



NPDES Electronic Reporting Rule 40 CFR 127



CWA-NPDES
electronic reporting

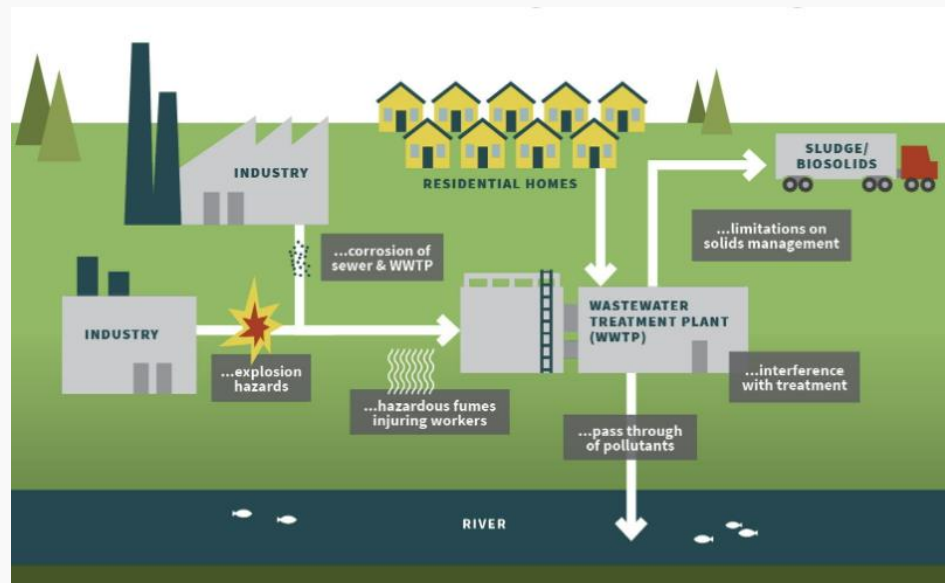
**Pretreatment
NeT Requirements AWCA Meeting**

May 15th 2023

Meeting Agenda



1. Overview of NPDES eRule
2. Overview of Pretreatment Program Reports
 - Annual Pretreatment Program Report
 - SIU/CIU Semi-Annual Report (where EPA or state is Control Authority)
3. Overview of NeT Requirements Gathering
4. Next Steps
5. Current Pretreatment Status



Overview of NPDES eRule



The 2015 NPDES Electronic Reporting rule (NPDES eRule) helps EPA and states clean up the nation's waters through:

- **Automation**
 - Shifting from paper to electronic reporting.
- **Time Saving** <https://youtu.be/mqFLXayD6e8gs>
 - Time and resources for the regulated community and states can be shifted to other program areas.
- **Improved Transparency**
 - Serves to elevate the importance of data and environmental performance.
- **Cutting Edge Technology**
 - Tools increase data accuracy, timeliness, completeness, and consistency for the NPDES program.

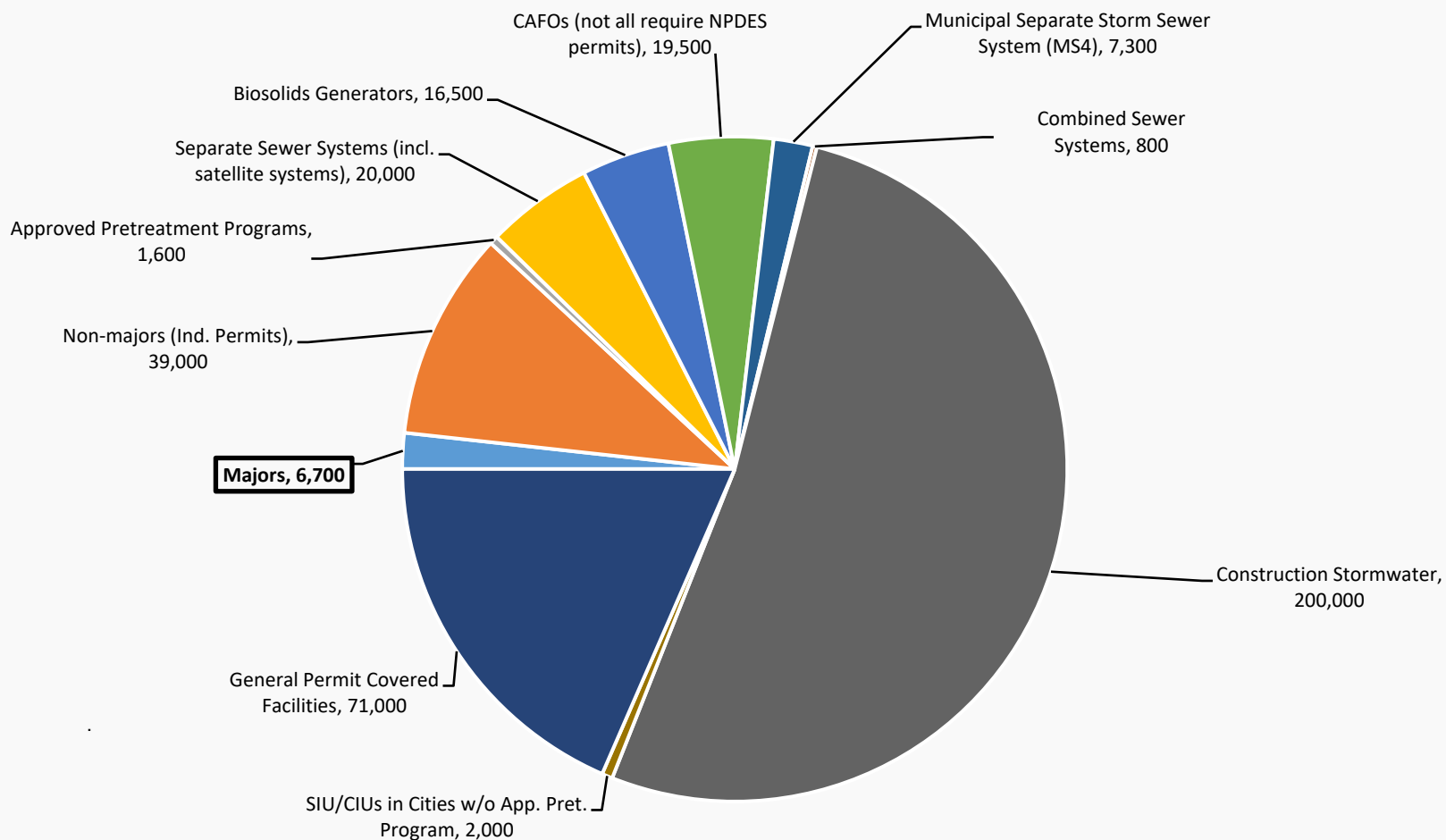


Pretreatment Program Annual Reports
in EPA Region 9

EPA in partnership w/ states developed and enhanced two electronic reporting tools for implementation: **NetDMR** (Phase 1 – 12/21/16) & **NeT** (Phase 2 – 12/21/25).



Scope of NPDES eRule: NPDES-Regulated Entities



Note: The “General Permit Covered Facilities” category also counts facilities included in other categories (e.g., CAFOs).

Reports and Data for Electronic Submissions



	Existing NPDES Program Reporting	40 CFR
Data from NPDES Permittees	Discharge Monitoring Reports (DMRs) – Phase 1	122.41(l)(4)(i)
	General Permit Reports (NOI, NOT, NECs, LEWs) – Phase 2	122
	Biosolids Annual Program Reports – Phase 1 (EPA only) & Phase 2 (9 states w/ auth.)	503
	CAFO Annual Program Reports – Phase 2	122.42(e)(4)
	MS4 Program Reports – Phase 2	122.34(d)(3), 122.42(c)
	Pretreatment Program Annual Reports – Phase 2	403.12(i)
	Industrial User Compliance Reports in Municipalities Without Approved Pretreatment Programs – When EPA or State is Control Authority – Phase 2	403.12(e) & (h)
	Sewer Overflow/Bypass Event Reports (CSOs, SSOs, Bypass events) – Phase 2	122.41(l)(4), (6), (7), (m)
CWA 316(b) Annual Reports (Federally Listed Threatened or Endangered Species) – Phase 2	40 CFR 125 Subpart J	
Data from States	Require electronic reporting by NPDES-authorized states, territories, tribes, and Regions of <u>program implementation information</u> (permits, inspections, violations, and enforcement actions)	123.41 & 123.43
	Eliminate state reporting requirements for the annual state biosolids annual report, semi-annual statistical summary report, and annual noncompliance report (ANCR), and quarterly noncompliance report (QNCR). The new NPDES noncompliance report (NNCR) is issued by EPA to show Category I and Category II noncompliance.	123.45, 501.21

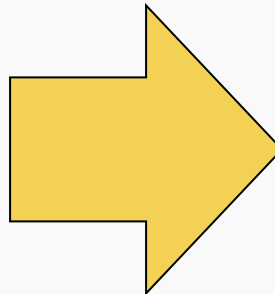
Example Benefit of Electronic Reporting



Implementing NPDES electronic reporting can help automate violation detection. Below is an example from the biosolids annual report.



Before Electronic Reporting
(Approximately 2,400 paper biosolids annual report submissions to EPA)



Sewage Sludge or Biosolids Parameter	Value Qualifier	Parameter Concentration (mg/kg, dry-weight basis)	If No Data, Select One Of The Following
Arsenic	= x v	75.01	Select an Option v
Cadmium	= x v	2	Select an Option v
Copper	= x v	1	Select an Option v
Lead	= x v	4	Select an Option v
Mercury	= x v	5	Select an Option v
Molybdenum	= x v	6	Select an Option v
Nickel	= x v	7	Select an Option v
Selenium	= x v	8	Select an Option v
Zinc	= x v	9	Select an Option v

⚠ At least one parameter concentration exceeded its ceiling concentration limit.

Facility land applied bulk sewage sludge or sold or gave away sewage sludge in a bag or other container when one or more pollutant concentrations in the sewage sludge exceeded a land application ceiling pollutant limit (see Table 1 of 40 CFR 503.13) has been checked in the Noncompliance Reporting section.

Today
(EPA's NeT-Biosolids automatically detects pollutant ceiling limit violations)



Partnering with States: Implementation

Phase 1 – DMR Submissions & Biosolids Reports (21 Dec 2016)

- EPA works with states to ensure that their data sharing rates are above 90% through:
 - Training and assistance for states to implement EPA’s electronic reporting tools (NetDMR and NeT-Biosolids) and data exchange protocols.
 - Submission of Biosolids Annual Program Reports are in Phase 1 where EPA runs the Federal biosolids program (41 states and all territories and tribal lands).

Phase 2 – General Permits and Program Reports (21 Dec 2025)

- EPA works with states to develop electronic reporting tools and data sharing protocols:
 - EPA is collaborating with states to build electronic reporting applications for states that elect to use EPA’s NPDES Electronic Reporting Tool or “NeT.”
 - EPA is collaborating with states to develop new data sharing protocols for Phase 2 data.
 - Collaborating with states on the new NPDES Noncompliance Report (NNCR).

Tracking NPDES eRule Implementation



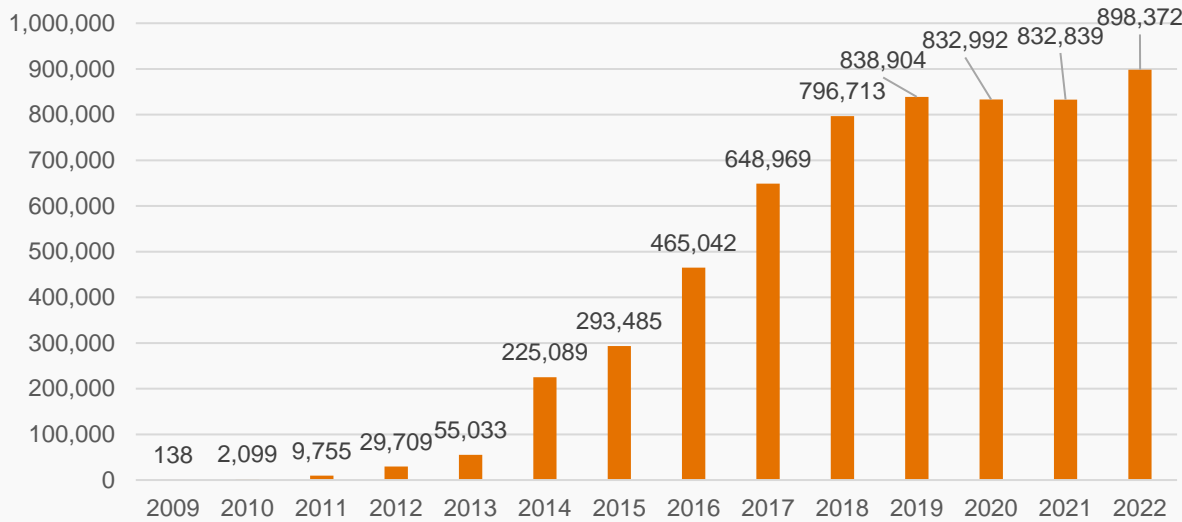
- EPA has developed a set of dashboards to help EPA Regional and state staff track NPDES eRule implementation and identify issues that require resolution.
- These dashboards are available through EPA's Enforcement Compliance History Online (ECHO) website.
 - See: <https://echo.epa.gov/trends/data-viz?filters=erule>.
- You will need to log into “ECHO Gov” for access to some of these dashboards. (Note: ECHO Gov is a resource for EPA and states)
- Unless otherwise noted, data are updated each weekend from EPA's national NPDES data system (ICIS-NPDES).

A screenshot of the ECHO website interface. On the left, there is a vertical navigation menu with three items: "Quick Search" (with a magnifying glass icon), "Search Options" (with a magnifying glass icon), and "Analyze Trends" (with a bar chart icon). The "Analyze Trends" item is highlighted with an orange arrow. The main content area has a header "Analyze Trends" in orange. Below the header, there is a paragraph: "ECHO provides many features to a variety to explore compliance and enforcement data. Use the links below to display trends through dashboards, maps, and charts." There are two columns of links. The left column is titled "Track Performance" and contains three links: "New! State Dashboards - Air", "New! State Dashboards - Haz. Waste", and "State Dashboards - Water". The right column is titled "Data Visualization" and contains two links: "Data Visualization Gallery" and "NPDES eRule Dashboards". A red arrow points to the "NPDES eRule Dashboards" link.

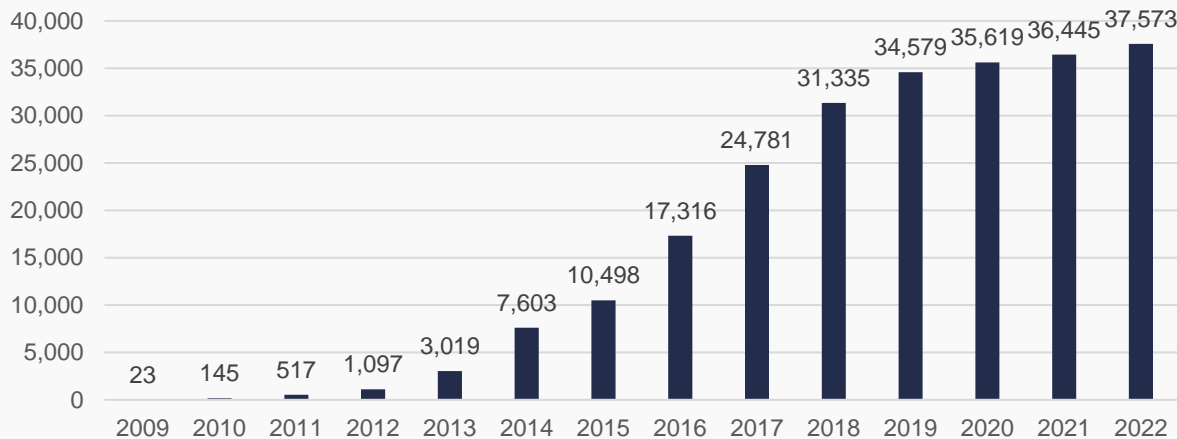
Phase 1 Progress



Count of DMR Form Submissions Through NetDMR



Count of Facilities Using NetDMR



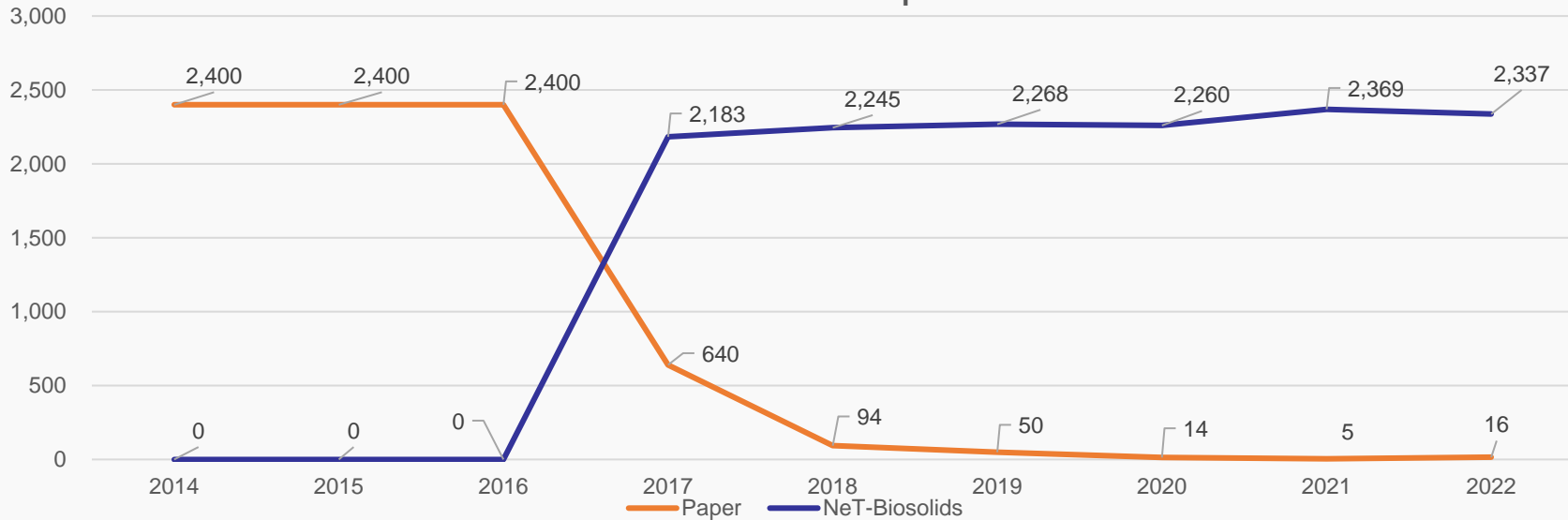
- NetDMR usage increased dramatically since promulgation of the 2015 NPDES eRule.
- This trend will continue as more and more facilities are trained and registered with NetDMR.
- States are also making tremendous progress in transitioning DMR filers to state electronic reporting tools and sharing these data with EPA.

Source: EPA's national NPDES data system (ICIS-NPDES, 6 February 2023)

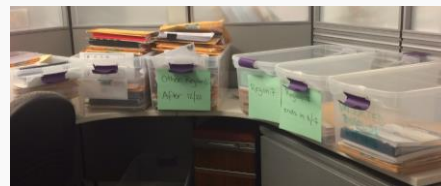
Phase 1 Progress



Federal Biosolids Annual Report Submissions



2014



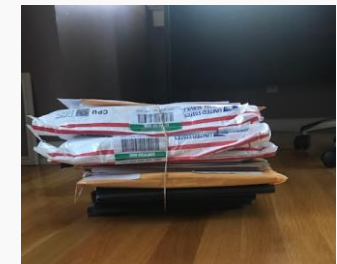
2017



2018



2019

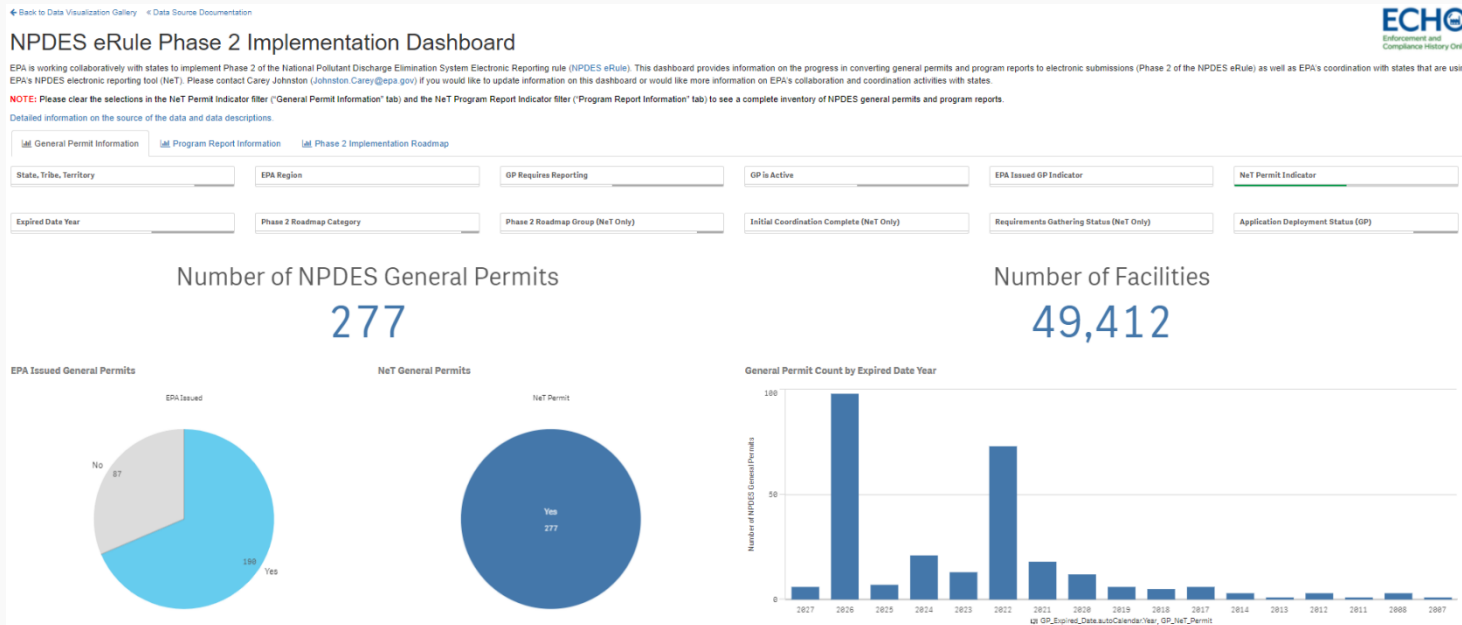


2020

Phase 2 Progress



- The NPDES eRule Phase 2 Implementation Dashboard provides EPA and states with a high-level tracking of EPA and state progress for Phase 2.
 - This public dashboard provides an inventory of general permits and program reports and identifies for each general permit or program report if the state has elected to use EPA's NeT as well as the deployment status and initial deployment date.
 - States regularly share information with EPA to maintain the completeness and accuracy of this dashboard.

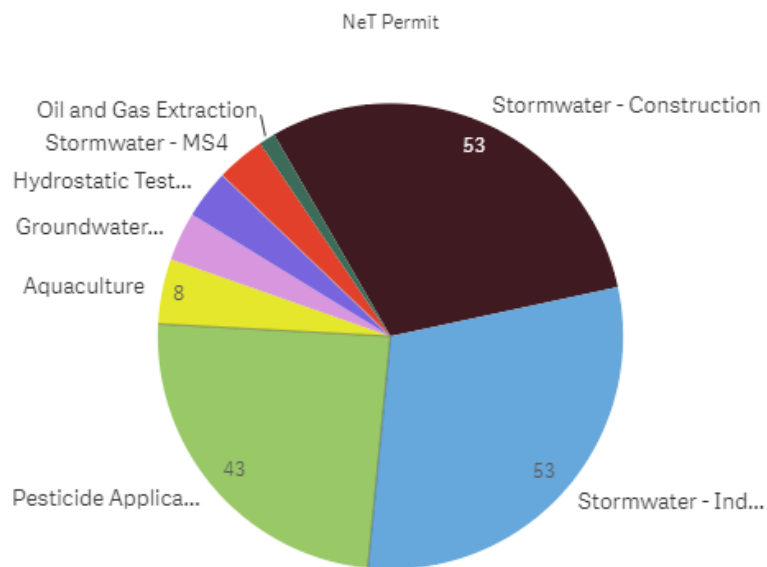


See: https://edap.epa.gov/public/extensions/eRule_Phase2/eRule_Phase2.html

Phase 2 Progress – Current EPA NeT Development Activities



General Permit Counts by Roadmap Category



- EPA has NeT applications deployed for eight general permit categories that cover approximately 32,000 facilities.
- These are Regional and state general permits (DE, ID, IL, NE, RI, SD, and UT)
- EPA also NeT applications for three program reports (biosolids, sewer overflow, and MS4) that cover approximately 10,500 facilities.
- These EPA and state issued program reports (six states above and LA, ME, MS, TX, and VI).

Overview of Pretreatment Electronic Reporting



- In accordance with 40 CFR 403.12(i), POTWs with an approved pretreatment program are required to submit annual reports to the Approval Authority documenting program status and activities performed during the previous year.
- In accordance with 40 CFR 403.12(e) and (h), SIU/CIUs must submit a report on their compliance status at least semiannually (once every 6 months).
 - These reports are generally filed in June and December; however, the Control Authority may modify the months in which the reports are to be submitted.
 - There are reduced reporting requirements for Middle-Tier Categorical Industrial Users and Non-Significant Categorical Industrial Users.
- These reports are used to evaluate compliance with pretreatment regulations.
- The NPDES eRule identified the data elements for each program report (see Attachment).

Overview of Pretreatment Electronic Reporting



- There are 37 states that are authorized to administer the Federal Pretreatment program (40 CFR part 403).
- Nine of these states have elected to use EPA's electronic reporting tool (called "NeT") for one or both of the pretreatment reports.
- EPA will use NeT for this report where it administers the NPDES program.
- States that elect to build their own electronic reporting tools will need to share the data that they collect with EPA in accordance with the NPDES eRule (40 CFR 127, Subpart B).

NeT-Pretreatment States

No.	State	EPA Region	Core NPDES Authorization (Part 122)	Pretreatment Authorization (Part 403)	Est. No. of Filers - POTW Annual Report	Est. No. of Filers - CIU-SIU Report
1	CO	8	Yes	No	27	7
2	CT	1	Yes	Yes	NA (0)	190
3	DC	3	No	No	1	0
4	DE	3	Yes	No	6	3
5	IL	5	Yes	No	48	100
6	IN	5	Yes	No	47	192
7	KY	4	Yes	Yes	70	12
8	KS	7	Yes	No	17	60
9	LA	6	Yes	Yes	14	22
10	MA	1	No	No	47	11
11	ME	1	Yes	Yes	11	13
12	MS	4	Yes	Yes	NA (0)	250
13	MT	8	Yes	No	6	4
14	NE	7	Yes	Yes	NA (0)	116
15	NH	1	No	No	14	22
16	NM	6	No	No	6	2
17	NV	9	Yes	No	7	7
18	NY	2	Yes	No	57	40
19	PA	3	Yes	No	105	50
20	PR	2	No	No	1	0
21	RI	1	Yes	Yes	15	0
22	SD	8	Yes	Yes	7	0
23	TX	6	Yes	Yes	74	40
24	UT	8	Yes	Yes	21	1
25	WY	8	Yes	No	5	1

Overview of NeT Requirements Gathering



The information below should be provided to EPA at the start of the “onboarding” process.

- Copies of all forms to be supported by NeT.
- Identification of workflow and business rules (e.g., review length period, approval process, payment processing, violation processing)
- Identification of any data sharing requirements between NeT-Pretreatment and EPA's national NPDES data system (ICIS-NPDES) such as facility, permit data, and violation data.
- Identification of any schedule that might influence the pace of development.
- Identification of any known potential blockers that might delay development.

Overview of NeT Requirements Gathering



High-Level Overview

Step 1 - Project Kick-off: This meeting to formally notify all participants that the project has begun and ensure everyone has a common understanding of the project and their roles.

Step 2 - Requirements: These weekly meetings will identify, discuss, understand, and agree the functionality and features needed to enable NeT to support the program report process.

Step 3 - Development: EPA's developers will take the requirements identified in Step 2 to build out the functionality and features in the NeT platform.

Step 4 - Testing: The regulatory authority will be tasked with verifying and validating that the NeT application implements the requirements identified in Step 2 using CDX-TEST.

Step 5 - Deployment: EPA releases updated NeT application into the production environment (CDX-PROD) and provide documentation and training resources for regulatory authorities and the regulated community.



Next Steps



- The NeT Team will hold weekly meetings to document the requirements for the Pretreatment Program Annual Report [40 CFR 403.12(i)].
 - The NeT Team will focus first on the pretreatment program report for one or more EPA Regions.
 - After the first deployment, the NeT Team will then onboard the remaining EPA Regions and states as well as start work on the SIU/CIU Semi-Annual Report.
- EPA also plans to hold less frequent meetings with all interested states and EPA Regions to highlight progress with NeT development and onboarding.
- The action items for today's meeting are:
 - If you are an EPA Region and would like to volunteer to go first, please contact Trish Nguyen (nguyen.trish@epa.gov) and Lauren D'Angelo (dangelo.lauren@epa.gov).
 - Please review Technical Paper No. 7 to familiarize yourself with the minimum set of data that must be collected on these two reports.
 - States and Regions that need to submit partnership memos or NeT CROMERR coversheet should do so within the next month or so.
 - Optional** – signup for a CDX Test user account (<https://test.epacdx.net/>) to get a sense of the look and feel of a NeT program report. Contact Carey Johnston (johnston.carey@epa.gov) for help with the NeT-Biosolids and NeT-SewerOverflow applications.



Current Development Status

- Currently meeting with Al Garcia (EPA Region 8) to review requirements for the Annual Report.
- Region 3 is listening in on these weekly meetings. RI, FL, ID, UT, TX, AR, SD, and ND also listen in on these weekly meetings.
- States that would like to join the weekly meeting in “listen only” mode should send an email to Trish Nguyen (Nguyen.Trish@epa.gov).



Thank You!!



Attachment – Additional Information

Data Elements Applicable to Pretreatment



Pretreatment Program Report [40 CFR 403.12(i)]

The following information will be electronically submitted by the approved pretreatment program (at least annually).

- SNC Published
- SNC with Pretreatment Enforceable Compliance Schedule Status
- Local Limits Adoption Date
- Local Limits Evaluation Date
- Local Limits Pollutants
- POTW Discharge Contamination Indicator (Program Report)
- POTW Biosolids or Sewage Sludge Contamination Indicator (Program Report)
- Industrial User Control Mechanism Status
- Industrial User Control Mechanism Effective Date
- Industrial User Control Mechanism Expiration Date
- SNC with Pretreatment Standards or Limits (Program Report)
- SNC with Pretreatment Standards or Limits Pollutants (Program Report)
- SNC with Reporting Requirements (Program Report)
- SNC with Other Control Mechanism Requirements (Program Report)
- Listing of Months in SNC

Data Elements Applicable to Pretreatment



Pretreatment Program Report [40 CFR 403.12(i)]

The following information will be electronically submitted by the approved pretreatment program (at least annually).

- Number of Industrial User Inspections by Control Authority
- Number of Industrial User Sampling Events by Control Authority
- Number of Required Industrial User Self-Monitoring Events
- Actual Number of Industrial User Self-Monitoring Events
- Types of Industrial User Enforcement Action
- Number of Industrial User Enforcement Actions
- Industrial User Cash Civil Penalty Amount Assessed
- Industrial User Cash Civil Penalty Amount Collected
- Industrial User POTW Discharge Contamination Indicator (Program Report)
- Industrial User Biosolids or Sewage Sludge Contamination Indicator (Program Report)
- Industrial User Wastewater Flow Rate (Program Report)
- Middle-Tier Significant Industrial User Reduced Reporting Status
- Non-Significant Categorical Industrial User (NSCIU) Certification Submitted to Control Authority
- Notification of Changed Discharge Submission

Data Elements Applicable to Pretreatment



SIU/CIU Compliance Monitoring Reports [40 CFR 403.12(e) & (h)]

The following information will be electronically submitted by the SIU/CIUs in municipalities without approved pretreatment programs (when EPA or State is Control Authority).

These monitoring data will be submitted at least semi-annually.

- NPDES ID
- Permitted Feature ID
- Limit Set Designator
- Monitoring Period End Date
- Monitoring Location Code
- Limit Season Number
- Parameter Code
- No Data Indicator (NODI)
- Value
- Quantity or Concentration Units
- Value Received Date (as determined by State or EPA)
- Value Type
- Value Qualifier
- Industrial User Wastewater Flow Rate