



MEMORANDUM

SUBJECT: Recommendations from the PFAS NPDES Regional Coordinators Committee
Interim Strategy for Per- and Polyfluoroalkyl Substances in Federally Issued National Pollutant Discharge Elimination System Permits

FROM: David P. Ross
Assistant Administrator

TO: Regional Administrators
Regions 1–10

The purpose of this memorandum is to transmit recommendations developed by a workgroup comprised of U.S. Environmental Protection Agency (EPA or Agency) Headquarters and Regional contacts. By transmitting these recommendations, I am also seeking your support in ensuring the recommendations encompassed in this interim strategy for Per- and Polyfluoroalkyl Substances (PFAS) in federally issued National Pollutant Discharge Elimination System (NPDES) permits are implemented.

EPA's Office of Water (OW) is currently leading multiple actions in the PFAS Action Plan that will help the Agency better understand and effectively manage risk from exposure to PFAS. These OW-led actions include developing analytical methods for detecting PFAS in drinking water and other environmental media, evaluating PFAS treatment techniques, understanding PFAS exposure from various environmental media, and evaluating statutory and regulatory mechanisms to manage adverse human health and environmental impacts from PFAS exposure. OW has made outstanding progress in each of these areas since the Action Plan was announced in February 2019. Among the important work underway are efforts to address point source discharges of PFAS in accordance with Clean Water Act (CWA) Section 402 NPDES permits.

While OW's work is advancing, a need for an interim strategy to address point source discharges of PFAS in EPA-issued NPDES permits has been identified. On February 6, 2020, the workgroup was established to develop an interim NPDES permitting strategy to address PFAS in EPA-issued CWA Section 402 permits. The workgroup was charged with exploring options on how to address these pollutants while the CWA framework for potentially regulating PFAS discharges pursuant to the NPDES program is under development. The workgroup's goal was to develop a strategy that would serve to guide the Agency's CWA NPDES permitting approach on an interim basis across the EPA Regions as informed by input from our state partners. Each of the ten EPA Regions appointed a representative to the workgroup.

To develop potential recommendations for an interim PFAS NPDES strategy, the workgroup conducted a thorough review of the NPDES permitting process, with a specific focus on PFAS in the context of permitting. This included examining CWA Section 402 authorities and permit writing practices to understand where unregulated contaminants, such as PFAS, may fit into the permit development process; analyzing existing state-issued NPDES permits with PFAS monitoring requirements (identified through EPA's NPDES Integrated Compliance Information System (ICIS)) to understand the prescribed analytical methods for detecting PFAS, monitoring frequency, and detection benchmarks in current permits; and obtaining input and perspectives from state partners.

Workgroup Recommendations:

- 1) Include permit requirements for phased-in monitoring and best management practices, as appropriate, taking into consideration when PFAS are expected to be present in point source wastewater discharges.**

The workgroup recommends that EPA NPDES permit writers consider incorporating permit requirements for monitoring PFAS at facilities where PFAS are expected to be present in point source wastewater discharges. The PFAS that could be considered for monitoring are those that will be part of EPA's multi-lab validated wastewater analytical method. This recommendation is consistent with EPA's 2010 NPDES Permit Writers Manual,¹ Section 6.2.1.5, "Pollutants Otherwise Expected to be Present in the Discharge." This section of the NPDES Permit Writer's Manual notes that there may be pollutants for which neither the discharger nor the permitting authority have monitoring data, but because of the raw materials stored or used at the facility, products or byproducts of the facility operation, or available data and information from similar facilities, the permit writer has a strong basis for expecting that the pollutant could be present in the discharge.

The workgroup also recognizes the need for reliable and accurate analytical methods and resulting data when considering the incorporation of monitoring provisions into NPDES permit requirements. The workgroup recommends a phased approach to any potential PFAS monitoring provision, such that monitoring requirements are triggered at a time after EPA's multi-lab validated methods are made available to the public. OW expects to have a multi-lab validated PFAS analytical method available for detecting certain PFAS in wastewater and several other matrices in 2021. EPA water quality methods are developed with particular attention to accuracy and precision and have been through single- and multi-lab validation. Generally, the permitting authority requires the use of methods approved at 40 CFR Part 136 for compliance with such monitoring requirements. If no approved methods are available at 40 CFR Part 136, then the permitting authority has discretion to specify the use of suitable methods.

The workgroup also recommends permit writers consider and incorporate best management practices when appropriate to control or abate the discharge of PFAS where authorized for both direct and indirect dischargers.²

¹ See EPA-833-K-10-001, September 2010.

² For industrial NPDES and stormwater NPDES discharges, 40 CFR 122.44(k). For POTW NPDES discharges, 40 CFR 403.8(f)(1)(iii)(B)(3).

2) Include permit requirements for phased-in monitoring and stormwater pollutant control, as appropriate, taking into consideration when PFAS are expected to be present in stormwater discharges.

The workgroup recommends consideration of pollutant control measures in municipal separate storm sewer system (MS4) and industrial stormwater permits when PFAS are expected to be present in stormwater discharges. In addition, the workgroup recommends a phased approach to incorporating monitoring in these permits, as described above, when deemed appropriate by the permit writer.

MS4 permits generally require permittees to implement traditional stormwater controls necessary to reduce the discharge of pollutants from MS4s to the “maximum extent practicable” and to make progress towards achieving other water quality objectives.^{3,4} MS4 permits typically require controls that focus on programs to reduce pollutant discharges through public education and outreach, illicit discharge detection and elimination, construction site stormwater runoff control, and pollution prevention measures. Additional requirements may be necessary to address specific pollutants of concern for specific water quality problems in receiving waters. In the same way, where PFAS are pollutants of concern, NPDES authorities may consider using these traditional controls to reduce PFAS discharges in stormwater.

Industrial stormwater permits generally require permittees to implement stormwater controls necessary to reduce the discharge of pollutants from industrial activities and to achieve applicable water quality standards. Typically, industrial permittees develop stormwater pollution prevention plans (SWPPPs), implement stormwater control measures to meet permit effluent limits, and conduct inspections and monitoring, where applicable. Where PFAS are pollutants of concern, NPDES authorities may consider using these general types of controls to reduce PFAS discharges in stormwater.

3) Information sharing on permitting practices and the development of a permitting compendium, an information sharing platform, and continuation of the workgroup.

Knowledge sharing and development of a common understanding of issues is helpful for emerging permitting topics in the NPDES program. Such actions help to establish best practices and communities of technical knowledge. The workgroup recommends building on the work that has already started on PFAS-specific communication, knowledge sharing, capacity-building, and training at the federal and state levels.

³ CWA Section 402(p)(3)(B)(iii) provides that “[p]ermits for discharges from municipal storm sewers shall require controls to reduce the discharge of pollutants to the maximum extent practicable including management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.” The Phase II stormwater regulations at 40 CFR 122.34(a) further specify that small MS4s permits “must include permit terms and conditions to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act.”

⁴ To recognize the importance of flexibility in establishing conditions based on the “maximum extent practicable” (MEP) standard and of optimizing reductions in stormwater pollutants on a location-by-location basis, “EPA has intentionally not provided a precise definition of MEP to allow maximum flexibility in MS4 permitting.” 64 FR 68754 (Dec. 8, 1999). In establishing MEP-based permit requirements, EPA suggests consideration of “such factors as conditions of receiving waters, specific local concerns, and other aspects included in a comprehensive watershed plan. Other factors may include MS4 size, climate, implementation schedules, current ability to finance the program, beneficial uses of receiving water, hydrology, geology, and capacity to perform operation and maintenance.” *Ibid.*

Permitting Compendium

The NPDES program has promoted the development and publishing of permitting compendia to share information. These compendia present examples of different permitting approaches that EPA identifies in a nationwide review of NPDES permits in a specific programmatic area. Current permitting compendia are located at <https://www.epa.gov/npdes/municipal-sources-resources>. A PFAS permitting compendium would build on the initial evaluation of permits conducted to date and would serve as a source of information for states and EPA to learn about practices being adopted in NPDES permits to address PFAS across the nation. Consistent with other compendia, EPA would update the document as new information is received and make it available on its website.

Information Sharing Platform

As PFAS information relevant to the NPDES program becomes available, the workgroup believes it would be beneficial to establish a mechanism for information sharing to facilitate frequent and timely communication with the states and our partners. The workgroup recommends that OW encourage utilizing the EPA’s NPDES Permit Writers’ Clearinghouse to share information on PFAS relevant to permitting.⁵ The Clearinghouse is a searchable database containing resources such as permits, templates, and webinars that are shared by NPDES authorities. It is primarily populated and used by permitting authorities and practitioners.

Continuation of the Workgroup

The NPDES PFAS workgroup has provided a forum for robust discussion on PFAS in the context of CWA Section 402 permitting. This resulted in valuable insights from key stakeholders at the EPA regional and state levels. As work on PFAS evolves, this workgroup can serve as an ongoing source of NPDES permitting knowledge and practice through continued collaboration with state permitting authorities.

The workgroup recommends PFAS-specific communication, knowledge sharing, capacity-building, and training opportunities through the following deliverables:

Deliverable	Timeline
Build-out relevant NPDES permitting information on the EPA PFAS website and NPDES Permit Writers’ Clearinghouse.	June 2021
Publish a PFAS permitting compendium that provides examples of permit conditions that have been developed and issued by states and EPA.	Third Quarter 2021
Host quarterly meetings of the Regional Coordinators workgroup.	Beginning January 2021
Broadcast two webinars for states and EPA Regions on relevant PFAS topics.	First Quarter 2021
Work with the Association of Clean Water Administrators (ACWA) to organize 2nd state listening session.⁶	First Quarter 2021

⁵ <https://ofmpub.epa.gov/apex/pwc/f?p=206:1:186468836250::NO::>

⁶ The first state listening session was held on March 18, 2020.

cc: Andrew Sawyers, Director, Office of Wastewater Management
Deborah Nagle, Director, Office of Science and Technology
Jennifer McLain, Director, Office of Groundwater and Drinking Water
John Goodin, Director, Office of Wetlands, Oceans and Watersheds
Water Division Directors, Regions 1–10

Workgroup Representatives:

Sally Gutierrez, ORD

Ellen Weitzler and Thelma Murphy, R1

Karen Obrien and Virginia Wong, R2

Ryan Shuart and Carissa Moncavage, R3

Craig Hesterlee and Becky Allenbach, R4

Russell Rasmussen, R5

Maria Martinez, R6

Glenn Curtis and Diane Huffman, R7

Al Garcia, R8

Amelia Whitson, R9

Mathew Martinson and Brian Nickel, R10

Carrie Wehling and Jessica Zomer, OGC

Brian Damico, Robert Wood, OW/OST

Rebecca Christopher, Jan Pickrel, Rachel Urban, Jenny Molloy, Marcus Zobrist, Maria Lopez-Carbo, and Christopher Kloss, OW/OWM