

NPDES Electronic Reporting Rule 40 CFR part 127



CWA-NPDES
electronic reporting

**ACWA 2024 National Stormwater Roundtable
23 October 2024**

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.

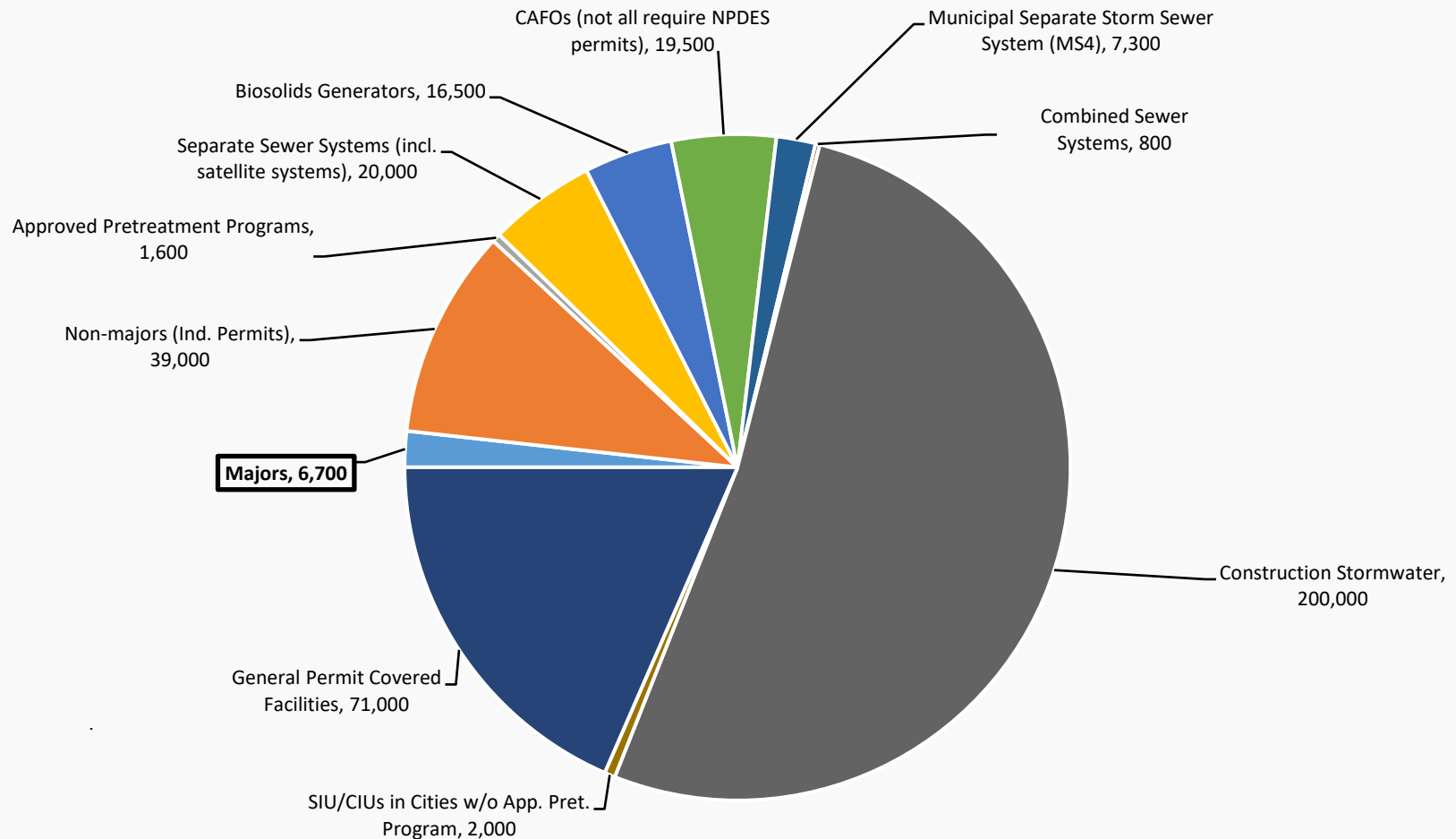


Pretreatment Program Annual Reports
in EPA Region 9

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



Submissions from Permittees	40 CFR
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
Submissions from States and EPA Regions	40 CFR
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

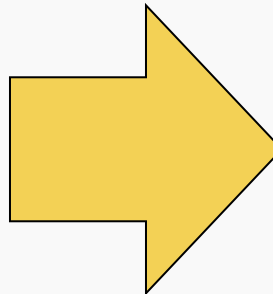
Example Benefit of Electronic Reporting



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



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 1 Progress: Biosolids Annual Reports



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: Biosolids Annual Reports - Year 2 and 3

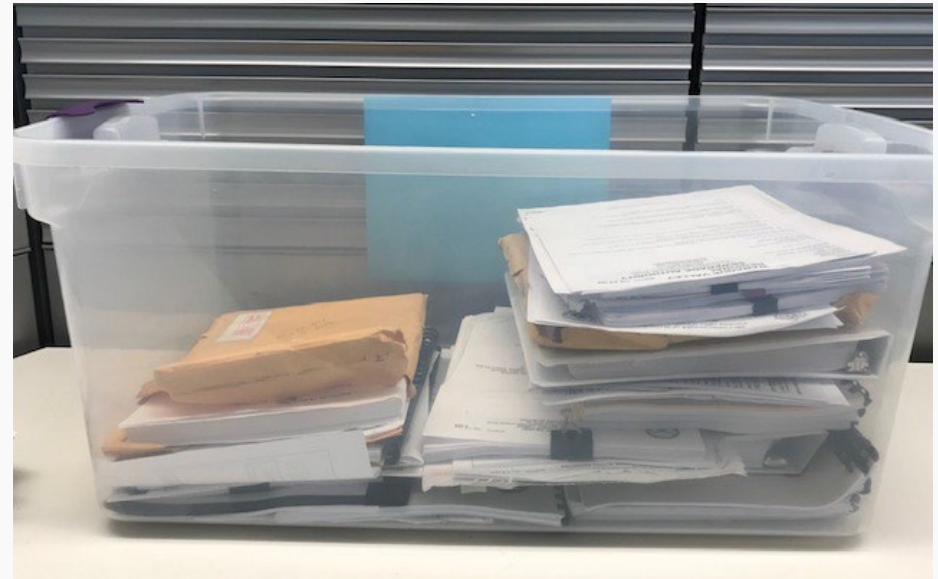


Federal Biosolids Annual Reports – 40 CFR 503 (EPA Biosolids Center of Excellence, Region 7)



2018

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



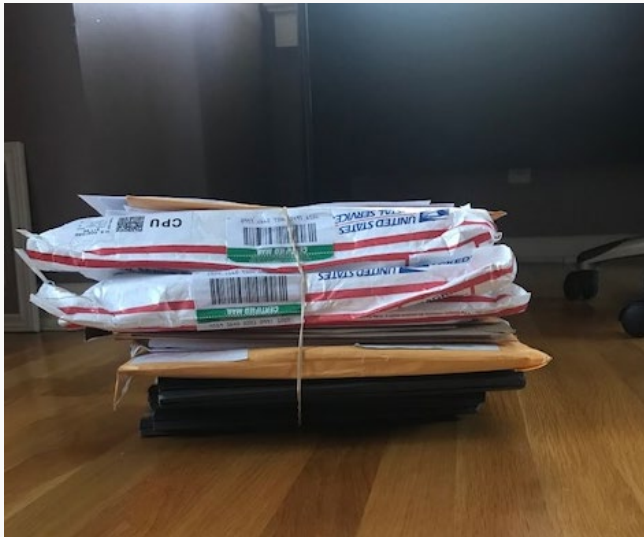
2019

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

Phase 1 Progress: Biosolids Annual Reports - Year 4 and 5

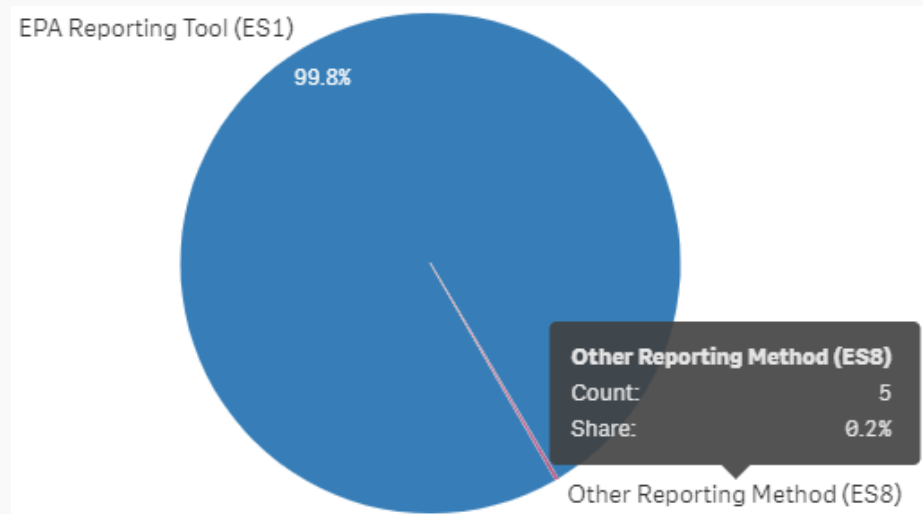


Federal Biosolids Annual Reports – 40 CFR 503 (EPA Biosolids Center of Excellence, Region 7)



2020

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



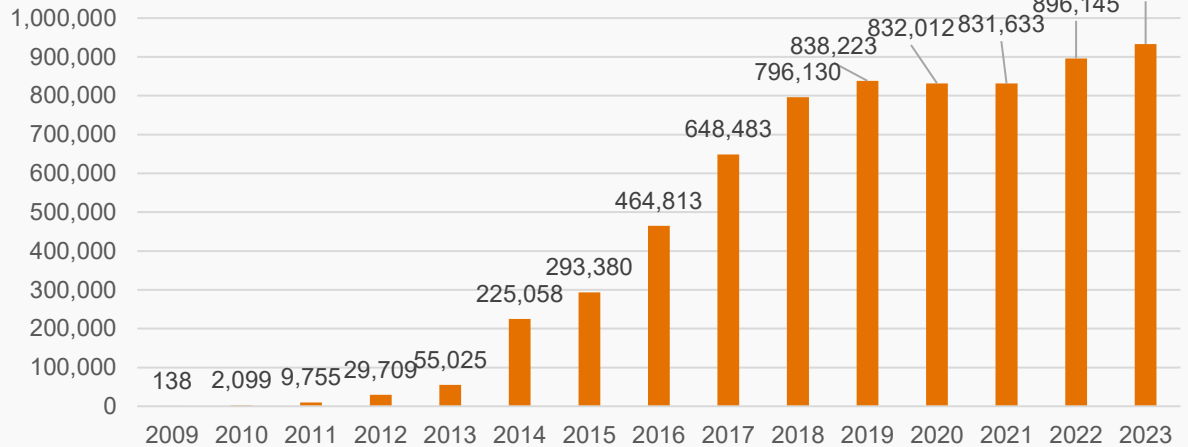
2021

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

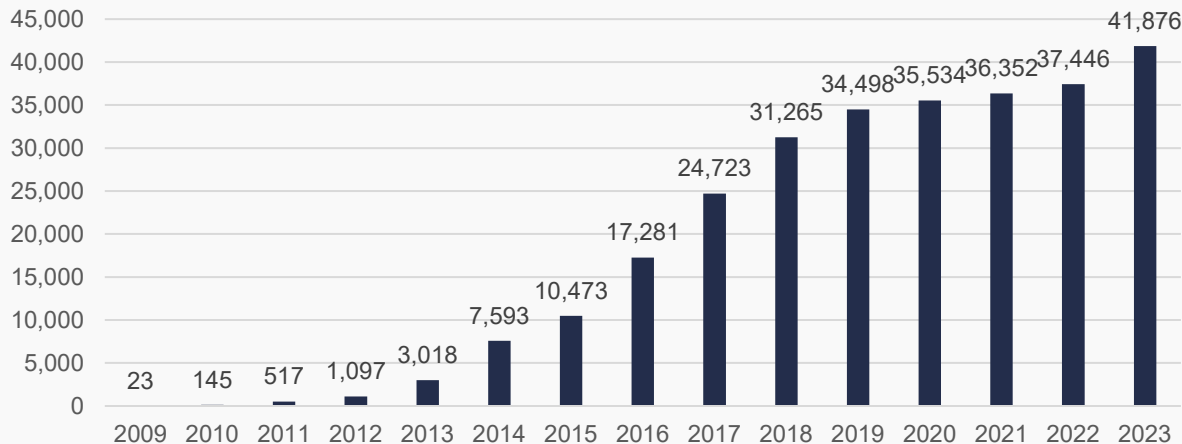
Phase 1 Progress



Count of DMR Form Submissions Through NetDMR



Count of Facilities Using NetDMR

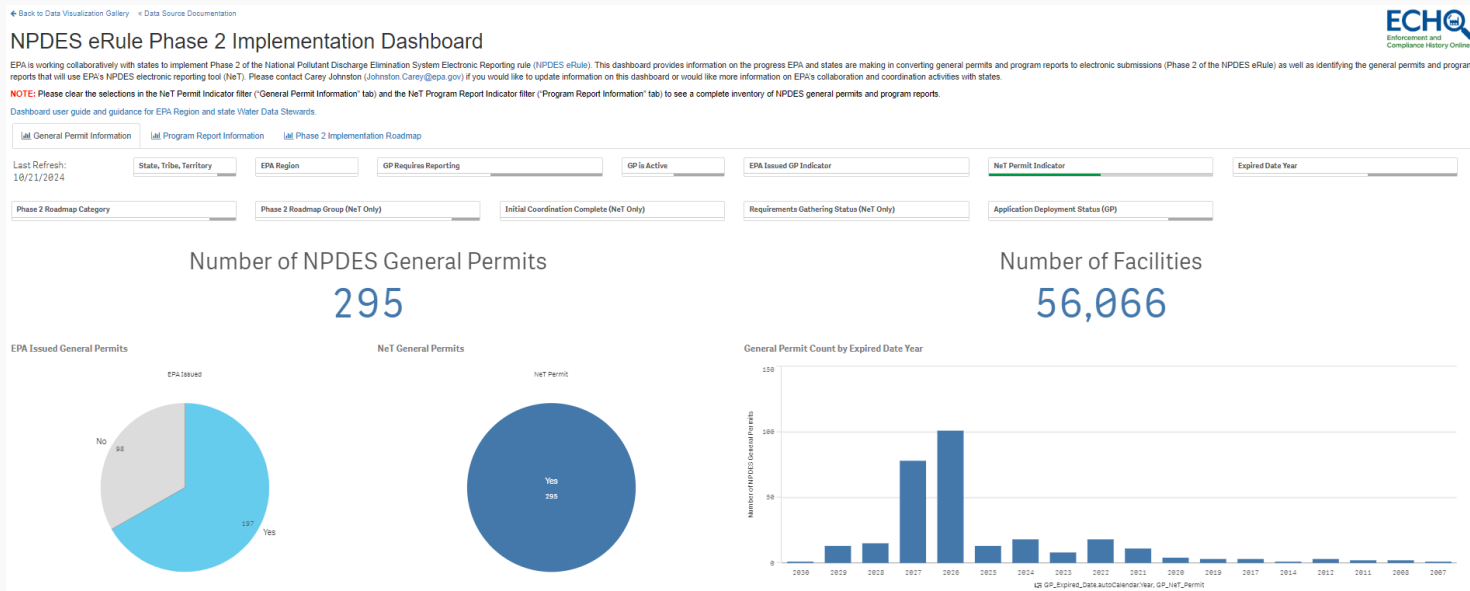


- NetDMR usage increased dramatically since promulgation of the 2015 NPDES eRule.
- This trend will continue as more and more facilities are trained and registered with NetDMR.
- States are also making tremendous progress in transitioning DMR filers to state electronic reporting tools and sharing these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

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.

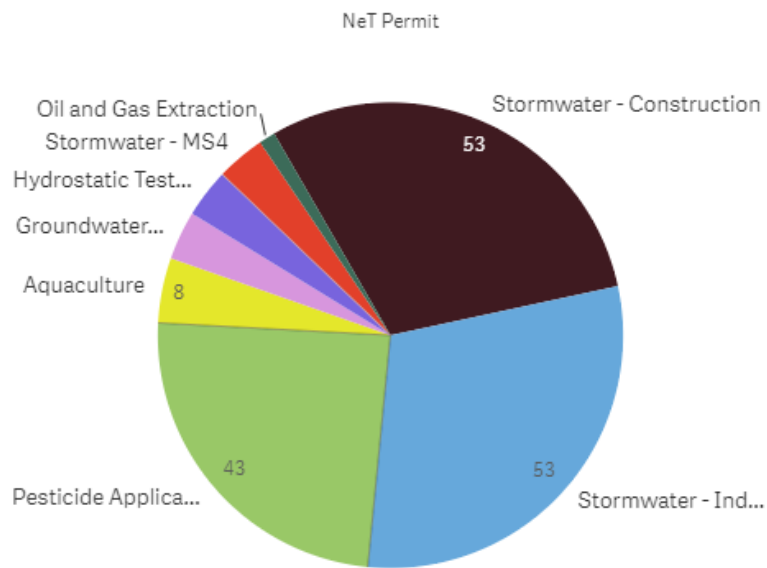


See: https://edap.epa.gov/public/extensions/eRule_Phase2/eRule_Phase2.html

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 four program reports (biosolids, sewer overflow, MS4, and pretreatment programs) that cover approximately 10,500 facilities.
- These EPA and state issued program reports (six states above and LA, ME, MS, TX, and VI).

Phase 2 Data Sharing: Technical Papers



- As part of Phase 2 implementation, EPA and states collaborated via technical workgroups to define the reference values, business rules, and other data standards for the minimum set of NPDES program data (App. A, 40 CFR 127).
- EPA-state technical workgroups included all the major aspects of the NPDES program (e.g., biosolids, pretreatment, sewer overflows, stormwater).
- These workgroups produced technical papers that are now posted on the NPDES eRule website: <https://www.epa.gov/compliance/npdes-ereporting>.
- EPA and states are collaborating on updating the data sharing protocols, which are published on the Environmental Council of States (ECOS) website: <https://exchangenetwork.net/data-exchange/icis-data-submission>.

NPDES Data Sharing Requirements



- EPA is working collaboratively with states to help them meet the data sharing requirements in the NPDES eRule. States are required to share complete, accurate, timely, and nationally-consistent data with EPA’s national NPDES data system (ICIS).
- EPA maintains a few dashboards that help identify potential data discrepancies in ICIS. See: <https://echo.epa.gov/trends/data-viz?filters=erule>
 - NPDES eRule Readiness and Reporting Dashboard: Shows the “completeness” of EPA Regional and state data sharing for Discharge Monitoring Report (DMR) data.
 - NPDES Data Sharing Dashboard: Shows the “completeness” of EPA Regional and state data sharing for key permit and facility data (e.g., missing facility location data).
 - NPDES Data Accuracy Dashboard: Shows the “accuracy” of EPA Regional and state data sharing for key permit and facility data (e.g., inaccurate facility location data).
 - Single Event Violation Dashboard: Shows inventory of violations detected from inspections or program reports.

NPDES Data Sharing Requirements - SEVs



- The NPDES Electronic Reporting rule requires authorized NPDES programs to share NPDES violation data on all facilities (major and non-major).
 - However, this requirement does not include NPDES violations found through construction stormwater inspections where the regulatory authority did not take a formal enforcement action.
 - As noted in preamble to the final rule, EPA made this distinction based on the large number of facilities in this segment of the NPDES universe (approximately 200,000 new construction sites each year). See 22 October 2015; 80 FR 64079.
- Prior to the final rule, states only had to share violation data [including Single Event Violations (SEVs)] from majors with EPA's national NPDES data system (ICIS-NPDES).

NPDES Noncompliance Report (NNCR)



- NPDES eRule requires EPA to produce online noncompliance reports (NNCR) that show all NPDES violations for:
 - 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.
- On 22 February 2023 EPA made the NNCR publicly available on [ECHO](#) after a year of testing by EPA Regions and states.