PERMIT NO. GW1810271

STATE OF MICHIGAN

DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

GROUNDWATER DISCHARGE PERMIT

In compliance with the provisions of Part 31, Water Resources Protection; and Part 41, Sewerage Systems, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA),

Tuscarora Township Wastewater Treatment Facility (WWTF)
P.O. Box 220
Indian River, MI 49749

is authorized to discharge treated sanitary wastewater in accordance with Rule 2218 Authorization of the Part 22 Rules, Groundwater Quality, promulgated pursuant to Part 31 from Tuscarora Twp WWTF located at

4649 Brudy Road
Indian River, MI 49749

designated as **Tuscarora Twp WWTF**

to the groundwater of the State of Michigan in accordance with effluent limitations, monitoring requirements, and other conditions set forth in this permit.

The issuance of this permit does not authorize violation of any federal, state, or local laws or regulations, nor does it obviate the necessity of obtaining such permits, including any other Michigan Department of Environment, Great Lakes, and Energy (Department) permits, or approvals from other units of government as may be required by law.

This permit is based on an original application submitted on January 25, 2017, as amended through August 4, 2023.

This permit takes effect on **November 1, 2023**. The provisions of this permit are severable. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term in accordance with applicable laws and rules. On its effective date, this permit shall supersede Groundwater Permit No. GW1810271 (which expired July 1, 2017).

This permit and the authorization to discharge shall expire at midnight, **November 1, 2027.** In order to receive authorization to discharge beyond the date of expiration, the permittee shall submit an application that contains such information, forms, and fees as are required by the Department by **May 5, 2027**.

Issued _____.

_____
Kristine Rendon, Supervisor
Groundwater Permits Unit
Permits Section
Water Resources Division

PERMIT FEE REQUIREMENTS

In accordance with Section 324.3122 of the NREPA, the permittee shall make payment of an annual permit fee to the Department for each December 15 the permit is in effect regardless of occurrence of discharge. The permittee shall submit the fee in response to the Department's annual notice. Payment may be made electronically via the Department's MiEnviro Portal system. Payment shall be submitted or postmarked by March 1 for notices mailed by January 15. Payment shall be submitted or postmarked no later than 45 days after receiving the notice for notices mailed after January 15.

In accordance with Section 324.3132 of the NREPA, the permittee shall make payment of an annual biosolids land application fee to the Department if the permittee land applies biosolids. The permittee shall submit the fee in response to the Department's annual notice. Payment may be made electronically via the Department's MiEnviro Portal system. Payment shall be submitted or postmarked no later than January 31 of each year for notices mailed by December 15. Payment shall be submitted or postmarked no later than 45 days after receiving the notice for notices mailed after December 15.

CONTACT INFORMATION

Unless specified otherwise, all contact with the Department required by this permit shall be made to the Gaylord District Office of the Water Resources Division. The Gaylord District Office is located at 2100 West M-32, Gaylord, Michigan, 49735-9282, Telephone: 989-731-4920, Fax: 989 731-6181.

CONTESTED CASE INFORMATION

Any person who is aggrieved by this permit may file a sworn petition with the Michigan Administrative Hearing System within the Michigan Department of Licensing and Regulatory Affairs, c/o the Michigan Department of Environment, Great Lakes, and Energy, setting forth the conditions of the permit which are being challenged and specifying the grounds for the challenge. The Department of Licensing and Regulatory Affairs may reject any petition filed more than 60 days after issuance as being untimely.

AUTHORIZATION TO DISCHARGE

The permittee shall utilize **Sequence Batch Reactor (SBR) with Chemical Clarification discharging to Rapid Infiltration Basins (RIBs)** as treatment to meet the terms and conditions of this permit.

The authorization to discharge under this permit is based upon the permittee providing treatment as identified in the application. If the permittee proposes to modify the treatment system, the permittee shall notify the Department. The Department may request that the permittee submit a modification request to amend the treatment system described in the application. Upon review of the proposed changes, the Department may terminate the permit, modify the permit, or require a different permit for the proposed discharge.

PART I

A. Limitations and Monitoring Requirements

1. Effluent Limitations and Monitoring, EQ-1

During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee is authorized to discharge treated sanitary wastewater to the groundwater of the state from EQ-1. The location of EQ-1 shall be specified in the facility's Sampling and Analysis Plan (SAP) approved by the Department in accordance with Part I.B.1. of this permit. Such discharge shall be limited and monitored by the permittee as specified below.

Parameter	Monthly Average	Minimum Daily Limit	Discharge Maximum Daily Limit	Units	Monitoring Frequency	Sample Type
Flow (Daily)			190,000	GPD	Daily	Direct Measurement
Final Flow (Annual)			69,350,000	GPY	Annually	Calculation
Total Inorganic Nitrogen (TIN)			5.0	mg/L	Twice Weekly	Calculation
Ammonia Nitrogen			(report)	mg/L	Twice Weekly	Grab
Nitrate Nitrogen			(report)	mg/L	Twice Weekly	Grab
Nitrite Nitrogen			(report)	mg/L	Twice Weekly	Grab
pH		6.5	9.5	S.U.	Twice Weekly	Grab
Biochemical Oxygen Demand (BOD5)			(report)	mg/L	Twice Weekly	Grab
Dissolved Oxygen		(report)		mg/L	Twice Weekly	Grab
Chloride			500	mg/L	Twice Weekly	Grab
Sodium			400	mg/L	Twice Weekly	Grab
Total Phosphorus	1.0			mg/L	Twice Weekly	Calculation
Total Suspended Solids (TSS)			(report)	mg/L	Twice Weekly	Grab
Iron			(report)	ug/L	Twice Weekly	Grab

a. *Total Inorganic Nitrogen (TIN)*
The daily maximum value for TIN shall be reported as the sum of the daily maximum values for ammonia nitrogen, nitrate nitrogen, and nitrite nitrogen.

b. *Sample Collection and Analytical Methods*
The permittee shall perform all sampling in accordance with the SAP approved by the Department in accordance with Part I.B.1. of this permit.

c. *Phosphorus Monthly Average*
Total Phosphorus concentrations shall be reported as a monthly average. The calculation shall be determined using the sum of all samples taken divided by the number of samples taken in the month.

2. Rapid Infiltration Basin Limitations and Monitoring

During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee is authorized to discharge treated sanitary wastewater to the groundwaters of the state, where the final disposal method is Rapid Infiltration Basins, at RI1, RI2, RI3, RI4, and RI5.

*The discharge point, designated as **RI1, RI2, RI3, RI4, and RI5** shall be limited and monitored as specified in the table below.*

Parameter	Limit	Unit	Monitoring Frequency	Sample Type
Application Rate (Daily)	25.5	gal/ft2 /d	Daily	Calculation

a. *Discharge Season*
The permittee is authorized discharge wastewater during the months of **January to December.**

b. *Rapid Infiltration*
The permittee shall meet all of the following standards in accordance with R 323.2236 of the Part 22 Rules.
   i. The system shall consist of two (2) or more cells or absorption areas that can be alternately loaded and rested or consist of one (1) cell or absorption area preceded by an effluent storage or stabilization pond system. If only one (1) cell or absorption area is provided, the storage or stabilization pond shall be operated on a fill and draw basis and have sufficient capacity to allow intermittent loading of the cell or absorption area.
   ii. For a system that has more than one (1) cell or absorption area, an individual cell or absorption area of the system shall be capable of being taken out of service without disrupting application to other cells or absorption areas of the system.
   iii. An appropriate hydraulic loading cycle shall be developed and implemented to maximize long-term infiltration rates and allow for periodic maintenance.

3. Groundwater Monitoring and Limitations, MW-3

During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee shall monitor the groundwater from the **static water elevation** groundwater monitoring well, MW-3, to establish upgradient concentrations of parameters necessary to evaluate groundwater quality, as specified below. The location and depth of MW-3 shall be consistent with the facility's SAP approved by the Department in accordance with Part I.B.1. of this permit.

Parameter	Minimum Daily Limit	Maximum Daily Limit	Units	Monitoring Frequency	Sample Type
Static Water Elevation		(report)	USGS-Ft	Quarterly	Grab

a. *Quarterly*

The permittee shall collect and analyze quarterly samples during the months of **February, May, August, and November.**

b. *Sampling Requirements*
The permittee shall perform all sampling in accordance with the SAP approved by the Department in accordance with Part I.B.1. of this permit.

4. Groundwater Monitoring and Limitations, MW-1 and MW-2

During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee shall monitor the groundwater from the hydraulically **upgradient** groundwater monitoring wells, MW-1 and MW-2, to establish upgradient concentrations of parameters necessary to evaluate groundwater quality. The location and depth of MW-1 and MW-2 shall be consistent with the facility's SAP approved by the Department in accordance with Part I.B.1. of this permit.

Parameter	Minimum Daily Limit	Maximum Daily Limit	Units	Monitoring Frequency	Sample Type
Static Water Elevation		(report)	USGS-Ft	Quarterly	Grab
pH	(report)	(report)	S.U.	Quarterly	Grab
Specific Conductance		(report)	umhos/cm	Quarterly	Grab
Total Inorganic Nitrogen		(report)	mg/L	Quarterly	Calculation
Ammonia Nitrogen		(report)	mg/L	Quarterly	Grab
Nitrate Nitrogen		(report)	mg/L	Quarterly	Grab
Nitrite Nitrogen		(report)	mg/L	Quarterly	Grab
Chloride		(report)	mg/L	Quarterly	Grab
Sodium		(report)	mg/L	Quarterly	Grab
Total Phosphorus		(report)	mg/L	Quarterly	Grab
Calcium		(report)	mg/L	Annually	Grab
Arsenic		(report)	ug/l	Annually	Grab
Iron		(report)	ug/L	Annually	Grab
Magnesium		(report)	mg/L	Annually	Grab
Manganese		(report)	ug/L	Annually	Grab
Potassium		(report)	mg/L	Annually	Grab
Dissolved Oxygen	(report)		mg/L	Annually	Grab
Bicarbonate		(report)	mg/L	Annually	Grab
Sulfate		(report)	mg/L	Annually	Grab
Aluminum		(report)	mg/L	Annually	Grab
Antimony		(report)	mg/L	Annually	Grab
Lead		(report)	mg/L	Annually	Grab
Titanium		(report)	mg/L	Annually	Grab
Beryllium		(report)	mg/L	Annually	Grab
Thallium		(report)	mg/L	Annually	Grab
Vanadium		(report)	mg/L	Annually	Grab

a. *Quarterly and Annual Monitoring*
The permittee shall collect and analyze quarterly samples during the months of **February, May, August, and November.** The permittee shall collect and analyze annual sampling during the month of **November**.

b. *Sampling Requirements*
The permittee shall perform all sampling in accordance with the SAP approved by the Department in accordance with Part I.B.1. of this permit.

c. *TIN at Groundwater Monitoring Points*
The daily maximum value for TIN shall be reported as the sum of the daily maximum values for ammonia nitrogen, nitrate nitrogen, and nitrite nitrogen.

5. Groundwater Monitoring and Limits, MW-5 and MW-6

During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee shall monitor the groundwater from the hydraulically **downgradient** groundwater monitoring wells, MW-5 and MW-6, to ensure limitations established to protect groundwater quality are met, as specified below. The location and depth of MW-5 and MW-6 shall be consistent with the facility's SAP approved by the Department in accordance with Part I.B.1. of this permit.

Parameter	Minimum Daily Limit	Maximum Daily Limit	Units	Monitoring Frequency	Sample Type
Static Water Elevation		(report)	USGS-Ft	Quarterly	Measured
pH	6.5	9.0	S.U.	Quarterly	Grab
Specific Conductance		(report)	umhos/cm	Quarterly	Grab
Total Inorganic Nitrogen		5.0	mg/L	Quarterly	Calculation
Ammonia Nitrogen		(report)	mg/L	Quarterly	Grab
Nitrate Nitrogen		(report)	mg/L	Quarterly	Grab
Nitrite Nitrogen		0.5	mg/L	Quarterly	Grab
Chloride		250	mg/L	Quarterly	Grab
Sodium		230	mg/L	Quarterly	Grab
Total Phosphorus		1.0	mg/L	Quarterly	Grab
Calcium		(report)	mg/L	Annually	Grab
Arsenic		(report)	ug/L	Annually	Grab
Iron		300	ug/L	Annually	Grab
Magnesium		(report)	mg/L	Annually	Grab
Manganese		50	ug/L	Annually	Grab
Potassium		(report)	mg/L	Annually	Grab
Dissolved Oxygen	(report)		mg/L	Annually	Grab
Bicarbonate		(report)	mg/L	Annually	Grab
Sulfate		250	mg/L	Annually	Grab
Aluminum		(report)	mg/L	Annually	Grab

Antimony		(report)	mg/L	Annually	Grab
Lead		(report)	mg/L	Annually	Grab
Titanium		(report)	mg/L	Annually	Grab
Beryllium		(report)	mg/L	Annually	Grab
Thallium		(report)	mg/L	Annually	Grab
Vanadium		(report)	mg/L	Annually	Grab

a. *Quarterly and Annual Monitoring*
The permittee shall collect and analyze quarterly samples during the months of **February, May, August, and November.** The permittee shall collect and analyze annual sampling during the month of **November**.

b. *Sample Collection and Analytical Methods*
The permittee shall perform all sampling in accordance with the SAP approved by the Department in accordance with Part I.B.1. of this permit.

c. *TIN at Groundwater Monitoring Points*
The daily maximum value for TIN shall be reported as the sum of the daily maximum values for ammonia nitrogen, nitrate nitrogen, and nitrite nitrogen.

d. *Sodium or Chloride Compliance*
The conditions set forth in Part I.A.5.e., below, shall apply if the discharge from the facility is otherwise in compliance with the sodium and chloride limitations specified in Part 31, Section 324.3109e(1) of the NREPA and Part 1, Effluent Limitations and Monitoring, of this permit. If the permittee is in compliance with these conditions, the permittee shall not be subject to response activities under Part 201, Environmental Remediation, of the NREPA with respect to the discharge of sodium and chloride.

e. *Sodium or Chloride Response*
If the permittee discharges sodium or chloride, or both, into groundwater that migrates off the property on which the discharge occurred and that discharge directly causes the groundwater concentration of sodium or chloride, or both, to exceed the levels of 230 milligrams per liter (mg/l) and 250 mg/l, respectively, provided under Part 31, Section 324.3109(e)(2) of the NREPA, the permittee shall do all of the following:

   i. Initiate a sampling program approved by the Department to monitor downgradient water supply wells for the levels of sodium or chloride, or both, in the water supply.

   ii. If the concentration of sodium in a downgradient water supply exceeds the level provided under Section 324.3109(e)(2), the permittee shall provide and maintain, for each affected downgradient water supply, free of charge, a point-of-use treatment system approved by the Department that will remove sodium from the water supply to be in compliance with the level provided under Section 324.3109(e)(2).

   iii. If the concentration of chloride in a downgradient water supply exceeds the level provided under Section 324.3109(e)(2), provide to each affected water supply owner a notice of aesthetic impact with respect to chloride levels.

6. Schedule of Compliance

The permittee shall make submittals in compliance with the following schedule, established in accordance with R 323.2206(4) of the Part 22 Rules.

a. *Schedule of Compliance for New Monitoring Well*

i. **On or before January 30, 2024**, the permittee shall submit to the Department for review and approval a work plan for the installation of a new groundwater monitoring well:

(1) The facility shall submit a work plan for the abandonment of the existing MW-6, and the installation of a new replacement monitoring well.

(2) The work plan shall include, at a minimum, the following:

(a) All information required under R 323.2221(3)(b)(v) of the Part 22 Rules which includes, number, location, depth, drilling method, construction materials, and development method of all wells.

(b) All information required under R 323.2221(3)(b)(vi) of the Part 22 Rules which includes, number of proposed soil borings, location, depth, drilling and plugging method.

ii. **On or before 90 days after approval of the workplan**, the permittee shall complete the installation of all required monitoring wells.

iii. **On or before 30 days after complete installation of all required monitoring wells**, the permittee shall submit to the Department for review, a well installation report for all complete monitoring wells. The report shall include, at a minimum, the following:

(1) Soil boring logs for all soil borings completed.

(2) Construction wells logs for all wells installed.

(3) Updated site map with new wells identified.

(4) A complete survey of all monitoring wells around the Drainfield. A complete survey shall include, at a minimum, the following:

(a) Top of casing.

(b) Ground surface elevations surveyed to a United States Geological Survey (USGS) datum as required in R 323.2221(4)(a)(vi), R 323.2221(4)(g)(iv), and R 323.2223(3)(b) of the Part 22 Rules.

iv. **On or before 60 days after complete installation of all required monitoring wells**, the permittee shall submit to the Department for review and approval an updated SAP as required under Part I.B.1 of this permit.

b. *Schedule of Compliance for Wastewater Treatment Plant Construction*

i. **On or before January 30, 2024,** the permittee shall submit for review and approval by the Department an updated SAP, in accordance with Part I.B.1. of this permit. The updated SAP will reflect the current permit requirements.

ii. **On or before January 30, 2024,** the permittee shall submit for review and approval by the Department, an updated Discharge Management Plan (DMP), in accordance with Part I.B.2. of this permit. The updated DMP shall reflect the WWTF expansion and discharge cycle. At a minimum the following topics need to be addressed:

(1) Change in the maximum daily discharge.

(2) Change in the annual accumulated discharge.

(3) Update the discharge schedule: dosing/resting cycle that includes all five basins.

(4) Any additional updates that reflect current operation.

iii. **By no later than 60 days after completion of construction of the wastewater treatment system**, the permittee shall submit, for review by the Department, as-built plans for the complete construction of the wastewater treatment system as approved under Part 41 of the NREPA.

iv. **By no later than 90 days after the startup of the wastewater treatment system addition**, the permittee shall submit for review and approval by the Department, a complete Operation and Maintenance Manual (O&M Manual), in accordance with Part I.B.3. of this permit.

Submittals shall be made via the Departments MiEnviro Portal system. If any document required to be submitted is disapproved by the Department, the permittee shall, within **30 days** of receiving written disapproval, submit a revised document addressing the deficiencies.

7. Facility Operation and Maintenance

The permittee shall complete site observations to ensure compliance with the terms and conditions of this permit. Observations shall be recorded in a written form, maintained by the permittee. The permit-required observation forms are available on the Groundwater Discharge Permit webpage. The observation forms shall be retained on site in accordance with Part II.C.6 of this permit and made available for inspection by the Department upon request. The following are the requirements of the observation form:

a. *Rapid Infiltration Basin(s)*

The following **weekly** observation shall be made:

i. *Vegetation*

The permittee shall visually observe all rapid infiltration basins for woody vegetation, shrubs, trees; and properly remove any harvested material.

ii. *Piping*

The permittee shall visually observe all piping to ensure there has been no damage and is functioning as designed.

The permittee shall immediately complete proper corrective actions if the observation identifies parts of the facility that are not in good working order.

8. Water Additive Request

This permit does not authorize the use of any additive without prior written approval from the Department. Such approval is authorized under separate correspondence. Additives include any substance added to water to enhance its effectiveness for uses such as, but not limited to, cleaning, disinfecting, heating, and cooling. A substance may be added to water directly or indirectly by being added to a process in such a way that it becomes a constituent of the wastewater. Permittees proposing to use any additives, including a proposed increased concentration of a previously approved additive, shall submit a request for approval via the Department's MiEnviro Portal system. The application form

name is “Groundwater Discharge Water Treatment Additive (WTA) Request Form” and can be found under the “Apps, Requests, and Reports”. A separate application form is required for each additive. Additional monitoring and reporting may be required as a condition of approval to use the water treatment additive.

A request for approval to use water additives shall include all of the following usage and discharge information for each water additive proposed to be used:

a. The Safety Data Sheet (SDS);

b. Ingredient information, including the name of each ingredient, Chemical Abstract Service (CAS) number for each ingredient, and fractional content by weight for each ingredient;

c. The proposed water additive discharge concentration with supporting calculations;

d. The discharge frequency (i.e., number of hours per day and number of days per year);

e. The outfall(s) and/or monitoring point(s) from which the water additive is to be discharged;

f. The type of removal treatment, if any, that the water additive receives prior to discharge;

g. The WTA’s function (i.e., microbiocide, flocculant, etc.);

h. The SDS shall include a 48-hour LC50 or EC50 for a North American freshwater planktonic crustacean (either *Ceriodaphnia sp*., *Daphnia sp*., or *Simocephalus sp*.). The results shall be based on the whole water additive, shall not be results based on a similar product, and shall not be estimated; and

i. The SDS shall include the results of a toxicity test for one (1) other North American freshwater aquatic species (other than a planktonic crustacean) that meets a minimum requirement of R 323.1057(2) of the Water Quality Standards. The results shall be based on the whole water additive, shall not be results based on a similar product, and shall not be estimated. Examples of tests that would meet this requirement include a 96-hour LC50 for rainbow trout, bluegill, or fathead minnow.

9. Residuals Management Program (RMP) for Land Application of Biosolids

The permittee is authorized to land-apply bulk biosolids or prepare bulk biosolids for land application in accordance with the permittee’s approved RMP approved on May 22, 2018; and approved modifications thereto, and the requirements established in R 323.2401 through R 323.2418 of the Part 24 Rules, Land Application of Biosolids, promulgated pursuant to Part 31 (Part 24 Rules). The approved RMP, and any approved modifications thereto, are enforceable requirements of this permit. Incineration, landfilling, and other residual disposal activities shall be conducted in accordance with applicable statutes and rules. The Part 24 Rules can be obtained via the internet at: https://www.michigan.gov/egle/about/organization/water-resources/biosolids/laws-and-rules.

a. *Annual Report*
On or before **October 30 of each year**, the permittee shall submit an annual report to the Department for the previous fiscal year of October 1 through September 30. The report shall be submitted electronically via the Department’s MiEnviro Portal system. At a minimum, the report shall contain:

i. a certification that current residuals management practices are in accordance with the approved RMP, or a proposal for modification to the approved RMP; and

ii. a completed Annual Report Form for Reporting Biosolids, available at mienviro.michigan.gov/ncore.

b. *Modifications to the Approved RMP*
Prior to implementation of modifications to the RMP, the permittee shall submit proposed modifications to the Department for approval. The approved modification shall become effective upon the date of approval. Upon written notification, the Department may impose additional requirements and/or limitations to the approved RMP as necessary to protect public health and the environment from any adverse effect of a pollutant in the biosolids.

c. *Record Keeping*
Records required by the Part 24 Rules shall be kept for a minimum of five (5) years. However, the records documenting cumulative loading for sites subject to cumulative pollutant loading rates shall be kept as long as the site receives biosolids.

d. *Contact Information*
RMP-related submittals shall be made to the Department.

10. Michigan Industrial Waste Pretreatment Program

It is understood that the permittee does not receive the discharge of any type or quantity of substance which may cause interference with the operation of the treatment works; and, therefore, the permittee is not required to immediately develop a Michigan Industrial pretreatment program as described in the Part 23 Rules, Pretreatment, promulgated under Part 31. The permittee is required to notify the Department within thirty (30) days if any user discharges or proposes to discharge such wastes to the permittee for treatment.

Under no circumstances shall the permittee allow introduction of the following waste into the waste treatment system:

a. Pollutants which cause pass-through (i.e., permit violations for this permit) or interference;
b. Pollutants which create a fire hazard or explosion hazard in the sewerage system, including, but not limited to waste streams with closed cup flashpoint of less than 140^0 Fahrenheit or 60^0 Centigrade using the test methods specified in 40 CFR 261.21;
c. Pollutants which will cause corrosive structural damage to the sewerage system; but in no case, discharge with a pH less than 5.0, unless the wastewater treatment plant is specifically designed to accommodate such discharges;
d. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the sewerage system resulting in interference;
e. Any pollutant, including oxygen demanding pollutants (BOD, etc.) released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the treatment plant;
f. Heat in amounts which will inhibit biological activity in the treatment plant resulting in interference; but in no case, heat in such quantities that the temperature at the treatment plant exceeds 40^0 Centigrade (104^0 Fahrenheit) unless the Department, upon request of the permittee, approves alternate temperature limits;
g. Pollutants which result in the presence of toxic gases, vapors or fumes within the sewerage system in a quantity that may cause acute worker health and safety problems; and

h. Any trucked or hauled pollutants, except at discharge points designated by the permittee.

If information is gained by the Department that the permittee receives or is about to receive industrial wastes, then this permit may be modified in accordance with applicable laws and rules.

11. Additional Monitoring Requirements

As a condition of this permit, the permittee shall monitor the discharge from monitoring point EQ-1 for the constituents listed below. Testing shall be conducted a maximum of one year from application submittal. Grab samples shall be collected for Total Metals and the Volatile Organic Compounds as identified below.

The results of such additional monitoring shall be submitted with the application for reissuance (May 5, 2027). Additional reporting requirements are specified in Part II.C.7. If, upon review of the analysis, it is determined that additional requirements are needed to be protective of groundwater in accordance with applicable laws and rules, the permit may then be modified by the Department in accordance with applicable laws and rules.

Metals	Chemical Abstract Service Number	Water Reporting Limits (ug/L)[2]	EPA Analytical Method or SW-846[3]
Aluminum	7429905	5	200.8/6020A
Antimony	7440360	1	200.8/6020A
Arsenic	7440382	1	200.8/6020A
Barium	7740393	5	200.8/6020A
Beryllium	7440417	1	200.8/6020A
Boron	7740428	20	200.7/6010C
Cadmium	7740439	0.2	200.8/6020A
Calcium	8047594	1000	200.7/6010C
Chromium	7740473	1	200.8/6020A
Cobalt	7740484	5	200.8/6020A
Copper	7740508	1	200.8/6020A
Iron	7439896	20	200.7/6010C
Lead	7439921	1	200.8/6020A
Lithium	7439932	10	200.7/6010C
Magnesium	7439954	500	200.7/6010C
Manganese	7439965	5	200.8/6020A

Mercury	7439976	0.2	245.1/7470A, 7471A
Molybdenum	7439987	5	200.8/6020A
Nickel	7440020	2	200.8/6020A
Potassium	7440097	200	200.7/6010C
Selenium	7782492	1	200.8/6020A
Silver	7440224	0.2	200.8/6020A
Sodium	17341252	1000	200.7/6010C
Strontium	7740246	5	200.8/6020A
Thallium	7740280	2	200.8/6020A
Titanium	7440326	5	200.8/6020A
Vanadium	7740622	2	200.8/6020A
Zinc	7740666	5	200.8/6020A

Volatile Organics	Chemical Abstract Service Number	Water Reporting Limits (ug/L)[2]	EPA Analytical Method or SW-846[3]
1,1,1,2-Tetrachloroethane	630206	1	624/8260B
1,1,1-Trichloroethane	71556	1	624/8260B
1,1,2,2-Tetrachloroethane	79345	1	624/8260B
1,1,2-Trichloroethane	79005	1	624/8260B
1,1-Dichloroethane	75343	1	624/8260B
1,1-Dichloroethylene	75354	1	624/8260B
1,2,3-Trichlorobenzene	87616	5	624/8260B
1,2,3-Trichloropropane	96184	1	624/8260B
1,2,3-Trimethylbenzene	526738	1	624/8260B
1,2,4-Trichlorobenzene	120821	5	624/8260B
1,2,4-Trimethylbenzene	95636	1	624/8260B
1,2-Dibromo-3- chloropropane	96128	5	624/8260B
1,2-Dibromoethane (EDB)	80977	1	624/8260B
1,2-Dichlorobenzene	95501	1	624/8260B
1,2-Dichloroethane	107062	1	624/8260B
1,2-Dichloroethlyene (cis)	156592	1	624/8260B
1,2-Dichloroethlyene (trans)	156605	1	624/8260B
1,2-Dichloropropane	78875	1	624/8260B
1,3,5-Trimethylbenzene (Mesitylene)	108678	1	624/8260B
1,3-Dichlorobenzene	541731	1	624/8260B
1,3-Dichloropropene (cis)	542756	1	624/8260B

1,3-Dichloropropene (trans)	99614025	1	624/8260B
1,4-Dichloro-2-butene (trans)	764410	5	624/8260B
1,4-Dichlorobenzene	106467	1	624/8260B
2-Butanone (MEK)	78933	5	624/8260B
2-Hexanone	591786	5	624/8260B
2-Methylnaphthalene	91576	5	624/8260B
2-Propanone (Acetone)	67641	20	624/8260B
4-Methyl-2-pentanone (MIBK)	108101	5	624/8260B
Acrylonitrile	107131	5(2.0)	624/8260B
t-Amyl Methyl Ether (TAME)	994058	5	624/8260B
Benzene	71432	1	624/8260B
Bromobenzene	108864	1	624/8260B
Bromochloromethane	83847498	1	624/8260B
Bromodichloromethane	75274	1	624/8260B
Bromoform	75252	1	624/8260B
Bromomethane	74839	5	624/8260B
t-Butyl Alcohol	75650	50	624/8260B
n-Butylbenzene	104518	1	624/8260B
sec-Butylbenzene	135988	1	624/8260B
t-Butylbenzene	98066	1	624/8260B
Carbon Disulfide	75150	1	624/8260B
Carbon Tetrachloride	56235	1	624/8260B
Chlorobenzene	108907	1	624/8260B
Chloroethane	75003	5	624/8260B
Chloroform	67663	1	624/8260B
Chloromethane	74873	5	624/8260B
Cyclohexane	108941	5	624/8260B
Dibromochloromethane	124481	1	624/8260B
Dibromomethane	74953	1	624/8260B
Dichlorodifluoromethane	75718	5	624/8260B
Diethyl Ether	60297	5	624/8260B
Diisopropyl Ether	108203	5	624/8260B
Ethylbenzene	100414	1	624/8260B
Ethyl-t-Butyl Ether (ETBE)	637923	5	624/8260B
Hexachloroethane	67721	5	624/8260B
Hexane	110543	1	624/8260B
Isopropyl Benzene	98828	1	624/8260B
p-Isopropyl Toluene (p-	99876	1	624/8260B
Methyl Iodide	74884	1	624/8260B
Methyl-t-Butyl Ether	1634044	1	624/8260B
Methylene Chloride	75092	5	624/8260B
Naphthalene	91203	5	624/8260B
n-Propylbenzene	103651	1	624/8260B
Styrene	100425	1	624/8260B
Tetrachloroethylene	127184	1	624/8260B
Tetrahydrofuran	109999	5	624/8260B
Toluene	108883	1	624/8260B

Trichloroethylene	79016	1	624/8260B
Trichlorofluoromethane	75694	1	624/8260B
Vinyl Chloride	75014	1	624/8260B
m & p-Xylene	1330207	2	624/8260B
o-Xylene	1330207	1	624/8260B

PART I

B. Required Documentation

1. Sampling and Analysis Plan

The permittee shall complete all measurement, sampling, and analysis procedures in accordance with the SAP approved by the Department. The SAP approved by the Department is an enforceable requirement under this permit. The SAP shall meet the requirements of R 323.2223(3) of the Part 22 Rules, and shall include, at a minimum, the following information:

a. Effluent Monitoring.
   i. Location of effluent sampling.
   ii. Sample frequency.
   iii. A list of substances to be sampled.
   iv. Sampling procedure, including all of the following:
      (1) The method and volume of water removed during sampling.
      (2) Steps taken to prevent cross contamination.
      (3) Sample handling and preservation methods.
      (4) Laboratory analysis method.
      (5) Laboratory method detection level.
      (6) Quality assurance and quality control program.

b. Groundwater Monitoring.
   i. The number and location of wells to be included in the groundwater monitoring system.
   ii. For each well, the depth and screened interval for each monitoring well. The screened interval shall be referenced to United States Geological Survey data.
   iii. Well construction materials and installation techniques.
   iv. Sampling frequency.
   v. A list of substances to be sampled.
   vi. Sampling procedure, including all of the following:
      (1) The method and volume of water removed from each well during sampling.
      (2) Steps taken to prevent cross contamination between wells.
      (3) Sample handling and preservation methods.
      (4) Laboratory analysis method.
      (5) Laboratory method detection level.
      (6) Quality assurance and quality control program.
   vii. A description of the techniques used to present and evaluate groundwater quality monitoring data.
   viii. A description of the method used to collect static water levels and present groundwater flow data. Static water level precision shall be to 0.01 foot.

Prior to implementation of any modifications to the procedures specified in the approved SAP, the permittee shall submit to the Department for review and approval a written request for modification of the SAP. Such requests shall explain the nature of the

modification, provide adequate rational for the modification, and include all necessary supporting documentation to enable a full review of the SAP. Approved modifications shall become enforceable requirements under this permit upon the date of Department written approval.

The permittee shall keep an approved copy of the SAP, including any approved modification, at the facility permanently and shall be provided to the Department upon request. The Department may review any document in whole or in part at its discretion and upon written notification require modifications if portions are determined to be inadequate. The permittee shall immediately initiate steps to correct any condition that is not in accordance with the SAP approved by the Department.

2. Discharge Management Plan (DMP)

The permittee shall manage land application in accordance with the DMP approved by the Department. The DMP approved by the Department is an enforceable requirement under this permit. The DMP shall include, at a minimum, the following information:

a. A site map identifying the location and size of each application area utilized in the system.
b. Maximum daily and annual discharge volumes.
c. The total discharge area.
d. Scheduled maintenance.
e. Vegetative cover control and removal.
f. Load and rest cycles.
g. Application rates.
h. Means for even distribution of waste or wastewater.
i. Strategies for period of adverse weather.
j. Monitoring procedures.
k. Other pertinent information.

More information can be found in the Part 22 Guidesheet II for the Development of a Discharge Management Plan.

Prior to implementation of any modifications to the procedures specified in the approved DMP, the permittee shall submit to the Department for review and approval an updated DMP. Such changes may include, but are not limited to, dosing and resting schedule, land area increases, land area decreases, or discharge season. Approved modifications shall become enforceable requirements under this permit upon the date of Department written approval. Major modification such as, but not limited to, an increase in discharge volume, addition of a new land application site, change in effluent characteristics, or change in treatment method shall not be authorized under this part. The permittee shall submit a permit modification application with a revised DMP for any major modifications in accordance with Part II.D.7. of this permit.

The permittee shall keep an approved copy of the DMP, including any approved modification, at the facility and shall be provided to the Department upon request. The Department may review any document in whole or in part at its discretion and upon written notification require modifications if portions are determined to be inadequate. The

permittee shall immediately initiate steps to correct any condition that is not in accordance with the DMP approved by the Department.

3. Operations and Maintenance Manual (O&M Manual)

The permittee shall operate the facility in accordance with the O&M Manual approved by the Department. The O&M Manual approved by the Department is an enforceable requirement under this permit. The O&M Manual shall include, at a minimum, the following information:

a. Descriptions and operation information for all equipment.
b. An emergency operation plan.
c. Monitoring program to monitor process efficiency.
d. Inspection instructions and plan for the collection system and pump stations.
e. Maintenance plan for equipment.
f. Documentation of maintenance and inspection.
g. List of relevant environmental regulations.

Prior to implementation of any modifications to the procedures specified in the approved O&M Manual, the permittee shall submit to the Department for review and approval a written request for modification of the O&M Manual. Such requests shall explain the nature of the modification, provide adequate rational for the modification, and include all necessary supporting documentation to enable a full review of the O&M Manual. Approved modifications shall become enforceable requirements under this permit upon the date of Department written approval.

The permittee shall keep an approved copy of the O&M Manual, including any approved modification, at the facility and shall be provided to the Department upon request. The Department may review any document in whole or in part at its discretion and upon written notification require modifications if portions are determined to be inadequate. The permittee shall immediately initiate steps to correct any condition that is not in accordance with the O&M Manual approved by the Department.

4. Basis of Design

The permittee shall operate the facility in accordance with the Basis of Design received and reviewed by the Department. The authorization to discharge under this permit is based upon the permittee providing treatment as identified in the submitted and reviewed Basis of Design. Prior to implementation of any modifications to the treatment system including, but not limited to, flow rates, wastewater characterization, unit processes, pollutant loading, and hydraulic capacity of the system, the permittee shall submit to the Department a permit modification application to amend the treatment system described in the application and basis of design. The application shall include an updated Basis of Design that clearly identifies all design changes. Upon review of the proposed changes, the Department may terminate the permit, modify the permit, or require a different permit for the proposed treatment and discharge system.

PART II

Part II may include terms and/or conditions not applicable to discharges covered under this permit.

A. Definitions

24-Hour Composite Sample is a flow proportioned composite sample consisting of hourly or more frequent portions that are taken over a 24-hour period.

Annual Monitoring Frequency refers to a calendar year beginning on January 1 and ending on December 31. When required by this permit, an analytical result, reading, value, or observation must be reported for that period if a discharge occurs during that period.

Best Management Practices means structural devices or nonstructural practices that are designed to prevent pollutants from entering into groundwater.

Biosolids are the solid, semisolid, or liquid residues generated during the treatment of sanitary sewage or domestic sewage in a treatment works. This includes, but is not limited to, scum or solids removed in primary, secondary, or advanced wastewater treatment processes and a derivative of the removed scum or solids.

Bulk Biosolids means biosolids that are not sold or given away in a bag or other container for application to a lawn or home garden.

By-Pass means any diversion from or bypass of facilities necessary to maintain compliance with the terms and conditions of this permit.

Class B Biosolids refers to material that has met the Class B pathogen reduction requirements or equivalent treatment by a Process to Significantly Reduce Pathogens (PSRP) in accordance with the Part 24 Administrative Rules, Land Application of Biosolids, of Part 31 of the NREPA. Processes include aerobic digestion, composting, anaerobic digestion, lime stabilization and air drying.

Daily Concentration is the sum of the concentrations of the individual samples of a parameter divided by the number of samples taken during any calendar day. If the parameter concentration in any sample is less than the quantification limit, regard that value as zero when calculating the daily concentration. For pH, report the maximum value of any individual sample taken during the month and the minimum value of any individual sample taken during the month.

Daily Monitoring Frequency refers to a 24-hour period. When required by this permit, an analytical result, reading, value or observation must be reported for that period if a discharge occurs during that period.

Department means the Michigan Department of Environment, Great Lakes, and Energy.

Detection Level means the lowest concentration or amount of the target analyte that can be determined to be different from zero by a single measurement at a stated level of probability.

Discharge means the addition of any waste, waste effluent, wastewater, pollutant, or any combination thereof to any groundwaters of the state.

Domestic Equivalent Wastewater means wastewater that falls outside the definition of sanitary sewage, but which has similar wastewater characteristics and is amenable to on-site wastewater treatment and subsurface soil disposal.

Effluent means waste or wastewater during or subsequent to treatment but before discharge.

Flow Proportioned Sample is a composite sample with the sample volume proportional to the effluent flow.

Furrow Stream is the volume, in gallons per unit time, usually per minute, of wastewater discharged into the furrow.

General Permit means a groundwater permit that is designed to cover permittees with similar operations or type of discharge.

GPD means gallons per day.

GPY means gallons per year.

Grab Sample is a single sample taken at neither a set time nor flow.

Individual Permit means a site-specific Groundwater permit.

Land Application means spraying or spreading waste, waste effluent, or wastewater onto the land surface or incorporating into the soil to be treated by the plants, soil surface, and/or the soil matrix.

Biosolids or a biosolids derivative sprayed or spread onto the land surface or incorporated into the soil can either condition the soil or fertilize crops or vegetation grown in the soil.

MGD means million gallons per day.

Mg/L is a unit of measurement and means milligrams per liter.

Monitoring Well means a well that is specifically designed and located to allow for the collection of hydrogeologic data and representative samples in order to measure the impact of a discharge on groundwater.

Monthly Monitoring Frequency refers to a calendar month. When required by this permit, an analytical result, reading, value, or observation must be reported for that period if a discharge occurs during that period.

POTW is a publicly owned treatment work.

Quantification Level means the measurement of the concentration of a contaminant obtained by using a specified laboratory procedure calculated at a specified concentration above the detection level. It is considered the lowest concentration at which a particular contaminant can be quantitatively measured using a specified laboratory procedure for monitoring of the contaminant.

Quarterly Monitoring Frequency refers to a three-month period, defined as January through March, April through June, July through September, and October through December. When required by this permit, an analytical result, reading, value, or observation must be reported for that period if a discharge occurs during that period.

Rapid Infiltration is the application of wastewater to areas of moderately to highly permeable soil. The majority of applied wastewater percolates through the soil, and the treated effluent drains naturally to groundwater.

Report means there is no limit associated with the individual substance for the medium that is being sampled; the permittee must only report the result of the laboratory analysis.

Slow-Rate Land Treatment is the application of wastewater to a vegetated land surface with the applied wastewater being treated as it flows through the plant and soil matrix. A portion of the flow is expected to percolate to the groundwater while the remainder is utilized by plants or lost through evaporation.

Wastewater means liquid waste discharged directly or indirectly into the waters of the state or onto the ground that results from industrial and commercial processes or municipal operations, including liquid or water-carried process waste, cooling and condensing waters, and sanitary sewage.

Water Additive means a substance added to water to enhance its effectiveness for uses such as, but not limited to, cleaning, disinfecting, heating, and cooling. A substance may be added to water directly or indirectly by being added to a process in such a way that it becomes a constituent of the wastewater.

Weekly Monitoring Frequency refers to a calendar week that begins on Sunday and ends on Saturday. When required by this permit, an analytical result, reading, value, or observation must be reported for that period if a discharge occurs during that period.

PART II

B. Design Requirements

1. General Prohibitions

The permit shall be in accordance with the requirements of R 323.2204 of the Part 22 Rules. This includes, but is not limited to, the following:

a. The discharge shall not be, or not be likely to become, injurious to the protected uses of the waters of the state.

b. The discharge shall not cause runoff to, ponding on, or flooding of adjacent property, shall not cause erosion, and shall not cause nuisance conditions.

c. The point of discharge shall be located not less than 100 feet inside the boundary of the property where the discharge occurs unless a lesser distance is specifically authorized in writing by the Department, unless the discharge is authorized under R 323.2210, R 323.2211, or R 323.2213 of the Part 22 Rules or unless a lesser distance is specifically approved by the Department in the permit.

d. For a discharge authorized under R 323.2211, R 323.2213, R 323.2215, R 323.2216(2), or R 323.2216(4) of the Part 22 Rules the discharge shall be a minimum of 200 feet from a Type I or Type IIa water supply well, 75 feet from a Type IIb and Type III water supply well, and 50 feet from any domestic well. For a discharge authorized under R 323.2218 or R 323.2216(3) of the Part 22 Rules, the discharge shall be a minimum of 2,000 feet from a Type I or Type IIa water supply well, 800 feet from a Type IIb or Type III water supply well, and 300 feet from a domestic well. The Department may authorize a lesser or greater isolation distance in an individual case based on groundwater flow direction, volume, and constituents of the discharge; geological, surface, and other site conditions; and the degree of threat to the well or wells.

e. The discharge shall not create a facility as defined in Part 201, Environmental Response, of the NREPA.

2. Land Application Design Requirements

The permittee shall design, construct, and operate any land treatment system in accordance with R 323.2233(4) of the Part 22 Rules, which shall include, at a minimum, the following requirements:

a. The system shall be designed and constructed to prevent surface runoff from either entering or exiting the system.

b. The system shall be designed and constructed to provide even distribution of wastewater during application. A header ditch, where used, shall be designed and constructed to allow for complete drainage after each wastewater loading or shall be lined to prevent seepage.

c. If vegetative cover is utilized and is considered part of the overall treatment system, then the design and construction of the system shall allow for the mechanical harvesting of vegetative cover.

d. The system shall be designed, constructed, and operated to allow an appropriate loading cycle. An appropriate loading cycle allows time between loadings for all of the following:

   i. Soil organisms to biologically decompose organic constituents in the wastewater.

   ii. Organic solids on the soil surface to decompose.

   iii. The soil to become aerated.

iv. Vegetative cover to utilize available nutrients provided through the application of the wastewater.

v. Soil conditions to become unsaturated and aerobic.

vi. Harvesting operations to occur at appropriate times.

e. The design hydraulic loading or application rate, whether daily, monthly, or annual, shall not be more than one of the following:

i. Three (3) percent of the permeability of the most restrictive soil layer within the solum over the area of the discharge when determined by either the cylinder infiltration method or air entry permeameter test method.

ii. Seven (7) percent of the permeability of the most restrictive soil layer within the solum over the area of the discharge as determined by the saturated hydraulic conductivity method.

iii. Twelve (12) percent of the permeability of the most restrictive soil layer within the solum over the area of the discharge as determined by the basin infiltration method.

iv. If published information is utilized, the permittee shall determine the methodology used to measure the reported hydraulic conductivity. If the hydraulic conductivity is given as a range of expected values, then a permittee shall use the minimum value given the most restrictive soil layer within the solum when calculating the hydraulic loading or application rate.

f. The system shall be designed, constructed, and operated to prevent the development of sodic conditions within the solum of the discharge area. Sodic conditions are considered to exist in the solum when the exchangeable sodium percentage, which is the percentage of the cation exchange capacity of a soil occupied by sodium, is more than 15 percent.

g. If phosphorus adsorption within the solum or unsaturated soil column is part of the overall treatment process, then the system shall be designed as follows:

i. The available phosphorus adsorption capacity (PAC) of the solum or unsaturated soil column from within the discharge area shall be sufficient to provide the necessary treatment to ensure that the applicable limit established in this permit is not exceeded for the duration of the permit.

ii. The loading cycle shall be designed so as to provide the necessary contact time within the solum or unsaturated soil column required for phosphorus to be removed from the applied wastewater through adsorption processes.

iii. The available PAC of the discharge area shall be determined through either of the following methods:

(1) By subtracting phosphorus levels of the unsaturated soil column, determined through on-site Bray-P1 analysis, from published PAC data for the solum found within the discharge area.

(2) adsorption maximum as determined through Langmuir isotherm analysis of on-site soils, after adjustments for the concentration of phosphorus in the effluent and fraction of utilization within the solum are made.

h. All of the following operation and maintenance requirements shall be met:

i. Portions of the wastewater distribution system shall be capable of being taken out of service for maintenance and other operational activities and to provide rest to portions of the irrigation area without disrupting applications to other areas of the system.

ii. All areas within a system shall be accessible for maintenance equipment.

iii. For slow rate and overland flow treatment systems, the pH of the plow layer within the discharge area shall be maintained between 6.0 and 7.5 standard units.

i. The discharge to a land treatment system shall be limited so that the discharge volume combined with the precipitation from a 10-year frequency, 24-hour duration rainfall event does not overflow the designed discharge area.

3. Lagoon Construction

Lagoon construction shall be consistent with R 323.2237 of the Part 22 Rules and shall consist of a composite liner composed of a base and flexible membrane liner unless the conditions set forth in R 323.2237(4) are met. Guidance can be found in Guidesheet IV: Wastewater Treatment and Storage Lagoons.

PART II

C. Monitoring Procedures

1. Permit Monitoring Requirements

Pursuant to R 323.2223(1) of Part 22 Rules, the Department may modify the effluent or groundwater monitoring parameters or frequency requirements of this permit. The permittee may request a modification of the parameters or frequency of monitoring of this permit with adequate supporting documentation.

2. Instrumentation

The permittee shall periodically calibrate and perform maintenance procedures on all monitoring instrumentation at intervals to ensure accuracy of measurements.

3. Test Procedures

Test procedures for the analysis of pollutants shall conform to regulations promulgated pursuant to either SW-846, 3rd Edition, September 1986, "Test Methods for the Evaluation of Solid Waste, Physical-Chemical Methods," or Section 304(h) of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq.), 40 CFR, Part 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants, unless specified otherwise in this permit. Requests to use test procedures not defined here shall be submitted to the Department for review and approval.

The permittee shall periodically calibrate and perform maintenance procedures on all analytical instrumentation at intervals to ensure accuracy of measurements. The calibration and maintenance shall be performed as part of the permittee's laboratory Quality Assurance/Quality Control (QA/QC) Program.

4. Representative Samples

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. Guidance on how to collect representative samples is contained in Guidesheet III, "Characterization of Wastewater".

5. Recording Results

The permittee shall record the following information for each measurement or sample taken pursuant to the terms and conditions of this permit:

a. The exact place, date, and time of measurement or sampling.
b. The person(s) who performed the measurement or sample collection.
c. The dates the analyses were performed.
d. The person(s) who performed the analyses.
e. The analytical techniques or methods used.
f. The date of and person responsible for equipment calibration.
g. The results of all required analyses.

6. Records Retention

The permittee shall maintain records of all groundwater-related activities. All such records and information resulting from the monitoring activities required by this permit shall be retained for three years. This includes, but is not limited to, all records of analyses performed, facility operation and maintenance logs, calibration and maintenance of instrumentation, and recordings from continuous monitoring instrumentation.

7. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report. Such increased frequency shall also be indicated.

Monitoring required pursuant to Part 41, Sewerage Systems, of the NREPA or Rule 35 of the Mobile Home Park Commission Act (1987 PA 96) for assurance of proper facility operation shall be submitted as required by the Department.

PART II

D. Reporting Requirements

1. Designated Wellhead Protection Area

The permittee shall do all of the following if the discharge is located within a designated wellhead protection area:

a. Provide to the public water supply system manager a copy of each monitoring report provided to the Department.

b. Notify the pertinent public water supply system manager when a discharge has exceeded an applicable standard. The notification shall be made within 48 hours of a determination by the discharge that an applicable standard has been exceeded.

2. Submittal Requirements for Self-Monitoring Data

Part 31 of the NREPA, specifically Section 324.3110(7), and R 323.2155(2) of Part 21, Wastewater Discharge Permits, promulgated under Part 31 of the NREPA, allow the Department to specify the forms to be utilized for reporting the required self-monitoring data. The permittee shall submit self-monitoring data via the Department's MiEnviro Portal system.

The permittee shall utilize the information provided on the MiEnviro Portal website to access and submit the electronic forms. Annual, monthly summary, and daily data shall be submitted to the Department no later than the **20th day of the month** following each month of the authorized discharge period(s) or reporting due date specified in this permit. The permittee may be allowed to submit the electronic forms after this date if the Department has granted an extension to the submittal date.

3. Compliance Requirements

The permittee shall comply with all applicable requirements set forth in Parts 31 and 41 of the NREPA and related regulations and rules. The permittee shall report all instances of noncompliance with concentration limitations of effluent or groundwater in accordance with the following requirements:

a. If the facility is in a wellhead protection area, within 48 hours from the time the permittee becomes aware of the noncompliance, the permittee shall report noncompliance to the public water supply manager.

b. Within seven (7) days from the time the permittee becomes aware of the noncompliance, the permittee shall report, in writing, all instances of noncompliance. Written reporting shall include all of the following:

   i. The name of the substance(s) for which a limit was exceeded.

   ii. The concentration at which the substance was found.

   iii. The location(s) at which the limit was exceeded.

c. Within 14 days from the time the permittee becomes aware of the noncompliance, the permittee shall resample the monitoring point at which the limit was exceeded for the substance for which a limit was exceeded.

d. Within 60 days from the time the permittee becomes aware of the noncompliance, the permittee shall submit a written report that shall include all of the following:

   i. The results of the confirmation sampling.

   ii. An evaluation of the cause for the limit being exceeded and the impact of that event to the groundwater.

   iii. A proposal detailing steps taken or to be taken to prevent recurrence.

e. In accordance with R 323.2227 of the Part 22 Rules, the Department may require additional activities including, but not limited to, the following:
   i. Change the monitoring program, including increasing the frequency of effluent monitoring or groundwater sampling, or both.
   ii. Develop and implement a groundwater monitoring program if one is not in place.
   iii. If the discharge is in a designated wellhead protection area, assess the effects of the discharge on the public water supply system.
   iv. Review the operational or treatment procedures, or both, at the facility.
   v. Define the extent to which groundwater quality exceeds the applicable criteria that would designate the site as a facility under Part 201 of the NREPA.
   vi. Revise the operational procedures at the facility.
   vii. Change the design or construction of the wastewater operations at the facility.
   viii. Initiate an alternative method of waste treatment or disposal.
   ix. Remediate contamination to comply with the terms of Part 201 of the NREPA, if applicable.

f. If the Department determines that a change in groundwater quality from a normal operating baseline has occurred that indicates the concentration of a substance in groundwater may exceed an applicable limit, then upon written notification from the Department the permittee shall take the following actions:
   i. Change the monitoring program, including increasing the frequency of effluent sampling or groundwater sampling, or both.
   ii. Review the operational or treatment procedures, or both, at the facility.

4. Electronic Reporting

Upon notice by the Department that electronic reporting tools are available for specific reports or notifications, the permittee shall submit all such reports or notifications as required by this permit, electronically.

5. Start-Up Notification

If the permittee will not discharge during the first 60 days following the effective date of this permit, the permittee shall notify the Department within 14 days following the effective date of this permit and then 60 days prior to the commencement of the discharge.

6. Compliance Dates Notification

Within 14 days of every compliance date specified in this permit, the permittee shall submit a written notification to the Department indicating whether or not the particular requirement was accomplished. If the requirement was not accomplished, the notification shall include an explanation of the failure to accomplish the requirement, actions taken or planned by the permittee to correct the situation, and an estimate of when the requirement will be accomplished. If a written report is required to be submitted by a specified date and the permittee accomplishes this, a separate written notification is not required.

7. Notification of Changes in Discharge, Treatment, or Facility Operations

If proposing to modify the quantity or effluent characteristics of the discharge or the treatment process for the discharge, the permittee shall notify the Department of the proposed modification prior to its occurrence. Significant modifications require the permittee to submit an application. A permit modification shall be processed in accordance with applicable rules and laws prior to implementation of the modification.

8. Transfer of Ownership or Control

In the event of any change in control or ownership of facilities from which the authorized discharge emanates, the permittee shall submit to the Department 30 days prior to the actual transfer of ownership or control a written agreement between the current permittee and the new permittee containing the following:

a. The legal name and address of the new owner.

b. A specific date for the effective transfer of permit responsibility, coverage, and liability.

c. A certification of the continuity of or any changes in operations, wastewater discharge, or wastewater treatment.

If the new permittee is proposing changes in operations, wastewater discharge, or wastewater treatment, the Department may propose modification of this permit in accordance with applicable laws and rules.

9. Spill Notification

The permittee shall immediately report any release of any polluting material that occurs to the surface waters or groundwater of the state, unless the permittee has determined that the release is not in excess of the threshold reporting quantities specified in R 324.2001 through 324.2009 of the Part 5 Rules, Spillage of Oil and Polluting Materials, promulgated under Part 31, by calling the Department at the number indicated in the Contact Information section of this permit, or if the notice is provided after regular working hours, call the Department's 24-hour Pollution Emergency Alerting System at 1-800-292-4706.

Within ten (10) days of the release, the permittee shall submit to the Department a full written explanation as to the cause of the release, the discovery of the release, response (clean-up and/or recovery) measures taken, and preventative measures taken or a schedule for completion of measures to be taken to prevent reoccurrence of similar releases.

10. Upset Noncompliance Notification

If a process "upset" (defined as an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee) has occurred, the permittee who wishes to establish the affirmative defense of upset, shall notify the Department by telephone within 24 hours of becoming aware of such conditions, and within five (5) days provide in writing the following information:

a. That an upset occurred and that the permittee can identify the specific cause(s) of the upset.

b. That the permitted wastewater treatment facility was, at the time, being properly operated.

c. That the permittee has specified and taken action on all responsible steps to minimize or correct any adverse impact in the environment resulting from noncompliance with this permit.

In any enforcement proceedings, the permittee seeking to establish the occurrence of an upset has the burden of proof.

11. Bypass Prohibition and Notification

a. *Bypass Prohibition*
Bypass is prohibited and the Department may take an enforcement action, unless:

i. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage.

ii. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass.

iii. The permittee submitted notices as required under 11.b. or 11.c., below.

b. *Notice of Anticipated Bypass*
If the permittee knows in advance of the need for a bypass, it shall submit prior notice to the Department, if possible at least 10 days before the date of the bypass, and provide information about the anticipated bypass as required by the Department. The Department may approve an anticipated bypass, after considering its adverse effects, if it will meet the three (3) conditions listed in 11.a., above.

c. *Notice of Unanticipated Bypass*
The permittee shall submit notice to the Department of an unanticipated bypass by calling the Department at the number indicated in the Contact Information section of this permit as soon as possible, but no later than 24 hours from the time the permittee becomes aware of the circumstances (if the notice is provided after regular working hours, call the Department's 24-hour Pollution Emergency Alerting System at 1-800-292-4706).

d. *Written Report of Bypass*
A written submission shall be provided to the Department within five (5) working days of commencing any bypass, and at additional times as directed by the Department. The written submission shall contain a description of the bypass and its cause; the period of bypass, including exact dates and times, and if the bypass has not been corrected, the anticipated time it is expected to continue; steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass; and other information as required by the Department.

e. *Bypass Not Exceeding Limitations*
The permittee may allow any bypass to occur that does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of 11.a., 11.b., 11.c., and 11.d., above. This provision does not relieve the permittee of any notification responsibilities under Part II.D.9, of this permit.

12. Untreated or Partially Treated Sewage Discharge Requirements

In accordance with Part 31, Section 324.3112a of the NREPA, if untreated sewage, including sanitary sewer overflows (SSO), combined sewer overflows (CSO), or partially treated sewage is directly or indirectly discharged from a sewer system onto land or into the waters of the state, the entity responsible for the sewer system shall immediately, but not more than 24 hours after the discharge begins, notify by telephone, the Department, local health departments, a daily newspaper of general circulation in the county in which the permittee is located, and a daily newspaper of general circulation in the county or counties in which the municipalities whose waters may be affected by the discharge are located that the discharge is occurring.

At the conclusion of the discharge, written notification shall be submitted in accordance with and on the "CSO/SSO/RTB/Other Discharge Event" form available in MiEnviro (after logging into MiEnviro, navigate to the facility's Dashboard section and open the As Needed tab to find the submittal).

In addition, in accordance with Part 31, Section 324.3112a of the NREPA, each time a discharge of untreated sewage or partially treated sewage occurs, the permittee shall test the affected waters for *E. coli* to assess the risk to the public health as a result of the discharge and shall provide the test results to the affected local county health departments and the Department. The testing shall be done at locations specified by each affected local county health department but shall not exceed ten (10) tests for each separate discharge event. The affected local county health department may waive this testing requirement if it determines that such testing is not needed to assess the risk to the public health as a result of the discharge event. The results of this testing shall be submitted with the written notification required above, or if the results are not yet available, submit them as soon as they become available. This testing is not required if the testing has been waived by the local health department or if the discharge(s) did not affect surface waters.

Permittees accepting sanitary or municipal sewage from other sewage collection systems are encouraged to notify the owners of those systems of the above reporting and testing requirements.

13. Availability of Reports

Except for data determined to be confidential under Section 323.2128 of Part 21, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. Effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Part 31 Sections 324.3112, 324.3115 and Part 41, Sections 324.4106, and 324.4110 of the NREPA.

PART II

E. Management Responsibilities

1. Operator Certification

The permittee shall have the waste treatment facilities under direct supervision and control of an operator certified at the appropriate level for the facility certification by the Department, as required by Part 31, Section 324.3110 and, as applicable, Part 41, Section 324.4104 of the NREPA.

2. Facility Contact

The "Facility Contact" was specified in the application. The permittee may replace the facility contact at any time. Within 10 days of taking such action, the permittee shall notify the Department in writing and update the Facility Contact in the MiEnviro Portal, including the name, physical address, email address, and telephone number of the new facility contact. The MiEnviro Portal website is located at mienviro.michigan.gov/ncore (log in, select the site from the left-site menu, click on Details, click on Contacts from the top menu, click Add Contact, fill out required fields, and select "facility Contact" from the list of roles).

a. The facility contact shall be (or a duly authorized representation of this person):
   i. For a corporation, a principal executive officer of at least the level of vice president, or a designated representative, if the representative is responsible for the overall operation of the facility from which the discharge described in the permit application or other groundwater form originates,
   ii. For a partnership, a general partner,
   iii. For a sole proprietorship, the proprietor, or
   iv. For a municipal, state, or other public facility, either a principal executive officer, the mayor, village president, city or village manager, or other duly authorized employee.

b. A person is duly authorized representative only if:
   i. The authorization is made in writing to the Department by a person described in subpart a. of this section: and
   ii. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the facility (a duly authorized representative may thus be either a named individual or any individual occupying and named position).

Nothing in this section obviates the permittee from properly submitting reports and forms as required by law.

3. Discharge to the Surface Waters

This permit does not authorize any discharge to the surface waters. The permittee is responsible for obtaining any permits required by federal or state laws or local ordinances.

4. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation.

5. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize violation of any federal, state, or local laws or regulations, nor does it obviate the necessity of obtaining such permits or approvals as may be required by law.

6. Duty to Comply

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of this permit.

It is the duty of the permittee to comply with all the terms and conditions of this permit. Any noncompliance with the effluent limitations, conditions, or terms of this permit constitutes a violation of the NREPA and constitutes grounds for enforcement action; for permit termination, revocation, reissuance, or modification; or denial of an application for permit renewal.

7. Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance, whether or not such noncompliance is due to factors beyond the permittee's control, such as accidents, equipment breakdowns, or labor disputes.

8. Facilities Operation

The permittee shall, at all times, properly operate and maintain all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance include adequate laboratory controls and appropriate quality assurance procedures.

9. Power Failures

In order to maintain compliance with the effluent limitations of this permit and prevent unauthorized discharges, the permittee shall either:

a. Provide an alternative power source sufficient to operate facilities utilized by the permittee to maintain compliance with the effluent limitations and conditions of this permit.

b. Upon the reduction, loss, or failure of one or more of the primary sources of power to facilities utilized by the permittee to maintain compliance with the effluent limitations and conditions of this permit, the permittee shall halt, reduce, or otherwise control production and/or all discharge in order to maintain compliance with the effluent limitations and conditions of this permit.

10. Containment Facilities

The permittee shall provide facilities for containment of any accidental losses of polluting materials in accordance with the requirements of the Part 5 Rules (R 324.2001 through 324.2009). For a POTW, these facilities shall be approved under Part 41 of the NREPA.

11. Waste Treatment Residues

Residuals (i.e., solids, sludges, biosolids, filter backwash, scrubber water, ash, grit, or other pollutants) removed from or resulting from treatment or control of wastewaters, shall be disposed of in an environmentally compatible manner and according to applicable laws and rules. These laws may include, but are not limited to, Part 31, Water Resources Protection; Part 55, Air Pollution Control; Part 111, Hazardous Waste Management; Part 115, Solid Waste Management; Part 121, Liquid Industrial By-Products; Part 301, Inland Lakes and Streams; and Part 303, Wetlands Protection, of the NREPA. Such disposal shall not result in any unlawful pollution of the air, surface waters, or groundwater of the state.

12. Treatment System Closure

a. In the event that discharges from a treatment system are planned to be eliminated, the permittee shall do the following:

   i. Eliminate all physical threats associated with discharge-related facilities not later than five (5) days after use of the facility has ceased.

   ii. Not less than 75 days before cessation of discharge-related activities, characterize any wastewater, sediments, and sludges related to the discharge, pursuant to Part 22, Section 323.2226(4)(a)(i-iii).

b. Within 30 days of completing the characterization, the discharger shall submit a closure plan to the Department for review and approval that describes how the wastewater, sediments, and sludges associated with the discharge will be handled in accordance with Part 31, Part 111, Part 115, or Part 201 of the NREPA, as appropriate.

a. Closure activities must be initiated within 30 days of Department approval of the Closure Plan and must be completed within one (1) year of approval of the Closure Plan.

b. If the groundwater exceeds a standard established by the Department that would result in the site qualifying as a facility under Part 201 of the NREPA, then the permittee shall comply with the requirements of Part 201, as applicable.

c. The Department may require post closure monitoring activities to evaluate the effectiveness of the closure activities. Any wastewater or residual disposal inconsistent with the approved plan shall be considered a violation of this permit. After proper closure of the treatment system, this permit may be terminated.

d. The permittee must certify completion of the approved closure plan. Certification shall be by a qualified person described as follows:

   i. An engineer licensed under Public Act 299 of 1980, as amended, being §339.101 et seq. of the Michigan Compiled Laws and known as the Occupational Code (Act 299).

   ii. A professional geologist certified by the American Institute of Professional Geologists, 7828 Vance Drive, Suite 103, Arvada, Colorado 80003.

   iii. A professional hydrologist certified by the American Institute of Hydrology, 2499 Rice Street, Suite 135, St. Paul, Minnesota 55113.

   iv. A groundwater professional certified by the National Ground Water Association, Association of Groundwater Scientists and Engineers Division, 601 Dempsey Road, Westerville, Ohio 43081.

   v. Another groundwater professional certified by an organization approved by the Department.

13. Right of Entry

The permittee shall allow the Department, or any agent appointed by the Department, upon the presentation of credentials:

a. To enter upon the permittee's premises where an effluent source is located or in which any records are required to be kept under the terms and conditions of this permit.

b. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect process facilities, treatment works, monitoring methods, and equipment regulated or required under this permit; and to sample any effluent discharge, discharge of pollutants, and groundwater monitoring wells and soils associated with the discharge.

14. Construction Certification

On or before 30 days following completion of construction of any new wastewater treatment facilities after issuance of this permit, pursuant to Part 22, Section 323.2218(4)(a), the permittee shall submit a certification that a QA/QC Program was utilized, and the facilities constructed were built consistent with standard construction practices to comply with the permit and the NREPA. This certification shall be by an engineer licensed under Act 299.

15. Termination

This permit shall remain in full force and effect until terminated by a written termination notice issued by the Department. Prior to issuance of a written termination notice, the permittee shall submit a request to the Department for termination of this permit via the MiEnviro Portal website.