December 12, 2013

U.S. Environmental Protection Agency
Attention: Docket ID No. EPA–HQ–OECA–2009–0274
EPA Docket Center
Enforcement and Compliance Docket – MC 28221T
1200 Pennsylvania Avenue, NW
Washington, DC 20460

RE: WEF Comments on the NPDES Electronic Reporting Rule (FR/Vol. 78, No. 146)

SUBMITTED VIA FEDERAL RULEMAKING PORTAL

The Water Environment Federation (WEF) thanks the U.S. Environmental Protection Agency for the opportunity to comment on the proposed NPDES Electronic Reporting Rule published in the Federal Register, Vol. 78, No. 146 on Tuesday, July 30, 2013 under Proposed Rules (FR). WEF submits the comments below on the proposed rule Docket ID No. EPA–HQ–OECA–2009–0274.

WEF is a not-for-profit association that has provided technical education and training for the world's water quality professionals since 1928. The Federation has 36,000 individual members and 75 affiliated Member Associations who support its mission to preserve and enhance the global water environment. WEF is supportive of regulations that are science based, achievable, and protective of human health and the environment.

Based on this first review, WEF requests the EPA to host a comment summary workshop and a second subsequent review by stakeholders. General comments to the Proposed Rules and 43 solicitations by the EPA are summarized in this letter.

I. PROJECT IMPLEMENTATION

WEF finds the project implementation portion of the proposed rule critical to success of this proposed rule. For example, if the project is implemented behind schedule, then the target dates defined in the rules would be meaningless such as Phase 1 and 2 Implementation.

The primary project objective is to implement a national data base system for storing, retrieving, and reporting NPDES compliance information. Although the first phase of implementation as reported in the FR 78 is reported as nearly completed, the second phase has not been started and has several data gaps. WEF believes that the data requirements in Phase 2 are orders of magnitude higher than Phase 1. Additionally, the number of approved State programs are lower, notably the Approved Biosolids (Sludge) Programs with only 8 out of the 59 states or regions defined by the EPA.

In Section C. Summary of Costs and Savings, the EPA states, “The cost of implementing the proposed rule in the first three years after the effective date is approximately $51.0 million”. According to Computerworld and the Standish Group, which tracks IT development projects, only 6.4 percent of projects with labor costs of $10 million or more were deemed successful. More than 41 percent were abandoned or started over, and the remaining 52 percent were over budget, behind schedule or fell short of users’ expectations, Computerworld reported. Recent examples of problematic implementation include the Healthcare.gov information exchange system, FBI’s $170 million Virtual Case File system, and the Air Force’s abandoned, $1 billion enterprise resource planning system. On this basis, WEF considers that Phase 2 of the rule-making is high risk.

To mitigate this risk, WEF proposes that the EPA consider the following:

1. **Conduct robust capacity planning**. "Start by gathering feedback from subject matter experts and key stakeholders across all teams to design a solution with the capacity for planned usage profiles as well as the elasticity to meet unexpected levels of demand. Conduct load tests in all geographic regions as page load times degrade the farther the distance from the server. Conduct deep-dive transactional testing to monitor the scale of aborted transactions by users. Ensure that outsourcing agreements include meaningful expectations around agile service delivery performance structures and relevant provisions to hold service providers responsible for quickly responding to changing needs, aggregating their services into an ecosystem-wide, seamless, end-to-end service experience for users;
2. **Seek out service providers with experience in agile delivery methods.** Agile delivery methods can serve as a catalyst for transforming delivery capabilities. Include frequent delivery of tested, working solution components and progress that can be objectively measured;
3. **Make customer experience a priority** for the NPDES permittees and the States. Stakeholder advisory groups are critical to the success of this program. The groups should be embedded throughout all phases of the project and into production. User experience should take precedence when it comes to error handling and exception processing. Driving customer inquiries to a service desk via phone or chat is one way service providers can cause costs to increase. But if lines are choked or agents don't have the proper information, the result is a negative customer experience, leading to even higher costs. In addition, EPA should establish an outsourcing agreement with incentives for a service provider to deploy tools by sharing in the savings and rewarding behaviors and processes that promote and deliver increased adoption of service functions and features that measurably enhance the customer experience;
4. **Anticipate mistakes**. Define and implement a process for quickly correcting errors whether due to customer input or data integrity and promulgation errors;
5. **Get everyone on the same page**. In a multi-sourced environment, like this NPDES electronic reporting information exchange project, it's critical to use common metrics across all provider agreements. Such "coordination indicators" encourage cooperation among all parties. Adhere to common industry terminology and process definitions to the greatest extent possible to avoid incompatible service models and the possibility of critical information or transactions getting lost in translation or stuck in limbo;
6. **Set standards**. Apply standards judicially throughout the software development and service lifecycle and selectively apply frameworks such as Capability Maturity Model Integration (CMMi) and Information Technology Infrastructure Library (ITIL) to embrace their value-adding processes and functions. Service providers themselves should define expectations regarding the application and adherence to international standards like ISO 29119 for software testing and ISO

20000 for service management to avoid a situation where a solution or service has never been tested and operational readiness is questionable;

7. **Address problems right away**. Even with substantial testing, sometimes unforeseeable issues arise. Let the users know the issues are being addressed and that the necessary steps to correct them are being taken;
8. **Do a soft launch**. Pre-test as new features are added because pretesting will provide engineers with an understanding of the site's weaknesses. Phase the launch over a small number of users and expand the users over a longer time period;
9. **Implement a transparent project management approach.** Develop a control level schedule with milestones, communication plan, RACI chart, scope of work, and deliverables in a phased approach. Allow stakeholders to review and comment on the plan before implementation.

II. CROMERR STREAMLINING

WEF understands the importance of the Cross-Media Electronic Reporting Regulation (CROMERR) (40 CFR part 3) for electronic data submittal and regulatory enforcement. WEF also recognizes that the expansion of the NPDES electronic submittal requirements to programs beyond the NPDES Discharge Monitoring report will impact the CROMERR certifications which are required under the proposed NPDES Electronic Reporting Rule. According to the information on the EPA CROMERR website, the status of CROMERR approvals is backlogged as shown in Figure 1.1 and Table 1.1 in Attachment A.

The number of EPA Approved State programs for biosolids is 8 out of the 59 defined States and regions in Table 1.2. Because biosolids is being added to the data reporting requirements, the net impact is that WEF anticipates a large number of additional CROMERR applications for certifications to be filed. According to the CROMERR overview website, the review process for completeness can take up to 75 days. Once the application is determined to be complete, EPA then has up to 180 days to approve or deny the application. However, EPA approval of applications for existing systems could take up to 360 days. From the perspective of the NPDES applicant, time for CROMERR certification alone could take a year and a quarter provided the applicant is successful in the first pass.

WEF notes that NPDES permittees have two years from promulgation date of Phase 2 to conform to the rule changes. WEF believes that the Phase 2 schedule of 2 years is insufficient for compliance to the rules. CROMERR streamline was suggested in the FR, but no details were provided. Streamlining modifications need to be in place as a pre-requisite to this rulemaking. WEF also suggests that block flow diagrams with common scenarios that would require CROMERR certification be developed relative to this FR.

III. STATE READINESS CRITERIA

The State Readiness Criteria has three criteria which the State must satisfy:

> *(1) The authorized state, tribe, or territory has 90 percent acceptance rate by data group (i.e., NPDES-regulated entities submit timely, accurate, complete, and nationally consistent NPDES data using approved state, tribe, territory or third-party electronic reporting tools; and (2) The EPA, state, tribe, territory, or third-party electronic reporting tools used by the NPDES regulated entity meet all of the minimum Federal reporting requirements for 40 CFR part 3 (CROMERR) and 40 CFR part 127 (NPDES Electronic Reporting Rule); and (3) EPA lists the state, tribe, or territory as the initial recipients for electronic NPDES information from NPDES-regulated entities in that state on EPA's Web site. Each authorized program will then designate the specific tools for these*

electronic submissions from their permittees. These designations are proposed to be made separately for each NPDES data group (see 40 CFR 127.2(c) and 127.27).

The consequence of failing to meet the State Readiness Criteria would be that the dischargers will need to submit regulatory data to both the State and the EPA, provided that the State is part of an approved program. Separate submittals to separate data warehouse will increase the probability of error. Conflicting data in both the State and Federal data warehouses would erode public trust.
WEF believes that data entry and revision should occur at a single point. The 90 percent acceptance in Phase 2 which is required two years after the promulgation date would require many NPDES permittees to enter data twice.

In consideration of lessons learned from the implementation of the Healthcare.gov information exchange system, phasing acceptance will build a more successful program. Therefore, WEF proposes for Phase 2 that an acceptance rate of 30 percent by the end of the first year, 60 percent by the end of the second year, and 90 percent by the end of the third year.

IV. CHANGE MANAGEMENT AND APPEAL PROCESS – DATA

The scale of data being proposed in Phase 2 is orders of magnitude higher than Phase 1 and the data comes from a wider variety of sources. For example, Pretreatment Programs receive base line and periodic reports, slug control plans, flow data, and self-monitoring analytical data from individual permitted dischargers. Data entry errors, mistakes, and revisions are a common occurrence with data sets of this magnitude. To preserve data quality, WEF urges the EPA to include a structured change management and appeal process that also electronically tracks and documents the process. The process should be designed with efficiency and expediency. The process will need to quickly propagate across the electronic exchange system.

V. CHANGE MANAGEMENT AND REVISION NOTIFICATION PROCESS – DATA STRUCTURE AND INFORMATION EXCHANGE SYSTEM

NPDES Electronic Reporting involves several data warehouses, electronic exchange systems, and portals. The EPA estimates that the current number of facilities covered by general permits to be 816,138 and increasing to 1,989,938 over 5 years. The number of customers is proportional to the number of facilities. WEF recommends the following:

1. **Technical Review Committee.** As such, the community of users and IT technical support need to be embedded in system changes. System changes should be driven by stakeholders at all levels including end use customers, local, regional, state, and national IT. Change management quality systems include ISO 27001 and ISO 9001;

2. **Regulatory Review Committee.** All changes should be tested and should go through an approval process before implementation. In addition, revision, addition, and removal of fields are subject to review by a regulatory stakeholder committee prior to pre-investment to confirm that changes are within the authorization of the Clean Water Act in the Code of Federal Regulations.

VI. RISK MITIGATION WITH PROJECT AND RULE-MAKING SCHEDULE

NPDES permittees have two years from promulgation date of Phase 2 to conform to the rule changes. In terms of project execution and because of the number of data gaps identified by the EPA, consider project completion milestones as precedents to the promulgation date milestone. This would take the electronic exchange systems changes off of the critical path. Doing this would avoid overlap of the project implementation phase into the rulemaking phase. For example, the two year clock for enforcement of electronic data reporting would not be started until after the electronic exchange system has gone into production and is available for customer use.

VII. RISK MANAGEMENT CONTINGENCY PLAN

A contingency plan needs to be defined in the event that the electronic exchange systems are unavailable for any reason. For example, if a cyber-attack or software virus infects the system and it is shut down for an extended period, or operating in a degraded state, then either forgiveness on deadlines will need to be provided or manual, CD or paper submission will need to occur to comply with the rule changes proposed by the EPA.

VIII. IMPACT TO NPDES PERMITTEES

Table VIII.1 in the FR estimated Average Annual Burden per Respondent of 0.46 hours. The consensus of WEF responders is that the 0.46 hours estimated Average Annual Burden per Respondent is low, especially in consideration of the Pretreatment program data which is a function of the number of permits, ongoing XML script changes in response to changes in reporting, and the potential of dual reporting at both the State and Federal levels based on the State Readiness Criteria. In one case, for example, WEF estimates Pretreatment program data alone for the Annual Report to take 120 hours which includes data interrogation, integration, normalization, composition, and QA/QC for 700 point sources and 4 jurisdictions. Therefore, WEF believes that the financial burden to NPDES dischargers is substantially underestimated in the FR notice.

IX. IMPACT TO BIOSOLIDS PROGRAMS

The biosolids regulations (40 CFR Part 503) set different and unique monitoring requirements and limits depending on the end use of the biosolids. This nuance is not captured in the proposed regulations. Since EPA is expecting to be able to judge compliance from the reports, there must be a means to identify monitoring requirements based on the end use of the biosolids. The end use may change from monitoring period to monitoring period or even within a single monitoring period. The electronic reporting tool must be able to delineate those differences since different compliance requirements apply based upon the end use. Similarly a single permittee may produce multiple biosolids types (i.e., liquid and dewatered; Class A and Class B; anaerobically digested and lime stabilized; etc.) so the electronic reporting mechanism must be able to account for each and its associated requirements for every monitoring period and for every end use. In some states, including California, biosolids from multiple generators may be applied to the same land application site. If there is intent to track individual site information as when 503.13(b) (2) applies; then this needs to be captured. Due to the ready public availability of the electronic data to be collected, it is incumbent upon EPA to collect the required data that can be verified in a regulatory context. The electronic reporting system should be able to alert one as to the need for further review but should not be viewed as the means to a final determination of

compliance. In addition, POTWs should have a mechanism for submitting corrections or modifications to the electronic system if errors are found.

The proposed rule states that all of the electronic reporting tools, whether already existing or to be developed in implementing this rule need to be compliant with EPA's CROMERR (40 CFR part 3) if it is transmitted to EPA. Presently, California does not have delegated authority for the biosolids program, and its electronic reporting system (California Integrated Water Quality System) does not support biosolids monitoring data. As a result, POTWs are required to report directly to US EPA. Clarification is sought on whether POTWs need to be CROMERR certified to authorize electronic reporting directly to EPA.

The EPA appears to be eliminating the benefits and responsibilities for delegated authority by phasing out the annual summary reports now provided to EPA and relying solely on electronic reporting by permittees. While we agree that electronic reporting will yield many benefits and improve accuracy of biosolids management and quality overall, we do not agree that it will allow determination of compliance in most cases.

Again, WEF thanks EPA for the opportunity to comment on these important issues and look forward to a continuous dialogue to improve the final product leading to an effective implementation and advancement of electronic reporting.

Sincerely,

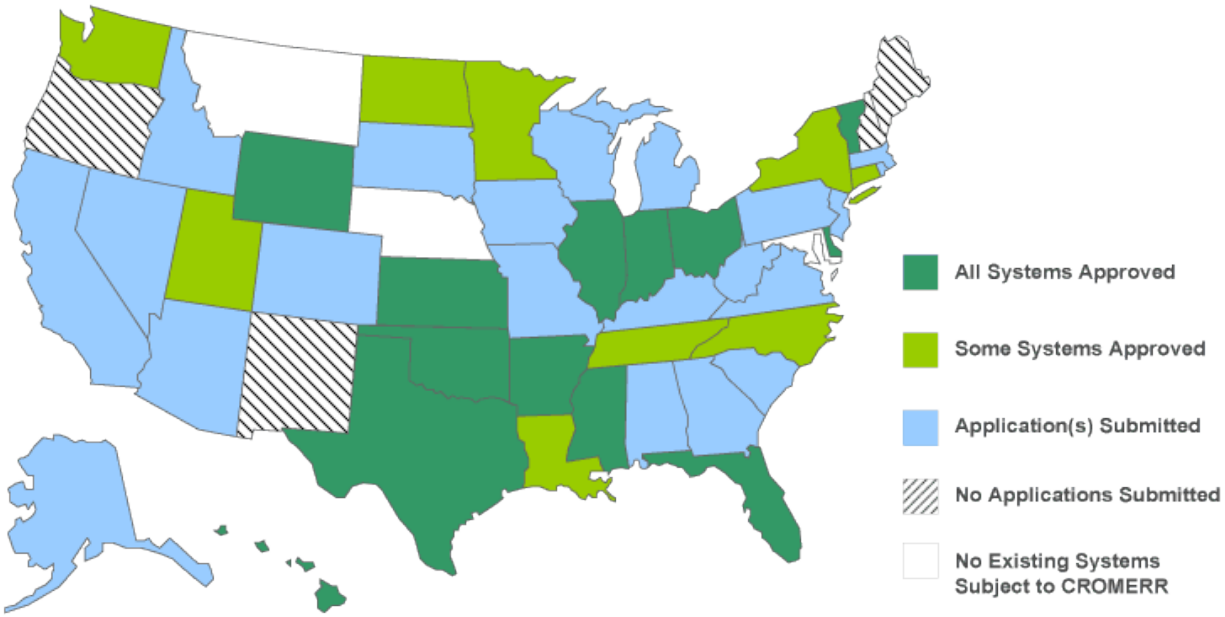
Claudio H. Ternieden
Director of Regulatory Affairs
Water Environment Federation

Cc: John Dombrowski, Director, Enforcement Targeting and Data Division, OECA, US EPA
Alan Vicory, Chair, Government Affairs Committee, Water Environment Federation
Linda Blankenship, Chair, Regulatory Subcommittee, Government Affairs Committee, Water Environment Federation

Attachment A

EPA CROMERR website data

Attachment A - EPA CROMERR website data



*American Samoa, District of Columbia, Guam, Northern Mariana Islands, Puerto Rico, and U.S. Virgin Islands – No Existing Systems Subject to CROMERR.

Figure 1.1 – Status of CROMERR Approvals.

Table 1.1 – Status of CROMERR Approvals

State	Agency	System Name(s)	Programs(s) Covered	Report(s) Included	Application Status
Alabama	DEM	Electronic Environmental Data Exchange Reporting System (E2)	Water	Discharge Monitoring Report (DMR)	Application Submitted
Alaska	DEC	Air Online Services (AOS)	Air	Title V Emissions Inventory	Application Submitted
	DEC	Electronic Data Reporting System (EDRS)	Water	Drinking Water	Application Submitted

State	Agency	System Name(s)	Programs(s) Covered	Report(s) Included	Application Status
	DEC	Electronic Environmental Discharge Monitoring System (E2)	Water	DMR	Application Submitted
	DEC	Water Online Application System (OASys)	Water	NPDES Permits	Application Submitted
American Samoa					No Existing Systems Subject to CROMERR
Arizona	DEQ	(1) Smart Notice of Intent (NOI) (2) Safe Drinking Water Information System (SDWIS) Lab to State	Water	(1) NPDES NOI (2) Drinking Water Reports	Application Submitted
Arkansas	DEQ	National NetDMR	Water	DMR	Application Approved
	DEQ	Annual Hazardous Waste Electronic Reporting System	Waste	Biennial RCRA Hazardous Waste Report (BRS)	Application Approved
	DEQ	State and Local Emissions Inventory System (SLEIS)	Air	Title V Emissions Inventory	Application Submitted
California	DPH	Electronic Data Transfer (EDT) System	Water	Drinking Water Reports	Application Submitted
Colorado	DPH&E	National NetDMR	Water	DMR	Application Approved
	DPH&E	Safe Drinking Water Information System (SDWIS) Lab to State	Water	Drinking Water Reports	Application Submitted
Connecticut	DPH	Safe Drinking Water Information System	Water	Drinking Water Reports	Application Submitted

State	Agency	System Name(s)	Programs(s) Covered	Report(s) Included	Application Status
		(SDWIS) Lab to State			
	DEP	National NetDMR	Water	DMR	Application Approved
Delaware	DNREC	Online Reporting System (ORS)	Air/Water/Waste	Multiple	Application Approved
District of Columbia					No Existing Systems Subject to CROMERR
Florida	DEP	e-Reporting System	Air/Water/Waste	Multiple	Application Approved
Georgia	DNR/EPD	Georgia EPD Electronic Reporting System (GEERS)	Air/Water	(1) Drinking Water Reports (2) Title V Emissions Inventory	Application Submitted
	DNR/EPD	National NetDMR	Water	DMR	Application Approved
Guam					No Existing Systems Subject to CROMERR
Hawaii	DOH	National NetDMR	Water	DMR	Application Approved
Idaho	DEQ	Point Source Survey Tool (POSST)	Air	Title V Emissions Inventory	Application Submitted
Illinois	EPA	Electronic Annual Emissions Reports (eAER)	Air	Title V Emissions Inventory	Application Approved
	EPA	e-DMR System	Water	DMR	Application Approved
	EPA	Safe Drinking Water Information System	Water	Drinking Water	Application

State	Agency	System Name(s)	Programs(s) Covered	Report(s) Included	Application Status
		(SDWIS) Lab to State		Reports	Approved
Indiana	DEM	eAuth	Air/Water/Waste	Multiple	Application Approved
	DEM	National NetDMR	Water	DMR	Application Approved
Iowa	DNR	Wastewater Permit Information Exchange (WWPIE)	Water	DMR	Application Submitted
	DNR	Electronic Reporting Information System (ERIS)	Water	Drinking Water Reports	Application Submitted
	DNR	Electronic Reporting System for Air (ESARS)	Air	Multiple	Application Submitted
Kansas	DHE	DHE Enterprise	Air/Water/Waste	Multiple	Application Approved
Kentucky	DEP	(1)Electronic Reporting System (ERS) (2) National NetDMR	Air/Water/Waste	Multiple	Some Systems Approved
Louisiana	DEQ	National NetDMR	Water	DMR	Application Approved
Maine					No Applications Submitted
Maryland	MDE	National NetDMR	Water	DMR	Application Approved
Massachusetts	DEP	eDEP	Air/Water/Waste	Multiple	Application Submitted
Michigan	DNRE	(1) Michigan Business One Stop (MBOS) Portal (2) Michigan Air Emission Reporting System (MAERS)	Air/Water/Waste	Multiple	Application Submitted

State	Agency	System Name(s)	Programs(s) Covered	Report(s) Included	Application Status
		(3) Electronic Environmental Reporting (E2) System			
Minnesota	DH	Safe Drinking Water Information System (SDWIS) Lab to State	Water	Drinking Water Reports	Application Submitted
	PCA	MPCA-CROMERR	Air/Water/Waste	Multiple	Application Approved
Mississippi	DEQ	(1) Regulatory Services Portal (RSP) (2) Hazardous Waste Biennial Reporting (EasiTRAK)	Air/Water/Waste	Multiple	Application Approved
Missouri	DNR	(1) Air Emissions Inventory Reporting System (2) Hazardous Waste Biennial Reporting System (BRS) (3) Safe Drinking Water Information System (SDWIS) Lab to State	Air/Water/Waste	Multiple	Application Submitted
Montana	DEQ	National NetDMR	Water	DMR	Application Approved
Montana	DEQ	Safe Drinking Water Information System (SDWIS) Lab to State	Water	Drinking Water Reports	Application Submitted
Nebraska					No Existing Systems Subject to CROMERR
Nevada	DCNR/DEP	Bi-ennial Reporting System (BRS)	Waste	BRS	Application Submitted
	DCNR/DEP	State NetDMR	Water	DMR	Application Submitted

State	Agency	System Name(s)	Programs(s) Covered	Report(s) Included	Application Status
	DCNR/DEP	Water Permits Information Center	Water	(1) NPDES Permits (2) NPDES NOIs	Application Submitted
	DCNR/DEP	Safe Drinking Water Information System (SDWIS) Lab to State	Water	Drinking Water Reports	Application Submitted
New Hampshire					No Applications Submitted
New Jersey	DEP	(1) Regulatory Services Portal (RSP) (2) Electronic Reporting System (E2) (3) e-New Jersey Environmental Management System (eNJEMS)	Air/Water/Waste	Multiple	Application Submitted
New Mexico					No Applications Submitted
New York	DEC	Hazardous Waste Annual Reporting System (HWARS)	Waste	BRS	Application Approved
	DEC	Air Compliance and Emission Electronic Reporting System (ACERS)	Air	(1) Title V Compliance Certification (2) Title V Emissions Inventory	Application Submitted
North Carolina	DENR	Safe Drinking Water Information System (SDWIS) Lab to State	Water	Drinking Water Reports	Application Approved
	DENR	Integrated Build Environment for Application Management (IBEAM)	Air	Title V Emissions Inventory	Application Approved

State	Agency	System Name(s)	Programs(s) Covered	Report(s) Included	Application Status
North Dakota	DPH	Electronic Reporting Information System (ERIS)	Water	Drinking Water Reports	Application Approved
North Dakota	DPH	Electronic Reporting Information System (ERIS)	Air/Water/Waste	Multiple	Application Submitted
Northern Mariana Islands					No Existing Systems Subject to CROMERR
Ohio	EPA	eBusiness Center	Air/Water/Waste	Multiple	Application Approved
Oklahoma	DEQ	Electronic Document Receiving System (EDRS)	Air/Water/Waste	Multiple	Application Approved
Oregon					No Applications Submitted
Pennsylvania	DEP	(1) Drinking Water Electronic Lab Reporting System (DWELR) (2) eDMR System (3) Continuous Emission Monitoring Data Processing System (CEMDPS) (4) Air Emission Statement (AES) Online	Air/Water/Waste	Multiple	Application Submitted
Puerto Rico					No Existing Systems Subject to CROMERR
Rhode Island	DH	Safe Drinking Water Electronic Reporting	Water	Drinking Water Reports	Application Submitted
South Carolina	DHEC	e-DMR	Water	DMR	Application Submitted

State	Agency	System Name(s)	Programs(s) Covered	Report(s) Included	Application Status
	DHEC	Emissions Inventory	Air	Title V Emissions Inventory	Application Submitted
South Dakota	DENR	(1) Electronic Document Receiving System (EDRS) (2) National NetDMR	Air/Water/Waste	Multiple	Some Systems Approved
Tennessee	DEC	National NetDMR	Water	DMR	Application Approved
Texas	CEQ	State NetDMR	Water	DMR	Application Approved
	CEQ	State of Texas Environmental Electronic Reporting System (STEERS)	Air/Water/Waste	Multiple	Application Approved
U.S. Virgin Islands					No Existing Systems Subject to CROMERR
Utah	DEQ	National NetDMR	Water	DMR	Application Approved
Vermont	DEC	eDEC	Air/Water/Waste	Multiple	Application Approved
Virginia	DH	Safe Drinking Water Information System (SDWIS) Lab to State	Water	Drinking Water Reports	Application Submitted
	DH	Electronic Environmental Data Exchange Reporting System (E2)	Water	DMR	Application Submitted
Washington	ECY	(1) Generic CROMERR Solution (2) Turbowaste.net	Air/ Water/Waste	Multiple	Some Systems Approved

State	Agency	System Name(s)	Programs(s) Covered	Report(s) Included	Application Status
	DOH	Washington State Lab Electronic Reporting System (WSLERS)	Water	Drinking Water Reports	Application Approved
West Virginia	DOHHR	Drinking Water Program Electronic Data Receiving System	Water	Drinking Water Reports	Application Submitted
	DEP	e-DMR	Water	DMR	Application Submitted
Wisconsin	DNR	Electronic Receiving System (ERS)	Air/Water/Waste	Multiple	Application Submitted
Wyoming	DEQ	Environmental IT Enterprise (ENV-ITE) System	Air/Water/Waste	Multiple	Application Approved

Table 1.2 – Status of Approved State Programs.

State	Approved State NPDES Permit Program	Approved to Regulate Federal Facilities	Approved State Pretreatment Program	Approved General Permits Program	Approved Biosolids (Sludge) Program
Alabama	10/19/1979	10/19/1979	10/19/1979	6/26/1991	
Alaska*	10/31/2008	10/31/2008	10/31/2008	10/31/2008	
American Samoa					
Arizona	12/5/2002	12/5/2002	12/5/2002	12/5/2002	4/1/2004
Arkansas	11/1/1986	11/1/1986	11/1/1986	11/1/1986	
California	5/14/1973	5/5/1978	9/22/1989	9/22/1989	
Colorado	3/27/1975			3/4/1982	
Connecticut	9/26/1973	1/9/1989	6/3/1981	3/10/1992	
Delaware	4/1/1974			10/23/1992	
District of Columbia					
Florida	5/1/1995	5/1/2000	5/1/1995	5/1/1995	
Georgia	6/28/1974	12/8/1980	3/12/1981	1/28/1991	
Guam					
Hawaii	11/28/1974	6/1/1979	8/12/1983	9/30/1991	
Idaho					

State	Approved State NPDES Permit Program	Approved to Regulate Federal Facilities	Approved State Pretreatment Program	Approved General Permits Program	Approved Biosolids (Sludge) Program
Illinois	10/23/1977	9/20/1979		1/4/1984	
Indiana	1/1/1975	12/9/1978		4/2/1991	
Iowa	8/10/1978	8/10/1978	6/3/1981	8/12/1992	
Johnston Atoll					
Kansas	6/28/1974	8/28/1985		11/24/1993	
Kentucky	9/30/1983	9/30/1983	9/30/1983	9/30/1983	
Louisiana	8/27/1996	8/27/1996	8/27/1996	8/27/1996	
Maine	1/12/2001	1/12/2001	1/12/2001	1/12/2001	
Maryland	9/5/1974	11/10/1987	9/30/1985	9/30/1991	
Massachusetts					
Michigan	10/17/1973	12/9/1978	6/7/1983	11/29/1993	9/28/2006
Midway Island					
Minnesota	6/30/1974	12/9/1978	7/16/1979	12/15/1987	
Mississippi	5/1/1974	1/28/1983	5/13/1982	9/27/1991	
Missouri	10/30/1974	6/26/1979	6/3/1981	12/12/1985	
Montana	6/10/1974	6/23/1981		4/29/1983	
Nebraska	6/12/1974	11/2/1979	9/7/1984	7/20/1989	
Nevada	9/19/1975	8/31/1978		7/27/1992	
New Hampshire					
New Jersey	4/13/1982	4/13/1982	4/13/1982	4/13/1982	
New Mexico					
New York	10/28/1975	6/13/1980		10/15/1992	
North Carolina	10/19/1975	9/28/1984	6/14/1982	9/6/1991	
North Dakota	6/13/1975	1/22/1990	9/16/2005	1/22/1990	
Northern Mariana Islands					
Ohio	3/11/1974	1/28/1983	7/27/1983	8/17/1992	3/16/2005
Oklahoma**	11/19/1996	11/19/1996	11/19/1996	9/11/1997	11/19/1996
Oregon	9/26/1973	3/2/1979	3/12/1981	2/23/1982	
Pennsylvania	6/30/1978	6/30/1978		8/2/1991	
Puerto Rico					
Rhode Island	9/17/1984	9/17/1984	9/17/1984	9/17/1984	
South Carolina	6/10/1975	9/26/1980	4/9/1982	9/3/1992	
South Dakota	12/30/1993	12/30/1993	12/30/1993	12/30/1993	10/22/2001
Tennessee	12/28/1977	9/30/1986	8/10/1983	4/18/1991	
Texas***	9/14/1998	9/14/1998	9/14/1998	9/14/1998	9/14/1998
Utah	7/7/1987	7/7/1987	7/7/1987	7/7/1987	6/14/1996
Vermont	3/11/1974		3/16/1982	8/26/1993	

State	Approved State NPDES Permit Program	Approved to Regulate Federal Facilities	Approved State Pretreatment Program	Approved General Permits Program	Approved Biosolids (Sludge) Program
Virgin Islands	6/30/1976	12/26/2007		12/26/2007	
Virginia	3/31/1975	2/9/1982	4/14/1989	4/20/1991	
Wake Island					
Washington	11/14/1973		9/30/1986	9/26/1989	
West Virginia	5/10/1982	5/10/1982	5/10/1982	5/10/1982	
Wisconsin	2/4/1974	11/26/1979	12/24/1980	12/19/1986	7/28/2000
Wyoming	1/30/1975	5/18/1981		9/24/1991	
59	**47**	**43**	**36**	**47**	**8**