

NPDES PQR Reference Document

FY24-FY28 Cycle

Contents

- I. PQR OVERVIEW 3
- II. STATE PROGRAM INFORMATION 5
 - A. Program Background 5
 - B. Permit Universe 6
 - C. Selected EPA Priorities 6
 - 1. *Climate Impacts and Resilience*..... 6
 - 2. *Environmental Justice*..... 7
 - 3. *Per- and Poly-fluoroalkyl Substances (PFAS)* 8
- III. CORE REVIEW 9
 - A. Basic Facility Information and Permit Application..... 9
 - B. Effluent Limitations..... 10
 - 1. *Technology-based Effluent Limitations* 10
 - 2. *Reasonable Potential and Water Quality-Based Effluent Limitations*..... 11
 - 3. *Determination of Final Effluent Limitations*..... 12
 - C. Monitoring and Reporting Requirements 13
 - D. Standard and Special Conditions 14
 - E. Administrative Process..... 14
 - F. Documentation 15
- IV. Action Items 16

This document provides an overview of the U.S. Environmental Protection Agency's (EPA) Program and Permit Quality Review (PQR) process. It serves as a general reference document, providing additional context for the PQR reports, the purpose of PQRs as an oversight mechanism, and relevant regulatory information for permitting elements reviewed in a PQR.

I. PQR OVERVIEW

A PQR is an evaluation of a National Pollutant Discharge Elimination System (NPDES) permitting authority's permits and permitting practices.¹ EPA undertakes this evaluation to determine whether permits are developed in a manner consistent with applicable requirements in the Clean Water Act (CWA) and federal regulations that apply to the NPDES program. PQRs also consider EPA guidance, policies, and other best practices. Through this oversight mechanism, EPA promotes national consistency, recognizes successes in NPDES program implementation, and identifies opportunities for improvement in the development of NPDES permits. PQRs are conducted under EPA's state program oversight and information collection authority on a cycle of approximately five years. The current PQR cycle is fiscal years 2024-2028.

PQRs are conducted following EPA's national [NPDES PQR Toolkit](#), a set of standardized tools.² A PQR consists of two main components:

1. State Program Information

EPA Regions collect information on the state permitting authority's NPDES program using the state's written and interview responses to the *PQR Questionnaire* from the toolkit. A Region may also gather information from other materials provided during the PQR and/or from the state's website. This process ensures the Region is aware of the state's current permitting practices, understands the decision-making process involved in permit development, and learns about program aspects that might not otherwise arise directly from reviews of permits and their associated documentation. This additional information includes challenges the state is facing in permit development and issuance, initiatives the state has taken to improve permitting processes and implementation, the permit universe and backlog concerns, and how the state is addressing selected EPA priorities.

By collecting information on states' challenges and concerns, EPA can connect states that request support in addressing similar program challenges, thereby advancing relationships between state permitting authorities while strengthening programs. Likewise, insights into states' initiatives allow EPA to share, with other states and the

¹ During a PQR, EPA Regions review permits issued by states with NPDES program authorization. EPA Headquarters reviews permits issued by EPA Regions for states without authorization for the NPDES program or particular program components. In the interest of clarity, and because most PQRs are for state-issued permits, this document uses "EPA Region" for the entity conducting the PQR and "state" for the entity being reviewed. Nevertheless, the processes described here apply equally to EPA Headquarters' review of permits issued by EPA Regions.

² <https://www.epa.gov/npdes/npdes-program-and-permit-quality-review-toolkit>

public, NPDES “success stories” and lessons learned to continue improving program implementation and advance EPA priorities. Section II provides more details on the State Program Information component of a PQR.

2. Permit Review

Permit reviews primarily consist of an evaluation of selected permits, their fact sheets or statements of basis,³ and administrative records (required for EPA-issued permits and for most state-issued permits under state law). The reviews are supplemented, as necessary, by information gathered from the *PQR Questionnaire*. The permit review focuses on two areas:

- *Core Review:*
EPA evaluates a selected set of a state’s permits (and corresponding permit records) using the standard assessment criteria in the *Core Review Checklist* from the toolkit. The assessment criteria are based on the [Central Tenets of the NPDES Permitting Program](#).⁴ The core permit review is intended to evaluate similar types of permits in all states while also providing a representative look at the state’s permitting practices. To identify permits, EPA Regions use EPA’s Integrated Compliance Information System–National Pollutant Discharge Elimination System (ICIS–NPDES) to conduct a search for recently issued permits. EPA selects a minimum of 10 individual permits for the core review. Most permits selected are for major facilities, and the ratio of publicly owned treatment works (POTW) to non-POTW permits selected approximately reflects the state’s permit universe. Additionally, to capture current permitting practices, EPA selects permits issued within the two years preceding the review, when possible. If an insufficient number of permits meet this criterion, EPA could review permits issued up to four years prior to the review. Section III provides more information on the Core Review.
- *Regional Topic Review(s):*
When planning a PQR, an EPA Region selects one or more regional topics to review that target regionally specific permit types or particular aspects of permits. EPA evaluates a selected set of these permits and corresponding records to assess the permit or state program’s effectiveness in addressing the Regional topic(s). The Region may use standardized assessment criteria (such as checklists) for the review, or it may reference applicable NPDES requirements

³ Per 40 CFR 124.8(a), every EPA and state-issued permit must be accompanied by a fact sheet if the permit: is a major facility, incorporates a variance or requires an explanation under 124.56(b), is an NPDES general permit, is subject to widespread public interest, is a Class I sludge management facility, or includes a sewage sludge land application plan. A statement of basis, as described in 40 CFR 124.7, is required for EPA-issued permits that are not required to have a fact sheet, though many states also require a fact sheet or statement of basis for all NPDES permits.

⁴ <https://www.epa.gov/sites/default/files/2015-09/documents/tenets.pdf>

and EPA guidance to identify specific evaluation criteria for each regional topic selected.

A regional topic may be unique to each PQR. When selecting a regional topic, a Region may consider factors such as challenges the state program is facing in particular NPDES program areas, new EPA or state regulatory requirements, significant levels of industry or activities that may be unique to the state or Region, and/or activities that pose a significant environmental impact. Examples of regional topic reviews conducted over the last two PQR cycles are whole effluent toxicity (WET), CWA section 316(b), mining permits, compliance schedules, reasonable potential analysis (RPA), implementation of total maximum daily loads (TMDLs), and antidegradation.

Based on information gathered during a PQR, the EPA Region drafts a report using the *PQR Report Template* from the toolkit. In addition to the state program information and findings from the permit reviews, the report identifies action items to address areas for program improvement. It also lists action items from the previous PQR(s), provides the status of each, and describes any steps the state has taken to address them. To ensure consistency in the evaluation of findings from state to state, the Region sends EPA Headquarters a draft report for review. After addressing Headquarters' comments, the Region then sends the revised draft report to the state for review. Following the state's review, the Region's subsequent revisions, and EPA Headquarters' final review, EPA Headquarters publishes the report on EPA's [NPDES PQR Reports](#) website.⁵

II. STATE PROGRAM INFORMATION

The following subsections describe the state program information collected during the PQR.

A. Program Background

The EPA Region gathers information on the state's NPDES program to ensure that the Region is aware of the state's current practices as well as challenges and initiatives. The *PQR Questionnaire* collects information on the state program's:

- structure, responsibilities, locations, and staffing;
- application forms and processes;
- policies, tools, and data systems for development of technology- and water quality-based effluent limitations, including procedures to address anti-backsliding and antidegradation;
- approaches to developing monitoring and reporting requirements and standard conditions; and

⁵ <https://www.epa.gov/npdes/regional-and-state-npdes-program-and-permit-quality-review-pqr-reports>

- administrative processes (e.g., public participation, administrative recordkeeping).

While the above information is collected and discussed during the PQR, the PQR report only summarizes the most relevant information regarding the state's permitting practices, focusing on program aspects that have changed significantly since the previous PQR.

B. Permit Universe

Prior to the permit review, the EPA Region gathers data on the state's permitting universe and permit backlog rates (backlogged permits are those not reissued within 180 days from permit expiration). The Region might already have some of this information through its oversight role or by searching ICIS-NPDES. The *PQR Questionnaire* also contains questions requesting this information. The state's description of its NPDES permit universe provides a general overview of permitted facilities by type (POTW and non-POTW), size (major and non-major), and general permit categories. The state's backlog information includes an explanation of causes, such as technical issues or staffing resources.

C. Selected EPA Priorities

The EPA Region will gather information on how the state is addressing certain overarching EPA priorities using the *PQR Questionnaire* and supplemented by permit reviews using the *PQR Core Checklist*. The three topics discussed in this section were chosen for this PQR cycle because EPA has identified them as priorities in the [FY2022-2026 EPA Strategic Plan](#)⁶ and/or the [FY2023-FY2024 National Water Program Guidance](#) (NWPG).⁷

Although the NPDES regulations do not contain specific requirements for permits or permit programs to address these priorities, the PQR process provides an opportunity for an EPA/state conversation about how a state addresses them in its permitting processes. This information may be used to identify and share best management practices.

1. Climate Impacts and Resilience

Goal 1 of EPA's Strategic Plan is "Tackle the Climate Crisis." EPA's water program, including the NPDES program, plays an important role in achieving this goal, particularly Objective 1.2: Accelerate Resilience and Adaptation to Climate Change Impacts.

EPA's expectations for climate adaptation are described in detail in its 2021 [Climate Adaptation Action Plan](#),⁸ which advances [Executive Order \(E.O.\) 14008: Tackling the Climate Crisis at Home and Abroad](#).⁹ The Climate Adaptation Action Plan describes the following five priority actions:

1. Integrate climate adaptation into EPA programs, policies, rulemaking processes, and enforcement activities.

⁶ <https://www.epa.gov/system/files/documents/2022-03/fy-2022-2026-epa-strategic-plan.pdf>

⁷ https://www.epa.gov/system/files/documents/2022-10/fy-2023-2024-ow-npg_1.pdf

⁸ <https://www.sustainability.gov/pdfs/epa-2021-cap.pdf>

⁹ <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/>

2. Consult and partner with Tribes, states, territories, local governments, environmental justice organizations, community groups, businesses, and other federal agencies to strengthen adaptive capacity and increase the resilience of the nation, with a particular focus on advancing environmental justice.
3. Implement measures to protect EPA's workforce, facilities, critical infrastructure, supply chains, and procurement processes from the risks posed by climate change.
4. Measure and evaluate performance.
5. Identify and address climate adaptation science needs.

The NWPG identifies "Addressing and Mitigating the Effects of Climate Change" as one of four priority areas. The NWPG and EPA Office of Water's [Climate Adaptation Implementation Plan](#)¹⁰ identifies the eight overall objectives for the Office of Water's programs, including the following that have direct potential applicability to NPDES:

- Integrate Climate Considerations in CWA and SDWA Actions and Programs;
- Invest in Ecosystem Protection and Restoration;
- Support Assessment of Climate Risks and Climate-Informed Decision-making; and
- Improve Availability of Data and Information to Support Climate-Informed Decisions.

The PQR provides an opportunity to gather information about climate impact and resilience considerations in a state's NPDES program and permits, such as overall policies, guidance, or other tools the state uses, or is considering, to address climate change. The permit review identifies whether the permit writer considered climate impacts and resilience in developing permit conditions, and if so, how. Climate impacts might be considered for factors such as critical low flow evaluations, precipitation statistics, and ambient water temperature data. Additionally, special conditions that address the potential for sea level rise or that address discharges related to water-reuse might be considered.

2. Environmental Justice

Environmental justice (EJ) refers to the fair treatment and meaningful involvement of all people regardless of race, color, culture, national origin, income, and educational levels with respect to the development, implementation, and enforcement of protective environmental laws, regulations, and policies.¹¹

¹⁰ https://www.epa.gov/system/files/documents/2022-10/bh508-OW-12113_ClimateAdaptatImplementPlan_508final.pdf

¹¹ "Environmental justice" is defined at <https://www.epa.gov/environmentaljustice/ej-2020-glossary>. "Fair treatment" means that no group of people, including a racial, ethnic, or socioeconomic group, should bear a disproportionate share of the negative environmental consequences from industrial, municipal, and commercial operations or the execution of federal, state, local, and Tribal programs and policies. EPA's programs have expanded this concept to include consideration of the distribution of benefits, as well as burdens, across all populations. "Meaningful involvement" means that potentially affected community residents can participate in decisions about a proposed activity that will affect their environment and/or health. In other words, decision-

In its Strategic Plan, under Goal 2 (“Take Decisive Action to Advance Environmental Justice and Civil Rights”), EPA describes long-term performance goals to meet three objectives:

1. Promote Environmental Justice and Civil Rights at the Federal, Tribal, State, and Local Levels
2. Embed Environmental Justice and Civil Rights into EPA’s Programs, Policies, and Activities
3. Strengthen Civil Rights Enforcement in Communities with Environmental Justice Concerns

On January 29, 2024, EPA released the [Program Policy Addressing Environmental Justice and Equity in NPDES Permitting](#), which encourages the use of existing CWA authorities and other federal laws to help mitigate potential adverse effects of a permitting action where the EPA is the permitting authority or where the EPA is supporting a state in issuing an NPDES permit.¹² As mentioned in the policy, the PQR provides an opportunity to identify, highlight, and share best practices used by states and Regions to address environmental justice concerns. Specifically, the PQR collects information about the use of existing tools to identify and assess impacts (e.g., EJScreen, cumulative impact analysis), practices for permit-specific outreach and public participation, and any permit terms or conditions developed to address EJ concerns. The NPDES permitting process provides opportunities to support the goals of fair treatment and meaningful involvement for disadvantaged communities.

3. Per- and Poly-fluoroalkyl Substances (PFAS)

EPA’s Strategic Plan identifies PFAS contamination as an urgent public health and environmental threat facing communities across the United States, and EPA’s NWPG identifies “Monitoring and Remediating PFAS” as a priority area. The EPA Council on PFAS developed the “[PFAS Strategic Roadmap: EPA’s Commitments to Action 2021-2024](#)”¹³ (PFAS Strategic Roadmap) to outline EPA’s approach. One of the key actions identified in the PFAS Strategic Roadmap is to leverage NPDES permitting to decrease PFAS discharges to waterways, reduce discharges of PFAS at the source, and obtain more comprehensive information through monitoring on the sources of PFAS and quantity of PFAS discharged by these sources. Also, EPA will use the effluent monitoring data to inform which industrial categories should be studied for potential future effluent limitations guideline (ELG) actions to control PFAS in wastewater discharges.

In December 2022, EPA issued a memorandum, “[Addressing PFAS Discharges in NPDES Permits and Through the Pretreatment Program and Monitoring Programs](#).”¹⁴ It describes steps permit

makers seek the involvement of those potentially affected; the decision-making process will consider the concerns of all participants; and the public’s contribution can influence the permitting process.

¹² <https://www.epa.gov/system/files/documents/2024-01/npdes-ej-program-guidance-principles-recommended-practices-january-2024.pdf>

¹³ https://www.epa.gov/system/files/documents/2021-10/pfas-roadmap_final-508.pdf

¹⁴ https://www.epa.gov/system/files/documents/2022-12/NPDES_PFAS_State%20Memo_December_2022.pdf

writers can implement under existing authorities to reduce the discharge of PFAS. Additionally, EPA also released the information sheet [Pollution Prevention Strategies for Industrial PFAS Dischargers](#),¹⁵ as a companion to the December 2022 memorandum. The memorandum and companion information sheet provide recommendations to NPDES permitting authorities to address PFAS discharges when they are authorized to administer the NPDES permitting program and/or pretreatment program.

The PQR provides an opportunity to gather information about approaches to addressing PFAS in a state's NPDES program and permits. The PQR collects information on monitoring for PFAS, effluent limitations, best management practices, and public notice procedures. The NPDES permitting process provides opportunities to support monitoring efforts and decrease PFAS discharges to waterways.

III. CORE REVIEW

The following sub-sections provide a general overview of the regulatory basis for each NPDES permit element reviewed during a PQR. The PQR tools contain more comprehensive details on each permit element and are supplemented by guidance, policy, and best practices.

A. Basic Facility Information and Permit Application

1. Basic Facility Information

Fact sheets must identify certain information about the facility such as a description of the type of permitted facility or activity and, when appropriate, the location of the outfall(s) (40 CFR 124.8 and 124.56). Permits, which authorize the discharge of pollutants from a point source to a water of the U.S., shall be effective for not more than five years (CWA section 402(b)(1)(B) and 40 CFR 122.46).

2. Permit Application Requirements

Applications provide information related to facility type, facility location, discharge points, operations, treatment processes, and effluent characterization. The permit writer uses application information to understand the characteristics of the discharge, which is necessary for developing appropriate effluent limitations and other permit conditions.

NPDES regulations at 40 CFR 122.21 and 122.22 specify application requirements for those seeking NPDES permits. If a state has not adopted the use of EPA's NPDES application forms in its program, then the state-developed application forms must include all the application requirements applicable to state programs, as identified in 40 CFR 123.25. Additionally, a state may have adopted the regulations at 40 CFR 122.21(c) and (d), which require that complete applications be submitted at least 180 days prior to commencement of discharge or 180 days prior to permit expiration, respectively.

¹⁵ <https://www.epa.gov/system/files/documents/2023-07/PFAS-BMP-Fact-Sheet.pdf>

NPDES regulations at 40 CFR 122.21 require specific information and data for certain facility types and categories. For example, each POTW must submit data from a minimum of three samples for parameters listed in Appendix J of 40 CFR 122.21, with some parameters based on the facility's design capacity (40 CFR 122.21(j)(4)). Furthermore, a POTW must submit the results of WET tests if it has a design flow rate greater than or equal to 1 million gallons per day, if it has an approved pretreatment program, or if the permitting authority requires it to do so (40 CFR 122.21(j)(5)). Additionally, a POTW is required to submit data on industrial discharges (40 CFR 122.21(j)(6)), which enables the permitting authority to assess whether pretreatment requirements are necessary. An industrial applicant, by comparison, is required by 40 CFR 122.21(g)(7) to submit quantitative data for certain parameters based on its industrial category.

Furthermore, data quality requirements exist to ensure monitoring data are collected using appropriate analytical methods. All required quantitative data must be collected in accordance with sufficiently sensitive analytical methods approved under 40 CFR Part 136 or required under 40 CFR chapter I, subchapter N or O (40 CFR 122.21(e)(3)).

NPDES regulations at 40 CFR 122.22 specify the signatories and certification for all permit applications. For a corporation, the signatory is a responsible corporate officer. For a partnership, the signatory is a general partner. For a sole proprietorship, the signatory is the proprietor. For a municipality, the signatory is the principal executive officer or ranking elected official. A correct application contains the appropriate signatures and certifications.

Finally, the permit application must be appropriate to the facility type (e.g., POTW, industrial facility, aquaculture facility, concentrated animal feeding operation, stormwater, nonprocess wastewater) and comply with the application requirements in 40 CFR Part 122, Subpart B. The application must be made publicly available by request during the public notice process (40 CFR 124.10(d)(1)(iv)), and EPA recommends the complete permit application be retained in the administrative record.

B. Effluent Limitations

1. Technology-based Effluent Limitations

CWA section 301(b) and the NPDES regulations at 40 CFR 125.3(a) identify technology-based treatment requirements, which represent the minimum level of control that must be imposed in a permit. Technology-based effluent limitations (TBELs) require a minimum level of effluent quality that is attainable using demonstrated technologies for reducing discharges of pollutants or pollution into the waters of the United States. TBELs are developed independently of considering the potential impacts of a discharge on the receiving water.

TBELs for POTWs

Under 40 CFR 125.3(a)(1), TBELs for POTWs must be based on secondary treatment. EPA regulations in 40 CFR Part 133 specify standards for secondary treatment, equivalent-to-secondary treatment, and several special considerations applied on a case-by-case basis. These

standards impose limits for five-day biochemical oxygen demand (BOD₅), total suspended solids (TSS), pH, and percent pollutant removal, or authorized alternatives.

In cases where the effluent limits were adjusted from secondary treatment standards, the permit fact sheet should identify which special considerations from 40 CFR 133.103 applied, and include any calculations used to derive the adjusted limits (40 CFR 124.56).

TBELs for Non-POTW Dischargers

Permits issued to non-POTWs that are existing sources must require compliance with a level of treatment performance equivalent to the best practicable control technology currently available (BPT), best available technology economically achievable (BAT), or best conventional pollutant control technology (BCT) (40 CFR 125.3(a)(2)). Permits issued to non-POTWs that are new sources must require compliance with new source performance standards (40 CFR 122.44(a)(1) and Part 129). Where federal ELGs have been developed for the discharge category applicable to the permit, the permit's TBELs must be based on the application of these guidelines.

Under 40 CFR 125.3(c)(2), if ELGs are not applicable, a permit must include technology-based requirements that meet the appropriate level of control (e.g., BPT, BAT, BCT) developed on a case-by-case basis using best professional judgment (BPJ) in accordance with the criteria outlined at 40 CFR 125.3(d) and statutory factors specified in CWA sections 301(b)(2) and 304(b). The site-specific TBELs reflect the BPJ of the permit writer, considering the same statutory factors EPA would use in promulgating an ELG, but they are applied to the circumstances relating to the applicant/facility.

Consistent with 40 CFR 124.56, the fact sheet should identify any technology-based limitations and standards that EPA may have promulgated for the industrial category that applies to the facility. A facility might have both new and existing sources, produce multiple products, or have production operations that fall under more than one category or subcategory of the effluent guidelines. If one or more ELGs apply, the permit fact sheet should include any calculations used to determine effluent limitations for the discharge based on the ELGs. The fact sheet should reflect all decisions regarding how pollutant limits are expressed (e.g., whether they are mass-based or concentration-based). Where no ELG applies, the fact sheet should indicate which limits were developed on a case-by-case BPJ basis and how criteria at 40 CFR 125.3(d) were met. The fact sheet also should address any consideration of state laws or regulations governing TBELs that might require performance standards more stringent than those required by federal ELGs. EPA recommends that the permit record include the data set, such as production and flow data, used to develop the final TBELs.

2. Reasonable Potential and Water Quality-Based Effluent Limitations

CWA section 301(b)(1)(C) and NPDES regulations at 40 CFR 122.44(d)(1) require NPDES permits to include any requirements in addition to or more stringent than technology-based requirements where necessary to achieve state water quality standards (WQS), including

narrative criteria for water quality. Water quality-based effluent limits (WQBELs) are designed to protect water quality by ensuring that WQS are met in the receiving water.

To establish whether WQBELs are necessary, the permitting authority evaluates whether any pollutants or pollutant parameters cause, have the reasonable potential to cause, or contribute to an excursion above any applicable state WQS (40 CFR 122.44(d)(1)(i)). EPA and many authorized NPDES states refer to the evaluation as a reasonable potential analysis (RPA). States may have their own methods for conducting an RPA, or may follow the approach outlined in EPA's [Technical Support Document for Water Quality-based Toxics Control](#).¹⁶ RPAs are typically quantitative, using effluent and receiving water data and modeling, but a qualitative approach may be used in the absence of data. Some permitting authorities have developed spreadsheets or other software tools to conduct the RPA, reflecting their state's water quality criteria, mixing zone implementation procedures, ambient water quality data, and TMDLs.

Where the RPA determines that a discharge causes, has the reasonable potential to cause, or contributes to an excursion above any state WQS, and an applicable TBEL does not achieve the WQS, then a WQBEL must be included in the permit. Additionally, the permit writer must ensure that effluent limits developed to meet the applicable WQS are consistent with any EPA-approved wasteload allocation,¹⁷ such as from a TMDL (40 CFR 122.44(d)(1)(vii)).

Consistent with 40 CFR 124.56, a fact sheet should document all considerations made regarding any RPA analysis and development of WQBELs, such as the process, calculations, and results. If mixing is allowed by the state's WQS, the fact sheet should describe why a dilution allowance is or is not appropriate for the discharge. Furthermore, the fact sheet should illustrate the calculation of the dilution allowed, describe the data considered in the calculation, and identify how the final effluent limitations were developed incorporating the dilution allowance. The fact sheet also should address whether and how ambient water quality conditions, and the impacts from other discharges to the receiving water, were considered in developing the WQBEL(s). EPA recommends that the permit record include the data set(s) used in any RPA and WQBEL calculations.

3. Determination of Final Effluent Limitations

When determining the final effluent limitations for a permit, the permit writer must ensure that all applicable statutory and regulatory requirements, including technology and water quality standards, are fully implemented. The permit writer determines the calculated limitations (TBELs, WQBELs, or some combination of the calculated limitations) that will ensure that all applicable CWA standards are met.

With limited exceptions, the anti-backsliding statutory (CWA section 402(o)(1)) and regulatory (40 CFR 122.44(l)(1)) provisions prohibit the renewal, reissuance, or modification of an existing

¹⁶ <https://www3.epa.gov/npdes/pubs/owm0264.pdf>

¹⁷ A wasteload allocation (WLA) is the portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution. WLAs constitute a type of water quality-based effluent limitation (40 CFR 130.2(h))

NPDES permit that contains effluent limitations, standards, or conditions that are less stringent than those established in the previous permit.¹⁸ If any of the limitations in a reissued permit are less stringent than limitations on the same pollutant in the previous NPDES permit, the fact sheet should include information showing how less stringent effluent limitations are consistent with the provisions that allow backsliding (40 CFR 124.56).

For new or increased discharges, the state must conduct an antidegradation review, to ensure the permit is written to maintain existing high quality of surface waters, or if appropriate, allow for some degradation. The WQS regulations at 40 CFR 131.12 require states to develop and adopt an antidegradation policy and implementation methods, and outline the common elements of the antidegradation review process. When an antidegradation review is applicable, the fact sheet should address how the state considered and applied its antidegradation policy, clearly explaining the antidegradation analysis, if conducted, and its consideration in developing the WQBELs and other permit requirements (40 CFR 124.56).

C. Monitoring and Reporting Requirements

Monitoring is performed to assess compliance with effluent limitations established in an NPDES permit, establish a basis for enforcement action, assess treatment efficiency, characterize effluents, and characterize receiving water quality.

All monitoring must be sufficient to yield data that are representative of the monitored activity (40 CFR 122.41(j) and 122.48(b)). The permit must specify monitoring type, intervals, and frequency (40 CFR 122.48(b)) along with requirements concerning the proper use, maintenance, and installation of monitoring equipment or methods (including biological monitoring methods when appropriate) (40 CFR 122.48(a)).

NPDES regulations at 40 CFR 122.44(i) require permits to include monitoring for pollutant mass (or other applicable measurement) and effluent volume, and to provide other measurements (as appropriate) using the test methods approved under 40 CFR Part 136. In some cases, there may be two or more approved Part 136 analytical methods available for the analysis of a parameter. In such cases, the permit writer should determine whether there is a need to select one of the approved methods and include a requirement mandating the use of only the selected method. The selected method must be sufficiently sensitive to quantify pollutants at concentrations equal to or less than the permit limits, or have the lowest minimum level of the approved analytical methods (40 CFR 122.44(i)(1)(iv)). NPDES regulations at 40 CFR 122.44(i) also establish monitoring frequency requirements. The permit must require the permittee to monitor for all pollutants limited in the permit at a frequency sufficient to characterize the effluent quality and to detect events of noncompliance. Decisions for setting monitoring conditions should be described in the fact sheet, including identification of the specific state policy or internal guidance referenced.

¹⁸ Note, in addition to effluent limits, the anti-backsliding provisions apply to permit standards and conditions.

The permittee must maintain records and report on monitoring activities. The regulations at 40 CFR 122.41(l)(4)(i) require that monitoring results be reported on a discharge monitoring report (DMR). Data reported include both data required by the permit and any additional data the permittee has collected. All facilities must submit reports (on discharges and sludge use or disposal) at least annually, as required by 40 CFR 122.44(i)(2). The regulations also specify that permits must include language requiring permittees to retain monitoring records for 3 years (5 years for sewage sludge activities) subject to extension by the State Director (40 CFR 122.41(j)(2)). Also, monitoring records must include the following: date, place, and time of sampling; name of sampler; date of analysis; name of analyst; analytical methods used; and analytical results (40 CFR 122.41(j)(3)). The permit may also require other types of reporting, such as pretreatment reports for POTWs with approved pretreatment programs, which must be submitted at least annually (40 CFR 403.12(i)). For DMRs and various program-specific reports, NPDES-regulated entities must report the required information electronically (40 CFR Part 127).

D. Standard and Special Conditions

Standard conditions (40 CFR 122.41 and 122.42) delineate various legal, administrative, and procedural requirements of the permit. Standard conditions cover various topics, including definitions, testing procedures, records retention, notification requirements, penalties for noncompliance, and other permittee responsibilities. The standard conditions provided in 40 CFR 122.41 apply to, and must be included in, all types and categories of NPDES permits. Depending on the type of facility (e.g., industrial, POTW, concentrated animal feeding operation, stormwater), certain conditions in 40 CFR 122.42 might also apply.

A state may include the federal standard conditions as a separate attachment to the NPDES permit, verbatim in the permit, or by reference to the regulations. Alternatively, a state may modify the language of the federal standard conditions as long as the requirements are as stringent as, or more stringent than, the requirements at 40 CFR 122.41 and 122.42.

Permits may also contain special conditions based on the unique characteristics of the facility. Special conditions supplement numeric effluent limitations and require the permittee to undertake activities designed to reduce the overall quantity of pollutants being discharged, reduce the potential for discharges of pollutants, or collect information that could be used in determining future permit requirements. Such conditions could include additional monitoring and special studies, best management practices, or compliance schedules. Some special conditions may also be implemented specifically for municipal facilities, such as conditions applicable to pretreatment programs, biosolids, and sewer overflows. Where a permit contains special conditions, such conditions must be consistent with applicable regulations.

E. Administrative Process

The administrative process includes coordinating EPA review of the draft (or proposed) permit (40 CFR 123.44); providing public notice (40 CFR 124.10); conducting hearings, if applicable (40 CFR 124.11 and 40 CFR 124.12); responding to public comments (40 CFR 124.17); and modifying a permit (if appropriate) after issuance (40 CFR 124.5). During the PQR, the Region discusses

each element of the administrative process with the state, and reviews materials from the administrative process as they relate to the permit review.

The state must provide public notice of the draft permit and at least 30 days for public comment (40 CFR 124.6). The draft permit is usually submitted for public notice after undergoing internal review by the permitting authority. Most state-issued major permits typically undergo public notice concurrent with EPA review. The fact sheet must include a description of the public notice procedures for the draft permit (40 CFR 124.8(b)(6)).

Public notice of a draft permit might elicit comments from concerned individuals or agencies. Under 40 CFR 124.17, the state must briefly describe and respond to all significant comments on the draft permit raised during the public comment period or during any hearing. Additionally, the state must specify which provisions, if any, of the draft permit have been changed in the final permit decision, and the reasons for the change. The response to comments must be available to the public.

Under 40 CFR 123.44, EPA may review draft or proposed state-issued permits and provide comments on, objections to, or recommendations with respect to the permit, within 90 days of receiving the permit. Under CWA section 401(a)(1), EPA may not issue an NPDES permit until a certification is granted or waived by the state or Tribe in which the discharge originates (or will originate). All CWA section 401 certification actions for EPA-issued NPDES permits must comply with the certification regulations located at 40 CFR 121 and 40 CFR 124.53-55.

Under certain circumstances, it may be necessary to modify the permit before its expiration date. Certain minor modifications may be made without public notice, as described in 40 CFR 122.63. Otherwise, as described in 40 CFR 122.62, a draft permit must be prepared and public noticed.

F. Documentation

Fact sheets play an important role in the review process because they include essential information about the permit's contents and development. In general, fact sheets must describe the type of facility or activity permitted; the type and quantity of pollutants discharged; the technical, statutory, and regulatory basis for permit conditions; the basis and calculations for effluent limits and conditions; the reasons for application of specific limits; rationales for variances or alternatives; and procedures for issuing the final permit (40 CFR 124.8 and 124.56).

In addition to the fact sheet, permit documentation often includes an administrative record. Federal regulations require that EPA-issued permits have an administrative record containing specific elements (40 CFR 124.9 and 124.18), and most state legal requirements include similar provisions for an administrative record. While some of the content is specified by federal and state regulation, the remainder is dictated by good project management.

Examples of files recommended for a complete administrative record include the permit application and supporting attachments (e.g., topographical map, wastewater flow diagram), previous permit, draft permit, fact sheet or statement of basis, all items cited in the fact sheet or statement of basis, copy of the public notice, comments received, response to comments, meeting reports, correspondence between the applicant and regulatory personnel, notes from telephone calls, whether the permit has been contested or appealed for review, and any other information relevant to the permit (e.g., pretreatment program information). Where EPA issues the permit, the administrative record should also document the Section 401 certification process and, for a new source, any environmental assessment, environmental impact statement, or finding of no significant impact.

Maintaining permit records in an orderly, complete, and retrievable manner allows personnel from the permitting authority to reconstruct the justification for a given permit and defend the permit during any legal proceedings.

IV. Action Items

Based on information gathered during a PQR, the EPA Region identifies program strengths and areas for improvement. To address areas for improvement, the PQR report identifies action items, which are divided into two categories to distinguish the priority that should be placed on each item.

- **Essential Action Items:** Address inconsistencies with a federal regulation, which EPA cites for each essential action item.
- **Recommended Action Items:** Make recommendations based on guidance, policies, or other best practices.

Essential action items are tracked by EPA Headquarters on an annual basis, and essential and recommended action items are reviewed during subsequent PQRs. The PQR report summarizes the state's efforts to address the action items identified during the previous PQR(s), and if applicable, any steps taken to resolve items identified in the current PQR. The action items and subsequent reviews during a PQR allow EPA and state to track progress, identify long-term trends, and plan performance discussions.