NPDES Electronic Reporting Rule Phase 2 Implementation Plan

For Delaware Department of Natural Resources and Environmental Control December 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 at: NPDESeReporting@epa.gov.

1. Overview/Executive Summary

DNREC currently reports Major/Minor Wastewater Treatment Facility (WWTF) data to ICIS through our Delaware Environmental Navigator (DEN) database. It is through expansion of that system to cover different NPDES permittee universes that DNREC primarily looks to meet the Electronic Reporting Rule requirements. Through modification of current application, and development of new application in DEN, DNREC anticipates achieving compliance with the Electronic Reporting Rule by December 21, 2020. DNREC intends to be the initial recipient of the data from all the programs for which it is Authorized to implement. The primary contacts for this Implementation Plan are Bryan Ashby (for CAFO, MS4, Industrial Stormwater, Aquatic Pesticides, CSO, and SSO programmatic information), Jamie Rutherford (for Construction Stormwater Programmatic information), and Chris Morell (for IT information).

2. Agency NPDES Universe

The following numbers are accurate as of December 21, 2016:

- A. Number of Active and Administratively Continued Major Individual NPDES Permits: DNREC has 19 wastewater treatment facilities which hold Individual NDPES permits. One of these facilities is permitted with a Combined Sewer Overflow (CSO). All of these facilities are in DEN and report their Discharge Monitoring Reports electronically to DEN, which feeds this data into ICIS.
- B. Number of Active and Administratively Continued Minor Individual NPDES Permits: DNREC has 27 wastewater treatment facilities which hold Individual NDPES permits. All of these facilities are in DEN and report their Discharge Monitoring Reports electronically to DEN, which feeds this data into ICIS.
- C. Number of Active and Administratively Continued MS4 Permits: DNREC has 1 Phase I and 4 permitted Phase II MS4s. All of these permittees currently have individual permits. A Phase II general permit is

being developed to provide coverage for new Phase II MS4 facilities which do not currently have permit coverage as well as existing Phase II permittees. The Phase I permit is currently in ICIS. The Phase II permits will be incorporated along with the Phase II General Permit.

- D. List of Agency General NPDES Permits with number of authorizations for each:
 - Construction General Permit: Currently the universe of facilities (open NOIs) for construction stormwater is 3,340. However, this number does not signify whether the project is active/ inactive or whether the project is complete.
 - Industrial Stormwater (compliment to Multisector) General Permit: DNREC has 369
 Industrial Stormwater permittees: 105 No Exposure and 264 NOI facilities. Basic facility information is in DEN, but not actively managed. No Industrial Stormwater information is currently transmitted to ICIS.
 - Municipal Separated Storm Sewer System (MS4) Phase II General Permit: DNREC is working
 towards, but has not yet issued a Phase II MS4 General Permit. At this time 19 communities
 are identified that could receive coverage under this permit, including those currently
 covered under individual permits. The utilization of waivers and residual designation
 authority will impact the number of communities which eventually receive coverage.
 - Concentrated Animal Feeding Operations (CAFO) General Permit: Delaware currently has 19 permitted CAFOs. Delaware is working to get non-land applying poultry operations covered under its first General Permit. We then intent to issue two more General Permits: one covering land applying Poultry and one covering all non-poultry CAFOs. Delaware has Notice of Intents from 457 farming operations, and is working toward permitting them. This information is not in DEN or ICIS.
 - Aquatic Pesticide General Permit: DNREC currently has 30 permittees. This information is not in DEN or ICIS.

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

DNREC currently uses the Delaware Environmental Navigator (DEN) as the primary repository for its environmental permitting and compliance data. DEN contains data on various Air, Waste and Water permitting programs. DEN is available to the public at http://www.nav.dnrec.delaware.gov/DEN3/. It is easily searchable by the public by a variety of fields including: facility, program, enforcement action or permit. DEN is also invaluable to Department staff, which uses it as a repository for permit and compliance data, and a tool for managing and analyzing that data. The Individual NPDES Major and Minor wastewater treatment facilities are all in DEN and actively managed through DEN. Electronic reporting of Discharge Monitoring Reports (DMR) for these facilities is in place and all of these facilities are utilizing electronic reporting. Additionally, Construction Stormwater has their permitting data housed in DEN. Unfortunately, the rest of our NPDES facilities are not managed through DEN.

For Construction Stormwater we are currently testing an eNOI system which would allow for electronic submission of Construction Stormwater NOIs. A March 2017 roll out date is expected. The eNOI will contain an approved CROMERR piece as well as the data elements outlined in Appendix A.

For the rest of our programs (MS4, CAFO, Industrial Stormwater and Aquatic Pesticides) permitting and compliance data is maintained on an in-house Microsoft Access database. DNREC intends to migrate this data to DEN. Then going forward, DNREC will use DEN to actively manage data and report data to ICIS for all of Delaware's NPDES programs. DEN provides a good platform for this work, but significant application development or specialization of existing application is needed in order to effectively contain and mange this data. Additionally, a system will have to be developed to accept NOI and report information for general permitted facilities, possibly based on the Construction Stormwater's eNOI system once fully operational.

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

DNREC intends to further develop DEN to meet all of our Electronic Reporting Requirement. DNREC staff will work with Department of Technology and Information (DTI) staff to identify the needed updates, the extent of the data fields required by the Electronic Reporting Rule and the additional measures needed to make the DEN interface user friendly and a useful tool to both the public and DNREC staff. DTI works a great deal with inhouse contractors. As such it is likely that much of the work will be performed by contractors overseen by DTI staff.

DNREC appreciates all the assistance EPA has provided and continues to provide in effectuating this change. DNREC will look to EPA to here assist by working your side of the Information Technology to allow DNREC to connect to the appropriate node and establish a smooth and complete transfer of data. Additional, we request EPA provide training on ICIS direct data entry for our Construction Stormwater enforcement staff. DNREC intends to have all requirements of the Electronic Reporting Rule met by December 21, 2020. This include having all required data elements listed in Appendix A of the Rule in ICIS, and have the ability to electronically report the following report: Discharge Monitoring Reports; General Permit Reports - Including NOIs, NOTs, NOEs, and LEWs - see 40 CFR 122.26(b)(15), 122.28, and 124.5; Concentrated Animal Feeding Operation (CAFO) Annual Program Reports - see 40 CFR 122.42(e)(4); Municipal Separate Storm Sewer System (MS4) Program Reports - see 40 CFR 122.34(g)(3) and 122.42(c);Sewer Overflow/Bypass Event Reports - see 40 CFR 122.41(l)(4), (l)(6) and (7), and (m)(3); and CWA section 316(b) Annual Reports - see 40 CFR 125, subpart J. The table below identifies the milestones identified to meet this deadline.

NPDES Data Group	Milestones	Target Date
Construction Stormwater -	Testing phase	March 2017 – September 2017
General Permit Reports	Develop User Manual	
	Launch	
	Outreach	
	(Electronically flow data into ICIS)	
Construction Stormwater -	Purchase of off the shelf	December 2017

Compliance Monitoring Activity Information	inspection mobile application. IT folks will have to migrate data, modify code and work with vendor during implementation. (Electronically flow data into ICIS)	
Construction Stormwater - Enforcement Action Information	Staff training with EPA R3. (Direct enter Data into ICIS)	June – December 2017
CAFO, MS4, Industrial Stormwater, Aquatic Pesticides, CSO and SSO	Gather Requirements, Design and Planning.	March 2017 – December 2017
CAFO, MS4, Industrial Stormwater, and Aquatic Pesticides	Convert current systems tracking CAFO, MS4, Industrial Stormwater, and Aquatic Pesticides into a modular application that ties into DNREC's current Environmental Navigator Database.	January 2018 – July 2018
CSO, and SSO	Create two new modules to track CSO and Sewer Overflows	August 2018 – December 2018
CAFO, MS4, Industrial Stormwater, Aquatic Pesticides, CSO, and SSO	Build extraction process to build xml datasets to send Facility, State Inspection and Compliance Monitoring via en-Node portal	January 2019 – May 2019
CAFO, MS4, Industrial Stormwater, Aquatic Pesticides, and SSO	Convert current eNOI system, to be applicable NOI submission for CAFO, MS4, Industrial Stormwater, and Aquatic Pesticides.	June 2019 – September 2019
CAFO, MS4, Industrial Stormwater, Aquatic Pesticides, and SSO	Develop PDF submission capability for report submission.	October 2019 – December 2019
CAFO, MS4, Industrial Stormwater, Aquatic Pesticides, CSO, and SSO	Make modifications in production environment, configure en-Node software for new schemas, and submit to production node of CDX.	January 2020 – August 2020
CAFO, MS4, Industrial Stormwater, Aquatic Pesticides, CSO, and SSO	Test all ICIS data flows to test node of CDX until errors are resolved.	September 2020 – December 21, 2020

5. CROMERR Compliance Status for Agency Electronic Reporting Systems

DNREC Information Technology (IT) staff have been actively engaged in obtaining and maintaining CROMERR compliance. Recently, the State of Delaware underwent an IT consolidation. Now those same staff which were managing our CROMEER compliance continues to do so from their post in Delaware's Department of Technology and Information (DTI). It is our understanding that EPA generally provides CROMERR approval on a program basis, which would cover all reports under the approved program. If the same system is being used with the same CROMERR functionality, and only flowing in new reports under the same program, EPA has typically not required a new or amended application. The data group breakdown is for states/jurisdictions that use different systems for different sectors and therefore are covered under multiple CROMERR approvals instead of just one for their program. As such, at this time we are not aware of any additional CROMERR approval that would be needed.

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

Inclusion of applicable new requirements in permits should be sufficient to implement this rule. These new requirements will be added to permits through the regular permitting process as permits are renewed. As of this time, DNREC has not identified any statutory or regulatory required changes. However, we will look to proactively recognize electronic reporting requirements in our regulations as regulations are revised and opened to comment. The Construction Stormwater Regulations will likely be the first example of this; they are expected to be finalized with electronic reporting conditions in them in December 2017.

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

Waivers requests will be evaluated on a case by cases basis. DNREC cannot grant a waiver to an NPDES-regulated entity without first receiving a waiver request from the NPDES-regulated entity. All waiver requests shall have the information required in 40 CFR 127.15, and all approval granted will be done in compliance with § 127.24. Each temporary waiver shall not extend beyond five years. However, NPDES-regulated entities may re-apply for a temporary waiver. Permanent waivers are only available to facilities and entities owned or operated by members of religious communities that choose not to use certain modern technologies. An approved waiver is not transferrable. DNREC acknowledged that if a waiver is granted, it is the responsibility of the regulatory agency to insure all Appendix A data received in paper format is shared with EPA in electronic format.

8. Outreach and Training

- A user manual will be developed and posted on our website, which walks permittees through the
 process of data submission. It will include screen shots and step by step instructions on how to data
 is to be submitted. Such manuals have already be developed and utilized for electronic DMR
 reporting and Construction Stormwater's electronic NOI reporting.
- Current permittees will be notified of pending changes to submission requirements through direct email or mail. Our website will be adjusted to direct new permittees to the user manual and electronic reporting mechanisms.
- DNREC will also notify attendees of course which we provide or are associate with, such as the required certification courses for Stormwater Construction inspectors, or the Know Your Permit Course which DNREC regularly provides to certified wastewater operators.

9. Alternative Options

As stated before DEN is a Department wide data system, designed to allow the public to access not just NPDES data, but data from all media. The addition of these missing NPDES data sets serves to increase its value and functionality to the citizens of Delaware. DEN is capable of effectively managing this data; all that is necessary is adequate time, money and effort to make the changes required. DNREC is determined to see that we succeed in making the needed changes.

At this point in time there seem to be no readily available alternatives that allow DNREC to remain the initial recipient of information. We are unaware of any Commercial Off-The-Shelf (COTS) systems available that have the functionality needed. Any COTS system would require significant modification to meet DNREC's needs and to interface with the systems we already have in place; such that, modifying our current DEN system would be more time and cost efficient that starting with a COTS system. The only alternative would be to move to EPA's NeT, once it is fully functional. Given the time and effort that DNREC as a whole has invested in the DEN system, we would be very reluctant to divest ourselves of our NPDES data in this manner.

10. Obstacles to Rule Implementation

• We have no dedicated source of funding for this project. We are reliant in large part on EPA providing funding through grants, such as the Enterprise Grant. We shall continue to request grant funding, until this project is fully funded.

- Delaware's IT support functions are centralized in the Department of Technology and Information
 (DTI). As such we do not have direct control over assignment of work but rather are competing with
 our own agency priorities and the priorities of every other agency in the state when seeking IT
 support. Currently DTI has contractual support staff assigned to DNREC that is able to assist with this
 project. Should this contractual support capacity change, and DTI staff be required to perform the
 work themselves, the timeline could see significant negative impact.
- Our CAFO data primarily resides with our Department of Agriculture (DDA), and is transferred to DNREC by hard copy. The capability of getting DDA's database to interact directly with DEN or ICIS has yet to be explored.

11. Implementation Plan Reassessment

DNREC has monthly calls with EPA Region 3, part of which is dedicated to the Electronic Reporting Rule implementation. Any significant changes in plan or schedule would be brought to EPA's attention through that forum.