

Agency Priority Goal Action Plan

Increase Environmental Law Compliance Rate

Goal Leader:

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Deputy Goal Leader:

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Overview

Goal Statement

o **Increase environmental law compliance rate.** 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 (SNC) with their permit limits to 25.7% from a baseline of 29.4%*.

Challenge

- Reducing the NPDES SNC rate significantly will require a substantial effort by EPA and the 47 states authorized to implement the NPDES program, including implementation of new approaches for predicting, addressing, and deterring SNC.
- Many factors hamper permittees' compliance with permit limits, and EPA's and states' capacity to inspect, enforce, or provide compliance assistance is limited; infrastructure needs and availability of skilled operators are particular challenges for publicly-owned wastewater facilities which constitute a large portion of the SNC universe. EPA expects to pursue efforts to further reduce the SNC rate beyond the timeframe identified in this Priority Goal.

Opportunity

With ongoing implementation of its 2015 NPDES electronic reporting rule, EPA is beginning to have reliable, comprehensive compliance data for a major environmental program for the first time. 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.

^{*} EPA originally established a baseline of 24% and FY2019 target of 21%, and used these figures throughout FY2018. After identifying and accounting for significant data inaccuracies, EPA revised the baseline and target. EPA retained methodology for deriving the target from the baseline. EPA used the new baseline and target for FY2019 progress summaries.

Leadership



APG Workgroup Co-Chairs:

Daniel Palmer, OC/Planning, Measures, and Oversight Division (PMOD)

Scott Gordon, Region 4

Joe Theis, OCE/Water Enforcement Division (WED)

Goal Structure & Strategies

- **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 National Pollutant Discharge Elimination System (NPDES) authorized states.
- **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 significant noncompliance (SNC) definition, including:
 - 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).
 - Consider varied approaches for addressing and deterring SNC for different categories of SNC, different NPDES permitted sectors, different states, etc.
 - Consider different compliance assurance tools and new and automated mechanisms for addressing and deterring SNC.
 - Develop predictive tools for identifying and targeting NPDES permittees most likely to generate SNClevel violations.
- 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.
- **Strategy 4:** Measure effects on SNC rate of implementation of various approaches employed; use this information to improve ongoing efforts at reducing SNC rates.

Goal Structure & Strategies, continued

EPA Lean Management System (ELMS)

- EPA continues to deploy its new EPA Lean Management System (ELMS) to achieve the results set forth in the FY 2018-2022 EPA Strategic Plan. As part of ELMS, EPA has conducted multi-day process improvement events to make significant progress in specific priority areas, including permitting, identified in the Strategic Plan.
- Visual management is a major aspect of ELMS that is being used to ensure that improvements from the
 events are achieved and will be sustained over time. Poster boards with regularly updated performance
 data serve as visual management for monitoring progress towards meeting the targets set forth in the
 Strategic Plan, while additional poster boards are being used to track the work flow necessary to achieving
 the targets. Managers and staff have weekly stand-up huddle meetings in front of their visual
 management boards to discuss the performance and flow of the process.
- In addition, National Programs and Regional Offices hold Monthly Business Review meetings 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 and Chief of Operations hold quarterly performance reviews to monitor overall progress on the agency's Strategic Plan and priority area projects.
- ELMS is designed to ensure that EPA regularly monitors progress toward meeting targets and takes immediate action if expected performance is off track.

Strategy 1: APG Governance and Metric Development:

• In Q1 FY 2018, EPA developed and finalized its performance tracking metric, baseline and targets, issued call for workgroup members, identified a regional leader, and completed the National Pollutant Discharge Elimination System (NPDES) significant noncompliance (SNC) dashboard construction.

Measure: Increase compliance in the Clean Water Act NPDES by increasing the percentage of permittees not in SNC with their permit limits

Baseline: 24.0% rate for individually-permitted NPDES facilities in significant noncompliance or Category 1 Noncompliance, based on July 2016-June 2017 data*

Targets: Maintain 24% SNC through FY 2018; 21% SNC by the end of FY 2019*

Q1 Performance: 21% SNC in December 2017 (Oct 2016 – Sept 2017 data)

^{*} For FY 2019, EPA revised the baseline to 29.4% and FY 2019 target to 25.7%.

Q2 Target: Maintain 24% rate of National Pollutant Discharge Elimination System (NPDES) permittees in significant noncompliance (SNC) through FY 2018* while a program is developed to improve the compliance rate.

Q2 Performance: 25% SNC (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 FY 2017 Q4 SNC rate. For FY 2018 Q1, the rate appears to have returned to a near-baseline level.

Strategy 1 Progress: APG Governance and Metric Development

- National Pollutant Discharge Elimination System (NPDES) SNC workgroup formed four sub-workgroups:
 - Outreach, Engagement, and Policy States, State Organizations, Regions, and Public
 - NPDES Data Quality and Reducing DMR Non-Receipt Category 1 Violations
 - Strategies for Deterring Effluent Limitation Category 1 Violations
 - Written Strategy for the NPDES Measure

Strategy 2 Progress: State engagement and implementation plan development

- 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.
- Began development of materials for state engagement to promote national consistency in communication with states and EPA Regions.

^{*} For FY 2019, EPA revised the baseline to 29.4% and FY 2019 target to 25.7%.

Q3 Target: Maintain 24% of National Pollutant Discharge Elimination System (NPDES) permittees in significant noncompliance (SNC) through FY 2018* while a program is developed to improve the compliance rate.

Q3 Performance: 25% SNC (April 2017 – March 2018 data)

- EPA's goal is to maintain the baseline rate throughout FY 2018 while a program is developed to improve the compliance rate;
- EPA anticipates approaches to reduce noncompliance will be implemented in FY 2019.
- Stability in the SNC rate between Q2 and Q3 FY 2018 supports EPA's understanding that the September 2017
 effort to improve data quality in the Integrated Compliance Information System (ICIS)-NPDES data system, related
 to NPDES report submission violations, resulted in a temporary, artificial improvement in the SNC rate in Q1 of FY
 2018.

Strategy 1 Progress: APG Governance and Metric Development

- EPA's Chief of Operations, Henry Darwin, and EPA's Office of Enforcement and Compliance Assurance (OECA)
 Assistant Administrator Susan Bodine held a webinar for senior state officials in June 2018 to formally
 introduce states to the Goal and encourage state participation in the effort to reduce NPDES significant
 noncompliance.
- OECA held a second webinar in July 2018 for EPA and state NPDES practitioners.
- EPA developed and distributed a fact sheet to be used by EPA and state managers to assist them in understanding and communicating about EPA's new Strategic Plan priority for increasing compliance rates in general, and for this Clean Water Act NPDES program. The fact sheet also included a structure for sustained state engagement in the SNC rate reduction effort.
- Strategy 1 near completion; anticipate completion in FY 2018 Q4.

^{*} For FY 2019, EPA revised the baseline to 29.4% and FY 2019 target to 25.7%.

Summary of Progress – FY 2018 Q3 (continued)

Strategy 2 Progress: State engagement and implementation plan development

- Workgroup chairs continued discussions with Association of Clean Water Administrators (ACWA) to get state personnel engaged in implementation plan development.
- Sub-workgroups have begun to develop strategies that will be combined to create an overall implementation plan.
- Tasks under this strategy will accelerate once state participation is fully established. States are critical partners in this effort, and their participation in implementation plan development is imperative.

Approaches underway to reach target:

- EPA is identifying states with incomplete data and establishing a structure for tracking data quality issues impacting the National Pollutant Discharge Elimination System (NPDES) significant noncompliance (SNC) rate.
- A dashboard for tracking and examining SNC rates was demonstrated during the July webinar for NPDES
 practitioners and made available for state use. As states are beginning to review this information,
 communication with states about their data in Integrated Compliance Information system (ICIS)-NPDES will
 continue.
- EPA is working with states to resolve data issues that have been identified. As additional states are identified as needing EPA assistance, schedules for EPA communications with them are being developed on a rolling basis.

Q4 Target: Maintain 24% of National Pollutant Discharge Elimination System (NPDES) permittees in significant noncompliance (SNC) through FY 2018* while a program is developed to improve the compliance rate.

Q4 Performance: 22% SNC (July 2017 – June 2018 data). EPA worked with states to improve compliance data completeness in EPA's Integrated Compliance Information system (ICIS)-NPDES data system, which resulted in a lower SNC/Category 1 noncompliance rate this quarter.

Strategy 1 Progress: APG Governance and Metric Development - Complete

- An August 21, 2018 memorandum from EPA Assistant Administrator for Enforcement and Compliance
 Assurance Susan Bodine to Regional Administrators on Transition from National Enforcement Initiatives to
 National Compliance Initiatives established the NPDES SNC rate reduction goal as a National Compliance
 Initiative (NCI).
- 32 people from 17 states and a representative from the Association of Clean Water Administrators (ACWA) volunteered to join workgroups for this goal, completing the effort to ensure collaboration with state coregulators throughout implementation of the remaining strategies identified for this goal.

^{*} For FY 2019, EPA revised the baseline to 29.4% and FY 2019 target to 25.7%.

Summary of Progress – FY 2018 Q4 (continued)

Strategy 2 Progress: State engagement and implementation plan development – On track

- Sub-workgroups, which now include state personnel, are developing strategies that will be combined to create an overall implementation plan.
- Workgroup has been analyzing permit compliance data to better understand where to focus strategy efforts to achieve the target while also addressing permits that have the most severe impacts on the environment.
- EPA continues to work with states to improve the accuracy and completeness of data in Integrated Compliance Information system (ICIS)-National Pollutant Discharge Elimination System (NPDES) that impact the identification of significant noncompliance.
- Workgroup has been gathering information about approaches individual states have used to produce high rates of NPDES permit compliance.
- Tasks under this strategy will accelerate now that state participation is fully established.

Strategy 3 Progress: Identify technical approaches to reduce SNC – Not yet initiated

Strategy 4 Progress: Measure effects of approach and adjust as needed – Not yet initiated

Summary of Progress – FY 2019 Q1 & Q2

Q1 Target: 28.5%* SNC

Q1 Performance: 27.7% SNC (Oct 2017 – Sept 2018 data)

Q2 Target: 27.6%* SNC

Q2 Performance: 27.9% SNC (Jan 2018 – Dec 2018 data)

Strategy 1 Progress: APG Governance and Metric Development - Complete

• Upon further analysis of the data, EPA developed a revised baseline and targets for this goal after identifying and accounting for inaccuracies.

Strategy 2 Progress: State engagement and implementation plan development – On track

- EPA drafted a shorter-term set of implementation priorities and an outline for a longer-term implementation plan to cover activities that will extend beyond the term of this FY 2018-2019 Agency Priority Goal.
- A memorandum outlining ways EPA regions will work with authorized state programs has been developed and circulated to EPA regions for review.

Strategy 3 Progress: Identify technical approaches to reduce SNC – On track

- The SNC workgroup has engaged non-federal groups currently working in the area of technical support for small sewerage systems, which often have high rates of SNC, to explore ways to leverage their work in support of this goal.
- EPA developed multiple electronic tools to help EPA and state agencies identify and characterize facilities in or likely to be in SNC in the near future. More such tools and expansion of smaller-scale pilot tools are planned.
- Initiated work with other Federal agencies regarding reducing SNC at federal facilities.

Strategy 4 Progress: Measure effects of approach and adjust as needed – On track

 Working to establish an agreement with Stanford University to study effects of interventions on permittees deemed likely to be in SNC

^{*} For FY 2019, EPA revised the baseline to 29.4% and FY 2019 target to 25.7%.

- **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.
- **Recent Accomplishments:** EPA developed a revised baseline and targets for this goal after identifying and accounting for inaccuracies.

Milestone Summary							
Key Milestone	Milestone Due Date	Milestone Status	Change from last quarter	Owner	Comments		
Identification of APG Metric	Q1 FY 2018	Complete	No change	Office of Compliance			
Calculation of Metric Baseline	Q1 FY 2018	Complete	No change	Office of Compliance			
Determination of Quarterly & Yearly Targets	Q1 FY 2018	Complete	No change	Office of Compliance			
Identification of Workgroup Co-Chairs	Jan.5, 2018	Complete	No change	Office of Compliance	Also identified regional leader		
Creation of APG Metric Workgroup	Jan. 5, 2018	Complete	No change	Office of Compliance			
Build dashboard for tracking 4Q SNC rate	Q1 FY 2018	Complete	No change	Office of Compliance			
Workgroup kickoff, initiate discussions	Jan. 2018	Complete	No change	Office of Compliance			
Initiate discussions with ACWA	Q2 FY 2018	Complete	No change	Office of Compliance			
State engagement on NPDES SNC Workgroup	Q3 FY 2018	Complete	No change	Office of Compliance	Requested state involvement in Q3, full engagement in Q4.		
Dev. introductory Webinars for State Officials	Q3 FY 2018	Complete	No change	Office of Compliance	Executive and practitioner webinars complete		
Dev. materials for EPA Communications with States	Q3 FY 2018	Complete	No change	Office of Compliance	Fact Sheet distributed in Q3, other materials under development		
Identify and invite State workgroup participants	Sept. 30, 2018	Complete	No change	Office of Compliance			
EPA presentation at ACWA national mtg.	Aug. 15, 2018	Complete	No change	Office of Compliance			

- Strategy 2: In close coordination with states and state organizations (Environmental Council of the States,
 Association of Clean Water Administrators), develop a detailed, draft measure implementation plan for reducing
 the rate of violations at NPDES individual permittees meeting EPA's significant noncompliance (SNC) definition,
 including:
 - 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).
 - 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.
- Recent Accomplishments: EPA has drafted a set of implementation priorities and an outline for a longer-term
 implementation plan to cover activities that will extend beyond FY 2019. EPA presented the set of implementation
 priorities to states at a national ACWA meeting. EPA also developed a draft memorandum outlining ways EPA
 regions will work with authorized state programs.

Milestone Summary								
Key Milestone	Milestone Due Date	Milestone Status	Change from last quarter	Owner	Comments			
Priority Approaches for Reducing the NPDES SNC Rate for FY 2019 and Forward	Q1 FY 2019	Complete	Changed from "in progress" to "complete"	APG Workgroup	Moved milestone date from Q2 FY 2018 to Q1 FY 2019 in June 2018 due to communications matters taking precedence. Reframed milestone to focus on near-term priorities in Q1 FY 2019.			
Outline of Implementation Plan – Activities through FY 2023	Q3 FY 2019	In progress	New milestone	APG Workgroup				
Draft Implementation Plan – Activities through FY 2023	Q3 FY 2019	In progress	Changed status from "not yet initiated"	APG Workgroup	Moved milestone date from Q3 FY 2018 to Q1 FY 2019 in June 2018 due to communications matters taking precedence, and to Q3 FY 2019 in April 2019 to align with National Compliance Initiative program.			
Final Implementation Plan	Q4 FY 2019	Not yet initiated	Modified due date	APG Workgroup	Moved milestone from Q2 FY 2019 to Q3 FY 2019 in October 2018, and to Q4 FY 2019 in April 2019 to align with National Compliance Initiative program.			

- **Strategy 3:** In close coordination with states, state organizations, and media associations at a technical level, identify approaches to reduce the rate of significant noncompliance level violations at NPDES major and minor permittees.
- Recent Accomplishments: The SNC workgroup has engaged non-federal groups currently working in the area of technical support for small sewerage systems, which often have high rates of SNC, to explore ways to leverage their work in support of this goal. Multiple electronic tools have been developed to help EPA and state agencies identify and characterize facilities in or likely to be in SNC in the near future. More such tools and expansion of smaller-scale pilot tools are planned. The workgroup has initiated work with other Federal agencies regarding SNC at federal facilities.

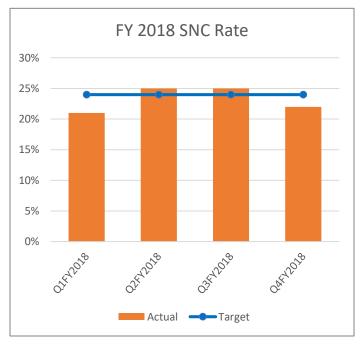
Milestone Summary							
Key Milestone	Milestone Due Date	Milestone Status	Change from last quarter	Owner	Comments		
Discuss Lean and Kaizen tools with States during identification of approaches	Q3 FY 2019	•	Changed due date	APG Workgroup	Adjusted this milestone date from Q1 FY 2019 to Q3 FY 2019 in May 2019 to better align with state discussions		
Initiate implementation of approaches	Q1 FY 2019	Ongoing	Changed status from "not yet initiated"	APG Workgroup	Milestone updated in FY 2018 Q3 to align with implementation plan development schedule under Strategy 3		

- **Strategy 4:** Measure effects on significant noncompliance (SNC) rate of implementation of various approaches employed; use this information to improve ongoing efforts at reducing SNC rates.
- Recent Accomplishments: Nearing completion of a formal agreement with Stanford University to develop a
 method to predict which permittees are likely to be in SNC absent intervention and measure the effect of
 different interventions in preventing SNC.

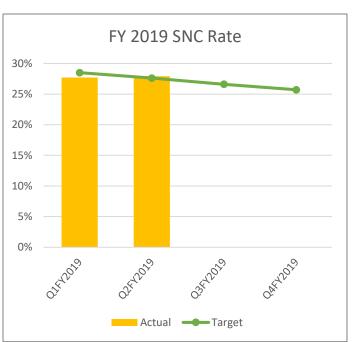
Milestone Summary							
Key Milestone	Milestone Due Date	Milestone Status	Change from last quarter	Owner	Comments		
Review data on impacts of Strategy implementation	Q4 FY 2019	Not yet initiated	No change	APG Workgroup			
Discuss Lean and Kaizen tools with States during identification of approaches	Q4 FY 2019	Not yet initiated	No change	APG Workgroup	May need to adjust this milestone date to better align with state discussions		
Revise strategy based on findings of review	Q1 FY 2020	Not yet initiated	No change	APG Workgroup			
Implement revisions to strategy	Q1 FY 2020	Not yet initiated	No change	APG Workgroup			

Key Indicators

- Baseline (October 2017 September 2018): 29.4% significant noncompliance (SNC) rate for National Pollutant Discharge Elimination System (NPDES) major and minor permittees.
 - Current facility universe: Approx. 41,000 facilities
- APG EOY FY 2019 Target: 25.7% SNC rate for NPDES individually-permitted facilities.*
- <u>NOTE</u>: EPA originally established a baseline of 24% and FY2019 target of 21%, and used these figures throughout FY2018. After identifying and accounting for significant data inaccuracies, EPA revised the baseline and target. EPA retained methodology for deriving the target from the baseline. EPA used the new baseline and target for FY2019 progress summaries.



Actual should be at or below target



^{*}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

Data Accuracy and Reliability

Name of relevant information system:

Integrated Compliance Information System (ICIS)- National Pollutant Discharge Elimination System (NPDES)
data system

Entities that report data to the system:

- 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:

- 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.
 - 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.
 - 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:

- EPA's Office of Enforcement and Compliance Assurance (OECA) has an annual data verification process for
 the collection and reporting of National Pollutant Discharge Elimination System (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:

- EPA's Office of Enforcement and Compliance Assurance (OECA) Leadership, coordination with state organizations, workgroup leadership, strategy and technical expertise
- EPA Regions Leadership, coordination with individual states, workgroup leadership, strategy and technical expertise
- EPA's Office of Water (OW), Office of Wastewater Management (OWM)
- Environmental Council of the States (ECOS), Association of Clean Water Administrators (ACWA) Leadership, strategy and technical expertise

Program Activities:

 National Pollutant Discharge Elimination System (NPDES) Compliance and Enforcement Program – lead and contribute to workgroup, lead implementation of activities to achieve APG

Regulations:

- 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:

EPA NPDES "Enforcement Management System (EMS)" guidance and NPDES Significant Noncompliance (SNC)
 Policy – Defines NPDES SNC criteria and program management expectations

Stakeholder / Congressional Consultations

States are primary stakeholders. EPA held webinars for senior state officials and NPDES state practitioners in June and July 2018. EPA discussed the APG with the Association of Clean Water Administrators (ACWA) members at their national meeting in August 2018.