s phone number, and locations of fire extinguishers and spill control equipment near the phone. I pointed out that the document did not identify the locations of fire extinguishers and spill control equipment. **Katecho must post emergency information describing the locations of fire extinguishers and spill control equipment near the phone for potential HW emergencies in accordance with the provisions of 40 CFR §262.16(b)(9)(ii), NOPF #1 Attachment, Attachment 5.**

I observed one five-gallon step can containing cloth solvent-contaminated wipes used to clean printing equipment in the printing area (Photos 6 and 7, Attachment 2). The metal

step can was in good condition and closed. The container appeared to have complete contact between the fitted lid and the rim. Mr. Gunsaulus explained that the container is emptied weekly. He added that Katecho's internal waste management procedures prohibit free liquids in the wipes. The solvent-contaminated wipes do not contain free liquids as defined in 40 CFR §260.10. The step can was lined with a bag that appeared to be made of woven plastic-tarp material. The container was less than 1/3-full of cloth solvent-contaminated wipes. Mr. Gunsaulus stated that the cloth wipes were managed in accordance with the provisions described in 40 CFR §261.4(a)(26)(i), which requires that solvent-contaminated wipes, when accumulated, stored, and transported, are contained in non-leaking, closed containers that are labeled "Excluded Solvent-Contaminated Wipes." Upon closer examination, Mr. Gunsaulus and I determined that the five-gallon step can was not labeled as "Excluded Solvent-Contaminated Wipes" as previously described.

Katecho must label the five-gallon step can used to accumulate solvent-contaminated wipes in the Printing Area with the words "Excluded Solvent-Contaminated Wipes" as required by 40 CFR §261.4(a)(26)(i), NOPF added after the CEI.

I observed a large parts washer used to clean printing machinery and screens in the Printing Area (Photo 8, Attachment 2). I observed the filters affixed to the parts washer and an absorbent drip pad placed beneath the filters as shown in Photo 9, Attachment 2. I also observed plastic containers (Photo 10, Attachment 2) used to transport waste ink and waste solvent from the printing machinery and the parts washer to the nearby 55-gallon SAA container described above.

I inspected the Analysis Laboratory where Hydrogel is tested to meet customer specifications. I observed a container stored inside a cabinet, pictured in Photo 11, Attachment 2. The container was not labeled with the words "Hazardous Waste" and did not bear any indication of the nature of the container's contents. However, the container was identified by a yellow label with the words "QUARANTINE" and approximately 12 handwritten descriptions with the word "waste" as shown in Photo 11, Attachment 2. I asked Mr. Warning what was in the container, to which he replied, "waste methanol." This is consistent with the Waste Laboratory Waste Stream discussed above and the generation of waste methanol managed as U154 listed HW. I asked Mr. Warning how this waste was generated. He took me to a nearby laboratory hood where I also observed testing apparatus in use inside the Analysis Laboratory, pictured in Photo 12 and Attachment 2. I asked Mr. Warning the contents of the container labeled with the words "WASTE MATERIAL" in Photo 12, to which he responded "methanol." Based upon these observations and Mr. Waring's answers to my questions, I determined that the container marked with the words "WASTE" pictured in Photo 11 and described above was waste methanol that should be managed as U154 listed HW and was not appropriately labeled. **Katecho must label containers of HW as "Hazardous Waste" in accordance with the provisions of 40 CFR §262.15(a)(5)(i), NOPF #4, Attachment 5. Additionally, Katecho must label containers of HW with an indication of the nature of the hazard in accordance with 40 CFR §262.15(a)(5)(ii), NOPF added after this CEI.**

I observed a similar container located in another cabinet located inside the Analysis Laboratory, Pictured in Photo 13, Attachment 2. This container bore approximately five handwritten descriptions with the word “WASTE” as shown in Photo 13, Attachment 2. I asked Mr. Warning if he knew what was in the container, to which he responded that “he did not know.” I also observed a general trash container located inside the Analysis Laboratory, pictured in Photos 14 and 15, Attachment 2. The trash container was lined with a plastic trash bag and was nearly full. I observed nitrile gloves and plastic syringes in the trash container. I asked Mr. Warning if a HW determination had been conducted on the contents of the trash container, specifically the waste nitrile gloves and plastic syringes, to which he responded that he was not aware of any such HW determination. **Katecho must conduct a HW determination on the contents of one container labeled “waste” and a general trash container containing waste nitrile gloves and plastic syringes located inside the Analysis Laboratory in accordance with 40 CFR §262.11, NOPF #5, Attachment 5.**

I observed three cardboard containers of UW-Lamps stored inside the Warehouse (Photo 16, Attachment 5). The cardboard containers were closed, dated, and identified as “UW-Lamps.” I did not observe any UW-batteries.

I observed a flammable cabinet located near the UW-Lamps in the Warehouse (Photo 17, Attachment 2). I observed approximately 21 containers, ranging in size of about one quart to five gallons that were partially full to full, labeled “Hazardous Waste” that were being stored awaiting transfer to a laboratory pack for pick-up and transportation off-site by Tradebe. The containers of Hazardous Waste did NOT bear any description indicating the nature of the hazardous waste contained within the containers. **Katecho must label approximately 21 containers of hazardous waste stored inside a flammable cabinet inside the Warehouse with an indication of the nature of the hazard in accordance with 40 CFR §262.16(b)(6)(i)(B), NOPF #6, Attachment 5.**

I observed two flammable cabinets located in southeastern corner of the Warehouse. One cabinet (Photo 18, Attachment 2) contained one full 55-gallon drum of waste ink and solvent, labeled as Hazardous Waste, and approximately 22 smaller containers, ranging in size of about one quart to five gallons that were partially full to full, all of which were labeled as Hazardous Waste. All of the containers were in good condition, closed, and dated (Photos 19 and 20, Attachment 2). I did not observe any indication of the nature of the hazard contained in the various containers. **Katecho must label approximately 23 containers of hazardous waste stored inside a flammable cabinet inside the Warehouse with an indication of the nature of the hazard in accordance with 40 CFR §262.16(b)(6)(i)(B), NOPF added after the CEI.** The second flammable cabinet was identified by a label affixed to the exterior door with the words “Hazardous Waste Accumulation Area Acids” as shown in Photo 21, Attachment 2. The cabinet contained two full, closed, labeled, and dated five-gallon plastic containers filled with waste hydrogen peroxide, managed as D001 characteristic HW (Photo 22, Attachment 2). Mr. Gunsaulus explained that the waste hydrogen peroxide was segregated from the

other HW because it was an oxidizer. We discussed the wording on the label affixed to the exterior of the cabinet and Mr. Gunsaulus stated that he would change the label to better reflect the contents of the cabinet.

4.4 Documentation

Prior to this CEI, I reviewed 10 electronic uniform hazardous waste manifests (UHWM) spanning the period of August 31, 2018, to present. Additionally, I reviewed the following UHWM while on site during this inspection:

DATE	UHWM #	Description	Weight/Lbs	EPA Waste Codes
11/29/2021	022784036JJK	UN1992	800	D001, D007, D010, D011, D035, F003, F005
		UN1263	40	D001, D007, D010, D011, D035, F003, F005
		NON-DOT	400	Non-RCRA
		UN1992	400	D001, D007, D010, D011, D035, F003, F005

Mr. Beenken provided manifests spanning the previous three years. I did not observe any discrepancies with the shipping documentation/manifests maintained by the facility.

4.5 Emergency Planning and Preparedness and Training

I discussed emergency preparedness and prevention topics with Mr. Gunsaulus. He stated that Katecho has made arrangements with local emergency agencies. He added that emergency responders are familiar with the layout, waste types, access point evacuation routes and likely casualty types.

Ms. Wehrman-Andersen stated that Katecho familiarizes all employees with waste handling and emergency procedures relevant to their responsibilities. She stated that she last provided Katecho personnel hazardous waste management and operations training on February 24, 2021.

5.0 SUMMARY

No findings were documented during the RCRA CEI previously conducted April 4, 2012 when the facility was inspected as a conditionally exempt small quantity generator (CESQG) of HW and a SQHUW.

The following preliminary findings were documented during this CEI:

NOPF No. 1 - 40 CFR §262.16(b)(9)(ii): Post emergency coordinator's name and phone number and locations of fire extinguishers and spill control equipment near the phone.

NOPF No. 2 - 40 CFR §262.18(d)(1): Renotify the EPA of hazardous waste activity every four years, starting September 1, 2021.

NOPF No. 3 - 40 CFR §262.15(a)(4): Keep containers of HW closed when not adding waste or for temporary venting.

NOPF No. 4 – 40 CFR §262.15(a)(5)(i): Label containers as “Hazardous Waste”.

NOPF No. 5 – 40 CFR §262.11: Conduct a HW determination on:

- a. Container labeled with the word “WASTE” located inside the Analysis Laboratory; and**
- b. General trash container located inside the Analysis Laboratory containing plastic syringes and nitrile gloves.**

NOPF No. 6 – 40 CFR §262.16(b)(6)(i)(B): Label approximately 21 containers of HW located inside a flammable cabinet located inside the Warehouse (HWCAA) with an indication of the nature of the hazard. Label approximately 23 containers located inside another flammable cabinet located in the southeastern corner of the Warehouse (HWCAA) with an indication of the nature of the hazard.

NOPF No. 7 (Added after the CEI) – 40 CFR §261.4(a)(26)(i): Solvent contaminated wipes generated in the printing area must be contained in containers that are labeled “Excluded Solvent-Contaminated Wipes.”

NOPF No. 8 (Added after the CEI) – 40 CFR §262.15(a)(5)(ii): Label container of hazardous waste in the Analysis Laboratory with an indication of the nature of the hazard.

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

HURLEY BRYANT
(Affiliate)

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BRYANT (Affiliate)
Date: 2022.03.21 21:16:27 -05'00'

Date: 3/22/2022

H. D. "Doug" Bryant, CPP, PCI
Civil Investigator (SEE)

AMBER WHISNANT

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WHISNANT
Date: 2022.04.18 20:28:30 -05'00'

Date: _____

Amber Whisnant
Chief, RCRA Section, Chemical Branch
Enforcement and Compliance Assurance Division

Attachments:

- 1) Business Cards (1 page)
- 2) Site Map/Diagram (2 pages)
- 3) Confidentiality Notice (1 page)
- 4) Receipt of Document and Samples (1 page)
- 5) Notice of Preliminary Findings (NOPF) (2 pages)
- 6) Hazardous Waste Site Info Verification Report for Inspector (1 page)
- 7) TRADEBE Annual Waste Stream Profile Certification #KATECHO0362 dated 12/31/2015 (2 pages)
- 8) Safety Data Sheet (SDS), Solvent Based Printing Ink (7 pages)
- 9) SDS, Methyl Ethyl Ketone (12 pages)
- 10) Material Safety Data Sheet (MSDS), Silver/Silver Chloride Conductive Ink (4 pages)
- 11) Photo Log (2 pages) and Visual Inspection Photos (22 pages)
- 12) Katecho Emergency Response Reference, SFT-09, Form 1076, Rev. 11 (1 page)
- 13) Email thread, RE: Printing Area Parts Washer Solvent (3 pages)
- 14) Email thread, RE: Follow Up Solvent Contaminated Wipes dated 3/9/2022 (2 pages)
- 15) Katecho Document #SFT-29, Rev 2 (3 pages)
- 16) Katecho Memorandum, Subject: Procedure for Hazardous Waste Disposal, dated September 28, 2014 (1 page)
- 17) Email thread, RE: Scrap Metal Generation dated 3/9/2022 (2 pages)