NPDES Electronic Reporting Rule
Phase 2 Implementation Plan

For Indiana Department of Environmental Management
October 21, 2016

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 using the following email address: NPDESElectronicReporting@epa.gov.

1. **Overview/Executive Summary**

    The Indiana Department of Environmental Management (IDEM) is considered the initial recipient for all permitting and reporting data from regulated entities within the State of Indiana. This includes DMR information, even though electronic DMR information is collected through use of NetDMR. The current participation rate for NetDMR has surpassed the expected 90%, with IDEM continuing to enroll remaining permittees in NetDMR.

    IDEM is in the process of implementing NPDES permitting information into an Enterprise System known as Tools for Environmental Management and Protection Organizations (TEMPO360). Currently, Industrial Storm Water General, MS4, and CAFO are the only permitting groups implemented into TEMPO360. Construction Storm Water General and all Non-Storm Water General permitting groups are in the process of being implemented, with all Individual permitting groups in queue (Industrial, Municipal, and Industrial Waste Pretreatment). Once all permit information is in place, compliance and select enforcement information will be implemented into TEMPO360 for all NPDES permitting groups as well. During the implementation process, all NPDES permit, compliance, and enforcement data will be manually entered into ICIS.

While TEMPO360 fully supports the ICIS-NPDES required data elements, modifications will need to be made to the database and user interfaces to include the required NPDES eReporting Rule data elements, found in Appendix A. To this end, IDEM, Kentucky Department of Environmental Quality (KYDEQ), Mississippi Department of Environmental Quality (MDEQ), Louisiana Department of Environmental Quality (LDEQ), and Minnesota Pollution Control Agency (MPCA), which all utilize TEMPO360, have partnered on a multi-state Exchange Network grant to add these missing data elements. The grant was tentatively awarded by the EPA on May 5, 2016. The grand was awarded September 1, 2016, and design and development will begin by the end of the year.

IDEM also utilizes another system, the Multimedia Enforcement Tracking System (METS), to track all formal enforcement actions. All NPDES programs are currently using METS, and all non-storm water enforcement actions/events are hand entered into ICIS.

IDEM is also working on a web-based application, the Regulatory Services Portal (RSP) to capture submission of NPDES Storm Water General Permit applications (NOI , NOT, and No Exposure). This is a sister product to TEMPO360, and all information received through the RSP is automatically flowed into TEMPO360. This application is currently available for use for Industrial Storm Water General Permit applications, with Construction Storm Water General Permit submission services available to the public by the middle of 2017. For all other NPDES General Permit applications, required annual reports, and Overflow/Bypass reports, IDEM is in the process of developing a web portal with submission services for each. The portal will also flow data automatically to TEMPO360.

In addition to all of the work mentioned above, IDEM is also currently developing Node flows for Basic Permit, Basic Facility, and Permitted Feature data groups for all general permitting groups. This development is being done as part of a 2012 NEIEN grant awarded to IDEM for that purpose. IDEM is currently testing the flow of information to the ICIS Stage environment and will have the aforementioned node flows actively working by September 30, 2017; the completion deadline for the grant. Once these flows are put into production, IDEM will create the remaining flows for all other eReporting Rule Schemas from TEMPO360 and METS to ICIS.

Overall, IDEM believes with current staffing and financial resources, it will have complete implementation of the NPDES eReporting Rule by March 1, 2030. Any questions regarding this implementation plan should be directed to Mark Stanifer, Chief of the Office of Water Quality Compliance Branch at 317-232-8431 or mstanife@idem.IN.gov.

2. **Agency NPDES Universe**

As of March 4th, 2016, IDEM has the following universe of NPDES and IWP permits:
- CAFO Individual Permits: 0
- Major Discharge Individual Permits (including the only large MS4): 192
- Minor Discharge Individual Permits: 1086
- Non-Delegated POTW (IWP) Individual Permits: 182
- Small and Medium MS4 General Permits: 145, managed by 189 co-permittees
- Industrial Storm Water General Permits: Approximately 2430

- Construction Storm Water General Permits: Approximately 3500
- Master General Permits (in transition from old permit-by-rule):
  - Groundwater Petroleum Remediation: 71
  - Hydrostatic Testing of Commercial Pipelines: 7
  - Once through Noncontact Cooling Water: 34
  - Sand, Gravel, Dimension Stone and Crushed Stone: 95
  - Petroleum Products Terminals: 38

All of the aforementioned permits have been manually entered into ICIS, with the exception of the Industrial and Construction Storm Water General Permits and MS4 General Permits. Once the Basic Permit, Basic Facility, and Permitted Feature node flows have been completed, those permits will be pushed to ICIS.

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

As mentioned in great detail in the Overview, IDEM utilizes the following Data Systems and E-reporting Tools:

TEMPO360 - Enterprise System in use by IDEM that will house all Permitting, Compliance, and select Enforcement data for all NPDES permitting groups. Currently houses the following permit and reporting information:
- Industrial Storm Water
- MS4
- Construction Storm Water (implementation partially complete)
- Non-Storm Water General Permits (implementation almost complete)
- AFO/CAFO (although there are no active CAFO permits at this time)
- CSO Long Term Control Plan information
- Sewer Overflow Event Reports

METS – System in use by IDEM that houses all NPDES violation and enforcement information.

RSP – web based application, and sister product to TEMPO360, with services to allow for submission of the following NPDES Permit Reports:
- Industrial Storm Water (NOI, NOT)
- Construction Storm Water (NOI, NOT)

IDEM developed web portal - will be developed to collect the following electronic submissions:
- Non-Storm Water General Permit Reports (NOI, NOT)
- MS4 General Permit Reports (NOI, NOT)
- Sewer Overflow/SSO/Bypass Event Reports
- MS4 Program Reports
- Pretreatment Program Report (Delegated POTWs)
- CWA Section 316(b) Annual Report

NetDMR – EPA web based application designed to collect NPDES DMR data. Currently 90% of Indiana non-storm water facilities submit using this tool.

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

The following milestones have been created with current IDEM staff resources and availability, as well as funding limitations in mind, which pushes the overall implementation date out to 2030. These limitations are discussed at greater length in section 10 of this document, along with other known risks to the implementation timeline. As IDEM does not currently have all Phase I data implemented, milestones for Phase I data have also been added to the table below. As mentioned previously, while development of Phase 1 Data are being completed all eReporting Rule required information will be manually entered into ICIS.

NPDES Data Group	Milestones	Target Date
Basic Facility and Permit Information (All Permits) – **Phase 1 Data**	1. Add new data elements to TEMPO360.	1. July 31, 2018
	2. Implementation of Remaining Master Non-Storm Water General Permits into TEMPO360	2. December 31, 2016
	3. Completion of Node Flows for Storm Water General Permits (Industrial, Construction, and MS4)	3. September 30, 2017
	4. Completion of Node Flows for remaining Master General Permits	4. September 30, 2017
	5. Implementation of Individual Industrial Permits into TEMPO360	5. September 30, 2020
	6. Completion of Node Flows for Individual Industrial Permits	6. September 30, 2020
	7. Implementation of Individual Municipal Permits into TEMPO360	7. November 30, 2022
	8. Implementation of Individual IWP Permits into TEMPO360	8. November 30, 2022
	9. Completion of Node Flows for Individual Municipal and IWP Permits.	9. November 30, 2022
Compliance, Violation, and Enforcement Information (All Permits)– **Phase 1 Data**	1. Add new data elements to TEMPO360.	1. July 31, 2018
	2. Implementation of Storm Water	

	General Permit data into TEMPO360	2. December 31, 2025
	3. Implementation of all Master General Permit data into TEMPO360	3. December 31, 2025
	4. Completion of Node Flows for Storm Water General Permit data	4. December 31, 2025
	5. Completion of Node Flows for all Master General Permit data	5. December 31, 2025
	6. Implementation of Individual Industrial Permit data into TEMPO360	6. January 31, 2028
	7. Completion of Node Flows for Individual Industrial Permit data	7. January 31, 2028
	8. Implementation of Individual Municipal Permit data into TEMPO360	8. March 1, 2030
	9. Implementation of Individual IWP Permit data into TEMPO360	9. March 1, 2030
	10. Completion of Node Flows for Individual Municipal and IWP Permit data	10. March 1, 2030
General Permit Reports (NOI, NOT) – **Phase 2 Data**	1. Completion of online web application submittal services for Industrial and Construction NOI and NOT in RSP portal.	1. March 31, 2016
	2. Creation of online web application submittal services for MS4 NOI and NOT in IDEM developed portal.	2. September 30, 2020
	3. Creation of online web application submittal services for Non-Storm Water General Permit NOI and NOT in IDEM developed portal.	3. November 30, 2022
	4. Completion of Node Flows for remaining permitting schemas (other than Basic Permit and Basic Facility) for all Master General Permits.	4. September 30, 2020
	5. Full participation of all permittees in online submittals	5. December 31, 2023

MS4 Program Report – **Phase 2 Data**	1. Add new data elements to TEMPO360	1. July 31, 2018
	2. Creation of online web application submittal service in IDEM developed portal	2. December 31, 2022
	3. Completion of Node Flow	3. December 31, 2021
	4. Full participation of all permittees in online submittals	4. December 31, 2023
Pretreatment Program Report (Delegated POTWs) – **Phase 2 Data**	1. Add new data elements to TEMPO360	1. July 31, 2018
	2. Creation of online web application submittal service in IDEM developed portal	2. December 31, 2023
	3. Completion of Node Flow	3. December 31, 2022
	4. Full participation of all permittees in online submittals	4. December 31, 2024
Sewer Overflow/SSO/Bypass Event Report – **Phase 2 Data**	1. Add new data elements to TEMPO360	1. July 31, 2018
	2. Creation of online web application submittal service in IDEM developed portal	2. December 31, 2018
	3. Completion of Node Flow	3. December 31, 2018
	4. Full participation of all permittees in online submittals	4. December 31, 2019
CWA Section 316(b) Annual Report – **Phase 2 Data**	1. Add new data elements to TEMPO360	1. July 31, 2018
	2. Creation of online web application submittal service in IDEM developed portal	2. December 31, 2025
	3. Completion of Node Flow	3. December 31, 2024
	4. Full participation of all permittees in online submittals	4. December 31, 2026
Sewage sludge/Biosolids Annual Report – **Phase 2 Data**	EPA retains primacy	Not applicable
CAFO Annual Report – **Phase 2 Data**	Indiana has no NPDES CAFOs	Not applicable

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

IDEM Roles and Responsibilities: IDEM will develop a CROMERR-compliant web portal that will allow permit holders to electronically submit Non-Storm Water and MS4 General Permit Reports to IDEM, which will flow the information directly to TEMPO360. IDEM will finish RSP electronic submittal service implementations for Industrial and Construction Storm Water General Permit Reports, which will also flow information directly to TEMPO360. IDEM will add any missing data elements to the TEMPO360 database, and complete implementation of all NPDES Permits into TEMPO360, and will complete development of all Node Flows necessary to flow permit data from TEMPO360 directly into ICIS. Once all of this is complete, all EPA-required permit data that get recorded in TEMPO360 will automatically flow to ICIS. In the interim, IDEM will manually enter basic facility and permit information into ICIS. Finally, IDEM will perform outreach and provide training to all regulated entities required to submit this information electronically prior to task completion deadlines listed in the table above.

Task Completion Timeline: See table above

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

IDEM Roles and Responsibilities: IDEM will develop a submission service for MS4 Program Reports as part of their CROMERR-compliant web portal listed in 'B' above, which will then flow the information directly to TEMPO360. IDEM will add any missing eReporting Rule data elements to the TEMPO360 database, and will also develop a node flow to send the information from TEMPO360 to ICIS. Finally, IDEM will perform outreach and provide training to all regulated entities required to submit this information electronically prior to task completion deadlines listed in the table above.

Task Completion Timeline: See table above

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

IDEM Roles and Responsibilities: IDEM will develop a submission service for Pretreatment Program Reports as part of their CROMERR-compliant web portal listed in 'B' above, which will then flow the information directly to TEMPO360. IDEM will add any missing eReporting Rule data elements to the TEMPO360 database, and will also develop a node flow to send the information from TEMPO360 to ICIS. Finally, IDEM will perform outreach and provide training to all regulated entities required to submit this information electronically prior to task completion deadlines listed in the table above.

Task Completion Timeline: See table above

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

IDEM Roles and Responsibilities: IDEM will develop a submission service for Sewer Overflow/Bypass Event Reports as part of their CROMERR-compliant web portal listed in 'B' above, which will then flow the information directly to TEMPO360. IDEM will add any missing eReporting Rule data elements to the TEMPO360 database, and will also develop a node flow to send the information from TEMPO360 to ICIS. Finally, IDEM will perform outreach and provide training to all regulated entities required to submit this information electronically prior to task completion deadlines listed in the table above.

Task Completion Timeline: See table above

E. CWA Section 316(b) Annual Reports - *See 40 CFR 125, subpart J*

IDEM Roles and Responsibilities: IDEM will develop a submission service for CWA Section 316(b) Annual Reports as part of their CROMERR-compliant web portal listed in 'B' above, which will then flow the information directly to TEMPO360. IDEM will add any missing eReporting Rule data elements to the TEMPO360 database, and will also develop a node flow to send the information from TEMPO360 to ICIS. Finally, IDEM will perform outreach and provide training to all regulated entities required to submit this information electronically prior to task completion deadlines listed in the table above.

Task Completion Timeline: See table above

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

IDEM Roles and Responsibilities: As of December 29, 2015 there are no NPDES CAFOs in Indiana. Therefore, IDEM has no responsibilities with regards to the CAFO Annual Program Reports. However, in the event of a discharge from an 'unpermitted' AFO site, IDEM will manually enter the required data in ICIS. This is an extremely rare occurrence, as there have only been three spill incidents from an unpermitted AFO site since November of 2013.

Task Completion Timeline: N/A

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

EPA Roles and Responsibilities: EPA retains primacy in this program, and will continue to receive Annual Sewage Sludge/Biosolids Program Reports from regulated entities. IDEM has no roles or responsibilities for this program report.

Task Completion Timeline: N/A

5. **CROMERR Compliance Status for Agency Electronic Reporting Systems**

    IDEM completed implementation and received EPA approval of its CROMERR solution in December of 2007. The solution, known as 'eAuth', covered information submitted under all NPDES eReporting Rule data groups. IDEM then updated their eAuth CROMMER solution to cover additional shared services, and received EPA approval in January of 2015.

    On July 13, 2011, IDEM submitted its formal application to EPA to utilize NetDMR and its CROMERR solution to collect NPDES, IWP permit, CSO, and Pretreatment DMR data.

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

    The Indiana NPDES rules are generally complete and effective. The significant exception here is that general permit coverage is being migrated away from permits-by-rule to administratively issued Master General Permits (MGPs). This process is mostly, but not entirely, complete. As of this time five MGPs have been developed:
    *   Once Through Noncontact Cooling Water
    *   Sand, Gravel, Dimension Stone and Crushed Stone
    *   Groundwater Petroleum Remediation
    *   Hydrostatic Testing of Commercial Pipelines
    *   Petroleum Products Terminals.

    The only remaining permits-by-rule, for coal mines, Industrial Storm Water, Construction Storm Water, and MS4, will be phased out once a new MGP is issued, according to a timeframe previously developed by IDEM. Litigation may delay the anticipated implementation of the coal mine MGP. IDEM expects that MGPs for additional categories of dischargers may be developed in the future. There are also several application and annual report forms that do not capture all of the required eReporting Rule data elements. IDEM will make necessary changes to these forms in the event they will be utilized by those regulated entities seeking a temporary waiver from electronic submissions. There should be no legislative changes necessary to update the forms, and all changes will be made prior to deadlines for each NPDES data group listed in the table in section 4 above.

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

    IDEM does not currently require NPDES facilities to submit information electronically, and therefore does not have a waiver process in use at this time. The tentative waiver process moving forward will require regulated entities to request a waiver from IDEM in writing. IDEM will not create a waiver request form, but will allow regulated entities to submit the request in the form of a letter detailing the reasons the facility cannot comply with electronic submission of required Electronic Reporting Rule data. IDEM will not have standard criteria for approval of a waiver, but will review the requests on a case by case basis. Waivers would be granted for facilities that are able to demonstrate an inability to submit electronically, and not for those unwilling to do so. Waivers will be granted for one year, with an option to renew the waiver at the end of that time. Each renewal request will also be reviewed on a case by case basis, and each renewal period will also be for one year. IDEM will notify facilities by mail that the waiver has been approved, and track the waiver

application, waiver approval, and any renewal dates in TEMPO360. The only permanent waivers that IDEM would give to regulated entities would be for religious exemptions. This would most likely only pertain to the NPDES CAFO program, and there are currently no CAFOs in Indiana. For any facilities that have a waiver, IDEM will continue to manually enter the required data into TEMPO360.

8. **Outreach and Training**

Since 2012, IDEM staff have been promoting use of NetDMR through trade group events, newsletters, e-mails, and during on-site inspections. Subsequent to the effective date of the eReporting Rule, IDEM staff have expanded their outreach efforts with e-mails, phone calls and on-site assistance visits.

IDEM expects to perform outreach for all Phase II data in much the same manner. There may be slight variation from one NPDES program to the next, but a combination of the outreach methods listed above will be utilized. IDEM plans to begin outreach at least one year prior to the deadlines listed in the table in section 4 of this document, with full compliance most likely based on permit cycle. Because the collection of Phase II data is much more cumbersome than a simple submission of a DMR, IDEM believes that compliance with electronic submission requirements will be much slower. Quite a number of the NPDES regulated entities in Indiana are also smaller, less technically able facilities, so there may be both financial and knowledge roadblocks to compliance.

9. **Alternative Options**

In the event of unforeseeable complications to the creation of a web portal detailed above, IDEM will have all electronic services for the submission of General Permit Reports, Annual Reports, and Bypass Overflow Reports created in RSP by the vendor. If there are other financial complications, or time constraints with implementing the Electronic Reporting Rule through RSP, IDEM will utilize the NeT application developed by EPA to capture all electronic submissions.

10. **Obstacles to Rule Implementation**

IDEM has the following obstacles to implementation of the eReporting Rule:
   - **IT and Program Staff Limitations** – IDEM currently has a limited number of IT and NPDES program staff, negatively affecting implementation timelines. In addition, any available staff are already working on other projects or are busy doing program work (permitting, compliance, enforcement activities). New IT business analysts are going to be necessary, and additional developers will also be necessary in order to create an IDEM proprietary web portal as well. Furthermore, NPDES program staff will have to find a way to juggle existing job responsibilities as well as acting as subject matter experts during implementations. IDEM will also have to contend with any hiring freezes that may be in place for the State or Agency as a whole when trying to add necessary staff.
   - **Lack of funding** – IDEM will need to find funding to cover the cost of upgrades to the TEMPO360 and RSP third party systems. In addition, IDEM will need additional funding

to hire the staff needed to create the web portal, and for implementation of the rule altogether.

- **Training** – If additional staff can be hired (hiring freezes or lack of funding), there will have to be a ramp-up to train them in NPDES programs, the Electronic Reporting Rule, and TEMPO360/RSP which will push back the timeline for implementation.
- **Implementation time constraints –** Historically, it has taken three or more years to implement each functional area within a regulatory program into TEMPO360, and only three programs are implemented at a time. The EPA has given states six years total for all NPDES programs to be implemented into TEMPO360, Node Flows created for these, RSP services created, and another new portal developed to capture everything not captured by the RSP. This is not a realistic timeline for IDEM, given the other obstacles listed above.
- **Current NEIEN Project Completion –** In addition to other non-NPDES TEMPO implementations, staff are also working on completion of various NPDES Node Flows as part of the 2012 NEIEN Grant awarded to IDEM. There have been several extensions made to this grant, and IDEM must complete work no later than September 2017. This means that the grant takes priority, as it has a due date prior to that of the Electronic Reporting Rule, and it has already been extended.
- **Unknown Valid Values/Character Lengths/Data Types for Appendix A Data Elements –** IDEM cannot begin to hold design sessions, draft change requests for existing systems, or create screen mock-ups without knowing the data types, character lengths, and valid values for each of the Appendix A data elements. IDEM has been told that these will not even be discussed until after the Phase I due date has passed. This adds to the time constraints obstacle, in that it takes months for each step of the design process to get new elements implemented and/or changes made to existing elements while working with the TEMPO360/RSP vendor. Lack of complete information on each data element pushes this time frame out considerably.

11. Implementation Plan Reassessment

IDEM will contact EPA for reassessment of this Implementation Plan if there are significant changes to the timelines, or to the tools that will be utilized. IDEM plans to have regularly scheduled teleconferences with EPA Region 5 staff on a quarterly basis to discuss progress and any issues that have developed during implementation.