

NPDES Electronic Reporting Rule 40 CFR part 127



CWA-NPDES
electronic reporting

**2023 National NPDES Permitting Meeting
28 February 2023**

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 Savings**
 - 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.

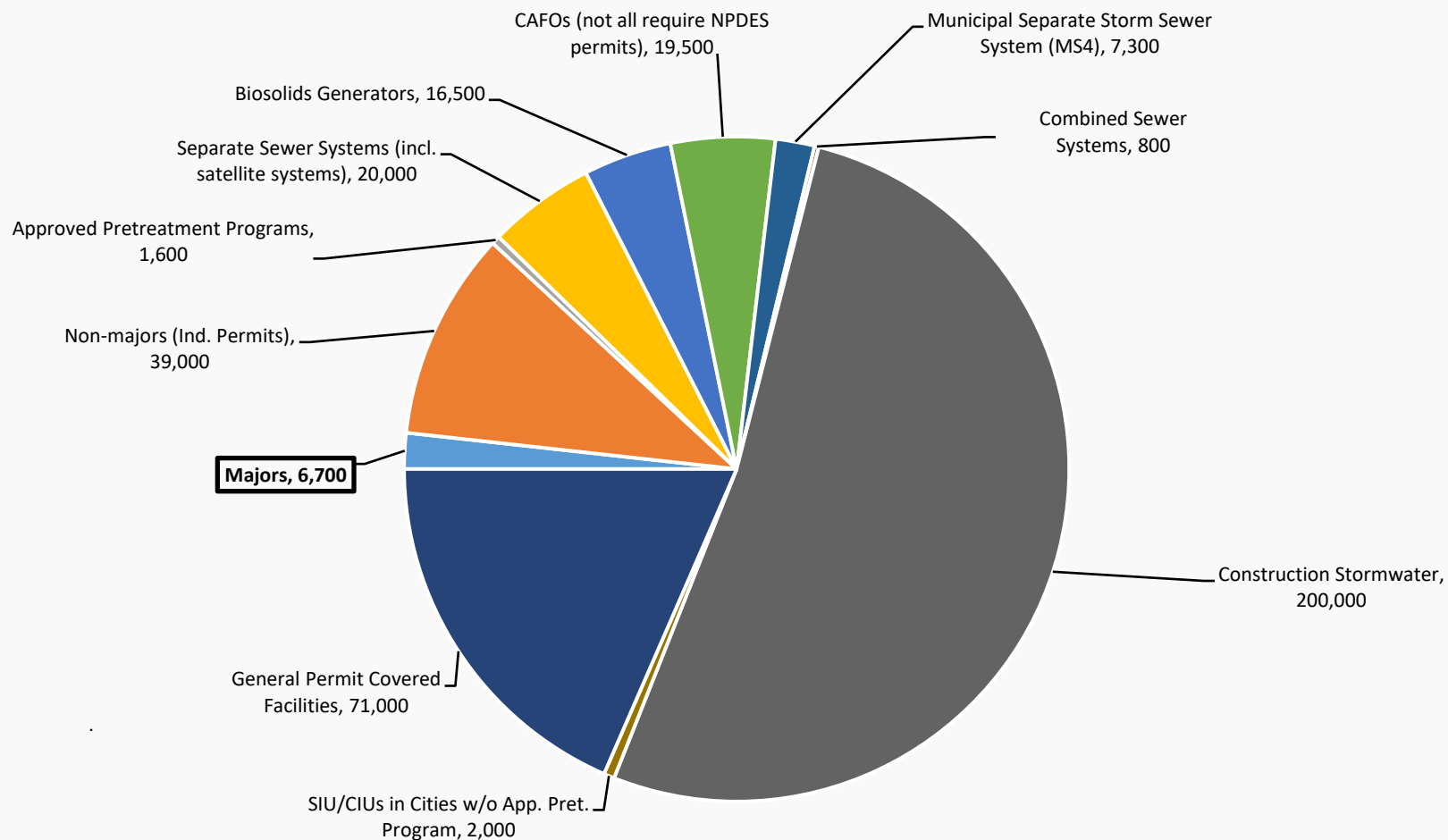


Pretreatment Program Annual Reports
in EPA Region 9

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

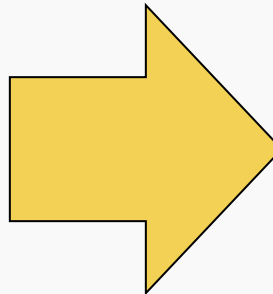
Example Benefit of Electronic Reporting



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).



- Building Capacity for Electronic Reporting
- Strengthening and Expanding NPDES Program Data Sharing
- Collaborating and Coordinating EPA and State Activities
- Creating Insight and Transparency on Noncompliance



Phase 1 Progress



Federal Biosolids Annual Reports – 40 CFR 503 (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)

Phase 1 Progress

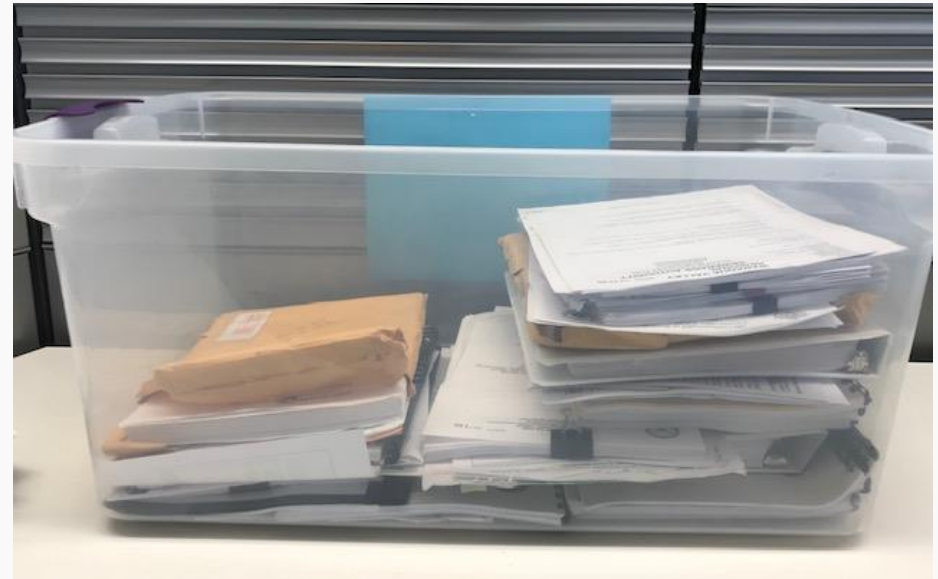


Federal Biosolids Annual Reports – 40 CFR 503 (EPA Biosolids Center of Excellence, Region 7)



2018

2nd Year of Electronic Reporting
(2,245 electronic submissions with
94 paper submissions)



2019

3rd Year of Electronic Reporting
(2,290 electronic submissions with
52 paper submissions)

Phase 1 Progress

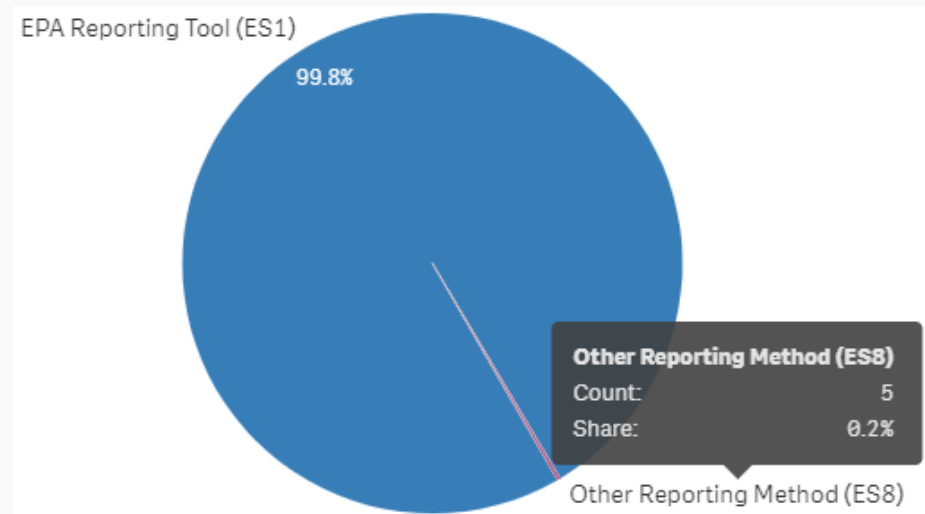


Federal Biosolids Annual Reports – 40 CFR 503 (EPA Biosolids Center of Excellence, Region 7)



2020

4th Year of Electronic Reporting
(2,260 electronic submissions with
14 paper submissions)



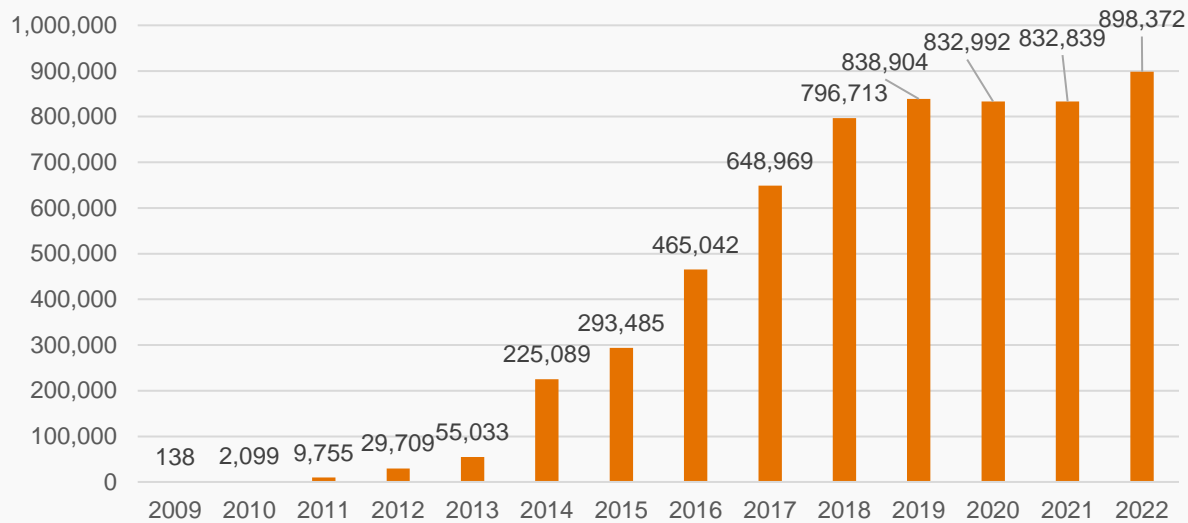
2021

5th Year of Electronic Reporting
(2,369 electronic submissions with
5 paper submissions)

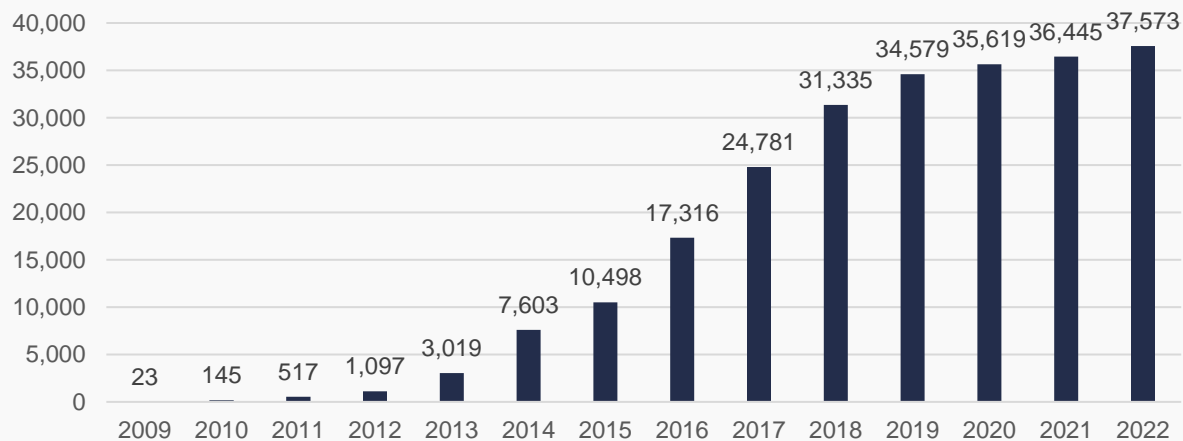
Phase 1 Progress



Count of DMR Form Submissions Through NetDMR



Count of Facilities Using NetDMR



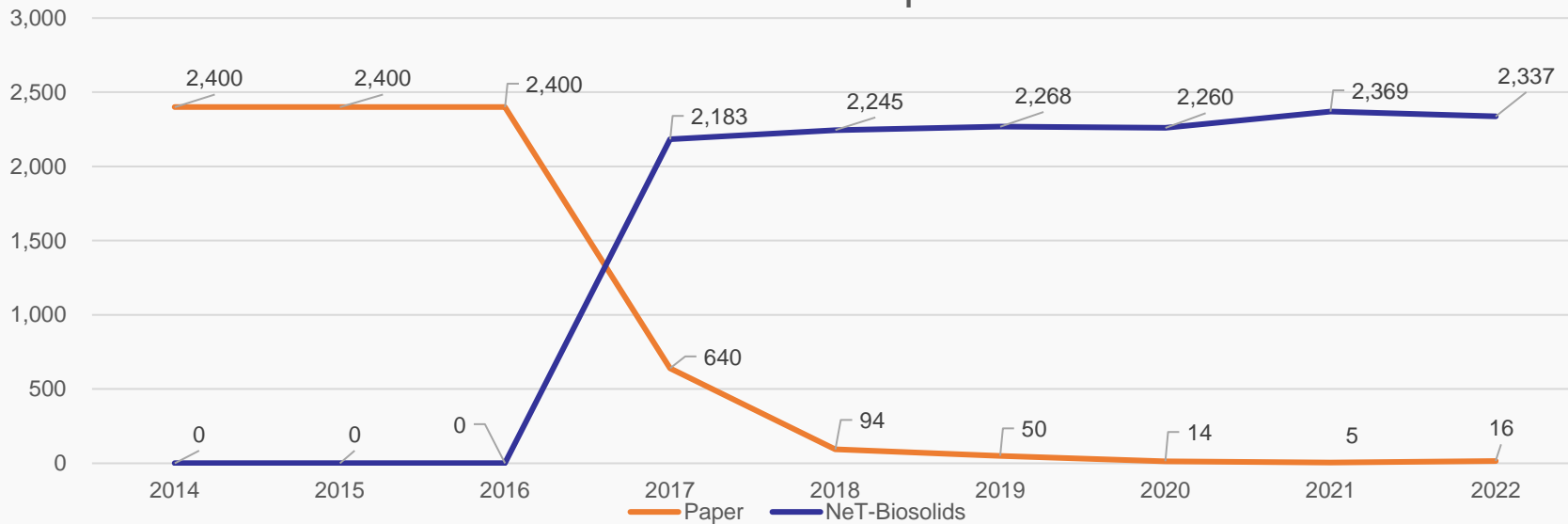
- NetDMR usage increased dramatically since promulgation of the 2015 NPDES eRule.
- This trend will continue as more and more facilities are trained and registered with NetDMR.
- States are also making tremendous progress in transitioning DMR filers to state electronic reporting tools and sharing these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

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

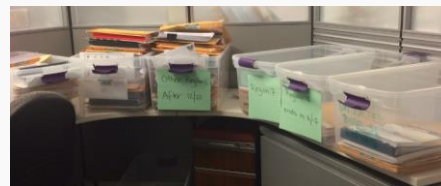
Phase 2 Progress



Federal Biosolids Annual Report Submissions



2014



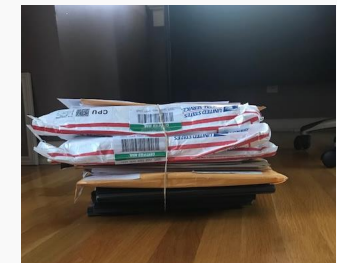
2017



2018



2019



2020

Tracking NPDES eRule Implementation



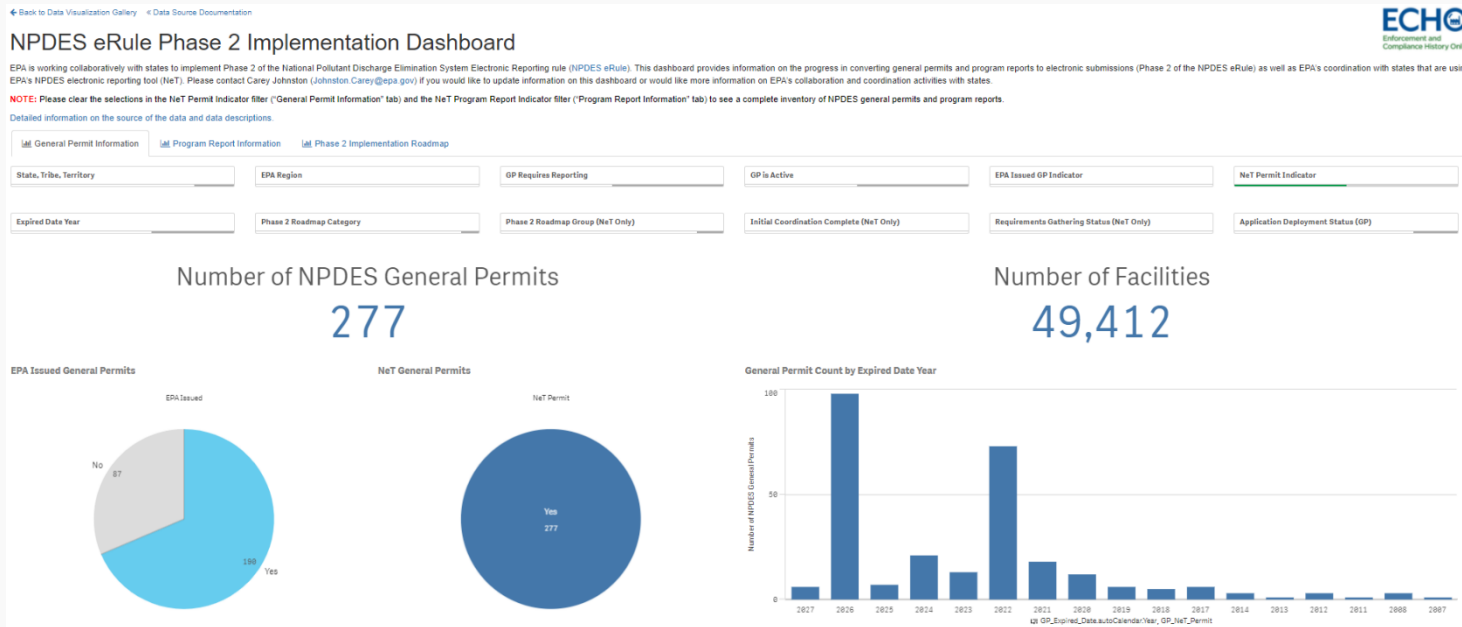
- EPA has developed a set of dashboards to help EPA Regional and state staff track NPDES eRule implementation and identify issues that require resolution.
- These dashboards are available through EPA's Enforcement Compliance History Online (ECHO) website.
 - See: <https://echo.epa.gov/trends/data-viz?filters=erule>.
- 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).



Phase 2 Progress

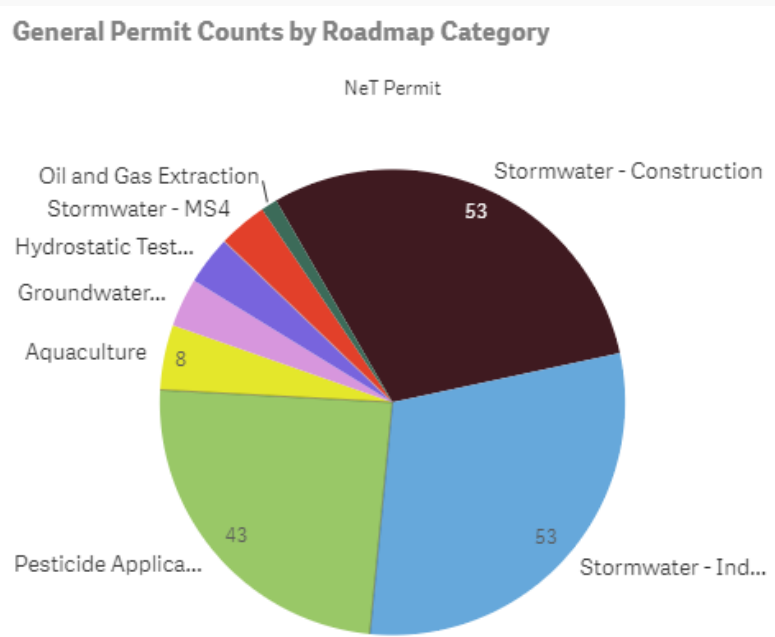


- The NPDES eRule Phase 2 Implementation Dashboard provides EPA and states with a high-level tracking of EPA and state progress for Phase 2.
 - This public dashboard provides an inventory of general permits and program reports and identifies for each general permit or program report if the state has 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 Development Activities



- 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).

NPDES Noncompliance Report (NNCR)



- NPDES eRule requires EPA to produce online noncompliance reports (NNCR) by:
 - December 21, 2022 (Phase 1 data); and
 - December 21, 2026 (Phase 2 data) or earlier as data become available.
- The Quarterly NNCR must include a list of all violations that occurred within the quarter, details about the violations, enforcement actions taken in response to the violations, and include any violations from previous quarterly reports not been documented as being corrected.
- The Annual NNCR is a summary of compliance monitoring and enforcement activities within each state, tribe, and territory.
- These noncompliance reports will show all violations detected by authorized NPDES programs or self-report by facilities. EPA worked with states to develop this report, which will be released on ECHO.

How Can You Help with NPDES eRule Implementation?



- Awareness: Regional legal, permitting, and enforcement staff need to be aware of the NPDES eRule and its implementation.
 - All NPDES permits should include requirements for electronic reporting [see [40 CFR 127.26\(f\)](#)].
 - Key information from NPDES permits must be shared with Regional data entry staff (e.g., permit application received dates).
 - Review [NPDES Data Sharing Dashboard](#) to see and fix data gaps.
- Support: The switch to electronic reporting has uncovered issues that were previously “papered over.” Be aware that these issues may need your support to facilitate the adoption of electronic reporting.
 - States that use “permit-by-rule” instead of NPDES permits.
 - States are issuing coverages under expired NPDES general permits.
 - More clearly defining noncompliance (e.g., wet-weather CSO discharges) as these reports will now be publicly online
 - Addressing neglected reporting requirements (e.g., EPA’s permit application regulations [40 CFR 122.21(q)] require submission of NPDES Form 2S (sludge data) to EPA Regional office).