

**NPDES Electronic Reporting Rule
Phase 2 Implementation Plan
for
Michigan Department of Environmental Quality
Water Resource Division
January 23, 2017**

Implementation Plan Purpose

On October 22, 2015, EPA published the final National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Rule. This regulation requires the electronic reporting and sharing of Clean Water Act NPDES program information instead of the current paper-based reporting of this information.

The NPDES Electronic Reporting Rule allows states to determine what electronic reporting tools and systems work best for them and whether they would like to be the initial recipient of NPDES compliance monitoring data. EPA does not dictate the electronic reporting tools that a state may use. Rather, EPA sets performance requirements for states that wish to build their own electronic reporting tools. States also have the option of using and, if desired, customizing electronic reporting tools developed and maintained by EPA. A state, tribe, or territory that is designated by EPA as the initial recipient for an NPDES data group must submit an implementation plan to EPA for review to ensure that the authorized NPDES program will meet the Phase 2 electronic reporting deadline. This plan must provide enough details (e.g., tasks, milestones, roles and responsibilities, necessary resources) to clearly describe how the program will successfully implement electronic reporting of Phase 2 data. This plan does not include electronic reporting of Discharge Monitoring Reports (DMRs).

In accordance with the final rule [40 CFR 127.26(h)], authorized NPDES programs must submit an Implementation Plan (IP) to EPA by December 21, 2016, for EPA's review. EPA will inform the authorized NPDES program if the implementation plan has enough detail to ensure successful implementation of electronic reporting for Phase 2 data. Completed IPs can be emailed to EPA at: NPDESeReporting@epa.gov.

1. Overview/Executive Summary

The Michigan Department of Environmental Quality, Water Resources Division (WRD) has developed a web-based data management system, called MiWaters, to collect application, permitting and compliance data from the regulated public, track compliance, and report that data to EPA. MiWaters serves as the mechanism by which WRD collects information as the initial recipient for all NPDES permitting requirements.

WRD receives NPDES and state-program permit applications, modifications, renewals, transfers and termination requests, NPDES discharge monitoring reports (DMRs) and permit/enforcement compliance schedules via the MiWaters system, directly from the authorized user associated with the NPDES permit.

MiWaters is successfully implementing phase 1 of the e-reporting rule which requires receipt of the DMR through the MiWaters system and subsequent flowing of that data from MiWaters to EPA.

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MiWaters Data Flow to ICIS: Jeffrey Jones, WRD Environmental Quality Specialist and Bill Rensmith, Windsor Solutions

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The following list represents the status and tasks related to phase 2 of the e-reporting requirements for certain other NPDES reports.

- Notices of Intent to Discharge (NOIs) under a general permit – Currently Implemented
- Notices of Termination (NOTs) of coverage under a general permit – Currently Implemented
- No Exposure Certifications (NOEs) under a storm water general permit – Currently Implemented
- Low Erosivity Waivers and Other Waivers from Storm Water Controls - Does not apply in Michigan
- All remaining NPDES Program Reports
 - Sewage Sludge/Biosolids Annual Program Report – Currently Implemented
 - Concentrated Animal Feeding Operation (CAFO) Annual Program Reports – Currently Implemented
 - Municipal Separate Storm Sewer System (MS4) Program Reports – Currently Implemented
 - Pretreatment Program Annual Reports – Currently Implemented
 - Significant Industrial User Compliance Reports in Municipalities Without Approved Pretreatment Programs – **The capability exists within MiWaters, but design of how WRD will capture the data will be dependent on how EPA sets up its data collection framework. – Projected to be implemented by December 21, 2018.**
 - Sewer Overflow/Bypass Event Reports – **Projected to be implemented no later than March 30, 2017**
 - CWA Section 316(b) Annual Reports (Cooling Water Intake)

WRD expects to have fully implemented the NPDES E-Reporting Requirements of Phase 1 and Phase 2 on or before December 21, 2018.

2. Agency NPDES Universe

- A. Number of Active and Administratively Continued Major Individual NPDES Permits: 182
- B. Number of Active and Administratively Continued Minor Individual NPDES Permits: 428
- C. Number of Active and Administratively Continued MS4 Permits: 263
- D. List of Agency General NPDES Permits with number of authorizations for each:

Permit Number	Permit Title & Number of Authorizations	Description of Coverage
MIG690000 (issued March 15, 2013 and modified on April 23, 2013)	Recreational Dredging Dewatering Water 3	Discharges of recreational dredging dewatering water which results from the removal of sediment from a waterway in recreational harbors or marinas or as otherwise necessary to provide for recreational boating.
MIG140000 (reissued March 9, 2012)	Ballast Water Control Port Operations and Ballast Water Discharges 175	General permit coverage authorizes oceangoing vessels to engage in port operations. Port operations include fueling, loading and off-loading cargo and loading and un-loading passengers. Permit coverage authorizes ballast water discharges provided the discharge is in compliance with one or more of the ballast water treatment conditions and all other requirements contained in the permit.
MIG033000	Forest Canopy Pest Control 4	For the application of a pesticide to a forest canopy to control the population of a pest species (e.g., insect or pathogen) where, to target the pests effectively, a portion of the pesticide unavoidably will be applied over and deposited to water.
MIG030000	Mosquito and Other Flying Insect Pest Control	Authorization to control public health/nuisance and other flying insect pests that develop or are present during a portion of their life cycle in or above standing or flowing water. Public health/nuisance

	9	and other flying insect pests in this use category include mosquitoes and black flies.
MIG032000	Nuisance Animal Control and Fish Reclamation 3	Authorization to use pesticides to control animal pests in water and at water's edge. Animal pests in this use category include fish, lampreys, insects, mollusks, and pathogens.
MIG031000	Nuisance Plant and Algae Control 56	Authorization to use pesticides to control weeds, algae, and pathogens that are pests in water and at water's edge, including ditches and/or canals.
MIG019000 (expired April 1, 2015) and MIG010000 (effective April 30, 2015)	Concentrated Animal Feeding Operations 3 247	Animal Feeding Operations that request coverage from the Department. Permit requires implementation of a comprehensive nutrient management plan (CNMP). Authorized discharges: overflow of process wastewater, production area wastewater and/or manure, and silage leachate and runoff when certain conditions are met; and, runoff from precipitation events from land application areas managed in accordance with the CNMP.
MIG080000(effective April 1, 2015)	Wastewater from Cleanup of Water Contaminated by Gasoline & Related Petroleum Products 49	Discharges associated with wastewaters contaminated with gasoline and/or related petroleum product. Does not include non-petroleum groundwater cleanups.
MIG490000 (modified June 16, 2015)	Sand and Gravel Mining Wastewater 25	Discharges of sand and gravel mining wastewater, including mine dewatering water and process generated wastewater.
MIG570000 (issued June 16, 2015)	Secondary Treatment Wastewater 21	Discharges of treated sanitary wastewater which have been treated using secondary treatment processes and comply with applicable secondary treatment regulations at 40 CFR 133.102.
MIG640000(effective April 1, 2015)	Wastewater Discharge from Municipal Potable Water Supply 57	Discharges associated with the production of potable water, including wastewater from the following types of potable water treatment facilities: iron and manganese removal, micro-filtration, chemical softening, coagulation/sedimentation with filter backwash storage/treatment, and coagulation/sedimentation without filter backwash storage/treatment.
MIG760000 (effective April 1, 2015)	Public Swimming Pool Wastewater 23	Discharges of wastewater associated with the operation and maintenance of public swimming pools, including pool overflow, periodic pool drainage, and treated pool filter backwash.
MIG960000 (effective April 1, 2015)	Land Application of Biosolids 4	Land application of biosolids. This permit is limited to facilities that generate biosolids which are applied to the land in bulk.
MIS040000*	Storm Water Discharges from Municipal Separate Storm Sewer Systems	Direct or indirect point source discharges of storm water and non-storm water throughout the federally designated urbanized area of a municipality that has requested coverage under this general

*These are being phased out as individual permits are being issued	(MS4s) - Jurisdictional General Permit 37	permit. Best management practices are required for storm water pollution control.
MIG619000* *These are being phased out as individual permits are being issued	Storm Water Discharges from Municipal Separate Storm Sewer Systems (MS4) - Watershed General Permit 224	Direct or indirect point source discharges of storm water and non-storm water throughout a watershed basin from jurisdictions which have requested coverage under this watershed general permit.
MIG250000 (effective April 1, 2013)	Non Contact Cooling Water 149	Discharges of noncontact cooling water which complies with the temperature requirements of the Part 4 Rules of the Michigan Act 451.
MIG670000 (expires April 1, 2018)	Hydrostatic Pressure Test Water 33	Discharges from the hydrostatic pressure testing of new and existing piping, tanks, vessels and other associated equipment which have been physically cleaned and/or provided with effluent treatment. This permit also covers other discharges of similar short-term duration and discharge quality, such as: prover loop water; tank and/or meter calibration water; and flushing, testing and/or disinfection of potable water systems.
MIG580000 (effective April 1, 2014 & modified Oct. 2, 2014)	Wastewater Stabilization Lagoons 231	Wastewater stabilization lagoons that discharge seasonally. Aerobic lagoons, both mechanically aerated and non-mechanically aerated, which discharge treated sanitary wastewater are included.
MIS110000 (expires April 1, 2016) and MIS110000 (effective April 1, 2016)	Storm Water Discharges Not Associated with Special-Use Areas For Cycle-Year 1 Watersheds 728	Discharges of storm water (and specified non-storm water) to surface waters of the state located within a cycle-year 1 watershed.
MIS120000 (effective April 1, 2016)	Storm Water Discharges Associated with Special-Use Areas for Cycle-Year 1 Watersheds 0	Facilities which discharge storm water to surface waters of the state located within a cycle-year 1 watershed. Applicable discharges include storm water from secondary containment structures required by State or Federal law, from lands on Michigan's List of Sites of Environmental Contamination, or from other activities which may contribute pollutants to the storm water for which the Department determines monitoring is needed.
MIS210000 (expires April 1, 2017) and MIS210000 (effective April 1, 2017)	Storm Water Discharges Not Associated with Special-Use Areas for Cycle Year 2 Watersheds 568	Discharges of storm water (and specified non-storm water) to surface waters of the state located within a cycle-year 2 watershed.

MIS220000 (effective April 1, 2017)	Storm Water Discharges Associated with Special-Use Areas for Cycle-Year 2 Watersheds 1	Facilities which discharge storm water to surface waters of the state located within a cycle-year 2 watershed. Applicable discharges include storm water from secondary containment structures required by State or Federal law, from lands on Michigan's List of Sites of Environmental Contamination, or from other activities which may contribute pollutants to the storm water for which the Department determines monitoring is needed.
MIS320000 (effective April 1, 2013)	Storm Water Discharges with Required Monitoring- Cycle-Year 3 Watersheds 20	Facilities which discharge storm water to surface waters of the state located within a cycle-year 3 watershed. Applicable discharges include storm water from secondary containment structures required by State or Federal law, from lands on Michigan's List of Sites of Environmental Contamination, or from other activities which may contribute pollutants to the storm water for which the Department determines monitoring is needed.
MIS310000 (effective April 1, 2013)	Storm Water from Industrial Activities in Cycle Year 3 Watersheds 417	Discharges of storm water (and specified non-storm water) to surface waters of the state located within a cycle-year 3 watershed.
MIS410000 (effective April 1, 2014)	Storm Water from Industrial Activity without Required Monitoring in Cycle-Year 4 Watersheds 368	This general permit authorizes storm water discharges to surface waters of the state located within a cycle-year 4 watershed. The applicability of this general permit is limited to storm water discharges: associated with industrial activity as defined in the federal storm water regulations, from secondary containment structures required by State or Federal law, from lands on Michigan's List of Sites of Environmental Contamination, or from other activities which may contribute pollutants to the storm water for which the Department determines monitoring is needed.
MIS420000 (effective April 1, 2014)	Storm Water Discharges with Required Monitoring- Cycle-Year 4 Watersheds 13	Facilities which discharge storm water to surface waters of the state located within a cycle-year 4 watershed. Applicable discharges include storm water from secondary containment structures required by State or Federal law, from lands on Michigan's List of Sites of Environmental Contamination, or from other activities which may contribute pollutants to the storm water for which the Department determines monitoring is needed.
MIS510000 (effective April 1, 2015)	Storm Water Discharges Not Associated with Special-Use Areas For Cycle-Year 5 Watersheds (3 deluxe) 407	Discharges of storm water (and specified non-storm water) to surface waters of the state located within a cycle-year 5 watershed.
MIS520000 (effective April 1, 2015)	Storm Water Discharges Associated with Special-Use Areas for Cycle-Year 5 Watersheds 12	Facilities which discharge storm water to surface waters of the state located within a cycle-year 5 watershed. Applicable discharges include storm water from secondary containment structures required by State or Federal law, from lands on Michigan's List of Sites of Environmental Contamination, or from other activities which may contribute pollutants to the storm water for which the Department determines monitoring is needed.

MIS710000	Storm Water From Municipally Operated Industrial Activity 0	Municipal wastewater treatment plants and other municipally owned industrial facilities that discharge storm water (and specified non-storm water) to surface waters of the state. This permit allows discharge authorization following the end of the ISTE A Moratorium.
MIS720000	Storm Water From Municipally Operated Industrial Facilities With Required Monitoring 0	Municipal wastewater treatment plants and other municipally owned industrial facilities that discharge storm water to surface waters of the state from secondary containment structures required by State or Federal law, from lands on Michigan's List of Sites of Environmental Contamination, or from other activities which may contribute pollutants to the storm water for which the Department determines monitoring is needed. Specified non-storm water discharges may be authorized. This permit allows discharge authorization following the end of the ISTE A Moratorium.

3. Current and/or Planned NPDES Data Systems and E-reporting Tools

WRD receives NPDES and state-program permit applications, modifications, renewals, transfers and termination requests, NPDES discharge monitoring reports (DMRs) and permit/enforcement compliance schedules via the MiWaters system.

The MiWaters system was built to consolidate and replace over 25 existing systems used by WRD, to bring consistency to permitting and compliance processes, and to significantly enhance WRD's capabilities through advanced technologies (e.g. GIS), enhanced public access to information, and improved data integrity.

The core of MiWaters is comprised of a web application based on the Microsoft .NET framework, with data being managed and reported upon using Microsoft's SQL Server platform. However, significant functionality is also being provided by integrating Windsor Solution products into the MiWaters solution:

- nFORM – supports online electronic form submission and management
- nSPECT – provides mobile inspections and data collection
- nSITE Explorer – delivers powerful GIS based data inquiry for both internal staff, the regulated community and the general public.

Primary capabilities provided by the MiWaters system include:

- Site Management
 - Management of Site Plans related to environmental interests (e.g. Permitted)
 - Integration with GIS for mapping of Site Plan Features as points, lines, or polygons.
 - Site centric view of environmental activities (Permits, Enforcement Actions, Inspections, Complaints)
- Service Request Processing
 - Integration with nFORM for submission of Permit Applications, Service Requests, and Complaints
 - Request processing and fulfillment
 - Permit development and/or modifications
 - Request fulfillment
 - Tracking of Complaints
 - Public Notice of proposed permit Applications and/or newly issued Permits
 - Processing paper-based Applications, Requests, Submissions
- Permit Maintenance
 - Schedules of Compliance
 - Permitted Features (e.g., Outfalls) and Feature Limits
 - Dynamic program-specific data components based on permit type
 - Contact Management

- Related Documents
- Permittee Reporting Requirements
 - Electronic submission of Permit required reporting (via nFORM) based on Schedules of Compliance specified in the Permit or Compliance/Enforcement Action
 - Electronic Submission of Discharge Monitoring Reports
- Compliance and Enforcement
 - Evaluation of permit reporting submissions
 - Automatic violation generation for late / missing permit report submissions
 - Planning and scheduling of Site Inspections
 - Field Inspection data capture, reporting and violation generation (via nSPECT)
 - Tracking of Compliance and Enforcement Actions including escalations
- Complaints/Incidents
 - Recording and processing of Complaints or Incidents
 - Initiation of Inspections, Permitting, or Compliance/Enforcement Actions from Complaints
- Financial Tracking
 - Application Fee Assessment
 - Invoice Generation
 - Payment Processing
 - Payment Status Tracking
 - Refund Request Processing
- Other Water Resources related functionality
 - Financial Instruments
 - Conservation Easements
 - Mitigation Banks
- EPA Reporting (ICIS / NPDES)

Other general features and capabilities of MiWaters include:

- External site for regulated community (registered users)
- Public Inquiry including GIS based inquiry
- Workflow and Tasking
- Automated Document Generation from user-defined document templates
- Integrated Document Management (upload/download)
- User Notifications – to both internal staff and registered external users (regulated community)
- Extensive configuration and administrative functions
- Contact Management
- User management
- System Announcements
- Online help

4. Key Tasks for Updating Agency Data Systems and Data Transmission Systems for Phase 2 Data Groups

The following table summarizes the major milestones for each NPDES Data Group.

A. General Permit Reports - Including NOIs, NOTs, NOEs, and LEWs; see 40 CFR 122.26(b)(15), 122.28, and 124.5

Currently Implemented with the exception of Low Erosivity Waivers which were not adopted in Michigan and therefore will not be included with Michigan e-reporting.

B. Concentrated Animal Feeding Operation (CAFO) Annual Program Reports - See 40 CFR 122.42(e)(4)

Currently Implemented

C. Municipal Separate Storm Sewer System (MS4) Program Reports - See 40 CFR 122.34(g)(3) and 122.42(c)

The capability currently exists within MiWaters, but WRD needs to confirm requirements and develop the proper tools in MiWaters. Project to be implemented by September 30, 2017.

D. Pretreatment Program Reports - See 40 CFR 403.12(i)

The capability exists within MiWaters, but design of how WRD will capture the data will be dependent on how EPA sets up its data collection framework. Projected to be implemented by December 21, 2018.

E. Significant Industrial User Compliance Reports in Municipalities Without Approved Pretreatment Programs - See 40 CFR 403.12(e) and (h)

The capability exists within MiWaters, but design of how WRD will capture the data will be dependent on how EPA sets up its data collection framework. Projected to be implemented by December 21, 2018.

F. Sewer Overflow/Bypass Event Reports - See 40 CFR 122.41(l)(4), (l)(6) and (7), and (m)(3)

Projected to be implemented no later than March 30, 2017.

G. CWA section 316(b) Annual Reports - See 40 CFR 125, subpart J

The capability exists within MiWaters, but design of how WRD will capture the data will be dependent on how EPA sets up its data collection framework. WRD needs to confirm requirements and develop proper tools in MiWaters. WRD anticipates a phased implementation during the 5 year cycle permitting process with full implementation by October 1, 2022.

H. Sewage Sludge/Biosolids Annual Program Reports - Complete this subsection only if the agency is the authorized NPDES program for biosolids; see 40 CFR 503

Currently Implemented

5. CROMERR Compliance Status for Agency Electronic Reporting Systems

WRD is concurrently working through a draft for EPA informal comment prior to providing an official submittal. CROMERR data approval is expected to cover all of the data groups, as the same system will be utilized for data flow to EPA for each of group.

6. State Statutes, State Regulation/Administrative Rule, and NPDES Permit Update Estimated Completion Dates

WRD has determined that the existing state statutes and regulations provide the necessary language to facilitate e-reporting. Michigan issued NPDES permits have been updated to reflect that e-reporting will be required as of a date certain, or upon written notification of by the WRD. In most data groups, WRD has already provided notice and is no longer accepting paper submittal. In the few remaining data groups to be implemented, WRD will notify users of the date certain for e-reporting prior to release of that aspect of our MiWaters system to the public.

7. Temporary and Permanent Waiver Approval Process (127.24c)

Michigan has determined that waivers will not be implemented for its NPDES e-reporting requirements.

8. Outreach and Training

Prior to roll out of the MiWaters system, WRD direct mailed all of the contacts for NPDES permits, notifying them of the upcoming change, instructing them how to access the system, and providing opportunities to take part in introductory training sessions. WRD developed a webpage and webinars to further train users which can be found at www.Michigan.gov/miwaters . WRD employees have also provided extensive one on one training to external users, as needed.

9. Alternative Options

Alternative options were not pursued.

10. Obstacles to Rule Implementation

Creating a robust database that interfaces with the permitted public and the public at large, as well as with internal permitting and compliance staff is a complicated endeavor. WRD has found that the MiWaters interface will continue to be updated and improved as we learn how to better structure the interaction and in efforts to improve processing time of permitting and compliance efforts, reporting, and response to requests for public information. This effort requires both money and staff time for database enhancements and policy development and updates. While these obstacles are not insurmountable, it is unlikely that the time or the money we would prefer to have to devote to addressing these needs will be in the quantity which will allow us to proceed as quickly as we would like. However, these obstacles are not barriers to implementation, but rather speed bumps to streamlining and user interface improvements.

11. Implementation Plan Reassessment

In the event that unforeseen circumstances cause WRD to become uncertain of its ability to comply with the e-reporting requirements on the timeframes set forth in the e-reporting rule, WRD will reach out to EPA and discuss the concerns and revise the implementation plan as necessary and appropriate.