Increase Environmental Law Compliance Rate

Goal Leader: Larry Starfield, Principal Deputy Assistant Administrator, Office of Enforcement and Compliance Assurance
Deputy Goal Leader: David Hindin, Director, Office of Compliance

Theme: National Resources and Environment

Overview

Goal Statement

o Through September 30, 2019, EPA will increase compliance by reducing the percentage of Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) permittees in significant noncompliance with their permit limits to 21% from a baseline of 24%.

Challenge

o The rate of Significant Noncompliance (SNC)-level violations at NPDES major and minor permittees is currently about 24%. This figure has remained quite consistent in the 20 - 24% range for many years. Reducing the SNC rate significantly will require a substantial effort by EPA and the 46 NPDES authorized states, including implementation of new approaches for predicting and addressing and deterring SNC.

Opportunity

o With ongoing implementation of its 2015 NPDES electronic reporting rule, EPA for the first time is beginning to have reliable, comprehensive compliance data for a major environmental program. Using this data, EPA will track the rate of all NPDES violations (at both major and minor permittees) that meet its SNC definition and target resources with the specific goal of reducing the SNC rate. A reduced-rate of SNC-level violations will indicate both an improvement in NPDES permittee CWA compliance status and diminished illegal discharges of pollutants. The focus on achieving a lower SNC rate will promote a reduction in pollutant discharges impacting surface water quality.

Leadership

Goal Leader:

Larry Starfield

Principal Deputy Assistant Administrator

Deputy Goal Leader:

David Hindin, Director

Office of Compliance

Rosemarie Kelley, Acting Director

Office of Civil Enforcement

Regional Representative

APG Workgroup Co-Chairs:
Daniel Palmer, OC/Planning, Measures, and Oversight Division (PMOD)
Scott Gordon, Region 4
Loren Denton, OCE/Water Enforcement Division (WED)

Goal Structure & Strategies

o **Strategy 1:** Initiate APG, including implementation of APG governance and workgroup structures and determination of how best to coordinate and collaborate with state organizations and individual NPDES authorized states.

o **Strategy 2:** In close coordination with states and state organizations (Environmental Council of States (ECOS), Association of Clean Water Administrators (ACWA), etc.), develop a detailed, draft measure implementation plan for reducing the rate of violations at NPDES major and minor permittees meeting EPA's SNC definition, including:

   o Acquire input from varied and knowledgeable federal and state sources on the causes of SNC and approaches to successfully addressing and deterring SNC (e.g., identify best practices).

   o Consider varied approaches for addressing and deterring SNC for different categories of SNC, different NPDES permitted sectors, different states, etc.

   o Consider different compliance assurance tools and new and automated mechanisms for addressing and deterring SNC.

   o Develop predictive tools for identifying and targeting NPDES permittees most likely to generate SNC-level violations.

o **Strategy 3:** In close coordination with states, state organizations, and media associations at a technical level, identify approaches to reduce the rate of SNC-level violations at NPDES majors and minors.

Goal Structure & Strategies, continued
APG—Increase Environmental Law Compliance Rate

o **Strategy 4:** Measure effects on SNC rate of implementation of various approaches employed; use this information to improve ongoing efforts at reducing SNC rates.

EPA Lean Management Systems (ELMS)

o EPA will be using the deployment of a new EPA Lean Management System (ELMS) to achieve the results set forth in the Strategic Plan. As part of ELMS, EPA will be conducting multi-day process improvement events to make significant progress in specific priority areas, which include permitting, identified in the Strategic Plan.

o Visual management will then be used to ensure that improvements from the events are achieved and sustained over time. Poster boards with regularly updated performance data will serve as visual management for monitoring progress towards meeting the targets set forth in the Strategic Plan, while additional poster boards will be used to track the flow of the work that needs to be performed to achieve the targets. Managers and staff will have weekly stand-up huddle meetings in front of their visual management boards to discuss the performance and flow of the process.

o In addition, National Programs and Regional Offices will hold monthly business reviews to go over both the strategic measures tracked on scorecards, and the implementation plans that track progress on Strategic Plan and priority area projects identified for EPA under President Trump's Executive Order on a Comprehensive Plan for Reorganizing the Executive Branch. The Administrator will hold quarterly reviews to monitor overall progress on the agency's Strategic Plan and priority area projects.

o ELMS is designed to make sure that EPA is regularly monitoring progress towards meeting the targets set forth in the Strategic Plan, and taking immediate action if expected performance is off track.

Strategy 1: APG Governance and Metric Development:

o   In Q1 FY 2018, EPA developed and finalized its performance tracking metric, baseline and targets, issued call for workgroup members, and completed the NPDES SNC dashboard construction.

Summary of Progress – FY 2018 Q2

Measure: Increase compliance in the Clean Water Act National Pollutant Discharge Elimination System by increasing the percentage of permittees not in significant noncompliance with their permit limits

Baseline: 76.0% rate for individually-permitted NPDES facilities not in significant noncompliance or Category 1 Noncompliance, based on July 2016-June 2017 data

Targets: Maintain 76% through FY 2018; 79% by the end of FY 2019.

Performance: 79% in December 2017 (Oct 2016 – Sept 2017 data), 75% in March 2018 (Jan – Dec 2017 data). The workgroup is investigating a probable cause for the difference in quarterly performance: a data quality effort undertaken in September 2017 that deflated the FY17Q4 SNC rate. For FY18Q1, the rate appears to have returned to a near-baseline level.

Strategy 1 Progress: APG Governance and Metric Development
- o NPDES SNC workgroup formed four sub-workgroups:
  - o Outreach, Engagement, and Policy – States, State Organizations, Regions, and Public
  - o NPDES Data Quality and Reducing DMR Non-Receipt Category 1 Violations
  - o Strategies for Deterring Effluent Limitation Category 1 Violations
  - o Written Strategy for the NPDES Measure

Strategy 2 Progress: State engagement and implementation plan development
- o Workgroup chairs initiated discussions with ACWA to get state personnel engaged on sub-workgroups and on other substantive matters. These discussions with ACWA are continuing.
- o Began development of materials for state engagement to promote national consistency in communication with states and EPA Regions.

Key Milestones – Strategy 1

- o **Strategy 1:** Initiate APG, including implementation of APG governance and workgroup structures and determination of how best to coordinate and collaborate with state organizations and individual NPDES authorized states.

- o **Recent Accomplishments:** Finalized metric, baseline and targets, issued call for workgroup members, completed APG NPDES SNC dashboard construction, initiated discussions with the Association of Clean Water Administrators (ACWA) about state involvement in Workgroup. Preparing to conduct Webinars for State senior clean water and enforcement officials.

Milestone Summary					
Key Milestone	**Milestone Due Date**	**Milestone Status**	**Change from last quarter**	**Owner**	**Comments**
Identification of APG Metric	Q1	Complete	No change	Office of Compliance	
Calculation of Metric Baseline	Q1	Complete	No change	Office of Compliance	
Determination of Quarterly & Yearly Targets	Q1	Complete	No change	Office of Compliance	
Identification of Workgroup Co-Chairs	Jan.5	Complete	No change	Office of Compliance	
Creation of APG Metric Workgroup	Jan. 5	Complete	No change	Office of Compliance	
Build dashboard for tracking 4Q SNC rate	Q1	Complete	No change	Office of Compliance	
Workgroup kickoff, initiate discussions	Jan. 2018	Complete	No change	Office of Compliance	
Initiate discussions with ACWA	Q2	Complete	No change	Office of Compliance	
State engagement on NPDES SNC Workgroup	Q3			Office of Compliance	
Dev. introductory Webinars for State Officials	Q3			Office of Compliance	
Dev. materials for EPA Communications with States	Q3			Office of Compliance	

Key Milestones – Strategy 2

- o **Strategy 2:** In close coordination with states and state organizations (ECOS , ACWA) , develop a detailed, draft measure implementation plan for reducing the rate of violations at NPDES individual permittees meeting EPA's SNC definition, including:
  - o Acquire input from varied and knowledgeable federal and state sources on the causes of SNC and approaches to successfully addressing and deterring SNC (e.g., identify best practices).
  - o Consider varied approaches for addressing and deterring SNC for different categories of SNC, different NPDES permitted sectors, different states, etc.
  - o Consider different compliance assurance tools and new and automated mechanisms for addressing and deterring SNC.
  - o Develop predictive tools for identifying and targeting NPDES permittees most likely to generate SNC-level violations.

Milestone Summary					
Key Milestone	**Milestone Due Date**	**Milestone Status**	**Change from last quarter**	**Owner**	**Comments**
1st Draft of Implementation Plan	Q2, FY18	In progress	TBD	APG Workgroup	Communications strategy and other communications matters have taken precedence.
2nd Draft of Implementation Plan	Q3, FY18	Not yet initiated		APG Workgroup	
Final Implementation Plan	Q3, FY18	Not yet initiated		APG Workgroup	

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Key Milestones – Strategy 3

o **Strategy 3:** In close coordination with states, state organizations, and media associations at a technical level, identify approach to reduce the rate of SNC-level violations at NPDES majors and minors.
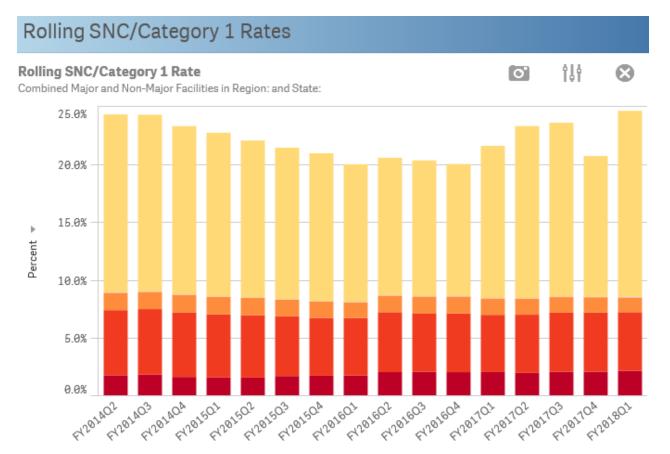
Milestone Summary					
Key Milestone	**Milestone Due Date**	**Milestone Status**	**Change from last quarter**	**Owner**	**Comments**
Initiate implementation of approach	Q4, FY 18	Not yet initiated		APG Workgroup	

Key Milestones – Strategy 4

o **Strategy 4:** Measure effects on SNC rate of implementation of various approaches employed; use this information to improve ongoing efforts at reducing SNC rates.

Milestone Summary					
Key Milestone	**Milestone Due Date**	**Milestone Status**	**Change from last quarter**	**Owner**	**Comments**
Review data on impacts of Strategy implementation	Q4, FY 19	Not yet initiated		APG Workgroup	
Revise strategy based on findings of review	Q1, FY 20	Not yet initiated		APG Workgroup	
Implement revisions to strategy	Q1, FY 20	Not yet initiated		APG Workgroup	

Key Indicators

o **Baseline (July 1, 2016 - June 30, 2017):** 24% SNC rate for NPDES majors and minors.

  o **Current facility universe:** Approx. 52,000 facilities

o **APG EOY FY 2019 Target:** 21% SNC rate (3% reduction from baseline) for NPDES individually-permitted facilities.*

Rolling SNC/Category 1 Rates

Rolling SNC/Category 1 Rate
Combined Major and Non-Major Facilities in Region: and State:

*SNC/Category 1 noncompliance rates are calculated quarterly, with a one-quarter lag; rolling rates for this measure include permittees in SNC any time during the most recent four quarters of available data

Key Indicators (continued)

Rolling SNC/Category 1 Rates

For each quarter, each facility's status is defined as being the highest non-compliance code (using the hierarchy below) in that quarter or any of the three previous quarters.

Code	Color	Status	Level	Description
S		Noncompliant	SNC/Cat. 1	For Unachieved Schedule Milestone Violation
E		Noncompliant	SNC/Cat. 1	For Monthly (e.g., 30-Day Average/Daily Average) Effluent Violation
X		Noncompliant	SNC/Cat. 1	For Non-Monthly (e.g., 7-Day Average/Daily Maximum) Effluent Violation
T		Noncompliant	SNC/Cat. 1	Permit Schedule Violation
D		Noncompliant	SNC/Cat. 1	For DMR Non-Receipt Violation
N		Noncompliant	RNC	For All Non-SNC/Cat. 1 Violation
V		Noncompliant	N/A	Non-RNC Violations in the Quarter
P		Resolved Pending	N/A	Final Resolution Pending Compliance with Formal Enforcement Action Final Order
R		Resolved	N/A	Final Resolution of Violation
C		Compliant	N/A	Not Automatically Generated, Used for Manual Overrides
Blank		Null in ICIS-NPDES "No Viol" in ECHO	N/A	Not Considered in Violation (including RNC or SNC/Cat. 1)
U		Unknown	N/A	Unknown Compliance Status

Data Accuracy and Reliability

Name of relevant information system:

o   Integrated Compliance Information System (ICIS)-NPDES data system

Entities that report data to the system:

o   NPDES permittees electronically report their self-monitoring data to EPA and/or to NPDES-authorized states. This data is housed in EPA's ICIS-NPDES data system. Authorized states either use the ICIS-NPDES data system or upload to ICIS-NPDES the electronically reported permittee effluent data they receive, as well as state NPDES permit, inspection, and enforcement data. EPA enters its permit, inspection, and enforcement data into the ICIS-NPDES database.

Frequency of reporting primary data:

o   NPDES compliance data generally is reported by the permittee on a monthly basis. ICIS-NPDES uses this data to calculate an SNC rate on a quarterly basis. Therefore, data for this measure is available quarterly.

   o   Noncompliance data reported for NPDES facilities is used by EPA to produce quarterly and annual public reports as required by 40 CFR 123.45. ICIS-NPDES automatically screens the noncompliance data to identify the subset of SNC-level violations. SNC-level violations are specific types or levels of violation, which are classified based on duration, severity, and type.

   o   Each quarter's data is available approximately 10 weeks following the end of a quarter. Quarterly reporting for this metric began in January of FY 2018 (reporting the annual SNC rate based on the four quarters that ended Sept. 30, 2017).

Data Accuracy and Reliability (continued)

Description of data quality assurance processes:

- OECA has an annual data verification process for the collection and reporting of NPDES information. The goal of this process is to give states the opportunity to verify that compliance and enforcement data regarding individual regulated facilities is accurate, is reliably flowing into national databases, and that this information displays correctly in the Enforcement and Compliance History Online (ECHO) website.

  - The Data Verification Process is referenced in Environmental Council of the States (ECOS) Resolution No. 11-2, Respectful Use of Data, as a model for ensuring high-quality data and is the result of the ongoing, collaborative partnership between EPA and ECOS to improve quality assurance efforts for compliance and enforcement information.

- A Data Quality Record has been developed for the strategic measure associated with this Agency Priority Goal: https://www.epa.gov/sites/production/files/2018-05/documents/dqr-3-1-environmental-law-compliance.pdf

- For more information on the data verification process: https://echo.epa.gov/oversight/state-review-framework

- For more information on SNC determinations: https://echo.epa.gov/help/reports/dfr-data-dictionary#SNCHPV

Additional Information

Contributing Programs

Organizations and Roles:

- o OECA – Leadership, coordination with state organizations, workgroup leadership, strategy and technical expertise.

- o EPA Regions – Leadership, coordination with individual states, workgroup leadership, strategy and technical expertise.

- o EPA Office of Water (OW), Office of Wastewater Management (OWM)

- o ECOS, ACWA - Leadership, strategy and technical expertise.

Program Activities:

- o NPDES Compliance and Enforcement Program – lead and contribute to workgroup, lead implementation of activities to achieve APG.

Regulations:

- o 40 CFR Section 123.45 – Defines required NPDES noncompliance reporting by NPDES-regulated facilities and regulatory authorities, as well as public reports required to be produced by EPA.

- o 40 CFR Section 127 – NPDES Electronic Reporting.

Policy and Guidance:

- o EPA NPDES "Enforcement Management System (EMS)" guidance and NPDES SNC Policy – Defines NPDES SNC criteria and program management expectations.

Stakeholder / Congressional Consultations

States are primary stakeholders. No significant discussions with external stakeholders have yet taken place, though such discussions are planned with state environmental and media associations.