A.11 Closure Plan

MICHIGAN DISPOSAL WASTE TREATMENT PLANT (MDWTP)
MID 000 724 831
JANUARY 18, 2019 ATTACHMENT REVISIONS

Replaces Previous Attachment A.11 Closure Plan

FORM EQP 5111 ATTACHMENT TEMPLATE A11
CLOSURE AND POSTCLOSURE CARE PLANS

This document is an attachment to the Michigan Department of Environmental Quality's (DEQ) *Instructions for Completing Form EQP 5111, Operating License Application Form for Hazardous Waste Treatment, Storage, and Disposal Facilities.* See Form EQP 5111 for details on how to use this attachment.

The administrative rules promulgated pursuant to Part 111, Hazardous Waste Management, of Michigan's Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, (Act 451), R 299.9613 and Title 40 of the Code of Federal Regulations (CFR), Part 264, Subpart G, establishes requirements for the closure and, if necessary, postclosure care of hazardous waste management facilities. All references to 40 CFR citations specified herein are adopted by reference in R 299.11003. This license application template addresses requirements for the proper closure and, if necessary, postclosure care of the hazardous waste management units and the hazardous waste management facility for the *Michigan Disposal Waste Treatment Plant* in *Belleville*, Michigan. The information provided in this template was used to prepare the closure and postclosure care cost estimate provided in Template A12, "Closure and Postclosure Care Cost Estimates."

Ensure that all samples collected for waste characterization and environmental monitoring during closure and postclosure care activities are collected, transported, analyzed, stored, and disposed by trained and qualified individuals in accordance with the QA/QC Plan. The QA/QC Plan should, at a minimum, include the written procedures outlined in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, Third Edition, Chapter 1 (November 1986), and its Updates.

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A11.A CLOSURE PLAN

A11.A.1 Closure Performance Standard
[R 299.9613 and 40 CFR §264.111]

This Closure Plan is designed to ensure that the facility will be closed in a manner that achieves the following:

a. Minimizes the need for further maintenance; and

b. Controls, minimizes, or eliminates, to the extent necessary to protect human health and the environment, postclosure escape of hazardous wastes, hazardous constituents, leachate, contaminated runoff, or hazardous waste decomposition byproducts to the groundwater, surface water, or atmosphere; and, as applicable

c. Complies with the unit-specific closure requirements for each of the following units:

Additionally, as a Polychlorinated Biphenyl (PCB) Commercial Storage Facility this Closure Plan presents protocols and procedures for addressing Toxic Substances Control Act (TSCA)-regulated PCB waste storage and processing areas as part of final closure activities for the Michigan Disposal Waste Treatment Plant (MDWTP). The PCB Commercial Storage Closure Plan only addresses those portions of the MDWTP facility which will be utilized for storage and processing of TSCA-regulated PCB wastes. The MDWTP is also a permitted Resource Conservation and Recovery Act (RCRA) hazardous waste storage and treatment facility and the facility will undergo RCRA closure concurrently with the PCB Commercial Storage Facility closure activities outlined in this Closure Plan.

In accordance with 40 Code of Federal Regulations (CFR) Part 761.65(e), a commercial storer of PCB waste shall have a written Closure Plan that identifies the steps that the owner or operator of the facility shall take to close the PCB waste storage facility in a manner that eliminates the potential for post-closure releases of PCBs which may present an unreasonable risk to human health or the environment.

An acceptable Closure Plan must include, at a minimum, all of the following:

- A description of how the PCB storage areas of the facility will be closed in a manner that eliminates the potential for post-closure releases of PCBs into the environment;

- An identification of the maximum extent of storage operations that will occur during the active life of the facility, including an identification of the extent of PCB storage operations at the facility relative to other wastes that will be handled at the facility;

- An estimate of the maximum inventory of PCB wastes that could be handled at one time at the facility over its active life, and a detailed description of the methods or arrangements to be used during closure for removing, transporting, storing, or disposing of the facility's inventory of PCB waste, including an identification of any off-site facilities that will be used;

- A detailed description of the steps needed to remove or decontaminate PCB waste residues and contaminated containment system components, equipment, structures, and soils during closure in

accordance with the levels specified in the PCB Spill Cleanup Policy (40CFR 761 Subpart G), including a description of the methods for sampling and testing of surrounding soils, and the criteria for determining the extent of removal or decontamination;

- A detailed description of other activities necessary during the closure period to ensure that any post-closure releases of PCBs will not present unreasonable risks to human health or the environment. This includes activities such as ground-water monitoring, run-on and run-off control, and facility security;

- A schedule for closure of each area of the facility where PCB waste is stored or handled, including the total time required to close each PCB waste storage or handling area, and the time required for any intervening closure activities; and

- An estimate of the expected year of closure of the PCB waste storage areas, if a trust fund is opted for as the financial mechanism. It should be noted that this requirement is not applicable as the financial assurance mechanism is a letter of credit issued by a commercial banking institution.

(Check as appropriate)

☒ Use and management of containers	R 299.9614 and 40 CFR §264.178
☒ Tank systems	R 299.9615 and 40 CFR §264.197
☐ Surface impoundments	R 299.9616 and 40 CFR §264.228
☐ Waste piles	R 299.9617 and 40 CFR §264.258
☐ Land treatment[a]	R 299.9618 and 40 CFR §264.280
☐ Landfill	R 299.9619 and 40 CFR §264.310
☐ Incinerators	R 299.9620 and 40 CFR §264.351
☐ Drip pads[b]	R 299.9621 and 40 CFR §264.575
☐ Miscellaneous units	R 299.9623 and 40 CFR §§264.601-603
☐ Hazardous waste munitions and explosive storage[b]	R 299.9637 and 40 CFR §264.1202
☐ Boilers and industrial furnances	R 299.9808 and 40 CFR §266.102(e)(11)

[a] Not included in the template
[b] *Not yet included in 40 CFR §264.111; therefore not considered*

Unit-specific closure procedures are discussed in Section A11.A.5 of this template for each unit type indicated above.

A11.A.2 Unit-Specific Information

[R 299.9613 and 40 CFR §§264.112(b)(3) and (6)]

The following table identifies each hazardous and TSCA-PCB waste management unit at the *MDWTP* facility subject to the closure requirements of this hazardous waste management facility operating license. The table includes each unit's maximum licensed hazardous waste inventory. A list of the waste codes managed can be found in Attachment 2 Chemical and Physical Properties Table A2.A.2. Unit-specific methods for closure and detailed schedules are discussed in Section A11.A.5 of this template.

See waste code list in A2 Chemical and Physical TABLE A2.A.2

Table A11.A.1 Hazardous Waste Management Units Information

*TSCA-regulated PCB waste storage

Storage Capacities

Silos

Tank #	Description	Volume		Volume	
1	Hazardous Waste Solid	15,150	g	75.00	yd^3
2	Hazardous Waste Solid	15,150	g	75.00	yd^3
3	Hazardous Waste Solid	15,150	g	75.00	yd^3
4	Hazardous Waste Solid	15,150	g	75.00	yd^3
5	Hazardous Waste Solid	15,150	g	75.00	yd^3
6	Hazardous Waste Solid	15,150	g	75.00	yd^3
Total		**90,900**	**g**	**450.00**	**yd^3**

East and West Treatment Tanks*

Tank #	Description	Volume		Volume	
A	Hazardous Waste to be treated	53881	g	266.74	yd^3
B	Hazardous Waste to be treated	53881	g	266.74	yd^3
C	Hazardous Waste to be treated	43589	g	215.79	yd^3
D	Hazardous Waste to be treated	43589	g	215.79	yd^3
E	Hazardous Waste to be treated	43589	g	215.79	yd^3
F	Hazardous Waste to be treated	43589	g	215.79	yd^3
G	Hazardous Waste to be treated	53881	g	266.74	yd^3
H	Hazardous Waste to be treated	53881	g	266.74	yd^3
Total		**389,880**	**g**	**1930.10**	**yd^3**

Liquid Vertical Tanks

Tank #	Description	Volume	Volume
23	Liquid Waste to be treated	18,000 g	89.1204 yd^3
16	Liquid Waste to be treated	20,000 g	99.0226 yd^3
17	Liquid Waste to be treated	20,000 g	99.0226 yd^3
18	Liquid Waste to be treated	20,000 g	99.0226 yd^3
19	Liquid Waste to be treated	20,000 g	99.0226 yd^3
25	Liquid Waste to be treated	20,000 g	99.0226 yd^3
Total		**118,000 g**	**584.2334 yd^3**

Container Storage Areas

Storage Area	Description	Volume	Volume
ECSA and NCSA*	Waste to be treated	124,000 g	163.40 yd^3
SECSA	Waste to be treated	191,100 g	900.12 yd^3
West/East Treatment Bay*	Waste to be treated	11,000 g	54.46 yd^3
Total		**328,300 g**	**1,172.42 yd^3**

Laboratory

Storage Area	Description	Volume	Volume
Waste Containers	Waste to be treated	360 g	2 yd^3

A11.A.2(a) Disposal of TSCA-regulated PCB Waste Inventory

All remaining TSCA-regulated PCB waste that is present at the facility at the time of closure will be processed (if necessary) and transferred for disposal. Disposal of all TSCA-regulated PCB wastes will follow the guidelines set forth in 40 CFR 761.60. Methods of disposal and processing procedures required for closure are discussed below. The designated disposal facility for solid TSCA-regulated PCB waste generated by the closure activities is WDI. WDI is anticipated to remain in operation as a TSCA-permitted landfill throughout the operating life of the MDWTP facility and will have ample capacity to handle disposal of the maximum potential TSCA inventory that could be stored/processed at MDWTP at any time. This Closure Plan must be reviewed and updated annually, at which time WDI's available disposal capacity will be confirmed to exceed the volume of TSCA waste that will be generated as a result of the implementation of this Closure Plan. If the volume of TSCA waste generated by implementation of this Closure Plan exceeds (or may exceed before the next update of this Closure Plan) WDI's available disposal capacity, this Closure Plan will be revised to show what portion of the MDWTP TSCA capacity will require off-site (non-WDI) disposal.

A11.A.3 Schedule of Final Facility Closure

[R 299.9613 and 40 CFR §264.112(b)(6)]

The *MDWTP* facility:

☒ Has not determined when the facility will close and does not anticipate completing final closure of the entire facility prior to expiration of the facility's hazardous waste operating license.

1. Removal, Treatment, and Disposal of Waste Inventory	
2. Cleaning of Tanks	
3. Cleaning of Equipment	
4. Cleaning Concrete & Asphalt Surfaces	
5. Disposal of Decontamination Agents	
6. Sampling, Analysis & Background	
Total # of days	Approximately 180 Days*

*Applicable to partial or final closure activities

Closure activities that will be implemented to address PCB storage and handling areas at the MDWTP following final closure of the facility are presented below. Because only solid PCB waste materials are managed at the MDWTP, the roof and walls of the enclosed PCB storage and processing areas will not be impacted by spills or releases of PCBs. Therefore, the facility closure activities focus on decontamination of floors in the storage and processing areas, containment structures, treatment tanks, laboratory floors and counters, and waste handling and processing equipment. Concrete surfaces in the NCSA, the ETB, and the WTB have been treated with a sealant to reduce permeability and increase resistance to wear. Therefore, the concrete surfaces will be treated as a non-porous material for the purposes of the closure activities. Performance standards for testing and decontamination of surfaces are based on the use of surface wipe testing and results will be compared against the high occupancy use cleanup criteria for non-porous surfaces of 10 micrograms per 100 square centimeters (10 ug/100 cm^2). All closure activities will be conducted by appropriately trained personnel in accordance with a project-specific Health and Safety Plan (HASP).

A11.A.4 Notification and Time Allowed for Closure

[R 299.9613 and 40 CFR §§264.112(d)(2) and 264.113(a) and (b)]

Closure activities will be initiated within 90 days of receipt of the final volume of hazardous and non-hazardous waste. Partial and final closure activities will be completed within 180 days of receipt of the final volume of waste. Within 90 days after receiving the final quantity of PCB waste for storage MDWTP shall remove PCB from the facility in accordance with the approved closure plan. The tasks and estimated time required for closure shall follow the schedule specified in Section 11A.3. The Director will be notified by MDWTP facility 60 days before final closure begins. Final closure will be certified by both MDWTP facility and an independent, qualified, registered professional engineer of the state of Michigan.

A11.A.4(a) Extensions for Closure Time

[R 299.9613 and 40 CFR §264.113(a) and (b)]

In the event that an extension for closure for the facility or any unit is necessary, the *MDWTP* facility will request an extension in accordance with the requirements of 40 CFR §264.113(a).

A11.A.5 Unit-Specific Closure Procedures

Unit-specific closure procedures are provided for each unit identified in Section A11.A.2 of this template.

A11.A.5(a) Closure of Container Storage Areas and Tank Systems
[R 299.9614 and 40 CFR §264.178] [R 299.9615 and 40 CFR §264.197]

This section describes the procedures for closure of the units identified in A11.A.1. The general closure requirement and specific closure procedures are discussed below. Procedures apply to each type of waste management unit.

A. General Closure Requirement

At closure, all hazardous waste and hazardous waste residues will be removed from the containment system. Remaining containers, liners, bases, and soil containing or contaminated with hazardous waste or hazardous waste residues will be decontaminated or removed.

B. Specific Closure Procedures

Specific procedures for inventory management, unit inspection, decontamination, sampling and analysis, and additional waste management are discussed below.

1. Inventory and Remedial Waste Management Procedures

Waste inventory or equipment requiring treatment will be processed at MDWTP and disposed of at a properly licensed facility. The maximum volumes to be treated are as follows:

Description	Volume		Volume	
Treatment Tanks	327,499	g	1621.28	yd^3
Silos	90,900	g	450.00	yd^3
Liquid Vertical Tanks	118,000	g	584.16	yd^3
Containers	316,000	g	1564.36	yd^3
Laboratory	360	g	2	yd^3
MDWTP total waste to be treated:	**852,399**	**g**	**4219.80**	**yd^3**

The maximum amount of waste that may be treated at the facility assumes storage volumes are at the permitted capacity, with the exception of the waste treatment tanks. Treatment tank capacity is reduced from the permitted capacity in order to allow for reagent addition without overflowing the treatment tank.

The TSCA-regulated PCB waste inventory requiring treatment will be processed at MDWTP (as necessary) and transferred for disposal at WDI. The volumes of wastes to be processed and disposed of are identified in the MDWTP RCRA/TSCA Closure Cost Estimate.

All concrete, asphalt, soil, wash waters, and other decontamination agents removed from MDWTP will be treated and/or disposed at a properly licensed facility. Collected decontamination agents will be

sampled prior to treatment or disposal. Wash waters will be disposed of by transferring to an on-site wastewater treatment plant operated by Wayne Disposal Inc., using the vac truck that is utilized by the power washers. Remediation wastes will be characterized for disposal and managed in accordance with Parts 111, 115 and 121 of Act 451, as appropriate.

2. Unit Inspection Procedures

Units will be inspected for signs of deterioration, cracks, and gaps that may have resulted in a release to soil. If an inspection reveals a mechanism for a release, sampling procedures outlined in this subpart will be utilized to determine the extent of ground contamination, if any.

3. Decontamination Procedures

The decontamination process will cause no escape of PCBs, hazardous waste, or hazardous waste constituents. All wash waters and other decontamination agents will be collected from plant surfaces and sumps in the NCSA, the ETB, and the WTB.

It is anticipated that no liquid waste containing PCBs at a concentration equal to or greater than 50 parts per million (ppm) will be generated by the closure activities. Liquid wastes generated by pressure washing of storage areas and tanks will be collected and transferred to the on-site wastewater pre-treatment plant prior to discharge to a Publicly Owned Treatment Works (POTW). Any decontamination solvents [kerosene or other PODF] used for decontamination efforts will be containerized in 55-gallon drums and tested for PCBs prior to being transported for off-site energy recovery via fuels blending. There is no cost included in the Closure Cost Estimate (Attachment B) for disposal of diesel fuel, other PODFs, or non-water decontamination agents, because it is reasonable to expect that only water-based pressure washing will be required to meet the decontamination standard.

Equipment
All equipment will be disassembled and hydro-blasted. Hydro-blasting is expected to generate 7 gallons per minute. The total estimated time to wash and the volume of water expected to be generated are as follows:

Quantity	Equipment or WMU	Expected Time (hours)	Expected Wash Water Volume (gal)
6	Screw conveyors	12	2,520
1	Scrubber equipment	4	840
2	Baghouses	8	1,633
	Miscellaneous lines, piping and mobile equipment	28	5,880

Equipment that is utilized to handle TSCA-regulated PCB waste and will be reused for non-PCB activities following closure will be decontaminated following processing of the final volume of TSCA-regulated waste at the time of facility closure. The majority of the equipment is expected to be given or sold to WDI except for equipment that is leased (e.g. excavators).

All equipment that was previously used to handle or process TSCA-regulated material will be moved to a temporary decontamination pad (located in the ETB or WTB) where the equipment will be cleaned with pressure washers to remove bulk material that could potentially contain PCBs. Cleaning will include the entire piece of equipment, including tires, tracks, and equipment body. After the equipment has been thoroughly cleaned, the equipment will be visually inspected to confirm the removal of adhered materials or waste residues.

Cleaning Concrete & Asphalt Surfaces

The decontamination of the concrete and asphalt surfaces will be performed in compliance with the extraction technologies specified in 40 CFR 268.45 or will consist of triple rinsing the surfaces with a pressure washer to remove residue. The concrete in each of these areas has been treated with a sealant to reduce permeability and increase resistance to wear. In addition, any spills that may have occurred during operations will have been cleaned at the time of the spill per Subpart G of the TSCA regulations thus leaving no visible traces of PCBs. All secondary containment areas, drum storage areas, sumps, loading areas will be decontaminated. Any cracks, joints, etc. will be sealed prior to cleaning and rinsing concrete and asphalt surface to prevent loss of contaminants through the surface.

Items to be cleaned include, but are not limited to, the following:

Surfaces	Expected Time (hours)	Expected Wash Water Volume (gal)
ECSA	26	5,532
NCSA*	28	5,869
SECSA	90	18,942
WTST Bays*	44	9,256
Truck Dock Area	5	1,008

*TSCA-regulated PCB waste storage

Tank Systems

At closure of the tank system, MDWTP will remove or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated soils, and structures and equipment contaminated with waste, and manage them as hazardous waste, unless 40 CFR §261.3(d) applies. Tanks are anticipated remain in place following decontamination.

Decontamination of steel treatment tanks will be performed in compliance with the decontamination standards specified in 40 CFR 761.79 for non-porous surfaces. After waste materials have been removed from the tanks, the sides and floors of the tanks will be rinsed with water using a pressure washer.

If the MDWTP facility demonstrates that not all contaminated soils can be practicably removed or decontaminated, then the tank system will be managed in accordance with the closure and postclosure care requirements that apply to landfills. The total estimated time to wash and the volume of water expected to be generated are as follows:

Tank System	Expected Time (hours)	Expected Wash Water Volume (gal)
Vertical Liquid Tanks - 16,17,8,19,23,25	18	21,600
Waste Storage Silos -1,2,3,4,5,6	18	21,600
*WTS Tanks - A,B,C,D,E,F,G,H	40	40,000

*TSCA-regulated PCB waste storage

4. Sampling and Analysis Procedures

Sampling, testing and background will be conducted in compliance with the following documents:

- Part 111, Hazardous Waste Management, of the Michigan Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.
- Part 201, Environmental Remediation, of the Michigan Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.
- DEQ Sampling Strategies & Statistics Training Materials for Part 201 Cleanup Criteria (S3TM) will be used to determine sampling distance, depth, verification of remediation, etc. See the DEQ website for a copy of this r
- DEQ Remediation & Redevelopment Division (RRD), Operational Memoranda
- Michigan Background Soil Survey 2005
- Test Methods for Evaluating Solid Waste: Physical/Chemical Methods SW 846 EPA

Sampling

The purpose of this program soil sampling will be to determine any contamination that must be addressed in compliance with Part 111 and Part 201, as well as to determine if PCBs have migrated into soils immediately adjacent to the PCB storage or processing areas at the facility. Any identified PCBs in soil adjacent to the storage and processing areas will be addressed in compliance with TSCA, Michigan Part 111, and Michigan Part 201 requirements.

Samples collected for waste characterization and environmental monitoring during closure care activities will be collected, transported, analyzed, stored, and disposed by trained and qualified individuals in accordance with the QA/QC Plan and in compliance with the following guidance:

- 40 CFR 761 Subpart G and Subpart N.

- MDEQ Sampling Strategies & Statistics Training Materials for Part 201 Cleanup Criteria (S3TM) will be used to determine sampling distance, depth, verification of remediation, etc. See the DEQ website for a copy of this reference document.

- MDEQ Remediation & Redevelopment Division (RRD), Operational Memoranda No. 2: Sampling and Analysis Guidance.

- MDEQ RRD, Operational Memoranda No. 4: Site Characterization and Remediation Verification.

- USEPA Test Methods for Evaluating Solid Waste: Physical/Chemical Methods (SW-846).

After the contamination is defined in compliance with the above referenced documents, MDWTP will provide its selected remedy to address the contamination for review and approval to the DEQ prior to implementation.

Soil

After decontamination of MDWTP, initial soil samples will be collected. Soil samples will be collected at the following:

1) any cracks in the concrete or asphalt,
2) secondary containment trenches and sumps,
3) unloading/loading areas, waste handling areas,
4) any areas of suspect contamination,
5) any areas where the integrity of the pad may be questionable.

Sampling will be conducted in compliance with S3TM. For each sampling area listed above, initial sampling will be conducted by taking grab samples from 0" – 6" below the asphalt or concrete surface. As the samples are collected, each sample will be sealed in jar containers, and properly preserved in accordance with laboratory specified procedures. If analysis (as detailed in the next section) verifies that no contamination exists, then no further sampling will be required. If the initial samples show contamination further sampling will be required to define the extent of the contamination horizontally and vertically.

If the laboratory results indicate contaminants are present in the soils beneath the concrete pad, the following activities will be completed to delineate the impacted soil.

1) Soil samples will be collected at the location of the impacted soil to determine the vertical extent of the soil contamination.
2) Soil samples will be collected in each direction from the original boring to determine the horizontal extent of soil contamination.
3) If perched groundwater is encountered, a water sample will also be collected.
4) Samples will be analyzed for the contaminant of concern identified in the initial sample results. Laboratory analysis of the delineation samples will be completed in accordance with the methods and method detection limits listed in MDEQ RRD OP Memo #2 or the appropriate guidance at the time of closure.
5) The above process will be repeated at each initial sample location that exceeds the Generic Industrial Clean Up Criteria.

Tanks

Following pressure washing, each tank will be visually inspected to confirm that waste material and residue have been removed and standard PCB wipe samples (10-cm by 10-cm as described in 40 CFR Part 761.123) will be collected from the floor and walls of the tank (3 samples per tank).

Equipment

After the equipment to be reused is cleaned, PCB wipe samples will be collected from surfaces of the equipment that would be in primary contact with the TSCA-regulated waste. Wipe samples as described in 40 C.F.R. § 761.123 under the definition for Standard Wipe Test, will be collected at a frequency of one sample per every 100 square feet of equipment surface area, with a maximum of three samples for any individual piece of equipment.

Concrete Surface

After the concrete surface of the NCSA, EWTB, and WWTB have been pressure washed and are visibly free of any remaining residue, PCB wipe samples as described in 40 C.F.R. § 761.123 under the definition for Standard Wipe Test, will be collected from the cleaned surfaces in accordance with C.F.R. § 761.130 and the guidance documents referenced within. Sampling grids will be approximately 20-foot by 20-foot with a maximum of 37 samples being collected from the NCSA and a combined maximum of 37 samples being collected from the EWTB and WWTB as agreed to with USEPA. Upon closure a reduced sampling plan may be approved by USEPA.

Laboratory Surface

PCB wipe samples will be collected from laboratory counters and floors that would be in primary contact with the TSCA-regulated waste. Wipe samples as described in 40 C.F.R. § 761.123 under the definition for Standard Wipe Test, will be collected at a frequency of one sample per every 100 square feet of equipment surface area, with a maximum of three samples for any individual piece of equipment.

Analysis

As the samples are collected, each sample will be sealed in sample containers, packed in ice, and transported to an analytical laboratory for chemical analysis. Each soil and/or water sample will be tested for metals, VOCs, Semi-Volatiles, PCBs, pesticides, herbicides, cyanides and mercury.

The wipe samples will be submitted for laboratory analysis in accordance with USEPA SW-846 Method 8082. If PCBs are detected for any of the wipe samples at concentrations equal to or exceeding 10 µg/100 cm2, the portion of the tanks, equipment or concrete represented by that sample will be pressure washed again and additional samples will be collected until acceptable wipe sample results are achieved. If multiple pressure washing attempts do not achieve a surface decontamination level of less than 10 µg/100cm2, the surfaces may be swabbed and hand wiped with diesel fuel or an alternate PODF [as defined in 40 CFR 761.79(c)] and additional samples will be collected to verify that the surface decontamination standards have been achieved.

The laboratory analysis of the samples will be conducted in accordance with MDEQ RRD OP Memo #2 and associated target detection levels to allow comparison to the cleanup criteria established pursuant to Part 201. PCBs will be conducted in accordance with USEPA SW-846 Method 8082 (or the applicable guidance at the time of closure) using appropriate detection levels to allow comparison to soil cleanup criteria. Any monitoring parameters, not exceeding the Generic Industrial Cleanup Criteria at a particular sample location, will be removed from further consideration at that location.

Background levels for metals in native soils has been established for the facility through WDI's environmental soil. The data from each of the background metals samples will be compared to the default background metals concentrations listed in DEQ RRD OP Memo #1 or the appropriate guidance document at the time of closure.

5. Additional Waste Management Procedures

Waste inventory, decontamination material, or remediation waste that cannot be treated on site will be properly characterized and managed by a licensed off-site treatment, storage and disposal facility.

A11.A.6 Certification of Closure
[R 299.9613]

Within 60 days of completion of closure *MDWTP* will submit to the Director and EPA Regional TSCA Administrator, by registered mail, a certification that the hazardous waste management unit or facility, as applicable, has been closed in accordance with the specifications in the approved closure plan. The certification will be signed by the *MDWTP* and by an independent registered professional engineer. Documentation supporting the independent registered engineer's certification will be furnished to the Director in accordance with R 299.9613(3), including:

1. The results of all sampling and analysis;
2. Sampling and analysis procedures;
3. A map showing the location where samples were obtained;
4. Any statistical evaluations of sampling data;
5. A summary of waste types and quantities removed from the site and the destination of these wastes; and
6. If soil has been excavated, the final depth and elevation of the excavation and a description of the fill material used.

MDWTP facility will maintain financial assurance for closure until the Director releases the *MDWTP* facility from the financial assurance requirements for closure under R 299.9703.
The certification must be worded as follows:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to be the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A11.A.7 Postclosure Notices Filed
[R 299.9504(1)(c) and R 299.9508(1)(b) and 40 CFR §270.14(b)(14)]

The applicant must provide documentation that the postclosure notices required under 40 CFR §264.119 have been filed for hazardous waste disposal units that have been closed at the facility.

A11.B POSTCLOSURE PLAN
[R 299.9613 and 40 CFR §264.118]

A11.B.1 Applicability

☒ **Not applicable**: Hazardous waste will not be left behind at closure. A survey plat, postclosure care, postclosure certifications, and other notices are not required.