NPDES eReporting Across the Enterprise

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ABSTRACT

The Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Rule went into effect in December 2015; EPA is developing a foundation that can be leveraged across the enterprise.

This presentation provides:

1. A brief overview of the rule
2. EPA’s programmatic and technical approach for implementation
3. Highlights of the opportunities (e.g., cost savings, standardization, reusable solutions) for states and the broader community
4. The state perspective on the implementation of the rule
Background

• NPDES eReporting rule effective December 2016

• Implementation schedule
  – Phase 1: December 2016 – begins electronic submission for selected data.
  – Phase 2: December 2020 – broader type of data to be submitted electronically.
High Level Changes

• Exchange Network:
  – Updates to ICIS-NPDES dataflow
  – State electronic data transfer (EDT) processes

• NPDES e-reporting applications
  – Updates to permitting, DMR, and compliance monitoring tools
  – Updates to ICIS-NPDES itself
Rule Benefits

• Cost effective solutions that can be shared between EPA and partners
• Stronger collaboration and engagement with State/Territory/Tribal partners
• Better insight for the regulated community
• Enhanced public access and visibility to a national, more complete, timely data set
Rule Benefits

- There is a dramatic increase in the use of EPA’s NetDMR since promulgation of the 2015 NPDES Electronic Reporting Rule.
- This trend will continue as more and more facilities are trained and registered with EPA’s NetDMR and state eDMR applications.
Federal Biosolids Annual Reports
(EPA Biosolids Center of Excellence, Region 7)

2014
Before Electronic Reporting
(Approximately 2,400 paper submissions)

2017
1st Year of Electronic Reporting
(2,183 electronic submissions with 640 paper submissions).
Approach - EPA-State Workgroups

• An EPA-State integrated workgroup collaborated during rule development
• EPA-State collaboration will continue throughout implementation to help define the specific data element characteristics (e.g., reference table values, business rules)
• Recommendations from the workgroups will be documented to serve as starting points for future IT development
How do we get there?

• Collaboration
  – EPA (OW, OECA, and OEI), States, Tribes
• Governance
  – Governing bodies (EELC/MB/IOT)
  – Specifications
• Budget
• Viable technical approach
Innovative Technical Approach

• EN Services (Submit, Query, Solicit, etc.)
• CDX Shared Services
  – Authentication; User Registration; Identity Proofing; CROMERR, etc.
• Basic building blocks
• Lower Cost through reuse
• Standardization around data sets (input/output)
Innovative Technical Approach

• Reusable e-reporting solution
  – EPA Shared Services
  – Common practices
• E-Enterprise Portal integration
  – Access to real-time data via shared services
• Integration of open source frameworks
• Attempt to maintain backwards compatibility
Opportunity - Technical Benefits

• Collaborative solution that lowers cost
  – No license fees
  – Our solution is available

• Reusability/Maintainability/Sustainability

• Continuous integration continuous delivery
State Perspective - Approach

• Prioritization of State needs
  – Initiatives and timelines
  – EPA system availability
    • Schema updates
    • System processing
  – Data collection status
  – “Biggest bang for the buck”
State Perspective - Implementation

• Critical areas
  – Data collection methods
    • Convert paper to electronic
    • Outreach, communication, and training
  – Update state system
    • New fields, where are they going?
    • How to leverage e-enterprise and shared services
  – Update ICIS-NPDES dataflow
State Perspective - Challenges

• Complex software based on older technology
  – New initiatives vs legacy systems

• Resources
  – Staffing allocations
  – Insufficient funding

• Competing priorities
Summary

This presentation just provided background information on the NPDES Electronic Rule; the approach EPA is taking; and a state’s perspective. We do acknowledge this is going to be a large amount of work, there will be hurdles that we will need to overcome, and we are very interested in having this be a collaborative journey. EPA is committing to having open communication and making our solution available to the community.
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