

US EPA ARCHIVE DOCUMENT



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March 24, 2017

Lisa Graczyk
RCRA/TSCA Program Section-Land and Chemicals Division
United States Environmental Protection Agency Region V
77 West Jackson Blvd.
Chicago, IL 60604

RE: EPA Comments on the PCB Commercial Storage Permit Application for the Michigan Disposal Waste Treatment Plant Facility in Belleville, Michigan

Dear Ms. Graczyk,

Michigan Disposal Waste Treatment Plant (MDWTP) is responding to the U.S. Environmental Protection Agency's ("USEPA") January 25th, 2017 comments, received via mail on January 30th, 2017 regarding our request under the Toxic Substances Control Act (TSCA) to commercially store and process Polychlorinated Biphenyl ("PCB") waste at MDWTP.

A revised permit application to reflect USEPA's requested information is provided in Appendix A. Provided below are your questions (*italicized*) and MDWTP's response.

- 1. Provide any updated information since the time the application was written. This information may include facility name, owners, operators, key personnel, and compliance history.*

On June 18, 2014 US Ecology, Inc. announced the completion of the acquisition of EQ-The Environmental Quality Company (EQ) including MDWTP. Changes to facility personnel are reflected in Appendix A Section 3.2 of the updated permit application. The acquisition did not change MDWTP's legal name.

Appendix B provides MDWTP's compliance status for the last three years based on information obtained from USEPA's Enforcement and Compliance History Online database.

- 2. What is the volume capacity in gallons of the drainage trench in the North Container Storage Area?*

The trenches in the North Container Storage Area (NCSA) have a total capacity of 14,332 gallons.

3. *How often is the drainage trench in the North Container Storage Area inspected to ensure that it is free of any debris or obstructions?*

MDWTP's Part 111 Hazardous Waste Operating License requires trenches to be inspected daily during operation. Liquids are removed within 24 hours of detection and solids are removed within 60 days. Any obstruction would be removed within 24 hours of detection.

4. *On Figure 3 in the application include the dimensions for the PCB storage areas including curb heights (if any), slopes of flooring, drainage trench (blind containment) dimensions, and treatment tank dimensions. In addition, include locations of pertinent features such as sumps or sewers.*

A modified Figure 3 is provided in Appendix A.

5. *US Ecology is requesting a storage capacity of 82,500 gallons of PCB wastes in in the North Container Storage Area of Michigan Disposal Waste Treatment Plant (MDWTP). Is this requested PCB storage capacity in addition to the storage capacity allowed in MDWTP's Resource Conservation and Recovery Act (RCRA) permit for hazardous waste storage? If so, what would be the total permitted storage capacity of the North Container Storage Area if a PCB Approval is issued?*

The requested 82,500 gallons of PCB storage capacity is not in addition to the storage capacity already allowed in MDWTP's RCRA permit for hazardous waste storage.

6. *What is the largest sized container of PCB waste that US Ecology will store in the North Container Storage Area?*

No container size limit is proposed.

7. *The application states that the concrete floor of the North Container Storage Area is coated with Xypex™. Provide more detail on the coating used and if it was applied on the surface or mixed with the concrete.*

Xypex™ is used as an additive to our concrete secondary containment areas in order to render the concrete impervious. It is mixed into the concrete, not applied on the surface. A specification sheet is provided in Appendix C.

8. *In accordance with 40 C.F.R. § 761.65(c)(3), PCB storage areas "... shall be marked as required in subpart C § 761.40(a)(10)." Please confirm that PCB storage areas will be marked with the large PCB mark (M_L).*

PCB storage areas will be marked with the Large PCB Mark as specified in § 761.40(a)(10) upon receiving storage authorization.

9. *Describe how MDWTP tracks the date of removal from service for disposal of the PCB waste.*

As required by 40 C.F.R. § 761.07(a)(1) generators must provide the date of removal from service for bulk PCB waste, PCB article containers, PCB containers, and PCB articles. The dates are recorded as part of the facility operating record on a per receipt basis with each container having their own unique receipt number. PCBs will be transferred for disposal to ensure that the disposal date is within 1 year of the date of removal from service. MDWTP is incentivized to do this in order to ensure the landfill is not required to submit a PCB Exception Report to EPA Region V in accordance with § 761.215(c).

10. *Submit a copy of MDWTP's most recent Industrial Pretreatment Permit issued by the South Huron Valley Utility Authority as mentioned in Section 2.3 of the application.*

MDWTP does not have an Industrial Pretreatment Permit because there are no discharges from MDWTP to the South Huron Valley Utility Authority POTW. Wayne Disposal Inc. (WDI) is the TSCA approved landfill co-located at the same property as MDWTP. WDI does have an Industrial Pretreatment Permit issued by the South Huron Valley Utility Authority. The current WDI pretreatment permit can be found in Attachment D.

11. *40 C.F.R. § 761.65(d)(3)(iii) states that information in the PCB storage application shall include "information concerning the technical qualifications and experience of the persons responsible for the overall operation of the facility and the employees responsible for handling PCB waste or other wastes." Your application included this information for persons responsible for the overall operation of the facility but not for the employees responsible for handling of the PCB waste. Provide the technical qualifications for employees that handle the PCB waste. A training plan provided for employees will suffice for this requirement.*

The handling of PCB waste will be performed by facility operators that have successfully completed a program of instruction and on-the-job training that teaches them to perform their duties in a safe and compliant manner. The facility managers are responsible for identifying the initial and continuing training needs of his/her employees to ensure facility compliance.

Training topics generally include:

- HAZWOPER
- Emergency Response and Preparedness
- Health and Safety Programs
- Departmental Specific Operating Procedures
- Job Specific Regulatory Required Training

Any new obligations that are required under a future MDWTP TSCA approval will be covered in TSCA-specific training for affected employees responsible for handling PCB waste.

12. Describe the security at the MDWTP facility.

Included in Section 2.1 of Appendix A.

Wayne Disposal Inc. (WDI) and Michigan Disposal Waste Treatment Plant (MDWTP) maintain a secure facility in order to prevent unknowing entry and minimize the possibility for the unauthorized entry onto the active portion of the facility.

The entire site is surrounded by fencing with warning signs meeting the specification of 40 CFR 264.14(c).

- At each entrance of the active portion of the facility and at other locations in sufficient numbers to be seen from any approach to the active portion, signs are posted indicating only authorized personnel are allowed to enter the active portion, and that entry onto the active portion can be dangerous.
- Signs are legible from a distance of at least 25 feet.

Additional signs communicating directions to unfamiliar guests and drivers are also posted at the entrance of the facility.

Unless in use, all access gates are closed and locked. If in use, an open gate is monitored to ensure unauthorized personnel do not enter the facility.

13. Provide a map that depicts locations of sewers and surface water runoff flow pattern. This map should be of the MDWTP facility and surrounding area that depicts locations of storm sewer inlets and any drainage ditches with arrows or contour lines to depict surface water runoff flow pattern.

Attachment A Figures 3 and 4 provide maps indicating sewer location and surface water run-off flow patterns. All surface water from the areas shown is conveyed to WDI storm water collection ponds and treated before discharge.

14. Confirm that the stabilization and microencapsulation of mixed PCB/RCRA waste will be performed inside a treatment building and identify which treatment building(s) will be utilized for stabilization and microencapsulation of mixed PCB/RCRA waste.

Stabilization and microencapsulation of mixed PCB/RCRA waste will be performed in both the East Waste Treatment Building (EWTB) and West Waste Treatment Building (WWTB).

15. Section 2 of the application lists four processing activities that may occur at MDWTP for PCB waste. Will all PCB waste processing activities take place in the same area as the stabilization and microencapsulation? If not, please describe where these activities will take place.

All PCB processing activities will occur in the EWTB and the WWTB.

16. *Will only soil and sediment containing PCBs be treated in the treatment buildings or is other waste anticipated? If so, what other types of PCB wastes does US Ecology anticipate treating?*

MDWTP is proposing to treat PCB waste that would otherwise be able to be disposed of in a PCB authorized landfill, but other characteristics of the waste prevent direct land disposal. Examples may include contaminants requiring treatment to meet RCRA land disposal restrictions; waste that requires amendment to increase strength for landfill stability; solidification of incidental liquids (not otherwise requiring incineration). MDWTP provided soil and sediment as examples of PCB containing waste that may be treated. Soil and sediment are anticipated to be the most common examples. Another example is debris from remediation projects that requires microencapsulation. It is not possible to know all future possible waste streams. But soil, sediment and debris are anticipated to be the most prevalent.

17. *Describe the MDWTP process for stabilizing waste for metals that also contains volatile organic compounds and/or semivolatile organic compounds.*

MDWTP is not proposing the treatment of PCBs in RCRA/TSCA waste. PCB bearing waste will meet applicable LDRs prior to receipt at MDWTP.

The treatment plant treats RCRA wastes that require treatment to comply with the land disposal restrictions (LDR) using treatment methods such as stabilization, encapsulation, neutralization, deactivation, oxidation, and/or reduction using such treatment reagents as inorganic binders (e.g., cement, fly ash, kiln dust), organic binders (e.g., activated carbon), ferrous sulfate, ferric chloride, sodium sulfide, acids, bases, oxidizers and/or reducing agents. A combination of treatment methods may be needed in order to ensure compliance with applicable LDRs. For example waste that requires the treatment of RCRA metals as well as volatile organic compounds (VOC) or semi-volatile compounds (SVOC) consists of the oxidization of VOC and SVOC compounds, followed by the chemical reduction of metals.

Stabilization of metals typically involves the addition of lime based reagents but may include other reagents to enhance the precipitation or binding of metals (e.g., sulfides, reagents that will change valence states to reduce solubility). Waste and reagents are mixed with an excavator inside a waste treatment tank. After mixing, the waste is tested to confirm constituents requiring treatment meet applicable treatment standards. Treated mixed RCRA/TSCA waste will then be transferred to WDI's RCRA/TSCA landfill.

18. *In Section 2.4, describe the air pollution control devices in the treatment building(s) to be utilized in more detail including how effective these devices are for removing PCB vapors from the air.*

Attachment A Section 2.5 specifies the air pollution control devices in the treatment buildings.

Both the EWTB and the WWTB have air pollution control systems that maintain negative pressure in the buildings and remove at least 99% of particulate matter

using baghouses. The EWTB is additionally equipped with a regenerative thermal oxidizer (RTO) that destroys at least 95% of VOCs followed by a caustic scrubber. Air pollution control systems are operated in accordance with the facility's Title V Renewable Operating Permit administered by the Michigan Department of Environmental Quality's (MDEQ) Air Quality Division (AQD)

TSCA-regulated PCBs will be present in solid phase and as a result the presence of PCBs inside the treatment building's air will predominantly, if not completely, be in particulate form, and will be removed by the baghouse at a removal efficiency of at least 99%.

MDWTP is not aware of a TSCA PCB regulatory standard on which to base the assessment of the control of non-particulate PCBs. In reviewing the waste treatment industry for guidance, from the available information that could be found, non-particulate air pollution equipment has not been required for TSCA approved TSDFs or other TSDFs known to treat, or that have treated, metals in RCRA/TSCA waste; at best, some of these facilities have particulate removal equipment. We are also aware that it is common practice for generators of PCB remediation waste with RCRA metals exceeding LDRs to perform outdoor treatment without any air pollution control equipment. Therefore, it appears that the air pollution control systems operated by MDWTP meet or exceed industry standards commonly accepted.

19. *How many days will the RCRA/PCB wastes remain in the treatment tanks?*

Though unlikely to occur, RCRA/PCB waste could remain in the treatment tanks for 365 days, consistent with MDWTP's Part 111 RCRA permit. Normally waste will not remain in the treatment tanks for more than one to three days depending on the day of the week that waste is treated, the post-treatment testing required (TCLP testing takes about one day), and whether retreatment is necessary.

20. *After treatment, will the treated RCRA/PCB wastes be disposed of immediately or stored temporarily until disposed? If the treated RCRA/PCB waste might be stored temporarily, where will it be stored and in what sort of containers?*

After treatment has been completed, testing required to confirm RCRA LDRs have been met will be completed during which time the waste must remain in storage. Waste will most likely be stored in the waste treatment tanks pending test results. However, it is possible that treated waste may be transferred to roll-off boxes or other bulk shipping containers while waiting for test results to be available in which case such waste would be covered and stored in the NCSA. Once confirmatory analysis is received, mixed RCRA/TSCA waste will be transferred to WDI in a timely manner. Typically waste will be transferred to WDI the same day that passing test results are received unless testing occurs on a weekend in which case transfer usually will occur the next business day. It is desirable to transfer the waste to landfill as quickly as possible to clear space for the next batch of waste to be treated.

21. *Are treatment tanks cleaned? If so, how are they cleaned and at what frequency are they cleaned?*

There is not a routine need for cleaning the tanks. When there is a need to clean a tank (e.g., to perform repairs), tanks may be power washed and decontamination water removed (pump, vacuum truck) and transferred to a different waste treatment tank for treatment.

22. *Will all treated PCB/RCRA waste be disposed of in the Wayne Disposal Landfill?*

All treated PCB/RCRA waste will be disposed of at WDI or another TSCA authorized landfill.

23. *Provide EPA with any written plans or procedures that MDWTP maintains for the treatment of the RCRA/PCB waste proposed in the application. In addition, provide any treatment tank inspection and maintenance procedures.*

MDWTP does not maintain any written plans for the treatment of RCRA/PCB waste as we are not authorized to treat RCRA/PCB waste.

Treatment tanks are inspected in accordance with MDWTP's Part 111 RCRA permit. Provided below are the tank inspection procedures outlined in MDWTP's October 2016 submittal of its Part 111 Renewal.

Tanks

In accordance with the requirements set forth in 40 CFR 264.193, 264.195, 264.1084 tank system components will be inspected as follows:

Once each operating day (every day the tank is in operation (i.e., storing or treating hazardous waste)):

- ◆ Above ground portions of the tank including areas around the tank
 - Erosion or signs of releases of hazardous waste
- ◆ Secondary containment and area around the tanks
 - Free of cracks and gaps
 - Spilled liquid waste or accumulated precipitation must be removed from the secondary containment system within 24 hours of detection in accordance with 40 CFR 264.193.
 - If spilled or leaked waste and accumulated precipitation cannot be removed from the secondary containment system within 24 hours, MDWTP will demonstrate to the DEQ that removal of the released waste or accumulated precipitation cannot be accomplished within 24 hours. (40 CFR 264.193(c)(4))
- ◆ Leak detection system
 - Check tanks A-H to detect the failure of the primary and secondary structure.
 - If the leak detection system fails to detect the failure of the primary containment structure or the presence of any release within 24 hours, MDWTP will demonstrate to MDEQ that existing detection technologies or site conditions will not allow the detection of a release within 24 hours. (40 CFR 264.193(c)(3))

- ◆ Ancillary equipment without secondary containment
 - Equipment ancillary to Silos 1-6 will be inspected daily when hazardous waste is present in the tanks and the equipment is used. All other tank system ancillary equipment is in secondary containment.

Monthly (if tank is not used in the month inspection will be completed prior to the next use)

- ◆ Overfill controls
 - Ensure overfill controls are properly functioning.

All tanks and ancillary equipment that must have secondary containment systems meet the requirements of 40 CFR 264.193. As a result, leak and fit testing of tanks and ancillary equipment will occur following the replacement or repair of the tank system.

24. *Describe your protocol for determining whether a waste will be analyzed for PCBs at the MDWTP facility and include any relevant written procedures or guidance to this determination including analytical procedures.*

Prior to the receipt of each waste stream, qualified MDWTP staff review generator waste characterizations and supporting documentation to confirm the waste has been properly characterized and may be managed at the facility. As previously noted, MDWTP is not requesting the treatment of PCBs in RCRA/TSCA waste. Waste that will be treated will meet any applicable PCB treatment standard prior to approval into MDWTP, and this will be ensured during the waste approval process.

MDWTP intends to utilize a PCB screening method to confirm generator PCB concentrations are below the applicable threshold prior to the treatment of any incidental liquids in order to ensure liquids that require incineration are not solidified prior to placement in the landfill. The "incidental liquid" determination is made by the generator at the time of waste characterization or characterized by the generator during the discrepancy resolution process. The screening method may also be utilized if additional information is needed in order to confirm a generator's characterization.

The screening method utilizes a gas chromatograph with appropriate column and ECD detector. Prior to analysis, a 1ppm aroclor standard is analyzed to confirm the instrument is in working condition (gasses are flowing, column is functional, injection port is clean). This standard may rotate between several common aroclors 1260, 1254, 1242, etc. If there are considerable amounts of solids/particulate in the liquid portion, the sample is centrifuged. The centrifuged sample will be evaluated for phase separation in the liquid layer. If multiple layers are present each individual layer will be analyzed separately. The aqueous sample or supernatant from the centrifuged sample (5 mL) is then placed into a vial and surrogates are added (SW846 8082 method recommended surrogates decachlorobipheynyl and tetrachloro-m-xylene). The sample with surrogate is then extracted in a 1:1 ratio with hexane. A 1 mL aliquot of the hexane is removed and injected into the GC/ECD system. If surrogate shows adequate recoveries, the area counts of the sample are compared to those of the 1ppm aroclor standard. If the sample area counts are less than the 1ppm aroclor standard, the sample is reported out as <10ppm PCB. If the sample area counts are above the 1ppm aroclor standard, the full 8082 PCB method is performed in order to quantify the PCB concentration.

25. *Provide a copy of the ambient air and groundwater monitoring programs for MDWTP.*

Attachment E provides the ambient air and groundwater monitoring program submitted in MDWTP's Part 111 renewal application.

Please contact me with any additional questions or comments at (734) 699-6294.

Sincerely,



Sylwia Scott
Environmental Manager

sylwia.scott@usecology.com

Attachment A
Updated MDWTP Permit Application

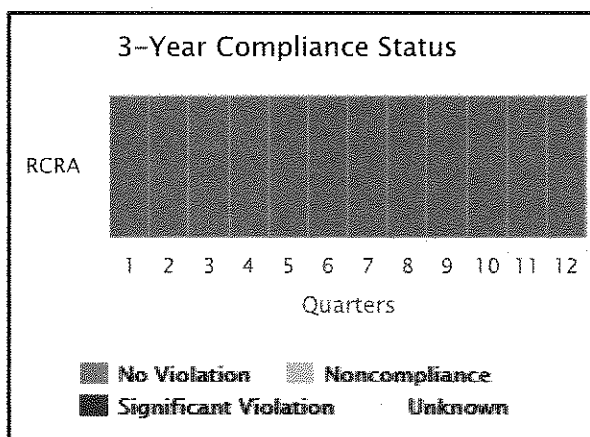
Attachment B
Updated Compliance History

Detailed Facility Report

Facility Summary

**MICHIGAN DISPOSAL WASTE TREATMENT
PLANT**
**49350 N. I-94 SERVICE DRIVE, BELLEVILLE,
MI 48111** ⓘ

FRS (Facility Registry Service) ID: 110063118950
EPA Region: 05
Latitude: 42.219866
Longitude: -83.522802
Locational Data Source: FRS
Industry: Waste Management and Remediation
Services
Indian Country: N



Enforcement and Compliance Summary

Statute	Insp (5 Years)	Date of Last Inspection	Compliance Status	Qtrs in NC (Non-Compliance) of 12	Qtrs in Significant Violation	Informal Enforcement Actions (5 years)	Formal Enforcement Actions (5 years)	Penalties from Formal Enforcement Actions (5 years)	EPA Cases (5 years)	Penalties from EPA Cases (5 years)
RCRA	23	09/13/2016	No Violation	0	0	1	2	\$390,124	1	\$390,124

Related Reports

ⓘ [Enforcement Case Report](#)

Regulatory Information

Clean Air Act (CAA): No Information
Clean Water Act (CWA): No Information
Resource Conservation and Recovery Act (RCRA): Active (HPA) LQG Operating TSDF (MID000724831)
Safe Drinking Water Act (SDWA): No Information

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information
Greenhouse Gas Emissions (eGGRT): No Information
Toxic Releases (TRI): No Information

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
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FRS		1100631 18950			N	42.219866	-83.522802
RCR	RCRA	MID000724831	IQG Operating TSDF TSDF	Active (HP A)	N	42.219831	-83.524757

Facility Address

System	Statute	Identifier	Facility Name	Facility Address
FRS		1100631 18950	MICHIGAN DISPOSAL W ASTE TREATMENT PLANT	49350 N. I-94 SER VICE DRIVE, BELLEVILLE, MI 481 11
RCR	RCRA	MID000724831	MICHIGAN DISPOSAL, INC.	49350 NOR TH I-94 SER VICE DRIVE, BELLEVILLE, MI 481 11

Facility SIC (Standard Industrial Classification)

Codes

System	Identifier	SIC Code	SIC Desc
		No data records returned	

Facility NAICS (North American Industry

Classification System) Codes

System	Identifier	NAICS Code	NAICS Description
RCR	MID000724831	56221 1	Hazardous W aste Treatment And Disposal

Facility Tribe Information

Reservation Name	Tribe Name	EPA Tribal ID	Distance to T ribe (miles)
		No data records returned	

Enforcement and Compliance

Compliance Monitoring History (5 years)

Statute	Source ID	System	Inspection T ype	Lead Agency	Date	Finding
RCRA	MID000724831	RCR	COMPLIANCE EV ALUATION INSPECTION ON-SITE	State	09/13/2016	No Violations Or Compliance Issues W ere Found
RCRA	MID000724831	RCR	NON-FINANCIAL RECORD REVIEW	State	07/27/2016	No Violations Or Compliance Issues W ere Found
RCRA	MID000724831	RCR	FINANCIAL RECORD REVIEW	State	06/08/2016	No Violations Or Compliance Issues W ere Found
RCRA	MID000724831	RCR	COMPLIANCE EV ALUATION INSPECTION ON-SITE	State	06/07/2016	No Violations Or Compliance Issues W ere Found
RCRA	MID000724831	RCR	NON-FINANCIAL RECORD REVIEW	State	05/06/2016	No Violations Or Compliance Issues W ere Found
RCRA	MID000724831	RCR	COMPLIANCE EV ALUATION INSPECTION ON-SITE	State	03/22/2016	No Violations Or Compliance Issues W ere Found
RCRA	MID000724831	RCR	NON-FINANCIAL RECORD REVIEW	State	03/17/2016	No Violations Or Compliance Issues W ere Found
RCRA	MID000724831	RCR	FINANCIAL RECORD REVIEW	State	12/28/2015	No Violations Or Compliance Issues W ere Found
RCRA	MID000724831	RCR	NON-FINANCIAL RECORD REVIEW	State	11/23/2015	No Violations Or Compliance Issues W ere Found
RCRA	MID000724831	RCR	COMPLIANCE EV ALUATION INSPECTION ON-SITE	State	11/10/2015	No Violations Or Compliance Issues W ere Found
RCRA	MID000724831	RCR	NON-FINANCIAL RECORD REVIEW	State	10/28/2015	No Violations Or Compliance Issues W ere Found
RCRA	MID000724831	RCR	NON-FINANCIAL RECORD REVIEW	State	08/28/2015	No Violations Or Compliance Issues W ere Found
RCRA	MID000724831	RCR	COMPLIANCE EV ALUATION INSPECTION ON-SITE	State	08/25/2015	No Violations Or Compliance Issues W ere Found
RCRA	MID000724831	RCR	FOCUSSED COMPLIANCE INSPECTION	State	08/18/2015	No Violations Or Compliance Issues W ere Found
RCRA	MID000724831	RCR	NON-FINANCIAL RECORD REVIEW	State	08/11/2015	No Violations Or Compliance Issues W ere Found
RCRA	MID000724831	RCR	COMPLIANCE EV ALUATION INSPECTION ON-SITE	State	06/30/2015	No Violations Or Compliance Issues W ere Found
RCRA	MID000724831	RCR	NON-FINANCIAL RECORD REVIEW	State	06/09/2015	No Violations Or Compliance Issues W ere Found
RCRA	MID000724831	RCR	FINANCIAL RECORD REVIEW	State	06/08/2015	No Violations Or Compliance Issues W ere Found
RCRA	MID000724831	RCR	COMPLIANCE EV ALUATION INSPECTION ON-SITE	State	04/10/2015	No Violations Or Compliance Issues W ere Found
RCRA	MID000724831	RCR	NON-FINANCIAL RECORD REVIEW	State	03/19/2015	No Violations Or Compliance Issues W ere Found

Statute	Source ID	System	Inspection Type	Lead Agency	Date	Finding
RCRA	MID000724831	RCR	NON-FINANCIAL RECORD REVIEW	State	01/20/2015	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	FINANCIAL RECORD REVIEW	State	01/07/2015	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	COMPLIANCE EVALUATION INSPECTION ON-SITE	State	11/06/2014	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	NON-FINANCIAL RECORD REVIEW	State	10/31/2014	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	COMPLIANCE EVALUATION INSPECTION ON-SITE	State	09/11/2014	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	NON-FINANCIAL RECORD REVIEW	State	08/19/2014	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	COMPLIANCE EVALUATION INSPECTION ON-SITE	State	06/20/2014	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	COMPLIANCE EVALUATION INSPECTION ON-SITE	State	04/08/2014	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	NON-FINANCIAL RECORD REVIEW	State	04/03/2014	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	FINANCIAL RECORD REVIEW	State	04/02/2014	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	FINANCIAL RECORD REVIEW	State	03/14/2014	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	NON-FINANCIAL RECORD REVIEW	State	01/15/2014	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	NON-FINANCIAL RECORD REVIEW	State	11/20/2013	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	COMPLIANCE EVALUATION INSPECTION ON-SITE	State	11/14/2013	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	NON-FINANCIAL RECORD REVIEW	State	10/10/2013	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	COMPLIANCE EVALUATION INSPECTION ON-SITE	State	08/14/2013	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	FOCUSED COMPLIANCE INSPECTION	State	07/25/2013	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	NON-FINANCIAL RECORD REVIEW	State	07/25/2013	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	NON-FINANCIAL RECORD REVIEW	State	07/18/2013	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	FINANCIAL RECORD REVIEW	State	06/25/2013	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	COMPLIANCE EVALUATION INSPECTION ON-SITE	State	06/19/2013	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	NON-FINANCIAL RECORD REVIEW	State	05/17/2013	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	NON-FINANCIAL RECORD REVIEW	State	03/19/2013	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	FINANCIAL RECORD REVIEW	State	03/13/2013	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	COMPLIANCE EVALUATION INSPECTION ON-SITE	State	02/13/2013	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	NON-FINANCIAL RECORD REVIEW	State	01/17/2013	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	NON-FINANCIAL RECORD REVIEW	State	01/10/2013	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	COMPLIANCE EVALUATION INSPECTION ON-SITE	State	12/05/2012	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	NON-FINANCIAL RECORD REVIEW	State	11/28/2012	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	NON-FINANCIAL RECORD REVIEW	State	10/29/2012	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	COMPLIANCE EVALUATION INSPECTION ON-SITE	State	09/11/2012	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	FOCUSED COMPLIANCE INSPECTION	State	08/14/2012	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	NON-FINANCIAL RECORD REVIEW	State	07/20/2012	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	FINANCIAL RECORD REVIEW	State	06/14/2012	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	COMPLIANCE EVALUATION INSPECTION ON-SITE	State	06/13/2012	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	FINANCIAL RECORD REVIEW	State	06/05/2012	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	NON-FINANCIAL RECORD REVIEW	State	05/02/2012	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	NON-FINANCIAL RECORD REVIEW	State	03/22/2012	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	COMPLIANCE EVALUATION INSPECTION ON-SITE	State	02/09/2012	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	NON-FINANCIAL RECORD REVIEW	State	01/12/2012	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	COMPLIANCE EVALUATION INSPECTION ON-SITE	State	11/08/2011	No Violations Or Compliance Issues Were Found
RCRA	MID000724831	RCR	NON-FINANCIAL RECORD REVIEW	State	11/01/2011	No Violations Or Compliance Issues Were Found

Entries in italics are not considered inspections in official counts.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Non-compliance) /HPV (High Priority Violation)	Description	Current As Of	Qtrs in NC (Non-Compliance) (of 12)
RCRA	MID000724831	No		10/29/2016	0

Three Year Compliance Status by Quarter

Statute	Program/Pollutant/Violation Type	QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12
RCRA (Source ID: MID000724831)		01/01-03/31/14	04/01-06/30/14	07/01-09/30/14	10/01-12/31/14	01/01-03/31/15	04/01-06/30/15	07/01-09/30/15	10/01-12/31/15	01/01-03/31/16	04/01-06/30/16	07/01-09/30/16	10/01-12/31/16
RCRA	Facility-Level Status												

Informal Enforcement Actions (5 Years)

Statute	Source ID	Type of Action	Lead Agency	Date
RCRA	MID000724831	LETTER OF INTENT TO INITIATE ENFORCEMENT ACTION	EPA	09/10/2012

Formal Enforcement Actions (5 Years)

Statute	Source ID	Type of Action	Lead Agency	Date	Penalty	Penalty Description
RCRA	MID000724831	FINAL 3008(A) COMPLIANCE ORDER	EPA	06/24/2013	\$390,124	Final Monetary Penalty
RCRA	MID000724831	INITIAL 3008(A) COMPLIANCE	EPA	06/24/2013		

ICIS (Integrated Compliance Information System) Case History (5 years)

Primary Law/Section	Case No.	Case Type	Lead Agency	Case Name	Issued/Filed Date	Settlement Date	Federal Penalty	State/Local Penalty	SEP (Supplemental Environmental Project) Cost	Comp Action Cost
RCRA / §3004	(15-2013)-9905	Administrative - Formal	EPA	MICHIGAN DISPOSAL	06/24/2013	06/24/2013	\$390,124	\$0	\$0	\$0

Environmental Conditions

Water Quality

Permit ID	Combined Sewer System?	Number of CSO (Combined Sewer Overflow) Outfalls	Watershed (HUC (Hydrologic Unit Code) 8)	Watershed Name (HUC (Hydrologic Unit Code) 8)	Watershed (HUC (Hydrologic Unit Code) 12)	Watershed Name (HUC (Hydrologic Unit Code) 12)	Receiving Waters	Impaired Waters	Impaired Class	Causes of Impairment(s) by Group(s)	Watershed with ESA Endangered Species Act-listed Aquatic Species?
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No data records returned

Waterbody Designated Uses

Reach Code	Waterbody Name	Exceptional Use	Recreational Use	Aquatic Life Use	Shellfish Use	Beach Closure Within Last Year	Beach Closure Within Last Two Years
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No data records returned

Air Quality

Non-Attainment Area?	Pollutant(s)
Yes	Ozone
No	Lead
Yes	Particulate Matter
No	Sulfur Dioxide

Pollutants

Toxics Release Inventory History of Reported Chemicals Released in Pounds per Year at Site ①

TRI Facility ID Year Total Air Emissions Surface Water Discharges Off-Site Transfers to POTWs (Publicly Owned Treatment Works) Under ground Injections Releases to Land Total On-site Releases Total Off-site Releases

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year ⓘ

Chemical Name

No data records returned

Demographic Profile

Demographic Profile of Surrounding Area (3 Miles)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2010 US Census and American Community Survey data, and are accurate to the extent that the facility latitude and longitude listed below are correct. The latitude and longitude are obtained from the EPA Locational Reference Table (LRT) when available.

Radius of Area:	3	Land Area:	92%	Households in Area:	12,872
Center latitude:	42.219866	Water Area:	8%	Housing Units in Area:	14,401
Center Longitude:	-83.522802	Population Density:	1,164/sq mi.	Households on Public Assistance:	392
Total Persons:	30,104	Percent Minority:	38%	Persons Below Poverty Level:	9,450
Race Breakdown		Persons (%)	Age Breakdown		Persons (%)
White:		19,198 (63.77%)	Child 5 years and younger:		1,956 (6.5%)
African-American:		9,024 (29.98%)	Minors 17 years and younger:		6,962 (23.13%)
Hispanic-Origin:		966 (3.21%)	Adults 18 years and older:		23,143 (76.88%)
Asian/Pacific Islander:		422 (1.4%)	Seniors 65 years and older:		2,977 (9.89%)
American Indian:		153 (.51%)			
Other/Multiracial:		1,308 (4.34%)			
Education Level (Persons 25 & older)		Persons (%)	Income Breakdown		Households (%)
Less than 9th Grade:		615 (3.19%)	Less than \$15,000:		1,642 (13.26%)
9th through 12th Grade:		2,044 (10.61%)	\$15,000 - \$25,000:		1,348 (10.88%)
High School Diploma:		3,781 (30.02%)	\$25,000 - \$50,000:		3,873 (31.27%)
Some College/2-yr:		6,384 (33.15%)	\$50,000 - \$75,000:		2,175 (17.56%)
B.S./B.A. or More:		4,436 (23.03%)	Greater than \$75,000:		3,347 (27.02%)

Attachment C
Xypex™ Specification Information



CONCENTRATE

DESCRIPTION

Xypex is a unique chemical treatment for the waterproofing, protection and repair of concrete. XYPEX CONCENTRATE is the most chemically active product within the Xypex Crystalline Waterproofing System. When mixed with water, this light grey powder is applied as a cementitious slurry coat to above-grade or below-grade concrete, either as a single coat or as the first of a two-coat application. It is also mixed in Dry-Pac form for sealing strips at construction joints, or for the repairing of cracks, faulty construction joints and honeycombs. Xypex prevents the penetration of water and other liquids from any direction by causing a catalytic reaction that produces a non-soluble crystalline formation within the pores and capillary tracts of concrete and cement-based materials.

RECOMMENDED FOR:

- Reservoirs
- Sewage and Water Treatment Plants
- Underground Vaults
- Secondary Containment Structures
- Foundations
- Tunnels and Subway Systems
- Swimming Pools
- Parking Structures

ADVANTAGES

- Resists extreme hydrostatic pressure
- Becomes an integral part of the substrate
- Can seal hairline cracks up to 0.4 mm
- Allows concrete to breathe
- Highly resistant to aggressive chemicals
- Non-toxic
- Does not require a dry surface
- Cannot puncture, tear or come apart at the seams
- No costly surface priming or leveling prior to application
- Does not require sealing, lapping and finishing of seams at corners, edges or between membranes
- Can be applied to the positive or the negative side of the concrete surface

- Does not require protection during backfilling or during placement of steel, wire mesh or other materials
- Less costly to apply than most other methods
- Not subject to deterioration
- Permanent

PACKAGING

Xypex Concentrate is available in 20 lb. (9.1 kg) pails, 60 lb. (27.2 kg) pails and 50 lb. (22.7 kg) bags.

STORAGE

Xypex products must be stored dry at a minimum temperature of 45°F (7°C). Shelf life is one year when stored under proper conditions.

COVERAGE

For normal surface conditions, the coverage rate for each Xypex coat is 6 to 7.2 sq. ft./lb. (1.25 - 1.5 lb./sq. yd. or 0.65 - 0.8 kg/m²).

TEST DATA

PERMEABILITY

U.S. Army Corps of Engineers (USACE) CRD C48-73
 "Permeability of Concrete" Pacific Testing Labs, Seattle, USA
 Two inch (51 mm) thick, 2000 psi (13.8 MPa) Xypex-treated concrete samples were pressure tested up to a 405 ft. (124 m) water head (175 psi/1.2 MPa), the limit of the testing apparatus. While untreated samples showed marked leakage, the Xypex-treated samples (as a result of the crystallization process) became totally sealed and exhibited no measurable leakage.

DIN 1048 "Water Impermeability of Concrete" Bautest - Corporation for Research & Testing of Building Materials, Augsburg, Germany

Twenty cm thick Xypex-treated concrete samples were pressure tested up to 7 bars (230 ft./70 m water head) for 24 hours to determine water impermeability. While the reference specimens measured water penetration up to a depth of 92 mm, Xypex-treated samples measured water penetration of zero to an average of 4 mm.

ÖNORM B 3303 "Water Impermeability of Concrete"
Technologisches Gewerbemuseum, Federal Higher
Technical Education & Research Institute, Vienna, Austria

Xypex-treated concrete samples were pressure tested to a maximum 7 bars (230 ft./70 m water head) for 10 days. Test revealed that while 25 ml of water had penetrated the untreated concrete samples, zero ml had penetrated the Xypex-treated samples. Test specimens were then broken and showed water penetration to a depth of 15 mm on untreated samples but no measurable water penetration on the Xypex-treated samples.

CSN 1209/1321 "Impermeability and Resistance to Pressurized Water" Institute of Civil Engineering, Technology and Testing, Bratislava, Slovak Republic

Xypex-treated and untreated concrete samples were exposed to 1.2 MPa of pressure to determine water permeability. Results showed the Xypex-treated samples provided effective protection against hydrostatic water pressure. Treated and untreated samples were also subjected to contact with silage juices and various petroleum products (e.g. diesel oil, transformer oil, gasoline) at 14 kPa for 28 days. The Xypex-treated samples significantly reduced the penetration of these solutions.

CHEMICAL RESISTANCE

ASTM C 267-77 "Chemical Resistance to Mortars"
Pacific Testing Labs, Seattle, USA

Xypex-treated cylinders and untreated cylinders were exposed to hydrochloric acid, caustic soda, toluene, mineral oil, ethylene glycol, pool chlorine and brake fluid and other chemicals. Results indicated that chemical exposure did not have any detrimental effects on the Xypex coating. Tests following chemical exposure measured an average 17% higher compressive strength in the Xypex-treated specimens over the untreated control samples.

IWATE University Technical Report "Resistance to Acid Attack" Tokyo, Japan

Xypex-treated mortar and untreated mortar were measured for acid resistance after exposure to a 5% H₂SO₄ solution for 100 days. Xypex suppressed concrete erosion to 1/8 of the reference samples.

FREEZE/THAW DURABILITY

ASTM C 672 "Standard Test Method for Scaling Resistance of Concrete Surfaces Exposed to De-icing Chemicals"
Twin City Testing Lab, St. Paul, USA

Xypex-treated samples restricted chloride ion concentration to below the level necessary to promote electrolytic

corrosion of reinforcing steel. Visual examination of untreated panels after 50 freeze/thaw cycles showed a marked increase in surface deterioration compared to Xypex-treated samples.

JIS A 6204 "Concrete Freeze/Thaw" Japan Testing Center
For Construction Materials, Tokyo, Japan

The resonating frequency of both untreated and Xypex-treated concrete samples were measured throughout 435 freeze/thaw cycles. At 204 cycles, the Xypex-treated samples showed 96% relative durability compared to 90% in the untreated samples. At 435 cycles, the Xypex-treated samples measured 91% relative durability compared to 78% in the untreated reference samples.

POTABLE WATER EXPOSURE

NSF 61 "Drinking Water System Component-Health Effects"
NSF International, Ann Arbor, USA

Exposure testing of potable water in contact with Xypex-treated samples indicated no harmful effects.

RADIATION RESISTANCE

U.S.A. Standard No. N69 "Protective Coatings for the Nuclear Industry" Pacific Testing Labs, Seattle, USA

After exposure to 5.76×10^4 rads of gamma radiation, the Xypex treatment revealed no ill effects or damages.

APPLICATION PROCEDURES

1. SURFACE PREPARATION Concrete surfaces to be treated must be clean and free of laitance, dirt, film, paint, coating or other foreign matter. Surfaces must also have an open capillary system to provide "tooth and suction" for the Xypex treatment. If surface is too smooth (e.g. where steel forms are used) or covered with excess form oil or other foreign matter, the concrete should be lightly sand-blasted, waterblasted, or etched with muriatic (HCL) acid.

2. STRUCTURAL REPAIR Rout out cracks, faulty construction joints and other structural defects to a depth of 1.5 inches (37 mm) and a width of one inch (25 mm). Apply a brush coat of Xypex Concentrate as described in steps 5 & 6 and allow to dry for 10 minutes. Fill cavity by tightly compressing Dry-Pac into the groove with pneumatic packing tool or with hammer and wood block. Dry-Pac is prepared by mixing six parts Xypex Concentrate powder with one part water to a dry, lumpy consistency.

Note:

1. Against a direct flow of water (leakage) or where there is excess moisture due to seepage, use Xypex Patch'n Plug then Xypex Dry-Pac followed by a brush coat of Xypex

Concentrate. (Refer to Xypex Specifications and Applications Manual for full details.)

2. For expansion joints or chronic moving cracks, flexible materials such as expansion joint sealants should be used.

3. **WETTING CONCRETE** Xypex requires a saturated substrate and a damp surface. Concrete surfaces must be thoroughly saturated with clean water prior to the application so as to aid the proper curing of the treatment and to ensure the growth of the crystalline formation deep within the pores of the concrete. Remove excess surface water before the application. If concrete surface dries out before application, it must be re-wetted.

4. **MIXING FOR SLURRY COAT** Mix Xypex powder with clean water to a creamy consistency in the following proportions:

For Brush Application

- 1.25 - 1.5 lb./sq. yd. (0.65 - 0.8 kg/m²)
- 5 parts powder to 2 parts water
- 2.0 lb./sq. yd. (1.0 kg/m²)
- 3 parts powder to 1 part water

For Spray Application

- 1.25 - 1.5 lb./sq. yd. (0.65 - 0.8 kg/m²)
- 5 parts powder to 3 parts water
- (ratio may vary with equipment type)

Do not mix more Xypex material than can be applied in 20 minutes. Do not add water once mix starts to harden. Protect hands with rubber gloves.

5. **APPLYING XYPEX** Apply Xypex with a semi-stiff nylon bristle brush, push broom (for large horizontal surfaces) or specialized spray equipment. The coating must be uniformly applied and should be just under 1/16 in. (1.25 mm). When a second coat (Xypex Concentrate or Xypex Modified) is required, it should be applied after the first coat has reached an initial set but while it is still "green" (less than 48 hours). Light pre-watering between coats may be required due to drying. The Xypex treatment must not be applied under rainy conditions or when ambient temperature is below 40°F (4°C). For recommended equipment, contact Xypex Chemical Corporation or your nearest Xypex distributor.

6. **CURING** A misty fog spray of clean water must be used for curing the Xypex treatment. Curing should begin as soon as the Xypex has set to the point where it will not be damaged by a fine spray of water. Under normal

conditions, it is sufficient to spray Xypex-treated surfaces three times per day for two to three days. In hot or arid climates, spraying may be required more frequently. During the curing period, the coating must be protected from rainfall, frost, wind, the puddling of water and temperatures below 36°F (2°C) for a period of not less than 48 hours after application. If plastic sheeting is used as protection, it must be raised off the Xypex to allow the coating to breathe. Xypex Gamma Cure may be used in lieu of water curing for certain applications (consult with Xypex Chemical Corporation or your nearest Xypex distributor).

Note: For concrete structures that hold liquids (e.g. reservoirs, swimming pools, tanks, etc.), Xypex should be cured for three days and allowed to set for 12 days before filling the structure with liquid.

TECHNICAL SERVICES

For more instructions, alternative application methods, or information concerning the compatibility of the Xypex treatment with other products or technologies, contact the Technical Department of Xypex Chemical Corporation or your local Xypex representative.

SAFE HANDLING INFORMATION

Xypex is alkaline. As a cementitious powder or mixture, Xypex may cause significant skin and eye irritation. Directions for treating these problems are clearly detailed on all Xypex pails and packaging. The Manufacturer also maintains comprehensive and up-to-date Material Safety Data Sheets on all its products. Each sheet contains health and safety information for the protection of workers and customers. The Manufacturer recommends you contact Xypex Chemical Corporation or your local Xypex representative to obtain copies of Material Safety Data Sheets prior to product storage or use.

WARRANTY

The Manufacturer warrants that the products manufactured by it shall be free from material defects and will be consistent with its normal high quality. Should any of the products be proven defective, the liability to the Manufacturer shall be limited to replacement of the product ex factory. The Manufacturer makes no warranty as to merchantability or fitness for a particular purpose and this warranty is in lieu of all other warranties expressed or implied. The user shall determine the suitability of the product for his intended use and assume all risks and liability in connection therewith.



ISO 9001:2000
FM 63167



13731 Mayfield Place, Richmond, British Columbia, Canada V6V 2G9

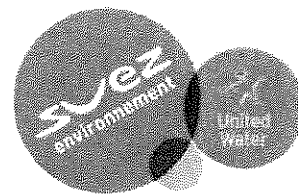
Tel: (604) 273-5265 Fax: (604) 270-0451

E-mail: info@xypex.com Website: www.xypex.com

XYPEX is a registered trademark of Xypex Chemical Corporation.

Attachment D

Wayne Disposal Inc. (WDI) Industrial Pretreatment Permit



May 15, 2013

Wayne Disposal, Inc.
49350 N. I 94 Service Drive
Belleville, MI 48111
Attn: Mr. Ken Weber

Re: Wayne Disposal, Inc. Discharge Permit No. D-11201

Dear Mr. Weber;

Enclosed, please find your revised Industrial Discharge Permit. Your permit contains some new parameters and updated limits. Please review your revised permit carefully to ensure that you understand all of the requirements it contains.

If there are any questions, please contact me at (734) 379-3855.

Sincerely,
United Water

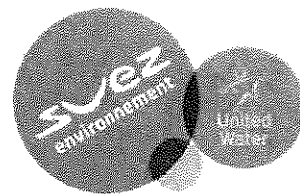
A handwritten signature in black ink, appearing to read 'Mark Houle', is written over the typed name.

Mark Houle
Operations Manager

Cc: South Huron Valley Utility Authority Board
Industrial User File



SOUTH HURON VALLEY UTILITY AUTHORITY
34001 WEST JEFFERSON AVE
BROWNSTOWN TOWNSHIP, MI 48173
(734) 379-3855
INDUSTRIAL PRETREATMENT PROGRAM
CLASS D WASTEWATER DISCHARGE PERMIT



Permit No.: D-11201
Expiration Date: 5/29/18
Effective Date: 5/30/13

In accordance with the provisions of Article V, Section 4.02 of the South Huron Valley Utility Authority Rules and Regulations and pursuant to the requirements of the Industrial Pretreatment Program as specified in 40 CFR 403.8 (f), **Wayne Disposal, Inc.(WDI)**

Mailing/Facility Address:
49350 N. I 94 Service Drive
Belleville, MI 48111

Contact Person(s):
Kerry Durnen (734) 699-6265 (734) 576-0189 (Cell)
Ken Weber (734) 699-6280 (734) 576-0153 (Cell)

is hereby authorized to discharge industrial wastewater from the above identified facility and through the outfall identified herein into the sanitary sewer system tributary to the South Huron Valley Wastewater Treatment Plant in accordance with the conditions set forth in this permit. Compliance with this permit does not relieve the permittee of its obligation to comply with any or all applicable Pretreatment regulations, standards, or requirements, or laws that may become effective during the term of this permit.

Noncompliance with any term or condition of this permit shall constitute a violation of the South Huron Valley Utility Authority Rules and Regulations.

If the permittee wishes to continue to discharge after the expiration date of this permit, an application must be filed for permit re-issuance in accordance with the requirements of Article V, Section 4 of the Rules and Regulations, a minimum of 90 days prior to the expiration date.

The permittee shall pay an ANNUAL SURVEILLANCE FEE OF \$4,095.00 for the current year of this permit, in accordance with the conditions of Part IIA.4 of this permit. Permit fees are subject to yearly evaluations and adjustments based on flow, number of constituents monitored, and any other factors influencing the costs associated with the administration of the Industrial Pretreatment Program.

Authorization of Permit: South Huron Valley Utility Authority

Signature of Official: _____

Printed Name: Mark Houle

Title: Operations Manager - SHVUA WWTP

Date: 5-15-13

PART I

A. DISCHARGE LIMITATIONS

1. Description of Permitted Discharges:

The permittee is authorized to discharge pretreated:

- a. Landfill leachate from closed hazardous landfills (identified as Cells V and VII) and closed municipal solid waste (non-hazardous) landfill (identified as Cells I, IV, IX, X and XI).
- b. Leachate and storm water runoff (i.e. contact water) from the active hazardous waste landfill (identified as Cell VI).
- c. Runoff from roadways and truck parking areas that collects in the Lined Pond (see the WWTP Figure in Attachment D), pretreated when necessary. Options for managing runoff collected in the lined pond include: direct discharge to sewer; pretreat by activated carbon adsorption (See Attachment D-1); transfer into the Wastewater Treatment Plant and pretreat; transfer into Compliance Tanks A or B and direct discharge.
- d. Wash water from equipment wash stations.
- e. Runoff from the drum storage area "blind trench" and collection dikes.
- f. Condensate from the Wayne Energy facility.
- g. Runoff from the non-paved portions of the facility that collects in the sedimentation basin may be transferred into the lined pond, pretreated when necessary. Options for managing runoff collected in the Sedimentation Basin include: direct discharge to sewer; transfer to the Lined Pond and then direct discharge; transfer into Lined Pond and pretreat; transfer into the Wastewater Treatment Plant and pretreat; Transfer into Compliance Tanks A or B and direct discharge.
- h. No water may be discharged that contains detectable levels (i.e. > 0.0001 mg/l) of PCBs. Potential sources of PCB contaminated water include leachate and contact water from Cell VI, Lined Pond water, and wheel wash water. These potential sources will be tested and managed in accordance with the WDI PCB Standard Operating Procedures (Attachment B). If it is not possible to achieve compliance with the PCB discharge limit (i.e. < 0.0001 mg/l), the water will be transported off site for disposal at an approved TSDF.
- i. Leak Detection water, pretreated when necessary.
- j. Landfill leachate from WDI Site 1 non-hazardous waste cell, pretreated as necessary.

Table of Sample Points

Sample Points	Description of Compliance Sample Points
001	Manhole located 42.7 feet south of the southeast corner and 92.5 feet east of the southwest corner of the Small Vehicle Maintenance Garage, see attachment C-1.
A	Water surface of Compliance Tank A during mixing, see attachment D-1.
B	Water surface of Compliance Tank B during mixing, see attachment D-1.
Tank 3	The tee/ball valve off the pipeline that conveys untreated leachate from Master Cell VI landfill into Tank 3, see attachment D-1.
Lined Pond	Water surface of the lined pond, see attachment D-1. This sample point will be used only if a direct discharge of untreated water is released from the lined pond.
Carbon Influent	Ball valve on influent line to carbon filter system, see attachment D-1.
Carbon Midpoint	Tee/ball valve on primary carbon vessel discharge pipe, see attachment D-1.
Carbon Effluent	Tee/ball valve on polish carbon vessel discharge pipe, see attachment D-1.

	This sample point will be used for treated discharge from the lined pond.
Master Cell VI	The tee/ball valve off the pipeline that conveys contact water from Master Cell VI landfill into the Wastewater Treatment Plant. See Attachment D-2.
Sedimentation Basin	Water surface of the sedimentation basin near discharge pump intake, see attachment D-3.
Leak Detection Water Holding Tank	Sampling port located on the designated holding tank.

2. Self-Monitoring Summary Tables

- a. All regulations regarding wastewater discharges to the South Huron Valley Utility Authority Sewerage System, set forth in Article V and Appendix A, of the Rules and Regulations, shall be conditions of this permit.
- b. Permittee shall be in compliance with parameter limitations set forth in Appendix "A". Where a Permittee is also subject to regulation under Categorical Pretreatment Standards, the most stringent limit shall apply.
- c. The Authority reserves the right to adjust self-monitoring requirements as needed in order to ensure proper protection of the POTW as required by Federal, State, and Local Industrial Pretreatment Program Regulations.
- d. The parameters listed in the following summary tables may potentially be present in the permittee's discharge, and shall be monitored following the stated requirements to ensure proper protection of the SHVUA WWTP.

Discharge Limitations – Sample Point: 001

Effluent Parameters	Discharge Limits Daily Maximum Concentration (mg/L)	Discharge Limits Monthly Average Concentration (mg/L)	Surcharge Threshold Concentration (mg/L)	Self-Monitoring Requirements		
				Frequency	Sample Type	Sample Point
Arsenic, Total	0.36	N/A	N/A	Monthly	24-Hr Comp	001
Cadmium, Total	0.29	N/A	N/A	Semi-Annual	24-Hr Comp	001
Cyanide, Free	0.82	0.11	NA	Monthly	Grab	001
Chromium, Total	10.51	N/A	N/A	Monthly	24-Hr Comp	001
Copper, Total	0.58	N/A	N/A	Monthly	24-Hr Comp	001
Lead, Total	1.00	N/A	N/A	Monthly	24-Hr Comp	001
Mercury, Total	ND*	N/A	N/A	Quarterly	24-Hr Comp	001
Nickel, Total	2.31	N/A	N/A	Monthly	24-Hr Comp	001
Phenolics	1.00	N/A	N/A	Monthly	24-Hr Comp	001
Selenium, Total	0.40	N/A	N/A	Semi-Annual	24-Hr Comp	001
Silver, Total	0.22	N/A	N/A	Semi-Annual	24-Hr Comp	001
Zinc, Total	5.00	N/A	N/A	Monthly	24-Hr Comp	001

Bromodichloromethane	Monitor Only	N/A	N/A	Quarterly	Grab	001
Bromoform	Monitor Only	N/A	N/A	Quarterly	Grab	001
Bromomethane	Monitor Only	N/A	N/A	Quarterly	Grab	001
Chloroform	Monitor Only	N/A	N/A	Quarterly	Grab	001
Chloromethane	Monitor Only	N/A	N/A	Quarterly	Grab	001
Dibromochloromethane	Monitor Only	N/A	N/A	Quarterly	Grab	001
Volatiles (624)	Monitor Only	N/A	N/A	Annually	Grab	001
Semi-Volatiles (625)	Monitor Only	N/A	N/A	Annually	24-Hr Comp	001
Pesticides (608, excluding PCBs)	Monitor Only	N/A	N/A	Annually	24-Hr Comp	001
Polychlorinated Biphenyls (PCBs)	ND*	N/A	N/A	Monthly	24-Hr Comp	001
5-Day BOD	N/A	4,000	275	Quarterly	24-Hr Comp	001
Suspended Solids, Total	N/A	9,665	350	Quarterly	24-Hr Comp	001
Fats, Oil & Grease	100	N/A	N/A	Monthly	Grab	001
Phosphorus, Total	N/A	25	12	Quarterly	24-Hr Comp	001
Methylene Chloride	0.25	N/A	N/A	Annually	Grab	001
Toluene	1.00	N/A	N/A	Annually	Grab	001
BTEX	2	N/A	N/A	Annually	Grab	001
		Monthly Average Loading (lbs/day)				
Molybdenum	3.5 lbs/day		N/A	Monthly	24-Hr Comp	001
	Daily Min (SU)	Daily Max (SU)				
pH	5.0	11.5	N/A	Monthly	Grab	001

Discharge Limitations – Sample Point: A

Effluent Parameters	Average Daily Maximum Concentration (mg/L)	Self-Monitoring Requirements		
		Frequency	Sample Type	Sample Point
PCB's	Monitor Only*	Each Batch Discharge	Grab	A

Discharge Limitations – Sample Point: B

Effluent Parameters	Average Daily Maximum Concentration (mg/L)	Self-Monitoring Requirements		
		Frequency	Sample Type	Sample Point
PCB's	Monitor Only*	Each Batch Discharge	Grab	B

Discharge Limitations – Sample Point: Tank #3

Effluent Parameters	Average Daily Maximum Concentration (mg/L)	Self-Monitoring Requirements		
		Frequency	Sample Type	Sample Point
PCB's	Monitor Only*	Monthly	Grab	Tank #3

Discharge Limitations – Sample Point: Lined Pond (Direct Discharge)

Effluent Parameters	Average Daily Maximum Concentration (mg/L)	Self-Monitoring Requirements		
		Frequency	Sample Type	Sample Point
PCB's	ND*	Prior to each withdrawal and Daily during withdrawal	Grab	Lined Pond

Discharge Limitations – Sample Point: Lined Pond (Treated Discharge)

Effluent Parameters	Average Daily Maximum Concentration (mg/L)	Self-Monitoring Requirements		
		Frequency	Sample Type	Sample Point
PCB's	Monitor Only*	Monthly during withdrawal	Grab	Carbon Effluent

Discharge Limitations – Sample Point: MCVI Contact

Effluent Parameters	Average Daily Maximum Concentration (mg/L)	Self-Monitoring Requirements		
		Frequency	Sample Type	Sample Point
PCB's	Monitor Only*	Prior to Pumping withdrawal	Grab	MCVI Contact

Discharge Limitations – Sample Point: Sedimentation Basin (Direct Discharge from Lined Pond)

Effluent Parameters	Average Daily Maximum Concentration (mg/L)	Self-Monitoring Requirements		
		Frequency	Sample Type	Sample Point
PCB's	Monitor Only*	Prior to each withdrawal	Grab	Sedimentation Basin
Total Suspended Solids	Monitor Only	Prior to each withdraw	Grab	Sedimentation Basin

Discharge Limitations – Sample Point: Sedimentation Basin (Treated Discharge from Lined Pond)

Effluent Parameters	Average Daily Maximum Concentration (mg/L)	Self-Monitoring Requirements		
		Frequency	Sample Type	Sample Point
PCB's	Monitor Only*	Monthly during withdrawal	Grab	Sedimentation Basin
Total Suspended Solids	Monitor Only	Monthly during withdrawal	Grab	Sedimentation Basin

Discharge Limitations – Sample Point: Leak Detection Water Holding Tank

Effluent Parameters	Average Daily Maximum Concentration (mg/L)	Self-Monitoring Requirements		
		Frequency	Sample Type	Sample Point
PCB's	ND*	Prior to Discharge	Grab	Leak Detection Water Holding Tank

Discharge Limitations – Sample Point: Sedimentation Basin (Direct Discharge)

Effluent Parameters	Average Daily Maximum Concentration (mg/L)	Self-Monitoring Requirements		
		Frequency	Sample Type	Sample Point
PCB's	Monitor Only*	Prior to each withdrawal and daily during withdrawal	Grab	Sedimentation Basin
Total Suspended Solids	Monitor Only	Prior to each withdrawal and daily during withdrawal	Grab	Sedimentation Basin

* The quantification level shall not exceed 0.0001 mg/l for PCBs and 0.0002 mg/l for Mercury, unless higher levels are appropriate because of sample matrix interference. Any discharge of PCBs or Mercury at or above the quantification level is a specific violation of this permit. This paragraph does not authorize the discharge of PCBs or Mercury at levels which are injurious to the designated uses of the waters of the State or which constitute a threat to the public health or welfare. If a quantification level is specified in or approved under 40 CFR 136 or pursuant to rules adopted by the State of Michigan to implement the Great Lakes Initiative for PCBs or Mercury, the quantification level in a permit issued pursuant to the Rules and Regulations may be changed, upon the SHVUA approval, to incorporate such promulgated quantification level.

3. Special Conditions

1. Discharge Timing/Duration:

- a. **Compliance Tanks A or B** – Permittee may commence discharge from Compliance Tanks A or B any day of the week. Permittee shall notify the South Huron Valley Utility Authority – Industrial Pretreatment Program (SHVUA-IPP) personnel by phone or FAX at least four (4) hours prior to a planned discharge or by 3:00 PM, which ever is earliest. If the discharge is cancelled as a result of laboratory analysis or any other reason, SHVUA-IPP shall be notified of cancellation as soon as possible. WDI will diligently attempt to discharge compliance tanks during the week to minimize the inconvenience caused by weekend discharge sampling. SHVUA-IPP will provide “after-hours or weekend” phone contacts for discharge notification. WDI will make every effort to contact SHVUA-IPP prior to a discharge.
- b. **Treated Lined Pond/Sedimentation Basin Water** - Permittee may commence treated discharge from the lined pond or sedimentation basin any day of the week, but for sampling purposes must notify SHVUA-IPP personnel by phone or Fax prior to the commencement of discharge.
- c. **Direct Discharge from Lined Pond/Sedimentation Basin:** Direct discharge (untreated) shall not commence until a representative sample has been collected and analyzed for PCBs. Permittee shall notify SHVUA-IPP prior to the commencement of direct discharge from the lined pond or sedimentation basin. No direct discharge from the lined pond or sedimentation basin shall occur if PCBs are in concentrations greater than the detection limit (0.0001 mg/l).

2. PCB Management Procedures:

- a. All batches of Potentially PCB contaminated wastewater shall be managed in accordance with the permittee's prevailing Standard Operating Procedure (SOP), Attachment B. Permittee may modify the SOP, as necessary. However, the permittee shall notify SHVUA-IPP prior to implementation of the proposed changes and submit the revised SOP for inclusion as Attachment B to this permit. All PCB analytical reports shall be kept on file for SHVUA review during inspections.
- b. For each full Compliance Tank, at least one grab sample of effluent from the leachate system carbon adsorber shall be collected. This grab sample must be representative of the lowest possible carbon effluent quality that is received in the Compliance Tank while it is filling (see Attachment B for details). If the treated carbon effluent is shown to contain detectable PCBs, the entire contents of the Compliance Tank shall be retreated and retested or hauled to off-site treatment. The permittee shall include in the Quarterly Periodic Compliance Report (PCR), a signed statement that no PCBs were detected in the discharge during the reporting period. All PCB analytical reports shall be kept on file for SHVUA review during inspections.

3. Lined Pond and/or Sedimentation Basin Contents

- a. Lined Pond contents may only consist of runoff water for potential discharge to the SHVUA sewer system. No other wastewaters are authorized for discharge.
- b. Sedimentation Basin contents may consist of runoff water for potential discharge to the SHVUA sewer system. No other wastewaters are authorized for discharge.

4. Compliance Monitoring

- a. Monthly grab and composite samples from Sample Point 001 shall be collected only while discharging treated leachate from the WDI WWTP.
- b. Permittee shall self-monitor runoff in the Lined Pond, testing for all parameters in Summary Table A. 2. a. above, excluding the organic parameter scans required annually. Representative grab samples shall be collected at a frequency of once per month. In addition, a representative sample shall be collected for PCB analysis before every direct discharge to the sewer and daily during discharge. Monthly and PCB Lined Pond (batches discharged directly) analytical reports shall be included in the quarterly PCR.
- c. When discharging from the Sedimentation Basin without pretreatment (i.e. direct to sewer; to Lined Pond and then direct to sewer; to Compliance Tanks A or B and then directly to sewer), Permittee shall self-monitor runoff in the Sedimentation Basin, testing for all parameters in Summary table A.2.a above, excluding the organic parameter scans required annually. Representative samples shall be collected at a frequency of once per month.

5. Leak Detection System

- a. WDI's Hazardous Waste Facility Operating License requires quarterly testing of the Leak Detection System water. If a statistically significant increase is detected by the quarterly sampling, The LDS water from the affected sump will not be discharged until the increase is proved to be a false positive or the cause of the increase.

B. MONITORING

1. Definitions

- a. Maximum 30-Day Limit- The maximum allowable value for the arithmetic average of all samples collected during a 30-day period.

- b. Four Day (4-day) Average Limit - The arithmetic average of daily discharge values for four consecutive monitoring days. A monitoring day cannot be counted toward a four day average more than once. Any data below the approved level of analytical detection shall be treated as zero for the purposes of averaging.
- c. Daily Maximum Limit - The maximum allowable discharge of a pollutant during a calendar day. Where daily maximum limitations are expressed in mass units, the daily discharge is the total mass discharged during the course of a day. Where daily maximum limitations are expressed in units of concentration, the limitation is the arithmetic average value of all samples collected during that day. Where daily maximum limitations are based on production, the daily discharge limit is the total mass discharged during the course of a day multiplied by the total units produced in a day.
- d. Daily Minimum Limit - The minimum allowable concentration of a pollutant, allowed to be discharged in a calendar day. This term usually applies to pH, where it is the lowest pH measurement determined from the analysis of a number of grab samples collected, independent of the industrial flow rate and the duration of the sampling event, in a calendar day.

2. Analytical Procedures

- A. Analytical procedures for all analyses of pollutants to determine compliance shall be in accordance with 40 CFR Part 136, "Guidelines Establishing Test Procedures for the Analysis of Pollutants under the Clean Water Act" and amendments, or any other test procedures approved by EPA as appropriate for wastewater analysis.
- B. pH analysis shall be conducted in accordance with 40 CFR Part 136. The permittee shall determine the pH as soon as possible after sample collection. Every quarterly Periodic Compliance Report ((PCR) shall include the following pH sampling and analysis information – date and time of sampling, date and time of analysis and signature or initials of the analyst.

3. Representative Sampling

- a. The samples and measurements that are taken as a result of requirements in this permit must be representative of the effluent being discharged during a typical workday.
- b. The proposed sampling plan submitted by WDI is attached to this permit as Appendix "B". Due to the nature of the waste stream being sampled, method of treatment, and method of discharge pumping, the proposed sampling plan is accepted in lieu of flow based sampling.

4. Sample Type

Grab - an individual sample collected over a period of time not to exceed 15 minutes, which reasonably reflects the characteristics of the waste stream at the time of sampling.

Composite - a sample comprised of individual grab samples collected at regular intervals, either on a time or flow proportional basis, over a specified period which provides a representative sample of the average stream during the sampling period.

- Composite Samples collected for compliance purposes shall be flow proportional composite samples unless the Industrial Permittee expressly requests an alternate sample collection method from the South Huron Valley Utility Authority. The decision to allow an alternate sample collection method must be documented and submitted for review by the South Huron

Valley Utility Authority prior to allowing an alternate type of sampling for report monitoring and compliance purposes (40 CFR 403.12(g)(3)). If the Industrial Permittee determines at any time that the alternate sampling method is not representative, the Industrial Permittee must notify the SHVUA IPP staff immediately so that the discharge permit may be revised to include a sampling method that is representative.

- Alternate sampling is being allowed as outlined in Part I, Section B, 3. b. of this permit, and Appendix "B".

5. Sampling Point

Samples shall be taken as described in Part A.1. The Sampling locations are not to be changed without prior written approval from the South Huron Valley Utility Authority.

6. Sampling Frequency

The effluent must be monitored and sampled at the frequency indicated in the Tables in Part I above. This applies for all the parameters shown in the tables.

C. ADDITIONAL MONITORING

1. Greater Sampling Frequency

If the permittee samples and monitors any pollutant using EPA approved procedures, at the sampling point(s) described in this permit, more frequently than required, then the results of this sampling and monitoring must be included in the Periodic Compliance Report. Permittee must calculate and report average values in the Report, taking the additional sampling and monitoring into account.

2. Surcharge

Biochemical Oxygen Demand, 5 Day (BOD₅), Total Suspended Solids (TSS), and Total Phosphorus (P) are surchargeable parameters. If the discharge contains concentrations of these compatible pollutants in excess of the allowable concentrations (BOD = 275, TSS = 350 and P = 12, all in mg/l) the permittee must pay a surcharge on the excess amount. The permittee may elect to do monthly self-monitoring of these parameters and have the results included in the determination of the surcharge and must then comply with the Surcharge Policy of the system. A copy of the surcharge policy is attached to this permit as Appendix "C".

3. Non-Compliance Additional Sampling

If a permittee is in non-compliance and subject to enforcement actions, additional self-monitoring may be required. The additional self-monitoring may be required until such time as the permittee can demonstrate compliance. At a minimum, the permittee shall resample and monitor for any pollutant limit that is in non-compliance within thirty days of becoming aware of the non-compliant result, but no more than forty five days from the date the non-compliant sample was taken.

D. REPORTING

1. Periodic Compliance Reports

The permittee shall summarize, report, and submit their self-monitoring results on a quarterly basis. The Periodic Compliance Reports shall be received by the 15th day of the month following the end of the period. The Periodic Compliance Reports must include wastewater flow rate data for each quarterly period.

2. Signatory Requirements for Reports

- a. The Baseline Monitoring Report (BMR), 90-Day Report, Periodic Compliance Reports and Total Toxic Organics (TTO) Reports shall include the certification statement pursuant to 40 CFR 403.6 (a)(2)(ii) and shall be signed by an authorized representative of the industrial Permittee per Article 1 Section 1 definition 4 of the Rules and Regulations.
- b. The quarterly Periodic Compliance Report shall also include a certification statement pursuant to 40 CFR 403 Streamlining Rules stating that Best Management Practices required by the discharge permit are being implemented at the facility. This certification statement shall also be signed by an authorized representative of the industrial Permittee per Article 1 Section 1 definition 4 of the Rules and Regulations.

3. Volume Reporting

- a. Permittee shall report the volume discharged, for billing purposes, on a monthly basis to the Van Buren Township Water Department, and on a quarterly basis (in the PCR) to the South Huron Valley Utility Authority.
- b. The meter used to report discharge volumes must be calibrated by a qualified technician at a minimum of once per year. Calibration records must be maintained as stated in Part II, Section A.2a.i. of this permit.

4. All reports and correspondence related to the conditions of this permit shall be addressed to:

SHVUA WWTP
Attn: Mark Houle
34001 W. Jefferson Ave.
Brownstown Township, MI 48173

E. COMPLIANCE SCHEDULE

1. Progress Reports on Compliance

The permittee shall submit written notification within 14 calendar days of every compliance milestone date, or any other requirement date as specified in this permit, or as a part of a Compliance Schedule resulting from enforcement action. These reports shall indicate whether or not the milestone date or other requirement was achieved.

If the milestone or other requirement was not achieved, the notification must include an explanation of the failure to achieve the milestone or other requirement, actions taken or planned to correct the situation, and must give an estimate of when the milestone or other requirement will be achieved.

If the milestone is a written report and the permittee submits the report by the due date, no progress report is required.

PART II

A. GENERAL TERMS AND CONDITIONS

1. Entry

The permittee shall allow Utility Authority personnel or their designated agents, upon the presentation of credentials, access at all reasonable times to all parts of the premises for the purposes of inspection, sampling, records, examination, copying or the performance of any of their duties related to the administration of this permit and/or the Industrial Pretreatment Program. Denial of entry shall constitute a violation of the Rules and Regulations and subject the Permittee to enforcement action.

2. Retention of Records

a. The permittee shall keep records for at least three (3) years of the following:

- i. all monitoring information - includes all calibration, Best Management Practices, and maintenance records
- ii. all original strip chart recordings
- iii. copies of all reports required by this permit, records of all data used to complete the Industrial-Commercial Waste Questionnaire, which serves as the application for this permit.

All correspondence related to monitoring, sampling and analyses related to its discharge.

Note: The three (3) year time period is 3 years from date of the sample, measurement, report, or submission of the Industrial-Commercial Waste Questionnaire, to the Utility Authority. This period may be extended by request of the Utility Authority at any time.

c. All records that apply to matters that are the subject of special orders or any other enforcement or litigation activities shall be kept and preserved by the permittee until all enforcement activities have concluded. Also, until all periods of limitation regarding appeals have expired.

3. Penalties for Violations of Permit Conditions

The Authority's Rules and Regulations provide that any person who violates a permit condition is subject to a civil penalty of not more than \$1,000.00, plus actual damages incurred by the POTW per violation per day for as long as the violation continues.

A person who willfully or negligently violates permit conditions is subject to criminal penalties, as per Article V, Section 6.10.3 of the Rules and Regulations and may be punished by a fine of not more than \$500.00, or by imprisonment for not more than ninety (90) days or both.

Additional penalties in excess of \$500 per occurrence may also be assessed pursuant to the local Sewer Use Ordinance adopted by the community in which the discharger is located.

4. Fees and Charges

The permittee shall agree to pay applicable annual surveillance fees and surcharges as established and billed by the Utility Authority.

5. Additional Sewer Information

The permittee shall agree to furnish the Utility Authority, upon request, any additional information relating to the installation or use of the sewer.

6. Operate Pretreatment Facilities

- a. Operation: The permittee shall operate and maintain any industrial wastewater pretreatment facilities, as may be required by this permit, in an efficient manner at all times, and at no expense to the Utility Authority.
- b. Plans for new pretreatment facilities must be submitted for approval, prior to commencing construction. Submit plans to the Utility Authority, at the address on the cover sheet of this permit.

B. NOTIFICATION REQUIREMENTS

1. Non-compliance Notifications and Re-sampling. If the results of the permittee's self-monitoring indicate that a violation of this permit has occurred, the permittee must, in accordance with 40 CFR 403.12 (g)(2):

- a. Inform the SHVUA by telephone (734)-379-3855 of the violation within 24 hours, of becoming aware of the violation, and
- b. Repeat the sampling and analysis and submit, in writing the results of this second analysis within thirty (30) days of becoming aware of the violation.

2. By-Pass Notification

By-pass of pretreatment facilities necessary to maintain compliance with all the requirements of this permit is prohibited, unless

- a. By-pass was unavoidable to prevent loss of life, personal injury, or severe property damage.
- b. There were no feasible alternatives to the by-pass.
- c. The permittee submitted notices as required under paragraph (c) of 40 CFR Part 403.17.
- d. The Utility Authority may approve an anticipated by-pass discharge, after considering its adverse effects in accordance with 40 CFR 403.17 (d)(2).

3. Slug Discharge and Spill Control Plan

- a. Industrial Permittees shall provide protection from accidental discharges of substances which may cause interference at the wastewater treatment plant(s) pursuant to Article V. Section 2.04 of the SUO. Where necessary spill prevention or slug control plans shall be developed by the Permittee to address notification, slug or spill prevention, containment spill cleanup and employee training and submit it for approval prior to construction. Approval of such plans shall not relieve the industrial Permittee from complying with laws and regulations governing

handling of hazardous substances. Any required facilities shall be provided and maintained at the industrial Permittee's expense.

- b. Within 30 days of the effective date of this permit the permittee shall submit to SHVUA a Slug Discharge and Spill Control Plan. The plan shall include a description of discharge practices, including non-routine batch discharges, a description of stored chemicals. Procedures for immediately notifying SHVUA of slug discharges, including any discharge that would violate a prohibition under R 323.2303(2), with procedures for follow-up written notification within five (5) days.
- c. The Slug Discharge and Spill Control Plan shall include procedures necessary to prevent any adverse impact from accidental spills, including any of the following: inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control plant site runoff, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants, including solvents, measures and equipment necessary for emergency response.
- d. The Slug Discharge and Spill Control Plan shall include any Best Management Practices required by a Pretreatment Standard, Local Limits, State, or local law [40 CFR 403.8 (f)(1)(iii)(B)(3)].
- e. Compliance with the Slug Discharge and Spill Control Plan and the Best Management Practices shall be reported as part of the quarterly self-monitoring reports to the South Huron Valley Utility Authority.
- f. All documents for the Slug Discharge and Spill Control Plan and Best Management Practices shall be maintained by the Industrial Permittee. [40 CFR 403.12(o)].

Spill Notification

The permittee must immediately report any spill, which may cause increased pollution of normal industrial and/or sanitary wastewater that has the potential of being discharged to the SHVUA. Call the Utility Authority at (734) 379-3855 and report the:

- 1) location of discharge, 2) date and time of discharge spill, 3) type of waste, 4) concentration and volume of the spill, and 5) describe the corrective actions taken to prevent future spills.

If a major spill occurs which might affect storm sewers or open waterways, call the Michigan Department of Environmental Quality (MDEQ), at 1-800-292-4706 and report the spill.

Written notification is required to the Utility Authority within five (5) days pursuant to 40 CFR 403.8 (f)(2)(v).

Slug Notification

The permittee must immediately report upon discovery, any slug discharge or potential slug discharge (a slug is defined as a non-routine batch discharge of wastewater which is four (4) times the average 24 hour concentration or is four (4) times over the flow limit for at least 15 minutes) to the SHVUA sewer system.

This slug could be at a flow rate and/or pollutant concentration, which will cause interference with the POTW operations or a pass-through. Call the Utility Authority at 1-734-379-3855. Report the: 1) location of slug discharge, 2) date and time of slug discharge, 3) type of waste in the slug discharge, 4) concentration and volume of the slug discharge, and 5) describe the corrective actions taken to prevent future slug discharges.

Written notification is required within five (5) days, pursuant to 40 CFR 403.8 (f)(2)(v and vi).

4. Upset Noncompliance

- a. The permittee shall notify the Utility Authority by phone, at 1-734-379-3855 within 24 hours of first becoming aware; that a process upset ("an upset" is defined as an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit discharge limitations because of factors beyond the reasonable control of the Industrial Permittee) has occurred.
- b. Written notification is required within five (5) days, which includes the following information: 1) description of the discharge to the sanitary sewer and cause of noncompliance, 2) period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue, and 3) steps being taken and/or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

5. Notification of Changed Discharge

In accordance with 40 CFR 403.12 (j), the permittee shall promptly notify the Utility Authority in advance of any substantial changes in the volume or character of pollutants in its discharge, including the listed or characteristic hazardous wastes for which the permittee has submitted initial notification under 40 CFR 403.12 (p).

C. PERMIT ITEMS

1. Permit Re-issuance

a. Re-application

The permittee must submit an application for permit re-issuance, in the form of a completed Industrial-Commercial Waste Questionnaire, no later than 90 days prior to the expiration date of the permit.

b. Re-issuance

Upon timely application for re-issuance of a permit in accordance with paragraph a, the expired permit shall be automatically extended until a final decision regarding the application is made by the Utility Authority.

2. Permit Modification

The Utility Authority reserves the right to modify this permit, in whole or in part, during its term in order to:

- a. Require compliance with National Categorical Pretreatment Standards.

- b. Assure compliance with the POTW NPDES Permit.
- c. Incorporate new conditions or parameters of concern due to substantial change in the Permittee's operations or new information concerning existing conditions.
- d. Incorporate changes in Federal or State Laws or changes in the Authority's approved Industrial Pretreatment Program.
- e. Change or terminate special conditions of the Permit, including but not limited to monitoring frequency or parameters to be monitored.
- f. Correct any omissions or typographical errors.
- g. Reflect changes in monitoring location.
- h. Address a Permittee's noncompliance with portions of the existing permit.
- i. For any other reason, if the Authority reasonably believes the modification is necessary to ensure either that the POTW complies with its NPDES Permit or that the POTW does not negatively affect the receiving water quality standards, the national air quality standards or any other applicable permit, order statute, regulation or limitation.

3. Non-transferability of Permit

Wastewater Discharge Permits are issued to a specific Permittee for a specific operation and may not be assigned or transferred to another discharger or to another location without the prior written approval of the Utility Authority and the Van Buren Township.

4. Permit Revocation, Surrender, and Termination of Discharge

Any Permittee who violates the following conditions of these Rules and Regulations or a Wastewater Discharge Permit or Order, or any applicable State or Federal Law is subject to permit revocation.

Violations of the terms and conditions of the Permit;

- 1) Failure to factually report the wastewater constituents and characteristics of the discharge.
- 2) Failure to report significant changes in wastewater constituents and characteristics.
- 3) Refuse reasonable access to the Permittee premises by Authority personnel for the purpose (s) of inspection or monitoring.
- 4) Failure to pay fines, penalties or costs incurred by the Authority, pursuant to this Section 6 of Article V.
- 5) Non-compliant industrial Permittees shall be notified of the proposed termination of their Wastewater Discharge Permit and be given an opportunity to show cause under Section 6.04.1 of these Rules and Regulations why the proposed action should not be taken.

5. Emergency Suspension of Service and Discharge Permits

The Authority may for good cause suspend the Wastewater Treatment Service and the Wastewater Discharge Permit of a discharger if the Authority finds that an actual or threatened discharge presents or may present an imminent or substantial danger to the health or welfare of persons, substantial danger to the environment, or interference with the operation of the POTW or pass-through. A discharger who is notified of the suspension of Wastewater Treatment Service and /or

the discharge's Wastewater Discharge Permit shall, within a reasonable period of time, as determined by the Authority cease all discharges.

If a discharger fails to comply voluntarily with the suspension order within the specified time, the Authority shall, in its sole discretion take such steps as deemed necessary, including severance of the sewer connection, to prevent or minimize damage to the POTW, its receiving stream or endangerment to any individuals. The Authority may, in its sole discretion allow the Permittee to recommence its discharge when the Permittee has demonstrated to the Authority's satisfaction that the endangerment has passed, unless termination proceedings are initiated against the Permittee.

A Permittee that is responsible, in whole or in part, for any discharge presenting imminent endangerment shall submit a full report to the Authority within five days of the incident. This report shall be a detailed written statement describing the causes of the harmful contribution and the measures taken to prevent any future reoccurrence. The information in this report shall be considered during any related Show Cause or Termination Hearing.

Local communities whose wastewater is transported or treated by the facilities of the Authority may join with the Authority in enforcement action and take such other action to effectuate these Rules and Regulations.

Failure of the contracting community to join in the enforcement action shall not limit the Authority's ability or authority to administer enforcement proceedings separate from the community and does not limit the Authority's ability or authority to enforce the Rules and Regulations of the Authority or Federal, State, and local standards.

D. SPECIAL PERMIT REQUIREMENTS

1. The SHVUA and Van Buren Township reserve the right to restrict the volume of discharge if conditions within the collection system or at the WWTP are such that additional flows would create the potential for sanitary sewer backups and/or an upset of the WWTP operations. In either event, the SHVUA and/or Van Buren Township will make every reasonable effort to notify the permittee of such restrictions in a timely matter so that alternate means of disposal or flow reductions can be arranged by the permittee.

APPENDIX "A"
LOCAL DISCHARGE LIMITATIONS

LOCAL DISCHARGE LIMITATIONS	
Parameters	Average Daily/Monthly Maximum Concentration (mg/L) or Loading (lb/day)
Arsenic, total	0.36 mg/L
Cadmium, total	0.29 mg/L
Chromium, total	10.51 mg/L
Copper, total	0.58 mg/L
Cyanide, free (Daily)	0.82 mg/L
Cyanide, free (Monthly)	0.11 mg/L
Lead, total	1.00 mg/L
Mercury, total*	ND
Molybdenum, total	0.4 lbs./day
Nickel, total	2.31 mg/L
Silver, total	0.22 mg/L
Zinc, total	5.00 mg/L
Fats, Oil & Grease (FOG)	100 mg/L
Polychlorinated Biphenyls (PCBs)*	ND
pH	5.0 – 11.5 s.u.
Biochemical Oxygen Demand (BODs)	4,000 mg/L
Total Phosphorus	25.0 mg/L
Total Suspended Solids (TSS)	9,665 mg/L
Methylene Chloride	0.25 mg/L
Toluene	1.0 mg/L
Phenolics, total	1.0 mg/L
Selenium, total	0.40 mg/L
BTEX (Benzene, Toluene, Ethylbenzene, Xylene)	2.0 mg/L

* The quantification level shall not exceed 0.0001 mg/l for PCBs and 0.0002 mg/l for Mercury, unless higher levels are appropriate because of sample matrix interference. Any discharge of PCBs or Mercury at or above the quantification level is a specific violation of this ordinance. This paragraph does not authorize the discharge of PCBs or Mercury at levels which are injurious to the designated uses of the waters of the State or which constitute a threat to the public health or welfare. If a quantification level is specified in or approved under 40 CFR 136 or pursuant to rules adopted by the State of Michigan to implement the Great Lakes Initiative for PCBs or Mercury, the

APPENDIX "A"
LOCAL DISCHARGE LIMITATIONS – Continued

quantification level in a permit issued pursuant to this Ordinance may be changed, upon SHVUA approval, to incorporate such promulgated quantification level.

APPENDIX "B"
WAYNE DISPOSAL, INC. SAMPLING PLAN



WAYNE DISPOSAL, INC.

August 26, 2009

Mark Houle
 United Water
 South Huron Valley Utility Authority
 34001 W. Jefferson
 Brownstown Twp., MI 48173

RE: Wayne Disposal, Inc. (WDI) Time Proportional Sampling

Dear Mr. Houle:

This is in response to the South Huron Valley Utility Authority (SHVUA) Industrial Pretreatment Sampling Protocols letter dated July 6, 2009. In response and as directed in the letter, WDI is requesting the continued use of the time-proportional composite sampling as the alternative sampling plan. WDI's request to continue time-proportional composite sampling is based on the following reasons:

1. WDI is required to composite sample the treated leachate while only treated leachate is being discharged. No other discharge is allowed during the permit required sampling. This eliminates the blending of different wastewater streams.
2. The treated leachate is batch discharged from a single tank. This is noted in predischARGE notification that facilitates sampling by SHVUA.
3. The discharge characteristics are consistent throughout the discharge. The discharge is from a well mixed tank. WDI does predischARGE sampling from the top of the compliance tank. The results from the top of the tank are consistent with the sampling results from sample point 001. This is also verified by the absence of any discharge violations for the past 3 years.
4. The batch discharge is a pumped discharge instead of a gravity drain discharge. A pumped discharge facilitates a consistent flow rate which makes time-proportional sampling equivalent to flow-proportional sampling.

WDI feels that the above items are reasons that the current time-proportional composite sampling represents a valid alternate sampling method and that the implementation of a flow-proportional sampling method provides no benefit over the current sampling method.

If you have any questions please contact me at 734-699-6280

Sincerely,

Ken Weber, P.E.
 Plant Manager

Cc: File. 49550 North I-94 Service Drive • Belleville, MI 48111
 M. Takacs Phone 734 697-2200 • FAX 734 699-3499 • Inside Sales Department 1-800-592-5489

a n e q c o m p a n y

Attachment E
MDWTP Air and Groundwater Monitoring Program

**FORM EQP 5111 ATTACHMENT TEMPLATE B5
ENVIRONMENTAL MONITORING PROGRAMS**

This document is an attachment to the Michigan Department of Environmental Quality's (DEQ) *Form EQP 5111, Operating License Application Form for Hazardous Waste Treatment, Storage, and Disposal Facilities*. See the instructions for Form EQP 5111 for details on how to use this attachment. All references to Title 40 of the Code of Federal Regulations (40 CFR) citations specified herein are adopted by reference in R 299.11003.

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 299.9611 establishes requirements for the environmental monitoring programs for hazardous waste management facilities. Owners and operators of hazardous waste treatment, storage, or disposal facilities must develop an environmental monitoring program capable of detecting a release of hazardous waste or hazardous waste constituents from the facility to groundwater, air, or soil.

This license application template addresses requirements for an environmental monitoring program for hazardous waste management units and the hazardous waste management facility for the Michigan Disposal Waste Treatment Plant facility. The template includes either a monitoring program description or a demonstration for a waiver from the monitoring requirements in accordance with R 299.9611(3)(a) and (b) and R 299.9611(4) as indicated below:

Groundwater Monitoring Program (*Check as appropriate*)

- ☒ R 299.9612 compliance monitoring program and sampling and analysis plan for one or more units
☐ Waiver for one or more units

If appropriate, both boxes may be checked if different monitoring programs and waivers apply to the units at the facility.

Ambient Air Monitoring Program (*Check as appropriate*)

- ☒ Monitoring program and sampling and analysis plan
☐ Waiver

Annual Soil Monitoring Program (*Check as appropriate*)

- ☐ Monitoring program and sampling and analysis plan
☒ Waiver

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B5.A GROUNDWATER MONITORING PROGRAM

[R 299.9611(2)(b) and (3), R 299.9612, and R 299.9629 and 40 CFR, Part 264, Subpart F, except 40 CFR §§264.94(a)(2) and (3), (b), and (c), 264.100, and 264.101]

This section describes the facility's unit-specific groundwater monitoring program as outlined in Table B5.A.1. The basis for determining the groundwater monitoring program for each unit described below is provided in the, Hydrogeological Report, attached separately to this application, which was prepared in accordance with R 299.9506.

All samples collected for environmental monitoring 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.

B5.A.1 UNIT-SPECIFIC GROUNDWATER MONITORING PROGRAM

TABLE B5.A.1 GROUNDWATER MONITORING PROGRAM

Unit	Name of Unit Subject to Monitoring ¹	Conditional Non-LDF Waiver ²	No Migration Waiver ³	Detection Monitoring ⁴	Compliance Monitoring ⁵	Corrective Action Monitoring ⁶
1	MDWTP	NA	NA	YES	NA	NA
2	SECSA	NA	NA	YES	NA	NA

B5.A.2 GROUNDWATER MONITORING PROGRAM WAIVER

[R 299.9611(3)]

B5.A.2(A) OTHER UNITS [R 299.9611(3)(a)]

The MDWTP facility is conducting response activities in the area of South East Container Storage Area (SECSA) and the waste treatment plant. The response activities include groundwater monitoring that demonstrates compliance with the provisions of Part 111 of Act 451 and the Part 111 Rules.

B5.A.3 GENERAL GROUNDWATER MONITORING REQUIREMENTS [R 299.9612 and 40 CFR §§264.97 and 264.91(b)]

The MDWTP facility will comply with the requirements for a groundwater monitoring program by implementing the program described in this section. This program was developed to satisfy the requirements of R 299.9612 and R 299.9629 and 40 CFR §§264.98 and 264.99, except 40 CFR

§§264.94(a)(2) and (3) and 264.94(b) and (c). The basis for determining the groundwater monitoring program for each unit is provided in Template B3, Hydrogeologic Report, of this application that was prepared in accordance with R 299.9506.

B5.A.3(A) SAMPLING AND ANALYSIS PLAN
[R 299.9611(2)(a)]

A sampling and analysis plan for groundwater monitoring at Michigan Disposal Waste Treatment Plant is included in the QA/QC Plan. The sampling and analysis plan was prepared in accordance with the requirements specified in R 299.9611(2)(a). All sampling and analysis performed pursuant to this application will be consistent with the QA/QC Plan. All samples for the purpose of environmental monitoring will be collected, transported, stored, and disposed by trained and qualified individuals in accordance with the QA/QC Plan.

B5.A.3(B) DESCRIPTION OF WELLS
[R 299.9612 and 40 CFR §264.97(a), (b), and (c)]

There are two groundwater monitoring programs for the Michigan Disposal Waste Treatment Plant (MDWTP). The first is designed to detect impacts from the waste treatment plant and North Container Storage Area (NCSA) within the uppermost aquifer. This monitoring program consists of 6 wells (2 upgradient and 4 downgradient) numbered OB-18, OB-19R, OB-21, OB-23R, OB-36 and OB-47. These wells are completed in the uppermost usable aquifer, which is the glacial sand and gravel deposit beneath the clay till deposit that underlies this area. The water-bearing surficial sand unit that overlies the clay was removed during construction of the treatment plant and replaced with clay; therefore this unit is not the target for this monitoring program. Wells OB-21, OB-23R, OB-36 and OB-47 are downgradient from the treatment plant at a spacing appropriate to monitor potential impacts from the MDWTP. The two upgradient wells, OB-18 and OB-19R represent the quality of background water that has not be affected by leakage from a regulated unit as they along the north property boundary. The four downgradient wells represent the quality of groundwater passing the point of compliance as close as practicable to the south boundary of the MDWTP which allow for detection of contamination when hazardous constituents have migrated from the waste management area to the uppermost usable aquifer.

Maps showing the locations of the aquifer wells and the SECSA wells are included with this template. The table below summarizes the monitoring well information for the two well networks.

The wells were installed in borings drilled with a hollow-stem auger and were constructed one of three ways. Wells OB-18 and OB-21 are composed of PVC screens and PVC riser pipes with the screened interval annular space containing silica sand and sealed off with bentonite pellets and then non-shrinking cement grout to the surface. Wells OB-36 and OB-47 are constructed with stainless steel screens and galvanized steel casing with the annular space consisting of silica sand, bentonite slurry and non-shrinking cement grout. Wells OB-19R and OB-23R are constructed with stainless steel screens and casing, with the annular space filled with silica sand, bentonite and a pH-neutral grout. All wells are equipped with lockable protective casings.

The second monitoring program is designed to detect impacts from the Southeast Container Storage Area (SECSA). At this location, the surficial water-bearing sand deposit containing a perched water table has not been removed and is therefore the unit targeted for groundwater monitoring. The active operations

performed in the SECSA are the storage of liquid and solid hazardous waste that is treated at the MDWTP. Solid containerized waste is stored on the asphalt surface while waste containing free liquids is stored on cement pads with secondary containment. In the past, the SECSA was the location of a Thermal Desorption Unit (TDU) used to recycle refinery waste, although these operations have ceased and the TDU removed and the area decontaminated. The historical groundwater flow direction in this unit was to the east, however the flow direction has reversed in recent years.

Well locations for monitoring the SECSA includes wells P-1, P-2R, P-3R, P-4R, P-5 & P-7. Well P-5 is used for water levels only. These wells are completed at the bottom of the surficial sand unit within the rather thin saturated zone of the perched water table. The wells are placed around each side of the area providing coverage in any direction of groundwater flow at approximately 150-foot intervals.

All of the SECSA wells are constructed with PVC screens and casing. The screened interval is surrounded by silica sand and sealed from the surface with hydrated bentonite hole-plug and quick grout. Each well has a lockable protective casing.

Maps showing the locations of the aquifer wells and the SECSA wells are included with this template. The following table summarizes the monitoring well information for the two well networks.

MDWTP GROUND WATER WELL INFORMATION

WELL ID	MONITORING PROGRAM	T.O.C. ELEVATION	SCREEN ELEVATION	WELL DEPTH	UNIT SCREENED	WELL PAIR
OB-18	MDWTP	703.11	589.2	114	AQUIFER ROCK	--
OB-19R	MDWTP	709.17	585.6	124	AQUIFER ROCK	--
OB-21	MDWTP	705.00	600.9	104	AQUIFER SAND	OB-36
OB-23A	MDWTP	702.67	577.5	125	AQUIFER SAND	--
OB-36	MDWTP	702.13	572.1	130	AQUIFER ROCK	OB-21
OB-47	MDWTP	702.70	594.3	108	AQUIFER SAND	--
P-1	SECSA	703.97	685.0	16	SURFICIAL SAND	
P-2R	SECSA	706.98	685.4	19	SURFICIAL SAND	
P-3R	SECSA	705.96	683.0	20	SURFICIAL SAND	
P-4R	SECSA	706.47	684.9	19	SURFICIAL SAND	
P-5	SECSA	702.12	684.0	14	SURFICIAL SAND	
P-7	SECSA	706.30	683.3	20	SURFICIAL SAND	

B5.A.3(C) PROCEDURE FOR ESTABLISHING BACKGROUND QUALITY [R 299.9612 and 40 CFR §264.97(a)(1) and (g)]

MDWTP Aquifer Program

The background for monitoring of the uppermost usable aquifer (MDWTP program) is calculated as intrawell using the methods described below. An intrawell background was selected because; 1) there is natural spatial variability between upgradient and downgradient locations due to changing hydrogeological conditions and, 2) the determination that there is no existing contamination in the groundwater due to a release from waste management units at the site. The intrawell background for parameter at each well is

calculated by a moving window of 8 sample results that lag 6 to 7 years prior to the current year. Then the calculation of the background quality for the 2 classes of parameters is described as follows:

Primary Parameters are volatile organic compounds that are not naturally occurring and thus are presumed to be non-detectable in background quality. In this case the detection limit is the background for evaluation purposes.

Secondary Parameters are naturally occurring metals, major ions and indicator parameters. The intrawell background quality statistics are calculated from the moving window of 8 samples described above. The background statistics and the method of calculation of the secondary parameters is based on the degree of censorship of each parameter at each well. The secondary parameter list includes parameters which are highly censored (at least half of the values are below detection limits), those which are moderately censored (more than half the values are above detection) and those which are essentially all above method detection limits. Some parameters exhibit varying degrees of censorship at different wells.

If the background data for a parameter contains at least five detectable background values, but contains some non-detects, the non-detects will be alternately assigned values of zero and the detection limit. If all of the background values are above detection, the background quality statistics will be calculated from the background data as is. If half or more of the intrawell background measurements are below detection limits (4 or more BDL values), then the background quality is defined by the proportion of values above method detection limits.

SECSA Program

The background groundwater quality for the SECSA was established from the first eight samples collected from each of the five monitoring wells around the SECSA. The first four sampling events were conducted in November of 2009 before any TDU activities or storage of liquid wastes began. Following these initial four samples, four quarterly samples were collected during the months of March, May, August and November of 2010. As these samples were collected during active operations, it was shown that there were no impacts to the ground water in 2010 and as a result the data was considered background.

Based on an evaluation of the background quality data it was decided to define background using intrawell procedures. This decision was based on the following reasons; 1) The vast majority of parameters do not have any data above the detection limits and the distinction between interwell and intrawell is irrelevant for these parameters, 2) The spatial variation for parameters that are present at measurable concentrations is very large posing significant problems for interwell statistics, and 3) although two wells (P-2R and P-4R) were upgradient at that time, these wells were immediately adjacent to the TDU and thus could not be to remain representative of native background conditions. Although the TDU operation was discontinued, the flow direction in the surficial unit has turned out to be quite variable, which is another good reason to define background using intrawell procedures. The statistical definition of background was based on the degree of censorship as described above for the MDWTP monitoring program.

B5.A.3(D) STATISTICAL PROCEDURES

[R 299.9612 and 40 CFR §§264.97(h) and 264.97(i)(1), (5), and (6)]

MDWTP Aquifer Program

The methods to be used for statistical analyses of all primary and secondary parameters that have an intrawell background as defined above are described as follows:

Primary Parameters - For each primary parameter, any measured concentration of any parameter which is above the laboratory reported detection limit is considered an apparent statistically significant increase. This is essentially a non-parametric prediction limit test that is suitable for highly censored data for which little or no information regarding the underlying data distribution is available. Detection limits are those recommended by MDEQ in the most recent version of Operational Memo Gen-8. An apparent statistically significant increase will initiate quadruplicate resampling for confirmation of the affected parameter(s), in accordance with the operating license. If the statistical failure is repeated, then a statistically significant increase is confirmed. If the apparent increase is not confirmed, then normal detection monitoring will be resumed.

Secondary Parameters - The statistical analysis of secondary parameters will be conducted by one of two statistical tests depending on the degree that the intrawell background data are censored. If more than half the data are above method detection limits then a control chart approach will be used. If at least half the background data are below detection limits, a test of proportions will be used to analyze the data.

The statistical evaluation of moderately censored or uncensored secondary parameters will be conducted using intrawell statistical comparisons via a control chart approach. This method assumes a normal distribution of the data but is robust to moderate deviations to normality. The combined Stewart-CUSUM control chart will be used to analyze the statistical significance of the measured concentrations of secondary parameters. This approach consists of two statistical tests designed to detect different types of evidence of an apparent statistically significant change in the concentration of a water quality parameter. The Stewart limit is designed to detect a sharp increase in the concentration of a monitoring parameter in a single sample. The CUSUM limit is designed to detect gradual increases in the concentration of a parameter over time. The two techniques are used as separate statistical tests. That is, failure of either test alone (or both) signals an apparent statistically significant increase for a given parameter. The Stewart control chart compares a detection monitoring concentration of a parameter to the intrawell background mean plus a selected number of standard deviations. The test is performed by calculating the standardized mean, Z , for the detection monitoring concentration. As individual samples are collected during each detection monitoring event, the standardized mean for each measured parameter is calculated by:

$$Z = (x_m - x_b)/s_b$$

where: x_b is the intrawell background mean
 x_m is the measured concentration during detection monitoring
 s_b is the standard deviation of the intrawell background

The value of Z is then simply compared to a selected value, U , which represents the number of standard deviations from the intrawell mean. The Shewhart limit (U), or upper control limit will be 4.5, as recommended in the Interim Final Guidance for Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities (USEPA, 1989). The statistical test is performed by simply comparing the value of Z to the value of U . If Z is greater than U then it is concluded that an apparent statistically significant increase has occurred.

The CUSUM control chart is designed to detect a trend of increasing concentrations over time that is not abrupt enough to exceed the Shewhart limit. In the CUSUM procedure, the cumulative sum of the values for $Z - k$ are tabulated over time, each time a round of samples are analyzed. The value for Z is computed as described above, and k is a selected parameter. During each analysis subsequent to the background

determination period, a value for $Z - k$ is computed and added to the previous total. As long as the cumulative total of $Z - k$ is a negative number the cumulative sum (S) remains zero. As positive values accumulate, the value for S is compared to a selected value, h . If S is greater than h , then an apparent statistically significant event has occurred. The values used for k and h are $k = 1$ and $h = 5$, respectively, as recommended (USEPA, 1989).

For parameters that contain at least half non-detectable concentrations in the intrawell background database, a statistical test to determine the significance of the proportion of detectable occurrences is appropriate. The test of proportions, which is based on the binomial distribution, is statistical test suited to this purpose. This statistical procedure analyzes the significance of an increase in the rate of detectable occurrences over time.

To implement the test of proportions, the proportion of detectable occurrences during the 8 background samples will be compared to the rate of detectable occurrences in the most recent 4 detection monitoring samples. The statistic is computed by the equation:

$$Z^* = \frac{P_m - P_b}{[p(1-p)(1/N_m + 1/N_b)]^{0.5}}$$

where: P_m = proportion of detectable concentrations in the last four detection monitoring samples
 P_b = proportion of detectable concentrations in the eight intrawell background samples
 N_m = number of detection monitoring samples (4)
 N_b = number of background samples (8)
 p = weighted proportion defined as:

$$p = \frac{nm + nb}{N_m + N_b}$$

where: nm = number of detection monitoring samples above method detection limits
 nb = number of background samples above method detection limits

The value of Z^* is then simple compared to a critical value, Z_c , obtained from standard tables for the normal variate, Z , at the desired level of significance. The test will be conducted at the 0.05 level of significance, therefore Z_c is equal to 1.645. Any value of Z^* greater than Z_c signals an apparent statistically significant increase for that parameter. To guard against the unlikely possibility of a large increase in a single secondary parameter going unflagged by the proportions test, MDWTP will consider any concentration of a secondary parameter that is greater than 10 times the background concentration (or the reported detection limit for highly censored parameters) as a default violation of the statistical tests described above. This will ensure that clearly anomalous data are evaluated.

MDWTP evaluates the secondary parameters as follows. If there is a statistically significant increase in any two secondary parameters at a particular monitoring well (i.e. two failures of the test of proportions or a combination of control chart and proportions test failures), then resampling in quadruplicate would be initiated to confirm the suspected increase. Two parameters are required because it is highly unlikely that only one parameter would increase in the event of a release and some of the parameters (e.g. sulfate, iron)

are more likely to change due to non-release related phenomena. Confirmation would be completed if both failures are repeated. If the increase is not confirmed then the mean values of the quadruplicate sampling replace the results of the anomalous (unconfirmed) values within the database.

SESCA Program

The methods to be used for statistical analyses parameters that have an intrawell background as defined above are described as follows:

For volatile organics, semi-volatile organics and metals with greater than 50% non-detects in the background, the non-parametric prediction limit test will be used. The non-parametric prediction limit is the detection limit for parameters that were not detected during the background period and the highest concentration during background for parameters that had less than 50% detectable values during the background period. This is an appropriate test for highly censored data as little is known about the underlying distribution. Detection limits are those recommended by MDEQ in the most recent version of Operational Memo Gen-8. The use of intrawell statistics negates the need to account for seasonal or spatial variability.

For the other metals (less than 50% non-detects) the background mean and standard deviation is computed accounting for non-detects and intrawell control charts will be used to evaluate the data. The control chart method described above is used to evaluate the metals data and any single apparent statistically significant increase must be addressed by quadruplicate resampling.

B5.A.4 DETECTION MONITORING PROGRAM

[R 299.9612 and 40 CFR §§264.91(a)(4) and 264.98]

The basis for determining the detection monitoring program for each unit is provided in Template B3, Hydrogeologic Report, of this application that was prepared in accordance with R 299.9506.

B5.A.4(A) INDICATOR PARAMETERS, WASTE CONSTITUENTS, AND REACTION PRODUCTS [R 299.9506(3)(a) and (f), R 299.9506(4)(a), and R 299.9612 and 40 CFR §264.98(a)]

MDWTP Aquifer Program

The following table lists the parameters that are monitored in the uppermost aquifer upgradient and downgradient of the MDWTP. The list was developed from landfill leachate data and an extensive evaluation of geochemical behavior because any release from the landfill or the treatment plant would be highly attenuated by the thick sequence of low permeability clay till beneath the waste management units. The primary parameters are highly mobile volatile organic compounds (VOCs), including breakdown products that are among the most commonly seen VOCs in the waste streams accepted by MDWTP. These mobile VOCs would be expected to be among the first indicators that a release of waste or waste constituents have penetrated the clay till layer. The secondary parameters were selected based on the background concentrations in the groundwater and the geochemical behavior of each individual parameter.

MDWTP Aquifer Monitoring Parameter List

A. Primary Parameters

Benzene	1,2 Dichlorobenzene	Xylene
1,2 Dichloroethane	1,2 Dichloroethene	Ethylbenzene
Methylene Chloride	Toluene	Trichloroethene
1,1,1 Trichloroethane	Vinyl Chloride	1,1 Dichloroethane
PCB-1016 ¹	PCB-1221 ¹	PCB-1231 ¹
PCB-1242 ¹	PCB-1248 ¹	PCB-1254 ¹
PCB-1260 ¹		

B. Secondary Parameters

Potassium	Sodium	Nickel
Chromium(t)	Lead	Molybdenum
Sulfate	Chloride	Bicarbonate
Carbonate	Arsenic	Cyanide ⁴
Nitrate	Nitrite	Fluoride
Total Phenolics	Total Organic Carbon	Iron

Note: PCB's to be analyzed in samples from wells OB-21 and OB-23A only.

As the primary parameters are not naturally occurring, the background is below detection and no background statistics are necessary. For the secondary parameters, the moving window of eight intrawell sample results are used to compute background statistics. These statistics include the mean, standard deviation, coefficient of variation, and proportion of non-detects. Each year the background statistics are recalculated and submitted to MDEQ.

SESCA Program

Following tables contain the quarterly, semi-annual and annual monitoring parameter lists for the SCSA monitoring program. The list is extensive because of the vast number of wastes that can be stored in the SCSA. Unlike the aquifer that is protected by clay, the surficial sand unit is directly below the pavement and thus waste or waste constituents would not be significantly attenuated if released to this unit. The quarterly parameters are targeted for TDU wastes; although the TDU has been removed it did operate for several years. As described above, non-parametric tests are applied to VOCs, SVOCs and metals as these are never or rarely detected in background samples.

MDWTP SECSA Monitoring Parameters

Parameter	Monitoring Frequency	Detection Limit (mg/L)	Parameter	Monitoring Frequency	Detection Limit (mg/l)
Benzene	Quarterly	0.001	2-Chloroethylvinyl Ether	Annual	0.001
Ethyl Benzene	Quarterly	0.001	Chloroform	Annual	0.001
Toluene	Quarterly	0.001	Chloromethane	Annual	0.005
Total Xylene	Quarterly	0.003	Cyclohexane	Annual	0.005
Benzo(a)pyrene	Quarterly	0.001	2-Hexanone	Annual	0.005
Benzo(a)anthracene	Quarterly	0.001	Dibromodifluoromethane	Annual	0.001
Benzo(b)fluoranthene	Quarterly	0.001	Dibromochloromethane	Annual	0.001
Benzo(k)fluoranthene	Quarterly	0.001	Dibromomethane	Annual	0.001
Dibenz(a,h)anthracene	Quarterly	0.002	Diethyl ether	Annual	0.005
Anthracene	Quarterly	0.001	Diisopropyl Ether	Annual	0.005
Chrysene	Quarterly	0.001	1,2 Dichlorobenzene	Annual	0.001
Fluorene	Quarterly	0.001	1,3 Dichlorobenzene	Annual	0.001
3-methylcholanthrene	Quarterly	NA	1,4 Dichlorobenzene	Annual	0.001
Napthalene	Quarterly	0.001	Dichlorodifluoromethane	Annual	0.005
Phenanthrene	Quarterly	0.001	1,1-Dichloroethane	Annual	0.001
Pyrene	Quarterly	0.001	1,2-Dichloroethane	Annual	0.001
pH (field)	Quarterly	---	1,1-Dichloroethene	Annual	0.001
Conductance (field)	Quarterly	---	1,2-Dichloroethene	Annual	0.001
Calcium	Semi-Annual	1	1,2 Dichloropropane	Annual	0.001
Magnesium	Semi-Annual	1	1,3 Dichloropropene	Annual	0.001
Sodium	Semi-Annual	1	Ethyltertiarybutylether	Annual	0.005
Potassium	Semi-Annual	0.1	Hexachloroethane	Annual	0.005
Iron	Semi-Annual	0.02	Isopropylbenzene	Annual	0.001
Chloride	Semi-Annual	1	1,1,2,2 Tetrachloroethane	Annual	0.001
Alkalinity	Semi-Annual	10	1,2,3-Trichlorobenzene	Annual	0.005
Sulfate	Semi-Annual	2	1,2,3-Trichloropropane	Annual	0.001
Arsenic	Annual	0.001	1,2,3-Trimethylbenzene	Annual	0.001
Barium	Annual	0.005	1,2,4-Trichlorobenzene	Annual	0.005
Cadmium	Annual	0.0002	1,2,4-Trimethylbenzene	Annual	0.001
Chromium	Annual	0.001	1,3,5-Trimethylbenzene	Annual	0.001
Hexavalent Chromium	Annual	0.005	1,2-Dibromomethane	Annual	0.001
Lead	Annual	0.001	1,2-Dibromo-3-chloropropane	Annual	0.005
Mercury	Annual	0.0002	1,4-Dichloro-2-butene	Annual	0.005
Selenium	Annual	0.001	Tetrachloroethane	Annual	0.001
Silver	Annual	0.0002	Tetrachloroethene	Annual	0.001
Copper	Annual	0.001	1,1,2-Trichloroethane	Annual	0.001
Nickel	Annual	0.002	1,1,1-Trichloroethane	Annual	0.001
Total Cyanide	Annual	0.005	Trichloroethene	Annual	0.001
Acetone	Annual	0.02	Trichlorofluoromethane	Annual	0.001
Acrylonitrile	Annual	0.005	Vinyl Chloride	Annual	0.001
Bromodichloromethane	Annual	0.001	Methylene Chloride	Annual	0.005
Bromochloromethane	Annual	0.001	Methyl Iodide	Annual	0.001
Bromoform	Annual	0.001	Methyl Tertiary Butyl Ether	Annual	0.001
Bromomethane	Annual	0.005	Methyl Ethyl Ketone	Annual	0.005
Bromobenzene	Annual	0.001	4-Methyl-2-Pentanone	Annual	0.005

MDWTP SECSA Monitoring Parameters (cont'd)

Parameter	Monitoring Frequency	Detection Limit (mg/L)	Parameter	Monitoring Frequency	Detection Limit (mg/l)
Carbon Disulfide	Annual	0.001	n-Butylbenzene	Annual	0.001
Carbon Tetrachloride	Annual	0.001	n-Propylbenzene	Annual	0.001
Chlorobenzene	Annual	0.001	Styrene	Annual	0.001
Chloroethane	Annual	0.005	Tertiary Butyl Alcohol	Annual	0.05
Tetrahydrofuran	Annual	0.005	Tertiary Butyl Benzene	Annual	0.001
Acenaphthene	Annual	0.001	Hexachlorocyclopentadiene	Annual	0.01
Acenaphthylene	Annual	0.001	Aniline	Annual	0.001
Benzidene	Annual	NA	Indeno (1,2,3-cd) pyrene	Annual	0.002
Benzo(ghi)perylene	Annual	0.001	Isophorone	Annual	0.001
Benzoic Acid	Annual	NA	2-Methylnaphthalene	Annual	0.005
Benzyl alcohol	Annual	0.05	2-Nitroaniline	Annual	0.02
Bis (2-chloroethoxy) methane	Annual	0.002	3-Nitroaniline	Annual	0.2
Bis (2-chloroethyl) ether	Annual	0.001	4-Nitroaniline	Annual	0.02
Bis (2)chloroisopropyl) ether	Annual	0.001	Nitrobenzene	Annual	0.002
Bis (2-ethylhexyl) phthalate	Annual	0.005	N-Nitrosodiphenylamine	Annual	0.002
4-Bromo phenyl ether	Annual	0.002	N-Nitroso-di-n-propylamine	Annual	0.002
Butyl benzyl phthalate	Annual	0.005	1,2,4-Trichlorobenzene	Annual	0.002
4-Chloroaniline	Annual	NA	4-Chloro-3-methylphenol	Annual	0.005
2-chloronaphthene	Annual	0.002	2-Chlorophenol	Annual	0.01
4-Chlorophenyl phenyl ether	Annual	0.001	2,4-Dichlorophenol	Annual	0.01
Dibenzofuran	Annual	0.004	2,4-Dimethylphenol	Annual	0.005
Di-n-butyl phthalate	Annual	0.005	4,6-Dinitro-2-methylphenol	Annual	NA
1,2-Dichlorobenzene	Annual	0.001	2,4-Dinitrophenol	Annual	0.025
1,3-Dichlorobenzene	Annual	0.001	2-Methylphenol	Annual	0.01
1,4-Dichlorobenzene	Annual	0.001	3-Methylphenol	Annual	0.02
3,3'-Dichlorobenzene	Annual	NA	4-Methylphenol	Annual	0.02
Diethyl phthalate	Annual	0.005	2-Nitrophenol	Annual	0.005
Dimethyl pthalate	Annual	0.005	4-Nitrophenol	Annual	0.025
2,4-Dinitrotoluene	Annual	0.005	Pentachlorophenol	Annual	0.02
2,6-Dinitrotoluene	Annual	0.005	Phenol	Annual	0.005
Di-n-octyl phthalate	Annual	0.005	Pyridine	Annual	0.02
Fluoranthene	Annual	0.001	2,4,5-Trichlorophenol	Annual	0.005
Hexachlorobenzene	Annual	0.001	2,4,6-Trichlorophenol	Annual	0.004
Hexachlorobutadiene	Annual	0.001			

B5.A.4(B) GROUNDWATER MONITORING SYSTEM

[R 299.9612 and 40 CFR §§264.97(a)(2), (b), and (c) and 264.98(b)]

See Section B5.A.3(a).

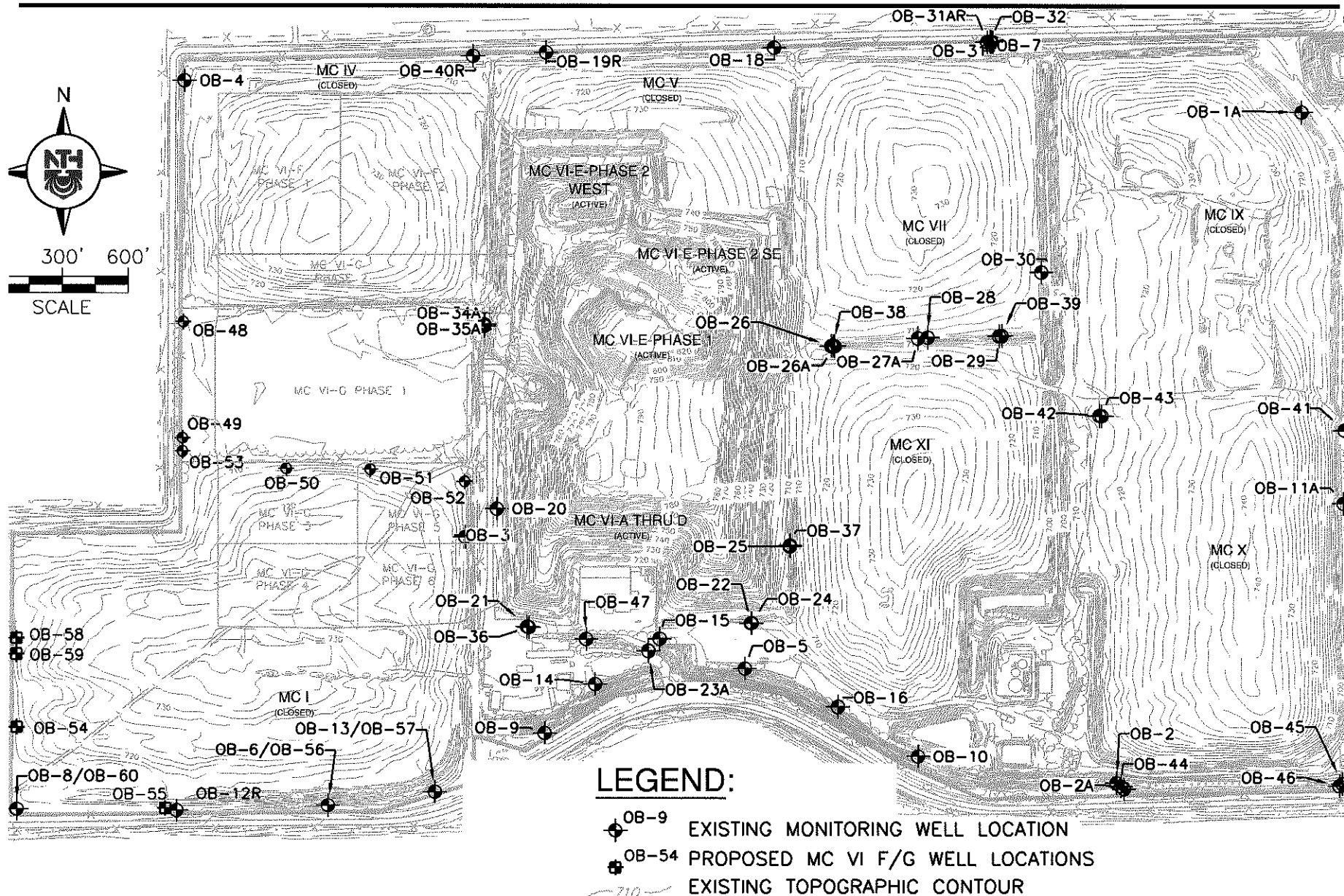
B5.A.4(C) BACKGROUND CONCENTRATION VALUES FOR PROPOSED PARAMETERS

[R 299.9612 and 40 CFR §§264.98(c) and 264.97(g)(1) and (2)]

See Sections B5.A.3(b) and (c).

B5.A.4(D) PROPOSED SAMPLING AND ANALYSIS PROCEDURES
[R 299.9506(3)(e) and R 299.9612 and 40 CFR §§264.97(d), (e), and (f) and 264.98(d), (e),
and (f)]

See Sections B5.A.3(a) and (b).



NTH PROJECT No. 13060921-06	DESIGNED BY: DLP	CHECKED BY: ACE	DRAWING SCALE: AS SHOWN
CAD FILE NAME: 060921-WLM	DRAWN BY: KRO	INCEPTION DATE: 11/16/09	PLOT DATE: 10/15/2014



NTH Consultants, Ltd.
Infrastructure Engineering
and Environmental Services

WAYNE DISPOSAL, INC. SITE NO. 2
VAN BUREN TWP., WAYNE COUNTY, MICHIGAN

GROUNDWATER MONITORING WELL
LOCATION MAP

ATTACHMENT:
A

B5.B AMBIENT AIR MONITORING PROGRAM

[R 299.9611(2)(c) and (4)]

B5.B.1 SAMPLING AND ANALYSIS PLAN

[R 299.9611(2)(a)]

A sampling and analysis plan for ambient air monitoring for MDWTP and WDI is included in the QA/QC Plan. The sampling and analysis plan was prepared in accordance with the requirements specified in R 299.9611(2)(a). All sampling and analysis performed pursuant to this application will be consistent with the QA/QC Plan. All samples for the purpose of environmental monitoring will be collected, transported, stored, and disposed by trained and qualified individuals in accordance with the QA/QC Plan.

The MDWTP and WDI facility will conduct ambient air monitoring to demonstrate compliance with the provisions of Part 55 of Act 451 and will be utilized to characterize the air quality associated with both MDWTP (MID 000724831) and WDI (MID 048090633) Site #2.

B5.B.1(A) SAMPLERS AND LOCATION

Ambient air quality will be monitored at seven stations around the perimeter of the site, one of which is a collocated station. These locations are noted on the map attached. All seven sites are equipped with a polyurethane foam (PUF) sampler, high volume Total Suspended Particulate (TSP) sampler, and a sorbent tube sampler, with the collocated station having two of each sampling apparatus. Sampling equipment is inspected before and after use.

B5.B.1(B) SCHEDULE

The sampling schedule for the high volume samplers is every 12th day for 24 hours (to coincide with the USEPA national sampling schedule. When required, resampling will occur on an alternate sampling day as designated by the national sampling schedule.

B5.B.1(C) SAMPLING AND ANALYSIS

PCB sampling will be conducted using a high volume PUF sampler and analyzed and reported as total PCBs. Sampling for the PCB compounds will be conducted in adherence to the USEPA's Toxic Organic Compendium Methods TO-4A or TO-10A. The PUF samplers will operate at an air sampling rate of approximately 200 to 280 lpm.

Metal concentrations will be determined from the samples collected in a high volume TSP sampler. The sampling for multi-metals will adhere to the requirements of 40 CFR Part 50, Appendix G for the determination of lead. All sections referenced by Part 50, Appendix G will likewise be followed. Then analysis will be performed using USEPA Reference Methods for lead and the other metals listed in the attached table to this monitoring plan. Quality control and assurance requirements specified in the method will be incorporated in the sampling protocol. Samples will be collected with a nominal flow rate of 50 cfm \pm 10 cfm.

VOC's will be sampled utilizing a system of sorbent tubes capable of effectively collecting the listed compounds in the attached table. A constant flow sampling pump is operated at approximately 0.10 liters

per minute (lpm). Samples will be collected at a flow rate adequate to reach the required limits of detection. Sampling will be conducted in adherence to the USEPA's Toxic Organic Compendium Method, TO-17 for solid sorbent tubes.

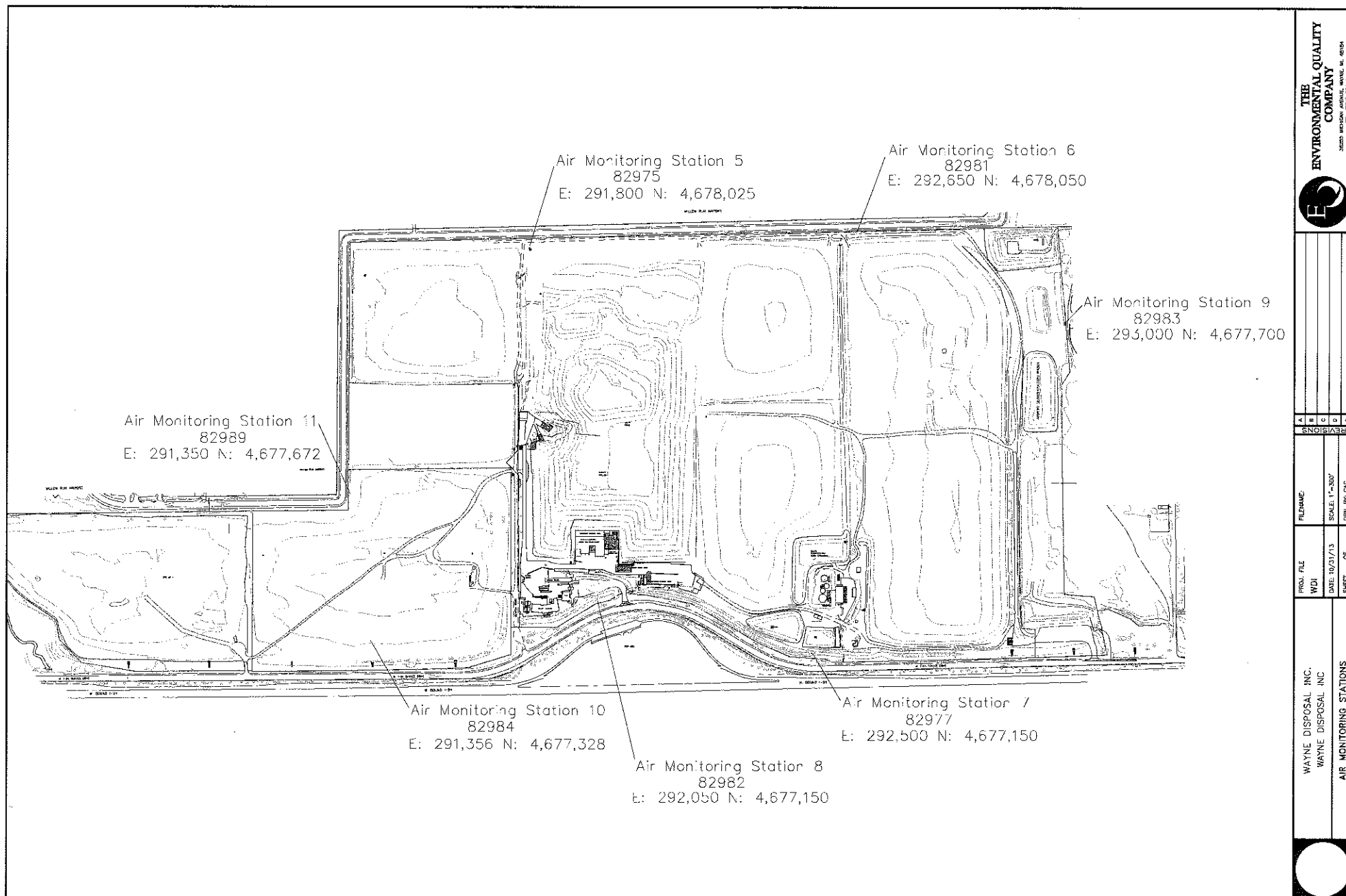
B5.B.1(D) MONITORING PARAMETERS

The table below provides a list of parameters monitor and the minimum detection limit.

WDI & MDWTP - AMBIENT AIR - MONITORING PARAMETERS (METALS and PARTICULATES)	
<u>COMPOUND</u>	<u>DETECTION LIMIT (ug/m³)</u>
CADMIUM	0.005
CHROMIUM	0.009
LEAD	0.025
TSP	-
WDI & MDWTP - AMBIENT AIR - MONITORING PARAMETERS (ORGANIC COMPOUNDS)	
<u>COMPOUND</u>	<u>DETECTION LIMIT (ug/m³)</u>
BENZENE	0.04
CARBON TETRACHLORIDE	0.25
CHLOROFORM	0.05
ETHYLBENZENE	1
METHYLENE CHLORIDE	1
1,1-DICHLOROETHANE	1
1,1,1-TRICHLOROETHANE	1
TETRACHLOROETHENE	0.1
TRICHLOROETHENE	0.1
TOLUENE	1
XYLENE (TOTAL)	1
PCBs (TOTAL)	0.02

B5.B.1(E) QUALITY ASSURANCE

On each run day, samples from the collocated site shall be analyzed and reported to the MDEQ for the assessment of sampler precision. One sample day per month, one blank sorbent tube and metals filter shall accompany the samples to the collocated site, not have air pulled through it, then submitted to the laboratory as a "trip blanks". All laboratory quality assurance, such as the analysis of blanks and standards, shall be made available to the MDEQ upon request for the determination of accuracy. If any parameter that is analyzed by the laboratory and determined to be non-detectable, the value of the method detection limit for that compound divided by 2 (MDL/2) shall be reported. Staff from the MDEQ may audit the ambient air monitoring program, files, and samplers at their discretion.



WAYNE DISPOSAL INC.		FILE NAME	A	
WAYNE DISPOSAL INC.		WDI	B	
AIR MONITORING STATIONS		DATE 10/31/13	C	
		SHEET 1 OF 1	D	
		SCALE 1"=300'	E	
		DATE 10/31/13	F	
		SHEET 1 OF 1	G	
		SCALE 1"=300'	H	
		DATE 10/31/13	I	
		SHEET 1 OF 1	J	
		SCALE 1"=300'	K	
		DATE 10/31/13	L	
		SHEET 1 OF 1	M	
		SCALE 1"=300'	N	
		DATE 10/31/13	O	
		SHEET 1 OF 1	P	
		SCALE 1"=300'	Q	
		DATE 10/31/13	R	
		SHEET 1 OF 1	S	
		SCALE 1"=300'	T	
		DATE 10/31/13	U	
		SHEET 1 OF 1	V	
		SCALE 1"=300'	W	
		DATE 10/31/13	X	
		SHEET 1 OF 1	Y	
		SCALE 1"=300'	Z	

B5.C ANNUAL SOIL MONITORING PROGRAM

[R 299.9611(2)(d) and (4)]

B5.C.1 SAMPLING AND ANALYSIS PLAN

[R 299.9611(2)(a)]

MDWTP is requesting a requesting a waiver from the soil monitoring requirements of R 299.9611(2)(d). Soil monitoring is not needed because the entire area is paved, and any areas designated for the storage of liquid waste has secondary containment in the form of concrete floors, curbing and sumps to collect precipitation as well as any spills. All active waste treatment or processing occurs within the MDWTP, which is inside a building. The treatment tanks contain leak detection and the treated concrete floors drain to blind sumps that are cleaned out if any liquids accumulate. Thus there are no areas where spills would occur onto an unpaved area. In the unlikely event that any waste or waste constituents penetrate the pavement, the entire area (excepting the SECSA) is underlain by either clay fill or native clay till. Therefore there would be very limited ability for transport in any direction. As described above, the SECSA, which is either asphalt (for solid waste) or concrete with secondary collection (for liquid waste) is underlain by surficial sand that is monitored by shallow groundwater wells. In addition, the closure plan requires sampling the soil beneath the pavement at the time of closure.