

RCRA Inspection Report

1) Inspector and Author of the Report

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2) Facility Information

PMC Organometallix, Inc.
2316 or 2314 Highland Avenue
Carrollton, Kentucky 41008
EPA ID Number: KYD006373922

3) Responsible Official

Laura Robinson, HES Manager
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4) Inspection Participants

Laura Robinson	PMC Organometallix, Inc.
Kristin Baker	PMC Organometallix, Inc.
Vince Pinnick	PMC Organometallix, Inc.
Donnie Stephen	PMC Organometallix, Inc.
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Leslie Carr-Polly	KYDEP–Frankfort Central Field Office
Ariel Johnson	KYDEP–Florence Field Office
Brian Osterman	KYDEP–Frankfort Central Field Office
Alan Newman	EPA Region 4

5) Date of Inspection

September 14, 2021 8: a.m.-5:30 p.m. through September 15, 2021, at 8:05 a.m.–4:00 pm

6) **Applicable Regulations**

Sections 3002, 3005 and 3007 of Resource Conservation and Recovery Act (RCRA) 40 Code of Federal Regulations (C.F.R). Parts 260 through 268, 270, 273 and 279 Rules Governing Hazardous Waste Management Title 401 of Kentucky Administrative Regulations (401 K.A.R.) Chapters 30 through 40 and 44 Kentucky Department for Environmental Protection, RCRA Hazardous Waste Permit Part B KYD006373922 for treatment of hazardous waste by incineration and storage and on-site treatment of hazardous waste in containers and tanks.

Pursuant to 401 KAR 39:080 Section 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(1) [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 [40 C.F.R. § 262.17] (hereinafter referred to as the “LQG Permit Exemption”).

Pursuant to 401 KAR 39:080 Section 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 the 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(1) [Section 3005 of RCRA, 42 U.S.C. § 6925], and without complying with 401 KAR 39:080 Section 1 [40 C.F.R. § 262.16(b) or §262.17(a)], except as required in 401 KAR 39:080 Section 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 [40 C.F.R. § 262.15(a)] (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, or lamps, calculated collectively) at any time.

7) **Purpose of Inspection**

To conduct an unannounced EPA lead compliance evaluation inspection and determine the facility's compliance status with the applicable regulations and permit.

8) **Facility Description**

PMC Organometallix Inc. (PMC) operates a RCRA permitted hazardous waste storage and treatment facility and is a large quantity generator of hazardous waste, a small quantity handler of universal waste, and a generator of used oil. PMC is actively conducting RCRA corrective action at the facility due to historic releases to the groundwater. PMC is located at 2316 Highland Avenue, Carrollton, Carroll County, Kentucky. The property consists of 403 acres; however, the active area of the facility is located on 40 acres. The primary NAICS code for the facility is 32518.

PMC is a batch manufacturer of both organic and inorganic tin compounds. These compounds are used as thermal and optical stabilizers in Poly Vinyl Chloride (PVC) resin formulations,

catalysts for chemical reaction and other primary industrial applications. The tin oxide ash is produced from incinerated wastes and sold as feed material to an off-site tin smelter.

The plant has been in operation since 1960, the plant has produced over 400 chemical products either as production intermediates or for commercial sale. In October 2012, ARKEMA was sold to PMC and the name was changed to PMC Organometallix, Inc. The plant's headquarters is located in Mt. Laurel, New Jersey. The facility currently employs 160 employees at the Carrollton plant.

On the day of the inspection the inspection team was given a list of hazardous and non-hazardous waste generated at the site. PMC generates approximately 200 hazardous waste streams at the facility that include the following EPA waste codes: D001, D002, D003, D004, D006, D007, D008, D009, D011, D018, D021, D026, D035, D038, D039, F002, F003, F005, U003, U028, U031, U067, U112, U147, U154, U159, U162, U196, and U228. PMC also generates universal waste and used oil.

The production of the organic or inorganic tin compounds begins at PMC by the reaction of elemental tin with chlorine gas to produce tin tetrachloride. Some of the tin tetrachloride thus produced is further reacted with additional elemental tin to produce stannous chloride. Tin tetrachloride and stannous chloride are then reacted with other organic chemicals to produce the intermediate and finished products. The processing/production operation includes controlled chemical reaction, mixing, distillation, centrifuging, filtration, and drying.

There are three main areas at the plant: the processing/production area on the western side of the facility; the shipping/receiving/warehousing on the eastern side; and the tin recovery system (TRS) is in the southern side. The TRS is a permitted incinerator and is co-located near the other permitted units including the two permitted treatment units, two permitted container storage pads, and multiple permitted hazardous waste storage tanks. No hazardous waste related activities take place in the shipping/receiving/warehousing area.

Non-hazardous waste streams include certain filter paper muds, laboratory glassware, used oil and antifreeze, baghouse waste, maintenance waste, ethylene glycol and garbage. All non-hazardous waste except glassware and garbage are disposed of by incineration in the on-site TRS unit provided the waste is combustible and can be processed by the hydropulper. Non-hazardous waste that cannot be disposed by on-site incineration are collected by Rumpke Inc. for disposal.

The Kentucky Department for Environmental Protection (KYDEP) issued PMC a RCRA permit (No: KYD006373922) on March 1, 2021 for incineration, storage, and treatment of hazardous waste. The permit expiration date is March 31, 2031.

9) Previous Inspection History

KYDEP conducted a CEI at the facility on August 8, 2020; there were no violations noted during the CEI.

10) Findings

On September 14-15, 2021, Alan Newman, along with Ariel Johnson and Leslie Carr-Polly with the Kentucky Department of Environmental Protection (KYDEP) conducted an unannounced compliance evaluation inspection (CEI) at PMC. This was an EPA-lead inspection. Inspectors arrived at PMC at 8:33 a.m. and were greeted by Kristin Baker and Vince Pinnick, environmental engineers. Inspectors conducted an entrance briefing where they showed credentials and explained the purpose of the visit.

- Area B-12 The Laboratory CAAs and SAAs

Inside the laboratory, PMC was accumulating hazardous waste in two 55-gallon metal containers in the solvent room central accumulation area (CAA). These two containers were storing corrosive/flammable liquids (D001/D002) and were in good condition, closed, labeled, and affixed with flip-top funnels (Photos 1-4). These two containers were raised off the floor on a plastic stand. The concrete floor in this room was distressed and cracked in some areas. The oldest accumulation start date was 8/15/2021. The inspection team noted that the flip-top funnels had some waste on the outside of the funnels. PMC should ensure that spills of hazardous waste are promptly cleaned up. This was considered an area of concern. PMC was storing hazardous waste in five containers (Photos 5-9) in a SAA. These containers were closed, in good condition, and properly labeled. Additionally, the inspection team noted five 1-gallon containers of paint underneath a table. Facility personnel stated that this paint was left over from former painting activities in the laboratory. Personnel stated that these containers were probably latex paint. PMC is required to make a hazardous waste determination for each solid waste that is generated.

Pursuant to 401 KAR 39:080 Section 1 [40 C.F.R. § 262.11], a person who generates a solids waste as defined in 40 C.F.R. § 261.2, must determine if that waste is a hazardous waste.

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.

Outside the laboratory, PMC operated a CAA and stored one labeled 55-gallon container of corrosive solids dated 7/20/2021 and one container of nonhazardous waste (Photo 10). There were also three red 55-gallon containers of hazardous waste stored nearby (Photos 11-14). One container was labeled solvent contaminated lab wipes and TRS PPE (F003-flammable solids) and was dated 6/25/2021. When this container was opened, it was partially full of liquids and held a black trash bag of waste. This waste determination as a flammable solid did not match the waste in the container. The lid was unable to be reclosed due to an improperly working drum lid. The second container was labeled as “Methyl Tin Waist” [sic] (D001/D002/waste flammable liquid corrosive), with an indication of the hazards of its contents, and was dated 8/18/2021. This lid for this container was rusting. The third container was labeled as Methyl Tin and was dated

9/11/2021; this container had a Pig closure device on the drum lid (Photo 14). This container was not labeled with an indication of the hazard.

Pursuant to 401 KAR 39:080 Section 1 [40 C.F.R. § 262.11], a person who generates a solids waste as defined in 40 C.F.R. § 261.2, must determine if that waste is a hazardous waste.

Pursuant to 401 KAR 39:080, Section 1(1) [40 C.F.R. § 262.17(a)(1)(ii)], which is a condition of the LQG Permit Exemption, if a container holding hazardous waste is not in good condition, or if it begins to leak, the generator must immediately transfer the hazardous waste from this container to a container that is in good condition, or immediately manage the waste in some other way that complies with the LQG Permit Exemption.

Pursuant to 401 KAR 39:080, Section 1(1) [40 C.F.R. § 262.17(a)(1)(iv)], which is a condition of the LQG Permit Exemption, (A) a container holding hazardous waste must always be closed during accumulation, except when it is necessary to add or remove waste.

Pursuant to 401 KAR 39:080, Section 1(1) [40 C.F.R. § 262.17(a)(5)(i)], which is a condition of the LQG Permit Exemption, a generator must mark or label its containers with the following: an indication of the hazards of the contents clearly visible for inspection on each container.

- Central Accumulation Areas and CAA Tank Storage Areas

The inspection team toured the following CAAs BD003, BD0032, and BD037 (there were two 55-gallon containers of nonhazardous waste stored here) which were not storing hazardous waste on the day of the inspection.

PMC was undergoing repairs in building BD039 on the day of the inspection. So, the maintenance group moved the CAA from the middle of the room to an area against a wall and moved other items around the pallet of hazardous waste (D001-flammable liquids). There were three red 55-gallon metal containers of hazardous waste in this area (Photos 15-16). These containers were in good condition, labeled with Flammable Liquids warning labels and the words “Hazardous waste”, and each were dated with an accumulation start date of 8/11/2021. Since the pallet was against the wall and blocked in by other equipment, there was not adequate aisle space.

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. § 262.255], and is a condition of the LQG Permit Exemption, a generator is required to maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless aisle space is not needed for any of these purposes.

At CAA BD005, the inspection team noted one black poly 55-gallon container of hazardous waste labeled as DBTC and Trash (D002-corrosive solid) and dated 8/12/2021 (Photos 17-18).

Adjacent to this container were two open boxes of 500 ml lidded glass jars. Facility personnel later stated that these glass jars were determined to be storing nonhazardous waste.

At CAA BD022, PMC was storing four black poly 30-gallon containers on the day of the inspection (Photos 19-20). Three of the containers were not labeled. One container was labeled as hazardous waste, toxic solids, and labeled with an accumulation start date of 9/5/2020 (>90 days). These containers were closed and in good condition. The facility labeled these containers while the inspectors were on site as hazardous waste and included an accumulation start date of 9/5/2021 but also stated that these four containers were generated at the same time as the labeled container (9/5/2020) last year. It appeared that the person making the label mislabeled these containers with an inaccurate date. Also, in this area there were three supersacks partially full of rusted metal parts. Facility personnel stated that these parts were packing material for the scrubber and will be reused.

Pursuant to 401 KAR 39:080, Section 1(1) 40 C.F.R. § 262.17(a), 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(1) [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 [40 C.F.R. § 262.17].

Pursuant to 401 KAR 39:080 Section 1(1) [40 C.F.R. § 262.17(a)(5)(i)(A-C)] Labeling and marking of containers and tanks, which is a condition of the LQG Permit Exemption, an LQG must mark or label its containers with the following: (A) the words “Hazardous Waste”; (B) an indication of the hazards of the contents; and (C) the date upon which each period of accumulation begins clearly visible for inspection on each container.

PMC is operating a CAA hazardous waste storage tank, TK 1709, for storing benzene waste. This tank was properly labeled. The inspection team noted that the insulation around the tank had begun to buckle (Photos 21-24). Additional areas on the tank had insulation that was removed or missing. The insulation observations were not noted on the inspection records of this area.

- BD034 Maintenance Area

At the time of the inspection, PMC was storing two 55-gallon used oil containers that were in good condition and labeled (Photo 25). PMC accumulates aerosol cans and punctures them in a device attached to a 55-gallon metal SAA container (Photo 26). This container was in good condition and labeled. The punctured cans are placed into a metal recycling bin (Photo 27).

- BD0025 - Universal Waste Storage

Area B-25 is designated for storage of universal wastes. There were five 4-foot boxes of universal waste lamps, three boxes for misc. waste lamps, and four boxes of universal waste batteries. The oldest date was 12/13/2020 (Photos 28-29). There were four book-sized lead acid batteries on the shelf outside of the locked universal waste storage room. These batteries were not labeled, and the staff were unsure of how long they had been in this location (Photo 30). Two of the batteries were dated “8-18-11” and “3-26-15.” The facility stated that batteries are managed as universal waste.

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.

- Pad 65

The inspection team toured the permitted Container Storage Pad B-65. This pad was separated into eight adjacent areas designated as 9S10 through and 9S80 (Photos 31-35). These areas were storing hazardous and non-hazardous waste. From B-65, containers are aggregated on Pad B-64 prior to use as fuel in the Tin Recovery System (TRS). The oldest accumulation start date was recorded as 10/12/2020. A summary of the containers is detailed below:

Section	Number of Containers	Oldest Date	Comments
9S10	5 250-gallon totes 12 55-gallon containers		
9S20	473 55-gallon containers 5 250-gallon containers	10/12/2020	Two bulging and rusting containers (numbers 1178584 and 1178583); one container with HW on outside of container
9S30	42 55-gallon containers		
9S40	132 250-gallon containers		
9S50	No containers		
9S60	104 55-gallon containers 8 85-gallon containers		
9S70	68 250-gallon containers		
9S80	4 55-gallon containers		Non-Hazardous

The inspection team noted the gate used to secure this area had been removed since approximately July 2021 when a new tank was installed. The gate has not been repaired/replaced as of September 2021.

Pursuant to Permit Condition III.B.3.1, the Permittee shall comply with all requirements set forth under 40 CFR Part 264.14 and shall follow the security measures outlined in Attachment F of the Permit and/or those outlined in the Site Management Plan, as an attachment of the Part E permit application (incorporated herein as Attachment E). Pursuant to Permit Condition III.B.3.1, the Permittee shall maintain the 6-foot-high locked chain-link fence around the facility and gates in good operating condition at all times. The

main gate and other access gates at the facility shall be closed, chained, and locked when the facility personnel are not on site.

On Pad B-65, 9S20, the inspection team noted one container that had hazardous waste expelled through the bung hole. There was some waste accumulated on the lid of this container (Photo 36). This container was not considered to be closed. There were two containers with bulging lids that were rusting (Photos 37-41). These containers did not appear to be in good condition (see table above for observations).

Pursuant to Permit Condition III.K.7, Management of Containers: The Permittee shall manage and inspect the containers in accordance with 40 CFR Part 264.173 and 264.174 as well as according to the container management system, and container layout and configuration delineated in Attachment D, illustrated in Figures D-1.2 and D-1.3. Containers will not be stacked more than two (2) high. Only stable containers and containers with no physical damage maybe stacked. The Permittee shall keep all containers closed during storage, except when it is necessary to add or remove waste, and shall not open, handle, or store containers in a manner which may rupture the container or cause it to leak.

Pursuant to Permit Condition III.K.5, Condition of Containers: The Permittee shall comply with all requirements set forth under 40 CFR Part 264.171, to ensure that all hazardous waste containers are in good condition. If a container holding hazardous waste is not in good condition (e.g. severe rusting, apparent structural defects) or if it begins to leak, the Permittee shall transfer the hazardous waste from such container to a container that is in good condition or otherwise manage the waste in compliance with the conditions of this Permit. [40 CFR Part 264 - Subpart I].

- Pad 64

The inspection team toured permitted Container Storage Pad B-64. This pad was separated into two adjacent areas designated as 9S01 and 9S02 (Photos 42-43). From Pad B-64, the containers of waste solvents are staged in a small area adjacent to the permitted hazardous waste tanks. The waste solvents are pumped from the containers into the tanks, for blending as fuel for the TRS unit. Section 9S01 was not storing any waste on the day of the inspection. Section 9S02 was storing 16 55-gallon containers of hazardous waste, four 250-gallon tote containers, two 55-gallon nonhazardous waste containers, and one 250-gallon steel tote. The oldest date in this area was September 24, 2020. Each container appears to be in good condition, labeled, and closed.

- Hydropulper (5220), Slurry Tanks (TK-5209A, TK-5209B, and TK-5210), Hazardous waste Tanks (TK-5204A and TK-5205)

PMC Utilizes slurry tanks (5209A, TK-5209B, and TK-5210) and the hazardous waste tanks (TK-5204A and TK-5205) to blend and store hazardous waste prior to and after charging the hydropulper which feeds into the TRS system. Once blended and analyzed, the resulting hazardous waste fuel is fed into the TRS unit. Although waste solvent mixtures are the primary fuels for the TRS unit, natural gas can also be used. The TRS unit is a rotary kiln with a top and bottom burning section (called primary and secondary). The process is essentially as follows.

“Mud” wastes, which are dewatered sludges from sewage treatment plants (both on-site and off-site) or other combustible wastes, are put into a hydropulper. The hydropulper mixes liquid with the semi-solid waste material to form a slurry. The slurry is injected into the TRS for incineration. Ash and clinkers (larger particles from the kiln process) from the TRS unit are shipped offsite as exempt tin recovery material. The ash is approximately 60% tin with clinkers having approximately 35% tin content. On October 31, 2011, the KY DEP issued a solid waste classification variance for TRS ash and dust containing >10% tin by weight. Such ash and dust are exempt from HW requirements if it is being reclaimed through recycling. This material is shipped off-site for reclamation of the tin.

PMC empties containers of hazardous waste into the permitted treatment hydropulper with water to generate waste solids (slurry) (Photos 46-47). The inspection team noted one 5-gallon plastic pail of aerosol cans on the container prep platform below the maw of the hydropulper. This container was open on the day of the inspection and not labeled with either the words “Hazardous Waste” or with the indication of the hazard. The aerosol cans appeared to be discarded and rusting (Photo 47). The inspection team also noted one 5-gallon pail of waste material and discarded Tyvek in the solid waste dumpster in this area (Photos 48-49). PMC had not conducted a hazardous waste determination on these wastes.

Pursuant to 401 KAR 39:080 Section 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 [40 C.F.R. § 262.15(a)(5)], which is a condition of the SAA Permit Exemption, a generator is required to mark or label its containers (i) with the words “Hazardous Waste” and (ii) with an indication of the hazards of the contents.

Pursuant to 401 KAR 39:080 Section 1 [40 C.F.R. § 262.11], a person who generates a solids waste as defined in 40 C.F.R. § 261.2, must determine if that waste is a hazardous waste.

The waste solids are pumped to one of three permitted hazardous waste slurry tanks: TK-5209A, TK-5209B, and TK-5210. One tank is feeding the kiln, one is being filled, and the third is being analyzed to determine appropriate feed rates to meet emission permit limits. These three tanks appeared to be in good condition and properly labeled on the day of the inspection (Photos 50-57). The secondary containment near tank TK-5210 had multiple cracks (Photos 55-60). PMC representatives scaled each slurry tank and conducted air monitoring of the multiple closure devices during the inspection. One closure device (agitator) measured 1350 ppm on top of TK-5209B. The monitoring point exceeds the 500-ppm limit for Subpart CC (Photo 61). No other measurements above 500 ppm were noted. It is unknown if repairs to this device were initiated after the conclusion of the inspection.

Pursuant to Permit Condition III.L.7.4 The Permittee shall manage the secondary containment systems for the tank systems in accordance with Attachment D of this Permit, and 40 CFR Part 264.193. The Permittee shall maintain an impervious coating which is

free of cracks, gaps, or other deterioration on all containment system surfaces which may be exposed to hazardous wastes or hazardous constituents (or releases of hazardous constituents).

Permitted tanks TK-5204A and CAA tank TK-5205 are utilized by PMC to store hazardous waste solvents that are fed into the incinerator as fuel. The inspection team observed CAA tank TK 2505 which is located next to the hydropulper (Photos 44-45). This tank appeared to be in good condition and labeled. Facility representatives were later able to identify that the accumulation start date was 8/13/2021. PMC should ensure that accumulation start dates for each hazardous waste tank are easily accessible. These dates are not marked on the tanks. The inspection team noted that Tank 5204A was showing signs of surficial rusting in multiple locations and around the base of the tank (Photos 62-64). PMC should ensure that these rusting areas do not lead to failure of tank integrity. PMC did not comment on the surficial rust on the inspection records but later stated that this tank passed a recent third-party integrity test. PMC was in the process of connecting a recently installed permitted tank, TK-5204B (Photo 65).

- Tin Recovery System

The Tin Recovery System (TRS) is an incinerator used to recover Tin from waste materials. The TRS operates with an automatic waste feed cutoff to minimize the possibility of exceeding the limits of the air permit. The TRS operates for 4-5 days and is then fully cleaned out. The TRS generates approximately two super sacks of ash a day when operating. The TRS has several steps. In the first step, a combination of the hazardous waste slurry, solvent waste, and natural gas is fed into rotating thermal reduction chamber (TRC) which operates between 1,500° F and 1,700° F. Ash is collected at the end of the TRC in a tote. The Tin content in this material is approximately 15%. The exhaust from the TRC travels to the thermal oxidizing chamber (TOC) fueled with natural gas which operates between 2,000° F and 2,300° F. The high temperature exhaust travels through a waste heat boiler which provides steam to the facility. The exhaust is filtered in a baghouse. The Tin content in the baghouse dust is approximately 40%. The exhaust travels through a quench step, a scrubber, and is released under an air permit to the atmosphere. There were no violations noted in these areas. Ash staged for shipment off site is wrapped in plastic and stored onsite (Photo 66).

- Record Review

The inspection team reviewed outbound and inbound manifests, land disposal restriction forms, and weekly and daily inspection forms for B-3, B-5, B-22, B-26, B-32, B-34, B-37, B-64, B65, TK-1709, TK-5201, TK-5204A, TK-5205, TK-5206, TK-5209A, TK-5209B, TK-5210, SU-5220, Hydropulper 5220, CO-5240, SU5240, TK5290, TK5293, North Pad, and South Pad. The team also reviewed annual reports along with proof that they had been copied to the local county judge executive, personnel training and job descriptions, Subpart BB and CC records, and the contingency plan. Waste profiles are updated annually or when they change.

The inspection records for the inspection of TK-1709 CAA tank did not describe any areas of disrepair. Multiple areas of deterioration to the tank were observed and these were not noted on the inspection logs. The inspection team noted that there were no inspections of TK-1709 on 7/27/2021 or 7/28/2021 (Photo 67). Also, it was noted that inspections conducted on 8/30/2021

and 3/28/2021 did not record the name, date, and/or time (Photos 68-69). The inspection team suggested changes to the inspection forms to include such questions as: Are containers labeled with the words “Hazardous Waste”, an indication of the hazard, and an accumulation start date? Are containers in good condition? Is there adequate aisle space between containers to facilitate emergency response activities when necessary?

Pursuant to 401 KAR 39:080, Section 1(1) [40 C.F.R. § 262.17(a)(2)], which incorporates 40 C.F.R. Part 265, Subpart J, and is a condition of the LQG Permit Exemption, a generator accumulating hazardous waste in tank systems is required to comply with the applicable requirements of 40 C.F.R. Part 265, Subpart J, except 40 C.F.R § 265.197(c) (closure and post-closure care) and 40 C.F.R § 265.200 (waste analysis and trial tests).

Pursuant to 401 KAR 39:080, Section 1(1) [40 C.F.R. § 262.17(a)(2)], which incorporates 40 C.F.R. § 265.195(b), and is a condition of the LQG Permit Exemption, a generator accumulating hazardous waste in tanks must conduct inspections at least once each operating day: (1) Overfill/spill control equipment (e.g., waste-feed cutoff systems, bypass systems, and drainage systems) to ensure that it is in good working order; (2) Above ground portions of the tank system, if any, to detect corrosion or releases of waste; and (3) The construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system (e.g., dikes) to detect erosion or signs of releases of hazardous waste (e.g., wet spots, dead vegetation).

The permit requires an operating log to track containers across the site. At the time of the inspection, it had been discovered that the operating log had not been correctly recording container movements for over a year. The issue was known for some time, but PMC did not notify the KDEP.

Pursuant to Permit Condition III.F.1, Operating Record, the Permittee shall comply with all requirements set forth under 40 CFR Part 264.73. The Permittee shall maintain records of all hazardous wastes stored and treated at the facility in accordance with the recordkeeping procedures set forth in 40 CFR Part 264.73.

III.F.1.1 A description and the quantity of each hazardous waste received and the method(s) and date(s) of its treatment, storage, and/or disposal at the facility.

III.F.1.2 The location of each hazardous waste within the facility and the quantity. This information must include cross-references to specific manifest document numbers, etc.

III.F.1.3 Records and results of waste characterization and waste analysis performed.

III.F.1.4 Summary reports and details of all incidents.

III.F.1.5 Records and results of inspections.

III.F.1.6 Monitoring, testing or analytical data, and corrective action.

III.F.1.7 Notices to generators (off-site facilities).

III.F.1.8 Copies of waste minimization documents required in Permit Condition V.A.

III.F.1.10 All closure and all Post-Closure cost estimates.

III.F.1.11 Copy of the notice, and the certification, and demonstration, if applicable, required by the generator or the owner or operator under 40 CFR Part 268.

III.F.1.12 Manifest system related documents.

11) **Closing Conference**

The inspectors conducted the exit meeting at 3:15 p.m. with Kristin Baker, Vince Pinnick, Alan Jackson, Terry Stapleton, Laura Robinson from PMC and Leslie Carr, Ariel Johnson, and Brian Osterman from KDEP. During this meeting, the inspectors stated their preliminary conclusions of the inspection.

12) **Inspection Findings**

Pursuant to 401 KAR 39:080 Section 1 [40 C.F.R. § 262.11], a person who generates a solids waste as defined in 40 C.F.R. § 261.2, must determine if that waste is a hazardous waste.

Pursuant to 401 KAR 39:080 Section 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 [40 C.F.R. § 262.15(a)(5)], which is a condition of the SAA Permit Exemption, a generator is required to mark or label its containers (i) with the words “Hazardous Waste” and (ii) with an indication of the hazards of the contents.

Pursuant to 401 KAR 39:080, Section 1(1) 40 C.F.R. § 262.17(a), 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(1) [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 [40 C.F.R. § 262.17].

Pursuant to 401 KAR 39:080, Section 1(1) [40 C.F.R. § 262.17(a)(1)(ii)], which is a condition of the LQG Permit Exemption, if a container holding hazardous waste is not in good condition, or if it begins to leak, the generator must immediately transfer the hazardous waste from this container to a container that is in good condition, or immediately manage the waste in some other way that complies with the LQG Permit Exemption.

Pursuant to 401 KAR 39:080, Section 1(1) [40 C.F.R. § 262.17(a)(1)(iv)], which is a condition of the LQG Permit Exemption, (A) a container holding hazardous waste must always be closed during accumulation, except when it is necessary to add or remove waste.

Pursuant to 401 KAR 39:080, Section 1(1) [40 C.F.R. § 262.17(a)(2)], which incorporates 40 C.F.R. § 265.195(b), and is a condition of the LQG Permit Exemption, a generator accumulating hazardous waste in tanks must conduct inspections at least once each operating day: (1) Overfill/spill control equipment (e.g., waste-feed cutoff systems, bypass systems, and drainage systems) to ensure that it is in good working order; (2) Above ground portions of the tank system, if any, to detect corrosion or releases of waste; and

(3) The construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system (e.g., dikes) to detect erosion or signs of releases of hazardous waste (e.g., wet spots, dead vegetation).

Pursuant to 401 KAR 39:080, Section 1(1) [40 C.F.R. § 262.17(a)(2)], which incorporates 40 C.F.R. Part 265, Subpart J, and is a condition of the LQG Permit Exemption, a generator accumulating hazardous waste in tank systems is required to comply with the applicable requirements of 40 C.F.R. Part 265, Subpart J, except 40 C.F.R § 265.197(c) (closure and post-closure care) and 40 C.F.R § 265.200 (waste analysis and trial tests).

Pursuant to 401 KAR 39:080 Section 1(1) [40 C.F.R. § 262.17(a)(5)(i)(A-C)] Labeling and marking of containers and tanks, which is a condition of the LQG Permit Exemption, an LQG must mark or label its containers with the following: (A) the words “Hazardous Waste”; (B) an indication of the hazards of the contents; and (C) the date upon which each period of accumulation begins clearly visible for inspection on each container.

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.

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. § 262.255], and is a condition of the LQG Permit Exemption, a generator is required to maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless aisle space is not needed for any of these purposes.

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 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 Permit Condition III.B.3.1, the Permittee shall comply with all requirements set forth under 40 CFR Part 264.14 and shall follow the security measures outlined in Attachment F of the Permit and/or those outlined in the Site Management Plan, as an attachment of the Part E permit application (incorporated herein as Attachment E). Pursuant to Permit Condition III.B.3.1, the Permittee shall maintain the 6-foot-high locked chain-link fence around the facility and gates in good operating condition at all times. The

main gate and other access gates at the facility shall be closed, chained, and locked when the facility personnel are not on site.

Pursuant to Permit Condition III.F.1, Operating Record, the Permittee shall comply with all requirements set forth under 40 CFR Part 264.73. The Permittee shall maintain records of all hazardous wastes stored and treated at the facility in accordance with the recordkeeping procedures set forth in 40 CFR Part 264.73.

III.F.1.1 A description and the quantity of each hazardous waste received and the method(s) and date(s) of its treatment, storage, and/or disposal at the facility.

III.F.1.2 The location of each hazardous waste within the facility and the quantity. This information must include cross-references to specific manifest document numbers, etc.

III.F.1.3 Records and results of waste characterization and waste analysis performed.

III.F.1.4 Summary reports and details of all incidents.

III.F.1.5 Records and results of inspections.

III.F.1.6 Monitoring, testing or analytical data, and corrective action.

III.F.1.7 Notices to generators (off-site facilities).

III.F.1.8 Copies of waste minimization documents required in Permit Condition V.A.

III.F.1.10 All closure and all Post-Closure cost estimates.

III.F.1.11 Copy of the notice, and the certification, and demonstration, if applicable, required by the generator or the owner or operator under 40 CFR Part 268.

III.F.1.12 Manifest system related documents.

Pursuant to Permit Condition III.K.5, Condition of Containers: The Permittee shall comply with all requirements set forth under 40 CFR Part 264.171, to ensure that all hazardous waste containers are in good condition. If a container holding hazardous waste is not in good condition (e.g. severe rusting, apparent structural defects) or if it begins to leak, the Permittee shall transfer the hazardous waste from such container to a container that is in good condition or otherwise manage the waste in compliance with the conditions of this Permit. [40 CFR Part 264 - Subpart I].

Pursuant to Permit Condition III.K.7, Management of Containers: The Permittee shall manage and inspect the containers in accordance with 40 CFR Part 264.173 and 264.174 as well as according to the container management system, and container layout and configuration delineated in Attachment D, illustrated in Figures D-1.2 and D-1.3. Containers will not be stacked more than two (2) high. Only stable containers and containers with no physical damage may be stacked. The Permittee shall keep all containers closed during storage, except when it is necessary to add or remove waste, and shall not open, handle, or store containers in a manner which may rupture the container or cause it to leak.

Pursuant to Permit Condition III.L.7.4 The Permittee shall manage the secondary containment systems for the tank systems in accordance with Attachment D of this Permit, and 40 CFR Part 264.193. The Permittee shall maintain an impervious coating which is free of cracks, gaps, or other deterioration on all containment system surfaces which may be exposed to hazardous wastes or hazardous constituents (or releases of hazardous constituents).

13) **Signed**

Alan Newman
Environmental Engineer

Date

14) **Concurrence**

Araceli B. Chavez
Chief
RCRA Enforcement Section

Date

Photographs

Photos taken on September 14-15, 2021

Photos taken by Ariel Johnson

Camera: iPhone

And by Alan Newman

Camera: Olympus Tough

Serial Number: S75926



Photo 1: Laboratory CAA for solvent waste.



Photo 4: Laboratory CAA floor.

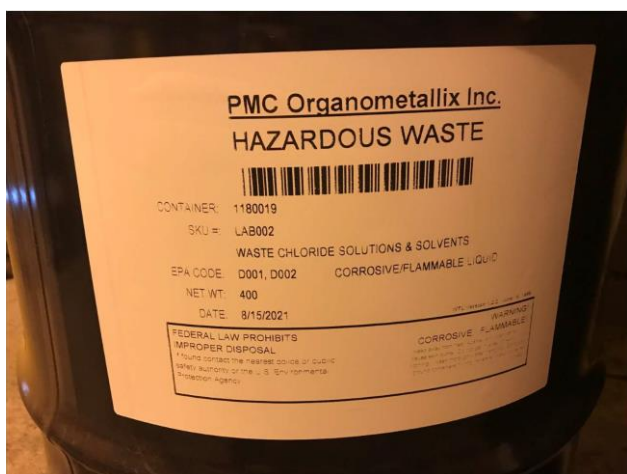


Photo 2: Laboratory CAA for Solvent waste.



Photo 5: Laboratory SAA.



Photo 3: Laboratory CAA for Solvent waste.



Photo 6: Laboratory SAA.



Photo 7: Laboratory SAA.



Photo 10, CAA outside Laboratory.



Photo 8: Laboratory SAA.



Photo 11: CAA outside Laboratory.



Photo 9: Laboratory SAA.

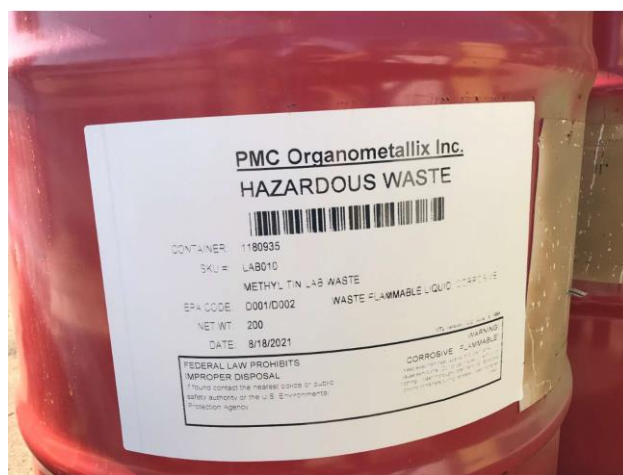


Photo 12: CAA outside Laboratory.



Photo 13: CAA outside Laboratory.



Photo 15: BD039 CAA.



Photo 14: CAA outside Laboratory.



Photo 16: BD039 CAA.



Photo 17: BD005 CAA.

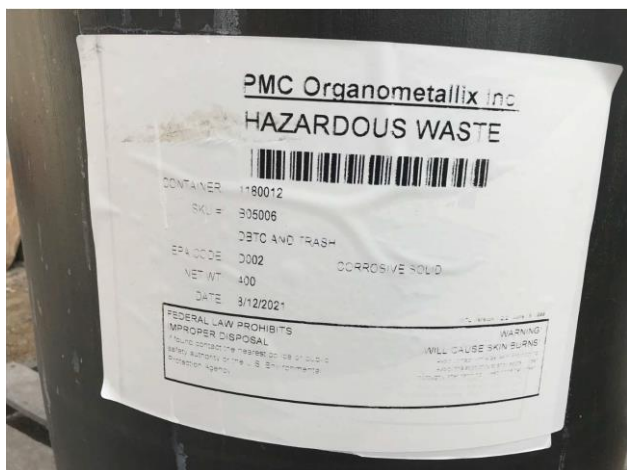


Photo 18: BD005 CAA.



Photo 21: CAA TK 1709.



Photo 19: BD022 CAA.



Photo 22: CAA TK 1709.



Photo 20: BD022 CAA.

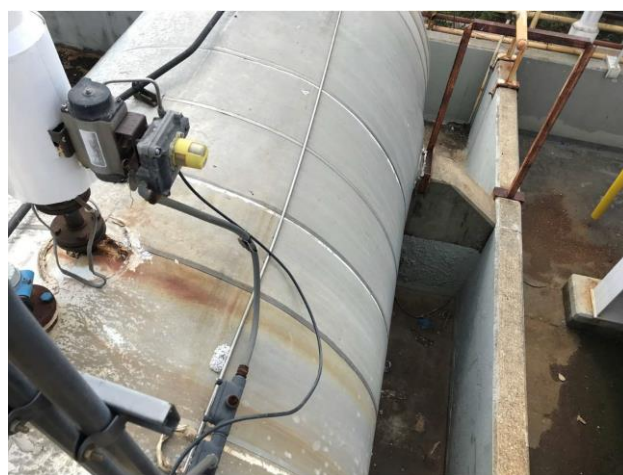


Photo 23: CAA TK 1709.



Photo 24: CAA TK 1709.



Photo 27: BD034 Maintenance metal recycling bin.



Photo 25: BD034 Maintenance Used Oil Storage.



Photo 28: BD0025 Universal Waste Storage.



Photo 26: BD034 Maintenance aerosol can puncture device.

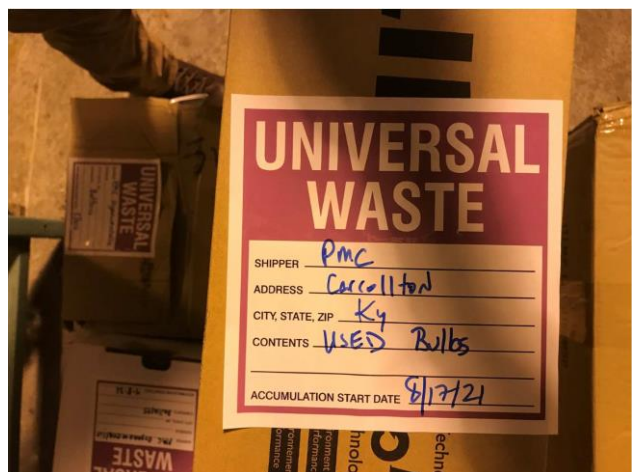


Photo 29: BD0025 Universal Waste Storage .

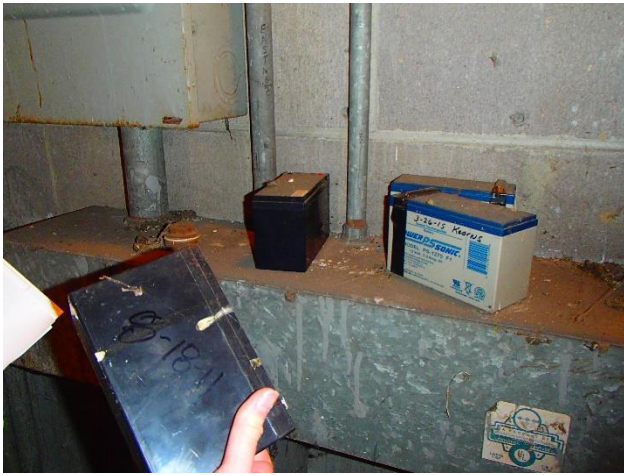


Photo 30: BD0025 Universal Waste Storage batteries.



Photo 33: Permitted Pad 65.



Photo 31: Permitted Pad 65.



Photo 34: Permitted Pad 65.



Photo 32: Permitted Pad 65.



Photo 35: Permitted Pad 65.



Photo 36: Waste on top of container on Permitted Pad 65.

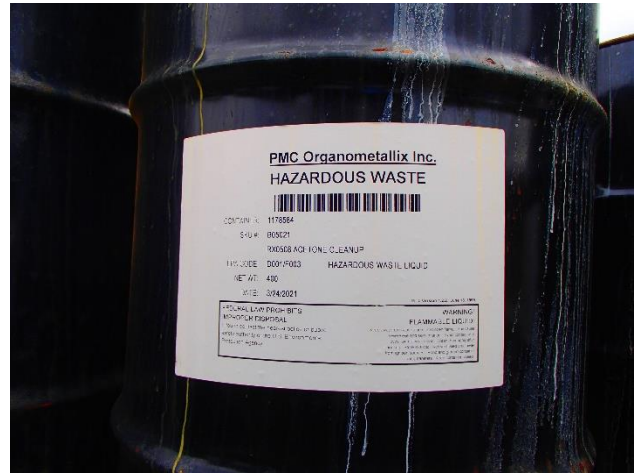


Photo 39: Bulging/Rusting containers on Permitted Pad 65.



Photo 37: Bulging/Rusting containers on Permitted Pad 65.



Photo 40: Bulging/Rusting containers on Permitted Pad 65.



Photo 38: Bulging/Rusting containers on Permitted Pad 65.



Photo 41: Bulging/Rusting containers on Permitted Pad 65.



Photo 42: Permitted Pad 64.



Photo 45: TK 2505.



Photo 43: Permitted Pad 64.



Photo 46: Hydropulper.



Photo 44: TK 2505.



Photo 47: Hydropulper.



Photo 48: Pail of unknown waste.

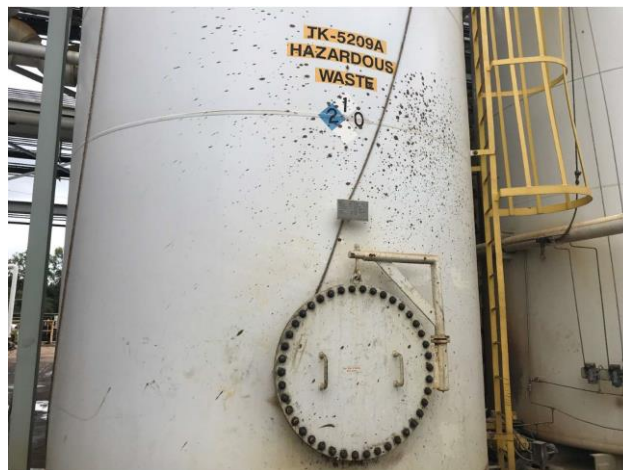


Photo 51: Slurry Tank TK-5209A.

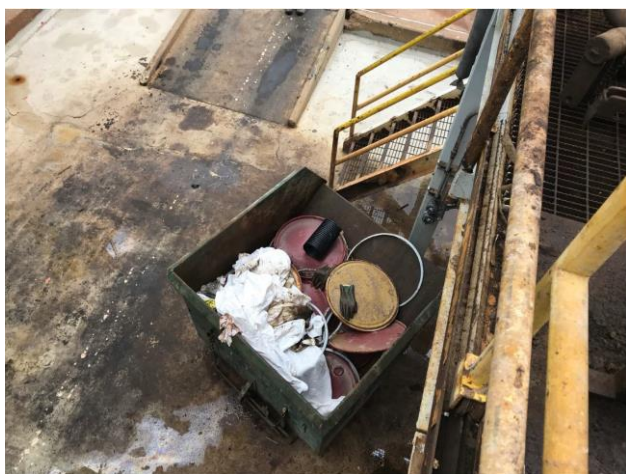


Photo 49: Tyvek in solid waste dumpster.



Photo 52: Slurry Tanks TK-5209B.



Photo 50: Three Slurry Tanks.



Photo 53: Slurry Tank TK-5209B.



Photo 54: Slurry Tank TK-5210.



Photo 57: Cracks in secondary containment near Slurry Tank TK-5210.



Photo 55: Cracks in secondary containment near Slurry Tank TK-5210.

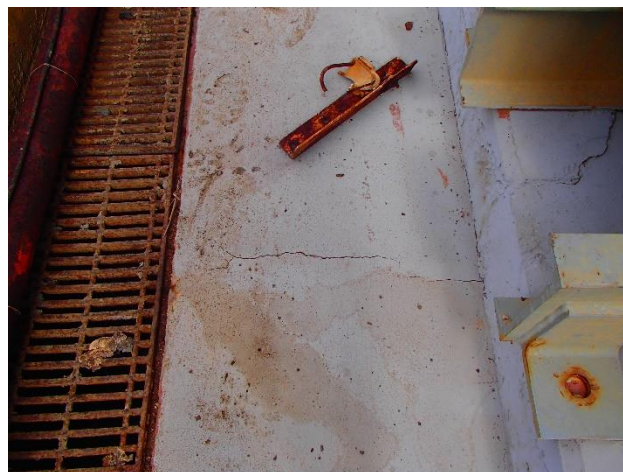


Photo 58: Cracks in secondary containment near Slurry Tank TK-5210.

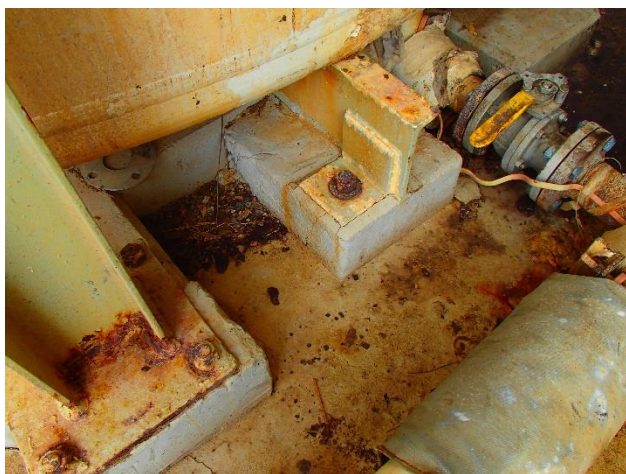


Photo 56: Secondary Containment near Slurry Tanks.

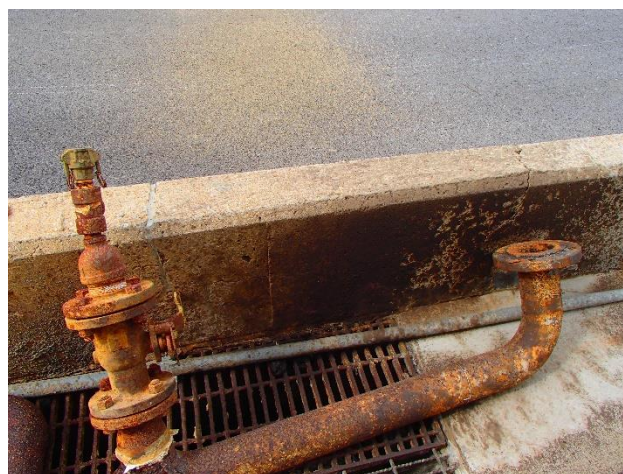


Photo 59: Cracks in secondary containment near Slurry Tank TK-5210.



Photo 60: Cracks in secondary containment near Slurry Tank TK-5210.



Photo 63: Tank 5204A.



Photo 61: Tank 5204A.



Photo 64: Tank 5204A.



Photo 62: Tank 5204A.



Photo 65: Tank 5204B.



Photo 66: Tn Ash to be shipped off site for reclamation.

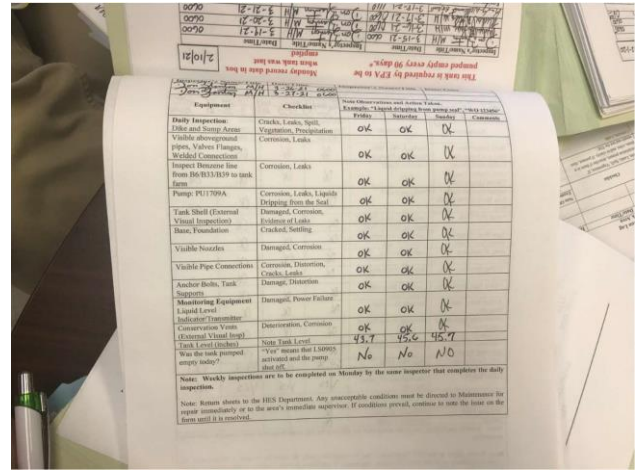


Photo 68: TK-1709 CEI record inspector name, date, and time.

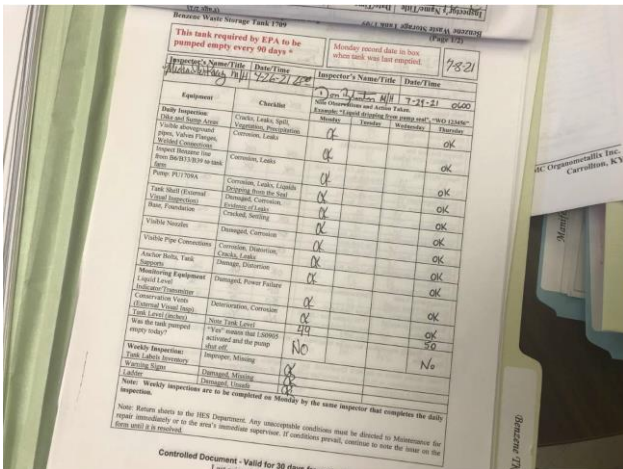


Photo 67: TK-1709 CEI record missing two days.

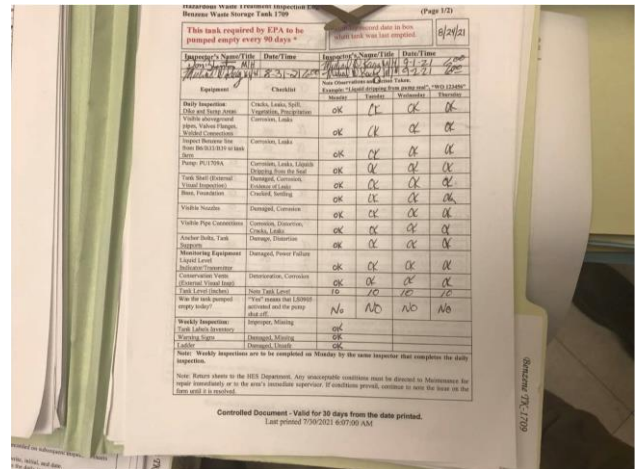


Photo 69: TK-1709 CEI record missing