NPDES Electronic Reporting Rule
Phase 2 Implementation Plan

Tennessee Department of Environment and Conservation
Division of Water Resources
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 using the following email address: NPDESElectronicReporting@epa.gov.

1. Overview/Executive Summary

The Tennessee Department of Environment and Conservation ("TDEC") has received NPDES authorization for all data families except the Biosolids family and has opted to be the initial recipient of data for same under 40 CFR 127.

TDEC continues to work vigorously toward substantial compliance with Phase 1. As Phase 2 begins, TDEC intends to continue its assessment and update of WaterLog, its in-house ORACLE/APEX database, to support e-reporting. In support of Phase 1 and high priority areas identified within Phase 2, TDEC will implement permit and facility data flows. TDEC's highest priorities as of December 2016 are basic facility and basic permit flows and compliance and enforcement data flows. Included in the basic facility and basic permit areas are permitted feature, limit sets, limits, unscheduled monitoring, master general permits, general permit coverages, unpermitted dischargers, and permit termination processes. Included in compliance and enforcement are inspections and associated single event violations ("SEV"), information violation notices, formal violations, and associated case setup, tracking and resolution.

On a continuing basis, TDEC will work to maintain and upgrade flows as software, targets and schema change. TDEC will continue its efforts to maintain NetDMR users and manage data submittals. In so doing, TDEC will continue manual data entry for TMSP and CGP data that is not received electronically.

2. **Agency NPDES Universe**

TDEC currently has the following permit volume by category:

- 153 – Active and Administratively Continued Major Individual NPDES Permits
- 1008 – Active and Administratively Continued Minor Individual NPDES Permits*
- 95 – Active and Administratively Continued MS4 Permits

    *Discharges of Filter Backwash and Sedimentation Basin Washwater from Water Treatment Plants ("WTP") is included

TDEC's current list of Agency General NPDES Permits with number of authorizations for each is as follows:
- 15 – General NPDES Permit for Discharges from the Application of Pesticides ("TNP")
- 228 – General NPDES Permit for Discharges of Stormwater Runoff and Process Wastewater Associated with Ready Mixed Concrete Facilities ("RMCP")
- 30 – General NPDES Permit for Discharges of Hydrostatic Test Water
- 52 – General NPDES Permit for Discharges of Treated Groundwater Associated with Underground Storage Tank Remediation ("UST")
- 3,251 – Tennessee General NPDES Permit for Discharges of Stormwater Associated with Construction Activities ("CGP")
- 2048 – Tennessee Storm Water Multi-Sector General Permit for Industrial Activities ("TMSP")

All of the above data is current as of December 20, 2016. As of the same date, there are approximately 500 permits that have not been thoroughly assessed to determine whether they are currently in ICIS. Assessments are ongoing and continuous to ensure that all permits are accounted for in ICIS.

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

Currently, TDEC uses an ORACLE/APEX database, referred to as "WaterLog", in support of Clean Water Act activities for NPDES. WaterLog is used for tracking permit applications, permits, and compliance and enforcement actions for multiple state and federal program areas. The same ORACLE/APEX backend is used for other data within TDEC but commonly the users have a different appellation for each area in which it is used. The interface is tailored to the area and subject matter required by the division and/or business unit. While much of Division of Water Resources interaction with the public and permit holders is still primarily via a paper process and emails, a "database viewer" is offered on the department's web page to allow public access to select permit information and documents.

The following represents an estimated delivery schedule specific to the transfer of NPDES data from WaterLog to ICIS

Permit Submission	
Basic Permit Submission	comp 11/17/16
Permitted Feature Submission	comp 11/17/16
Limit Set Submission	comp 11/17/16
Parameter Limits Submission	comp 11/17/16
Permit Reissuance Submission	comp 11/17/16
Permit Components	December 2017

Compliance Data	
Narrative Condition Schedule Submission	in process, 50% complete

Compliance Schedule Submission	June 2017
Compliance Monitoring Linkage Submission	June 2017
Compliance Monitoring Submission	June 2017

Enforcement Data	
Single Event Violation Submission	September 2017
Enforcement Action Submission	March 2018
Final Order Violation Linkage Submission	Manual
Enforcement Action Violation Linkage Submission*	Manual
Enforcement Action Milestone Submission	TBD

*Violations are currently reported through NetDMR with TDEC relying on the ICIS system to flag DMR violations. However, violations are not stored in WaterLog. TDEC will continue to manually link violations to Enforcement Actions and Final Orders until a suitable alternative is considered, developed and implemented.

The following is a list of all applications and reports (including form numbers) to be converted to electronic applications in order to meet eNOI, eNOT and Annual reporting.

• General Permits (eNOI for CGP or for RMCP),
• Construction Storm Water (CN-0940),
• Industrial Multi-Sector Stormwater, TMSP eNOI, 2017-18, (TDEC forms CN-1108, CN-1115)
• Underground Storage Tanks (TDEC form CN-1217)
• Hydrostatic Test Water (TDEC form CN-1262)
• Ready Mixed Concrete (TDEC form CN-1216)
• Municipal Storm Sewer Systems, MS4 Phase 2, small (TNS000000)
• Water Treatment Plant Backwash (CN-1225)
• Pesticide Application (TNP000000)
• Program (Annual) Report
• Concentrated Animal Feeding Operation Annual Program Reports
• Municipal Separate Storm Sewer System Program Reports
• Pretreatment Program Semi-Annual Reports (annual reports where semi-annual reports are abandoned)
• Significant Industrial User Compliance Reports in Municipalities Without Approved Pretreatment Prog.
• CWA section 316(b) Annual Reports – water intakes
• Event Reporting (not due in 2017)
• Sanitary Sewer Overflow Event Reports (SSO)
• Emergency Response waiver requests (TDEC)

NetDMR

TDEC is using an instance of the national NetDMR for discharge monitoring report (DMR) submittals by our permit holders. The DMR copy of record and associated meta-data is maintained within the NetDMR system while the data flows are automatically sent to ICIS-NPDES. The DMR data in ICIS-NPDES is evaluated for compliance and potential violations are flagged within ICIS-NPDES for review and response.

On-line eReporting registrations:

TDEC intends to use Shared CROMERR Services. However, TDEC may consider the development or purchase of credentialing applications for use with reporting and vendor/entity tracking for financial transactions.

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

NPDES Data Group	Milestones	Target Date
General Permit Reports	Electronically transfer Notices of Intent to discharge (NOIs); Notices of Termination (NOTs); No Exposure Certifications (NOEs); Low Erosivity Waivers and Other Waivers from Stormwater Controls (LEWs)	More specific target dates are outlined below but in general the target dates range from March 2017 to September 30, 2021 depending on the type of report and the level of effort associated with same.
Discharge Monitoring Reports [40 CFR 122.41(l)(4)]	N/A	To be handled by EPA's Net DMR application
Sewage Sludge/Biosolids Annual Program Reports [40 CFR 503]	N/A	Annual program reports to be handled by EPA's Net application and out of scope for TDEC as TN does not have authorization for biosolids under NPDES
Concentrated Animal Feeding Operation (CAFO)	Electronically transfer Annual Program Reports	January 2021
Municipal Separate Storm Sewer System (MS4)	Electronically transfer Program Reports	December 2018
Pretreatment	Electronically transfer Program Reports	December 2020
Significant Industrial User Compliance Reports in Municipalities Without Approved Pretreatment Programs [40 CFR 403.12(e) and (h)]	TDEC will consider electronically transferring User Compliance Reports. However, the majority of our Pretreatment Programs will cover the Industrial Users and thus this category may have an insignificant number of compliance reports. In consideration of same, best practice may be to enter those entities and subsequent reports that fall within this category manually as they occur.	December 2020
Sewer Overflow/Bypass	Electronically transfer Event Report	The timeline associated with completing this milestone is contingent on the EPA
CWA Section 316(b)	Electronically transfer Annual Reports	December 2018

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

Agency/Contractor/EPA Roles and Responsibilities:

With regard to NOIs, NOEs, and NOTs, TDEC plans to design an on-line interface to electronically flow data to ICIS. Please refer to the below task completion timeline for a list of TDEC's priorities and the date by which TDEC estimates they will be implemented.

Task Completion Timeline:

General Permit	General Permit Expiration Date	eReporting Deadline for eNOI
TNP**	March 30, 2017	TBD
RMCP	October 31, 2017	March 2018
TMSP	April 14, 2020*	September 2019*
WTP	August 20, 2020	May 2020
Hydrostatic**	April 21, 2021	TBD
CGP	September 30, 2021*	November 2017
MS4	September 30, 2021	December 2020

*TDEC will work in furtherance of developing an in-house on-line interface but may, depending on the level of effort associated with same, opt to use the EPA NeT system once it becomes available.

**These categories have relatively low volume and may not warrant development of eNOI.

B. <u>Concentrated Animal Feeding Operation (CAFO) Annual Program Reports</u> - *See 40 CFR 122.42(e)(4)*

Agency/Contractor/EPA Roles and Responsibilities:

TDEC plans to work on an internal solution, utilizing WaterLog, for operational reporting. However, due to the level of community involvement specific to CAFOs, TDEC has placed this as a lower priority.

Task Completion Timeline:

TDEC hopes to have a solution in place for CAFO reporting by January 2021.

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

Agency/Contractor/EPA Roles and Responsibilities:

TDEC plans to work on an internal solution, utilizing WaterLog, for operational reporting specific to MS4.

Task Completion Timeline:

TDEC hopes to have a solution in place for MS4 annual reporting by December 2018.

D. <u>Pretreatment Program Reports</u> - *See 40 CFR 403.12(i)*

Agency/Contractor/EPA Roles and Responsibilities:

TDEC plans to work on an internal solution, utilizing WaterLog, for operational reporting.

Task Completion Timeline:

TDEC place to have a solution in place for Pretreatment by December 2020.

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

Agency/Contractor/EPA Roles and Responsibilities:

TDEC will consider electronically transferring User Compliance Reports. However, the majority of our Pretreatment Programs will cover the Industrial Users and thus this category may have an insignificant number of compliance reports. In consideration of same, best practice may be to enter those entities and subsequent reports that fall within this category manually as they occur.

Task Completion Timeline:

If TDEC develops a solution, TDEC plans to have a solution in place for SSO by December 2020

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

Agency/Contractor/EPA Roles and Responsibilities:

As this area was part of Phase 1, TDEC recognizes the need for development. However, this is an area that depends heavily on EPA. Dataflows are not currently available or may have just become available in the past week. As dataflows become available, TDEC will work to provide the reports electronically.

Task Completion Timeline:

N/A

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

Agency/Contractor/EPA Roles and Responsibilities:

TDEC plans to work on an internal solution, utilizing WaterLog, for operational reporting. However, TDEC plans to work in coordination with the Tennessee Valley Authority on scheduling and functionality.

Task Completion Timeline:

TDEC plans to have a solution in place for 316(b) by December 2018.

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

    A. General Permit Reports
        CROMERR Approval Date: December 31, 2017*
    B. Concentrated Animal Feeding Operation (CAFO) Annual Program Reports
        CROMERR Approval Date: December 31, 2017*
    C. Municipal Separate Storm Sewer System (MS4) Program Reports
        CROMERR Approval Date: December 31, 2017*
    D. Pretreatment Program Reports
        CROMERR Approval Date: December 31, 2017*
    E. Significant Industrial User Compliance Reports in Municipalities Without Approved Pretreatment Programs
        CROMERR Approval Date: December 31, 2017*
    F. Sewer Overflow/Bypass Event Reports
        CROMERR Approval Date: December 31, 2017*
    G. CWA section 316(b) Annual Reports
        CROMERR Approval Date: December 31, 2017*
    H. Sewage Sludge/Biosolids Annual Program Reports

CROMERR Approval Date: December 31, 2017*

*TDEC's goal is to pilot its first CROMERR application by the third quarter of 2017. The first application is planned for TDEC's Division of Air Pollution Control. Once implemented in the Division of Air Pollution Control, TDEC will begin work on the applications for other divisions including the Division of Water Resources.   All applications are contingent on approval by EPA and thus the dates for which these applications will be in place are subject to adjustment.

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

Updating state statutes and rules can be a lengthy process. TDEC is in the process of analyzing its rules to determine if any changes are necessary for e-reporting. The formal rule making process can take up to a year and thus all suggested changes, including the recently promulgated dental rule will be formally considered during the first quarter of 2017 with the approved changes going in to effect on or about July 1, 2018.
Tennessee previously promulgated a rule specific to e-reporting. The Rule went in to effect on December 27, 2015. TDEC is currently working on coordinating the full implementation of the rule and those efforts will remain ongoing as Phase 2 work begins.

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

TDEC currently has a waiver approval process in place. TDEC has carved out three areas for which a waiver may be considered: 1) Entity has no current internet access and is physically located in a geographic area that is identified as under-served for broadband internet access; 2) Entity can fully demonstrate that electronic reporting of the monitoring data and reports would pose an unreasonable burden or expense to the facility; or 3) Other. Each of the waiver areas requires additional documentation in support of the request. Entities are required to complete the Waiver Request Form in its entirety and submit it either electronically or hard copy to TDEC no less than 60 days prior to the date the entity is required to begin using NetDMR. Currently, TDEC has only granted waivers to several small facilities without computers and/or internet access and a facility in the process of closing. As Phase 2 begins, TDEC may have to consider additional waivers and/or waiver categories but will reassess its current waiver approval process as Phase 2 is implemented.

8. **Outreach and Training**

As TDEC works toward implementing the agency's planned electronic reporting systems, we will perform initial outreach to the regulated community to first communicate the changes that will take place. Following initial communication efforts, TDEC will work to create training materials for the regulated community. Using an approach similar to the one used with NetDMR, TDEC will provide scheduled in person training to the regulated community with additional troubleshooting sessions by phone available on an as needed basis.

Currently, TDEC maintains an E-Reporting website to assist in communicating requirements to the regulated community. The website includes links to the rule, updated training information, and timelines applicable to the regulated community.

9. **Alternative Options**

In the event the planned obligations are not met as outlined above, TDEC will promptly consider the utilization of EPA services as they become available. In determining the level of effort associated with each online service necessary to achieve compliance with Phase 2, TDEC will assess its progress on a regular basis to decide whether it will continue internal development or move toward the EPA services and systems.

TDEC may consider a COTS system but will only do so if it feels it will not achieve full compliance within the timeline frame allowed by EPA.

10. Obstacles to Rule Implementation

TDEC faces many potential obstacles to e-reporting. Chief among the obstacles is funding. TDEC has applied for the EIN Grant to help offset some of the costs associated with e-reporting compliance. In the event TDEC is not awarded those funds in whole or in part, leadership will begin looking for alternate funding sources to ensure compliance is achieved. Capacity continues to prove an obstacle. While TDEC has applied a great deal of manpower to achieving compliance, capacity remains an obstacle as those employees working on e-reporting have other unique duties that must be fulfilled in addition to e-reporting tasks. TDEC has brought in additional staff to work on e-reporting and will increase effort as needed. Similar to capacity to perform the work, continuity continues to prove difficult. Staff turnover poses a threat to rule implementation. Securing adequate funding for the project may help with potential staff turnover but normal turnover may still occur as employees seek new opportunities outside the agency or retire. TDEC is working toward succession planning across the Department, but focusing on redundancy particularly in the e-reporting work group to ensure that as staff transition off the project, remaining work group members will be well suited and informed to continue work without losing momentum.

11. Implementation Plan Reassessment

TDEC hopes to reassess the implementation plan throughout the project and particularly as work begins on the initial compliance efforts. As TDEC begins work on its first online interface and thus is better suited to accurately gauge the level of effort required for each area, TDEC appreciates the opportunity to reassess the implementation plan in order to shift focus either to new/other systems to achieve compliance, to other program areas based on difficulty of compliance and level of effort, to adjust timelines as needed based on funding and staff capacity, and to continuously reassess the priorities as they are outlined herein.