NPDES Electronic Reporting Rule
Phase 2 Implementation Plan
UT R8 V1 IP 20Dec2016.doc
Utah Division of Water Quality
Submitted to EPA website by December 20, 2016
NPDESElectronicReporting@epa.gov

1. Overview/Executive Summary

The Utah Division of Water Quality (DWQ) is preparing to comply with Phase 2 of EPA's E-Reporting Rule on or before the December 21, 2020 implementation deadline requirement. Currently we have roughly half of the NPDES (UPDES) General Permit applications available online through our state database programs. These were developed by the state's contracted application development partner, *Utah Interactive, LLC*. The remaining half (or 6 UPDES General Permits) of DWQ 's General Permit universe will be developed and implemented by the same contractor over the next three calendar years, or by December 1, 2020 at the latest, dependent upon funding as planned and described further herein.

Also as part of DWQ's Phase 2 implementation plan, we propose to integrate DWQ's existing Storm Water and other UPDES on-line permitting resources with EPA's Integrated Compliance Information System (ICIS) through a central data exchange process. In addition, we will develop e-filing modules for the following six (6) remaining UPDES general permits; Coal Mining Operations, Drinking Water Plants, Fish Hatcheries, Small Municipal Separate Storm Sewer Systems (MS4), Discharges of Groundwater Contaminated with Petroleum Products, and Concentrated Animal Feeding Operations (CAFO).

DWQ will partner again with Utah Interactive, LLC to develop this data exchange for migration of all permitted information from state database programs to EPA's ICIS program as required. DWQ, as the designated NPDES (UPDES) permit authority in the state, will continue to be the initial recipient of these permit data elements, including: Notice of Intent permit applications (NOIs) Notice of Termination for permit coverages (NOTs), Low Erosivity Waivers (LEWs) and No Exposure Certifications (NECs), as well as Sanitary Sewer Overflows (SSOs) and Discharge Monitoring Reports (DMRs) if not using NetDMR due to waiver approvals.

All program reporting as part of permit requirements will utilize EPA's NeT tool for e-reporting submittals (i.e., CAFO Annual Reports, MS4 Program Reports, Pretreatment Program Reports, Significant Industrial User Compliance Reports, SSO/Bypass Event Reports, Biolsolids Annual Reports, and CWA Section 316(b) Annual Reports).

Below is an outline summary of these two major efforts followed by the DWQ Team of key personnel responsible for Phase 2 implementation over the next four years, and by December 21, 2020 as required.

PROJECT GOALS, OUTPUTS, AND OUTCOMES

DWQ's proposed project goals, outputs, and outcomes are focused to meet the E-Reporting Phase 2 goals as follows:

Goals:
- Develop e-filing modules for all remaining UPDES general permits (6).
- Integrate DWQ's new and existing Industrial and Construction Storm Water and other UPDES on-line permitting resources with ICIS.

Outputs:
- Develop e-filing modules for the six remaining UPDES general permits, including Coal Mining, Drinking Water Plants, Fish Hatcheries, Small Municipal Separate Storm Sewer Systems (MS4), Discharges of Groundwater Contaminated with Petroleum Products, and Concentrated Animal Feeding Operations (CAFO).
- Integrate the four existing and the six newly developed UPDES general permits on-line permitting resources with direct upload to ICIS via central data exchange.

Outcomes:
- Improving DWQ's environmental oversight by reducing the burden and costs associated with data management and reporting by DWQ staff.
- Improving the accuracy and transparency of environmental permit data.
- Improving operational efficiencies by reducing burden for regulated community and the general public through shared services and e-submittals.

Goal 1: Develop e-filing modules for six remaining UPDES general permits that will upload required data elements directly to ICIS.	Goal 1 Outcome(s) 1. Improving DWQ's environmental oversight by reducing the burden and costs associated with data management and reporting by DWQ staff 2. Improving the accuracy and timeliness of environmental data 3. Improving operational efficiencies by reducing burden for regulated community and the general public through shared services
Outputs	**Scheduled Implementation Date**
1.1 Coal Mining General UPDES Permit; Develop on line application program and process with required data fields to match ICIS ride elements as required.	12/31/2019
1.2 Drinking Water Plants General UPDES	12/31/2019

	Permit; Develop on line application program and process with required data fields to match ICIS ride elements as required.	
1.3	Fish Hatchery General UPDES Permit; Develop on line application program and process with required data fields to match ICIS ride elements as required.	12/31/2019
1.4	Small MS4 General UPDES Permit; Develop on line application program and process with required data fields to match ICIS ride elements as required.	12/1/2020
1.5	Groundwater Contaminated with Petroleum Products General UPDES Permit; Develop on line application program and process with required data fields to match ICIS ride elements as required.	12/1/2020
1.6	CAFO General UPDES Permit; Develop on line application program and process with required data fields to match ICIS ride elements as required.	12/1/2020

Goal 2: Integrate DWQ's new and existing UPDES on-line permitting resources directly with ICIS through data exchange programs.	Goal 2 Outcome(s) 1. Supporting better decision-making by building data access for environmental professionals 2. Facilitating environmentally sound, place-based decision-making through the inclusion of quality locational data.
Outputs	**Scheduled Implementation Date**
1.1 Construction Stormwater UPDES permit universe; ensure that existing state data permit elements are uploaded to ICIS as required.	December 1, 2018
1.2 Industrial Stormwater UPDES permit universe; ensure that existing state data permit elements are uploaded to ICIS as required.	December 1, 2018
1.3 Pesticide UPDES Permit Universe; ensure that existing state data permit elements are	December 1, 2019

uploaded to ICIS as required.	
1.4 Construction Dewatering UPDES permit universe; ensure that existing state data permit elements are uploaded to ICIS as required.	December 1, 2019
1.5 Industrial No Exposure Certifications and Low Erosivity Waivers universe; ensure that existing state data elements are uploaded to ICIS as required.	December 1, 2019
1.6 All remaining Program Reporting Requirements (CAFO, MS4, Biosolids, Pretreatment, SIU, SSOs,and 316(b) reports)	December 1, 2020

KEY PROJECT PERSONNEL

- **Jeff Studenka, DWQ**
- **Maria Berg, Utah Interactive**
- **Edith Van Vleet, DWQ**
- **Monique Bridges, DWQ**
- **Kim Shelley, DWQ**
- **Matt Garn, DWQ**
- **Mike Casey, DTS**

DWQ Project Personnel:

Jeff Studenka has been the Utah Storm Water Program Manager since 2010 and part of Utah's NPDES program since 2004, including permit writing and program specialty coordinator, as well as ICIS, NetDMR and other UPDES Permit Program Implementation Functions. Prior to moving to Utah, Jeff worked for Michigan DEQ as a compliance and enforcement specialist in Air Quality. Originally from Lansing, Michigan, Jeff graduated from Michigan State University with an Environmental Science degree and initially spent several years in private environmental consulting throughout the Great Lakes region before joining state government in 2000.

Edith Van Vleet and Monique Bridges are DWQ's ICIS data stewards and together have over 25 years of experience with DWQ in EPA data collection programs and initiatives, including DMRs and implementing the NetDMR program for NPDES (UPDES) permits, ECHO and OTIS data stewards, and state storm water database application programs specifically designed to upload to ICIS with this EN Grant Application proposal.

Kim Shelley is the Surface Water Section Manager and has been part of the UPDES team since 1999 when she began her career at the Division of Water Quality as a Permit Writer. Prior to working at DWQ, Kim was the Research Lab Director for an international drill bit manufacturer and later worked as an environmental consultant in the oil and

natural gas industry. Kim is a graduate of the University of Utah with degrees in Metallurgical Engineering and Chemistry.

Matthew Garn, P.E., has over 12 years of experience with Utah DWQ as a UPDES permit writer and facilitator along with NetDMR implementation experience since inception. Matt is a Utah native and is an engineering graduate of the University of Utah.

Utah Interactive Project Manager:

Maria Berg and other Utah Interactive, Inc. Project Managers have worked as a Product Manager/Business Analyst for Utah Interactive for many years leading teams in the definition, design, development, testing, deployment, maintenance and marketing of web and mobile applications and websites. Including the following efforts:

- **Public Notice Website**, the central source for all public notice information throughout the state of Utah;
- **Utah.gov**, provides visitors with access to thousands of state and local government online services;
- **Utah GovPay**, an enterprise application that serves as the online payment processor for the state of Utah;
- **UT Onetime**, a mobile application for Utah Transit Authority (UTA) riders;
- **Utah.gov Account Management Application**, an enterprise application that serves as the central authentication and authorization application for Utah Interactive hosted applications and services;
- **Utah Hunting and Fishing Mobile Application**, the official mobile hunting and fishing application from the Utah Division of Wildlife Resources (DWR);
- **Utah State Parks Website Redesign**; a custom website redesign that showcases each of Utah's 42 State Parks;
- **Utah Birth and Death Certificates Web Application**, a custom built website for the Utah Office of Vital Records;
- **Department of Environmental Quality Suite of Services**, custom online applications that were developed to steam line specific compliance requirements between the state and industry.

Maria and others have accredited degrees from various Utah Universities and institutions and provide sole source contracting for all the State of Utah's *Utah.gov* applications.

Utah IT Support: Mike Casey has worked for state of Utah Department of Technology Services for many years developing state web based programs and technical support for DWQ and other state agencies. Mike has a very successful background in assisting state agencies with computer based programs and applications.

2. Agency NPDES Universe

As of October 1, 2016, DWQ has the following UPDES permit counts:

Individual Discharge Permits (Industrial + Municipal)	121	All in ICIS
Individual Stormwater Permits	4	All in ICIS
MASTER GENERAL PERMITS	**PERMITTEES**	**IN ICIS**
Industrial Stormwater	716	Yes
Construction Stormwater (in ICIS only upon inspections)*	3,030	*Only 10%
Biosolids	33	Yes
Drinking Water Plants	43	Yes
Groundwater Contaminated with Petroleum Products	13	Yes
Coal Mines	11	Yes
Construction De-watering	126	Yes
MS4's Small	89	Yes
General Pesticides	90	Yes
Fish Hatcheries	12	Yes
TOTAL PERMIT UNIVERSE	4,288	

*Utah anticipates large increases in the number of these permits into ICIS starting in 2018 once the e-NOIs are directly uploaded to ICIS upon completion.

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

DWQ has been implementing the use of ICIS and NetDMR since inception of each program. DWQ will continue to utilize both EPA programs for E-Reporting Rule Implementation as appropriate. DWQ will also utilize EPA's Net Tool for submission of other reporting requirements. As mentioned previously, all program reporting as part of permit requirements will utilize EPA's NeT tool for e-reporting submittals (i.e., CAFO Annual Reports, MS4 Program Reports, Pretreatment Program Reports, Significant Industrial User Compliance Reports, SSO/Bypass Event Reports, Biolsolids Annual Reports, and CWA Section 316(b) Annual Reports).

As mentioned previously in Section 1, DWQ will include all UPDES permitting information collected by the state into ICIS thru a central data exchange program application developed by Utah Interactive, LLC, by December 2020 as part of the Phase 2 requirements.

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

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: DWQ will partner with Utah Interactive, LLC (UI) for developing the data exchange from current state collection systems into ICIS. UI has worked with the Utah Department of Environmental Quality and DWQ to create and refine a Requirements Documentation that details the application development with specificity. UI will create and refine a prototype using HTML, CSS and Javascript that lays out the end user experience and the administrative features of the application. Then UI will build out the application code and database using Java and MYSQL according to the previously outlined pathway according to the documentation and prototype. This also includes the necessary coding and requirements to integrate the application with the Environmental Information APIs needed to share the necessary information with the EPA.

UI will deploy the newly developed application to an internal test environment and deliver it to the Quality Assurance team for internal testing. Testing includes: functional requirement verification, business requirement verification, browser compatibility testing, usability testing, and accessibility testing. Testing will continue when UI will deploy the application to an external text environment for User Acceptance Testing by Utah DWQ UI will perform a Security and Best Practices Code review using an additional developer that did not participate in the coding of the application. UI team will perform and review a Security application scan to check the application against known security vulnerabilities. The UI will obtain Production Deployment approval from Utah DWQ and the Utah Interactive Change Advisory Board (CAB). Lastly, UI will deploy the application to production for live use.

Task Completion Timeline: December 1, 2019

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

Agency/Contractor/EPA Roles and Responsibilities: DWQ plans to utilize EPA's NeT system for the submittal of CAFO Annual Reports.
Task Completion Timeline: December 1, 2020

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: DWQ plans to utilize EPA's NeT system for the submittal of MS4 Program Reports.
Task Completion Timeline: December 1, 2020

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

Agency/Contractor/EPA Roles and Responsibilities: DWQ plans to utilize EPA's NeT system for the submittal of Pretreatment Program Reports.

Task Completion Timeline: December 1, 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: DWQ plans to utilize EPA's NeT system for the submittal of SIU Compliance Reports.
    Task Completion Timeline: December 1, 2020

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

    Agency/Contractor/EPA Roles and Responsibilities: DWQ plans to utilize EPA's NeT system for the submittal of SSO/Bypass Event Reports.
    Task Completion Timeline: December 1, 2020

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

    Agency/Contractor/EPA Roles and Responsibilities: DWQ plans to utilize EPA's NeT system for the submittal of CWA section 316(b) Annual Reports.
    Task Completion Timeline: December 1, 2020

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

    Agency/Contractor/EPA Roles and Responsibilities: DWQ plans to utilize EPA's NeT system for the submittal of Biosolids Annual Program Reports.
    Task Completion Timeline: December 1, 2020

5. CROMERR Compliance Status for Agency Electronic Reporting Systems

DWQ is planning to utilize EPA's NeT tool for electronic submittals directly by permittees of all UPDES Permit Program Reporting requirements by the December 21, 2020 EPA E-Reporting Rule Phase 2 implementation deadline requirement. DWQ has been CROMERR compliant since the inception of NetDMR program implementation and will ensure that is the case for the remaining UPDES Permit program reports identified below (A thru H).

A. <u>General Permit Reports</u>
    CROMERR Approval Date: December 1, 2020
B. <u>Concentrated Animal Feeding Operation (CAFO) Annual Program Reports</u>
    CROMERR Approval Date: December 1, 2020
C. <u>Municipal Separate Storm Sewer System (MS4) Program Reports</u>
    CROMERR Approval Date: December 1, 2020
D. <u>Pretreatment Program Reports</u>
    CROMERR Approval Date: December 1, 2020
E. <u>Significant Industrial User Compliance Reports in Municipalities Without Approved Pretreatment Programs</u>
    CROMERR Approval Date: December 1, 2020
F. <u>Sewer Overflow/Bypass Event Reports</u>
    CROMERR Approval Date: December 1, 2020

G. CWA section 316(b) Annual Reports
   CROMERR Approval Date: December 1, 2020
H. Sewage Sludge/Biosolids Annual Program Reports
   CROMERR Approval Date: December 1, 2020

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

Utah State Statutes and Regulations are current and supportive of EPA's E-Reporting Rule implementation. Regarding UPDES permits, DWQ has been replacing DMR related permit language with NetDMR permit language requirements as the permits come up for renewal over the last few years. DWQ will have re-issued all UPDES permits with updated NetDMR requirements prior to the December 21, 2020 EPA deadline.

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

Currently DWQ anticipates only one UPDES facility pursuing a waiver from utilizing NetDMR for E-Reporting. Therefore, DWQ's waiver process is a simple one in that we will utilize the EPA template of the "Application for Temporary Electronic Reporting Waiver" form for any UPDES facility that wishes to pursue this option. Once the waiver application is received by Utah, it will be reviewed by the permit writer within 30 days and either approved or denied with reasoning. Examples of conditions that may warrant a waiver approvals are as follows but not limited to; no current access to internet or broadband proximal to the permit facility; religious purposes preventing the use of internet; temporary permitted facilities not expected to discharge or be permitted longer than a year, such as with the *UPDES Construction Dewatering General Permit* and the *UPDES Discharge of Treated Groundwater from Petroleum Products General Permit*; and Federal Facilities or other highly confidential facilities whereas firewall security issues would prevent the electronic reporting submittals.

For waiver requests that are approved, DWQ will continue to be the initial recipient of the associated DMR data and will continue to enter the Appendix A data into ICIS within a timely manner as required.

8. Outreach and Training

Since the inception of EPA's NetDMR program, DWQ has encouraged UPDES permittees to voluntarily sign up for e-reporting. These efforts prior to 2015 resulted in approximately 25% of the Individual UPDES Permittees to sign up for and utilize NetDMR for their reporting requirements. Therefore starting in 2015, DWQ has been actively engaged in soliciting NetDMR sign-ups in advance of the December 21, 2016 Phase 1 implementation deadline. Several outreach events were held by DWQ at various conferences throughout the state over the last two years to encourage and assist new NetDMR sign-ups. In addition, Utah permit writers were directed to reach out their permittees not yet using NetDMR, and solicit their sign up in advance of the December 21, 2016 Phase 1 implementation deadline. As of November 1, 2016, DWQ has ~70% of the Individual UPDES Permittees signed up and using NetDMR for their reporting requirements.

With our lead NetDMR coordinator out of the office for the last two months of 2016 due to unexpected surgery, Utah will most likely not reach the 90% user requirement until early 2017. Although efforts are still ongoing with soliciting new sign-ups for NetDMR users, Utah realistically will need to rely on other staff in the interim and then once the lead NetDMR coordinator returns to work, the remaining new users can be officially processed for NetDMR use in early 2017. Utah anticipates achieving the 90% NetDMR user rate by June 30, 2017.

Regarding EPA's NeT e-reporting tool, DWQ plans to utilize this option for UPDES permit program report submittals as previously mentioned above, which includes; CAFO Annual Reports, MS4 Program Reports, Pretreatment Program Reports, Significant Industrial User Compliance Reports, SSO/Bypass Event Reports, Biolsolids Annual Reports, and CWA Section 316(b) Annual Reports. Outreach efforts to UPDES permittees will be ongoing over the next four years through emails, conference presentations and other networking throughout the state to ensure all program reports are electronically submitted and into ICIS by the December 21, 2020 E-Reporting Rule Phase 2 implementation deadline.

9. Alternative Options

Since Utah is currently utilizing NetDMR and is planning to utilize EPA's NeT program for required permit reporting submittals, we do not have the need for alternative options other than alternative funding that may be required based upon the results of the 2017 EPA Exchange Network Grant solicitation and Utah's application submitted by November 17, 2016.

Alternate funding options would be to solicit the Utah Water Quality Board and/or the Utah State Legislature for one time funding of ~$150,000.00 to assist in the implementation of Phase 2 of EPA's E-Reporting Rule as required. If for some unexpected reason, Utah was unable to fully utilize EPA's NeT tool for program report submittals, then an alternative plan would be to develop a data exchange from Utah's electronic document management system (e-docs) to ICIS once UPDES permit program reports are received electronically by the state. This alternative plan would also require additional funding solicitation to the Utah Water Quality Board and/or the Utah State Legislature for one time funding of an amount to be determined at that time.

10. Obstacles to Rule Implementation

As mentioned above, the main obstacle for Utah's regarding E-Rule implementation would be funding the necessary online UPDES permit programs as well as the central data exchange (CDX) program from state databases to ICIS as required. Alternative funding sources may be required based upon the results of the 2017 EPA Exchange Network Grant solicitation and Utah's application submitted by November 17, 2016.

As mentioned above in Section 9, Alternate funding options would be to solicit the Utah Water Quality Board and/or the Utah State Legislature for one time funding of ~$150,000.00 to assist in the implementation of Phase 2 of EPA's E-Reporting Rule as required.

11. Implementation Plan Reassessment

Utah will contact EPA regarding possible reassessment of this Implementation Plan if alternative funding sources or other identified obstacles become apparent and potentially contribute to the delay of its full implementation as described herein, such as with the alternative option for submitting permit program reports as described in Section 9. Utah will annually review this Implementation Plan and contact EPA if changes are necessary and imminent towards complying with Phase 2 of the E-Reporting Rule.