

RCRA COMPLIANCE EVALUATION INSPECTION REPORT

1) Inspector and Author of Report

Daryl R. Himes
Environmental Engineer
Enforcement Compliance and Assurance Division
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2) Facility Information

D & W Plating Company, Inc. (D & W)
3855 Old Getwell Road
Memphis, Tennessee 38118
EPA ID: TND007031131

NAICS Code: 332813 – Electroplating, plating, polishing, anodizing and coloring

3) Primary Contact

Michael Walker
President

4) Inspection Participants

Chris Walker,	D & W
Vern Schrimsher	D & W
Deanne Burford	D & W
Ashley Walker	D & W
Jason Simpson	Tennessee Department of Environment and Conservation (TDEC)
Jim Holt	TDEC
Daryl Himes	EPA, Region 4

5) Date and Time of Inspection

June 28, 2022 9:30 a.m.

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.

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 announced compliance evaluation inspection (CEI) was conducted to evaluate the facility's compliance with applicable requirements of RCRA and corresponding Tennessee Department of Environment and Conservation (TDEC) regulations.

8) Facility Description

D&W has been in the metal finishing industry since 1951 and presently occupies a 49,000 square foot building.

Plating services provided by D&W include the following:

- Zinc/Alkaline-Chloride
- Trivalent Chromate
- Hexavalent Yellow
- Electroless Nickel
- Black Nickel
- Zinc Nickel
- Industrial Silver
- Copper
- Manganese Phosphate
- Passivation
- Top Coat Sealer

D & W has rack, barrel and hand line plating services for parts provided to the facility by its customers.

Tanks used on-site at the facility within the three types of plating lines include, but are not limited to, cleaners, rinses, nitric acid, hydrochloric acid, sulfuric acid, sodium hydroxide, tin baths, nickel baths, silver baths, zinc baths electroless nickel baths and copper baths. The facility's silver-plating operation utilizes a tank of silver cyanide solution followed by a subsequent stagnant rinse tank. The stagnant rinse tank water is used to replenish the water for the silver cyanide plating tank bath. Wastewaters meeting the definition of F007 are not generated at the facility.

The facility generates sludges (dried filter cake) from the treatment of rinse waters from its electroplating operations in an on-site wastewater treatment unit (WWTU). This waste has an EPA listing of F006. The facility's treated wastewaters are discharged to the City of Memphis' publicly owned treatment works.

The facility leases a portion of its building to a company which operates a powder coating operation.

On March 1, 2022, the facility submitted its most recent hazardous waste notification as a large quantity generator of D002, D006, D007 D008 characteristic hazardous waste and F006 listed

hazardous waste.

9) Previous Inspection History

On September 5, 2019, TDEC conducted a RCRA follow-up inspection at D & W for a previous June 5, 2019, inspection. Violations observed during the initial inspection had been corrected.

10) Findings

On June 28, 2022, EPA inspector Daryl Himes, accompanied by Tennessee Department of Environmental Conservation inspectors Jason Simpson and Jim Holt, arrived at D & W at approximately 9:30 a.m. Chris Walker, Vice President, immediately received the inspectors and was shown their credentials. The inspectors were joined by Vern Schrimsher, Vice President, Deanne Burford, Secretary Treasurer and Ashley Walker for an opening conference. The inspectors introduced themselves and explained the purpose of the visit. The inspectors described the anticipated use of cameras during the inspection and provided a request for records.

Prior to performing the walkthrough inspection, facility representatives provided the inspection team an overview of the facility's history and current operations during the opening conference as described above in the facility overview. The facility personnel also provided the inspection team a copy of the Safety Data Sheet for the powder coating used by the entity leasing space at the facility for the powder coating operation. The SDS indicated that the paint used has a flash point greater than 300 degrees Fahrenheit. The process uses water as a thinner, as needed. No hazardous waste would be generated as a result of this operation.

The company appears 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 will 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>.

Please note that during the walk-through inspection, containers of hazardous waste were observed within satellite accumulation areas (SAAs) and a less than 90-day accumulation area. Unless otherwise noted, each container observed within any SAA was observed to be closed and labeled with the words "Hazardous Waste" and an indication of the hazard contents of the container. Containers in any 90-day accumulation area were observed to be closed, marked with an accumulation start date of less than 90-days and labeled with the words "Hazardous Waste" and an indication of the hazard contents of the container.

In addition, containers of Universal Waste were observed to be properly labeled, dated, and closed at the time of the inspection, unless noted otherwise.

Also, please note that unless otherwise noted, any containers and tanks observed managing used oil were labeled with the words "Used Oil."

Main Building-Electroplating Areas

The walk-through inspection started within the area of the building where the hand (Photo 1), barrel, and rack (Hoist) electroplating lines were set up. Each of these lines are arranged in an east-west orientation within the Main Building. A concrete secondary containment system existed beneath each line which was sloped downward towards the north side of each line. Bordering the north side of each secondary containment system for each line was a concrete sump/trench for the capture of any drippage or drag-out from the operation of the electroplating lines. Each sump/trench was set up to gravity feed to the east side of the Main Building and be captured by another concrete sump which would subsequently feed the wastewaters to the facilities on-site wastewater treatment plant.

Photos were taken of the concrete trenches on the north side of the plating lines, which varied from 12 to 16 inches in width and approximately four inches in depth. Each of these concrete trenches ran the length of the plating lines or approximately 100 feet.

Photos taken during the inspection (Photos 2-9) indicated the presence of a significant buildup of potentially hazardous waste sludges in several areas of the collection trenches in addition to pitting damage which could result in a reduction of the structural integrity of those trenches.

While these concrete sump/trenches are considered as ancillary equipment to the tanks making up the “tank system” which comprises the facility’s wastewater treatment system as defined by 40 CFR § 260.10, it is important that they maintain their structural integrity and be free of sludge buildup which could cause deterioration of the trench.

It is recommended that action be taken to periodically remove the sludges from these trenches in order maintain the integrity of the concrete trenches. It is also recommended that the structural integrity of the concrete trenches be reviewed to insure they meet the definition of a tank in 40 CFR § 260.10.

Overflow Area-90-Day Hazardous Waste Accumulation Area

In an area between the barrel and rack electroplating lines, the inspection team observed nine cubic yard polypropylene bags of F006 listed hazardous waste sludge from the facility’s wastewater treatment plant. The oldest accumulation start date on the bags was March 30, 2022.

Also located in this area were six 5,000-gallon polypropylene tanks used for the accumulation of acids, caustics and rinse waters from the facility’s rack electroplating lines prior to being fed to the facility’s wastewater treatment system. The wastewaters are accumulated in these wastewater treatment tanks to avoid upset conditions in the wastewater treatment plant. The tanks are hard-piped to the facility’s wastewater treatment system and the liquids in these tanks are pumped/metered through a regulating device (Photo 11) to the wastewater treatment tank system to avoid causing an upset condition.

One 55-gallon container of hazardous waste personnel protective equipment was present in a satellite accumulation area in this location (Photo 12). The ring on the containers lid was not fastened.

Pursuant to Tenn. Comp. R. & Regs. 0400-12-01-.03 (1)(f)1.(iv)] [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.

Wastewater Treatment Facility

The facility's Wastewater Treatment Facility is composed of plastic-lined inground concrete tanks (Photo 13) and aboveground polyethylene and fiberglass tanks (Photo 14). Operations performed in these tanks includes clarification, thickening and neutralization. Upon completion of the wastewater treatment processes, water and sludges are transferred to a filter press (Photo 15) and then transferred to a gas-fired sludge dryer (Photos 16 & 17) before being dropped into a collection bag within a metal closet (Photo 18). At the time of the inspection, the metal cabinet was closed as the generation of sludge was occurring. Treated wastewaters are discharged to the City of Memphis' publicly owned treatment facility.

Universal Waste Accumulation Area

Eight 8-foot universal waste fluorescent bulbs were observed outside of any box or containment mechanism in an area used to accumulate the facility's universal waste (Photo 19).

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.

Pursuant to Tenn. Comp. R. & Regs. 0400-12-01-.12(2)(e)5. [40 C.F.R. § 273.14(e)], a SQHUW must label or mark each lamp or container of lamps clearly with one of the following phrases: "Universal Waste-Lamp(s)," or "Waste Lamp(s)," or "Used Lamps."

Pursuant to TENN. COMP. R. & REGS. 0400-12-01-.12(2)(F)1. & 3. [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.

Record Review

The following hazardous waste records were reviewed at the time of the inspection:

- Last three years of Hazardous Waste Manifests.
- Last three years of Weekly Inspection Logs.
- Training for hazardous waste personnel.
- Hazardous Waste Contingency Plan.

The facility's contingency plan included Lynn Staggs (retired) as an emergency coordinator.

Pursuant to Tenn. Comp. R. & Regs. 0400-12-01-.03 (1)(h) [40 C.F.R. § 262.17(a)(6)], which incorporates Tenn. Comp. R. & Regs. 0400-12-01-.03 (12)(i)4. [40 C.F.R. § 262.261(d)], and is a condition of the LQG Permit Exemption, the contingency plan must list names and emergency telephone numbers of all persons qualified to act as emergency coordinator, and this list must be kept up to date.

The contingency plan, renewed within the last year, did not have a Quick Reference Guide.

Pursuant to Tenn. Comp. R. & Regs. 0400-12-01-.03 (12)(j)2. [40 C.F.R. § 262.262(b)], a generator's amended contingency plan must include a Quick Reference Guide for the Facility.

Closing Conference

At the conclusion of the walkthrough inspection and record review, a brief closing conference was conducted with each of 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: 2022.07.25 00:13:21 -04'00'

Daryl R. Himes
Environmental Engineer

Date

12) Concurrence

**ARACELI
CHAVEZ** Digitally signed by ARACELI
CHAVEZ
Date: 2022.07.25 12:26:35
-04'00'

Araceli B. Chavez
Chief
RCRA Enforcement Section

Date

ATTACHMENT A

D & W Plating, Inc.

Memphis, Tennessee

COMPLIANCE EVALUATION INSPECTION

TND007031131

June 28, 2022

Photos taken by Daryl R. Himes

Photos taken with Canon Power Shot Elph 360 HS



Photo 1 – Electroplating “Hand” Line – North side of building taken facing east



Photo 2 – Sludge in trough on north side of barrel line



Photo 3 – Sludge in trough on north side of barrell line



Photo 4 – End of trough on north side of Barrel Line. Observed on western end.



Photo 5 – Sludge in trough on north side of hoist or rack line



Photo 6 – Sludge in trough on north side of hoist line



Photo 7 – Liquid and Sludge in trough on north side of hoist line



Photo 8 – Sludge in trough on north side of Rack Line 3



Photo 9 – Sludge in trough on north side of Rack Line 3



Photo 10 – Cubic Yard Bags of F006 Hazardous Waste Sludge in Overflow Area



Photo 11 – Pump and metering device for overflow



Photo 12 – Drum of hazardous waste in wastewater treatment area



Photo 13 – Inground concrete wastewater treatment tanks



Photo 14 – Above ground poly and fiberglass wastewater treatment tanks



Photo 15 – F006 sludge filter press in wastewater treatment facility



Photo 16 – F006 sludge gas-fired sludge dryer



Photo 17 – F006 sludge gas-fired sludge dryer



Photo 18 – F006 sludge collection cabinet from gas-fired sludge dryer



Photo 19 – Eight loose universal waste bulbs