State of Michigan

Department of Environment, Great Lakes, and Energy

National Pollutant Discharge Elimination System (NPDES)

Appendix to the Permit Application

Revised May 18, 2022

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EGLE

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

Additional Application Instructions for All Applicants

1) APPLICANT NAME AND MAILING ADDRESS:
   - For industrial facilities – Provide the parent company name, division name, and mailing address.
   - For federal and state facilities – Provide the department name, division or bureau name, and mailing address.
   - For commercial facilities – Provide both the owner's and the entity's names, name of the business, and mailing address.
   - For publicly-owned facilities – Provide the legal owner of the facility and mailing address.
2) FACILITY NAME AND LOCATION: Provide the name of the facility or plant. Provide the street address or approximate location of the facility or plant. **DO NOT USE** P.O. Box numbers.
3) CONTACTS: Provide the name, mailing address, telephone number, and e-mail address for the following required contacts. Other contact types may also apply:
   - Application: The person who should be contacted to respond to questions concerning the Application.
   - Facility: Each facility is required to have a facility contact. The facility contact for a publicly-owned treatment works should be the superintendent or a properly certified operator who is in charge of the day-to-day operation and maintenance of the treatment facility. The facility contact for a corporation should be a principal executive officer of at least the level of vice president, or their designated representative if the representative is responsible for the overall operation of the facility from which the discharge described in the Application occurs. The facility contact for a partnership should be a general partner. The facility contact for a sole proprietorship should be the proprietor. The facility contact for a municipal, state, or other public facility should be a principal executive officer, the mayor, village president, city or village manager, or other duly authorized employee.
   - NPDES Annual Billing: The person responsible for payment of the facility's NPDES Permit annual fee required by Section 324.3120 of the Michigan's Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA).
   - Discharge Monitoring Reports (DMRs): The person responsible for completing and submitting the facility's DMRs.
   - Certified Operator: The person responsible for the day-to-day operations of the waste treatment system.
4) RULE 1098 – ANTIDEGRADATION REQUIREMENTS: A facility that has never discharged wastewater to the surface waters (new use), or a facility that is discharging but has never been issued an NPDES Permit (existing unpermitted), or a facility that is requesting reissuance or modification of a previously-issued NPDES permit and is increasing the loading of pollutants to the receiving water, must provide an Antidegradation Demonstration, or indicate both that the increased loading is exempt from Rule 1098 and the basis for the exemption. Additional information concerning Antidegradation requirements can be found on Page 8 of this Appendix.
5) ADDITIONAL FACILITY LOCATION INFORMATION: Provide the following information:
   A. Identify the local unit of government (LUG) where the treatment facility is located. **Provide an e-mail address** for an appropriate LUG contact, such as a clerk, who can be notified about the public notice period. **Do not** provide a website address.
   B. Identify the county and, where appropriate, the township where the facility is located.
   C. Identify the location of the facility using latitude and longitude, precise to within 6 decimal places in the case of Decimal Degrees (e.g., Latitude = 42.454167, Longitude = - 83.041667).

6) CERTIFIED OPERATOR: Provide the operator's name, certification number, certification classification(s), address, telephone number(s), and e-mail address. The NREPA requires that all dischargers to the surface waters of the State of Michigan employ a properly certified operator. Information about operator certification may be obtained by visiting Michigan.gov/WWCertification.

7) EFFLUENT CHARACTERISTICS – CONVENTIONAL POLLUTANTS
Effluent data already submitted through the DMR reporting system need not be submitted with the Application. Prior submittal of the data should be noted in the application.
In accordance with Title 40 of the Code of Federal Regulations (40 CFR), Subpart 122.21, all applicants are required to report Biochemical Oxygen Demand – 5 day (BOD_5), Chemical Oxygen Demand (COD), Total Organic Carbon (TOC), Total Suspended Solids (TSS), Ammonia as N, Temperature (both summer and winter), and pH. The applicant may request that data reporting for one or more of these required parameters be waived; however, such requests shall be supported by adequate rationale. The request and rationale for the waiver should be provided in the application. Report available discharge data for the parameters listed in the application. Actual data shall be provided for existing discharges, and expected or estimated data provided for proposed discharges. Certain types of discharges require that the applicant provide a minimum of analytical test data for specific parameters. See "Minimum Analytical Testing Requirements for Various Discharge Requests" in this Appendix for a list of specific discharge types and their additional required analyses. For assistance in determining the appropriate parameters to report, contact the Permits Section.
To analyze for pH, temperature, total residual chlorine, oil and grease, and fecal coliform, use **Grab Samples** unless otherwise directed by a current NPDES Permit. To analyze for BOD_5, total phosphorus, COD, TOC, TSS, and ammonia nitrogen, use **24-hour composite samples** unless other frequency or sample type analyses are available.
For two or more substantially identical outfalls, permission may be requested from the appropriate Department of Environment, Great Lakes, and Energy (EGLE) District Office to sample and analyze only one outfall and submit the results of the analysis for other substantially identical outfalls. (A map of EGLE District Office locations and contact information is available online at Michigan.gov/-/media/Project/Websites/egle/Documents/Programs/WRD/About-Us/district-offices.pdf). If the request is granted by the District Office, on a separate sheet attached to the Application, identify which outfall was sampled and describe why the outfalls which were not sampled are substantially identical to the outfall which was sampled.

Additional Instructions for Treatment Works Treating Domestic Sewage

1. OUTFALL INFORMATION

Outfall refers to the point where treated wastewater is discharged to the surface waters of the state. "Surface waters of the state" means all of the following: the Great Lakes and their connecting waters, all inland lakes, rivers, streams, impoundments, open drains, wetlands, and other surface bodies of water within the confines of the state, but does not include drainage ways and ponds used solely for wastewater conveyance, treatment, or control. Enter the Outfall Number in the Outfall Number Box, identifying the outfall by number, e.g., 001, 002, etc.

A. Identify the name of the receiving water. This is the first surface water of the State into which the facility's effluent discharges.

B. Identify the location at which the facility's effluent first enters a surface water of the state. Use latitude and longitude precise to within 6 decimal places in the case of Decimal Degrees (e.g., Latitude = 42.454167, Longitude = - 83.041667). This is the outfall.

C. Enter the Annual Average Design Flow Rate that the facility is designed to treat. **Continuous Dischargers** are required to enter the Total Volume [million gallons per day (MGD)] of wastewater the facility is designed to treat and discharge per day. **Seasonal Dischargers** are required to enter the Total Volume [million gallons per year (MGY)] of wastewater the facility is designed to

treat and discharge per year. The design flow is used in determining the appropriate effluent limitations for the discharge.

D. Seasonal Discharge: A facility is considered to have a seasonal discharge if wastewater is treated **and stored** throughout a portion of the year and then discharged over a specified period or periods of days, weeks, or months. **Note: Batch process discharges are not seasonal discharges.** Provide the dates the facility discharges the treated wastewater (e.g., October 15 through November 10) and the actual average discharge flow rate (e.g., 5 MGD).

E. Continuous Discharge: Any facility that does not discharge seasonally is considered to have a continuous discharge. Provide the approximate hours per day and the number of days per year that the discharge occurs from this outfall. Also provide the actual annual average facility flow and the maximum daily facility flow for the past three years. **Batch Dischargers** are required to provide the peak batch flow rate; the number of batches per day; the per-batch minimum, average, and maximum volumes in gallons; and the per-batch minimum, average, and maximum batch discharges in minutes.

F. Inflow and Infiltration is clear water entering a sanitary collection system from either precipitation or non-sanitary sources. The volume of inflow and infiltration should be reported in gallons per day.

Additional Instructions for Industrial / Commercial Facilities

1. OUTFALL INFORMATION

Outfall refers to the point where treated wastewater is discharged to the surface waters of the state. “Surface waters of the state" means all of the following: the Great Lakes and their connecting waters, all inland lakes, rivers, streams, impoundments, open drains, wetlands, and other surface bodies of water within the confines of the state, but does not include drainage ways and ponds used solely for wastewater conveyance, treatment, or control. Enter the Outfall Number in the Outfall Number Box, identifying the outfall by number, e.g., 001, 002, etc.

A. Identify the name of the receiving water. This is the first surface water of the State into which the facility’s effluent discharges.

B. Identify the location at which the facility’s effluent first enters a surface water of the state. Use latitude and longitude precise to within 6 decimal places in the case of Decimal Degrees (e.g., Latitude = 42.454167, Longitude = - 83.041667). This is the outfall.

C. Identify the type(s) of wastewater the facility will discharge from this outfall. Check as many types of wastewater as are appropriate. If the water is used in multiple areas, such as water that is first used for noncontact cooling and then for another use, such as process water, indicate the final use only. For other common wastewater types, see “Table 8 – Other Common Types of Wastewater” in this Appendix.

D. When reporting the Maximum Design Flow Rate, identify the design flow for this specific outfall (e.g., capacity of pipes, package treatment system flow, or some other finite treatment system flow). Please provide an explanation if “Pollution Prevention Measures” are expected to provide flow reductions.

E. Identify the Maximum Daily Discharge Flow Rate that the facility is expecting to discharge in the next five years. This flow will be used to determine the facility’s effluent limitations and will be the flow authorized in an issued permit. If this flow rate differs from that authorized in the current permit, the applicant shall attach to their Application a description of the basis for the change. Any increase in the authorized flow rate represents a permit modification and must be requested in the Application; such an increase also requires that the Antidegradation requirements of the Application be completed and complied with (see also p. 8 of this Appendix). NOTE: Discharges of flows greater than the Discharge Flow Rate authorized in the permit will constitute a violation of the NREPA and would be subject to the penalties specified therein.

F. Seasonal Discharge: A facility is considered to have a seasonal discharge if wastewater is treated **and stored** throughout a portion of the year and then discharged over a specified period or periods of days, weeks, or months. **Note: Batch process discharges are not seasonal discharges.** Provide the dates the facility discharges the treated wastewater (e.g., October 15 through November 10) and the actual average discharge flow rate (e.g., 5 MGD).

G. Continuous Discharge: Any facility that does not discharge seasonally is considered to have a continuous discharge. Provide the approximate hours per day and the number of days per year that the discharge occurs from this outfall. Also provide the actual annual average facility flow and the maximum daily facility flow for the past three years. Batch Dischargers are required to provide the peak batch flow rate; the number of batches per day; the per-batch minimum, average, and maximum volumes in gallons; and the per-batch minimum, average, and maximum batch discharges in minutes.

Frequently Asked Questions about the NPDES Permit Application

Q. Why do I have to apply for an NPDES permit?

A. The NPDES Program protects the surface waters of the state by ensuring that discharges of domestic and industrial wastewater comply with state and federal regulations. NPDES permits are required under Section 402 of the federal Clean Water Act, as amended (33 U.S.C. 1251 et seq, P.L. 92-500, 95-217), and under Part 31, Water Resources Protection of the NREPA. Part 31 of the NREPA also provides authority for the State to issue NPDES permits. EGLE administers the NPDES permit program for the State of Michigan.

Q. I have never applied for an NPDES Permit before. What will happen after I submit my Application?

A. The Application will be reviewed by the Permits Section staff for administrative and technical completeness. Applicants with incomplete Applications will be contacted and required to supply any missing information. Only complete Applications will move on to the next step.

The Permits staff will determine if the proposed discharge qualifies for coverage under a general permit. A Certificate of Coverage (COC) will be issued to qualifying dischargers. If the discharge does not qualify for coverage under a general permit, the staff will begin processing the Application for an individual permit.

Processing for an individual permit can include: development of treatment technology and/or water quality-based effluent limitations; draft permit and related document development, a pre-public notice review period that allows the applicant to review the draft permit and related documents; and a public notice period.

There can be additional steps that occur during processing for an individual permit. Applicants may provide additional information and request review or clarification of permit conditions. During the public notice period, the general public may request that meetings or hearings be held to provide further input on the proposed discharge. The applicant or general public may request a meeting with EGLE. Each of these actions could impact the requirements of the draft permit.

If no objections are received to the proposed permit action during the public notice period, EGLE will make a final determination to either issue or deny a permit.

Q. What if I don't have a discharge of wastewater yet? How can I provide the required analytical data?

A. Applicants who do not yet have a discharge should provide estimated data based on the expected quality of their treated wastewater. Applicants who will have a groundwater cleanup discharge should provide analytical results of the intake water.

Q. What if I don't have all of the information required by the Application?

A. Applications for new discharges will not be processed unless all of the requested information is provided. Processing of Applications for existing, permitted discharges may be started without all of the required information, provided that the missing information is not needed to draft the reissued permit, and provided that the applicant has agreed to provide the missing information prior to the public notice period for the draft permit.

Q. How much effluent data is sufficient for the Application to be considered complete?

A. The effluent data must be sufficient to accurately characterize the facility's discharge. Effluent limitations will be based in part on the information submitted. If the data is insufficient, the effluent limitations will not reflect the discharge and may be unnecessarily restrictive.

Q. Which Publicly-Owned Treatment Works (POTWs) are required to submit Whole Effluent Toxicity (WET) tests as part of their NPDES Permit Application?

A. See the section entitled Whole Effluent Toxicity Test Guidance and Requirements for POTWs, at the end of this Appendix.

Q. How do I determine the latitude and longitude of the location at which my discharge first enters a surface water of the state?

A. These coordinates will generate automatically within MiWaters when you select a location on the map provided within the application. Alternatively, this information can be obtained using a Global Positioning System (GPS) unit, by the use of United States Geological Survey (USGS) Topographical maps, or at various internet map sites.

Q. Do the analytical data I submit with my application have to meet certain requirements?

A. Yes, all analytical data submitted with this application must be obtained using test procedures for the analysis of pollutants that conform to regulations promulgated pursuant to Section 304(h) of the Clean Water Act (40 CFR Part 136 – Guidelines Establishing Test Procedures for the Analysis of Pollutants), unless you have received prior written approval from the Department for alternate test methods. For lists of approved test methods, go to EPA.gov/CWA-Methods. In addition, to ensure that test procedures used for certain parameters are sufficiently sensitive, EGLE provides Table 7 of this Appendix, and any analytical data submitted for parameters listed in that table shall meet the requirements of that table.

Q. Is there an NPDES Permit Application Fee?

A. Yes, a non-refundable fee must be submitted along with the Permit Application. Application fees can be viewed online at Michigan.gov/EGLENPDES. Under the Information banner, click on NPDES Fees, then click on Summary of NPDES Fees for Discharges other than Storm Water.

Q. Is there an Annual Permit Fee?

A. Yes, permittees with authorization to discharge wastewater are subject to Annual Permit Fees. Further information on Annual Permit Fees can be viewed online at Michigan.gov/EGLENPDES. Under the Information banner, click on NPDES Fees, then click on NPDES Fees: Frequently Asked Questions and Answers.

Some Acronyms Used in the NPDES Permit Application and this Appendix

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act (Superfund)
COC Certificate of Coverage

CNMP Comprehensive Nutrient Management Plan

CPLR Cumulative Pollutant Loading Rate

DL Detection Level

DR Discharge Monitoring Report

FIPP Federal Industrial Pretreatment Program

GPD Gallons per Day

IPP Industrial Pretreatment Program

LUG Local Unit of Government (village, city, township)

MAHL Maximum Allowable Headworks Loading

MGD Million Gallons per Day

MGY Million Gallons Per Day

NAICS North American Industry Classification System

POTW Publicly-Owned Treatment Works

QA/QC Quality Assurance / Quality Control

QL Quantification Level

SIC Standard Industrial Classification

SIU Significant Industrial User

TWTDS Treatment Works treating Domestic Sewage

WET Whole Effluent Toxicity

Definitions for Selected Terms Used in the Application and this Appendix

7-day concentration

For Wastewater Storage Lagoons (WWSL) that collect and store wastewater and are authorized to discharge only in the spring and/or fall on an intermittent basis – The 7-day concentration is the sum of the daily concentrations determined during any 7 consecutive days of discharge during a WWSL discharge event divided by the number of daily concentrations determined. If the number of daily concentrations determined during the WWSL discharge event is less than 7 days, the number of actual daily concentrations determined shall be used for the calculation. The calculated 7-day concentration will be used to determine compliance with any maximum 7-day concentration limitations. When required by the permit, report the maximum calculated 7-day concentration for the WWSL discharge event in the "MAXIMUM" column under "QUALITY OR CONCENTRATION" on the DMR. If the WWSL discharge event was partially in each of two months, the value shall be reported on the DMR of the month in which the last day of discharge occurred.

For all other discharges – The 7-day concentration is the sum of the daily concentrations determined during any 7 consecutive days in a reporting month divided by the number of daily concentrations determined. If the number of daily concentrations determined is less than 7, the actual number of daily concentrations determined shall be used for the calculation. The calculated 7-day concentration will be used to determine compliance with any maximum 7-day concentration limitations in the reporting month. When required by the permit, report the maximum calculated 7-day concentration for the month in the "MAXIMUM" column under "QUALITY OR CONCENTRATION" on the DMR. The first 7-day calculation shall be made on day 7 of the reporting month, and the last calculation shall be made on the last day of the reporting month.

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. A time-proportioned composite sample may be used upon approval of EGLE if the permittee demonstrates it is representative of the discharge.

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.

Certificate of Coverage (COC) is a document, issued by EGLE, which authorizes a discharge under a general permit.

Cumulative Pollutant Loading Rate (CPLR) is the maximum amount of an inorganic pollutant that can be applied to an area of land.

Daily concentration
FOR PARAMETERS OTHER THAN pH, DISSOLVED OXYGEN, TEMPERATURE, AND CONDUCTIVITY – Daily concentration is the sum of the concentrations of the individual samples of a parameter taken within a calendar day divided by the number of samples taken within that calendar day. The daily concentration will be used to determine compliance with any maximum and minimum daily concentration limitations. For guidance and examples showing how to perform calculations using results below quantification levels, see the document entitled "Reporting Results Below Quantification," available at Michigan.gov/-/media/Project/Websites/egle/Documents/Programs/WRD/MiEnviro/results-below-quantification.pdf.

FOR pH, DISSOLVED OXYGEN, TEMPERATURE, AND CONDUCTIVITY – The daily concentration used to determine compliance with maximum daily pH, temperature, and conductivity limitations is the

highest pH, temperature, and conductivity readings obtained within a calendar day. The daily concentration used to determine compliance with minimum daily pH and dissolved oxygen limitations is the lowest pH and dissolved oxygen readings obtained within a calendar day.

Detection Level (DL) 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 location is defined as the point at which a discharge first enters a surface water of the state.

Flow-proportioned composite sample is a composite sample in which either a) the volume of each portion of the composite is proportional to the effluent flow rate at the time that portion is obtained, or b) a constant sample volume is obtained at varying time intervals proportional to the effluent flow rate.

Geometric mean is the average of the logarithmic values of a base 10 data set, converted back to a base 10 number.

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

Maximum Allowable Headworks Loading (MAHL) is the maximum loading of a pollutant that will not cause a POTW to violate a treatment plant or environmental criterion developed to prevent process inhibition or interference, or to violate effluent or biosolids standards.

Monthly concentration is the sum of the daily concentrations determined during a reporting period divided by the number of daily concentrations determined. The calculated monthly concentration will be used to determine compliance with any maximum monthly concentration limitations. Days with no discharge shall not be used to determine the value. When required by the permit, report the calculated monthly concentration in the “AVERAGE” column under “QUALITY OR CONCENTRATION” on the DMR.

For minimum percent removal requirements, the monthly influent concentration and the monthly effluent concentration shall be determined. The calculated monthly percent removal, which is equal to 100 times the quantity [1 minus the quantity (monthly effluent concentration divided by the monthly influent concentration)], shall be reported in the "MINIMUM" column under "QUALITY OR CONCENTRATION" on the DMRs.

Noncontact cooling water is water used for cooling which does not come into direct contact with any raw material, intermediate product, by-product, waste product, or finished product.

Primary industries are listed in Table 1 of this Appendix.

Quantification Level (QL) 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.

Secondary industries are those industries that are not listed as primary industries.

Significant Industrial User (SIU) is a nondomestic user that: 1) is subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N; or 2) discharges an average of 25,000 gallons per day or more of process wastewater to a POTW (excluding sanitary, noncontact cooling and boiler blowdown wastewater); contributes a process waste stream which makes up five (5) percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the permittee as defined in 40 CFR 403.12(a) on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's treatment plant operation or violating any pretreatment standard or requirement [in accordance with 40 CFR 403.8(f)(6)].

Storm Water – Not Regulated is a storm water discharge that does not require a permit under the federal storm water regulations found in 40 CFR 122.26(b)(14).

Storm Water – Regulated is defined in 40 CFR 122.26 (b) (14), Storm Water Discharges Associated with Industrial Activities, and includes storm water discharges from 1) various types of industries identified in the regulations; 2) Treatment Works Treating Domestic Sewage (TWTDS) with design flows equal to or greater than 1 MGD or that have Federal Industrial Pretreatment Programs; and 3) any storm water discharge subject to effluent guidelines as defined in the regulations.

Storm Water Subject to Effluent Guidelines is a regulated storm water discharge for which federal effluent limitation guidelines exist. Such guidelines currently exist under the following sections of the federal regulations: 40 CFR: 411 – cement manufacturing; 412 – feedlots; 418 – fertilizer manufacturing; 419 – petroleum refining; 422 – phosphate manufacturing; 423 – steam electric; 434 – coal mining; 436 – mineral mining and processing; 440 – ore mining and dressing; and 443 Subpart A – asphalt emulsion.

Water Quality Standards means the Part 4, Water Quality Standards, promulgated pursuant to Part 31, Water Resources Protection, of the NREPA, being R 323.1041 through R 323.1117 of the Michigan Administrative Code.

Rule 1098 – Antidegradation

Rule 1098, being R 323.1098 of the Part 4 Rules, applies to any NPDES permit action that is anticipated to result in a new or increased loading of pollutants to the surface waters of the state. It requires applicants to either show how the discharge is exempt under Subrule (8) or (9), or provide a demonstration under Subrule (4) that identifies the social or economic development and benefits that will be foregone in the area where the waters are located if the lowering of the water quality is not allowed.

The following examples are considered to be an increase in loading, requiring either a statement of exemption or an Antidegradation Demonstration:

- A new use
- An increase in flow
- An increase in a mass limit
- An increase in thermal loading
- An increase in concentration limits with no change in flow
- The addition of a new waste stream that will not require an authorization to increase the flow of the discharge
- An existing discharger which has never received an effective NPDES permit for discharges at a particular site

The following examples are not considered to be increases in loading, and do not require an Antidegradation Demonstration:

- A change in the Water Quality-Based Effluent Limits (WQBEL) for mercury or Polychlorinated Biphenyls (PCBs) due to a change in the Water Quality Standard.
- A newly-established limit for a parameter when there has been no action on the part of the permittee to increase the mass loading.
- Limits that are eliminated.

In accordance with Subrules (8) and (9), certain discharges are exempt from Antidegradation requirements. Applicants with these discharges shall check the appropriate box(s) in the Application. The following examples do not constitute a lowering of water quality and are therefore exempt from the antidegradation requirements:

- A short-term (weeks to months) or temporary lowering of water quality.
- Bypasses that are not prohibited by regulations set forth in 40 CFR 122.41(m).
- Response actions undertaken to alleviate a release of pollutants into the environment that may pose an imminent and substantial danger to the public health or welfare.
- Discharges of pollutant quantities from the intake water at a facility if the intake and discharge are to the same body of water.
- Increases in flow, if the increase is within the design flow of the facility, it is not specifically authorized in the current permit, and there is no significant change expected in the characteristics of the wastewater collected.
- Intermittent increased loading related to wet-weather conditions.
- New or increased loading due to EGLE-approved controls related to wet-weather conditions.
- Discharges authorized by COC and Notices of Coverage.
- Increased loadings within the authorized levels of a limit in an existing control document, except those loadings that result from actions by the permittee that would otherwise require submittal of an increased use request.
- Increased loadings of a pollutant which do not involve a Bioaccumulative Chemicals of Concern (BCC) and which use less than 10 percent of the unused loading capacity that exists at the time of the request.
- Environmental or public health problem corrections.
- Economic or social benefits to the community.

For a new or increased loading of pollutants that is not exempt from Antidegradation requirements, the applicant shall submit an Antidegradation Demonstration. In addition to identifying the social or economic development and benefits that will be foregone in the area where the waters are located if the lowering of the water quality is not allowed, the Antidegradation Demonstration shall also identify possible alternatives to the proposed surface water discharge and an explanation as to why those

alternatives are considered not feasible. Alternatives to a surface water discharge may include, but are not limited to:

- Discharge to groundwater
- Discharge to available sewerage systems
- Water reuse and/or water recycling
- If BCCs will be present in the proposed discharge, the Antidegradation Demonstration shall describe the alternatives evaluated to reduce or eliminate these BCCs, and which of the alternatives were selected.

Antidegradation Demonstrations for privately-owned treatment systems serving the public for the treatment of domestic wastewater from two or more residences shall include documentation of the methods established to ensure the ongoing operation and maintenance of the sewerage system, as required under Section 4107 of Part 41 of the NREPA.

Please note: The applicant may indicate if the property is zoned for the intended use.

More information concerning Antidegradation can be found on the EGLE website at Michigan.gov/EGLENPDES. Under the Information banner, click on How to Apply for an NPDES Permit, then scroll down and click on Procedure No. 14 – Antidegradation.

Concentrated Animal Feeding Operation (CAFO) Guidance and Requirements

CAFO waste means CAFO process wastewater, manure, production area waste, silage leachate and runoff, any contaminated runoff, etc. Applicants are required to provide:

(1) The average and maximum number of animals expected during the five-year permit, the type of animals (beef cattle, broilers, layers, swine more or less than 55 lbs., mature dairy cows, dairy heifers, veal calves, turkeys, etc.), and type of housing (open confinement, under roof, etc.).

(2) The type of CAFO waste storage (roofed storage sheds, storage ponds, underfloor pits, above- or below-ground storage tanks, concrete pads, etc.), and total combined capacity of all CAFO waste storage structures [both by volume (tons, gallons, cu. ft.) and by time (months)].

(3) CAFO waste storage structure design – All new CAFO waste storage structures shall, at a minimum, be constructed in accordance with Natural Resource Conservation Service (NRCS) standards. The NRCS standard is Conservation Practice Standard No. 313, Waste Storage Facility, dated June 2003. For existing storage structures at existing CAFOs, through an evaluation by a professional engineer either 1) provide documentation that each storage structure is constructed in accordance with NRCS standards, or 2) demonstrate environmental performance equivalent to NRCS standards. If your farm is verified under the Livestock System of the Michigan Agriculture Environmental Assurance Program (MAEAP), you may submit the “Evaluation of Existing Components” of the waste storage structures for review by EGLE. After review, EGLE will notify you if additional information is necessary to complete your Application. If you cannot provide the documentation or demonstration described under 1) or 2) above for newly acquired waste storage structures, you may request that the permit or COC specify a date by which you will provide storage structures that attain 1) above, but that date cannot be more than two years after the permit or COC is issued. Guidance for the Evaluation of Existing Storage Structures can be found on our website or is available in print.

(4) The total number of acres under your control available for land application of CAFO waste. This includes land that you own, lease, or otherwise have access to for land application of CAFO waste. This does not include land application where you sell or give away your CAFO waste. If you are in the process of acquiring land at the time of application, explain how much land and when you expect to acquire it.

(5) Estimated amounts of CAFO waste generated per year (annual average over the life of the permit) (tons, gallons, or cu. ft.).

(6) Estimated amounts of CAFO waste transferred (sold, given away, or otherwise transferred) to other persons per year (annual average) (tons, gallons, or cu. ft.).

(7) A list and map(s) showing the location of all land application fields. This list would include a name and/or number to identify the field and size in acres. Maps could be plat maps, aerial maps, or soil maps with each field highlighted or colored in, with a number to correspond to the list, or Farm Service Agency (FSA) Form # 578 and associated maps. Information such as crop, soil type, and analysis will be included with the field-by-field analysis (this does not need to be completed until the CNMP Revision date specified in the COC or permit).

(8) All potential receiving waters for both the production and land application areas. This includes rivers, creeks, and major drains where runoff would flow overland or through tiles. Consider slope and tile outlet locations to determine flow pathways. Include maps, if possible, with the waterways highlighted and named, if they have names. The same maps showing your application fields could show the receiving waters.

To access the EGLE CAFO website, go to Michigan.gov/EGLENPDES. Under the Information banner, click on Concentrated Animal Feeding Operation (CAFO).

Minimum Analytical Testing Requirements for Selected Discharge Requests

Each discharge is evaluated on a case-by-case basis. The following list is not inclusive of all analytical tests that may be requested from an applicant, but it does include those parameters which we believe have the reasonable potential to violate water quality standards in certain types of discharges. **Analytical results not meeting the requirements of Table 7 of this Appendix may not count towards completion of the application**:

Contact Cooling Water: Submit average and maximum levels of Oil and Grease, and average and maximum levels of Total Suspended Solids; average and maximum summer and winter Temperatures; and maximum and minimum pH. Total Residual Chlorine analysis may be required if a city water source is used or a water treatment additive containing chlorine is used.

Cooling Tower Blowdown: Submit average and maximum levels of Total Dissolved Solids, Sulfates, Chlorides, and Total Suspended Solids; average and maximum summer and winter Temperatures; maximum and minimum pH; Total Residual Chlorine.

Facilities Mining Sand, Gravel, or Materials of a Similar Nature: Submit monthly average and daily maximum concentrations of Hardness, Total Suspended Solids, Total Dissolved Solids, Chloride, Sulfate, Total Arsenic, Total Barium, Total Cadmium, Total Chromium, Total Copper, Total Lead, Total Selenium, Total Silver, and Total Zinc; and daily maximum and daily minimum pH.

Facilities Mining Limestone, Gypsum Dolomite, or Materials of a Similar Nature: Submit monthly average and daily maximum concentrations of Hardness, Total Suspended Solids, Total Dissolved Solids, Sulfate, Chloride, Total Sulfide, Total Beryllium, Total Copper, Total Lithium, Total Selenium, Total Silver, Total Strontium, Total Thallium, and Total Zinc; daily maximum and daily minimum pH; and daily maximum temperature and conductivity. Temperature, conductivity, and pH must be measured at the same time as, and with each sample taken for, Total Sulfide.

Groundwater Cleanups: If groundwater is contaminated with petroleum compounds characterized by BTEX, submit analytical results for Benzene, Ethylbenzene, Toluene, Xylene, Methyl Tertiary Butyl Ether, Total Phosphorus, and Total Lead. If groundwater is contaminated with kerosene or diesel fuel, submit analytical results for diesel range organics (DRO) using a maximum quantification level of 100 ug/L. If final treatment other than activated carbon is proposed or used, submit analytical results for Polynuclear Aromatic Hydrocarbons (PAHs). Applicants for groundwater remediation discharges should also report the intake characteristics of the contaminated groundwater.

Noncontact Cooling Water: Submit average and maximum summer and winter temperatures; and if pH control is required, the maximum and minimum pH. Total Residual Chlorine analysis is required if a city water source or a water treatment additive containing chlorine is used.

Water Softener Discharges: Submit average and maximum levels of Total Dissolved Solids, Sulfates, and Chlorides.

Summary of Information to be Reported by Industry Type

40 CFR 405 Dairy Products Processing: Report mass of raw materials (milk equivalent or fluid raw whey) and mass of BOD_5 input of raw materials. If your facility is regulated under Subparts K or L of this category, also report total suspended solids of the raw materials.

40 CFR 406 Grain Mills: Report volume of final product per-volume of raw material in standard bushels or mean standard bushels (for corn or wheat); hundredweight (rice); or volume-per-volume on a weight basis (for cereal or wheat flour as raw material).

40 CFR 407 Canned and Preserved Fruits and Vegetables Processing: Facilities regulated under Subparts A - G, report volume-per-volume (weight basis) of raw materials. Facilities regulated under Subpart H, report volume-per-volume (weight basis) of final product.

40 CFR 409 Sugar Processing: Facilities regulated under Subpart A, report volume-per-volume (weight basis) of final product (crystallized refined sugar). Facilities regulated under Subparts B and C, report pounds per ton of melt, where melt is the amount of raw material (sugar) contained within an aqueous solution at the beginning of the process for production of refined sugar cane.

40 CFR 411 Cement Manufacturing: Facilities regulated under Subpart A, report pounds of final product. Facilities regulated under Subpart B, report pounds of dust leached.

40 CFR 414 Organic Chemicals, Plastics, and Synthetic Fibers (OCPSF): Report (1) flow rates of individual process wastewater streams; (2) flow rates of individual metal-bearing or cyanide-bearing wastewater streams; (3) pounds of product generated per year for each product; and (4) indicate if end-of-pipe biological treatment exists.

40 CFR 415 Inorganic Chemicals Manufacturing: Report pounds of product.

40 CFR 419 Petroleum Refining: Report volume of feedstock (number of barrels) and volume of flow.

40 CFR 420 Iron and Steel Manufacturing: Report pounds of product. If air or vent scrubbers are used at the facility, describe the operations they are used in, and indicate the number of scrubbers in use.

40 CFR 421 Nonferrous Metals Manufacturing: Report weight of product produced, cast, or material recovered (see individual subparts for specific materials regulated) and provide a description of each specific process that produces a wastewater stream.

40 CFR 423 Steam Electric Power Generating: Report volume of flow from process wastewater streams, including contact cooling, cooling tower blowdown, and any other wastewaters other than noncontact cooling water, and total rating of electric generating capacity.

40 CFR 424 Ferroalloy Manufacturing: Report (1) megawatt hour(s) of electrical energy consumed in the smelting process (for electric furnaces only); (2) weight of product (for nonelectric furnaces only and other if appropriate); and (3) weight of raw material processed.

40 CFR 425 Leather Tanning and Finishing: Report weight of raw material.

40 CFR 428 Rubber Manufacturing: Report (1) weight of raw material or raw material equivalent; and (2) weight of gross production.

40 CFR 429 Timber Products Processing: Report (1) weight per volume of production; and (2) weight of gross production.

40 CFR 430 Pulp, Paper, and Paperboard: Report (1) weight of product; and (2) provide a statement certifying that chlorophenolic-containing biocides are not being used at the facility, if these biocides are not being used.

40 CFR 432 Meat Products: Report (1) weight of raw material (raw material measured in live weight killed or equivalent live weight killed); (2) weight of finished product, and if the facility is regulated under Subparts E – J; and (3) the manufacturing rate for individual products.

40 CFR 433 Metal Finishing: Report flow rates of individual processes generating wastewater streams.

40 CFR 436 Mineral Mining and Processing: If the facility uses Hydrogen Fluoride floatation as a treatment process, report weight of total product.

40 CFR 440 Ore Mining and Dressing: Report (1) treatment or milling technique(s) employed; and (2) if the facility is regulated under Subparts F – H or J, report tons of product.

40 CFR 461 Battery Manufacturing: (1) Report weight of raw materials used, applied, deposited, or processed; and (2) weight of cells, powder, or other material produced.

40 CFR 463 Plastics Molding and Forming: Report average process wastewater usage flow rates for each individual process.

40 CFR 464 Metal Molding and Casting: Report (1) weight of material poured (casted); and (2) if air scrubbers are used, report volume of air scrubbed. If the facility is regulated under Subpart C, report (1) the weight of sand reclaimed (if applicable); and (2) the weight of metal poured annually (if applicable).

40 CFR 465 Coil Coating: Report (1) the total surface area of the material processed; and (2) if the facility is regulated under Subpart D, report the number of cans manufactured.

40 CFR 466 Porcelain Enameling: Report the total surface area of raw material processed or coated.

40 CFR 467 Aluminum Forming: Report the weight of raw material (aluminum) processed, including rolling, casting, forging, quenching, drawing, extruding, cleaning, and etching operations.

40 CFR 468 Copper Forming: Report weight of raw material (copper) processed, including rolling, drawing, heat treating, extruding, annealing, cleaning, pickling, tumbling, burnishing, coating, and forming operations.

40 CFR 471 Nonferrous Metals Forming and Metals Powders: Report weight of raw materials processed for various operations (see guidelines for descriptions of processes).

TABLE 1 – Testing Requirements for Organic Toxic Pollutants by Industrial Category

	GC/MS Fraction			
Industrial Category	Volatile	Acid	Base/Neutral	Pesticide
Adhesives and Sealants	Yes	Yes	Yes	--
Aluminum Forming	Yes	Yes	Yes	--
Auto and Other Laundries	Yes	Yes	Yes	Yes
Battery Manufacturing	Yes	--	Yes	--
Coal Mining	Yes	Yes	Yes	Yes
Coil Coating	Yes	Yes	Yes	--
Copper Forming	Yes	Yes	Yes	--
Electric and Electronic Components	Yes	Yes	Yes	Yes
Electroplating	Yes	Yes	Yes	--
Explosives Manufacturing	--	Yes	Yes	--
Foundries	Yes	Yes	Yes	--
Gum and Wood Chemicals	Yes	Yes	Yes	Yes
Inorganic Chemicals Manufacturing	Yes	Yes	Yes	--
Iron and Steel Manufacturing	Yes	Yes	Yes	--
Leather Tanning and Finishing	Yes	Yes	Yes	Yes
Mechanical Products Manufacturing	Yes	Yes	Yes	--
Nonferrous Metals Manufacturing	Yes	Yes	Yes	Yes
Ore Mining	Yes	Yes	Yes	Yes
Organic Chemicals Manufacturing	Yes	Yes	Yes	Yes
Paint and Ink Formulation	Yes	Yes	Yes	Yes
Pesticides	Yes	Yes	Yes	Yes
Petroleum Refining	Yes	Yes	Yes	Yes
Pharmaceutical Preparations	Yes	Yes	Yes	--
Photographic Equipment and Supplies	Yes	Yes	Yes	Yes
Plastic and Synthetic Materials Manufacturing	Yes	Yes	Yes	Yes
Plastic Processing	Yes	--	--	--
Porcelain Enameling	Yes	--	Yes	Yes
Printing and Publishing	Yes	Yes	Yes	Yes
Pulp, Paper, and Paperboard/Mills	Yes	Yes	Yes	Yes
Rubber Processing	Yes	Yes	Yes	--
Soap and Detergent Manufacturing	Yes	Yes	Yes	--
Steam Electric Power Plants	Yes	Yes	Yes	--
Textile Mills	Yes	Yes	Yes	Yes
Timber Products Processing	Yes	Yes	Yes	Yes

Below is a list of industrial categories and subcategories which are specifically suspended from submitting certain GC/MS data in 40 CFR 122, Appendix D, Note 1. If your industrial category or subcategory is specifically listed in the suspensions, you are not required to submit analytical data for the suspended GC/MS fractions listed below. In addition to the listed industries, 40 CFR 122.21 (g)(8) also provides for an exemption from reporting GC/MS analytical data for small businesses. Refer to the federal guidelines to determine if your facility is exempt.

Coal Mining Industry and Porcelain Enameling Industry

All four GC/MS organic fractions for all subcategories of these industries are suspended.

Leather Tanning and Finishing Industry, Paint and Ink Formulation, and Photographic Supplies

Pesticide fraction is suspended for all subcategories of these industries.

Petroleum Refining Industry

Acid, base/neutral, and pesticide fractions are suspended for all subcategories of this industry.

Textile Mills Industry

All four GC/MS organic fractions in the Greige Mills Subcategory are suspended.
Pesticide fraction in this category is suspended for all other subcategories of this industry.

Ore Mining and Dressing Industry

Volatile, base/neutral, and pesticide fractions in the Base and Precious Metals Subcategory are suspended.
All four GC/MS organic fractions in all other subcategories of this industry are suspended.

Gum and Wood Chemicals Industry

Pesticide fraction in the Tall Oil Rosin Subcategory and the Rosin-Based Derivatives Subcategory are suspended.
Pesticide and base/neutral fractions in all other subcategories of this industry are suspended.

Pulp and Paper Industry

Pesticide fraction in Papergrade Sulfite (Subpart E) is suspended.
Base/neutral and pesticide fractions in Dissolving Kraft (Subpart A), Deink (Subpart I), and Paperboard from Waste Paper (Subpart J) are suspended.
Volatile, base/neutral, and pesticide fractions in the BCT Bleached Kraft (Subpart B), Semi-Chemical (Subpart F), and Nonintegrated-Fine Papers (Subpart K) are suspended.
Acid, base/neutral, and pesticide fractions in Fine Bleached Kraft (Subpart B), Dissolving Sulfite Pulp (Subpart D), Groundwood-Fine Papers (Subpart G), Market Bleached Kraft (Subpart B), Tissue from Wastepaper (Subpart J), and Nonintegrated-Tissue Papers (Subpart L) are suspended.

Steam Electric Power Plant Industry

Base/neutral fraction in the Once-Through Cooling Water, Fly Ash, and Bottom Ash Transport Water process waste streams are suspended.

TABLE 2 – Organic Toxic Pollutants in Each GC/MS Fraction
(Table II from 40 CFR 122, Appendix D)

Volatile Compounds

- 1,1,1-Trichloroethane
- 1,1,2,2-Tetrachloroethane
- 1,1,2-Trichloroethane
- 1,1-Dichloroethane
- 1,1-Dichloroethylene
- 1,2-Dichloroethane
- 1,2-Dichloropropane
- 1,2-Trans-Dichloroethylene
- 1,3-Dichloropropylene
- 2-Chloroethylvinylether
- Acrolein
- Acrylonitrile
- Benzene
- Bromoform
- Carbon Tetrachloride
- Chlorobenzene
- Chlorodibromomethane
- Chloroethane
- Chloroform
- Dichlorobromomethane
- Ethylbenzene
- Methyl Bromide
- Methyl Chloride
- Methylene Chloride
- Tetrachloroethylene
- Toluene
- Trichloroethylene
- Vinyl Chloride

Acid Compounds

- 2,4,6-Trichlorophenol
- 2,4-Dichlorophenol
- 2,4-Dimethylphenol
- 2,4-Dinitrophenol
- 2-Chlorophenol
- 2-Nitrophenol
- 4,6-Dinitro-O-Cresol
- 4-Nitrophenol
- P-Chloro-M-Cresol
- Pentachlorophenol
- Phenol

Base/Neutral Compounds

- 1,2,4-Trichlorobenzene
- 1,2-Dichlorobenzene
- 1,2-Diphenylhydrazine (as Azobenzene)
- 1,3-Dichlorobenzene
- 1,4-Dichlorobenzene
- 2,4-Dinitrotoluene
- 2,6-Dinitrotoluene
- 2-Chloronaphthalene
- 3,3'-Dichlorobenzidine
- 3,4-Benzofluoranthene
- 4-Bromophenylphenylether
- 4-Chlorophenyl Phenyl Ether
- Acenaphthene
- Acenaphthylene
- Anthracene
- Benzidine
- Benzo (a) Anthracene
- Benzo (a) Pyrene
- Benzo (ghi) Perylene
- Benzo (k) Fluoranthene
- Bis (2-Chloroethoxy) Methane
- Bis (2-Chloroethyl) Ether
- Bis (2-Chloroisopropyl) Ether
- Bis (2-Ethylhexyl) Phthalate
- Butylbenzyl Phthalate
- Chrysene
- Di-N-Butyl Phthalate
- Di-N-Octyl Phthalate
- Dibenzo (a,h) Anthracene
- Diethyl Phthalate
- Dimethyl Phthalate
- Fluoranthene
- Fluorene
- Hexachlorobenzene
- Hexachlorobutadiene
- Hexachlorocyclopentadiene
- Hexachloroethane
- Indeno (1,2,3-cd) Pyrene
- Isophorone
- N-Nitrosodi-N-Propylamine
- N-Nitrosodimethylamine
- N-Nitrosodiphenylamine
- Naphthalene
- Phenanthrene
- Pyrene

Pesticides

- 4,4'-DDD
- 4,4'-DDE
- 4,4'-DDT
- α-BHC
- α-Endosulfan
- Aldrin
- β-BHC
- β-Endosulfan
- Chlordane
- δ-BHC
- Dieldrin
- Endosulfan Sulfate
- Endrin
- Endrin Aldehyde
- γ-BHC (Lindane)
- Heptachlor
- Heptachlor Epoxide
- PCB-1016
- PCB-1221
- PCB-1232
- PCB-1242
- PCB-1248
- PCB-1254
- PCB-1254
- PCB-1260
- Toxaphene

TABLE 3 – Other Toxic Pollutants (Metals and Cyanide) and Total Phenols

(Table III from 40 CFR 122, Appendix D)

- Total Antimony
- Total Arsenic
- Total Beryllium
- Total Cadmium
- Total Chromium
- Total Copper
- Available Cyanide
- Total Lead
- Total Mercury
- Total Nickel
- Total Phenols
- Total Selenium
- Total Silver
- Total Thallium
- Total Zinc

TABLE 4 – Conventional and Nonconventional Pollutants to be Tested by Existing Dischargers if Expected to be Present in Discharge

(Table IV from 40 CFR 122, Appendix D)

- Aluminum, Total
- Barium, Total
- Boron, Total
- Bromide
- Chlorine, Total Residual
- Cobalt, Total
- Color
- Fecal Coliform
- Fluoride
- Iron, Total
  Magnesium, Total
- Manganese, Total
- Molybdenum, Total
- Nitrate-Nitrate (as N)
- Nitrogen, Total Organ (as N)
- Oil and Grease
- Phosphorus (as P), Total
- Radioactivity
  - Alpha, Total
  - Beta, Total
  - Radium, Total
  - Radium 226, Total
- Sulfate (as SO4)
- Sulfide, Total
- Sulfite (as SO3)
- Surfactants
- Tin, Total
- Titanium, Total

TABLE 5 – Toxic Pollutants and Hazardous Substances Required to be Identified by Existing Dischargers if Expected to be Present in Discharge

Toxic Pollutants – Table V, 40 CFR 122, Appendix D

- Asbestos

Hazardous Substances – Table V, 40 CFR 122, Appendix D

- 2,2-Dichloropropionic Acid
- 2,4,5-T (2,4,5-Trichlorophenoxy Acetic Acid)
- 2,4-D (2,4-Dichlorophenoxyacetic acid)
- Acetaldehyde
- Allyl Alcohol
- Allyl Chloride
- Amyl Acetate
- Aniline
- Benzonitrile
- Benzyl Chloride
- Butyl Acetate
- Butylamine
- Captan
- Carbaryl
- Carbofuran
- Carbon Disulfide
- Chlorpyrifos
- Coumaphos
- Cresol
- Crotonaldehyde
- Cyclohexane
- Diazinon
- Dicamba
- Dichlobenil
- Dichlone
- Dichlorvos
- Diethyl Amine
- Dimethyl Amine
- Dinitrobenzene
- Diquat
- Disulfoton
- Diuron
- Epichlorohydrin
- Ethanolamine
- Ethion
- Ethylene Diamine
- Ethylene Dibromide
- Formaldehyde
- Furfural
- Guthion
- Isoprene
- Isopropanolamine
- Kelthane
- Kepone
- Malathion
- Mercaptodimethur
- Methoxychlor
- Methyl Mercaptan
- Methyl Methacrylate
- Methyl Parathion
- Mevinphos
- Mexacarbate
- Monoethyl Amine
- Monomethyl Amine
- Naled
- Napthenic Acid
- Nitrotoluene
- Parathion
- Phenolsulfonate
- Phosgene
- Propargite
- Propylene Oxide
- Pyrethrins
- Quinoline
- Resorcinol
- Silvex
- Strontium

- Strychnine
- Styrene
- TDE (Tetrachlorodiphenylethane)
- Trichlorofon
- Triethylamine
- Trimethylamine
- Uranium
- Vanadium
- Vinyl Acetate
- Xylene
- Xylenol
- Zirconium

Other or Additional Toxic Pollutants – Michigan Critical Materials

- 1,1,1,2-tetrachloroethane
- 1,1,2,2-tetrachloroethane
- 1,1,2-trichloroethane
- 1,1-dichloroethylene
- 1,2,3,4-tetrachlorobenzene
- 1,2,3,5-tetrachlorobenzene
- 1,2,3-trichlorobenzene
- 1,2,4,5-tetrachlorobenzene
- 1,2,4-trichlorobenzene
- 1,2:3,4-diepoxybutane
- 1,2-dichlorobenzene
- 1,2-dichloroethane
- 1,2-epoxybutane
- 1,3-butadiene
- 1,3-dichlorobenzene
- 1,3-dichloropropene
- 1,3-propane sultone
- 1,4-dichlorobenzene
- 1,4-dioxane
- 1,5-naphthalenediamine
- 1-amino-2-methylanthraquinone
- 1-chloro-4-phenoxybenzene
- 1-chloropropene
- 2,3,4,5-tetrachlorophenol
- 2,3,4,6-tetrachlorophenol
- 2,3,5,6-tetrachlorophenol
- 2,4,5-trichlorophenol
- 2,4,5-triclhorotoluene
- 2,4,5-trimethylaniline
- 2,4,6-trichlorophenol
- 2,4-diaminoanisole sulfate
- 2,4-diaminotoluene
- 2,4-dichlorophenol
- 2,4-dinitrophenol
- 2-acetylaminofluorene
- 2-aminoanthraquinone
- 2-methyl-1-nitroanthraquinone
- 2-naphthylamine
- 2-nitropropane
- 3-(chloromethyl) pyridine hydrochloride
- 3,3'-dichlorobenzidine
- 3-amino-9-ethylcarbazole
- 3-amino-9-ethylcarbazole hydrochloride
- 4,4'-diaminodiphenyl ether
- 4,4'-methylenebis (2-methylaniline)
- 4,4'-methylenebis(N,N-dimethyl) benzenamine
- 4,4'-thiodianiline
- 4,6-dinitro-o-cresol
- 4-aminobiphenyl
- 4-aminopyridine
- 4-bromophenyl phenyl ether
- 4-chloro-m-phenylenediamine
- 4-chloro-o-phenylenediamine
- 4-dimethylaminoazobenzene
- 5-chloro-o-toluidine
- 5-nitroacenaphthene
- 5-nitro-o-anisidine
- Abietic acid
- Acetone cyanohydrin
- Acrolein
- Acrylonitrile
- Actinomycin D
- Aflatoxins
- Aldrin
- Aminoazobenzene
- Amitrole
- Anilazine
- Aniline hydrochloride
- Antimony
- Antimycin A
- Aramite
- Arsenic
- Asbestos
- Azinphos-ethyl
- Azinphos-methyl
- Azobenzene
- Barban
- Bendiocarb
- Benomyl
- Benz(a)anthracene
- Benzene
- Benzidine (and salts)
- Benzo(a)pyrene
- Beryllium
- beta-propiolactone
- Bis(2-chloroethyl)ether
- Bis(chloromethyl)ether
- Bromomethane
- Bromoxynil
- Butyl benzyl phthalate
- Butylbutanol nitrosamine
- Cadmium
- Captafol
- Carbon tetrachloride
- Carbophenothion
- Chloramines
- Chlordane
- Chlordecone
- Chlorfenvinphos
- Chlorine (elemental Cl and hypochlorite salts)
- Chlorobenzene
- Chlorobenzilate
- Chloroform
- Chloromethane
- Chloroprene
- Chromium
- Clonitralid
- Cobalt
- Copper
- Crotoxyphos
- Cupferron
- Cyanides
- Cycasin
- Cycloheximide
- N-nitrososarcosine
- DDT (p,p', o,p' and technical grade)

- Dehydroabietic acid
- Demeton
- Diallate
- Dibenz(a,h)anthracene
- Dibromochloropropane (DBCP)
- Dibutyl phthalate
- Dichrotophos
- Dieldrin
- Diethylhexyl phthalate
- Diethylstilbestrol
- Dihydrosafrole
- Dimethoate
- Dimethyl disulphide
- Dimethyl sulfate
- Dimethylhydrazines
- Dinitrotoluenes
- Dinocap
- Di-n-octyl phthalate
- Dinoseb
- Dioxathion
- Diphenyl ether
- Endosulfan
- Endrin
- EPN
- Ethyl chloride
- Ethylene oxide
- Ethylene thiourea
- Ethyleneimine
- Ethylmethanesulfonate
- Fensulfothion
- Fenthion
- Fluchloralin
- Furathiazole
- Heptachlor
- Heptachlor epoxide
- Hexachlorobenzene
- Hexachlorobutadiene
- Hexachlorocyclohexane (all isomers)
- Hexachlorocyclopentadiene
- Hexachloroethane
- Hexamethylphosphoramide
- Hydrazine
- Hydrazobenzene
- Hydrogen sulfide
- Hydroquinone
- Isonicotinic acid hydrazide
- Kanechlor C
- Ketene
- Lactonitrile
- Lasiocarpine
- Lead
- Leptophos
- Lithium
- Malachite green
- m-cresol
- Mercury
- Mestranol
- Methacrylonitrile
- Methomyl
- Methyl chloroform
- Methyl hydrazine
- Methylene chloride
- Methylenebis(2-chloroaniline)
- Methylthiouracil
- Mirex
- Mitomycin C
- Monocrotaline
- Monocrotophos
- Mustard gas
- N-(2-hydroxyethyl) ethyleneimine
- N,N'-diethylthiourea
- Naphthalene
- Neoabietic acid
- Nickel
- Nifurthiazole
- Niridazole
- Nithiazide
- Nitrobenzene
- Nitrofen
- Nitrogen mustard
- N-methyl formamide
- N-nitrosodiethylamine
- N-nitrosodimethylamine
- N-nitroso-di-N-butylamine
- N-nitrosodi-N-propylamine
- N-nitrosodiphenylamine
- N-nitrosomethylvinylamine
- N-nitrosomorpholine
- N-nitroso-N-ethylurea
- N-nitroso-N-methylurea
- N-nitroso-N-methylurethane
- N-nitrososarcosine
- o-Aminoazotoluene
- o-Anisidine
- o-Anisidine hydrochloride
- o-Cresol
- Octachlorostyrene
- o-Phenylphenol
- o-Toluidine
- o-Toluidine hydrochloride
- Oydemetonmethyl
- p,p'-DDE
- p,p'-TDE (p,p'-DDD)
- Paraquat
- p-Chlorophenol
- p-Cresidine
- p-Cresol
- Pentachloronitrobenzene
- Pentachlorophenol (and salts)
- Phenazopyridine hydrochloride
- Phenesterin
- Phenobarbitol
- Phenol
- Phenytoin
- Phenytoin sodium
- Phorate
- Phosazetim
- Phosmet
- Phosphamidon
- Piperonyl sulfoxide
- p-Nitrosodiphenylamine
- Polybrominated biphenyls (PBB)
- Polychlorinated biphenyls (PCB)
- Polychlorinated dibenzofurans (PCDF)
- Polychlorinated dioxins (PCDD)
- Polychlorinated naphthalenes
- Propyleneimine
- Propylthiouracil
- Rotenone
- Selenium
- Semicarbazide
- Semicarbazide hydrochloride
- Silver
- Silvex, propylene glycol butyl ether ester
- Sodium fluoroacetate
- Sodium-o-phenylphenol

- Sulfallate
- Sulfotepp
- TEPP
- Terbufos
- Tetrachloroethylene
- Tetrachloroguaiacol
- Tetrachlorvinphos
- Tetranitromethane
- Thallium
- Thioacetamide
- Thiourea
- Thiram
- Toluene
- Toxaphene
- Triaryl phosphate esters
- Tributyltin (and salts and esters)
- Trichloroethylene
- Trifluralin
- Trimethylphosphate
- Tris(2,3-dibromopropyl)phosphate
- Uracil mustard
- Urethane (monomer)
- Vinyl bromide
- Vinyl chloride
- Zinc
- Ziram

TABLE 6 – Dioxin and Furan Congeners

Dioxin Congeners	Furan Congeners
2,3,7,8-Tetrachlorodibenzo-p-dioxin	2,3,7,8-Tetrachlorodibenzofuran
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	1,2,3,7,8-Pentachlorodibenzofuran
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	2,3,4,7,8-Pentachlorodibenzofuran
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	1,2,3,4,7,8-Hexachlorodibenzofuran
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	1,2,3,6,7,8-Hexachlorodibenzofuran
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	2,3,4,6,7,8-Hexachlorodibenzofuran
Octachlorodibenzo-p-dioxin	1,2,3,7,8,9-Hexachlorodibenzofuran
	1,2,3,4,6,7,8-Heptachlorodibenzofuran
	1,2,3,4,7,8,9-Heptachlorodibenzofuran
	Octachlorodibenzofuran

TABLE 7 – Maximum Acceptable Quantification Levels and Analytical Methods for Selected Parameters

Parameter	QL	Units	Analytical Method
1,2-Diphenylhydrazine (as Azobenzene)	3.0	ug/l	
2,4,6-Trichlorophenol	5.0	ug/l	
2,4-Dinitrophenol	19	ug/l	
3,3'-Dichlorobenzidine	1.5	ug/l	
4-Chloro-3-Methylphenol	7.0	ug/l	
4,4'-DDD	0.01	ug/l	
4,4'-DDE	0.01	ug/l	
4,4'-DDT	0.01	ug/l	
Acrylonitrile	1.0	ug/l	
Aldrin	0.01	ug/l	
Alpha-Endosulfan	0.01	ug/l	
Alpha-Hexachlorocyclohexane	0.01	ug/l	
Antimony, Total	1	ug/l	
Arsenic, Total	1	ug/l	
Barium, Total	5	ug/l	
Benzidine	0.1	ug/l	
Beryllium, Total	1	ug/l	
Beta-Endosulfan	0.01	ug/l	
Beta-Hexachlorocyclohexane	0.01	ug/l	
Bis (2-Chloroethyl) Ether	1.0	ug/l	
Bis (2-Ethylhexyl) Phthalate	5.0	ug/l	

Parameter	QL	Units	Analytical Method
Boron, Total	20	ug/l	
Cadmium, Total	0.2	ug/l	
Chlordane	0.01	ug/l	
Chloride	1.0	mg/l	
Chromium, Hexavalent	5	ug/l	
Chromium, Total	10	ug/l	
Copper, Total	1	ug/l	
Cyanide, Available	2	ug/l	EPA Method OIA 1677
Cyanide, Total	5	ug/l	
Delta-Hexachlorocyclohexane	0.01	ug/l	
Dieldrin	0.01	ug/l	
Di-N-Butyl Phthalate	9.0	ug/l	
Endosulfan Sulfate	0.01	ug/l	
Endrin	0.01	ug/l	
Endrin Aldehyde	0.01	ug/l	
Fluoranthene	1.0	ug/l	
Heptachlor	0.01	ug/l	
Heptachlor Epoxide	0.01	ug/l	
Hexachlorobenzene	0.01	ug/l	
Hexachlorobutadiene	0.01	ug/l	
Hexachlorocyclopentadiene	0.01	ug/l	
Hexachloroethane	5.0	ug/l	
Lead, Total	1	ug/l	
Lindane	0.01	ug/l	
Lithium, Total	10	ug/l	
Mercury, Total	0.5	ng/l	EPA Method 1631E
Nickel, Total	5	ug/l	
PCB-1016	0.1	ug/l	
PCB-1221	0.1	ug/l	
PCB-1232	0.1	ug/l	
PCB-1242	0.1	ug/l	
PCB-1248	0.1	ug/l	
PCB-1254	0.1	ug/l	
PCB-1260	0.1	ug/l	
Pentachlorophenol	1.8	ug/l	
Perfluorooctane sulfonate (PFOS)	2.0	ng/l	EPA Method 1633 **or** ASTM D7979 **or** an isotope dilution method (sometimes referred to as Method 537 modified)
Perfluorooctanoic acid (PFOA)			
Phenanthrene	1.0	ug/l	
Phosphorus (as P), Total	10	ug/l	
Selenium, Total	1.0	ug/l	
Silver, Total	0.5	ug/l	
Strontium, Total	1000	ug/l	
Sulfate	2.0	mg/l	
Sulfide, Total	20	ug/l	
Thallium, Total	1	ug/l	
Toxaphene	0.1	ug/l	
Vinyl Chloride	1.0	ug/l	
Zinc, Total	10	ug/l	

TABLE 8 – Other Common Types of Wastewater

- Demineralizer regeneration water
- Drinking fountain overflow
- Filter backwash
- Fire system test water
- Fish rearing water
- Floor drainage water
- Foundation drainage water
- Groundwater seepage
- Hydrostatic pressure test water
- Intake screen backwash
- Iron filter backwash
- Landfill leachate
- Mine dewatering water
- Peat mine dewatering water
- Petroleum-contaminated water
- Pump screen backwash
- Raceway cleaning water
- Sand filter backwash
- Sanitary wastewater
- Secondary containment area water
- Swimming pool wastewater
- Tank bottom water
- Vegetable wash water
- Water softener backwash

Whole Effluent Toxicity Test Guidance and Requirements for POTWs

POTWs meeting one or more of the following criteria are required to submit WET tests with their Application: 1) POTWs with a design flow rate greater than or equal to 1 MGD, 2) POTWs with an approved Federal Industrial Pretreatment Program (FIPP), 3) POTWs required to develop a FIPP, OR 4) POTWs otherwise required by EGLE to submit WET test results with the Application.

Q. How many WET tests are required of POTWs for the NPDES Permit Application?

A. Unless stated otherwise in your current NPDES Permit, POTWs required to submit WET tests shall, at a minimum, submit four test sets that have been run quarterly in the previous year, or four test sets that have been run once a year over the last five years. To account for seasonal variation of facility effluent, one wet test set shall be conducted in each of the four seasons, (spring, summer, fall, and winter). Additional guidance is provided below.

Q. Am I required to submit WET test results using special forms?

A. No. Submit copies of the full WET test results obtained from the testing laboratory.

Q. I have not completed the WET tests required for my NPDES Permit Application and the Application is due. What should I do?

A. Submit your Application and provide a schedule for submission of the WET tests. Please note that the Application will be considered incomplete until the WET tests have been submitted. Submission of an incomplete Application may put applicants out of compliance with an existing NPDES permit, as Applications for reissuance must be submitted 180 days prior to permit expiration.

WET tests shall be conducted in accordance with the following: Chronic tests shall be conducted unless the applicant has requested and received EGLE approval to conduct acute tests. Approval will be based on high receiving water dilution or other site-specific factors. A 40:1 or greater dilution ratio of the receiving water's 95 percent drought flow to the facility's design flow may justify reduction to acute testing. Such requests, with supporting rationale, shall be made in writing to the appropriate District Office Supervisor of the Water Resources Division. (A map of District Office locations and contact information is available online at Michigan.gov/-/media/Project/Websites/egle/Documents/Programs/WRD/About-Us/district-offices.pdf). *If the permittee has previously received approval to conduct toxicity testing using a more sensitive species, the permittee may request approval from the District Office Supervisor to waive the multiple species testing requirements specified below. Such approval will be based on no significant changes to facility operations and wastewater characteristics.*

The following requirements apply to the chronic test set:

1) Test species shall include fathead minnow and *Ceriodaphnia dubia*.
2) Testing and reporting procedures for the fathead minnow and *Ceriodaphnia* are described in "Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms" (Fourth Edition) (USEPA-821-R-02-013).
3) If the Total Ammonia Nitrogen level in the effluent is greater than 3 mg/l, chronic test pH shall be maintained at 8 standard units.

The following requirements apply to the acute test set:

1) Acute test species shall include fathead minnow and either *Daphnia magna, Daphnia pulex, or Ceriodaphnia dubia*.
2) Testing and reporting procedures shall follow procedures contained in USEPA-821-R-02-012, "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" (Fifth Edition).
3) If the Total Ammonia Nitrogen level in the effluent is greater than 5 mg/l, acute test pH shall be maintained at the pH of the effluent at the time of sample collection.

Toxicity test data acceptability is contingent upon the validation of the test method by the testing laboratory. Such validation shall be submitted to EGLE upon request.

All POTWs are required to attach at least one full laboratory WET test report to their application in MiWaters, as specified:

For all WET test results not previously submitted by the facility via the DMRs, the full laboratory WET test reports shall be attached to the application.

For only the most recent WET test result already previously submitted by the facility via the DMRs, the laboratory WET test report shall be attached to the application.