

RCRA COMPLIANCE EVALUATION INSPECTION REPORT

1) Inspector and Author of Report

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2) Facility Information

Tradebe Treatment and Recycling of Tennessee, LLC (Tradebe)
5485 Victory Lane
Millington, Tennessee 38053

EPA ID: TND000772186

NAICS Code: 562261 – Hazardous Waste Treatment and Disposal

3) Primary Contact

Mario Murrell
Plant Manager

4) Inspection Participants

Daryl Himes	EPA, Region 4
Laura Dahlgren	EPA, Region 4
Jason Simpson	Tennessee Department of Environment and Conservation (TDEC), Memphis Environmental Field Office
Mr. Jim Holt	TDEC, Division of Solid Waste Management (DSWM), Memphis Environmental Field Office
Ms. Beverly Philpot	TDEC, DSWM, Nashville Central Office
Ms. Jennifer McClellan	TDEC, DSWM, Nashville Central Office
Mario Murrell	Plant Manager, Tradebe
Michael Decker	Director of Environmental Compliance, Tradebe
Chad Olson	Assistant Plant Manager, Tradebe
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Wesley Jenkins	Receiving Manager, Tradebe
Tita Lagrimas	Vice President of Regulatory Affairs and Sustainability
Kadie Baylous	Outbound Tracking Supervisor, Tradebe
Crysta Stringfellow	Quality Coordinator
Stephanie Martinez	Shipping Manager

5) Date of Inspection

March 8 & 9, 2022

6) Applicable Regulations

RCRA Sections 3005 and 3007; 40 Code of Federal Regulations (C.F.R.) Parts 260 - 266, 268, 270, 273, and 279; Tennessee Hazardous Waste Management Act, Tennessee Code Annotated (T.C.A.) 68 - 212 part 1 & 3 and the Used Oil Collection Act of 1993, T.C.A. 68 - 21; the Tennessee Hazardous Waste Management Regulations, Tennessee Rule Chapter 0400 -12 - 01 and Hazardous Waste Permit TNHW-103.

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

7) Purpose of Inspection

This unannounced compliance evaluation inspection (CEI) was conducted as a routine evaluation of the facility's RCRA compliance status with the applicable requirements. Inspection findings are based upon site observations, file review, and verbal and written information provided by facility personnel during the inspection including the identification of all physical locations where wastes are generated and managed by the facility.

8) Facility Description

Tradebe is a commercial hazardous waste treatment and storage facility situated on approximately 30 acres in northwest Shelby County. The current waste operations and buildings are confined to approximately 16 acres. TDEC Permit TNHW-103 (the Permit) authorizes Tradebe to manage hazardous waste on-site in containers and in above ground storage tanks (ASTs).

The facility was formerly owned by Chemical Waste Management (CWM) and operated by Advanced Environmental Technical Services. CWM was issued a permit (TNHW-016) for the treatment and storage of hazardous wastes by the DSWM on November 30, 1987. The ownership of CWM Chemical Services, Inc. was transferred to Pollution Control Industries of Tennessee (PCI), effective April 3, 1998. On December 28, 2010, PCI notified the DSWM that the facility was changing its name to Tradebe Treatment and Recycling of Tennessee, LLC (Tradebe). The name change (effective as of January 1, 2011) was incorporated into hazardous waste Permit TNHW-103 by a permit modification (11 (A-916)) on January 31, 2011.

PCI routinely processed special wastes, pursuant to their May 28, 1999 application. The waste analysis plan, rather than special waste approvals, is used to evaluate solid wastes. Unit 207 was incorporated into the hazardous waste permit TNHW-016 by a permit modification on February 8, 2000. PCI was subsequently issued a new hazardous waste permit on October 16, 2000.

Hazardous and solid waste storage and treatment are governed under hazardous waste Permit TNHW-103. The Permit's current expiration date is October 16, 2010. This Permit replaced hazardous waste Permit TNHW-016.

On October 1, 2010, PCI submitted a Part A and Part B Hazardous Waste Management Permit Renewal Application to the DSWM. At the time of the inspection, DSWM staff was in the process of reviewing the application. Until a decision is made by the DSWM to issue or deny the Permit, the facility is required to operate under the current Permit (TNHW-103). Renewal of this Permit will allow the facility to continue its operation for an additional 10 years.

A permit modification (5 (A-697)) was incorporated into hazardous waste Permit TNHW-103 on June 2, 2003. The permit modification required that the official storage capacities for permitted waste management units be adequate to include the amount of waste stored and staged in the units. This resulted in the official storage capacity of certain waste management units (and certain individual secondary containment areas within waste management units) to be changed. (These changes in maximum storage capacities for individual units did not increase or decrease the overall container storage capacity of 508,205 gallons for the facility.) The permit modification also added a new permitted hazardous waste storage area (the Outside Dry Container Staging Areas C and D) to Unit 207. The Outside Dry Container Staging Area is permitted to store a maximum of 50,000 gallons of waste which must not contain free liquids.

On June 4, 2012, the DSWM approved a temporary authorization (effective until December 1, 2012) to construct and operate a 15,000-gallon hazardous waste container storage area for solids (Unit 217), and to replace an already permitted, but yet to be constructed, 19,067-gallon tank (T-001) with a 4,000-gallon hazardous waste storage tank. On November 30, 2012, Unit 217 and Tank T-001 were incorporated into hazardous waste Permit TNHW-103 under permit modification (12 (A-953) and (C-135)). To date these units have not been constructed.

On December 1, 2013, the DSWM received a Class 2 Modification Request from Tradebe to expand the container storage capacity of Unit 217 from 15,000 gallons to 120,000 gallons of waste. The permit modification requires that containers holding waste in this area must not contain free liquids. The overall maximum waste capacity for the facility was increased from 508,205 gallons to 613,205 gallons.

The DSWM received a Class 2 Permit Modification Request on March 21, 2016 for the re-purposing and re-design of Unit 212. This Permit Modification (17 (C-145)) became effective on October 31, 2016. The overall maximum waste capacity for the facility was increased from 613,205 gallons to 673,545 gallons.

Tradebe is a commercial treatment and storage facility. Tradebe is permitted to store and treat a wide range of solid and hazardous wastes. Waste is received from off-site generators, including Tradebe's facility located in East Chicago, Indiana. Tradebe is permitted to store and treat the wastes in tanks, containers, and miscellaneous units. The facility's current primary treatment processes are stabilization, solidification, and fuel blending. All wastes are to be disposed of off-site. Wastes are primarily sent to either Subtitle D landfills or for energy recovery (such as at permitted hazardous waste cement kilns). Tradebe also stores wastes for trans-shipment to off-site facilities for disposal. Tradebe is not permitted to dispose of any solid or hazardous waste on-site at the Millington facility.

A description of the facility's active Permitted Units follows (for descriptions of inactive or unbuilt Permitted Units see Permit TNHW-103):

Unit 202 (Containerized Waste Management Unit):

This unit is a metal building open to the east side that contains a loading dock (Area A) that may store trailers, tankers, roll-offs, and/or drums. Container storage, sampling, and processing may occur in Area B (On the Floor). Curbed concrete floors sloped to sumps maintain individual secondary containment for each of the five loading/unloading bays and Area B.

Unit 203 (Container Storage and Sampling):

This unit opens to the receiving area of Unit 202. A firewall and fire doors separate this unit from Unit 204 and all other sides are closed. This unit contains three metal cabinets utilized to store laboratory sample retains. Secondary containment is a curbed concrete floor sloped to sumps. Container storage and sampling may occur in this unit. In addition, on-site generated hazardous wastes are sometimes stored in 55-gallon drums and five-gallon buckets in this unit.

Unit 204 (Containerized Waste Management Unit):

This unit is a metal building with reinforced concrete block perimeter walls. There are firewalls and doors separating this unit from other buildings. The unit has four separate rooms (referred to as A-Bay, B-Bay, C-Bay, and D-Bay) separated by firewalls and doors with each having four separate containment areas (total of 16 with 11 storage aisles) for segregation of incompatibles. Each of these containment areas is sloped to individual sumps. Raised walkways, curbs, sumps, and sloping concrete floors provide secondary containment.

Unit 204 has two containment areas (referred to as Q-Row South and Q-Row North) located along the western wall of B-Bay that are used for temporary storage of wastes awaiting resolution of manifest discrepancies identified during waste acceptance procedures. Curbs and sloping concrete floors provide secondary containment for each of these storage areas. Containment areas are also located at both the north and south ends of container storage aisles in each Bay. Each of these containment areas have floors sloped to a central sump.

According to facility personnel, A-Bay and B-Bay are typically used to store wastes that are destined for trans-shipment to an off-site facility. Wastes destined for on-site fuel blending are stored in C-Bay and D-Bay.

A storage room is located adjacent to the containment area at the south end of B-Bay. This room contains a drum crusher used to crush RCRA empty containers.

Unit 205 (Containerized Waste Storage, Loading and Unloading):

This unit is a metal building that can accommodate one trailer, tanker, roll-off box at a time. Drums may be directly decanted to a tanker. The east side opens to a covered and contained loading/unloading dock. Secondary containment is a curbed concrete floor sloped to a sump. According to facility personnel, wastes from Tradebe's facility in East Chicago, Indiana are received at this unit.

Unit 207 (Inorganic, Characteristic Waste Storage and Processing):

This unit is a metal building that contains a recessed concrete pit lined with steel which is located in the center along the south wall. The mix tank is located in the recessed pit and is used to treat waste as well as consolidate scrap pallets. The pit slopes to drain any liquids to the western edge. The building has three separate areas to the east, north and west. Each has concrete floors that slope to a center sump. The west area is the Container Storage Area (Area A) and is used to store containers prior to treatment in the Mix Tank. The east area is the Roll-Off Box Storage Area (Area B) and is used to store waste from the mix tank or from off-site. The north area stores the track hoe that is used to mix the wastes and reagent materials in the mix tank and transfer the wastes to the roll-off boxes. No listed, D003 (reactive), and D012 through D043 (organic toxicity) waste may be managed in this unit. Wastes may be placed into the tank by either: 1) direct dumping the container contents over the wall using a specially equipped forklift; 2) pumping with a portable pump and hose from the container; 3) pumping or gravity flow from a tanker; 4) transferring solid wastes from roll-off boxes with the track hoe; or 5) discharging from the chute of the drum shredder. (Note: The drum shredder is a single stage device that is used to shred the drum and its contents if the drum cannot be RCRA emptied by pumping or dumping.) Treatment reagents may be added via an auger feeder from a silo or from containers. The track hoe is used to transfer treated material from the mix tank into the roll-off containers placed in the adjacent roll-off storage area. The roll-offs stay in this area until the analytical results document that treatment was successful or is moved to an accumulation area. If additional treatment is necessary, waste may be placed back into the tank for additional treatment. Treatment (addition and mixing of reagent with the track hoe) may occur in the roll-off box in the storage area. In addition to container storage areas within Unit 207, additional capacity for certain wastes is provided by the paved surface outside to the north and west of Unit 207 (i.e., between Unit 207, Unit 206, and the Unit 208 tank farm). This outside container storage area (referred to as the Outside Dry Container Staging Area or Areas C & D) is used for the storage of only those containers of waste that contain no free liquids. Up to 50,000 gallons of such “dry” containers of waste may be stored in the Outside Dry Container Staging Area. Most of these wastes will be destined for processing in Unit 207, but dry containers may also be stored there prior to off-site shipment.

Unit 208 (Tank Farm):

Ten storage tanks are permitted for this unit with eight adjacent to Unit 208A (T-003 through T-010) and two adjacent to Unit 212 (T-001 and T-002). Tanks T-001, T-002 and T-007 through T-010 have not been constructed while tanks T-003 through T-006 are constructed and in operation. The following description is for all tanks, constructed or not. All tanks are to be vertical dish-bottom tanks, elevated above the floor on legs and are to be constructed with fixed roofs. The piping and ancillary equipment are to be constructed of carbon steel or comparable alloys compatible with the wastes and are above ground. Separate containment systems are to be provided for T-001 and T-002, T-003 through T-006, and T-007 through T-010. The secondary containment systems are to be covered with roofs. The constructed tanks did not have a roof at the time of the inspection (Information contained in the Hazardous Waste Report dated September 5, 2002, indicated that the roof would be constructed when tanks T-007 through T-010 are constructed beside tanks T-003 through T-006.). The secondary containment is to consist of reinforced concrete walls, floors and sumps all coated with a chemical-resistant concrete coating system and free of cracks and gaps. Piping system components (valves, meters, flanges, and other joints) outside of the secondary containment systems are to be in a concrete

trench or other device that serves as secondary containment. These are to drain back into the containment system. Check valves are to be placed at appropriate intervals to limit this volume to levels below the capacity of the receiving secondary containment system. A high-level alarm on each tank must provide an alarm and light signal to the operator to cease the transfer. The operator shall verify that sufficient capacity exists prior to making a transfer. Each tank is to be equipped with a pressure-vacuum conservation vent vented through a closed vent system and control device (i.e., carbon adsorption system) that is designed to remove 95% of the organics. The tank systems are to be equipped with flame arrestors. Inert gas is to blanket tank systems containing ignitable waste. Liquids may be accumulated, bulked, mixed, stored, or blended in the tanks. Multi-layered wastes may be phase-separated from one tank to another. Waste placed in the tanks must be pH neutral and not reactive.

Unit 208A (Tank Farm Truck Loading and Unloading):

This unit is a covered and contained tanker truck loading/unloading bay for storage and transfer of liquids and pumpable waste between containers (tanker, 55-gallon drums, etc.) and tanks. Secondary containment is a curbed concrete floor sloped to a sump.

Unit 212 (Containerized Storage and Processing):

On July 11, 2013, a fire occurred in this unit that required the implementation of the facility's Contingency Plan. According to Tradebe, approximately 124 drums of organic related waste destined for fuel blending were in the area at the time of the incident. Fire Units from Shelby County, Memphis, and Millington responded to the incident and were able to contain the fire to the unit. Tradebe indicated that during the incident air monitoring was performed and there was no off-site risk to the public. Fire suppression water was collected and stored in two frac tanks on-site. Areas impacted by the fire included the shredder tower, auger screw, hydra pulper, metal wash unit, waste drums, and metal building.

Unit 212's metal building and operating equipment (i.e., the shredder tower, hydra pulper, auger screw, and metal wash unit) had been removed prior to the June 25, 2014, CEI. Facility personnel indicated that Tradebe had no immediate plans to build a new shredder tower. The only structure remaining was a concrete slab. According to facility personnel, Tradebe began storing non-hazardous waste in this area in February 2015.

The DSWM received a Class 2 Permit Modification Request on March 21, 2016, with revisions submitted on April 6, 2016, April 28, 2016, June 6, 2016, and July 29, 2016, to rebuild and expand the permitted hazardous waste container management area Unit 212. The DSWM issued a Notice of Deficiency for this Permit Modification Request on June 28, 2016. This Permit Modification (17 (C-145)) was dated November 8, 2016 and became effective on October 31, 2016. On September 6, 2017, the DSWM conducted a Hazardous Waste Facility Construction Inspection to evaluate the facility's compliance with the October 31, 2016, Class 2 Modification and Permit TNHW-103 Section VIII Schedule of Compliance for Unit 212. No violations were observed during the September 6, 2017, Inspection and Tradebe was approved to use Unit 212 for storage and treatment of hazardous waste

Unit 217 (Outside Container Storage):

This unit is permitted to store a maximum of 120,000 gallons of hazardous waste in containers along the fence line south and east of Unit 207. Non-hazardous waste and ignitable, corrosive and toxicity characteristic wastes may be managed in this unit. This outside container storage area is used for storage of only those containers of waste that contain no free liquids. This permitted area is used as a processing area for combining both on-site generated and off-site generated hazardous wastes into roll-off boxes for off-site incineration or treatment.

90-day Hazardous Waste Accumulation Area (Front of the Facility within the Fence):

Roll-off containers with waste generated from the treatment of hazardous waste in the mix tank in Unit 207 are stored in this accumulation area while samples are analyzed to determine if the treatment was successful. In addition, hazardous wastes generated on-site are sometimes stored in roll-off containers, 300-gallon metal “hoppers”, and metal trays “half- moons” in this accumulation area.

Generator Status:

In addition to treating and storing wastes received from off-site generators, Tradebe is a large quantity generator (LQG) of hazardous waste. Hazardous wastes generated on-site are routinely stored in containers at a 90-day storage area located at the Roll-off Accumulation Area, and at the lower level of Unit 203. These wastes are typically shipped to an off-site facility for disposal. Tradebe is also a small quantity handler of universal waste and a used oil generator.

On November 12, 2021, the facility submitted its most recent hazardous waste notification as a large quantity generator and treatment and storage facility of hazardous waste.

9) Previous Inspection History

On December 9, 2021, TDEC conducted a RCRA follow-up inspection at Tradebe. The inspection was performed to verify that violations found during previous inspections had been corrected. On January 11, 2022 a Letter of Intent to Initiate Enforcement for various permit violations including capacity limits was sent to the facility.

10) Findings

On March 8, 2022, EPA inspectors Daryl Himes and Laura Dahlgren, accompanied by Jason Simpson and Jim Holt Tennessee Department of Environmental Conservation inspectors, arrived at Tradebe at approximately 9:00 a.m. Mario Murrell, the facility’s Plant Manager and Michael Decker, the facility’s Director of Environmental Compliance, immediately received the inspectors and were shown their credentials. Mario Murrell, Michael Decker and the inspection team were joined other members of the inspection participants listed, above. The inspection team introduced themselves and explained the purpose of their visit. The inspectors described the anticipated use of cameras during the inspection and provided a request for records.

The Facility representatives provided an overview of the facility’s history and current operations during the opening conference. The company does not appear to meet the Small Business Regulatory Enforcement Fairness Act’s classification of a “small business,” which is generally

set by the Small Business Administration using the business' SIC/NAICS code and annual receipts or number of employees. Therefore, the EPA inspector did not provide a copy of the agency's information sheet for small businesses, which can be found at <https://www.epa.gov/compliance/small-business-resources-information-sheet>.

A walk-through inspection of the facility was then conducted to observe areas where hazardous waste, nonhazardous wastes, used oil and universal waste is managed and generated. Please note, that unless specified otherwise, containers of hazardous waste within satellite accumulation areas (SAAs) were closed and labeled with the words "Hazardous Waste" and an indication of the hazard contents within the containers.

Also, please note, that unless specified otherwise, containers of hazardous waste within permitted storage areas were closed and labeled with the words "Hazardous Waste," an indication of the hazard contents within the containers and marked with an accumulation start date of less than one year.

: Unit 217

The inspection team observed containers having a capacity of 69,068 gallons of hazardous waste stored in Unit 217 at the time of the inspection. Unit 217 currently has a total permitted storage capacity of 120,000 gallons. Unit 217 is not permitted for the storage of any liquid hazardous wastes.

Specific observations made by the inspection team within Unit 217 included the following:

One 55-gallon container that was partially crushed (Photo 1) in row 15. The container label identified the drum with the code D007548501.

Pursuant to Section 68-212-108 of the THWMA, Tenn. Code Ann. § 68-212-108 (Section 3005 of RCRA), any facility treating, storing or disposing of hazardous waste shall have a permit or interim status for such treatment, storage or disposal of hazardous waste.

Permit TNHW-103 Section III Condition B states:

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 this container to a container that is in good condition or otherwise manage the waste in some other way that complies with the conditions of this permit.

In the area of Row 14, the surface of the asphalt was damaged by truck traffic (Photo 2). It is recommended that the facility take action to repair the asphalt in this area to avoid any possible disposal issues should a spill occur in this area.

Within Row 32 of Unit 217, the inspection team observed twelve, 55-gallon containers managing liquid hazardous wastes. These containers were identified with the following container identification codes:

D007195736 (Hole in lid of overpack/Drum floating in water) (Photos 3 & 4)	D007213795	D007213794	D007665295
D007513832	D007213793	D007269711	D007201512
D007327502	D007213792	D007181103	D007737405

Pursuant to Section 68-212-108 of the THWMA, Tenn. Code Ann. § 68-212-108 (Section 3005 of RCRA), any facility treating, storing or disposing of hazardous waste shall have a permit or interim status for such treatment, storage or disposal of hazardous waste.

Permit TNHW-103 Attachment 8 page 8-51 states:

Types and Quantities of Wastes Managed in Unit 217:

Non-hazardous waste and virtually every type of hazardous waste listed and identified in Rule 0400-12-01-.02, may be managed in Unit 217; however, they will be evaluated as part of the Waste Analysis Plan (WAP) process to ensure no free liquids and no F020, F021, F022, F023, F026, and F027 wastes will be present. Thus, Unit 217 is designed to manage all types of containerized ignitable, corrosive, and toxicity characteristic wastes. The physical characteristic of the wastes is solids only.

Two 55-gallon containers within overpack containers in Row 32 (marked with facility labels: D006380581 and D005229775) were observed to have storage start dates of February 9, 2021 and March 27, 2020.

Pursuant to Section 68-212-108 of the THWMA, Tenn. Code Ann. § 68-212-108 (Section 3005 of RCRA), any facility treating, storing or disposing of hazardous waste shall have a permit or interim status for such treatment, storage or disposal of hazardous waste.

Permit TNHW-103 Section II Condition O states:

Tennessee Rule 1200-1-11-.10 identifies hazardous wastes that are prohibited from land disposal and defines those limited circumstances under which an otherwise prohibited waste may continue to be placed in a land treatment, storage or disposal unit. (*Note: Tennessee Rule 1200-1-11-.10 has been amended to Tennessee Rule 0400-12-1-.10*). The permittee shall therefore comply with all applicable requirements of Rule 0400-12-1-11-.10 (40 C.F.R. Part 268) which includes (Tennessee Rule 0400-12-1-.10(4)(a)3. (40 CFR § 268.50(c)). An owner/operator of a treatment, storage or disposal facility may store such wastes beyond one year; however, the owner/operator bears the burden of proving that such storage was solely for the purpose of accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal.

One 55-gallon container within Row 36 was not marked with any label.

Pursuant to Section 68-212-108 of the THWMA, Tenn. Code Ann. § 68-212-108 (Section 3005 of RCRA), any facility treating, storing or disposing of hazardous waste shall have a permit or interim status for such treatment, storage or disposal of hazardous waste.

Permit TNHW-103 Section II Condition O states:

Tennessee Rule 1200-1-11-.10 identifies hazardous wastes that are prohibited from land disposal and defines those limited circumstances under which an otherwise prohibited waste may continue to be placed in a land treatment, storage or disposal unit. *(Note: Tennessee Rule 1200-1-11-.10 has been amended to Tennessee Rule 0400-12-1-.10).* The permittee shall therefore comply with all applicable requirements of Rule 0400-12-1-11-.10 (40 C.F.R. Part 268) which includes (Tennessee Rule 0400-12-1-.10(4)(a)1.(ii)(I)I-IV.) (40 CFR § 268.50(a)(2)(i)(A-D)) Except as provided in this section, the storage of hazardous wastes restricted from land disposal under Subpart C of this part of RCRA section 3004 is prohibited, unless the following conditions are met: An owner/operator of a hazardous waste treatment, storage, or disposal facility stores such wastes in tanks, containers, or containment buildings solely for the purpose of the accumulation of such quantities of hazardous waste as necessary to facilitate proper recovery, treatment, or disposal and:

- (i) each container is clearly marked to identify its contents and with:
 - (A) The words “Hazardous Waste”
 - (B) The applicable EPA hazardous waste number(s) (EPA hazardous waste codes) in subparts C and D of part 261 of this chapter; or use a nationally recognized electronic system, such as bar coding, to identify the EPA hazardous waste number(s);
 - (C) An indication of the hazards of the contents
 - (D) The date each period of accumulation begins.

One 55-gallon container in Row 36 (marked with facility label: D006367023) was observed to have storage start date of February 24, 2021.

Pursuant to Section 68-212-108 of the THWMA, Tenn. Code Ann. § 68-212-108 (Section 3005 of RCRA), any facility treating, storing or disposing of hazardous waste shall have a permit or interim status for such treatment, storage or disposal of hazardous waste.

Permit TNHW-103 Section II Condition O states:

Tennessee Rule 1200-1-11-.10 identifies hazardous wastes that are prohibited from land disposal and defines those limited circumstances under which an otherwise prohibited waste may continue to be placed in a land treatment, storage or disposal unit. *(Note: Tennessee Rule 1200-1-11-.10 has been amended to Tennessee Rule 0400-12-1-.10).* The permittee shall therefore comply with all applicable requirements of Rule 0400-12-1-11-.10 (40 C.F.R. Part 268) which includes (Tennessee Rule 0400-12-1-.10(4)(a)3. (40 CFR § 268.50(c)) An owner/operator of a treatment, storage or disposal facility may store such wastes beyond one year; however, the owner/operator bears the burden of proving that such storage was solely for the purpose of accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal.

90-Day Hazardous Waste Hazardous Waste Accumulation Area Located East of Unit 207

Six 20 cubic yard hazardous waste roll-off containers were observed in this area. Each of the containers were closed, marked with the words “Hazardous Waste,” accumulation start dates of less than 90-days and an indication of the hazard type associated with the waste. Each of the containers were closed at the time of the inspection.

Universal Waste Accumulation Area Located East of Unit 202

One 4-foot tube (Photo 5) and one cubic yard box containing universal waste bulbs were observed to be open at the time of the inspection. Three 55-gallon containers of universal waste batteries were also observed in this area.

Pursuant to Tenn. Comp. R. & Regs. 0400-12-01-.12(1)(b) [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.

Pursuant Tenn. Comp. R. & Regs. 0400-12-01-.12(2)(d)4. [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.

Unit 202

The inspection team observed containers with a total capacity of 10,822 gallons of waste stored in Unit 202 Area A (Lower) (which includes Rows 11-17 in this Unit). Unit 202 Lower currently has a total permitted storage capacity of 72,600 gallons.

The inspection team observed containers with a total capacity of 33,469-gallons of waste stored in Unit 202 Area B (Upper) which has a total permitted storage capacity of 51,480 gallons.

No container specific discrepancies were noted in this area.

Unit 203

In the upper section of Unit 203, the inspection team observed containers with a total capacity of 3,173 gallons of hazardous waste stored in this area.

In the lower section of Unit 203, the inspection team observed containers with a total capacity of 3,441 gallons of hazardous waste stored in this area.

Unit 203 currently has a combined total permitted storage capacity of 6,875 gallons. In addition, no container specific discrepancies were noted in this area.

Unit 203 – 90-Day Accumulation Area

In the Lower section of Unit 203, the inspection team also observed a 90-day hazardous waste accumulation area for waste generated in the Laboratory. Eight 55-gallon containers of

hazardous waste were observed in this area at the time of the inspection. In addition, samples from incoming waste were managed within three metal cabinets.

Unit 208A – Container Storage

The inspection team observed containers managing a total capacity of 5,840 gallons of hazardous waste stored in Unit 208A. Unit 208A currently has a total permitted storage capacity of 10,000 gallons.

In this area, the inspection team also observed one satellite accumulation area (SAA) that contained one closed and labeled 55-gallon drum for the accumulation of waste aerosol cans and one SAA that contained one closed and labeled 55-gallon drum for the accumulation of waste personal protection equipment (PPE).

Unit 208 – Tank Storage

According to the level indicator panel, at the time of the CEI, Tanks 3-6 had readings of 1.51, 1.45, 17.39 and 14.49, respectively (Photo 9). Using a strapping conversion chart to calculate the quantity of hazardous waste in each of the tanks at the time of the inspection, Tank T-003 contained 3,075 gallons of hazardous waste, Tank T-004 contained 3,017 gallons of hazardous waste, Tank T-005 contained 16,389 gallons of hazardous waste, and Tank T-006 contained 13,957 gallons of hazardous waste. The inspection team observed that these permitted hazardous waste tanks were labeled with the words “Hazardous Waste.” Emission monitoring tags were observed on the ancillary equipment to each of the tanks. The secondary containment system for the tank system appeared to be in good condition at the time of the inspection.

During the CEI, Daryl Himes and Laura Dahlgren of the inspection team and Michael Decker of Tradebe climbed the ladder to the platform at the top of the four tanks to observe their control devices. During the inspection on the platform, a closure device on Tank T-004 was observed to be open (Photo 8) at the time of the inspection. A work order dated March 10, 2022 was provided to the inspection team electronically a day after the inspection which indicated that an inlet ball valve was plugged and needed to be repaired.

Pursuant to Section 68-212-108 of the THWMA, Tenn. Code Ann. § 68-212-108 (Section 3005 of RCRA), any facility treating, storing or disposing of hazardous waste shall have a permit or interim status for such treatment, storage or disposal of hazardous waste.

Permit TNHW-103 Section II Condition R (RCRA Organic Air Emission Standards) requires the facility to comply with the Subpart CC air emission requirements within Tenn. Comp. R. & Regs. 0400-12-01-.06(29) [40 C.F.R § 264.1084(c)(2)(i)]. Specifically, Tenn. Comp. R. & Regs. 0400-12-01-.06(29) [40 C.F.R § 264.1084(c)(2)(i)] requires owners and operators controlling air pollutant emissions from a tank using Tank Level 1 controls to equip the tank with a fixed roof which has closure devices designed to form a continuous barrier over the entire surface area of the hazardous waste in the tank.

At Unit 208, the inspection team observed one SAA that contained three closed 5-gallon buckets for the accumulation of any drips from sampling ports. These containers were not marked legibly with the words “Hazardous Waste” or with indications of the hazards of the contents (Photos 6 & 7).

Pursuant to Tenn. Comp. R. & Regs. 0400-12-01-.03(4)(e)5(i)(I & II) [40 C.F.R. § 262.34(c)(1)], a generator may accumulate as much as 55 gallons of 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 Section 68-212-108 of the THWMA, Tenn. Code Ann. § 68-212-108 [Section 3005 of RCRA, 42 U.S.C. § 6925], and without complying with Tenn. Comp. R. & Regs. 0400-12-01-.03(4)(e)2. [40 C.F.R. § 262.34(a)], provided that the generator complies with the satellite accumulation area conditions listed in Tenn. Comp. R. & Regs. 0400-12-01-.03(4)(e)5(i)(I)-(II) [40 C.F.R. § 262.34(c)(1)(i)-(ii)] (hereinafter referred to as the “SAA Permit Exemption”).

Pursuant to Tenn. Comp. R. & Regs. 0400-12-01-.03(4)(e)5(i)(I & II) [40 C.F.R. § 262.34(c)(1)(ii)], which is a condition of the SAA Permit Exemption, a generator is required to mark satellite accumulation containers either with the words “Hazardous Waste” or with other words that identify the contents of the containers.

Non-Hazardous Waste Storage Area between Unit 208 and Unit 207

The inspection team observed one 200-gallon tote labeled with the words “Hazardous Waste.” Facility personnel stated that this container contained Texas Hazardous Waste that was non-hazardous in Tennessee and removed the label during the CEI. The label was removed from the container at the time of the inspection.

Pursuant to Section 68-212-108 of the THWMA, Tenn. Code Ann. § 68-212-108 (Section 3005 of RCRA), any facility treating, storing or disposing of hazardous waste shall have a permit or interim status for such treatment, storage or disposal of hazardous waste.

Unit 207

The inspection team observed containers having a total capacity of 24,261 gallons of hazardous waste stored in Unit 207 Outside Dry Container Storage Area. Within Row 7 of the Outside Dry Container Storage Area, the inspection team observed containers of liquids (D00716181 and D007579675) in a solids-only area.

Pursuant to Section 68-212-108 of the THWMA, Tenn. Code Ann. § 68-212-108 (Section 3005 of RCRA), any facility treating, storing or disposing of hazardous waste shall have a permit or interim status for such treatment, storage or disposal of hazardous waste.

Permit TNHW-103 Attachment 8 page 8-40 includes the “Design and Management of the Outside Container Management” section which does not allow liquid storage.

The inspection team observed 3,860 gallons of hazardous waste stored in Unit 207 Area C. Unit 207 Areas C&D currently have a total permitted storage capacity of 5,000 gallons.

Row 5 had a shrink-wrapped pallet of 32 boxes (container D007735503) that had one label on the outside of the shrink-wrap and dated January 19, 2022. They had not re-packaged or re-labeled within 15 days.

October 1, 2014 Settlement Agreement and Consent Order paragraph VIII – States that all incoming shrink-wrapped pallets intended for storage or processing at the Facility that are labeled and represented on the manifest as one container will be broken down in the permitted receiving/sampling areas within fifteen (15) days of unloading from the transport vehicle. De-palletized waste containers will be properly re-packaged and/or re-labeled as appropriate before leaving the receiving/sampling areas for placement into a permitted unit for storage. If the individual containers contain compatible waste, they may alternatively be placed into a larger container and the larger container re-labeled to reflect the contents.

The inspection team observed 5,205 gallons of hazardous waste stored in Unit 207 Area A. Unit 207 Area A currently has a total permitted storage capacity of 10,560 gallons. No container specific discrepancies were noted in this area.

Area B of Unit 207 is utilized by the facility for treatment purposes (neutralization) (Photo 10) of hazardous wastes in a stainless steel lined concrete pit using cement kiln dust. No hazardous wastes were observed in this area at the time of the inspection.

Unit 212 – Area B

The inspection team observed containers having a total capacity of 165 gallons of hazardous waste in this area. Three compressed gas cylinders and two eight-foot boxes universal waste bulbs were also observed in this area. This area has a permitted storage capacity of 6,600 gallons. No container specific discrepancies were noted in this area.

Unit 212 – Area A

The inspection team observed containers having a total capacity of 48,068 gallons of hazardous waste in this area. This area has a permitted storage capacity of 75,240 gallons. No container specific discrepancies were noted in this area.

Unit 204 – Wash Bay

The inspection team observed containers having a total capacity of 1,067 gallons of hazardous waste in this area at the time of the inspection. This area has a permitted storage capacity of 1,900 gallons.

One 55-gallon container in this area (marked with facility label: D005626227) was observed to have a storage start date of July 30, 2020. A second 55-gallon container in this area (marked with facility label: D006370556) was observed to have a storage start date of February 5, 2021.

Pursuant to Section 68-212-108 of the THWMA, Tenn. Code Ann. § 68-212-108 (Section 3005 of RCRA), any facility treating, storing or disposing of hazardous waste shall have a permit or interim status for such treatment, storage or disposal of hazardous waste.

Permit TNHW-103 Section II Condition O states:

Tennessee Rule 1200-1-11-.10 identifies hazardous wastes that are prohibited from land disposal and defines those limited circumstances under which an otherwise prohibited waste may continue to be placed in a land treatment, storage or disposal unit. (*Note: Tennessee Rule 1200-1-11-.10 has been amended to Tennessee Rule 0400-12-1-.10*). The permittee shall therefore comply with all applicable requirements of Rule 0400-12-1-11-.10 (40 C.F.R. Part 268) which includes (Tennessee Rule 0400-12-1-.10(4)(a)3. (40 CFR § 268.50(c)) An owner/operator of a treatment, storage or disposal facility may store such wastes beyond one year; however, the owner/operator bears the burden of proving that such storage was solely for the purpose of accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal.

Unit 204 – A-Bay North

The inspection team observed this area to be empty at the time of the inspection. This area has a permitted storage capacity of 3,960 gallons.

Unit 204 – A-Bay Sumps 1A & 1B

The inspection team observed containers having a total capacity of 6,110 gallons of hazardous waste in these two areas at the time of the inspection. These areas have a combined permitted storage capacity of 11,880 gallons. No container specific discrepancies were noted in this area.

Unit 204 – A-Bay South

The inspection team observed containers having a total capacity of 2,597 gallons of hazardous waste in this area at the time of the inspection. This area has a permitted storage capacity of 5,280 gallons. No container specific discrepancies were noted in this area.

Unit 204 – A-Bay Sump 2A

The inspection team observed containers having a total capacity of 3,330 gallons of hazardous waste in this area at the time of the inspection. This area has a permitted storage capacity of 11,880 gallons. No container specific discrepancies were noted in this area.

Unit 204 – A-Bay Sump 2B

The inspection team observed containers having a total capacity of 6,738 gallons of hazardous waste in this area at the time of the inspection. This area has a permitted storage capacity of 11,880 gallons.

In Unit 204 A-Bay Sump 2B, the inspection team observed a shrink-wrapped pallet of 17 small boxes of hazardous waste that had one hazardous waste label and a date of January 11, 2022 on the outside of the shrink-wrap. The shrink-wrapped pallet had not been re-packaged or re-labeled.

October 1, 2014 Settlement Agreement and Consent Order paragraph VIII – States that all incoming shrink-wrapped pallets intended for storage or processing at the Facility that are

labeled and represented on the manifest as one container will be broken down in the permitted receiving/sampling areas within fifteen (15) days of unloading from the transport vehicle. De-palletized waste containers will be properly re-packaged and/or re-labeled as appropriate before leaving the receiving/sampling areas for placement into a permitted unit for storage. If the individual containers contain compatible waste, they may alternatively be placed into a larger container and the larger container re-labeled to reflect the contents.

Unit 204 – B-Bay North

The inspection team observed containers having a total capacity of 1,020 gallons of hazardous waste in this area at the time of the inspection. This area has a permitted storage capacity of 3,960 gallons. No container specific discrepancies were noted in this area.

Unit 204 – B-Bay Sump 3A

The inspection team observed containers having a total capacity of 9,162 gallons of hazardous waste in this area at the time of the inspection. This area has a permitted storage capacity of 11,880 gallons. No container specific discrepancies were noted in this area.

Unit 204 – B-Bay Sump 3B

The inspection team observed containers having a total capacity of 8,375 gallons of hazardous waste in this area at the time of the inspection. This area has a permitted storage capacity of 11,880 gallons. No container specific discrepancies were noted in this area.

Unit 204 – B-Bay South

The inspection team observed containers having a total capacity of 1,640 gallons of hazardous waste in this area at the time of the inspection. This area has a permitted storage capacity of 3,960 gallons. No container specific discrepancies were noted in this area.

Unit 204 – B-Bay Q-Row (Staging) North

The inspection team observed containers having a total capacity of 4,552 gallons of hazardous waste in this area at the time of the inspection. This area has a permitted storage capacity of 5,280 gallons. No container specific discrepancies were noted in this area.

Unit 204 – B-Bay Q-Row South

The inspection team observed containers having a total capacity of 4,411 gallons of hazardous waste in this area at the time of the inspection. This area has a permitted storage capacity of 5,280 gallons. No container specific discrepancies were noted in this area.

Unit 204 – C-Bay North

The inspection team observed containers having a total capacity of 155 gallons of hazardous waste in this area at the time of the inspection. This area has a permitted storage capacity of 4,180 gallons.

A 30-gallon container in this area (marked with label D007584963) was observed to have storage start date of February 7, 2021. A 15-gallon container in this area (marked with facility label: D006287809) was observed to have storage start date of January 15, 2021.

Pursuant to Section 68-212-108 of the THWMA, Tenn. Code Ann. § 68-212-108 (Section 3005 of RCRA), any facility treating, storing or disposing of hazardous waste shall have a permit or interim status for such treatment, storage or disposal of hazardous waste.

Permit TNHW-103 Section II Condition O states:

Tennessee Rule 1200-1-11-.10 identifies hazardous wastes that are prohibited from land disposal and defines those limited circumstances under which an otherwise prohibited waste may continue to be placed in a land treatment, storage or disposal unit. *(Note: Tennessee Rule 1200-1-11-.10 has been amended to Tennessee Rule 0400-12-1-.10)*. The permittee shall therefore comply with all applicable requirements of Rule 0400-12-1-11-.10 (40 C.F.R. Part 268) which includes (Tennessee Rule 0400-12-1-.10(4)(a)3. (40 CFR § 268.50(c)) An owner/operator of a treatment, storage or disposal facility may store such wastes beyond one year; however, the owner/operator bears the burden of proving that such storage was solely for the purpose of accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal.

Unit 204 – C-Bay Sump 4A

The inspection team observed containers having a total capacity of 2,245 gallons of hazardous waste in this area at the time of the inspection. This area has a permitted storage capacity of 5,940 gallons. No container specific discrepancies were noted in this area.

Unit 204 – C-Bay Sump 4B

The inspection team observed containers having a total capacity of 1,396 gallons of hazardous waste in this area at the time of the inspection. This area has a permitted storage capacity of 5,940 gallons. No container specific discrepancies were noted in this area.

Unit 204 – C-Bay South

The inspection team observed this area to be empty at the time of the inspection. This area has a permitted storage capacity of 3,520 gallons. No container specific discrepancies were noted in this area.

Unit 204 – C-Bay Sump 5A

The inspection team observed containers having a total capacity of 4,120 gallons of hazardous waste in this area at the time of the inspection. This area has a permitted storage capacity of 11,880 gallons. No container specific discrepancies were noted in this area.

Unit 204 – C-Bay Sump 5B

The inspection team observed containers having a total capacity of 4,272 gallons of hazardous waste in this area at the time of the inspection. This area has a permitted storage capacity of 11,880 gallons. No container specific discrepancies were noted in this area.

Unit 204 – D-Bay North

The inspection team observed containers storing a total volume of 5,225 gallons of hazardous waste in this area at the time of the inspection consisting of 19 275-gallon plastic totes. This area has a permitted storage capacity of 4,400 gallons. No container specific discrepancies were noted in this area.

Pursuant to Section 68-212-108 of the THWMA, Tenn. Code Ann. § 68-212-108 (Section 3005 of RCRA), any facility treating, storing or disposing of hazardous waste shall have a permit or interim status for such treatment, storage or disposal of hazardous waste.

Permit TNHW-103 Attachment 8-1 Table 8-1-1 states:

Summary of Maximum Waste Capacities (Staged and Stored Containers) Container Management Units Unit 204, Containerized Waste Management Unit D-Bay, Staging Area North has a total capacity of 4,400 gallons.

Unit 204 – D-Bay Sump 6A

The inspection team observed containers having a total capacity of 5,070 gallons of hazardous waste in this area at the time of the inspection. This area has a permitted storage capacity of 11,880 gallons. No container specific discrepancies were noted in this area.

Unit 204 – D-Bay Sump 6B

The inspection team observed containers having a total capacity of 4,295 gallons of hazardous waste in this area at the time of the inspection. This area has a permitted storage capacity of 11,880 gallons. No container specific discrepancies were noted in this area.

Unit 204 – D-Bay South

The inspection team observed this area to be empty at the time of the inspection. This area has a permitted storage capacity of 2,200 gallons. No container specific discrepancies were noted in this area.

Unit 204 – D-Bay Sump 7A

The inspection team observed containers having a total capacity of 4,185 gallons of hazardous waste in this area at the time of the inspection. This area has a permitted storage capacity of 5,940 gallons. No container specific discrepancies were noted in this area.

Unit 204 – D-Bay Sump 7B

The inspection team observed containers having a total capacity of 5,390 gallons of hazardous waste in this area at the time of the inspection. This area has a permitted storage capacity of 5,940 gallons. No container specific discrepancies were noted in this area.

Unit 205

The inspection team observed 32 55-gallon containers having a total capacity of 1,760 gallons of hazardous waste in this area at the time of the inspection on a truck. This area has a permitted storage capacity of 9,680 gallons. No container specific discrepancies were noted in this area.

Unit 201 – Laboratory

In the Laboratory, the inspection team observed three SAAs that each contained a 5-gallon container for the accumulation of PPE and two SAAs that each contained a 15-gallon container for the accumulation of sample jars.

Unit 105 - Maintenance

In Unit 105, the inspection team observed one SAA that contained a 55-gallon drum for the accumulation of aerosols and one SAA that contained a closed 55-gallon drum for the accumulation of PPE. Each of these SAA drums was closed and labeled with the words “Hazardous Waste.”

Outside Unit 201/Universal Waste Storage Area

Located south and east of Unit 201 (the Laboratory), the inspection team observed a storage area for containers of Universal Waste. No discrepancies were observed in this area.

10-day Transfer Area and 5-day Inbound/Outbound Trailers

The 10-day transfer area containers of hazardous waste were observed in the area of Unit 212. The 5-day inbound/outbound trailer were located north and west of Unit 204.

During a review of the facility’s inbound trailer log, it was noted that the log for Trailer 275933 indicated that it was logged as an inbound trailer for seven days (January 11, 2022 to January 17, 2022).

Pursuant to Section 68-212-108 of the THWMA, Tenn. Code Ann. § 68-212-108 (Section 3005 of RCRA), any facility treating, storing or disposing of hazardous waste shall have a permit or interim status for such treatment, storage or disposal of hazardous waste.

Permit TNHW-103 Section III.I.2.(c) states:

Transport vehicles parked in the transport area will be moved into the receiving area for evaluation and/or receipt within five (5) calendar days. Hazardous waste may only be held in a transport area if loaded in a transport vehicle. Transport vehicles shall only be offloaded in a receiving area.

Record Review:

The inspection team performed the record review in part on March 9, 2022, and in part upon leaving the facility and receiving requested documents via electronic messages. On March 9, 2022, the inspection team reviewed the facility's contingency plan and hazardous waste manifests and found no discrepancies.

A request for hazardous waste training documents resulted in the submittal of training records for six employees which performed the training after the last TDEC inspection in November of 2021. No discrepancies were found upon reviewing these records.

A request for records regarding equipment leaks and air emission standards for tanks resulted in the electronic submittal of nine documents on March 11, 2022. No discrepancies were found upon reviewing these records.

A request for weekly inspection records for the time period of September 1, 2021, through April 1, 2022 was made to Mario Murrell of Tradebe on April 4, 2022. The corresponding records were emailed to EPA and TDEC on April 7, 2022. A review of the records did not indicate that any problems were noted in those inspections for the Tank 4 inlet ball valve that was plugged and being replaced at the time of the inspection causing the tank to be left open per a March 10, 2022 work order initiated after work had begun.

Closing Conference

At the conclusion of the walkthrough inspection and record review, a brief closing conference was conducted with the facility participants identified above. During the conference, the areas of concern identified during facility walkthrough were identified and discussed.

11) Signed

DARYL HIMES Digitally signed by DARYL HIMES
Date: 2022.05.23 10:53:55 -04'00'

Daryl R. Himes
Environmental Engineer

Date

12) Concurrence

**ARACELI
CHAVEZ** Digitally signed by ARACELI
CHAVEZ
Date: 2022.05.23 11:00:47
-04'00'

Araceli B. Chavez
Chief
RCRA Enforcement Section

Date

ATTACHMENT A

Tradebe Treatment and Recycling of Tennessee, LLC

Millington, Tennessee

COMPLIANCE EVALUATION INSPECTION

TND000772186

March 8 & 9, 2022

Photos taken by Daryl R. Himes

Photos taken with Canon Power Shot Elph 360 HS



Photo 1 – Damaged Container in Row 15 of Unit 217



Photo 2 – Damage to Asphalt in Area of Row 14 of Unit 217



Photo 3 – Hole in lid of overpack container in Row 32 of Unit 217



Photo 4 – Drum floating in water within overpack container in Row 32 of Unit 217 shown in Photo 3.



Photo 5 – Four-foot tube of universal waste batteries in Area East of Unit 202



Photo 6 – Five-gallon hazardous waste containers in SAA in the area of permitted tanks in Unit 208



Photo 7 – Five-gallon hazardous waste container in SAA in the area of permitted tanks in Unit 208



Photo 8 – Top of Tank 4. Equipment removed during repair.



Photo 9 – Level readings for Tanks 3, 4 & 5



Photo 10 – Treatment Unit within Area B of Unit 207