

Region [XX] NPDES Permit Quality Review

[Insert State]

[Insert Date]

[Insert Region and Address]

NOTE: All language presented in this report template is intended to help you and provide you with as much template language as possible for the PQR Report. If preferred, Regions may alter template language for specific areas, as appropriate. Should you choose to alter the template, please maintain the structure of the report so that the final deliverable remains consistent across all states and regions. Template/boilerplate report language is shown in black font. In addition, within template text are fields for you to specify certain information. Instructions/guidance for drafting the report sections are shown *[in brackets and italicized in either red font or blue font]*. Please ensure that you replace or delete these fillable fields/instructions after you have provided PQR-specific content. Ensure that all final report text font color, upon updating, is black.]

Contents

Executive Summary.....	3
I. PQR BACKGROUND.....	5
II. STATE PROGRAM BACKGROUND	7
A. Program Structure	7
B. Universe and Permit Issuance	7
C. State-Specific Challenges.....	7
D. Current State Initiatives	7
III. CORE REVIEW FINDINGS.....	8
A. Basic Facility Information and Permit Application	8
1. Facility Information	8
2. Permit Application Requirements	9
B. Developing Effluent Limitations	13
1. Technology-based Effluent Limitations.....	13
2. Reasonable Potential and Water Quality-Based Effluent Limitations	16
3. Final Effluent Limitations and Documentation	19
C. Monitoring and Reporting Requirements	22
D. Standard and Special Conditions.....	24
E. Administrative Process.....	26
F. Administrative Record and Fact Sheet	28
IV. NATIONAL TOPIC AREA FINDINGS.....	29
A. Permit Controls for Nutrients in Non-TMDL Waters.....	30
B. Effectiveness of POTW NPDES Permits with Food Processor Contributions	31
C. Small Municipal Separate Storm Sewer System (MS4) Permit Requirements	37
V. REGIONAL TOPIC AREA FINDINGS	39
A. [Insert Regional Topic Area]	39
VI. REVIEW OF PROGRESS ON ESSENTIAL ACTION ITEMS FROM LAST PQR	40
Table 1. Essential Action Items Identified During Last PQR [<i>Insert Year of Last PQR</i>]	40
VII. RECOMMENDED ACTION ITEMS FROM LAST PQR.....	41
Table 2. Recommended Action Items Identified During [<i>Insert Year of Last PQR</i>] PQR ..	41
VIII. ACTION ITEMS FROM FY 2018–2022 PQR CYCLE	42
Table 3. Essential Action Items from FY 2018-2022 PQR Cycle	43
Table 4. Recommended Action Items from FY 2018-2022 PQR Cycle.....	44

Executive Summary

[Insert an Executive Summary that presents a concise summary of the scope of the PQR and key findings. An example could include the following –

- *Paragraph 1 presents an overall summary of the PQR findings. This should include observations regarding program strengths and any significant concerns.*
- *Paragraph 2 describes the scope of the PQR (number and type of permits examined, dates, national topics including nutrients, pesticides, pretreatment and stormwater, regional topics, and any important developments in the state NPDES program).*
- *Paragraph 3 describes the primary findings of the PQR. Substantive and documentation issues can each be discussed, as appropriate. Observations regarding the permit development process (both kudos and issue identification) may be appropriate.*
- *Paragraph 4 can indicate that the state had an opportunity to review the draft report and provided comments, the nature of significant comments, and how these comments have been considered in the final report. Alternative or additional content can be included as appropriate. You may also summarize any essential action items here.]*

EXAMPLE LANGUAGE:

EPA Region [#]'s National Pollutant Discharge Elimination System (NPDES) Permit Quality Review (PQR) for [Insert State] found that permits issued in the state were generally [Note general quality and adherence to federal regulations]. However, we found [Note any significant deficiencies] in permits [Note type or scope of relevant permits] and [Note any additional issues]. We also found [Note any process issues and any factors that may be contributing to the problems].

The PQR examined [#] permits for discharges in [Insert state] along with [#] General Permits issued by the [Insert permit authority], several [Insert permitting authority] permitting policies, and the statewide permit template. The PQR also focused on several national and regional priority areas including:

- *Permit Controls for Nutrients in Non-TMDL Waters,*
- *Effectiveness of POTW NPDES Permits with Food Processor Contributions,*
- *Small Municipal Separate Storm Sewer System (MS4) Permit Requirements, and*
- *[Insert regional priorities]*

[State] permits [number] of facilities. As of [date], [percent] of [State's] permits are current.

The PQR recognizes the many state and region-specific challenges faced by the State of [Insert State], including [Insert challenges encountered by state]. The [Insert permitting authority] also continues to [Note any state NPDES or NPDES-related initiatives underway].

Although the permits reviewed commonly conformed to national requirements, we identified several concerns, including [Describe]. Since many of the deficiencies seem to stem from [Describe], we believe they can be best resolved if the [Insert permitting authority] [Describe action]. Based on this PQR, EPA is recommending modifications to [Insert list and/ or bullets of action items]. In addition to the items listed above, the report provides an overview of the [Insert state] NPDES permitting program and identifies specific areas where EPA and [Insert permitting authority] can work together to continue to strengthen permit language and documentation in state NPDES permits.

The State of [Insert state] reviewed and provided comments on the draft PQR report [Note date if appropriate]. The State agreed with many of the draft PQR's findings and recommendations, and committed to take action to address many of the proposed action items. Several of these actions, [Describe] are already underway.

I. PQR BACKGROUND

National Pollutant Discharge Elimination System (NPDES) Program and Permit Quality Reviews (PQRs) are an evaluation of a select set of NPDES permits to determine whether permits are developed in a manner consistent with applicable requirements established in the Clean Water Act (CWA) and NPDES regulations. Through this review mechanism, EPA promotes national consistency, and identifies successes in implementation of the NPDES program as well as opportunities for improvement in the development of NPDES permits. EPA conducted a PQR of the *[State]* NPDES permitting program on *[Insert Date of Prior PQR]*. The PQR summary report is available at: *[Insert URL to previous PQR summary report]*. The evaluation team proposed various action items to improve the *[State]* NPDES permitting program. As part of the current PQR, EPA requested updates from *[State]* on the progress on those action items. *[Insert brief comments regarding the State's progress on implementing the action items proposed during the previous PQR.] Use these fill-in statements for Authors to complete:* Of the **X** action items identified during the last PQR as Essential¹, **Y** have been resolved and the remainder represent actions that are either longer-term activities or lower-level actions on which *[State]* is still in progress. In addition, EPA identified Recommended action items to improve *[State's]* program; *[State]* (has chosen to implement them) **OR** (is in the process of implementing) the Recommended actions. Section VI of this report contains a detailed review of the progress on action items identified during the last PQR.

During this review, the evaluation team proposed action items to improve *[Insert state]'s* NPDES permit program. The proposed action items are identified in sections III, IV, and V of this report and are divided into two categories to identify the priority that should be placed on each item and facilitate discussions between regions and states.

- **Essential Actions** - Proposed Essential action items address noncompliance with respect to a federal regulation, which EPA has cited for each Essential action item. The permitting authority must address these action items in order to come into compliance with federal regulations.
- **Recommended Actions** - Proposed Recommended action items are recommendations to increase the effectiveness of the state's or Region's NPDES permit program.

New action items are used to augment the existing list of action items currently tracked by EPA Headquarters on an annual basis and reviewed during subsequent PQRs.

EPA's review team, consisting of *[insert number and type of review team members]*, conducted a review of the *[State]* NPDES permitting program which included an on-site visit to the *[State Environmental Department]* in *[City]* on *[Date]*.

¹ During the 2012-2017 PQR cycle, these action items were known as "Category 1" and addressed deficiencies or noncompliance with respect to federal regulations. EPA is now referring to these action items as Essential. In addition, previous PQR reports identified recommendations as either "Category 2" or "Category 3" action items. EPA is now consolidating these categories of action items into a single category: Recommended.

The [State] PQR included reviews of core permit components and national and regional topic areas, as well as discussions between the review team and [State] staff addressing their program status and permit issuance process. The permit reviews focused on core permit quality and included a review of the permit application, permit, fact sheet, and any correspondence, reports or documents that provided the basis for the development of the permit conditions and related administrative process. The PQR also included conversations between EPA and the State on program status, the permitting process, responsibilities, organization, staffing, and program challenges the state is experiencing.

A total of [Insert total number of permits reviewed] permits were reviewed as part of the PQR. Of these, [Insert total number of core review permits] permits were reviewed for the core review, [Insert number of regional topic review permits] permits were reviewed for national topic areas, and [Insert number of regional topic review permits] permits were reviewed for regional topic areas. Some permits were reviewed for both the core review and one or more topic area reviews. Permits were selected based on issue date and the review categories that they fulfilled.

Core Review

The core permit review involved the evaluation of selected permits and supporting materials using basic NPDES program criteria. Reviewers completed the core review by examining selected permits and supporting documentation, assessing these materials using standard PQR tools, and talking with permit writers regarding the permit development process. Core topic reviews focus on the *Central Tenets of the NPDES Permitting Program*² and are intended to evaluate similar issues or types of permits in all states.

Topic Area Reviews

The national topics reviewed in the [State] NPDES program were: Permit Controls for Nutrients in Non-TMDL Waters, Small Municipal Separate Storm Sewer System (MS4) Permit Requirements, and Effectiveness of POTW NPDES Permits with Food Processor Contributions.

Regional topic area reviews target regionally-specific permit types or particular aspects of permits. The regional topic areas selected by EPA Region [Insert Region number] included: [Insert regional topics reviewed]. These reviews provide important information to [State], EPA Region [Insert Region number], EPA HQs and the public on specific program areas.

² <https://www.epa.gov/npdes/central-tenets-npdes-permitting-program>

II. STATE PROGRAM BACKGROUND

A. Program Structure

[NOTE: The previous PQR report may have much of this language; authors may want to consider incorporating the previous PQR report language into the current PQR report and update as necessary.]

Describe the state NPDES program structure. Information should include:

- a general description of the state’s standard operating procedures for workflow management;*
- a description of the permitting authority (general structure, responsibilities, locations, and staffing levels);*
- a description of data systems used to support permitting;*
- a discussion of permit and fact sheet tools and templates; and*
- a description of the permit QA/QC process; and an indication of how permit files are managed.*

This information can be found in the responses to the PQR advance questionnaire and interview questions (i.e., written responses and notes from the interview).]

B. Universe and Permit Issuance

[Describe the NPDES permit universe in the state. Information should include:

- a description of the NPDES permitting universe (major and minor permits by POTW and non-POTW categories; general permits and permittees);*
- a discussion of backlog rates.*

This information can be found in the responses to the PQR advance questionnaire and interview questions. The Region also may have some of these data as a matter of course. NOTE: This section should not contain a description of the permit issuance process; that information should be included in the “background” portions of the relevant subsections in Section III of this template.]

C. State-Specific Challenges

[Describe requirements, processes, and resource or other challenges that affect permitting but were not evident from reviewing permits. This information can be found in the responses to the PQR interview questions.]

D. Current State Initiatives

[Describe state initiatives that will improve permitting. This information can be found in the responses to the advance questionnaire and interview questions. In addition, the Region may have knowledge of relevant initiatives as a result of general program oversight and support.]

Highlights could include any efforts that the state is undertaking to improve permitting efficiency, streamlining, timeliness, and prioritization.]

III. CORE REVIEW FINDINGS

A. Basic Facility Information and Permit Application

1. Facility Information

Background

Basic facility information is necessary to properly establish permit conditions. For example, information regarding facility type, location, processes, and other factors is required by NPDES permit application regulations (40 CFR 122.21). This information is essential for developing technically sound, complete, clear, and enforceable permits. Similarly, fact sheets must include a description of the type of facility or activity subject to a draft permit.

*[In the “Program Strengths” and “Areas for Improvement” subsections below, **discuss findings based on permit reviews** regarding the extent to which general facility information is discussed in the permit and fact sheet as **either a program strength or an area for improvement**. Aspects to consider should include:*

- a clear description of the facility in the fact sheet;*
- a description of processes or services conducted by the facility (including if the facility is an existing or new source);*
- identification of outfalls and description of waste streams associated with each permitted outfall; and*
- location information relative to receiving waters.*

This information is addressed in Sections 1 and 2 of the NPDES PQR Checklist.

Also discuss relevant action items from the prior PQR and identify if they have been resolved or continue to require attention. If prior action items remain unresolved, consider including as an Area for Improvement.]

Program Strengths

[Highlight satisfactory/effective elements of the process for including facility information in permit documents. Practices that the state is implementing adequately are considered strengths.]

Areas for Improvement

[Discuss specific elements to strengthen, or those that are inadequate. Discuss core review findings that are inconsistent with federal requirements. Note: Each concern identified as an Area for Improvement should have an associated action item or an explanation of why an action item is unnecessary (e.g., outside the program’s control or already addressed by the state.).]

*Action Items**[Tips for new action item titles]*

- *Action items should be short and to the point (generally not longer than one sentence), and should clearly state the measurable action that the permitting program should take.*
- *Action items should emphasize the action to be completed, not the specific issues that were identified.*
- *Essential action items address regulatory noncompliance. For these items, include the appropriate regulatory citation at end of the item, as a reference for the state and justification for the action item’s categorization.]*

Essential

- [Identify actions to correct issues that are inconsistent with regulatory requirements]
- [Text]
- [Text]

Recommended

- [Identify actions to implement best practices that may improve the program]
- [Text]
- [Text]

2. Permit Application Requirements*Background and Process*

Federal regulations at 40 CFR 122.21 and 122.22 specify application requirements for permittees seeking NPDES permits. Although federal forms are available, authorized states are also permitted to use their own forms provided they include all information required by the federal regulations. This portion of the review assesses whether appropriate, complete, and timely application information was received by the state and used in permit development.

[Describe the permit application process. Discuss:

- *if state forms are used, and if so, identify when the last update occurred and describe the differences between the state and EPA forms;*
- *the process for notifying permittees of the need to re-apply, procedures for processing and reviewing applications, and the method by which applications are assigned; and*
- *if the State uses specific tools or data systems to track the application process.]*

*[In the “Program Strengths” and “Areas for Improvement” subsections below, describe **findings based on permit reviews** regarding the permit application process and applications reviewed as either **a program strength or an area for improvement**. Aspects to consider may include:*

- *availability of the application in the record;*
- *conformance with information requested in EPA forms;*
- *timeliness of application submittal;*
- *completeness of application; and*
- *adequacy and quality of data submitted.*

This information is based on the permit application(s) in the permit file, some responses to the PQR interview questions, and information in Section 3 of the NPDES PQR Checklist.

Also discuss relevant action items from the prior PQR and identify if they have been resolved or continue to require attention. If prior action items remain unresolved, consider including as an Area for Improvement.]

Program Strengths

[Highlight satisfactory/effective elements of the State’s application process and procedures. Practices that the state is implementing adequately are considered strengths.]

Areas for Improvement

[Discuss specific elements to strengthen, or those that are inadequate. Discuss core review findings that are inconsistent with federal requirements. Note: Each concern identified as an Area for Improvement should have an associated action item or an explanation of why an action item is unnecessary.]

Action Items

[Refer to Report Template Section III.A.1, Action Items, for Guidelines on Naming Action Items]

Essential	<ul style="list-style-type: none">• [Identify actions to correct issues that are inconsistent with regulatory requirements]• [Text]• [Text]
Recommended	<ul style="list-style-type: none">• [Identify actions to implement best practices that may improve the program]• [Text]• [Text]

This text box provides an example report section to illustrate how to draft sections using the template, boilerplate text, and accompanying instructions.

Background and Process

Federal regulations at 40 CFR 122.21 and 122.22 specify application requirements for permittees seeking NPDES permits. Although federal forms are available, authorized states are also permitted to use their own forms provided they include all information required by the federal regulations. This portion of the review assesses whether appropriate, complete, and timely application information was received by the state and used in permit development.

[Staff Agency] administrative staff send out renewal reminder letters approximately six to eight weeks prior to the application due date. *[Staff Agency]* uses state application forms, some of which were updated as recently as September 2015. Permit application form *[Form Name]* is required for all applicants and was revised in September 2015. Permit application form *[Form Name]* is required for applicants for municipal treatment plants and Permit application form *[Form Name]* is required for applicants for industrial/commercial/institutional facilities.

Program Strengths

All applications reviewed in the permit file contained appropriate signatures. Eight of the applications reviewed were received at least 180 days prior to permit expiration.

Areas for Improvement

Most of the applications reviewed lacked effluent data required by 40 CFR 122.21.

POTWs: Federal regulations at 40 CFR 122.21(j)(3)(i) require applicants to provide outfall locations, including latitude/longitude information. *[State]'s [Form Name]* indicates latitude/longitude information is optional and the form does not require submittal of latitude and longitude information. In addition, 40 CFR 122.21(j) (4)(ii) requires every applicant to provide analytical results for certain parameters (BOD, fecal coliform, design flow rate, pH, temperature, and TSS). For facilities with a design capacity greater than or equal to 0.1 million gallons per day (MGD), 40 CFR 122.21(j)(4)(iii) requires results for specific parameters (ammonia, chlorine, dissolved oxygen, nitrate-nitrite, total Kjeldahl nitrogen, oil and grease, phosphorus, and total dissolved solids). Further, 40 CFR 122.21(j)(5)(i) requires submittal of WET results and 122.21(j)(5)(ii) requires facilities with a design capacity greater than or equal to 1 MGD to submit priority pollutant scans. However, form *[Form Name]* does not require submittal of analytical data for any parameters.

Non-POTW Dischargers: For industrial applicants, federal regulations 40 CFR 122.21(g)(1) require applicants to provide outfall locations, including latitude/longitude information. Form *[Form Name]* does not require submittal of latitude and longitude

Example section text, continued

information. In addition, 40 CFR 122.21(g)(7)(iii) requires every applicant to provide analytical results for certain parameters (BOD, COD, TOC, TSS, ammonia, temperature, and pH); 40 CFR 122.21(g)(7)(v) requires data for primary industry categories; and 40 CFR 122.21(g)(11) requires identification of WET tests conducted within the last three years. Form *[Form Name]*, instructs applicants to provide data for certain parameters—only for those parameters which the applicant knows or has reason to believe are present. *[State]* plans to revise applicable forms to ensure they conform to federal requirements.

Essential

- *[State Agency]* must review *[Form Name]* application forms to ensure applicants are required to submit information, including data analyses and outfall location information, to comply with NPDES regulations at 40 CFR 122.21.
- *[State Agency]* must ensure applications, including a copy of all submitted data, are submitted on-time and are included in the administrative record.

Recommended

- *[State Agency]* should coordinate with enforcement staff in the event applications and application data are chronically submitted past-due.

B. Developing Effluent Limitations***1. Technology-based Effluent Limitations***

NPDES regulations at 40 CFR 125.3(a) require that permitting authorities develop technology-based requirements where applicable. Permits, fact sheets and other supporting documentation for POTWs and non-POTWs were reviewed to assess whether technology based effluent limitations (TBELs) represent the minimum level of control that must be imposed in a permit.

*TBELs for POTWs**Background and Process*

POTWs must meet secondary or equivalent to secondary standards (including limits for BOD, TSS, pH, and percent pollutant removal), and permits must contain numeric limits for all of these parameters (or authorized alternatives) in accordance with the secondary treatment regulations at 40 CFR Part 133. A total of *[Insert number]* POTW permits were reviewed as part of the PQR.

[Discuss the State's procedures for determining appropriate TBELs for POTWs; address:

- *if equivalent to secondary standards, or adjustments to them (e.g., state-specific adjusted TSS requirements), are applied;*
- *if the State establishes CBOD₅ limits in place of BOD₅;*
- *if the State provides sufficient justification for establishing adjusted TBELs; and*
- *if the State discusses considerations for contributions to the POTW from industrial users.]*

*[In the “Program Strengths” and “Areas for Improvement” subsections below, describe **findings based on permit reviews** regarding application of technology-based standards for POTWs as either **a program strength or an area for improvement**. Aspects to consider should include:*

- *description of facility and treatment processes;*
- *identification of applicable standards (secondary or equivalent to secondary);*
- *application of alternate effluent limitations (adjusted standards and alternative state requirements);*
- *accommodating multiple types of treatment systems at a single facility in developing effluent limitations;*
- *establishing effluent limitations in appropriate units and forms (i.e., concentration or mass; average weekly and average monthly).*

This information can be found in the responses to the PQR interview questions and in Section 4 of the NPDES PQR Checklist. Also discuss relevant action items from the prior PQR and identify if they have been resolved or continue to require attention. If prior action items remain unresolved, consider including as an Area for Improvement.]

Program Strengths

[Highlight satisfactory/effective elements of the permitting program. Practices that the state is implementing adequately are considered strengths.]

Areas for Improvement

[Discuss specific elements to strengthen, or those that are inadequate. Discuss core review findings that are inconsistent with federal requirements. Note: Each concern identified as an Area for Improvement should have an associated action item or an explanation of why an action item is unnecessary.]

Action Items

[Refer to Report Template Section III.A.1, Action Items, for Guidelines on Naming Action Items]

Essential	<ul style="list-style-type: none"> • [Identify actions to correct issues that are inconsistent with regulatory requirements] • [Text] • [Text]
Recommended	<ul style="list-style-type: none"> • [Identify actions to implement best practices that may improve the program] • [Text] • [Text]

TBELs for Non-POTW Dischargers

Background and Process

Permits issued to non-POTWs must require compliance with a level of treatment performance equivalent to Best Available Technology Economically Achievable (BAT) or Best Conventional Pollutant Control Technology (BCT) for existing sources, and consistent with New Source Performance Standards (NSPS) for new sources. Where federal effluent limitations guidelines (ELGs) have been developed for a category of dischargers, the TBELs in a permit must be based on the application of these guidelines. If ELGs are not available, a permit must include requirements at least as stringent as 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).

[Discuss the State's procedures for determining and establishing appropriate TBELs for non-POTWs. Describe:

- *the State's process for facility categorization, and identification of pollutants of concern and appropriate flow values (to develop mass-based effluent limitations);*
- *any specific tools the State uses to develop ELG-based TBELs;*
- *the process of identifying portions of ELGs, or multiple ELG requirements, applicable to discharges and evaluating appropriate final ELG-based TBELs;*
- *scenarios where the State provides variances for non-POTWs, if at all;*
- *the process by which the State considers the need for case-by-case TBELs; and*
- *if the State provides sufficient justification for establishing case-by-case TBELs.]*

*[In the "Program Strengths" and "Areas for Improvement" subsections below, describe **findings based on permit reviews** regarding application of ELGs and standards to non-POTW facilities as either **a program strength or an area for improvement**. Aspects to consider should include:*

- *facility description, including a discussion of proper categorization based on processes and whether the facility is an existing or a new source;*
- *expected wastestreams and pollutants in the discharge;*

- *description of treatment processes and identification of applicable standards;*
- *discussion of implementation of technology-based standards and resulting effluent limitations development;*
- *case-by-case considerations;*
- *application of alternate effluent limitations;*
- *effluent limitations in appropriate units and forms (i.e., concentration or mass); and,*
- *calculation of effluent limitations based on ELGs.*

This information can be found in the responses to the PQR interview questions and in Section 4 of the NPDES PQR Checklist. Also discuss relevant action items from the prior PQR and identify if they have been resolved or continue to require attention. If prior action items remain unresolved, consider including as an Area for Improvement.]

Program Strengths

[Highlight satisfactory/effective elements of the permitting program. Practices that the state is implementing adequately are considered strengths.]

Areas for Improvement

[Discuss specific elements to strengthen, or those that are inadequate. Discuss core review findings that are inconsistent with federal requirements. Note: Each concern identified as an Area for Improvement should have an associated action item or an explanation of why an action item is unnecessary.]

Action Items

[Refer to Report Template Section III.A.1, Action Items, for Guidelines on Naming Action Items]

Essential	<ul style="list-style-type: none"> • [Identify actions to correct issues that are inconsistent with regulatory requirements] • [Text] • [Text]
Recommended	<ul style="list-style-type: none"> • [Identify actions to implement best practices that may improve the program] • [Text] • [Text]

2. Reasonable Potential and Water Quality-Based Effluent Limitations

Background

The NPDES regulations at 40 CFR 122.44(d) require permits to include any requirements in addition to or more stringent than technology-based requirements where necessary to achieve

state water quality standards, including narrative criteria for water quality. To establish such “water quality-based effluent limits” (WQBELs), the permitting authority must evaluate whether any pollutants or pollutant parameters cause, have the reasonable potential to cause, or contribute to an excursion above any applicable water quality standard.

The PQR for *[identify state permitting authority]* assessed the processes employed to implement these requirements. Specifically, the PQR reviewed permits, fact sheets, and other documents in the administrative record to evaluate how permit writers and water quality modelers:

- determined the appropriate water quality standards applicable to receiving waters,
- evaluated and characterized the effluent and receiving water, including identifying pollutants of concern,
- determined critical conditions,
- incorporated information on ambient pollutant concentrations,
- assessed any dilution considerations,
- determined whether limits were necessary for pollutants of concern, and, where necessary,
- calculated such limits or other permit conditions.

For impaired waters, the PQR also assessed whether and how permit writers consulted and developed limits consistent with the assumptions of applicable EPA-approved total maximum daily loads (TMDLs).

Process for Assessing Reasonable Potential

[Describe the State’s process for analyzing reasonable potential (RP). This background and process sub-section should discuss the State’s procedures for conducting an RP analysis, including the methodology/approach used to determine RP and any assumptions included in the analysis.]

- *Discuss staff who conduct the RP analysis —does the permit writer conduct it, or are other State staff (e.g., TMDL team, modelers) involved?*
- *Discuss the State’s procedures for identifying the receiving stream, applicable water quality standards, impairment status, applicable TMDLs, and pollutants of concern.*
- *Discuss what data are evaluated in the RP analysis, including the time frame of the data and the source of the data.*
- *Discuss the State’s use of ambient/background data (and in the absence of site-specific background data, the default or assumption for background conditions) and the rules for use of ambient data and default values.]*

Process for Developing WQBELs

[Describe the State’s process for developing WQBELs.]

- *Discuss staff who develop WQBELs—do permit writers develop the WQBELs, or are other State staff (e.g., TMDL team, modelers) involved in the process?*
- *Discuss the State’s application of mixing zones and assumptions during WQBEL development (e.g., complete mixing, stream flows, background data).*
- *Does the State apply its dilution/mixing zone policy?*
- *Discuss specifics of the State’s policy—if the policy imposes mixing zone size constraints and determination of when dilution/mixing zone is appropriate.*
- *Discuss how the State documents its use of mixing zones.*
- *Describe any specific tools (e.g., models, spreadsheets) the State uses for WQBEL development.]*

*[In the “Program Strengths” and “Areas for Improvement” subsections below, **discuss findings based on permit reviews** regarding the RP analysis and WQBEL development as either a **program strength or an area for improvement**. Aspects to consider should include:*

- *identification of receiving stream;*
- *applicable water quality standard;*
- *impairment status;*
- *applicable TMDLs;*
- *identification of pollutants of concern;*
- *discussion of data analyzed, including assumptions or default values (e.g., background);*
- *application of mixing zone policy;*
- *quality of discussion of RP analysis and models/analysis employed;*
- *subsequent development of water quality-based effluent limitations; and*
- *discussion of antidegradation and anti-backsliding requirements.*

This information is based on certain responses to the PQR interview questions, and is also addressed in Section 4 of the NPDES PQR Checklist. Also discuss relevant action items from the prior PQR and identify if they have been resolved or continue to require attention. If prior action items remain unresolved, consider including as an Area for Improvement.]

Program Strengths

Reasonable Potential

[Highlight satisfactory/effective practices for evaluating RP. Practices that the state is implementing adequately are considered strengths.]

WQBEL Development

[Highlight satisfactory/effective practices for developing WQBELs. Practices that the state is implementing adequately are considered strengths.]

Areas for Improvement

Reasonable Potential

[Discuss specific elements to strengthen, or those that are inadequate for evaluating RP. Discuss core review findings that are inconsistent with federal requirements. Note: Each concern identified as an Area for Improvement should have an associated action item or an explanation of why an action item is unnecessary.]

WQBEL Development

[Discuss specific elements to strengthen, or those that are inadequate for developing WQBELs. Discuss core review findings that are inconsistent with federal requirements. Note: Each concern identified as an Area for Improvement should have an associated action item or an explanation of why an action item is unnecessary.]

Action Items

[Refer to Report Template Section III.A.1, Action Items, for Guidelines on Naming Action Items]

Essential	<ul style="list-style-type: none"> • <u>Reasonable Potential</u> <ul style="list-style-type: none"> • [Identify actions to correct issues that are inconsistent with regulatory requirements] • [Text] • <u>WQBEL Development</u> <ul style="list-style-type: none"> • [Identify actions to correct issues that are inconsistent with regulatory requirements] • [Text]
Recommended	<ul style="list-style-type: none"> • <u>Reasonable Potential</u> <ul style="list-style-type: none"> • [Identify actions to implement best practices that may improve the program] • [Text] • <u>WQBEL Development</u> <ul style="list-style-type: none"> • [Identify actions to implement best practices that may improve the program] • [Text]

3. Final Effluent Limitations and Documentation

Background and Process

Permits must reflect all applicable statutory and regulatory requirements, including technology and water quality standards, and must include effluent limitations that ensure that all applicable CWA standards are met. The permitting authority must identify the most stringent applicable effluent limitations and establish them as the final effluent limitations in the permit. In addition, for reissued permits, if any of the limitations are less stringent than limitations on the same pollutant in the previous NPDES permit, the permit writer must conduct an anti-backsliding analysis, and if necessary, revise the limitations accordingly. In addition, for new or increased discharges, the permitting authority should 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 water quality standards regulations at 40 CFR 131.12 outline the common elements of the antidegradation review process.

In addition, permit records for POTWs and industrial facilities should contain comprehensive documentation of the development of all effluent limitations. Documentation for technology-based effluent limits should include assessment of applicable standards, data used in developing effluent limitations, and actual calculations used to develop effluent limitations. The procedures to determine the need for WQBELs and the basis for establishing, or for not establishing, WQBELs should be clear and straightforward. The permit writer should adequately document changes from the previous permit, ensure draft and final limitations match (unless the basis for a change is documented), and include all supporting documentation in the permit file. The permit writer should sufficiently document determinations regarding anti-backsliding and antidegradation requirements.

[Describe the State's procedures for establishing and documenting effluent limitations development. Discuss:

- *How the State documents their determination of appropriate TBELs (POTW and non-POTW), including:*
 - *facility and treatment process description;*
 - *expected wastestreams and pollutants in the discharge; and*
 - *identification of applicable treatment standards, or alternate limitations.*
- *How the State documents the RP analysis and WQBEL development, including:*
 - *identification of applicable water quality standards;*
 - *consideration of receiving stream impairment status and applicable TMDLs;*
 - *identification of pollutants of concern;*
 - *quality of discussion of RP analysis; and*
 - *subsequent development of WQBELs.*
- *If the State develops specific technical memos documenting the development of TBELs or WQBELs (even with coordination of additional agency staff).*
- *If effluent limitation development documentation is maintained electronically (e.g., as part of a spreadsheet or modeling tool), or in hard copy.*
- *Whether permit writers consistently apply the most stringent effluent limitation and how permit writers document or illustrate this evaluation of the most stringent applicable limitation;*
- *The State's process for ensuring compliance with federal anti-backsliding requirements and documentation of the evaluation; and*

- *The State's antidegradation requirements and process, including when antidegradation analysis is conducted and how the analysis is documented.*].

*[In the "Program Strengths" and "Areas for Improvement" sub-sections below, **discuss findings based on permit reviews** regarding determination and documentation of final effluent limitations as either **a program strength or an area for improvement**. Discuss:*

- *appropriateness of application of procedures for developing TBELs and WQBELs;*
- *adequacy of documentation of TBEL development, including discussion of applicable standards and illustration of TBEL calculations;*
- *thoroughness of discussion and documentation of RPA and WQBEL development;*
- *identification of basis for each final effluent limitation (i.e., TBEL or WQBEL);*
- *the evaluation/comparison and application of the most stringent of TBELs and WQBELs as the final effluent limitations; and*
- *anti-backsliding and antidegradation requirements and how permits satisfied these requirements.*]

This information is based on certain responses to the PQR interview questions, and is also addressed in Section 4 of the NPDES PQR Checklist. Also discuss relevant action items from the prior PQR and identify if they have been resolved or continue to require attention. If prior action items remain unresolved, consider including as an Area for Improvement.]

Program Strengths

[Highlight satisfactory/effective elements of the process for developing and documenting the development of final effluent limitations. Practices that the state is implementing adequately are considered strengths.]

Areas for Improvement

[Discuss specific elements to strengthen, or those that are inadequate for the process of developing and documenting the development of final effluent limitations. Discuss core review findings that are inconsistent with federal requirements. Note: Each concern identified as an Area for Improvement should have an associated action item or an explanation of why an action item is unnecessary.]

Action Items

[Refer to Report Template Section III.A.1, Action Items, for Guidelines on Naming Action Items]

Essential	<ul style="list-style-type: none"> •[Identify actions to correct issues that are inconsistent with regulatory requirements] •[Text] •[Text]
Recommended	<ul style="list-style-type: none"> •[Identify actions to implement best practices that may improve the program] •[Text] •[Text]

C. Monitoring and Reporting Requirements

Background and Process

NPDES regulations at 40 CFR 122.41(j) require permittees to periodically evaluate compliance with the effluent limitations established in their permits and provide the results to the permitting authority. Monitoring and reporting conditions require the permittee to conduct routine or episodic self-monitoring of permitted discharges and where applicable, internal processes, and report the analytical results to the permitting authority with information necessary to evaluate discharge characteristics and compliance status.

Specifically, 40 CFR 122.44(i) requires NPDES permits to establish, at minimum, annual reporting of monitoring for all limited parameters sufficient to ensure compliance with permit limitations, including specific requirements for the types of information to be provided and the methods for the collection and analysis of such samples. In addition, 40 CFR 122.48(b) requires that permits specify the type, intervals, and frequency of monitoring sufficient to yield data which are representative of the monitored activity. The regulations at 40 CFR 122.44(i) also require reporting of monitoring results with a frequency dependent on the nature and effect of the discharge. 40 CFR Part 127 requires NPDES-regulated entities to submit certain data electronically, including discharge monitoring reports and various program-specific reports, as applicable.

NPDES permits should specify appropriate monitoring locations to ensure compliance with the permit limitations and provide the necessary data to determine the effects of an effluent on the receiving water. A complete fact sheet will include a description and justification for all monitoring locations required by the permit. States may have policy or guidance documents to support determining appropriate monitoring frequencies; documentation should include an explicit discussion in the fact sheet providing the basis for establishing monitoring frequencies, including identification of the specific state policy or internal guidance referenced. Permits must also specify the sample collection method for all parameters required to be monitored in

the permit. The fact sheet should present the rationale for requiring grab or composite samples and discuss the basis of a permit requirement mandating use of a sufficiently sensitive Part 136 analytical method.

[Discuss the general process by which monitoring and reporting requirements were developed and documented. Discuss:

- how the State determines the basis for monitoring frequencies;*
- if the State uses any resources to develop monitoring requirements;*
- if the State requires use of specific analytical methods or method detection limits;*
- how the State develops reporting requirements;*
- how the State documents that monitoring locations, frequencies, and sampling types are appropriate to determine compliance with effluent limitations;*
- if the State uses guidance for identifying appropriate monitoring frequencies and sampling types;*
- if the State carries over existing monitoring requirements, or establishes standard requirements for new facilities or certain categories of industrial facilities; and*
- if the State allows for reductions in monitoring frequencies, and if so, describe their basis for determining that a reduction in frequency is appropriate.]*

*[In the “Program Strengths” and “Areas for Improvement” subsections below, **discuss findings based on permit reviews** regarding development and documentation/justification of monitoring and reporting requirements as either **a program strength or an area for improvement**. Aspects to consider should include:*

- identification of monitoring locations, appropriateness of monitoring locations, consistency of monitoring requirements, frequency, and location (e.g., influent monitoring of TSS and BOD to determine compliance with technology-based standard requiring minimum percent removal requirements for TSS and BOD);*
- appropriate monitoring frequency based on type of discharge and corresponding limit basis (i.e., number of monthly samples used in calculating average monthly effluent limitations);*
- specifying sampling and analytical methods consistent with Part 136;*
- inclusion of WET monitoring;*
- minimum reporting requirements, including method of reporting;*
- recordkeeping requirements.*
- the State’s practice of maintaining records of the decision-making process for establishing monitoring and reporting requirements (including monitoring location, sampling types, frequencies);*
- information or data that the State uses to determine that a reduction in monitoring frequency is appropriate; and*

- *if the analysis for establishing appropriate monitoring requirements (e.g., frequency) is documented in the permit record.*

This information is based on certain responses to the PQR interview questions, and is also addressed in Section 5 of the NPDES PQR Checklist. Also discuss relevant action items from the prior PQR and identify if they have been resolved or continue to require attention. If prior action items remain unresolved, consider including as an Area for Improvement.]

Program Strengths

[Highlight satisfactory/effective elements regarding development and documentation/justification of monitoring and reporting requirements. Practices that the state is implementing adequately are considered strengths.]

Areas for Improvement

[Discuss specific elements to strengthen, or those that are inadequate regarding development and documentation/justification of monitoring and reporting requirements. Discuss core review findings that are inconsistent with federal requirements. Note: Each concern identified as an Area for Improvement should have an associated action item or an explanation of why an action item is unnecessary.]

Action Items

[Refer to Report Template Section III.A.1, Action Items, for Guidelines on Naming Action Items]

Essential	<ul style="list-style-type: none"> • [Identify actions to correct issues that are inconsistent with regulatory requirements] • [Text] • [Text]
Recommended	<ul style="list-style-type: none"> • [Identify actions to implement best practices that may improve the program] • [Text] • [Text]

D. Standard and Special Conditions

Background and Process

Federal regulations at 40 CFR 122.41 require that all NPDES permits, including NPDES general permits, contain certain “standard” permit conditions. Further, the regulations at 40 CFR 122.42 require that NPDES permits for certain categories of dischargers must contain additional standard conditions. Permitting authorities must include these conditions in NPDES permits and

may not alter or omit any standard condition, unless such alteration or omission results in a requirement more stringent than those in the federal regulations.

Permits may also contain additional requirements that are unique to a particular discharger. These case-specific requirements are generally referred to as “special conditions.” Special conditions might include requirements such as: additional monitoring or special studies such as a mercury minimization plan; a toxicity identification evaluation (TIE) or toxicity reduction evaluation (TRE) to resolve measured toxicity; best management practices [see 40 CFR 122.44(k)], or permit compliance schedules [see 40 CFR 122.47]. Where a permit contains special conditions, such conditions must be consistent with applicable regulations.

[Discuss the State’s process for developing standard and special conditions. Discuss:

- if the State uses boilerplate standard and special conditions and if so, when they were last updated;*
- how the State determines whether special conditions are appropriate for a specific permit;*
- if the State allows compliance schedules and, if so, the process by which compliance schedules are evaluated, developed, and implemented in permits; and*
- if the State allows for water quality variances and, if so, the process by which variances are evaluated and implemented.]*

*[In the “Program Strengths” and “Areas for Improvement” subsections below, **discuss findings based on permit reviews regarding special conditions and standard conditions as either a program strength or an area for improvement.** Aspects to consider should include:*

- explanation of relevance and purpose of special conditions;*
- identification of measurable milestones if compliance schedules are established;*
- explanation of special studies or additional monitoring requirements; and*
- identification of and justification for special conditions for POTWs, pretreatment, biosolids, CSO, and /or SSO requirements.*

Further, the discussion should address if all standard conditions are established in the permit. Aspects to consider should include:

- completeness of standard conditions;*
- stringency compared to federal requirements; and*
- additional standard conditions based on facility category.*

This information is based on certain responses to the PQR interview questions, and is also addressed in Section 6 of the NPDES PQR Checklist. Also discuss relevant action items from the prior PQR and identify if they have been resolved or continue to require attention. If prior action items remain unresolved, consider including as an Area for Improvement.]

Program Strengths

[Highlight satisfactory/effective elements of the permitting program. Practices that the state is implementing adequately are considered strengths.]

Areas for Improvement

*[Discuss specific elements to strengthen, or those that are inadequate. Discuss core review findings that are inconsistent with federal requirements. **Note:** Each concern identified as an Area for Improvement should have an associated action item or an explanation of why an action item is unnecessary.]*

Action Items

[Refer to Report Template Section III.A.1, Action Items, for Guidelines on Naming Action Items]

Essential	<ul style="list-style-type: none"> • [Identify actions to correct issues that are inconsistent with regulatory requirements] • [Text] • [Text]
Recommended	<ul style="list-style-type: none"> • [Identify actions to implement best practices that may improve the program] • [Text] • [Text]

E. Administrative Process

Background and Process

The administrative process includes documenting the basis of all permit decisions (40 CFR 124.5 and 40 CFR 124.6); coordinating EPA and state review of the draft (or proposed) permit (40 CFR 123.44); providing public notice (40 CFR 124.10); conducting hearings if appropriate (40 CFR 124.11 and 40 CFR 124.12); responding to public comments (40 CFR 124.17); and modifying a permit (if necessary) after issuance (40 CFR 124.5). EPA discussed each element of the administrative process with *[State]*, and reviewed materials from the administrative process as they related to the core permit review.

[Discuss the State's procedures for:

- *providing public notice;*
- *receiving and responding to comments;*
- *conducting hearings;*
- *modifying permits after issuance; and*
- *documenting the basis for permit decisions.]*

*[In the “Program Strengths” and “Areas for Improvement” subsections below, **discuss findings based on permit reviews** regarding implementation of the permit administration process as either **a program strength or an area for improvement**. Aspects to consider should include:*

- *the quality of the permit record with respect to demonstration that public notice procedures were implemented accordingly;*
- *organization of comments received;*
- *response to comment document;*
- *revisions to permit limits or requirements;*
- *the process by which the draft permit was reviewed by EPA or a state;*
- *discussion of permit modifications, rationale, and documentation of modifications.*

This information is based on certain responses to the PQR interview questions, and is also addressed in Section 7 of the NPDES Core Review Checklist. Also discuss relevant action items from the prior PQR and identify if they have been resolved or continue to require attention. If prior action items remain unresolved, consider including as an Area for Improvement.]

Program Strengths

[Highlight satisfactory/effective elements of the administrative process. Practices that the state is implementing adequately are considered strengths.]

Areas for Improvement

[Discuss specific elements to strengthen, or those that are inadequate regarding the administrative process. Discuss core review findings that are inconsistent with federal requirements. Note: Each concern identified as an Area for Improvement should have an associated action item or an explanation of why an action item is unnecessary.]

Action Items

[Refer to Report Template Section III.A.1, Action Items, for Guidelines on Naming Action Items]

Essential	<ul style="list-style-type: none"> • [Identify actions to correct issues that are inconsistent with regulatory requirements] • [Text] • [Text]
Recommended	<ul style="list-style-type: none"> • [Identify actions to implement best practices that may improve the program] • [Text] • [Text]

F. Administrative Record and Fact Sheet

Background and Process

The administrative record is the foundation that supports the NPDES permit. If EPA issues the permit, 40 CFR 124.9 identifies the required content of the administrative record for a draft permit and 40 CFR 124.18 identifies the requirements for a final permit. Authorized state programs should have equivalent documentation. The record should contain the necessary documentation to justify permit conditions. At a minimum, the administrative record for a permit should contain the permit application and supporting data; draft permit; fact sheet or statement of basis;³ all items cited in the statement of basis or fact sheet including calculations used to derive the permit limitations; meeting reports; correspondence between the applicant and regulatory personnel; all other items supporting the file; final response to comments; and, for new sources where EPA issues the permit, any environmental assessment, environmental impact statement, or finding of no significant impact.

Current regulations at 40 CFR 124.8 and 124.56 require that fact sheets include information regarding 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 certain specific limits, rationales for variances or alternatives, contact information, and procedures for issuing the final permit. Generally, the administrative record includes the permit application, the draft permit, any fact sheet or statement of basis, documents cited in the fact sheet or statement of basis, and other documents contained in the supporting file for the permit.

[Describe the State's administrative record and fact sheet process. Discuss:

- the State's procedures for developing and maintaining the administrative record, including content and physical location.;*
- the State's process for developing the fact sheet;*
- if the State uses a template or other tools to develop the fact sheet; and*
- how the State maintains comments received during the public comment period, comments from EPA, and responses to those comments.]*

[In the "Program Strengths" and "Areas for Improvement" subsections below, discuss findings based on permit reviews regarding documentation of permit development and quality of fact sheets as either a program strength or an area for improvement. Aspects to consider should include:

- required elements of fact sheets;*

³ Per 40 CFR 124.8(a), every EPA and state-issued permit must be accompanied by a fact sheet if the permit: 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.

- *quality of discussion of water quality assessment (identification of pollutants of concern, reasonable potential analysis, and subsequent development of WQBELs);*
- *administrative requirements;*
- *the organization and overall completeness of the permit record; and*
- *discussion of miscellaneous fact sheet issues identified, in this section.*

This information is based on certain responses to the PQR interview questions, and is also addressed in Section 4 of the NPDES Core Review Checklist. Also discuss relevant action items from the prior PQR and identify if they have been resolved or continue to require attention. If prior action items remain unresolved, consider including as an Area for Improvement.]

Program Strengths

[Highlight satisfactory/effective elements of the administrative record and fact sheet. Practices that the state is implementing adequately are considered strengths.]

Areas for Improvement

[Discuss specific elements to strengthen, or those that are inadequate. Discuss core review findings that are inconsistent with federal requirements. Note: Each concern identified as an Area for Improvement should have an associated Action Item or an explanation of why an action item is unnecessary.]

Action Items

[Refer to Report Template Section III.A.1, Action Items, for Guidelines on Naming Action Items]

Essential	<ul style="list-style-type: none"> • [Identify actions to correct issues that are inconsistent with regulatory requirements] • [Text] • [Text]
Recommended	<ul style="list-style-type: none"> • [Identify actions to implement best practices that may improve the program] • [Text] • [Text]

IV. NATIONAL TOPIC AREA FINDINGS

National topic areas are aspects of the NPDES permit program that warrant review based on the specific requirements applicable to the selected topic areas. These topic areas have been determined to be important on a national scale. National topic areas are reviewed for all PQRs. The national topic areas are: Permit Controls for Nutrients in Non-TMDL Waters, Effectiveness of POTW NPDES Permits with Food Processor Contributions, and Small Municipal Separate Storm Sewer System (MS4) Permit Requirements.

A. Permit Controls for Nutrients in Non-TMDL Waters

Background

Nutrient pollution is an ongoing environmental challenge; however, nationally permits often lack nutrient limits. It is vital that permitting authorities actively consider nutrient pollution in their permitting decisions. Of the permits that do have nutrient limits, many are derived from wasteload allocations in TMDLs, since state criteria are often challenging to interpret. This section considers waters that do not have a nutrient TMDL. These waters may already be impaired by nutrient pollution or may be vulnerable to nutrient pollution due to their hydrology and environmental conditions. For the purposes of this program area, ammonia is considered as a toxic pollutant, not a nutrient.

Federal regulations at 40 CFR 122.44(d)(1)(i) require permit limits to be developed for any pollutant which causes, has the reasonable potential to cause, or contributes to an excursion of water quality standards, whether those standards are narrative or numeric.

To assess how nutrients are addressed in the *[State]* NPDES program, EPA Region *[Insert Region number]* reviewed *[Insert the number of permits reviewed]* permits as well as *[Insert any other documents reviewed as part of the nutrient permitting review]*.

[Discuss the general nutrient program for the state, such as:

- the type(s) of nutrient criteria that have been established for the state and how they are expressed
- if the state has combined criteria
- if the state has state-wide or site-specific criteria
- if the state has implementation rules, policies, or practices specific for nutrients]

[In the “Program Strengths” and “Areas for Improvement” subsections below, discuss findings based on permit reviews regarding nutrients as either a program strength or an area for improvement. Please include enough detail to support your findings. This may be listing each permit individually, or listing what was found in a group of permits (i.e. two of the three permits reviewed contained a discussion of reasonable potential). Aspects to consider should include:

- if permits discuss the impairment status of the water bodies, and which nutrient criteria apply
- if the applications indicate that the facility discharges nitrogen or phosphorus (in any form – excluding ammonia)
- if permits or fact sheets contain any discussion of RP analysis for nutrient discharges from the facility
- if permits or fact sheets include a nutrient limit, and the basis for the limit
- if permits or fact sheets include compliance periods for nutrients
- if permits include monitoring requirements

- if permits include other nutrient management approaches (e.g., water quality trading, watershed-based permitting)]

This information is based on certain responses to the PQR interview questions, and is also addressed in the Nutrients PQR Checklist.

Please present findings in the following format: 1) Background; 2) Program Strengths; and 3) Essential Findings (i.e., national topic review findings that are inconsistent with regulatory requirements)]

Program Strengths

[Highlight satisfactory/effective elements of the permitting program. Practices that the state is implementing adequately are considered strengths.]

Areas for Improvement

[Discuss specific elements to strengthen, or those that are inadequate. Discuss review findings that are inconsistent with federal requirements. Note: Each concern identified as an Area for Improvement should have an associated action item or an explanation of why an action item is unnecessary (e.g., outside program control or already addressed by the state.).]

Action Items

[Refer to Report Template Section III.A.1, Action Items, for Guidelines on Naming Action Items]

Essential	<ul style="list-style-type: none"> •[Identify actions to correct issues that are inconsistent with regulatory requirements] •[Text] •[Text]
Recommended	<ul style="list-style-type: none"> •[Identify actions to implement best practices that may improve the program] •[Text] •[Text]

B. Effectiveness of POTW NPDES Permits with Food Processor Contributions

The general pretreatment regulations (40 CFR 403) establish responsibilities of federal, state, and local government, industry, and the public to implement pretreatment standards to control pollutants from industrial users which may cause pass through or interfere with POTW treatment processes or which may contaminate sewage sludge.

Background

Indirect discharges from food processors can be a significant contributor to noncompliance at recipient POTWs. Food processing discharges contribute to nutrient pollution (e.g., nitrogen, phosphorus, ammonia) to the nation's waterways. Focusing specifically on the Food Processing Industrial Sector will synchronize PQRs with the Office of Enforcement Compliance and Assurance (OECA)'s Significant Non-compliance (SNC)/National Compliance Initiative (NCI).

The goal of the PQR was to identify successful and unique practices with respect to the control of food processor discharges by evaluating whether appropriate controls are included in the receiving POTW NPDES Permit and documented in the associated fact sheet or statement of basis, as well as by compiling information to develop or improve permit writers' tools to be used to improve both POTW and industrial user compliance.

The PQR also assessed the status of the pretreatment program in *[insert State name]* as well as specific language in POTW NPDES permits. With respect to NPDES permits, focus was placed on the following regulatory requirements for pretreatment activities and pretreatment programs:

- 40 CFR 122.42(b) (POTW requirements to notify Director of new pollutants or change in discharge);
- 40 CFR 122.44(j) (Pretreatment Programs for POTWs);
- 40 CFR 403.8 (Pretreatment Program Requirements: Development and Implementation by POTW), including the requirement to permit all SIUs;
- 40 CFR 403.9 (POTW Pretreatment Program and/or Authorization to revise Pretreatment Standards: Submission for Approval);
- 40 CFR 403.12(i) (Annual POTW Reports); and
- 40 CFR 403.18 (Modification of POTW Pretreatment Program).

Template Guidance:

[This section of the report should describe the program's structure, relationship/interaction between EPA and the state, and EPA's responsibilities. This section should discuss:

- *Who is the pretreatment program authority: EPA or State*
- *The universe [can be presented in table format]:*
 - *Number of Approved POTW Programs [and number of POTWs in approved programs]*
 - *Number of SIUs, CIUs (identifying number of SIUs and NSCIUs), and General Permits issued by:*
 - *Approved POTW Programs [POTWs as Control Authority]*
 - *EPA or State as Control Authority*
- *This question focuses on how pretreatment conditions are determined for NPDES permits, recognizing that the NPDES Authority and Pretreatment Authority may, or may not, be within the same Agency or staffing division. For instance, 47 States have NPDES*

authority, but only 37 have pretreatment authority (and rely on EPA as the pretreatment authority). Sometimes, within a single agency, the NPDES and Pretreatment staff may be in different workgroups.

- *How does the permitting authority [state or EPA] coordinate with the pretreatment authority to determine appropriate pretreatment conditions for a POTW permit – does the pretreatment authority [state or EPA] review the POTW application/draft permit/fact sheet [all sizes and status of POTWs, not just those already with approved pretreatment programs]? Who determines which and when a POTW needs to develop a pretreatment program?*
 - *Describe permit conditions: regulations incorporated by reference or written out, or both*
- *How does the pretreatment authority [state or EPA] identify SIUs in POTWs without approved pretreatment programs (i.e., where it has been determined that POTW pretreatment program development would not be required) and notify the SIUs of their requirements?*
- *For general program oversight (i.e., implementing the pretreatment program and ensuring that elements submitted per the NPDES permit are reviewed accordingly), who conducts these tasks (e.g., reviews of annual pretreatment program reports, reviews of local limits, review of program modifications, etc.?)*
- *For this PQR, describe what materials were reviewed:*
 - *the number of POTW permits reviewed (identify how many have approved pretreatment programs and how many do not have pretreatment programs),*
 - *the number of IU permits reviewed,*
 - *sewer use ordinances (SUOs) reviewed. (If not available as an attachment to the permit file and approved pretreatment program, these can often be found online. The link should be documented in this report.) Only a cursory review of the SUO is expected: identify the pollutants for which local limits or surcharge values are listed in the SUO and how they are expressed (for example, “All Users must comply with...” or “Only Users that...”)*
 - *how these POTWs were selected for review (e.g., POTWs with food processors were discovered by reviewing: data from EPA’s ECHO (Enforcement and Compliance History Online) and ICIS (Integrated Compliance Information System) Pollutant Loading Tool /Toxicity Release Inventory interface databases; annual reports submitted to EPA Region # by POTWs with federally approved pretreatment programs; Industrial Chamber of Commerce reports; discussions with [insert state] permitting agency).*

See table example of data to be collected, below:

Permittee	Permit No.	Approved Pretreatment Program?	Design Flow Average (MGD)	No. of SIUs ¹	No. of Food Processors ¹	Controls on Conventional Pollutants or Nutrients in SUO?
City of YYY	XXXXXXX	Yes	18.2	28	1	BOD and TSS surcharge
City of YYY	XXXXXXX	No	2.8	1	1	BOD and TSS surcharge
City of YYY	XXXXXXX	No	1.9	5	2	BOD, TSS, COD, ammonia, O&G, pH, and phosphorus local limits; BOD, ammonia, TSS, and phosphorus surcharge
City of YYY	XXXXXXX	No	1.8	0	2 ⁴	BOD, TSS, TDS, Ammonia, O&G, phosphorus, pH local limits
City of YYY	XXXXXXX	Yes	6.5 ²	6 ³	1 ⁵	BOD, FOG, TSS local limits; BOD, TSS, and FOG surcharge

¹ Based on the information provided in the permit application.

² Based on information provided in the [Month, Year] PCI performed by EPA Region [#]. Had permitted the food processor as a CIU, 432 subpart C.

³ Based on the POTW's [Year] pretreatment annual report for the POTW.

⁴ State annual Chamber of Commerce report: a dog food treat manufacturer and a microbrewery.

⁵ The [Month, Year] PCI report indicates that at the time of the PCI, the POTW had permitted the food processor as a CIU, subject to the categorical pretreatment standards at 40 CFR 432 subpart C. However, the POTW's [Year] pretreatment annual report lists the food processor as a non-categorical SIU.

Additional example text and table follow:

Two food processing industrial user permits were also reviewed as part of the PQR; they are identified in the table below.

Facility Name	Permit Number	Receiving POTW	Type of Food Processor	Classification by POTW	Average Process Wastewater Discharge (gallons per day [gpd])	Monitored Pollutants
Industrial User 1	#	City of YYY	Rendering	SIU	23,000 ¹	Flow, pH, ammonia as N, BOD, COD, TSS, O&G, total phosphorus, 11 metals, arsenic, cyanide, fluoride, phenols, and selenium
Industrial User 2	#	City of YYY	Beef, Pork, and Chicken Sausage Mfg.	CIU subject to 40 CFR 432.74 – Subpart G ³	60,000 ²	Flow, pH, temperature, BOD, TSS, and O&G

¹ Based on information included in the industrial user's permit.

² Based on information included in the industrial user's fact sheet.

³ 40 CFR 432.74 is listed as reserved and does not contain pretreatment standards.

[In the “Program Strengths” and “Areas for Improvement” subsections below, describe findings based on the review of permits and other supporting documentation regarding the Effectiveness of POTW NPDES Permits with Food Processor Contributions as either a program strength or an area for improvement. Aspects to consider may include:

- *Do permits for all POTWs include requirements to identify SIUs (including character and volume of pollutants)? (40 CFR 122.44(j)(1))?*
- *Do permits for POTWs with approved pretreatment programs contain requirements to provide a written technical evaluation of the need to revise local limits following permit issuance or reissuance? (40 CFR 122.44(j)(2)(ii))?*
- *Do permits for POTWs without approved pretreatment programs, but which experienced Interference or pass-through, contain requirements to develop and enforce specific effluent limits for Industrial Users, as well as evaluate POTW treatment plant operation, to ensure no recurrence (40 CFR 403.5(c)(2))? For instance, this would apply to a POTW that experienced operational problems from accepting high-strength conventional pollutants beyond its treatment capacity.*
- *Do permits for POTWs include the federal standard condition for notification and impact assessment of significant changes in industrial flow or character (40 CFR 122.42(b))?*
- *Do permits and fact sheets for POTWs identify pretreatment program approval and modification dates as applicable?*

- *Do fact sheets for POTW permits describe the industrial contributions (e.g., number of noncategorical SIUs and CIUs)?*
- *Do industrial user control mechanisms/permits include appropriate effluent limitations and monitoring requirements for conventional pollutants and other pollutants of concern? Do IU control mechanisms/permits include any best management practices? Note whether fact sheets fully characterize IU waste streams, both process wastewater and washdown/cleanup wastewater.*
- *Do fact sheets for industrial user control mechanisms/permits identify basis for limits or monitoring frequencies? For example, if the monitoring frequencies for a pollutant found in both the IU and POTW are vastly different (2/year v. 2/week, respectively), characterizing the effect of the IU discharge on the POTW treatment capacity may be difficult. Although food processors are known to discharge compatible pollutants (conventional pollutants) to a POTW, has the POTW determined its own treatment capacity to ensure that the POTW does not accept more than it can treat?*
- *If the food processor is regulated by both an NPDES permit and an IU control mechanism, indicate so. Are the requirements and scope of both permit and control mechanism clearly defined between the two?*

This information is based on the permit file (including permit, fact sheet, application, industrial user control mechanisms/permits, most recent pretreatment annual report, sewer use ordinance, local limits derivation, and/or approval authority pretreatment compliance audit or inspection [PCA or PCI]) and discussions during the PQR onsite interview or subsequent discussions relative to the national topic.

Also discuss relevant action items from the prior PQR and identify if they have been resolved or continue to require attention. If prior action items remain unresolved, consider including as an Area for Improvement.]

Program Strengths

*[Highlight satisfactory/effective elements regarding the **Effectiveness of POTW NPDES Permits with Food Processor Contributions**. Practices that the state is implementing adequately are considered strengths.]*

Areas for Improvement

*[Discuss specific elements to strengthen, or those that are inadequate regarding the **Effectiveness of POTW NPDES Permits with Food Processor Contributions**. Discuss review findings that are inconsistent with federal requirements as well as those that are recommended to strengthen or improve the program. Consider including separate discussions for (a) Approved Pretreatment Programs and (b) POTWs without an Approved Program. Note: Each concern identified as an Area for Improvement should have an associated Action Item or an explanation of why an action item is unnecessary.]*

Action Items

Essential

- **[Identify actions to correct issues that are inconsistent with regulatory requirements] Examples follow:**
- The permit writer must ensure that industrial users are properly classified as required in 40 CFR 403.8(f)(2)(i). Permits must be issued to all SIUs as required in 40 CFR 403.8(f)(1)(iii).
- Permit writers shall ensure that the NPDES permit application includes all industrial users or potential SIUs and identifies any applicable categorical classifications. [40 CFR 122.21(j)(6)].

Recommended

- **[Identify actions to implement best practices that may improve the program] Examples follow:**
- Revise POTW permits to specify the timeframe for adequate notice regarding the change in quality or quantity in effluent discharge to the POTW. Also revise the permits to require that notice be provided to EPA Region [#] to ensure that the Region is aware of changes that may require the POTW to develop a pretreatment program or make changes to its existing pretreatment program.
- Revise POTW permits to specify the general and specific prohibitions found at 40 CFR Section 403.5(a)(1) and (b), rather than incorporating by reference, in order to strengthen the permit effectiveness.
- Permit writers should specify the program approval or modification dates in fact sheets to ensure that the program includes up-to-date federal regulations.
- Permit writers should specify whether the POTW accepts hauled waste and identify and characterize contributing industrial dischargers in the permit fact sheet to clarify the basis for inclusion of language regarding the control of industrial discharges.
- The approval authority should identify permit deficiencies during pretreatment compliance inspections or audits.
- Permit writers should work with EPA Region [#] to determine adequate controls on industrial discharges to ensure that the POTW is protected from pollutant loads that could overwhelm the wastewater treatment plant. For example, note that 40 CFR 403.5(c)(2) requires POTWs that have experienced pass through or interference to develop local limits, regardless of full program development.
- The POTW permit and fact sheet should clearly state whether the POTW is required to develop or implement a pretreatment program.

C. Small Municipal Separate Storm Sewer System (MS4) Permit Requirements

Background

As part of this PQR, EPA reviewed *[insert either “the” if this is a general permit, or the number of individual small MS4 permits if you reviewed individual permits]* state’s small MS4 *[insert “general permit” or “permits” if individual permits]* for consistency with the Phase II stormwater permit regulations. EPA recently updated the small MS4 permitting regulations to clarify: (1) the procedures to be used when using general permits (see 40 CFR 122.28(d)); (2) the requirement that the permit establish the terms and conditions necessary to meet the MS4

permit standard (i.e., “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”), including conditions to address the minimum control measures, reporting, and, as appropriate, water quality requirements (see 40 CFR 122.34(a) and (b)); and (3) the requirement that permit terms must be established in a “clear, specific, and measurable” manner (see 40 CFR 122.34(a)).

[If this PQR is being completed at a time when the state is actively working on the reissuance of the permit being reviewed, note that this review reflects strengths and areas of improvement related to the existing permit. Consider also noting your ongoing work to review and provide comments on the draft permit.]

*[For small MS4 permits that were issued before January 9, 2017 (the effective date of the Phase II regulation changes), you may use previous PQR review materials. You may use the new **Small MS4 PQR Checklist** for permits issued after January 9, 2017. Program Strengths and Areas for Improvement can be lifted from the **Small MS4 PQR Checklist**. You may also use the **Small MS4 PQR Checklist** to provide direction to States on future small MS4 permits.]*

Program Strengths

[Highlight satisfactory/effective elements of the permitting program. Practices that the state is implementing adequately are considered strengths.]

Areas for Improvement

*[Discuss specific elements to strengthen, or those that are inadequate. For specific findings related to your review of the permit, the areas of improvement should correspond to inadequacies found in your review, through use of EPA’s **Small MS4 PQR Checklist** or other similar PQR materials. Each concern identified as an Area for Improvement should have an associated Action Item or an explanation for why an action item is unnecessary (e.g., outside program control or already addressed by the state.)].*

Action Items

[Refer to Report Template Section III.A.1, Action Items, for Guidelines on Naming Action Items]

Essential	<ul style="list-style-type: none"> • [Identify actions to correct issues that are inconsistent with regulatory requirements] • [Text] • [Text]
Recommended	<ul style="list-style-type: none"> • [Identify actions to implement best practices that may improve the program] • [Text] • [Text]

V. REGIONAL TOPIC AREA FINDINGS

[Regional Topic Area reviews are optional. If no Regional Topics have been reviewed, you may either include the statement, “Region [#] has elected not to include the optional Regional Topics in this review,” or you may delete this section of the report. If you elect to delete the section, please note the numbering of subsequent sections of the report will need to be manually corrected, as will section references contained in the boilerplate in section I.]

A. [Insert Regional Topic Area]

Section *[Insert statutory or regulatory authority]* requires *[Describe applicable program area requirements]*. *[Describe why these requirements are important for the protection of water quality]*. The focus of the *[Insert regional topic area]* review is to verify that permits and fact sheets *[Describe how permits and fact sheet fulfill the regional topic area requirements]*. *[Describe how many permits were reviewed]*.

*[In the “Program Strengths” and “Areas for Improvement” subsections below, **discuss findings based on permit reviews** regarding the special focus area (i.e., the extent to which the permits and fact sheets reviewed fulfill the requirements of this regional topic area.)]*

Program Strengths

[Highlight satisfactory/effective elements of the permitting program. Practices that the state is implementing adequately are considered strengths.]

Areas for Improvement

[Discuss specific elements to strengthen, or those that are inadequate. Discuss review findings that are inconsistent with federal requirements. Note: Each concern identified as an Area for Improvement should have an associated action item or an explanation of why an action item is unnecessary (e.g., outside program control or already addressed by the state.).]

Action Items

[Refer to Report Template Section III.A.1, Action Items, for Guidelines on Naming Action Items]

Essential	<ul style="list-style-type: none"> • <i>[Identify actions to correct issues that are inconsistent with regulatory requirements]</i> • <i>[Text]</i> • <i>[Text]</i>
Recommended	<ul style="list-style-type: none"> • <i>[Identify actions to implement best practices that may improve the program]</i> • <i>[Text]</i> • <i>[Text]</i>

VI. REVIEW OF PROGRESS ON ESSENTIAL ACTION ITEMS FROM LAST PQR

This section provides a summary of the main findings from the last PQR and provides a review of the status of the State’s efforts in addressing the action items identified during the last PQR, conducted *[INSERT DATE]*. As discussed previously, during the 2012-2017 PQR cycle, EPA referred to action items that address deficiencies or noncompliance with respect to federal regulations as “Category 1”. EPA is now referring to these action items as Essential.

[Select the appropriate option from the “choose an item” dropdown list. If a Region has established another essential action item tracking method that contains all of the information suggested in this table, Regions may use that chart in lieu of this chart.]

Table 1. Essential Action Items Identified During Last PQR *[Insert Year of Last PQR]*

Program Area	Action Item Title	Status Update
		<i>(Choose an item.) [Narrative Summary of Historical Status Updates, Current Status, Next Steps, and Considerations and Restrictions from Status/Update form. If adjustments were made to Action Item by the state’s request, describe here.]</i>
		<i>(Choose an item.) [Narrative Summary of Historical Status Updates, Current Status, Next Steps, and Considerations and Restrictions from Status/Update form. If adjustments were made to Action Item by the state’s request, describe here.]</i>
		<i>(Choose an item.) [Narrative Summary of Historical Status Updates, Current Status, Next Steps, and Considerations and Restrictions from Status/Update form. If adjustments were made to Action Item by the state’s request, describe here.]</i>
		<i>(Choose an item.) [Narrative Summary of Historical Status Updates, Current Status, Next Steps, and Considerations and Restrictions from Status/Update form. If adjustments were made to Action Item by the state’s request, describe here.]</i>
		<i>(Choose an item.) [Narrative Summary of Historical Status Updates, Current Status, Next Steps, and Considerations and Restrictions from Status/Update form. If adjustments were made to Action Item by the state’s request, describe here.]</i>
		<i>(Choose an item.) [Narrative Summary of Historical Status Updates, Current Status, Next Steps, and Considerations and Restrictions from Status/Update form. If adjustments were made to Action Item by the state’s request, describe here.]</i>

VII. RECOMMENDED ACTION ITEMS FROM LAST PQR

This section provides a summary of the recommendations from the last PQR, conducted *[INSERT DATE]*, and notes any State efforts to act on those recommendations. As discussed previously, during the 2012-2017 PQR cycle, EPA referred to action items that are recommendations to strengthen the state’s program as either “Category 2” or “Category 3” action items. EPA is consolidating these two categories of action items into a single category: Recommended.

[This is an opportunity to recognize states for forward progress on recommended action items, and is not meant to penalize states that have not progressed on recommended action items. Replace the table below with the completed Form 3 from Attachment D, if used, or add all Category 2 or 3 action items from the last PQR and select the appropriate status option from the “choose an item” dropdown list for each one.]

Table 2. Recommended Action Items Identified During *[Insert Year of Last PQR]* PQR

Program Area	Action Item Title	Status
		(Choose an item.)
		(Choose an item.)
		(Choose an item.)
		(Choose an item.)
		(Choose an item.)
		(Choose an item.)
		(Choose an item.)
		(Choose an item.)

VIII. ACTION ITEMS FROM FY 2018–2022 PQR CYCLE

This section provides a summary of the main findings of the PQR and provides proposed action items to improve *[Insert state]* NPDES permit programs, as discussed throughout sections III, IV, and V of this report.

The proposed action items are divided into two categories to identify the priority that should be placed on each Item and facilitate discussions between Regions and states.

- **Essential Actions** - Proposed “Essential” action items address noncompliance with respect to a federal regulation. The permitting authority is expected to address these action items in order to come into compliance with federal regulations. As discussed earlier in the report, prior PQR reports identified these action items as Category 1. Essential Actions are listed in Table 3 below.
- **Recommended Actions** - Proposed “Recommended” action items are recommendations to increase the effectiveness of the state’s or Region’s NPDES permit program. Prior reports identified these action items as Category 2 and 3. Recommended Actions are listed in Table 4 below.

The following tables summarize only those action items that were identified in Sections III, IV, and V of the report.

[In the Essential Action Items and Recommended Action Items tables below, delete rows for topics where no action items were identified in Sections III, IV, and V of the report. Refer to Report Template Section III.A.1, Action Items, for Guidelines on Naming Action Items]

Table 3. Essential Action Items from FY 2018-2022 PQR Cycle

Topic	Action(s)
Facility Information	
Permit Application Requirements	
TBELs for POTWs	
TBELs for Non-POTW Dischargers	
Reasonable Potential	
WQBELs Development	
Final Effluent Limitations and Documentation of Effluent Limitations Development	
Establishing Monitoring and Reporting Requirements	
Documentation of Monitoring and Reporting Requirements	
Standard and Special Conditions	
Administrative Process	
Administrative Record and Fact Sheet	
Nutrients	
Pretreatment: Food Processing Sector	
Municipal Separate Storm Sewer Systems (MS4s)	
[Insert Regional Topic Area 1]	
[Insert Regional Topic Area 2, etc.]	

Table 4. Recommended Action Items from FY 2018-2022 PQR Cycle

Topic	Action(s)
Facility Information	
Permit Application Requirements	
TBELs for POTWs	
TBELs for Non-POTW Dischargers	
Reasonable Potential	
WQBELs Development	
Final Effluent Limitations and Documentation of Effluent Limitations Development	
Establishing Monitoring and Reporting Requirements	
Documentation of Monitoring and Reporting Requirements	
Standard and Special Conditions	
Administrative Process	
Administrative Record and Fact Sheet	
Nutrients	
Pretreatment: Food Processing Sector	
Municipal Separate Storm Sewer Systems (MS4s)	
[Insert Regional Topic Area 1]	
[Insert Regional Topic Area 2, etc.]	