RCRA Inspection Report

1) Inspector and Author of Report

Alan Newman, Environmental Engineer
RCRA Enforcement Section
Chemical Safety and Land Enforcement Branch
Enforcement and Compliance Assurance Division
U.S. Environmental Protection Agency, Region 4
61 Forsyth Street, S.W. Phone: (404) 562-8589
Atlanta, Georgia 30303 Email: newman.alan@epa.gov

2) Facility Information

Techtrix, Inc.
525 Plainview Street
Gadsden, Alabama 35901-2027
Etowah County
EPA ID No.: ALD982167678
NAICS: 332813 Electroplating, plating, polishing, anodizing, and coloring

3) Responsible Officials

Pamela Beavers, Plant Manager
Office: (256) 543-2424
Cell: (256) 365-6458
Email: pamelabeavers@outlook.com

4) Inspection Participants

Pam Beavers	Techtrix, Inc.
Tobie Bateman	Techtrix, Inc.
Kayla Acosta	EPA, Region 4
Paula Whiting	EPA, Region 4
Mike Neill	EPA, Region 4
Art Masters	EPA, Region 4
Kevin Simmons	EPA, Region 4
Alan Newman	EPA, Region 4
Corey Holmes	ADEM

5) Date(s) of Inspection

March 22, 2021 1:00 p.m. – 5:00 p.m. C.D.T. and March 23, 2021 7:30 a.m. – 4:30 p.m. C.D.T

6) Applicable Regulations

Alabama Hazardous Waste Management and Minimization Act of 1978, Ala. Code § 22-30-1 *et seq* [Resource Conservation and Recovery Act (RCRA) Sections 3002 (42 U.S. Code – Annotated U.S.C.A. 6925 and 6927)] and rules 335-14 of the Alabama Department of

Environmental Management (ADEM) Administrative Code (ADEM Admin. Code) [40 Code of Federal Regulation (C.F.R.), Parts 260 - 270, 273, 278, & 279].

Pursuant to ADEM Admin. Code r. 335-14-3-.01(5)(a) [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 Section 22-30-12(b) of the AHWMMA, Ala. Code § 22-30-12(b) [Section 3005 of RCRA, 42 U.S.C. § 6925], and without complying with ADEM Admin. Code r. 335-14-3-.01(6) and (7) [40 C.F.R. § 262.16(b) or §262.17(a)], except as required in ADEM Admin. Code r. 335-14-3-.01(5)(a)7. and 8. [40 C.F.R. § 262.15(a)(7) and (8)], provided that the generator complies with the satellite accumulation area conditions listed in ADEM Admin. Code r. 335-14-3-.01(5)(a) [40 C.F.R. § 262.15(a)] (hereinafter referred to as the "SAA Permit Exemption").

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7) [40 C.F.R. § 262.17], a LQG may accumulate hazardous waste on-site for 90 days or less without a permit or without having interim status, as required by Section 22-30-12(b) of the AHWMMA, Ala. Code § 22-30-12(b) [Section 3005 of RCRA, 42 U.S.C. § 6925], provided that the generator complies with the conditions listed in ADEM Admin. Code r. 335-14-3-.01(7) [40 C.F.R. § 262.17] (hereinafter referred to as the "LQG Permit Exemption").

7) Purpose of Inspection

The purpose of this inspection was to conduct an unannounced compliance evaluation inspection to determine Techtrix Inc.'s compliance with the applicable requirements of RCRA and the corresponding ADEM regulations. This was an EPA lead inspection.

8) Previous Inspection History

Techtrix Inc. was inspected by ADEM on December 18, 2018. There were eleven violations documented in the ADEM trip report. The violations were resolved with formal enforcement on June 21, 2019.

9) Facility Description

Techtrix, Inc. (Techtrix or Facility) was founded in 1987 and operates as an electroplating and metal finishing shop. The Facility occupies an 80,000 square foot building and employs approximately eleven employees. The facility operates twelve plating lines and a no discharge wastewater treatment system. Techtrix provides zinc, cadmium, copper, tin, nickel, gold, and silver electroplating services. The Facility also performs additional finishing services such as electroless nickel, alodine anodize, zinc phosphate, manganese phosphate, endurion, passivation, and selection brush plating.

Techtrix is a large quantity generator of hazardous waste, a small quantity handler of universal waste, and generator of used oil. Techtrix's most recent notification of hazardous waste activity was submitted on March 27, 2020. The facility is accessed through a foyer and a locked door.

The following wastes are generated at the Facility:*

Waste type	Basis for Listing	Rationale
Wastewater Treatment Sludge	Toxicity	Listed Waste (F006) Characteristic Waste (D006, D007, D011)
Spent Cyanide Plating Bath Solution	Toxicity, Reactivity	Listed Waste (F007) Characteristic Waste (D003)
Plating Bath Residues from Bottom of Plating Tanks Containing Cyanides	Toxicity, Reactivity	Listed Waste (F008) Characteristic Waste (D003)
Rinse Waters from Various Cleaning and Plating Baths Awaiting Treatment	Toxicity, Reactivity, Corrosivity	Characteristic Waste (D002, D003, D006, D007, and D011)

*From Techtrix's waste analysis plan.

10) Opening Conference

On March 22, 2021, EPA inspectors Alan Newman and Kayla Acosta, and EPA's sampling team lead, Paula Whiting, accompanied by ADEM inspector Corey Holmes, arrived at Techtrix at approximately 1:00 p.m. Pamela Beavers, Plant Manager, immediately received the inspectors. The inspectors introduced themselves, showed their credentials to Pamela Beavers, and explained the purpose of the visit. The inspectors described the anticipated use of equipment (digital camera, sampling equipment) during the inspection and provided a request for records. The inspectors discussed the company's ability, pursuant to 40 C.F.R. §2.203, to assert a business confidentiality claim for information submitted to the EPA. The company did not assert a business confidentiality claim. The inspection participants also discussed health and safety protocols and required personal protective equipment before Pamela Beavers led the inspectors on a tour of the Facility operations.

Pamela Beavers provided an overview of the facility's history and current operations during the opening conference. The facility was operating two designated central accumulation areas (CAAs), several satellite accumulation areas (SAAs), and a wastewater treatment plant (WWTP). The company does 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. 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/sites/production/files/2017-06/documents/smallbusinessinfo.pdf.

11) Findings

- Shipping and Receiving

Techtrix was storing multiple containers of paint on a pallet (Photo 1). Facility personnel stated that these containers were old and no longer used, and that these wastes were awaiting a waste determination. Techtrix had not made a hazardous waste determination on these solid wastes.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(2) [40 C.F.R. § 262.11], a person who generates a solid waste, as defined in ADEM Admin. Code r. 335-14-2-.01(2) [40 C.F.R. § 261.2], must make an accurate determination as to whether that waste is a hazardous waste in order to ensure wastes are properly managed according to applicable RCRA regulations articulated in ADEM Admin. Code r. 335-14-3-.01(2) [40 C.F.R. § 262.11].

- Chemical Storage

Techtrix was storing usable chemicals in two separate adjacent areas that were separated by a chain-link fence. In a third area, Techtrix was storing chemicals that were either unusable, expired, in poor condition, or usable (Photos 2-15). There were approximately sixty (60) 55-gallon containers and seventy-five (75) smaller containers and bags of chemicals in this third area. A description of some of the waste and observations is included in Appendix 1. In summary, many of these containers were expired; many of the containers were in poor condition, leaking, or rusting; some containers were incompatible such that the containers failed to contain the waste. Several of these containers were open. Some of these containers were not labeled. There was no aisle space between containers. Although it appeared that most of these containers were discarded and had not been accessed for multiple years, Techtrix had not made a hazardous waste determination for all of these discarded materials. Techtrix was not conducting inspections of the hazardous waste observed in this area. The inspection team asked the facility for a detailed inventory of the containers in this area.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(2) [40 C.F.R. § 262.11], a person who generates a solid waste, as defined in ADEM Admin. Code r. 335-14-2-.01(2) [40 C.F.R. § 261.2], must make an accurate determination as to whether that waste is a hazardous waste in order to ensure wastes are properly managed according to applicable RCRA regulations articulated in ADEM Admin. Code r. 335-14-3-.01(2) [40 C.F.R. § 262.11].

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)1.(ii) [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[ADEM Admin. Code r. 335-14-3-.01 (7)(a)1.(iii) [40 C.F.R. § 262.17(a)(1)(iii)], which is a condition of the LQG Permit Exemption, a generator is required to use a container made of or lined with materials which will not react with, and are otherwise compatible with, the hazardous waste to be stored, so that the ability of the container to contain the waste is not impaired.

Pursuant to ADEM Admin. Code r. 335-14-3-.01 (7)(a)1.(iv) [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; and (B) a container holding hazardous waste must not be opened, handled, or stored in a manner that may rupture the container or cause it to leak.

Pursuant to ADEM Admin. Code r. 335-14-3-.01 (7)(a)1.(v) [40 C.F.R. § 262.17(a)(1)(v)], which is a condition of the LQG Permit Exemption, a generator is required to, at least weekly, inspect central accumulation areas looking for leaking containers and for deterioration of containers caused by corrosion or other factors.

Pursuant to ADEM Admin. Code r. 335-14-3-.01 (7)(a)5.(i) [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: the words "Hazardous Waste"; an indication of the hazards of the contents; and the date upon which each period of accumulation begins clearly visible for inspection on each container.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)6 [40 C.F.R. § 262.17(a)(6)], which incorporates ADEM Admin. Code r. 335-14-3-.14(6) [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 ADEM Admin. Code r. 335-14-3-.01(7)(b) [40 C.F.R. § 262.17(b)], an LQG who accumulates hazardous waste for more than 90 days is an operator of a storage facility and is subject to the requirements of ADEM Admin. Code r. 335-14-1 to 335-14-9 [40 C.F.R. Parts 124, 264 through 268 and Part 270].

- Tote Storage and Cyanide Storage

Adjacent to the Chemical Storage area, Techtrix was storing waste and usable material in tanks and containers. There were three (3) blue, tall tote containers labeled as Class 8 Corrosive Sodium Hydroxide (Placard 1824) (Photos 16-17). Although the container labels stated that these totes were full of reusable material, facility personnel stated these totes had been here for several years, untouched. There were nine (9) 250-gallon totes in this area labeled as either reusable cadmium, reusable electroless nickel, or reusable alodine (Photos 17-20). These tote containers were each marked with a date of accumulation of June 27, 2019.

Techtrix did not provide any records to document that this material had not been accumulated speculatively. ADEM Admin. Code r. 335-14-1-.02(1)(a)3. [40 C.F.R. § 262.17(a)(1] defines "Accumulated speculatively" or "Speculative accumulation" as a material that is accumulated before being recycled. A material is not accumulated speculatively, however, if the person accumulating it can show that the material is potentially recyclable and has a feasible means of being recycled; and that – during the calendar year (commencing on January 1) – the amount of material that is recycled, or transferred to a different site for recycling, equals at least 75 percent by weight or volume of the amount of that material accumulated at the beginning of the period.

Materials must be placed in a storage unit with a label indicating the first date that the material began to be accumulated. If placing a label on the storage unit is not practicable, the accumulation period must be documented through an inventory log or other appropriate method. In calculating the percentage of turnover, the 75 percent requirement is to be applied to each material of the same type (e.g., slags from a single smelting process) that is recycled in the same way (i.e., from which the same material is recovered or that is used in the same way). Materials accumulating in units that would be exempt from regulation under 335-14-2-.01(4)(c) are not to be included in making the calculation. Materials that are already defined as solid wastes also are not to be included in making the calculation. Materials are no longer in this category once they are removed from accumulation for recycling.

Pursuant to ADEM Admin. Code r. 335-14-2-.01(2) [40 C.F.R. 261.2(a)(4)], spent materials, sludges and by-products are solid wastes when accumulated speculatively. Techtrix had not made a hazardous waste determination on three (3) blue, tall tote containers labeled as Class 8 Corrosive Sodium Hydroxide (Placard 1824) (Photo 16-17) and nine (9) 250-gallon totes labeled as either reusable cadmium, reusable electroless nickel, or reusable alodine (Photos 17-20), which were all located adjacent to the Chemical Storage area.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(2) [40 C.F.R. § 262.11], a person who generates a solid waste, as defined in ADEM Admin. Code r. 335-14-2-.01(2) [40 C.F.R. § 261.2], must make an accurate determination as to whether that waste is a hazardous waste in order to ensure wastes are properly managed according to applicable RCRA regulations articulated in ADEM Admin. Code r. 335-14-3-.01(2) [40 C.F.R. § 262.11].

There were four 250-totes in this area that were labeled as hazardous waste and were marked with an accumulation start date of October 2020 (>90 days). Facility personnel stated that these containers had been recently pumped out and were reused to store more hazardous waste (Photos 17-18, 21-27). At least one of these totes was open (Photos 21-23). Facility representatives re-dated these containers with the accumulation start date of 3/16/2021.

There was one partially full, open, 2’ x 2’ tank in this area that was labeled as Hypro-Tri Yellow Rinse and dated 2/4/2013 (Photos 28-29). Facility representatives stated that the date was incorrect and that the tank held rinse waters from one of the plating lines. They stated that this was a product and had been moved to this area within the last two weeks. The inspection team recommends that all containers be labeled accurately to reflect their contents.

There was one blue former chicken incubator with two doors (Photos 17-18 and 30-31) used to store cyanide products. Techtrix was not managing several containers in this area as valuable product. The material appeared to be unusable waste because the containers were rusting and fully compromised (Photos 25-26). Although Techtrix had not made a hazardous waste determination on the contents of these containers at the time of the inspection, personnel indicated that the material would be hazardous waste.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(2) [40 C.F.R. § 262.11], a person who generates a solid waste, as defined in ADEM Admin. Code r. 335-14-2-.01(2) [40 C.F.R. § 261.2], must make an accurate determination as to whether that waste is a hazardous waste in order to ensure wastes are properly managed according to applicable RCRA regulations articulated in ADEM Admin. Code r. 335-14-3-.01(2) [40 C.F.R. § 262.11].

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)1.(ii) [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 ADEM Admin. Code r. 335-14-3-.01 (7)(a)1.(iv) [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; and (B) a container holding hazardous waste must not be opened, handled, or stored in a manner that may rupture the container or cause it to leak.

- CAA 1

Techtrix was storing hazardous waste tote containers in two designated CAAs. The first CAA was adjacent to the cyanide storage area and was storing liquid hazardous waste in twenty (20) tote containers ranging in size from 250-350 gallons. Each tote container was labeled with the words hazardous waste and marked with an accumulation start date, but none of the totes were marked with an indication of the hazards of its contents. Eleven totes were marked with an incorrect accumulation start date which was a future date (see table below); the other nine totes were marked with accumulation start dates prior to 12/22/2020, which indicated that the waste had been stored onsite for more than 90 days (Photos 32-39). The inspection team noted that the secondary containment of this storage area is not sufficiently impervious as required by the state regulations. An inventory of the tote containers stored in this area is below:

Tote	Date of Accumulation	Labeled as Hazardous Waste and with EPA Waste Number
1	11/23/2021*	D002
2	11/23/2021*	D002
3	11/24/2021*	D002
4	12/14/2020	F009
5	11/26/2021*	D002
6	11/26/2021*	D002
7	12/2/2020	D002
8	11/17/2020	F009
9	11/20/2020	F009

10	12/8/2021*	F009
11	11/17/2020	F009
12	11/24/2021*	D002
13	11/26/2021*	D002
14	11/13/2021*	D002
15	12/2/2020	D002
16	12/8/2021*	D002
17	12/14/2020	F009
18	12/2/2020	F009
19	12/8/2021*	D002
20	11/20/2020	F009

*dates incorrect (in the future)

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)1.(viii) which incorporates ADEM Admin. Code r. 335-14-6-.09(6)(a), and is a condition of the LQG Permit Exemption, container storage areas must meet the following requirements: (a) Container storage areas must have a containment system that is designed and operated in accordance with 335-14-6-.09(6)(b), except as otherwise provided by 335-14-6-.09(6)(c).

(b) A containment system must be designed and operated as follows:

1. A base must underlie the containers which is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed;

2. The base must be sloped or the containment system must be otherwise designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation, unless the containers are elevated or are otherwise protected from contact with accumulated liquids;

3. The containment system must have sufficient capacity to contain 10% of the volume of containers or the volume of the largest container, whichever is greater. Containers that do not contain free liquids need not be considered in this determination;

4. Run-on into the containment system must be prevented unless the collection system has sufficient excess capacity in addition to that required in 335-14-6-.09(6)(b)3. to contain any run-on which might enter the system; and

5. Spilled or leaked waste must be removed from the sump or collection area in a timely manner not to exceed 24 hours after detection. Accumulated precipitation must be removed in as timely a manner necessary to prevent overflow of the collection system.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)5.(i) [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 and the date upon which each period of accumulation begins clearly visible for inspection on each container.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(b) [40 C.F.R. § 262.17(b)], an LQG who accumulates hazardous waste for more than 90 days is an operator of a storage facility and is subject to the requirements of ADEM Admin. Code r. 335-14-1 to 335-14-9 [40 C.F.R. Parts 124, 264 through 268 and Part 270].

- F006 Supersack and Non-hazardous Waste Containers

Techtrix was accumulating filter cake from the WWTP and floor debris (F006) in a supersack (Photos 40-43). Facility personnel stated that waste solids were being removed from underneath the plating lines in response to previous observations made by ADEM inspectors. This supersack was open, dated with an accumulation start date of 10/14/2020 (>90 days), and was not labeled with an indication of the hazard on the container.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)1.(iv) [40 C.F.R. § 262.17(a)(1)(iv)], which is a condition of the LQG Permit Exemption, a container holding hazardous waste must always be closed during accumulation, except when it is necessary to add or remove waste.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)5.(i) [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.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(b) [40 C.F.R. § 262.17(b)], an LQG who accumulates hazardous waste for more than 90 days is an operator of a storage facility and is subject to the requirements of ADEM Admin. Code r. 335-14-1 to 335-14-9 [40 C.F.R. Parts 124, 264 through 268 and Part 270].

Techtrix was storing eighty-five (85) tote containers labeled as non-hazardous waste (Photos 40 and 44-48) adjacent to CAA 1. After the inspection, Techtrix determined that approximately half of these totes were storing hazardous waste due to the characteristic of corrosivity. Techtrix plans to ship the contents of all 85 containers off as hazardous waste corrosives (D002). At the time of the inspection, it appeared that some of these containers had leaked (Photos 46-47). At least one container was labeled as "on hold pending analysis" (Photos 49-50).

Pursuant to ADEM Admin. Code r. 335-14-3-.01(2) [40 C.F.R. § 262.11], a person who generates a solid waste, as defined in ADEM Admin. Code r. 335-14-2-.01(2) [40 C.F.R. § 261.2], must make an accurate determination as to whether that waste is a hazardous waste in order to ensure wastes are properly managed according to applicable RCRA regulations articulated in ADEM Admin. Code r. 335-14-3-.01(2) [40 C.F.R. § 262.11].

- CAA 2

The second CAA was adjacent to the eighty-five (85) tote containers labeled as non-hazardous waste described above and was storing approximately fifty-two (52) containers ranging in size from 250-350 gallons. Each container was labeled with the words hazardous waste and with an accumulation start date, but none of the containers were labeled with the indication of the hazards of its contents (Photos 51-60). The accumulations start dates for thirty-two (32) containers were dated prior to 12/22/2020 (>90 days). There was some waste accumulated on the floor of this CAA and at least one container had waste on the outside of the container (Photos 58-59). The secondary containment of this storage area is not sufficiently impervious due to the coating on the floor peeling (Photo 60). The inspection team noted that the containers were stored without adequate aisle space. Techtrix personnel stated that the contents of twenty-two (22) containers had been consolidated in a tanker truck and shipped off site to a permitted deep well injection facility in Ohio on February 24, 2021. An inventory of the containers stored in this area is below:

Row	Number of Non-Hazardous Totes and Number of Hazardous Totes	Comments
1	6 - Non-Hazardous 1 Hazardous Waste	One tote of hazardous waste had waste on outside of tote One tote of hazardous waste dated 12/7/2020 (>90 days) No Indication of the hazard Waste spilled on ground – Un-containerized
2	9 (Hazardous Waste)	No aisle space against wall One tote dated 10/14/2020 (>90 days) One tote dated 12/17/2020 (>90 days) One tote dated 12/10/2020 (>90 days) One tote dated 12/10/2020 (>90 days) One tote dated 12/10/2020 (>90 days) One tote dated 11/2/2020 (>90 days) One tote dated 11/2/2020 (>90 days) No indication of hazards on any totes
3	16 (Hazardous Waste)	One tote dated 11/9/2020 (>90 days) One tote dated 11/10/2020 (>90 days) One tote dated 11/4/2020 (>90 days) One tote dated 11/3/2020 (>90 days) One tote dated 12/7/2020 (>90 days) One tote dated 12/7/2020 (>90 days) One tote dated 11/13/2020 (>90 days) One tote dated 11/13/2020 (>90 days) One tote dated 11/30/2020 (>90 days) One tote dated 12/1/2020 (>90 days) One tote dated 12/1/2020 (>90 days) One tote dated 11/23/2020 (>90 days) No Indication of the hazards on any totes

4	20 (Hazardous Waste)	One tote dated 12/2/2020 (>90 days) One tote dated 11/16/2020 (>90 days) One tote dated 11/16/2020 (>90 days) One tote dated 11/23/2020 (>90 days) One tote dated 11/16/2020 (>90 days) One tote dated 11/23/2020 (>90 days) One tote dated 12/14/2020 (>90 days) One tote dated 11/23/2020 (>90 days) One tote dated 11/13/2020 (>90 days) One tote dated 11/13/2020 (>90 days) One tote dated 12/17/2020 (>90 days) One tote dated 12/17/2020 (>90 days) No Indication of the hazards on any totes

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)6 [40 C.F.R. § 262.17(a)(6)], which incorporates ADEM Admin. Code r. 335-14-3-.14(6) [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 ADEM Admin. Code r. 335-14-3-.01(7)(a)1.(viii) which incorporates ADEM Admin. Code r. 335-14-6-.09(6)(a), and is a condition of the LQG Permit Exemption, container storage areas must meet the following requirements: (a) Container storage areas must have a containment system that is designed and operated in accordance with 335-14-6-.09(6)(b), except as otherwise provided by 335-14-6-.09(6)(c).

(b) A containment system must be designed and operated as follows:

1. A base must underlie the containers which is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed;

2. The base must be sloped or the containment system must be otherwise designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation, unless the containers are elevated or are otherwise protected from contact with accumulated liquids;

3. The containment system must have sufficient capacity to contain 10% of the volume of containers or the volume of the largest container, whichever is greater. Containers that do not contain free liquids need not be considered in this determination;

4. Run-on into the containment system must be prevented unless the collection system has sufficient excess capacity in addition to that required in 335-14-6-.09(6)(b)3. to contain any run-on which might enter the system; and

5. Spilled or leaked waste must be removed from the sump or collection area in a timely manner not to exceed 24 hours after detection. Accumulated precipitation must be removed in as timely a manner necessary to

prevent overflow of the collection system.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(5)(i)b. [40 C.F.R. § 262.17(a)(5)(i)b.], 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.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(b) [40 C.F.R. § 262.17(b)], an LQG who accumulates hazardous waste for more than 90 days is an operator of a storage facility and is subject to the requirements of ADEM Admin. Code r. 335-14-1 to 335-14-9 [40 C.F.R. Parts 124, 264 through 268 and Part 270].

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)6 [40 C.F.R. § 262.17(a)(6)], which incorporates ADEM Admin. Code r. 335-14-3-.14(2) [40 C.F.R. § 262.251], and is a condition of the LQG Permit Exemption, a large quantity generator must 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.

- Wastewater Treatment Plant (Hazardous Waste Tanks Area)

There were three 250-gallon containers stored in the WWTP. One container was labeled as non-hazardous waste and two containers were labeled as hazardous waste. The liquid portions of the hazardous waste containers had been pumped into one of the tanks leaving a small amount of solids at the bottom. These containers were considered empty by the inspection team. The lid of one of these containers was in poor condition (Photos 61-67). The inspection team recommended that only containers in good condition be used to store hazardous waste. Techtrix was operating twelve (12) tanks for storage and treatment of liquid plating wastes. Techtrix was chemically treating the liquid waste to remove metals and adjust the pH. After chemical treatment in the tanks, liquids were further treated by filtering them in a filter press. The F006 filter cake produced from the filter press initially collected in a catch container and then placed in a supersack near the non-hazardous waste container storage area (Photos 40, 68-69). The filtered liquid wastes are stored either in a tank or in 250-350-gallon containers and then shipped off site as non-hazardous waste for disposal. At the time of the inspection, the catch container underneath the filter press was open, labeled as hazardous waste, F006, and dated 10/14/2020 (>90 days). This container was not labeled with an indication of the hazard. The inspection team also noted that a boiler in the tank area was leaking water that was pooling on the floor in this area. Techtrix had vacuumed up the boiler water and added it to the catch container underneath the filter press. The inspection team recommended that this practice be discontinued due to the generation of additional hazardous waste through this process.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(5)(i)b. [40 C.F.R. § 262.17(a)(5)(i)b.], 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.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(b) [40 C.F.R. § 262.17(b)], an LQG who accumulates hazardous waste for more than 90 days is an operator of a storage facility and is subject to the requirements of ADEM Admin. Code r. 335-14-1 to 335-14-9 [40 C.F.R. Parts 124, 264 through 268 and Part 270].

Tanks 1 and 2 were located side by side along the back wall of the facility. Tank 1 was labeled as hazardous waste and with the words "Brite Dip", the EPA waste code D002, and with an accumulation start date of 09/30/2020 (>90 days). This label was flopped over due to the adhesive failing on the back of the label. There was no indication of the hazard on this tank. There was waste material underneath this tank that appeared to have been there for some time (Photo 70). This open top tank was full on the day of the inspection (Photos 70-71).

Tank 2 was labeled "NOT IN USE". There was no indication of the hazard on this tank. This open top, tank was full of semi-solid waste on the day of the inspection. There was waste material underneath this tank that appeared to have been there for some time (Photos 72-74).

Tank 3 was a brown open-top, cone bottom tank that was labeled as hazardous waste and with the words "Sludge for Filter Press" and with an accumulation start date of 12/20/2020 (>90 days). There was evidence of a leak from one of the fittings on the side of the tank with spilled into the secondary containment. There was no indication of the hazard on this tank (Photos 75-79).

Tank 4 was a round, brown, cone-bottom tank with blue support legs. Tank 4 was labeled as hazardous waste and with the words "Bright Dip". This label also documented that the accumulation start date was 12/22/2020. There was no indication of the hazard on this tank. This open top tank was half-full on the day of the inspection (Photos 80-82). The Green Fiber tank, between Tanks 3 and 4, was labeled with the words "NOT IN USE". This open top, tank had approximately 5 feet of solids in the tank on the day of the inspection (Photos 75, 83). There was a brown circular tank next to Tank 3 that was ¾ full. This tank was not labeled (Photos 84-85). Tank 8 was a green, circular, open top, cone-top tank that was not labeled. This tank was full. There was some staining around the base of this tank (Photos 84-87).

The tan poly tank (next to Tank 3) (Photo 84 (left side)), Tanks 9 and 10 (Photo 88), and the unlabeled rusting green tank (Photo 88 in background) were empty on the day of the inspection. There was one blue tank that was rectangular. This tank was labeled as non-hazardous steam-off water (Photos 89-91).

Pursuant to ADEM Admin. Code r. 335-14-3-.01(2) [40 C.F.R. § 262.11], a person who generates a solid waste, as defined in ADEM Admin. Code r. 335-14-2-.01(2) [40 C.F.R. § 261.2], must make an accurate determination as to whether that waste is a hazardous waste in order to ensure wastes are properly managed according to applicable RCRA regulations articulated in ADEM Admin. Code r. 335-14-3-.01(2) [40 C.F.R. § 262.11].

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)5.(ii) [40 C.F.R. § 262.17(a)], a large quantity generator accumulating hazardous waste in tanks must do the following do the following:

a. Mark or label its tanks with the words "Hazardous Waste" and all appropriate EPA hazardous waste numbers associated with the waste as specified in 335-14-2-.03 and 335-14-2-.04;

b. Mark or label its tanks with an indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704);

c. Use inventory logs, monitoring equipment or other records to demonstrate that hazardous waste has been emptied within 90 days of first entering the tank if using a batch process, or in the case of a tank with a continuous flow process, demonstrate that estimated volumes of hazardous waste entering the tank daily exit the tank within 90 days of first entering; and

d. Keep inventory logs or records with the above information on site and readily available for inspection.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(b) [40 C.F.R. § 262.17(b)], an LQG who accumulates hazardous waste for more than 90 days is an operator of a storage facility and is subject to the requirements of ADEM Admin. Code r. 335-14-1 to 335-14-9 [40 C.F.R. Parts 124, 264 through 268 and Part 270].

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)2. [40 C.F.R. § 262.17(a)(2)], which incorporates ADEM Admin. Code r. 335-14-6-.10(7) [40 C.F.R. § 265.196], which a condition of the LQG Permit Exemption, a tank system or secondary containment system from which there has been a leak or spill, or which is unfit for use, must be removed from service immediately, and the owner or operator must satisfy the following requirements:

(a) Cessation of Use; prevent flow or addition of wastes. The owner or operator must immediately stop the flow of hazardous waste into the tank system or secondary containment system and inspect the system to determine the cause of the release.

(b) Removal of waste from tank system or secondary containment system.

1. If the release was from the tank system, the owner/operator must, within 24 hours after detection of the leak or, if the owner/operator demonstrates that it is not possible, at the earliest practicable time, remove as much of the waste as is necessary to prevent further release of hazardous waste to the environment and to allow inspection and repair of the tank system to be performed.

2. If the material released was to a secondary containment system, all released materials must be removed within 24 hours or in as timely a manner as is possible to prevent harm to human health and the environment.

The facility considered the tank system to be an exempt wastewater treatment unit. However, these tanks are not subject to either Section 402 or 307(b) of the Clean Water Act and therefore

do not currently meet the exemption. These tanks are regulated as RCRA Subpart J Tanks.

- Zinc Plating Line

On three sides of the zinc plating line there were supersacks used to accumulate hazardous waste solids from underneath the plating line (Photos 92-97). Each of the supersacks was open and not labeled with either the words hazardous waste, the indication of the hazard, or with the accumulation start dates. Two of these sacks had accumulated greater than 55 gallons on the day of the inspection. Techtrix personnel stated that these sacks had been collecting waste for greater than three days.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)1.(iv) [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 ADEM Admin. Code r. 335-14-3-.01 (7)(a)5.(i) [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: the words "Hazardous Waste"; an indication of the hazards of the contents; and the date upon which each period of accumulation begins clearly visible for inspection on each container.

Pursuant to ADEM Admin. Code r. 335-14-3-.01 (7)(a)1.(v) [40 C.F.R. § 262.17(a)(1)(v)], which is a condition of the LQG Permit Exemption, a generator is required to, at least weekly, inspect central accumulation areas looking for leaking containers and for deterioration of containers caused by corrosion or other factors.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(5)(a)4. [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 [ADEM Admin. Code r. 335-14-3-.01(5)(a)5.] [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.

- Alodine Plating Line

Techtrix personnel stated that the Alodine plating line had not been operating for several months. The inspection team noted leaks from the alodine line (Photos 98-103).

Pursuant to ADEM Admin. Code r. 335-14-3-.01(2) [40 C.F.R. § 262.11], a person who generates a solid waste, as defined in ADEM Admin. Code r. 335-14-2-.01(2) [40 C.F.R.

§ 261.2], must make an accurate determination as to whether that waste is a hazardous waste in order to ensure wastes are properly managed according to applicable RCRA regulations articulated in ADEM Admin. Code r. 335-14-3-.01(2) [40 C.F.R. § 262.11].

- Cadmium Plating Line

Techtrix periodically operates a plating line to plate cadmium onto parts. On the day of the inspection, there were four tanks on this line with solids in the bottom of each tank (Photos 104-107). There were no plating bath liquids present. Facility representatives stated that the waste inside these tanks would need to be cleaned out but that it would be a confined space entry. One solution Techtrix is considering is to cut the tanks apart to avoid the confined space entry requirements. Facility representatives stated that samples were taken and that a waste determination was pending.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(2) [40 C.F.R. § 262.11], a person who generates a solid waste, as defined in ADEM Admin. Code r. 335-14-2-.01(2) [40 C.F.R. § 261.2], must make an accurate determination as to whether that waste is a hazardous waste in order to ensure wastes are properly managed according to applicable RCRA regulations articulated in ADEM Admin. Code r. 335-14-3-.01(2) [40 C.F.R. § 262.11].

- Outside of Production Building

The inspection team toured the outside areas of the production building. The team noted green dust-like waste on upended poly tanks (Photos 108-110). The TCLP sampling result for this waste was 49 mg/L of Chrome, which is above the hazardous level. Facility representatives had not conducted a hazardous waste determination for this waste. The inspection team looked inside the solid waste dumpster at the side of the production building; there was remediated waste removed from underneath the plating lines in the dumpster similar to the waste inside the supersacks near the Zinc plating line (111-112). Facility personnel stated that this waste should have been added to the supersacks inside and not to the dumpster. There were three rusted containers grouped together near the solid waste dumpster (Photos 113-114). The EPA sampling team determined that these containers were storing solidified asphalt. Techtrix must make a hazardous waste determination on all solid wastes.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(2) [40 C.F.R. § 262.11], a person who generates a solid waste, as defined in ADEM Admin. Code r. 335-14-2-.01(2) [40 C.F.R. § 261.2], must make an accurate determination as to whether that waste is a hazardous waste in order to ensure wastes are properly managed according to applicable RCRA regulations articulated in ADEM Admin. Code r. 335-14-3-.01(2) [40 C.F.R. § 262.11].

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)6 [40 C.F.R. § 262.17(a)(6)], which incorporates ADEM Admin. Code r. 335-14-3-.14(2) [40 C.F.R. § 262.251], and is a condition of the LQG Permit Exemption, a large quantity generator must 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.

- Owners Personal Building

The owner of the facility has a small building beside the production building with a roll up door. The inspection team did not observe any waste in this building.

- Red Building

The inspection team toured the red building which was used as a workshop. Facility personnel stated that this building was seldom used and there were few working lights in this building. In the first room the inspection team entered, there was one flammable cabinet which was storing paint and paint related materials (Photo 115). There was a leaking container of solvent inside this cabinet resulting in a puddle at the bottom of the cabinet. Pursuant to 40 C.F.R. 261.2(b)(3), materials are solid waste if they are abandoned by being accumulated, stored, or treated (but not recycled) before or in lieu of being abandoned by being disposed of, burned or incinerated. Many of the paints and related material inside the cabinet appeared to be abandoned old material that had been accumulated and stored in lieu of being disposed of. Techtrix had neither cleaned up the spilled material beneath the cabinet nor conducted a hazardous waste determination on the solid wastes inside the cabinet.

In the second room in the Red Building, a few steps up, there was a stack of paint containers, a work bench with multiple containers, and a pallet of paint (Photos 116-118). Some of these containers looked to be in poor condition. It appears that many of these containers had been accumulated and stored in lieu of being disposed of. Techtrix should determine if these materials will be used and conduct a hazardous waste determination on material that is a solid waste.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(2) [40 C.F.R. § 262.11], a person who generates a solid waste, as defined in ADEM Admin. Code r. 335-14-2-.01(2) [40 C.F.R. § 261.2], must make an accurate determination as to whether that waste is a hazardous waste in order to ensure wastes are properly managed according to applicable RCRA regulations articulated in ADEM Admin. Code r. 335-14-3-.01(2) [40 C.F.R. § 262.11].

- Records Review

The inspection team reviewed the following records: CAA weekly inspection records from January 2019 through March 2021, hazardous waste manifests February 2018 through March 2021, universal waste shipping documents, land disposal restriction forms, training records, the contingency plan, the waste minimization plan, biennial report, and notification for hazardous waste activity.

The facility considered the tank system to be an exempt wastewater treatment unit. However, these tanks are not subject to either Section 402 or 307(b) of the Clean Water Act and therefore do not currently meet the exemption. These tanks are regulated as RCRA Subpart J Tanks. These tanks did not have tank integrity testing, daily tank inspections, or secondary containment among

other requirements.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)2. [40 C.F.R. § 262.17(a)(2)], which incorporates ADEM Admin. Code r. 335-14-6-.10 [40 C.F.R. § 265.192], and is a condition of the LQG Permit Exemption, a generator accumulating hazardous waste in tank systems must ensure that the foundation, structural support, seams, connections, and pressure controls (if applicable are adequately designed and that the tank system has sufficient structural strength, compatibility with the waste(s) to be stored or treated, and corrosion protection so that it will not collapse, rupture, or fail. The generator must obtain a written assessment reviewed and certified by a qualified Professional Engineer in accordance with § 270.11(d) of this chapter attesting that the system has sufficient structural integrity and is acceptable for the storing and treating of hazardous waste.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)2. [40 C.F.R. § 262.17(a)(2)], which incorporates ADEM Admin. Code r. 335-14-6-.10 [40 C.F.R. § 265.193], and is a condition of the LQG Permit Exemption, a generator accumulating hazardous waste in tank systems must provide secondary containment in order to prevent the release of hazardous waste or hazardous constituents to the environment.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)2. [40 C.F.R. § 262.17(a)(2)], which incorporates ADEM Admin. Code r. 335-14-6-.10 [40 C.F.R. § 265.195], and is a condition of the LQG Permit Exemption, a generator accumulating hazardous waste in tank systems must inspect and document, where present, at least once each operating day, (a) data gathered from monitoring and leak detection equipment; (b) overfill/spill control equipment, above ground portions of the tank system, construction materials and the area immediately surrounding the externally accessible portion of the tank system; (e) ancillary equipment that is not provided with secondary containment; and (f) cathodic protection systems.

Facility personnel stated that only four weekly inspections of the CAAs were conducted in 2019. They were discontinued after that time. The records do not designate which areas were inspected. The inspection team noted that Techtrix was storing hazardous waste without a permit or interim status in both of the two designed CAAs, the non-hazardous waste tote container area, the chemical storage area, the cyanide area, the catch container area near the tanks, the supersacks near the zinc plating line, and the supersack near the non-hazardous waste tote container storage area at the time of the inspection. Therefore, each of these areas was operating as a central accumulation area, which should have been inspected at least weekly.

Pursuant to [ADEM Admin. Code r. 335-14-3-.01(7)(a)1.(v)] [40 C.F.R. § 262.17(a)(1)(v)], which is a condition of the LQG Permit Exemption, a generator is required to, at least weekly, inspect central accumulation areas looking for leaking containers and for deterioration of containers caused by corrosion or other factors.

The actions that facility personnel should take in response to an emergency are described in the facility's Hazardous Waste Managment Plan, which was last updated in February 2019. A review of this plan was conducted by the inspection team. The plan describes actions facility personnel must take in response to fires, explosions, or any unplanned sudden or non-sudden

release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility. The plan describes arrangements agreed to with the local police department, fire department, other emergency response teams, emergency response contractors, equipment suppliers, local hospitals or the Local Emergency Planning Committee. The plan lists the names and emergency telephone numbers for persons identified as emergency coordinators. Pamela Beavers is listed as the primary emergency coordinator, and one other individual is listed. The plan includes a list of all emergency equipment at the facility. The list includes fire extinguishing systems, spill control equipment, communications and alarm systems, and decontamination equipment. The list is up to date. The plan includes the location and a physical description of each item on the list, and a brief outline of its capabilities. Some of the references in the plan are incorrect and point to the incorrect figures or tables. The plan includes an evacuation plan for personnel. This plan does describe signal to be used to begin evacuation, evacuation routes, and alternate evacuation routes.

The inspection team noted multiple containers that were in poor condition throughout the facility. These containers held corrosives and cyanide waste. These wastes could pose a human health threat to the workers in this facility. Techtrix did not implement their contingency plan to address these containers.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)6 [40 C.F.R. § 262.17(a)(6)], which incorporates Pursuant to ADEM Admin. Code r. 334-14-3-.14(8) [40 C.F.R. § 262.260(b)], and is a condition of the LQG Permit Exemption, a generator is required to carry out the provisions of the contingency plan immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.

Although the contingency plan was last updated in February 2019, the facility did not create a quick reference guide when the plan was updated. As of the date of the inspection, no quick reference guide had been created or submitted to the all local emergency responders.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)6 [40 C.F.R. § 262.17(a)(6)], which incorporates ADEM Admin. Code r. 334-14-3-.14(10) [40 C.F.R. § 262.262(b)], and is a condition of the LQG Permit Exemption, a large quantity generator that is amending its contingency plan must at that time submit a quick reference guide of the contingency plan to the local emergency responders identified at paragraph (a) of this section or, as appropriate, the Local Emergency Planning Committee. The quick reference guide must include the following elements: 1. The types/names of hazardous wastes in layman's terms and the associated hazard associated with each hazardous waste present at any one time (e.g., toxic paint wastes, spent ignitable solvent, corrosive acid); 2. The estimated maximum amount of each hazardous waste that may be present at any one time; 3. The identification of any hazardous wastes where exposure would require unique or special treatment by medical or hospital staff; 4. A map of the facility showing where hazardous wastes are generated and accumulated, and routes for accessing these wastes; 5. A street map of the facility in relation to surrounding businesses, schools and residential areas to understand how best to get to the facility and also evacuate citizens and workers; 6. The locations of

water supply (e.g., fire hydrant and its flow rate); 7. The identification of on-site notification systems (e.g., a fire alarm that rings off site, smoke alarms); and 8. The name of the emergency coordinator(s) and 7/24-hour emergency telephone number(s) or, in the case of a facility where an emergency coordinator is continuously on duty, the emergency telephone number for the emergency coordinator.

Techtrix did not provide a written description of the type and amount of both introductory and continuing training to be given to each person filling the positions at the facility related to hazardous waste management. The inspectors were told that the most recent training had occurred 1/10/2020. No records were available to document the training or the participants in the training. Pamela Beavers was scheduled to receive outside RCRA training after the inspection.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)7 [40 C.F.R. § 262.17(a)(7)], which is a condition of the LQG Permit Exemption, facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the regulations; (ii) Facility personnel must complete personnel training within six months of being hired or of being assigned to a new position at the Facility; (iii) Facility personnel must take part in an annual review of the initial training required by this section; and/or (iv) the generator must maintain training records that include, among others: the job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job; a written job description for each position; a written description of the type and amount of both introductory and continuing training that will be given to each person filling a position; and records documenting that the required training has been given to and completed by Facility personnel.

The inspection team reviewed available hazardous waste manifest records and land disposal restriction forms for shipments of hazardous waste sent since 2018. Hazardous waste manifest records show that F006 hazardous wastewater treatment sludge from electroplating operations waste are routinely shipped to EQ Metals Recovery LLC (Canton) (OHD986982155), D002/D007 hazardous waste sulfuric acid and chromium wastes are routinely shipped to Vickery Environmental (Ohio) (OHD020273819), and D003/D006/D008 hazardous waste cyanide plating bath wastes are routinely shipped to EQ Detroit (MID980991566). The most recent shipment was made on 2/23/2021. The shipments of waste were infrequent with one shipment of D002/D007 liquid waste in 2021 and two shipments in 2020; one of D002/D007 liquid waste and one of F006 filter cake. Because the operations observed during the inspection indicate that waste is generated at a consistent rate of generation, and not during discrete generation events, it appears that Techtrix stored hazardous waste for greater than 90 days prior to each shipment.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(b) [40 C.F.R. § 262.17(b)], an LQG who accumulates hazardous waste for more than 90 days is an operator of a storage facility and is subject to the requirements of ADEM Admin. Code r. 335-14-1 to 335-14-9 [40 C.F.R. Parts 124, 264 through 268 and Part 270].

Techtrix did not file a Biennial Report for 2019 by March 1, 2020.

Pursuant to ADEM Admin. Code r. 335-14-3-.04(2) [40 C.F.R. § 262.41], a generator that is

a large quantity generator for at least one month of an odd-numbered year (reporting year) who ships any hazardous waste off-site to a treatment, storage, or disposal facility within the United States must prepare and submit a single copy of a Biennial Report to the Department by March 1 of each even numbered year. The Biennial Report must be submitted on the Hazardous Waste Generator Biennial Report form supplied by the Department and must cover generator activities during the previous calendar year and must include certain information.

12) Closing Conference

The inspectors conducted the exit meeting at 3:00 pm with Pamela Beavers and Tobie Bateman. During this meeting, the inspectors stated their preliminary conclusions of the inspection. Techtrix agreed to provide inventory records for the chemical storage area. On April 30, 2021, Pam Beavers provided the inventory in an email to the inspection team.

13) Sampling Overview (If Applicable)

During the Techtrix, Inc. sampling investigation, EPA's Laboratory Services and Applied Science Division (LSASD) personnel collected a total of sixteen samples. Seven samples were collected from 275- or 325-gallon totes, six samples were from various sized tanks, one soil sample from the drainage ditch, one sample from outdoor containers and one sample from a cadmium plating line dip tank. LSASD's Laboratory Services Branch chemists analyzed the samples for pH, total metals and TCLP metals. Laboratory analyses showed that fifteen of the sixteen samples collected from the totes, tanks, drainage ditch and plating line exhibited the toxicity characteristic (TC) for cadmium (D006), chromium (D007), lead (D008) and/or silver (D011). Cadmium toxicity characteristic leaching procedure (TCLP) results ranged from 18 mg/l to 4,300 mg/l for the seven samples which exceeded the cadmium TC regulatory level of 1.0 mg/l. For the twelve samples which exceeded the chromium TC regulatory level of 5.0 mg/l, chromium TCLP results ranged from 6.8 mg/l to 2,200 mg/l. Both lead and silver have a TC regulatory level of 5.0 mg/l and both had four samples exceed it. Lead TCLP results ranged from 7.4 mg/l to 13 mg/l while silver TCLP results ranged from 5.4 mg/l to 74 mg/l. Laboratory testing showed that three samples demonstrated the RCRA characteristic of corrosivity (D002) by having pH values of less than 2.0 Standard Units (SUs) or greater than 12.5 SUs. Sample T07 had a laboratory pH value of less than 1.0 SUs while samples T16 and TK02 had pH values of 12.71 and 12.95 SUs, respectively. (Table 3). A copy of the sampling results are included in Appendix 3.

14) Inspection Findings

Based on the observations made during the inspection, Techtrix was apparently deficient with the following RCRA requirements:

Pursuant to ADEM Admin. Code r. 335-14-3-.01(2) [40 C.F.R. § 262.11], a person who generates a solid waste, as defined in ADEM Admin. Code r. 335-14-2-.01(2) [40 C.F.R. § 261.2], must make an accurate determination as to whether that waste is a hazardous waste in order to ensure wastes are properly managed according to applicable RCRA regulations articulated in ADEM Admin. Code r. 335-14-3-.01(2) [40 C.F.R. § 262.11].

Pursuant to ADEM Admin. Code r. 335-14-3-.01(5)(a)4. [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 [ADEM Admin. Code r. 335-14-3-.01(5)(a)5.] [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 ADEM Admin. Code r. 335-14-3-.01(7)(a)1.(ii) [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[ADEM Admin. Code r. 335-14-3-.01(7)(a)1.(iii) [40 C.F.R. § 262.17(a)(1)(iii)], which is a condition of the LQG Permit Exemption, a generator is required to use a container made of or lined with materials which will not react with, and are otherwise compatible with, the hazardous waste to be stored, so that the ability of the container to contain the waste is not impaired.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)1.(iv) [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; and (B) A container holding hazardous waste must not be opened, handled, or stored in a manner that may rupture the container or cause it to leak.

Pursuant to [ADEM Admin. Code r. 335-14-3-.01(7)(a)1.(v)] [40 C.F.R. § 262.17(a)(1)(v)], which is a condition of the LQG Permit Exemption, a generator is required to, at least weekly, inspect central accumulation areas looking for leaking containers and for deterioration of containers caused by corrosion or other factors.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)1.(viii) which incorporates ADEM Admin. Code r. 335-14-6-.09(6)(a), and is a condition of the LQG Permit Exemption, container storage areas must meet the following requirements: (a) Container storage areas must have a containment system that is designed and operated in accordance with 335-14-6-.09(6)(b), except as otherwise provided by 335-14-6-.09(6)(c).

(b) A containment system must be designed and operated as follows:

1. A base must underlie the containers which is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed;

2. The base must be sloped or the containment system must be otherwise designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation, unless the containers are elevated or are otherwise protected from contact with accumulated liquids;
3. The containment system must have sufficient capacity to contain 10% of the volume of containers or the volume of the largest container, whichever is greater. Containers that do not contain free liquids need not be considered in this determination;
4. Run-on into the containment system must be prevented unless the collection system has sufficient excess capacity in addition to that required in 335-14-6-.09(6)(b)3. to contain any run-on which might enter the system; and
5. Spilled or leaked waste must be removed from the sump or collection area in a timely manner not to exceed 24 hours after detection. Accumulated precipitation must be removed in as timely a manner necessary to prevent overflow of the collection system.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)2. [40 C.F.R. § 262.17(a)(2)], which incorporates ADEM Admin. Code r. 335-14-6-.10 [40 C.F.R. § 265.192], and is a condition of the LQG Permit Exemption, a generator accumulating hazardous waste in tank systems must ensure that the foundation, structural support, seams, connections, and pressure controls (if applicable are adequately designed and that the tank system has sufficient structural strength, compatibility with the waste(s) to be stored or treated, and corrosion protection so that it will not collapse, rupture, or fail. The generator must obtain a written assessment reviewed and certified by a qualified Professional Engineer in accordance with § 270.11(d) of this chapter attesting that the system has sufficient structural integrity and is acceptable for the storing and treating of hazardous waste.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)2. [40 C.F.R. § 262.17(a)(2)], which incorporates ADEM Admin. Code r. 335-14-6-.10 [40 C.F.R. § 265.193], and is a condition of the LQG Permit Exemption, a generator accumulating hazardous waste in tank systems must provide secondary containment in order to prevent the release of hazardous waste or hazardous constituents to the environment.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)2. [40 C.F.R. § 262.17(a)(2)], which incorporates ADEM Admin. Code r. 335-14-6-.10 [40 C.F.R. § 265.195], and is a condition of the LQG Permit Exemption, a generator accumulating hazardous waste in tank systems must inspect and document, where present, at least once each operating day, (a) data gathered from monitoring and leak detection equipment; (b) overfill/spill control equipment, above ground portions of the tank system, construction materials and the area immediately surrounding the externally accessible portion of the tank system; (e) ancillary equipment that is not provided with secondary containment; and (f) cathodic protection systems.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)2. [40 C.F.R. § 262.17(a)(2)], which incorporates ADEM Admin. Code r. 335-14-6-.10(7) [40 C.F.R. § 265.196], which a

condition of the LQG Permit Exemption, a tank system or secondary containment system from which there has been a leak or spill, or which is unfit for use, must be removed from service immediately, and the owner or operator must satisfy the following requirements:
(a) Cessation of Use; prevent flow or addition of wastes. The owner or operator must immediately stop the flow of hazardous waste into the tank system or secondary containment system and inspect the system to determine the cause of the release.
(b) Removal of waste from tank system or secondary containment system.
1. If the release was from the tank system, the owner/operator must, within 24 hours after detection of the leak or, if the owner/operator demonstrates that it is not possible, at the earliest practicable time, remove as much of the waste as is necessary to prevent further release of hazardous waste to the environment and to allow inspection and repair of the tank system to be performed.
2. If the material released was to a secondary containment system, all released materials must be removed within 24 hours or in as timely a manner as is possible to prevent harm to human health and the environment.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)5.(i) [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 and the date upon which each period of accumulation begins clearly visible for inspection on each container.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)5.(ii) [40 C.F.R. § 262.17(a)(5)(ii)], a large quantity generator accumulating hazardous waste in tanks must do the following do the following:
a. Mark or label its tanks with the words "Hazardous Waste" and all appropriate EPA hazardous waste numbers associated with the waste as specified in 335-14-2-.03 and 335-14-2-.04;
b. Mark or label its tanks with an indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704);
c. Use inventory logs, monitoring equipment or other records to demonstrate that hazardous waste has been emptied within 90 days of first entering the tank if using a batch process, or in the case of a tank with a continuous flow process, demonstrate that estimated volumes of hazardous waste entering the tank daily exit the tank within 90 days of first entering; and
d. Keep inventory logs or records with the above information on site and readily available for inspection.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)6 [40 C.F.R. § 262.17(a)(6)], which incorporates ADEM Admin. Code r. 335-14-3-.14(2) [40 C.F.R. § 262.251], and is a condition of the LQG Permit Exemption, a large quantity generator must 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 ADEM Admin. Code r. 335-14-3-.01(7)(a)6 [40 C.F.R. § 262.17(a)(6)], which incorporates ADEM Admin. Code r. 335-14-3-.14(6) [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 ADEM Admin. Code r. 335-14-3-.01(7)(a)6 [40 C.F.R. § 262.17(a)(6)], which incorporates Pursuant to ADEM Admin. Code r. 334-14-3-.14(8) [40 C.F.R. § 262.260], and is a condition of the LQG Permit Exemption, a generator is required to have a contingency plan for the facility. The contingency plan must be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water. (b) The provisions of the plan must be carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)6 [40 C.F.R. § 262.17(a)(6)], which incorporates ADEM Admin. Code r. 334-14-3-.14(10) [40 C.F.R. § 262.262(b)], and is a condition of the LQG Permit Exemption, a large quantity generator must submit a quick reference guide of the contingency plan to the local emergency responders identified at paragraph (a) of this section or, as appropriate, the Local Emergency Planning Committee. The quick reference guide must include the following elements: 1. The types/names of hazardous wastes in layman's terms and the associated hazard associated with each hazardous waste present at any one time (e.g., toxic paint wastes, spent ignitable solvent, corrosive acid); 2. The estimated maximum amount of each hazardous waste that may be present at any one time; 3. The identification of any hazardous wastes where exposure would require unique or special treatment by medical or hospital staff; 4. A map of the facility showing where hazardous wastes are generated and accumulated, and routes for accessing these wastes; 5. A street map of the facility in relation to surrounding businesses, schools and residential areas to understand how best to get to the facility and also evacuate citizens and workers; 6. The locations of water supply (e.g., fire hydrant and its flow rate); 7. The identification of on-site notification systems (e.g., a fire alarm that rings off site, smoke alarms); and 8. The name of the emergency coordinator(s) and 7/24-hour emergency telephone number(s) or, in the case of a facility where an emergency coordinator is continuously on duty, the emergency telephone number for the emergency coordinator.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(a)7 [40 C.F.R. § 262.17(a)(7)], which is a condition of the LQG Permit Exemption, facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their

duties in a way that ensures the facility's compliance with the regulations; (ii) Facility personnel must complete personnel training within six months of being hired or of being assigned to a new position at the Facility; (iii) Facility personnel must take part in an annual review of the initial training required by this section; and/or (iv) the generator must maintain training records that include, among others: the job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job; a written job description for each position; a written description of the type and amount of both introductory and continuing training that will be given to each person filling a position; and records documenting that the training required has been given to and completed by Facility personnel.

Pursuant to ADEM Admin. Code r. 335-14-3-.01(7)(b) [40 C.F.R. § 262.17(b)], an LQG who accumulates hazardous waste for more than 90 days is an operator of a storage facility and is subject to the requirements of ADEM Admin. Code r. 335-14-1 to 335-14-9 [40 C.F.R. Parts 124, 264 through 268 and Part 270].

Pursuant to ADEM Admin. Code r. 335-14-3-.04(2) [40 C.F.R. § 262.41], a generator that is a large quantity generator for at least one month of an odd-numbered year (reporting year) who ships any hazardous waste off-site to a treatment, storage, or disposal facility within the United States must prepare and submit a single copy of a Biennial Report to the Department by March 1 of each even numbered year. The Biennial Report must be submitted on the Hazardous Waste Generator Biennial Report form supplied by the Department and must cover generator activities during the previous calendar year and must include certain information.

15) List of Appendices

Appendix 1 – Inventory of containers in the Expired Chemical Storage area

Appendix 2 - Photo Log:
Photos taken by Kayla Acosta
Photos taken with Olympus Tough Digital Camera
EPA Property Tag: S75903
and
Photos taken by Paula Whiting
Photos taken with Olympus Tough Digital Camera
EPA Property Tag: SC7374

Appendix 3 – EPA's LSLAD Sampling Investigation Report dated May 27, 2021.

16) Signed

ALAN NEWMAN Digitally signed by ALAN NEWMAN Date: 2021.06.01 15:25:44 -04'00'

Alan Newman
Environmental Engineer

Date

Concurrence

ARACELI CHAVEZ Digitally signed by ARACELI CHAVEZ
Date: 2021.06.01 15:22:27 -04'00'

Araceli B. Chavez
Chief
RCRA Enforcement Section

Date

Appendix 1:

Inventory of containers in the Expired Chemical area

Volume/Description of Container	Contents/Labels	Condition/Comments	Photo
55-gallon – Blue Metal	Trichloroethylene Labeled as Toxic	Rusting; no expiration date Still using this on Silver line	119-120
55-gallon – Black Metal	Alcohol Isopropyl Fed Grd Flammable Liquid	Rusting through. expired 1/6/2014	119, 121
55-gallon – Black Metal	Isopropyl (99%) Flammable Liquid	Rusted through – container in poor condition	119, 122
4 x 55-gallon – Black Poly	Sodium Hypochlorite 12.5 % Corrosive	Used to treat cyanide waste Expired 11/2004	123-124
4 x 55-gallon – Blue Poly	Sodium Hypochlorite 12.5 % Corrosive	Expired 6/28/2012	125-127
3 x 55-gallon - Black Poly	Sodium Hypochlorite 12.5 % Corrosive	Expired 6/28/2012	128-130
55-gallon – Blue Poly	Electroless Nickel	May be reused	131
55-gallon – Black Metal	Phos 685 K dry to touch oil	Rusted Expired 12/2013	132
55-gallon – Black poly	IsoPrep 172 HW label D002	Dated 1/14/2019	133-134
55-gallon – Black Poly	Isoprep 560L Corrosive	Expired 1/2016	135
55-gallon – Black Poly	Acetic Acid 56% Solution Corrosives	Manufactured 5/15/2008	136-137
55-gallon - Blue Poly	Laser Brilliant Dip Marked as expired chemical pending waste determination	Expired 7/8/2015	138-139
55-gallon - Black Poly	Acetic Acid Marked as expired chemical pending waste determination	Manufactured 10/6/2009	138, 140

55-gallon - Poly Blue	TechPhos 3000-NF Corrosive Marked as expired chemical pending waste determination	Expired 3/5/2017	141-142
55-gallon – Black Poly	Marked as expired chemical pending waste determination	Expired 1/2011	141, 143
3 x 55-gallon Black Poly	Isoprep 172 Corrosive	Expired 6/2014	144-145
3 x 55-gallon Black Poly	ZB1010 Matte Tin Plate	Marked Usable Expired 3/4/2013	147
3 x 55-gallon - Blue	Blackener Sodium Hydroxide Caustic Soda Corrosive Metalive PreBlack	Dates: 8/8/2007 3/21/2008 One with no date	148-150
55-gallon fiber	Metex E 345 Corrosive	Container damaged at bottom Expired 4/2020 (or 12/2022)	151-152
6 x 5-gallon Blue (5) and Green (1)	- Sulfuric Acid - Merlin Starter - Isobrite 541 - 2 x ZC 1435 Hypro 200 sealer - ZC 1405 R HyproTech	- Expired 1/23/2013 - Expired 5/2016 - Expired 1/2015 - Expired 8/22/2015	153-159
5-gallon Cardboard Box	B-929 Nickel Strip powder		160-161
2 x 25-gallon	Muriatic Potash Ferrous Sulphate		162-164
	TMT 15	Received 5/14/1997	
9 x 30-gallon Blue Poly	Mercaptain Aqueous Trimercapto 5 triazine tri soldium salt		165-166
55-gallon Blue Poly	Aqua ammonia Corrosive		167-168
55-gallon Black Poly	Matte Tin Plate	Marked Usable Expired 3/4/2013	169

55-gallon Black Poly	Caustic Pot Ash Sodium Hydroxide Solution Corrosive		170
55-gallon Black Poly	Aluminum Sulphate Solution	Manufactured 2/15/2007	171
2 x 55-gallon Black Poly	Meta Plate 2500-A Sealed		172-174
55-gallon	Unknown – no labels		
2 x 55-gallon Black Poly	Meta Plate 2500-B Unopened		175-176
55-gallon white poly	Oxalic Acid (good)		177
55-gallon Fiber	Meta Kleen X-29	Manufactured 12/9/2009	178
40-gallon White	Parts Cleaner Fluid		179-180
55-gallon Blue Poly	Phosphate		181
55-gallon Blue Poly	SurTec 650 Chromit AL	Expired 5/14/2015	182
55-gallon Black Poly	Manganese Phosphotex	Expired 7/2008	183
2 x 5-gallon	Crome vet 2 Corrosive	Expired 6/2002	184-185
2 x 10 gallon	Crome vet 1 Conductivity salt	Expired 6/2002	184, 186
55-gallon Fiber	Corrosive	Expired 11/1998	184, 187
55-gallon Rusted Metal	Black Macro XL A Corrosive	Expired 2/2002	184, 188
55-gallon Rusting	Potassium Metal Permanganate Stripper	Container was open Waste on floor	184, 189
55-gallon Rusting	Rust Foe 2 metal	Expired 2007	190-191
55-gallon Fiber	Metex TS40-A	Expired 7/2012	190, 192
55-gallon Rusting Metal	Isoprep 188	Expired 5/2012	193
55-gallon Black Poly	Hyprocoate Black S		194
40-gallon Fiber	Acid Salt Pending waste determination	Expired 5/2007	195-196
55-gallon Fiber	Zn Oxide		195, 197
20-gallon Blue Poly	Anti-foam HL36	Manufactured 8/24/2012	
20-gallon Fiber	Metex Acid 1 MM Tin	Expired 1/2005	
55-gallon	Waste analysis pending Unknown		

55-gallon Fiber	OPEX Preplate Corrosive	Expired 5/2002	
55-gallon Red Metal	Hydraulic Oil		
55-gallon Black Poly	Silver Strike		
75 smaller containers			198-216