

RCRA Inspection Report

1) Inspector and Author of Report

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2) Facility Information

University of Kentucky
Environmental Quality Management
355 Cooper Drive
Lexington, Kentucky 40546
Fayette County

EPA ID#: KYD000830851
NAICS #: 611310 - Colleges, Universities, and
Professional Schools

3) Responsible Officials

Maridely Loyselle
Environmental Affairs Compliance
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4) Inspection Participants

Maridely Loyselle, University of Kentucky
Adam Cook, University of Kentucky
Brian Butler, University of Kentucky
Chuck Lowe, University of Kentucky
Shane Tedder, University of Kentucky
Tim Armstrong, University of Kentucky
Graham Gray, University of Kentucky
Paul Zeer, University of Kentucky
Sharon Berry, University of Kentucky
David Marr, University of Kentucky
Maggie Mastalerz, University of Kentucky

Heather Jordan, Kentucky Department for
Environmental Protection (KY DEP)
Scott Gerstner, KY DEP
Novelle Smith, USEPA
Paula Whiting, USEPA

5) Date of Inspection

February 12, 2025 at 9:00 EST

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; Hazardous Waste Permit KYD000830851.

Kentucky Revised Statutes Title XVIII, Chapter 224, Subchapter 46-Hazardous Waste *et seq.* (2006), and Title 401 of the Kentucky Administrative Regulations

Pursuant to KRS 224.1-010(12) [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 401 KAR 39:080, Section 1(1) [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 KRS § 224.46-520 [Section 3005 of RCRA, 42 U.S.C. § 6925], provided that the generator complies with the conditions listed in 401 KAR 39:080, Section 1(1) [40 C.F.R. § 262.17] (hereinafter referred to as the “LQG Permit Exemption”).

Pursuant to 401 KAR 39:080, Section 1(1) [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 KRS § 224.46-520 3005 of RCRA, 42 U.S.C. § 6925], and without complying with 401 KAR 39:080, Section 1(1) [40 C.F.R. § 262.16(b) or § 262.17(a)], except as required in 401 KAR 39:080, Section 1(1) [40 C.F.R. § 262.15(a)(7) and (8)], provided that the generator complies with the satellite accumulation area conditions listed in 401 KAR 39:080, Section 1(1) [40 C.F.R. § 262.15] (hereinafter referred to as the “SAA Permit Exemption”).

Pursuant to 401 KAR 39:080, Section 3(1) [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.

7) **Purpose of Inspection**

The purpose of this inspection was to conduct an unannounced compliance evaluation inspection to determine University of Kentucky’s compliance with the conditions of its RCRA Hazardous Waste Facility Operating Permit KYD000830851, the applicable requirements of RCRA and the corresponding Kentucky Administrative Regulations. This was an EPA lead inspection.

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.

8) Facility Description

The University of Kentucky (UK) is a public, land grant university with a full complement of liberal arts, engineering, professional, agricultural and medical colleges and disciplines on one contiguous campus. UK's campus covers more than 900 acres and is home to nearly 34,000 students and more than 26,000 employees, including over 3,000 full-time faculty. The university operates an annual budget of \$6.9 billion and is one of eight universities in the United States that has colleges of agriculture, engineering, medicine and pharmacy on a single campus. UK supports more than 200 academic programs spread across 16 degree-granting colleges, the Lewis Honors College, Graduate School, and the UK Library system.

The UK Environmental Quality Management Department (EQM) is a service-oriented resource for the university on all regulatory matters related to environmental management. The EQM operates the transfer, storage and disposal facility (TSDF) as well as provides services for Air Quality Compliance Management, Water Quality Compliance Management, Hazardous Waste Management, Asbestos Assessment and Abatement, Spill Response Assistance, Phase I Environmental Site Assessments, and manages the Title V Air Emissions, Hazardous Waste Treatment and Storage facility, Stormwater (MS4), and the Wastewater permits.

University of Kentucky Environmental Quality Management's most recent Hazardous Waste Generator Notification (EPA Form 8700-12) dated February 26, 2024, characterized the facility as a LQG, Operating TSDF, and Transporter of hazardous waste. University of Kentucky Environmental Quality Management may generate hazardous waste streams, spent aerosol cans, used solvent, used oil, universal lamps and batteries, paint waste, and other wastes.

9) Previous Inspection History

KYDEP has conducted 37 RCRA CEIs at the subject facility between 1990 and 2024 and found 96 violations during those inspections. The violations were returned to compliance.

On July 31, 2024, KYDEP conducted the most recent RCRA CEI at the subject facility and found no apparent violations of RCRA's requirements.

10) Opening Conference

On February 12, 2025, EPA inspector Paula Whiting and Novelle Smith, accompanied by Kentucky inspector Heather Jordan and Scott Gerstner, arrived at the University of Kentucky Environmental Quality Management Department at approximately 9:00 AM. Mr. Brian Butler, Director, immediately received the inspectors. Mr. Butler, and the inspectors were joined by Mrs. Maridely Loyselle, Assistant Director, and Mr. Adam Cook, Environmental Manager, for the opening conference. The inspectors introduced themselves, showed their credentials to Mr. Butler, Mrs. Loyselle, and Mr. Cook, and explained the purpose of the visit.

The inspectors described the anticipated use of a 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.

Mr. Butler, Mrs. Loyselle, and Mr. Cook 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 the Facility representative led the inspectors on a tour of the Facility's operations.

11) Inspection Observations

Environmental Quality Management Center

The EQM building houses their offices and the TSDf covered under the Hazardous Waste Permit KYD000830851. The EQM manages all waste streams generated by the University. The departments submit a E-TRAX ticket for hazardous waste pick up via Chematix. The ticket which includes the generator, location and type of waste, is attached to the waste container and the pickups occur by the oldest waste request first. The wastes are brought to the EQM, sorted by type, and placed on shelves. UK has 1500 satellite accumulation areas (SAAs) over 2700 lab spaces the EQM picks up from.

Quarterly, Veolia Environmental Solutions Technical Solutions (EPA ID OHD93945293) located in West Carrollton, Ohio comes and cleans out the waste storage area. September and December are specifically scheduled for Veolia clean outs.

The EQM TSDf is divided into sections/areas as determined by their characteristic. The tour of the EQM TSDf began at the Water Quality Testing area where the sewer manholes and drinking water testing equipment is stored. The inspectors then toured the following areas (Pictures 1-28):

- Acid Area where elementary neutralization occurs
- Receiving Area with spill supplies
- Toxic/Metals for water high in organic material (i.e., phosphate buffer feeds algae)
- Bases
- Upcycling which is UK's recycling program to collect and give away reusable products as a part of their waste minimization program.
- Oxidizers in an enclosed room
- Cylinder Room with four small hazardous waste cylinders
- Flammables which include universal waste aerosol and used oil
- Bulking Room for high water, used oil and toxicity characteristic leaching procedure (TCLP) chemicals under a fume hood. A shelf of spill material was against the wall, and an eyewash and shower were in the room. The bulk containers once full are moved to the hazardous characteristic area. Blue bottle recycling bins are in the room for collecting the emptied glass, plastic and metal containers.

- Toxics Area. The inspectors observed a container with a E-TRAX ticket dated January 23, 2024. Mrs. Loyselle and Mr. Chuck Lowe explained that the generator placed the date they started generating the waste on the ticket instead of the date the waste was requested to be picked up which was February 7, 2025. Mrs. Loyselle and Mr. Lowe immediately provided a correct ticket beside the original ticket.
- Supplies (i.e., containers)
- Lab for drinking and sewer water testing
- Reactive waste in a temperature-controlled room

The inspectors observed that all hazardous waste containers were closed, labeled, marked with hazard indicators and dated. No issues were observed in this facility.

Frank D Peterson Service Building

The Frank D. Peterson Service Building provides maintenance and operations services such as Air Conditioning and Refrigeration, Electric, Electronics, Masonry, Paint, Plumbing, Sheet Metal Design and Minor Fleet Repair.

The inspectors met with Mr. Shane Tedder, Director of Recycling and Sustainability and Mr. Tim Armstrong, Executive Director of Facilities Management and were escorted into the building service areas.

The inspectors observed the following in the UK Recycling Area located by the stairs (Pictures 29-35):

- A pallet of spent lead acid batteries labeled as universal waste batteries and dated February 3, 2025
- Two 4-foot fiberboard containers of universal waste lamps, closed, labeled and dated January 10, 2025
- One blue 55-gallon container of universal waste aerosol cans (the lid ring not closed), labeled and dated June 1, 2024
- One black 55-gallon container of universal waste ballasts mislabeled as universal waste batteries, not closed, missing the metal ring, and dated March 20, 2024

Pursuant 401 KAR 39:080, Section 3(1) [40 C.F.R. § 273.13(e)], a SQHUW must manage universal waste aerosol cans in a way that prevents releases of any universal waste or component of a universal waste to the environment.

Pursuant 401 KAR 39:080, Section 3(1) [40 C.F.R. § 273.13(d)], a SQHUW must manage universal waste lamps in a way that prevents releases of any universal waste or component of a universal waste to the environment.

Pursuant to 401 KAR 39:080, Section 3(1) [40 C.F.R. § 273.14(e)], a SQHUW must label or mark each lamp or container of lamps clearly with one of the following phrases: "Universal Waste-Lamp(s)," or "Waste Lamp(s)," or "Used Lamps."

On February 27, 2025, Mrs. Loyselle sent the following corrected actions for the UK Recycling Area:

- *The inspection at the UK Recycling area identified missing proper labeling and open containers. These issues were immediately corrected by EQM personnel on the same day (2/12/2025). The batteries were also collected the same day by the vendor recycling company day for proper processing.*
- *EQM follow-up on February 27, 2025, found the area in compliance with the regulations. The 55-gallon drum of aerosol cans was pick up for disposal have been placed in the area saying, "Universal waste". **Attachment 2** shows the before and after pictures.*

The Garage provides repairs and maintenance on vehicles and various types of equipment. The Garage maintains and repairs all items from lawn mowers to construction equipment, some of these include, but is not limited to - golf carts, chain saws, campus vehicles, wheelbarrows, etc.

In the Garage, the inspectors observed a 275-gallon used oil tank in a secondary containment (Picture 36). The tank was labeled as "Used Oil", and the secondary containment appeared clean.

Near the used oil tank is the used oil filter crusher with a gray catch bucket underneath to collect the released used oil (Pictures 37-41). The catch bucket sits on top of wood board with a hole cut in the center. The used oil and the used filters are dropped via the hole into the black 55-gallon container. The used oil container was observed to be labeled as "Used Oil"; however, the catch bucket was not labeled. Next to the used oil container, there were nine spent lead acid batteries that were not labeled or dated as universal waste batteries or labeled as "To Be Returned to Vendor."

Pursuant to 401 KAR 39:080, Section 4(1) [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 401 KAR 39:080, Section 3(1) [40 C.F.R. § 273.14(a)], a SQHUW must label or mark each Universal Waste battery or container or tank in which the batteries are contained clearly with one of the following phrases: "Universal Waste - Battery(ies)," or "Waste Battery(ies)," or "Used Battery(ies)."

Pursuant to 401 KAR 39:080, Section 3(1) [40 C.F.R. § 273.15(a) and (c)], a SQHUW may accumulate universal waste no longer than one year and must to be able to demonstrate the length of time that the universal waste has accumulated from the date that it became a waste or was received.

The inspectors observed that the crushed used oil filters should be collected in a separate container and not added to the 55-gallon used oil container. In addition, no fuel filters or non-used oil spent liquids should be added to the used oil. At the time of the inspection, the

inspectors observed a green catch pan labeled as “Used Oil” but actually contained spent diesel fuel and a diesel fuel filter draining inside (Picture 43). The garage staff was willing to show the inspectors how the filter crusher operated by crushing a spent diesel filter. The inspectors declined the demonstration. The inspectors also observed a black catch pan that collects used oil was not labeled as “Used Oil”.

Pursuant to 401 KAR 39:080, Section 4(1) [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.”

Area of Concern: Pursuant to 40 C.F.R. 279.10(d)(2) mixtures of used oil and diesel fuel mixed on-site by the generator of the used oil for use in the generator's own vehicles are not subject to this part once the used oil and diesel fuel have been mixed. Prior to mixing, the used oil is subject to the requirements of subpart C of this part. However, if the mixture of used oil and diesel fuel are not used on site by the generator then the mixture is subject to 40 C.F.R. 279.10(b)(2) which states that mixtures of used oil and hazardous waste that solely exhibit one or more of the hazardous waste characteristics may be subject to regulation.

The inspectors also observed a Crystal Clean parts washer using solvent based cleaner and a media blaster using glass beads (Picture 42). The maintenance staff explained the parts washer was maintained and resupplied every three months by Heritage Crystal Clean. The media blaster was used mostly for brake work. No issues were observed for the equipment.

On February 27, 2025, Mrs. Loyselle sent the following corrected actions for the Garage:

- To address these observations, the garage was provided with new containers and labels on the same day (2/12),*
- The batteries were picked up by the battery recycling vendor for proper processing and the garage staff was notified that used oil and fuel must be collected separately for disposal. The fuel pans were correctly labeled to prevent future misidentification. See **Attachment 3** for before and after pictures.*

Central Heating Plant No. 2

The Central Heating Plant No. 2 generates steam year-round by using a combination of natural gas, coal, and fuel oil. The main uses of the steam are for heating, hot water, and other processes such as autoclaves, cooking, humidity control, sterilization, and research.

The inspectors met with Mr. Graham Gray and Mr. Paul Zeer and were escorted around the plant. The inspectors observed the following during the walk through (Pictures 44-48):

- A blue 55-gallon container of universal waste aerosol cans closed, labeled, and dated May 11, 2023
- A white 55-gallon container of used oil that was half full sitting on secondary containment, with a closed red funnel in the bung and labeled

- A blue 55-gallon container of universal waste aerosol cans with no label and no date. In addition, inside the container was a discarded spent fire extinguisher. Mrs. Loyselle removed the fire extinguisher and placed it in its proper recycle location.
- Next to the unlabeled universal waste aerosol can container was a pallet of 5-gallon containers that Mrs. Loyselle stated were discarded and would be picked evaluated and picked up by EQM.

Pursuant to 401 KAR 39:080, Section 3(1) [40 C.F.R. § 273.15(a) and (c)], a SQHUW may accumulate universal waste no longer than one year and must to be able to demonstrate the length of time that the universal waste has accumulated from the date that it became a waste or was received.

Pursuant to 401 KAR 39:080, Section 3(1) [40 C.F.R. § 273.14(f)], a SQHUW must label or mark each universal waste aerosol cans (i.e., each aerosol can), or a container in which the aerosol cans are contained, must be labeled or marked clearly with any of the following phrases: “Universal Waste—Aerosol Can(s),” “Waste Aerosol Can(s),” or “Used Aerosol Can(s)”.

On February 27, 2025, Mrs. Loyselle sent the following corrected actions for the Central Heating Plant:

- *These deficiencies were corrected immediately on 2/12. The drums and buckets were picked up for disposal, and new, properly labeled new drums were provided the same day (2/12).*

Albert B. Chandler Hospital

The Albert B. Chandler Hospital is a 569-bed acute care hospital that opened in 1962. Chandler Hospital has Central and Eastern Kentucky’s only Level I trauma center and handles the most severe traumas and has the only Level IV neonatal intensive care unit in the area. The hospital also offers 100 intensive care beds, a post-anesthesia care unit, 17 operating rooms, 14-bed labor and delivery, and 26 mother-baby rooms. The hospital draws upon the resources of six UK colleges: Medicine, Nursing, Health Sciences, Dentistry, Pharmacy, and Public Health.

The inspectors met with Mrs. Sharon Berry, RN and were escorted around the hospital. The tour started in Pavillion H at the Hazardous Waste Pharmaceutical Storage. Mrs. Berry explained that the hazardous waste pick-ups occurred every two weeks. The inspectors observed 55 black bins of regulated hazardous waste pharmaceuticals and 11 blue 30-gallon containers of non-regulated medical waste (Pictures 49-51). The hazardous waste pharmaceutical bins were observed to be labeled, marked with the indication of hazards of the contents as “Toxic” and “Flammable” and the oldest accumulation start date was noted to be January 14, 2025.

Room HL409 Histology/Immunochemistry

The Histology Immunochemistry lab manages a SAA with 15-gallon container of hazardous waste stain in Room HL409. The container was located under a cabinet, and it was equipped with a bunghole lid, which was closed (Pictures 52-53). The container was labeled hazardous waste Trace Metals Combined Dyes Water Soluble Alcohol and identified with a Flammable

hazard identification. A second SAA held a 5-gallon carboy labeled hazardous waste DAB Alcohol that was equipped with a screw on lid and identified with a Flammable hazard identification (Picture 54).

In Room HL409B a SAA with a 55-gallon container of hazardous waste clarifier located in a corner, and it was equipped with a bung hole, which was closed (Pictures 55-56). The container was labeled hazardous waste Xylene Eosin Clarifier” and identified with a Flammable and Toxic hazard identification.

The Pathology Cytology lab manages a SAA with three 5-gallon carboys of hazardous waste poisonous material in Room HL412. The containers were located under a cabinet, and were equipped with a bung hole lids, which were closed (Picture 57). The containers were labeled hazardous waste Poisonous Material and identified with a Toxic hazard identification. A second SAA held a 15-gallon carboy labeled hazardous waste stain that was equipped with a screw on lid and identified with a Flammable and Toxic hazard identification (Picture 58).

The Special Chemistry and Toxicology lab manages a SAA with various sizes of amber bottles of hazardous waste poisonous material in Room HA647. The containers were located on the counter, and were equipped with black screw lids, which were closed (Pictures 59-60). The containers were labeled hazardous waste Poisonous Material and identified with a Toxic hazard identification.

The Microbiology lab manages a SAA with a white 30-gallon container of hazardous waste stain for slides in HA635. The container was located in a corner beside the sink, and was equipped with a bung hole lid, which was not closed (Pictures 61-62). At the time of the inspection, the lab manager removed the black funnel and closed the container. The container was labeled hazardous waste stain and identified with a Toxic hazard identification. The inspectors observed that the hazardous waste stain had been splattered on the floor and the wall behind the container. The inspectors recommended that the container should have a secondary containment pallet.

A second SAA had a white 30-gallon container of hazardous waste stain for slides (Picture 63). The container was located between a sink and a workbench, and was equipped with a bung hole lid, which was not closed because the black funnel was inside the bung hole. The container was labeled hazardous waste stain and identified with a Toxic hazard identification. The inspectors observed that the hazardous waste stain had been splattered on the floor and the wall behind the container. The inspectors recommended that the container should have a secondary containment pallet to replace the absorbent mat on the floor.

The inspectors asked if the container was being used at the time, and the lab manager explained that chemists routinely dump the stains into the container throughout the shift. The inspectors recommended that EQM research a different funnel that allows the chemists to close the lid after each use.

Pursuant to 401 KAR 39:080, Section 1(1) [40 C.F.R. § 262.15(a)(4)], which is a condition of the SAA Permit Exemption, a generator is required to keep containers of hazardous waste closed at all times during accumulation, except when adding, removing, or consolidating waste; or when temporary venting of a container is necessary for the proper operation of equipment, or to prevent dangerous situations, such as build-up of extreme pressure.

Pursuant to 401 KAR 39:080, Section 1(1) [40 C.F.R. § 262.17(a)(6)], which incorporates 401 KAR 39:080, Section 1(1) [40 C.F.R. § 262.251], and is a condition of the LQG Permit Exemption, a generator is required to maintain and operate its facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

On February 27, 2025, Mrs. Loyselle sent the following corrected actions for the Chandler Hospital:

- All identified deficiencies have been corrected. The two satellite accumulation areas now have secondary containment, new funnels to prevent contamination and keep containers closed, and absorbent pads for spill protection and waste tracking control. Sixth-floor personnel have been informed of these changes and the need to follow the updated practices. Attachment 4 shows the before and after pictures.*

Central Pharmacy

The Central Pharmacy at Chandler Hospital is the main distribution hub of all the medicines. The inspectors met with Mrs. Maggie Mastalerz and were escorted around the pharmacy. The Central Pharmacy manages a SAA with black bin of hazardous waste pharmaceuticals (Pictures 64-65). The container was located in a small storage area, and it was equipped with a white lid, which was closed. The container was labeled hazardous waste Pharmaceuticals and identified with a Flammable, Corrosive, Reactive, and Toxic hazard identification. The container had a date of January 30, 2025.

The inspectors observed the Pyxis C Safe where controlled substances are stored. Mrs. Mastalerz stated that Mr. David Marr handles the reverse distribution of expired and unused pharmaceuticals to Inmar Intelligence in Grand Prairie, TX and the reverse distribution of controlled substances to the Drug Enforcement Agency (DEA). Mr. Marr provide the records of the recent reverse distribution pick-ups for both expired and unused pharmaceuticals and controlled substances on January 10, 2025. In addition, Inmar provided a pickup of non-regulated pharmaceutical waste on February 12, 2025 (Pictures 66-67).

At the time of the inspection, the inspectors observed that the Central Pharmacy had limited space and that the controlled substance area was marked by a yellow line on the floor, which could be easily accessible by staff not approved to work in this area. The EPA recommends a separate room, safe and/or vault with limited access as per 21 C.F.R. 1301.72.

Morgue

The inspectors observed inside the morgue. The Morgue manages a SAA with a 55-gallon container of hazardous waste formalin (Pictures 68-69). The container was located inside the morgue, and it was equipped with a black funnel for the bung hole, which was closed. The container was labeled hazardous waste Formalin and identified with a hazard identification but not marked for the specific hazard indicator.

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's Hazardous Waste Contingency Plan - University of Kentucky Environmental Quality Management Department, which was last updated on December 17, 2017.

The 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.

The plan 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 (LEPC).

The plan lists the names and emergency telephone numbers for persons identified as emergency coordinators. Robert Kjelland is listed as the primary emergency coordinator, and the other individuals are listed in the order in which they will assume responsibility as alternates. However, Mr. Kjelland is no longer with EQM, and Mr. Butler is now the Director and primary emergency coordinator. In addition, Mr. Cook and/or his position needed to be added to the plan. The inspectors recommended listing the positions instead of the names to facilitate easier updates in personnel, and removing the home addresses from the plan, as they are no longer required. On February 27, 2025, Mrs. Loyselle emailed the update emergency contact list with Mr. Butler as the primary contact.

Pursuant to 401 KAR 39:080, Section 1(1) [40 C.F.R. § 262.17(a)(6)], which incorporates 401 KAR 39:080, Section 1(1) [40 C.F.R. § 262.263(d)], and is a condition of the LQG Permit Exemption, a generator is required to review and immediately amend its contingency plan, if necessary, whenever the list of emergency coordinator changes.

The plan includes a list of all emergency equipment at the facility. The list includes fire extinguishing systems, spill control equipment, communications and alarm systems, and decontamination equipment. The list appears up to date. The plan includes the location and a physical description of each item on the list, and a brief outline of its capabilities.

The plan includes an evacuation plan for personnel. This plan describes signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes.

A copy of the Hazardous Waste Contingency Plan - University of Kentucky Environmental Quality Management Department (and its quick reference guide) was most recently submitted to the police department, fire department, hospital, State and local emergency response teams and the Local Emergency Planning Committee in 2017. However, current documentation that the copies of the Contingency Plan were provided to the Local Emergency Planning Committee (LEPC) were not available. Mrs. Loyselle was sending the documentation via US Postal Service; however, all the letters were returned to sender. The inspectors advised Mrs. Loyselle to send the letters via email going forward. On February 27, 2025, Mrs. Loyselle sent via email the updated documentation.

Pursuant to 401 KAR 39:080, Section 1(1) [40 C.F.R. § 262.17(a)(6)], which incorporates 401 KAR 39:080, Section 1(1) [40 C.F.R. § 262.256], and is a condition of the LQG Permit Exemption, a generator must: (a) attempt to make arrangements with the local authorities identified, as appropriate for the type of waste handled at the Facility and the potential need for the services of these authorities, and (b) maintain records documenting the arrangements made.

The 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; the identification of on-site notification systems; and the name of the emergency coordinators and emergency telephone numbers.

Training Records:

The inspectors reviewed facility job description and employee name that was provided for Assistant Director. Each description included the requisite skill, education, or other qualifications, and duties of facility personnel assigned to that position.

The University of Kentucky EQM provided a written description of the type and amount of both introductory and continuing training to be given to each person filling the positions listed above. The inspectors reviewed records of employee hazardous waste training completed in 2024.

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 since March 14, 2024. Hazardous waste manifest records show that hazardous waste, are routinely shipped to Veolia Environmental Solutions Technical Solutions (EPA ID OHD93945293) located in West Carrollton, OH, and the most recent shipment was made in December 2024.

Daily Inspection Records

The inspectors reviewed University of Kentucky EQM's available records of inspections of the hazardous waste treatment, storage and disposal facility and the hazardous waste pharmaceutical central accumulation area (CAA) since 2024. The inspection log includes a checklist to record observations about leaking containers and for deterioration of containers caused by corrosion or other factors. The records include the date and time of the inspection and the name, signature and initials of the employee conducting the inspection. Employees do routinely record inspection observations and subsequent follow-up actions on the inspection log.

13) Closing Conference

The inspectors conducted the exit meeting at 5:45 PM with Mrs. Loyselle and Mr. Butler. During this meeting, the inspectors stated their preliminary conclusions of the inspection. The University of Kentucky EQM agreed to provide the requested records within 35 days.

Starting on February 12, 2025, Mrs. Loyselle provided the following records in emails to Ms. Jordan, Ms. Smith and Ms. Whiting:

- Attached is Class I Permit Modification #6 for Contingency Plan Contact List sent today February 12, 2025, to April Webb Hazardous Waste Branch for approval.
- Attached are the pictures of the garage corrective actions taken by our staff to do the correction.
- As requested, please find attached the 2017 EQMC RCRA Permit.
- I wanted to follow up on our inspection deficiencies and suggest possible corrective actions based on all your recommendations. For the lab observations, we are looking at getting a funnel that fully closes and covers the drum to minimize disruption to the workflow. The staining process typically happens 2-3 times per hour, so this should help without interference. We will also place a drum in secondary containment. Please see the pictures below and let me know if this, along with cleaning the area, would be an acceptable corrective action.



Drum
secondary
containment



Funnel
with lid
to reduce
exposure.



- I wanted to provide an update regarding the recent inspection. We have implemented all corrective actions to address the observations noted.
- Additionally, I have submitted a second Class 1 Modification to the Contingency Plan to include our new employee, as we decided to add him. I am still waiting for all the green cards, but I also sent them via email.
- Attached are our responses to the observations noted during the inspection conducted on February 12, 2025. We have addressed all comments, and the necessary corrective actions have been implemented. The submitted documentation includes:

- Two modifications to the contingency plan
- Updated Contingency Plan
- Email notification to the emergency response agency
- Mailing receipt confirmations for the Contingency Plan
- E-TRAX tickets for disposal request
- Photographic evidence of the areas after corrective actions were adopted.

14) List of Attachments

Attachment 1 – Photo Log:

15) Signed

PAULA WHITING

 Digitally signed by PAULA WHITING
Date: 2025.04.23 14:54:50 -04'00'

Paula Whiting
Environmental Engineer

16) Concurrence

ARACELI CHAVEZ

 Digitally signed by ARACELI CHAVEZ
Date: 2025.04.23 17:50:04 -04'00'

Araceli B. Chavez
RCRA Enforcement Section

Attachment 1 – Photo Log

67 Photos taken on: **February 12, 2025**

Photos taken by: **Paula A Whiting**

Photos taken with: **Olympus Tough**

EPA Property Tag: **SC7374**



Picture 1 – EQMC TSD Acid Area



Picture 4 – EQMC TSD Bases



Picture 2 – EQMC TSD Receiving Area w/spill supplies



Picture 5 – EQMC TSD Upcycling



Picture 3 – EQMC TSD Toxic/Metals



Picture 6 – EQMC TSD Upcycling



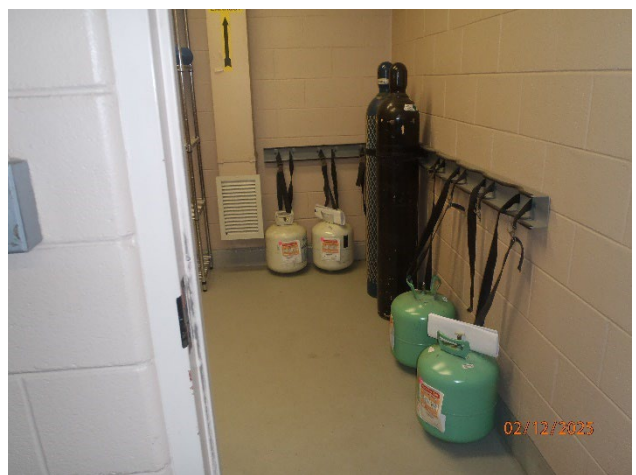
Picture 7 – EQMC TSD Upcycling



Picture 10 – EQMC TSD Oxidizers



Picture 8 – EQMC TSD Upcycling



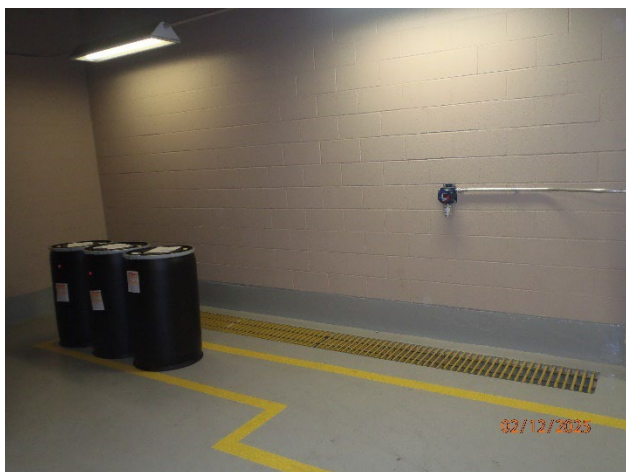
Picture 11 – EQMC TSD Cylinder Room



Picture 9 – EQMC TSD Oxidizers



Picture 12 – EQMC TSD Flammables



Picture 13 – EQMC TSD Flammables



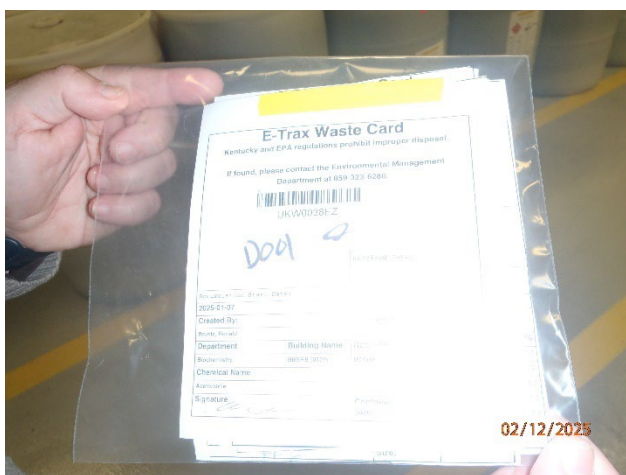
Picture 16 – EQMC TSD Bulking



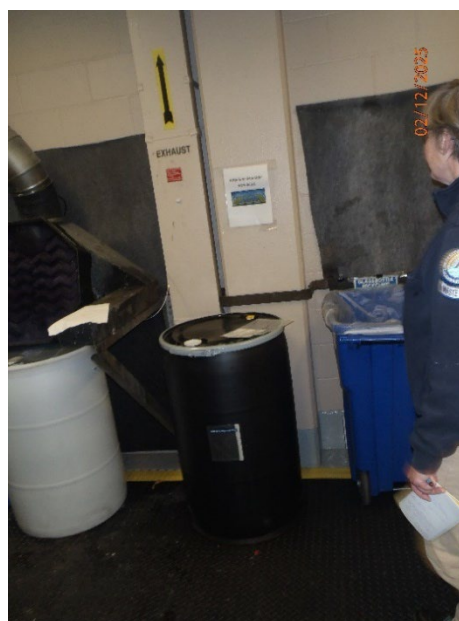
Picture 14 – EQMC TSD Flammables



Picture 17 – EQMC TSD Bulking



Picture 15 – EQMC TSD E-Trax Waste Card request ticket



Picture 18 – EQMC TSD Bulking

E-Trax Waste Card
 Kentucky and EPA regulations prohibit improper disposal.
 If found, please contact the Environmental Management Department at 859-323-6280.

Barcode: UKW0037KP

Accumulation Start Date: 2024-12-16	Received Date:
Container Type: GLASS	Physical State: SOLID
Created By: Koren kov, Victor	Principal Investigator:
Department: Kentucky Tobacco Research & Development Center	Building Name: KTRDC (0236)
	Room: 130
	Phone: 1-859-257-2409
Description: Ethidium bromide	CAS #: 1229-45-8
Total Volume: 0.00 L	Quantity: 1.00g
Total Mass: 0.001 Kg	pH Level:
Signature:	Container Size: 10.0 g
Department: Department of Biology	T M MORGAN BIO-SCI (0235)
	0213 (859) 323-9542
Description:	CAS #: 9012-36-6
Total Volume: 18.9271 L	Quantity: 5.00gal
Total Mass: 0.00 Kg	pH Level:
Signature:	Container Size: 5.0 gal

Picture 19 – EQMC TSD E-Trax ticket w/2024 date



Picture 21 – EQMC TSD Water Lab



Picture 20 – EQMC TSD Toxics



Picture 22 – EQMC TSD Reactive



Picture 23 – EQMC TSD Reactive



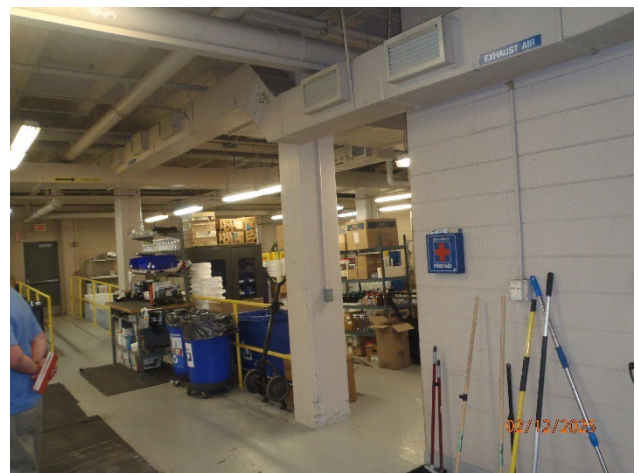
Picture 24 – EQMC TSD Reactive



Picture 25 – EQMC TSD Reactive



Picture 26 – EQMC TSD



Picture 27 – EQMC TSD Receiving Area



Picture 28 – EQMC TSD Receiving Area



Picture 29 – Service Management UW Storage Area



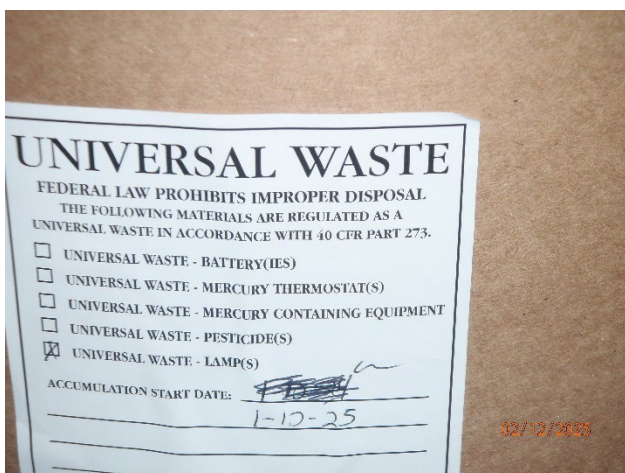
Picture 32 – Service Management UW Storage Area



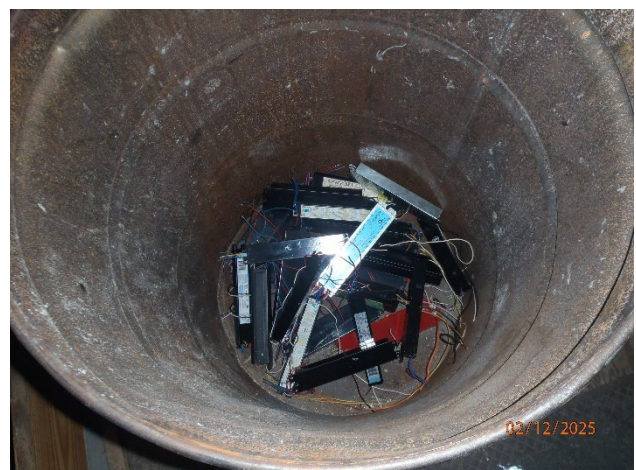
Picture 30 – Service Management UW Batteries label



Picture 33 – Service Management UW Ballasts wrong label



Picture 31 – Service Management UW Lamps label



Picture 34 – Service Management UW Ballasts



Picture 35 – Service Management UW Aerosol cans



Picture 38 – Garage Used Oil and used oil filters



Picture 36 – Garage Used Oil Tank



Picture 39 – Garage unlabeled used oil container



Picture 37 – Garage used oil and SLABS



Picture 40 – Garage used oil drainage center



Picture 41 – Garage used filter crusher



Picture 42 – Garage Crystal Clean parts washer



Picture 43 – Garage green used oil catch pan with used diesel



Picture 44 – Central Heating Plant UW aerosol cans



Picture 45 – Central Heating Plant UW aerosol cans label



Picture 46 – Central Heating Plant Used Oil container



Picture 49 – Hospital HW Pharmaceutical Storage Area



Picture 47 – Central Heating Plant UW aerosol cans



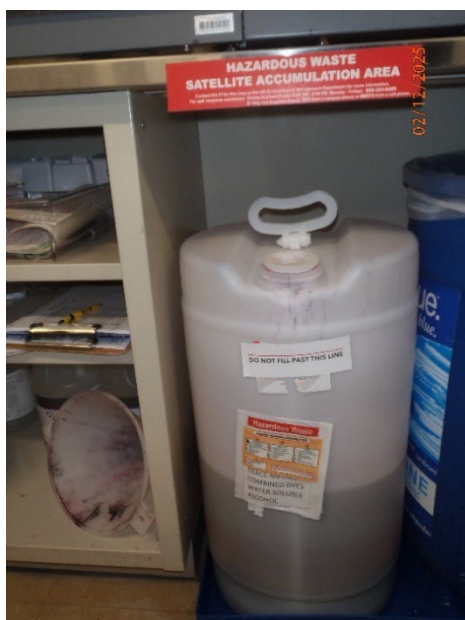
Picture 50 – Hospital HW Pharmaceutical Storage Area



Picture 48 – Central Heating Plant UW aerosol cans with spent fire extinguisher



Picture 51 – Hospital HW Pharmaceutical Storage Area



Picture 52 – Hospital Histology Immunochemistry SAA



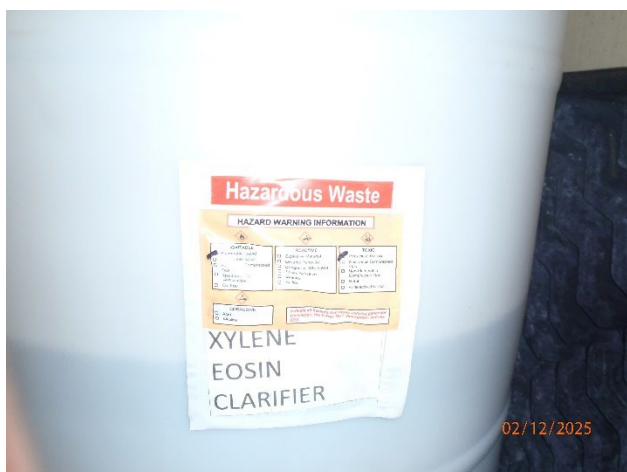
Picture 54 – Hospital Histology Immunochemistry SAA



Picture 53 – Hospital Histology Immunochemistry SAA label



Picture 55 – Hospital Histology Immunochemistry SAA



Picture 56 – Hospital Histology Immunochemistry SAA label



Picture 59 – Hospital Chemistry/Toxicology SAA



Picture 57 – Hospital Pathology/Cytology SAA



Picture 60 – Hospital Chemistry/Toxicology SAA



Picture 58 – Hospital Pathology/Cytology SAA



Picture 61 – Hospital Microbiology SAA w/stains on floor



Picture 62 – Hospital Microbiology SAA open funnel



Picture 63 – Hospital Microbiology SAA w/stains on floor and open funnel



Picture 64 – Hospital Central Pharmacy SAA

HealthCare
HAZARDOUS WASTE PHARMACEUTICALS
COMPLETE THIS FORM FOR EACH BLACK CONTAINER
SECURELY TAPE TO THE CONTAINER

NAME (Do not consult form) Bence Harris DATE (upon initial use of container) 1-30-25
PHONE NO. (859) 218-0001 ROOM NO. (location of container) A-03.101

Check all that apply

☒ Flammable (D001) ☐ Corrosive (D002) ☐ Reactive (D003)

☒ Acute-Estrogen (includes all chemotherapy agents and other specific drugs not listed below)

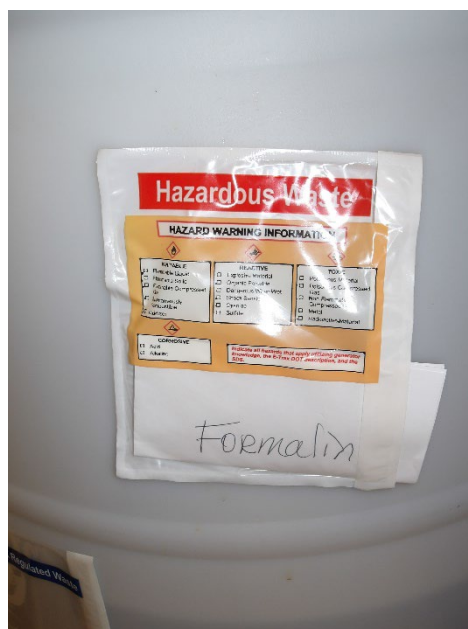
☐ Barium (D005)	☐ Chloral Hydrate (U034)
☐ Chromium (D007)	☐ Chlorambucil (U035)
☐ Mercury (D009)	☐ Cyclophosphamide (U058)
☐ Selenium (D016)	☐ Daunorubicin (U059)
☐ Silver (D011)	☐ Fluorouracil (U122)
☐ Chloroform (D022)	☐ Hexachlorophene (U132)
☐ M-Chloro (D024)	☐ Lindane (U129)
☐ 4-Aminopyridine (P008)	☐ Meprobamate (U150)
☐ Arsenic Trioxide (P012)	☐ Metyrosin G (U103)
☐ Nicotine (P075)	☐ Phenol (U185)
☐ Phenytoin Sodium (P186)	☐ Salicylic Acid (U204)
☐ Warfarin (D039) (P001)	☐ Sodium Sulfide (U205)
☐ Other	☐ Triphenyl Blue (U236)

To request pick-up of full containers FAX, CALL, or E-MAIL:
Environmental Management Department
Phone: 325-6280, Fax: 325-6276, lbhuff@uky.edu

Picture 65 – Hospital Central Pharmacy SAA label



Picture 66 – Hospital Central Pharmacy SAA



Picture 69 –Hospital Morgue SAA label



Picture 67 – Hospital Central Pharmacy SAA



Picture 68 – Hospital Morgue SAA