

# **Region 10 NPDES Program and Permit Quality Review Idaho**

Review Date: June 2023

Report Date: April 2024

EPA Region 10  
1200 Sixth Avenue, Suite 155 (19-C04)  
Seattle, WA 98101

# Contents

- Executive Summary.....3
- I. PQR BACKGROUND .....5
- II. STATE PROGRAM BACKGROUND .....6
  - A. Program Structure.....6
    - Table 1: Permits Completed by Year Since 2019*.....7
  - B. Universe and Permit Issuance .....9
    - Table 2: Individual NPDES Permit Universe* .....9
    - Table 3: General NPDES Permit Universe* .....9
  - C. State-Specific Challenges.....10
  - D. Current State Initiatives .....11
- III. CORE REVIEW FINDINGS .....11
  - A. Basic Facility Information and Permit Application.....11
    - 1. Facility Information .....11
    - 2. Permit Application Requirements.....12
  - B. Developing Effluent Limitations .....14
    - 1. Technology-based Effluent Limitations.....14
    - 2. Reasonable Potential and Water Quality-Based Effluent Limitations .....17
    - 3. Final Effluent Limitations and Documentation.....21
  - C. Monitoring and Reporting Requirements.....24
  - D. Standard and Special Conditions .....25
  - E. Administrative Process.....27
  - F. Administrative Record and Fact Sheet.....29
- IV. NATIONAL TOPIC AREA FINDINGS .....30
  - A. Permit Controls for Nutrients in Non-TMDL Waters .....31
    - Table 4: Permits Reviewed for Nutrients in Non-TMDL Waters National Topic Area*.....31
  - B. Effectiveness of POTW NPDES Permits with Food Processor Contributions .....33
    - Table 5 : POTWs in Idaho with Approved Pretreatment Programs* .....35
  - C. Small Municipal Separate Storm Sewer System (MS4) Permit Requirements .....37
- V. REGIONAL TOPIC AREA FINDINGS .....37
- VI. ACTION ITEMS FROM FY 2018–2022 PQR CYCLE .....38
  - Table 6 : Essential Action Items from FY 2018-2022 PQR Cycle*.....39
  - Table 7 : Recommended Action Items from FY 2018-2022 PQR Cycle* .....40

## Executive Summary

EPA Region 10's National Pollutant Discharge Elimination System (NPDES) Program and Permit Quality Review (PQR) for Idaho found that permits issued in the state were generally of good quality and adhered to federal regulations. However, EPA found that permit standard conditions were either absent (wholly or in part) or inconsistent with federal standard conditions, public notices lacked specific facility and outfall location information, and some documentation for permit decisions and effluent limitations lacked certain details.

The PQR examined 11 individual Idaho NPDES (IPDES) permits along with 1 general permit issued by the Idaho Department of Environmental Quality (IDEQ), several IDEQ permitting policies, and the statewide permit template. The PQR also focused on the following national priority areas:

- Permit Controls for Nutrients in Non-Total Maximum Daily Load (TMDL) Waters, and
- Effectiveness of Publicly Owned Treatment Works (POTW) NPDES Permits with Food Processor Contributions

IDEQ permits 146 individual facilities. As of February 2023, 41 percent of Idaho's permits are current.

The PQR recognizes the many state and region-specific challenges faced by the state of Idaho, including limited staff for developing and issuing IPDES permits and reducing permit backlog. The PQR also recognizes initiatives taken by the state to improve the program, such as IDEQ's extensive repository of IPDES guidance documents and standard operating procedures, many of which are available to the public on IDEQ's website. The guidance documents provide important foundational information to the permit writer but also provide transparency to the regulated community and general public. IDEQ is proactive in the IPDES permitting process, as they publish the permit issuance plan on their website and mail it directly to interested parties, which allows the public to learn of permitting actions in advance and ask IDEQ about the permits planned for development.

As a result of this review, EPA recommends that IDEQ review standard conditions language for completeness and consistency with federal standard conditions and update the boilerplate language to ensure alignment with federal language. In addition, IDEQ should review its templates for public notices and ensure that they address the content requirements in the NPDES regulations. Further, IDEQ should develop procedures to consistently evaluate reasonable potential where there are limited or no effluent monitoring data available. In addition to the items listed above, the report provides an overview of the IPDES permitting program and identifies specific areas where EPA and IDEQ can work together to continue to strengthen permit language and documentation in state NPDES permits.

The state of Idaho reviewed and provided comments on the draft PQR report November 15, 2023. 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, such as more consistent nutrient effluent and ambient monitoring in IPDES permits, 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.

During this review, the evaluation team proposed action items to improve Idaho's NPDES permit program. The 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** - 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** - Recommended action items are recommendations to increase the effectiveness of the state's or Region's NPDES permit program.

Action items are tracked by EPA Headquarters on an annual basis and reviewed during subsequent PQRs.

EPA's review team, consisting of four regional staff, one Headquarters (HQ) staff, and two HQ contractor staff, conducted a review of the Idaho NPDES permitting program which included an on-site visit to the Idaho Department of Environmental Quality (IDEQ) in Boise on June 27–28, 2023.

The Idaho PQR included reviews of core permit components and national and regional topic areas, as well as discussions between the review team and IDEQ 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 11 permits were reviewed as part of the PQR. All permits were reviewed for the core review and 5 permits were reviewed for national topic areas. Some permits were reviewed for both the core review and one or more topic area reviews. Permits were selected based on issuance 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*<sup>1</sup> and are intended to evaluate similar issues or types of permits in all states.

## Topic Area Reviews

The national topics reviewed for the Idaho NPDES program were: Permit Controls for Nutrients in Non-Total Maximum Daily Load (TMDL) Waters and Effectiveness of Publicly Owned Treatment Works (POTW) NPDES Permits with Food Processor Contributions.

Regional topic area reviews, which target regionally-specific permit types or particular aspects of permits, were optional for this PQR cycle and were not selected for this report.

# II. STATE PROGRAM BACKGROUND

## A. Program Structure

IDEQ is the NPDES permitting authority for the state. The state of Idaho received authorization to administer and implement the Idaho NPDES (IPDES) base program on June 5, 2018.<sup>2</sup> IDEQ received authorization to implement the program for pretreatment on July 1, 2018, general permits on July 1, 2020, federal facilities on July 1, 2021, and biosolids on July 1, 2021. The “Rules Regulating the Idaho Pollutant Discharge Elimination System Program” are addressed in the Idaho Administrative Procedures Act (IDAPA) 58.01.25.<sup>3</sup>

IDEQ is governed by both a director and a board consisting of seven members appointed by the governor. Within IDEQ are four divisions responsible for developing, administering, and enforcing environmental policies and for providing technical and administrative support, including Air Quality, Surface and Wastewater, Waste Management and Remediation, and Technical Services. The Surface and Wastewater Division addresses the state’s surface, ground, and drinking water resources. IDEQ’s Wastewater Permits Bureau is within the Surface and Wastewater Division.

IDEQ’s IPDES program is in the Boise State Office and is housed within the Wastewater Compliance Bureau and Wastewater Permits Bureau. Staff in the main office negotiate budgets, work plans, and performance partnership agreement components; contribute to the IDEQ strategic plan; supervise and hire IPDES staff; and integrate the program with other division programs and regional offices. Staff in the main office also develop the permit issuance

---

<sup>1</sup> <https://www.epa.gov/npdes/central-tenets-npdes-permitting-program>

<sup>2</sup> Authority for Idaho’s municipal permits transferred July 1, 2018, industrial permits transferred July 1, 2019, and individual stormwater permits transferred July 1, 2021.

<sup>3</sup> <https://adminrules.idaho.gov/rules/current/58/580125.pdf>

plan (PIP); implement permit administration, data management, and enforcement activities for the state; and develop IPDES individual and general permits. IDEQ also has regional offices in Boise, Coeur d'Alene, Idaho Falls, Lewiston, Pocatello, and Twin Falls. Regional office staff work directly with citizens, municipalities, industries, and businesses to implement IDEQ’s programs and policies. For the IPDES program, regional office staff provide compliance assistance to permittees, respond to complaints, and conduct facility inspections. They also participate in the development, review, and implementation of other program aspects including permits, rules, guidance, and standard operating procedures (SOPs).

IDEQ employs seven permit writers—four individual permit writers and three general permit writers—in addition to two permit supervisors (one each for individual and general permits). IDEQ reported that the IPDES program has experienced fluctuations in its permit writer staff as well as the types of permits assigned. IDEQ noted the number of permits completed over the last four years as follows:

*Table 1: Permits Completed by Year Since 2019*

Year	Number of Permits Completed
2022	8 <sup>1</sup>
2021	6
2020	12
2019	3

<sup>1</sup>This value includes two permit modifications.

Additional staff across IDEQ divisions support IPDES permit writers during permit development including, but not limited to, the following:

- Technical Services—Staff may perform mixing zone, water quality, or other analyses to support permit development as needed.
- Administrative Assistants—Staff assist with drafting correspondence, sending permit notifications, and entering permit data into various data systems.
- Information Technology—Staff assist in developing and maintaining IPDES data applications and associated user interfaces.
- Surface Water—Staff review draft permits for consistency with water quality standards (WQS) and TMDLs.
- Engineering—Staff review draft permits, assist with reviewing associated engineering documents, and provide compliance assistance.
- Regional Officers—Staff in the regional office where the permittee is located may provide support with historical context, contact information, and compliance questions.
- Departmental Attorney General—The Attorney General reviews draft permits and confidential business information designations, and provides other support as required.

IDEQ creates a yearly PIP that prioritizes permit renewals planned for the upcoming year based on factors such as compliance, watersheds of concern, operational upgrades, and pollutants.

Permits are mostly assigned between industrial (two permit writers) and POTW (two permit writers); permit writers also can influence the selection based on specialty areas that may arise in certain permits. General permits are assigned based on staff workload, availability, and experience.

IDEQ offers permit writers tools and opportunities for professional development through IDEQ trainings, SOPs, guidance documents, internal directives, and internal mentoring by peers and supervisors. In addition, permit writers attend various EPA training courses and webinars, including the NPDES Permit Writers' Course and specialized courses focused on topics such as whole effluent toxicity (WET), Integrated Compliance Information System (ICIS) and Network Discharge Monitoring Report (NetDMR), and water quality standards.

IDEQ has developed several documents providing permit writers and the regulated community with guidance and SOPs for most aspects of the permit development process. Many are available on IDEQ's website. The IPDES User's Guide to Permitting and Compliance explains the permitting and compliance process and the regulatory requirements for IPDES permits. Guidance documents are organized to follow the structure of the IPDES permit and fact sheet and provide thorough explanations and bases for permit conditions.

Examples of IDEQ's SOPs and guidance documents include the following:

- IPDES SOP Application Completeness Determination
- IPDES User's Guide Permitting and Compliance Volumes 1–4
- IPDES Technical Support Document for Reasonable Potential Analysis
- IPDES Effluent Limit Development Guidance (ELDG)
- Idaho Mixing Zone Implementation Guidance
- IPDES Public Participation in the Permitting Process
- IDEQ Antidegradation Guidance
- IPDES SOP Permit Handoff

The IDEQ permit writer uses templates to develop individual municipal and industrial IPDES permits and fact sheets, public notices and legal notices to newspapers, public comment and meeting postings, correspondence letters, and pre-application meeting documents. In addition, the permit writer uses a spreadsheet to evaluate reasonable potential. IDEQ inherited the spreadsheet from EPA Region 10 and has modified it in recent years.

IDEQ's Compliance Reporting, Inspection, and Permitting System (CRIPS) database supports the E-Permitting System and Management Application (MA) interfaces. Once a final permit is issued, IDEQ enters permit limits, monitoring requirements, and any special permit conditions into the CRIPS database to track a facility's compliance with the permit. Permittees submit applications and notices of intent (NOIs) and manage their permit requirements through the E-Permitting System, and IPDES permit staff assign permits and track permit development status in MA. Staff also use the Electronic Document Management System (EDMS) to create and maintain the permit administrative record. Related to surface water quality information, staff



use several web-based systems such as the Source Water Assessment Mapper, the Beneficial Use Reconnaissance Program ambient water quality data viewer, and TMDL program websites to review Subbasin Assessments, 5-Year Reviews, and the TMDL Implementation Table.

IDEQ uses a combination of the CRIPS database and EPA’s ICIS-NPDES. Some permittees, such as those enrolled under the aquaculture general permit and pesticide general permit, submit discharge monitoring reports (DMRs) through NeT, and all individual permittees submit DMRs through NetDMR. For most permits, IDEQ staff must enter information directly into ICIS-NPDES.

IDEQ’s Internal Review and Public Participation of Permits SOP (March 2022) describes the permit review process. The internal permit review process involves the backup permit writer, regional office staff, state office IPDES supervisors, bureau chiefs, deputy attorney general, and division administrator. After the preliminary draft permit and fact sheet have been reviewed by the primary and backup permit writer, appropriate IDEQ Regional Office, and the 401-certification lead, they are then reviewed by the IPDES permit supervisor, wastewater permits bureau chief, and in some cases the deputy attorney general. Additional reviews may be required on a case-by-case basis.

IDEQ maintains an electronic administrative record in EDMS; throughout permit development, the permit writer creates, maintains, and updates the electronic administrative record. Files related to permit development (e.g., permit, fact sheet, administrative record folders), compliance, inspection, and enforcement documentation, correspondence, and monitoring and reporting are maintained electronically in EDMS.

**B. Universe and Permit Issuance**

Based on information provided by IDEQ, as of February 16, 2023, the universe of individual, non-stormwater NPDES permits is presented in the following tables:

*Table 2: Individual NPDES Permit Universe*

Permit Type	Number of Permits
POTWs	
Major	28
Non-Major	75
Non-POTWs	
Major	9
Non-Major	17
Individual Stormwater	17

*Table 3: General NPDES Permit Universe*

Permit Number	Permit Name	Number of Permittees
IDR10000	General Permit for Discharges from Construction Activities	86 NOIs 74 Low Erosivity Waivers
IDR05000	Multi-Sector General Permit (MSGP) for Stormwater Discharges Associated with Industrial Activity	238 NOIs 92 No Exposure Certifications

Permit Number	Permit Name	Number of Permittees
IDG87000	Pesticide General Permit for Discharges from the Application of Pesticides	111
IDG130000	Aquaculture Facilities in Idaho Subject to Wasteload Allocations Under Selected TMDLs	70
IDG131000	Aquaculture Facilities in Idaho Excluding Facilities Discharging Into the Upper Snake-Rock Subbasin	19
IDG132000	General Permit for Fish Processors Associated with Aquaculture Facilities in Idaho	3
IDG370000	General Permit for Small Suction Dredge Placer Miners in Idaho	151
IDG380000	General Permit for Idaho Drinking Water Facilities	6
IDG910000/IDG911000	General Permit for Groundwater Remediation Facilities in Idaho	5

IDEQ reported that 30 major individual (6 industrial and 24 POTWs) and 56 non-major individual (13 industrial and 43 POTWs) permits are administratively continued, which equates to 59 percent of individual permits being administratively continued. In addition, 5 general permits, or 50 percent, are administratively continued.

IDEQ indicated that significant industries in the state include the following:

- Pulp/paper manufacturing
- Mining
- Aquaculture
- Hydroelectric power
- Construction of housing and resorts
- Science and technology (e.g., semiconductors)
- Dairy products
- Beef/pork/chicken products
- Agricultural processing (e.g., potatoes, fruit, vegetables)

### C. State-Specific Challenges

IDEQ indicated concerns with current staffing levels and staff turnover, a challenge faced by most states authorized to implement the NPDES program. IDEQ acknowledged that additional staff, and vacancy reduction and onboarding would help to reduce the permit backlog. IDEQ asked EPA if additional funding was available for the state to hire more staff and noted that the state would also consider seeking out contractor support for permit development. IDEQ strives to build capacity to create a more robust IPDES program and noted during the PQR that an overall priority is to improve their permits and program and to continue the progress they have made in the first 5 years of administering the program.

IDEQ also requested that EPA provide updates as new policies or guidance are developed, related to emerging contaminants, such as per- and polyfluoroalkyl substances (PFAS). IDEQ additionally noted that temperature may be a long-term concern that will require creativity to resolve and added that IPDES staff need to coordinate with their TMDL staff to better identify problematic outfalls and what locations are most vulnerable. Further, IDEQ requested specific training for general permit writing that currently isn't covered in EPA training and modules.

## **D. Current State Initiatives**

IDEQ maintains an extensive repository of permit development and administrative guidance documents that provide thorough explanations for the basis of permitting decisions for both the IDEQ permit writer, regulated community, and general public.

IDEQ is proactive in the IPDES permitting process: it publishes the PIP on its website and emails the list to local contacts and interested parties upon request. Publishing and notification of the PIP provides the public with advance notice of a permit that is proposed to be issued or reissued and the opportunity to contact IDEQ to discuss the permit. Further, IDEQ publishes many of its SOPs and guidance documents on its website, allowing the public to understand IDEQ's procedures, policies, and methods for developing permit conditions.

IDEQ requires monitoring for PFAS in some POTW permits such as the draft permits discharging to the Spokane River.

## **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.

##### *Program Strengths*

IDEQ's fact sheets include a table that summarizes basic facility information, including latitude and longitude coordinates for the facility and outfall locations. Fact sheets provide useful descriptions of facility operations (including design flow and nature of the business), treatment processes, and sludge/biosolids generation and management. Fact sheets also include summaries of permit and compliance history in addition to wastewater influent and effluent characterization data. Fact sheets adequately provide the waterbody's name, description, and assessment unit number.

### *Areas for Improvement*

The fact sheet for one permit incorrectly categorized the facility as a privately owned treatment works (PrOTW). The facility is described as a multifunctional resort, which consists or will consist of cabin units, an event center, a lodge/restaurant/pub, a convenience store, and full-service RV hookups, and includes its own treatment works to treat the domestic waste from the resort. Since the resort and treatment works are operated by the same entity, this facility does not qualify as a PrOTW according to 40 CFR 122.2 which defines a PrOTW as “any device or system which is (a) used to treat wastes from any facility whose operator is not the operator of the treatment works and (b) not a POTW.”

Some of Idaho’s permits and fact sheets did not clearly indicate whether the permit is new or reissued. IDEQ noted that typically the fact sheet narrative denotes if a permit is renewed or a new permit. Reviewers noted that permits identify the application renewal date, but for one permit, the specific date was inconsistent within the permit. EPA recommends that IDEQ consider streamlining the permit template to only include the specific date in one location, such as the cover page or the Submission Schedule. The Drinking Water Treatment Facility General Permit listed the expiration date as April 31, 2027, an invalid date. EPA recommends that IDEQ ensure that this information is reviewed during internal quality assurance/quality control (QA/QC) reviews.

### *Action Items*

#### Essential

- The PQR did not identify any essential action items for this section.

#### Recommended

- IDEQ should ensure that facility descriptions are accurate, particularly concerning the distinction between POTWs, PrOTWs, and other non-POTW facilities.
- IDEQ should consider adding facility status information upfront to the Facility Information table in the fact sheet, to clearly indicate whether the permit is new or reissued.
- IDEQ should consider streamlining the permit template to only include the specific application renewal date in one location, such as the cover page or Submission Schedule.
- Ensure that permit expiration dates are included in internal QA/QC reviews.

## **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.

IDEQ's IPDES application process uses a web-based interface for application submittal, the IPDES E-Permitting System, and state application forms that are based on EPA's forms and generally follow the organization of EPA's forms. IDEQ updates application forms when state or federal application regulations are updated. IDAPA 58.01.25.105.03 specifies timelines for individual permit application submittals; existing dischargers must submit a renewal application at least 180 days prior to the expiration date of the existing permit and new dischargers must submit a new application at least 180 days prior to the date on which the discharge is to commence.

IDEQ develops a PIP annually and coordinates with the regional offices to identify the top 20 permits to target for development, as well as the IDEQ contact for each permit (typically a regional office staff person). The PIP is published on IDEQ's website. IDEQ tracks permit applications and their due dates in an internal database (Management Application, or MA). IDEQ sends a reminder to the regional office 60 days prior to the application due date, prompting the regional staff person to reach out to the permittee, which often results in the permittee requesting an extension to submit the application or assistance with completing the application. The permit writer reviews applications for completeness following the procedures specified in IDAPA 58.01.25.106 (Individual Permit Application Review) and records relevant information in MA; the database assigns due dates/milestones automatically.

In addition to tracking permit applications, MA is used to track permit development status, including permit writer assignments. After an application is reviewed for completeness, it might wait in a queue until ready for development. In some cases, if an application has aged before a permit writer begins developing the permit, IDEQ may request an updated application or components of an application. When IDEQ is ready to begin development of the draft permit, the manager will assign it according to staff workload.

### *Program Strengths*

Applications reviewed were complete and submitted timely. Fact sheets clearly indicate the dates when the application was submitted and when IDEQ deemed the application complete.

### *Areas for Improvement*

IDEQ noted that the permittee often requests extensions after receiving a reminder 60 days prior to the application due date. EPA suggests increasing the notification timing to 120 days to reduce requests for extensions. One facility, a multifunctional resort, originally submitted an incorrect application form (EPA Form 2A for new POTWs), and IDEQ requested that the applicant reapply using EPA Form 2D (for new industrial facilities discharging process wastewater). However, the appropriate form for this facility would have been EPA Form 2E (for industrial facilities discharging only nonprocess wastewater).

*Action Items*

Essential	<ul style="list-style-type: none"> <li>• IDEQ must ensure that the appropriate NPDES application form is submitted, particularly for non-POTW facilities (40 CFR 122.21).</li> </ul>
Recommended	<ul style="list-style-type: none"> <li>• IDEQ should increase the notification timing to 120 days prior to the application due date to reduce requests for extensions.</li> </ul>

**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 biochemical oxygen demand (BOD), total suspended solids (TSS), pH, and percent pollutant removal), and permits must contain numeric limits for all these parameters (or authorized alternatives) in accordance with the secondary treatment regulations at 40 CFR Part 133.

Idaho's rules at IDAPA 58.01.25.302.03 require that IPDES permits include applicable TBELs that meet the requirements of 40 CFR 125.3. IDEQ's IPDES ELDG document (December 2017), section 2.1, points the permit writers directly to the IDAPA citation for establishing TBELs. For POTWs, the ELDG document discusses in detail how the permit writer should implement federal requirements while developing TBELs to reflect for secondary and equivalent to secondary standards. In addition, IDAPA 58.01.25.303.04 requires effluent limitations for continuous discharges from POTWs to be expressed, unless otherwise impracticable, as average monthly and average weekly limits.

*Program Strengths*

Fact sheets for POTW permits clearly identified the standards applicable to the discharge and included citations to the appropriate regulations that served as the basis for TBELs. Effluent

limitations were consistently established for pH, BOD, TSS, and minimum percent removal for BOD and TSS, and were expressed in appropriate units and forms.

### *Areas for Improvement*

The review team did not identify any areas for improvement in this core area.

### *Action Items*

#### Essential

- The PQR did not identify any essential action items for this section.

#### Recommended

- The PQR did not identify any recommended action items for this section.

### *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 Practicable Control Technology Currently Available (BPT), 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 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).

IDEQ's ELDG (December 2017), section 2.2, describes the process for establishing TBELs for non-POTWs. The IDEQ permit writer reviews available facility and discharge information and identifies whether any ELGs are applicable. Where ELGs are applicable, the permit writer identifies ELG subcategories, determines whether existing or new source standards apply, and then calculates TBELs from the ELGs. Section 2.2.2.6.2 of the guidance illustrates the process for applying multiple ELG requirements and describes the building block approach to TBEL development.

IDEQ's regulations provide limited opportunities for variances, waivers, and intake credits from ELGs. IDEQ allows for thermal discharge variances from technology-based standards, at IDAPA 58.01.25.310 (and consistent with CWA section 316(a) and 40 CFR 122.21(m)(6)), following request in a permit application, if the variance is based on an ELG (if the thermal discharge variance is based on WQS, application is due by the close of the draft permit comment period). Waivers from application data requirements are allowed at IDAPA 58.01.25.105 if the permit application indicates that the permitting authority has substantially identical information. In addition, IDAPA 58.01.25.302.03 allows for waivers from sampling required by ELGs if the

discharger demonstrates during permit reapplication that the pollutant is not present in the discharge or is present only at background levels from intake water and without any increase in the pollutant due to activities of the discharger. Any approved variance, waiver, or intake credit is effective for up to 5 years or the life of the IPDES permit, whichever is shorter, after which the discharger must meet the applicable standard or reapply for the variance, waiver, or intake credit. For variances from WQS, IDEQ requires the discharger to demonstrate reasonable progress toward meeting the standard.

IDEQ's permit fact sheet documents the data and information used to identify applicable ELGs, how the effluent limits were derived, and the final permit effluent limits. In accordance with the IDAPA, permits will also include any narrative requirements contained in the ELGs applicable to the discharge.

IDAPA 58.01.25.302.03 establishes requirements for developing case-by-case (BPJ) TBELs for industrial dischargers. Section 2.2.3 of IDEQ's ELDG provides permittees and the public with an understanding of the process for developing effluent limits on a case-by-case basis using BPJ. As discussed in IDEQ's guidance document, when developing a case-by-case BPJ limit, the permit writer uses an approach similar to EPA's statistical approach for developing national standards (ELGs). The fact sheet documents the rationale for developing case-by-case TBELs for industrial dischargers.

#### *Program Strengths*

Effluent limitations were established in appropriate units and forms.

#### *Areas for Improvement*

One permit for a non-POTW, a multifunctional resort, contained effluent limitations for BOD and TSS, reflecting application of secondary treatment standards for POTWs to the discharge. However, the permit did not conduct a formal BPJ analysis, consistent with 40 CFR 125.3(d), to demonstrate that the secondary treatment standards were appropriate for this facility. In addition, the fact sheet for this permit cited Idaho rule IDAPA 58.01.25.303.02 and indicated that the rule requires that effluent limits for POTWs (or PrOTWs) be calculated based on the design flow of the facility. The rule does not actually mention PrOTWs, and as previously described, this particular facility does not qualify as a POTW or PrOTW, so this specific rule should not be referenced for the limit development process for this facility.

One permit for a non-POTW (a fruit packing facility) applied secondary treatment standards as the basis for case-by-case TBELs using BPJ but did not evaluate a general permit for a similar type of operation (fruit packing facility), issued by Washington Department of Ecology. The fact sheet would be strengthened with a detailed discussion of the information sources the permit writer consulted to develop the TBELs.



*Action Items***Essential**

- IDEQ must ensure that permit writers determine appropriate effluent limitations for non-POTW discharges for which ELGs do not exist, by conducting a formal analysis based on BPJ, consistent with 40 CFR 125.3(d).

**Recommended**

- IDEQ should provide a robust and defensible rationale for developing case-by-case TBELs using BPJ, including a thorough discussion of all information sources considered to develop effluent limits.

**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 WQS.

The PQR for Idaho 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 WQS 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 TMDLs.

*Process for Assessing Reasonable Potential*

IDAPA 58.01.02 contains Idaho's WQS.<sup>4</sup> IDAPA 58.01.25.302.06.a.i mirrors the language from 40 CFR 122.44(d)(1)(i) and requires that effluent limits be established for all pollutants and pollutant parameters that are or may be discharged at levels that will cause, have the reasonable potential to cause, or contribute to an excursion above any state narrative or numeric water quality criteria. Where reasonable potential is found, a permit must include WQBELs that ensure the discharge will not cause violations of applicable WQS for individual pollutants and WET.

The IDEQ permit writer conducts the reasonable potential analysis (RPA) based on several internal guidance documents and SOPs and uses a standard spreadsheet. Section 3 of the IPDES ELDG (December 2017) discusses the process for evaluating the need for and subsequently developing WQBELs.

The IDEQ permit writer identifies pollutants of concern through a review of application information and data that report pollutants as present in the effluent, DMR data, applicable TBELs, effluent limits from the previous permit, and waterbody impairments and TMDLs. The permit writer identifies applicable water quality criteria and any applicable TMDLs. The permit writer evaluates all available data (typically from the last 5 years but may be shortened if changes at the facility have changed the character of the effluent) for all pollutants of concern in the spreadsheet RPA tool. The permit writer occasionally removes outliers from the data set, but after contacting the facility to ensure the data point is not representative of the discharge. IDEQ documents and justifies in the fact sheet any removal of outliers.

The RPA tool was originally developed by Washington Department of Ecology and then modified by EPA Region 10. It evaluates whether there is reasonable potential, whether there is a need for a mixing zone, and the effluent limits for pollutants of concern. IDEQ periodically reviews the tool to update water quality criteria (e.g., adding the Biotic Ligand Model criteria for copper) and applicable formulas, and to ensure that it accurately evaluates reasonable potential.

IDEQ generally follows the guidance in EPA's *Technical Support Document for Water Quality-based Toxics Control* (TSD).<sup>5</sup> The main difference is that IDEQ applies the reasonable potential multiplying factor to a value representing a certain percentile (95<sup>th</sup> or other percentile) instead of the maximum effluent concentration. Section 3.4.4 of the IPDES ELDG details the process to conduct the RPA. IDEQ noted during the PQR that they consider different sample sizes as well, based on the water quality criteria—20 data points for aquatic life water quality criteria and 10 data points for human health water quality criteria. If data sets are smaller than these thresholds, IDEQ uses the maximum observed effluent concentration in its RPA. If data sets are larger than these thresholds, IDEQ uses the 95<sup>th</sup> percentile value with the reasonable potential

---

<sup>4</sup> <https://adminrules.idaho.gov/rules/current/58/580102.pdf>

<sup>5</sup> <https://www3.epa.gov/npdes/pubs/owm0264.pdf>

multiplying factor. EPA's TSD recommends using the maximum effluent concentration; therefore, IDEQ's approach is not consistent with the TSD guidance.

The IDEQ permit writer thoroughly documents the quantitative RPA, including the data used in the analysis, applicable water quality criteria, mixing zone/dilution assumptions, and coefficients of variation, in the permit fact sheet. By comparison, reviewers observed that documentation for qualitative RPAs was less detailed and not consistent across several permits reviewed. IDEQ acknowledged the inconsistency and indicated that it was largely because certain permit writers were still new when they drafted those fact sheets.

Section 3.6 of the IPDES ELDG discusses the procedure for conducting the RPA and calculating WQBELs for WET. From section 3.6, "The RPA is based on toxicity data submitted by the discharger. For an RPA, data should be available for acute and/or chronic testing with select aquatic test species listed in section 3.6.2.1. The permit writer can evaluate the need for WQBELs using a calculated numeric criterion that will attain and maintain the applicable narrative criterion. Typically, Idaho's narrative criterion for toxics is interpreted to mean  $TU_a = 0.3$  and  $TU_c = 1$ , as defined in section 3.3.2.3. Using these values, the permit writer uses WET test results to project acute or chronic toxicity in the receiving water after accounting for the applicable dilution allowance or mixing zone. If the projected toxicity results in an excursion of the calculated criterion, the permit writer has demonstrated [reasonable potential] and must calculate WET limits." If the evaluation results in no reasonable potential, the permit writer determines a value for projected toxicity that, if exceeded, triggers the need for accelerated testing. Accelerated test results that confirm the trigger exceedance may identify the need for a WET limit.

#### *Process for Developing WQBELs*

The IDEQ permit writer develops WQBELs using the same spreadsheet that is used for conducting the RPA. IDEQ follows the TSD's guidance for calculating WQBELs and recommendation for applying the 99th-percentile value to calculate the maximum daily effluent limit while applying the 95th-percentile value to calculate the average monthly effluent limit.

When mixing zones are proposed, IDEQ staff verify mixing zone percentages used in the dilution factor and/or modeling.

To comply with IDAPA 58.01.02.060.01, the permit writer assesses the receiving water; performs any mixing zone analyses; establishes the mixing zone's size, configuration, and location (if a mixing zone is applicable); and authorizes all mixing zones on a case-by-case basis. The permit writer should run the mixing zone model using the maximum projected effluent concentration and the appropriate low-flow condition associated with each pollutant assessed. The discharger may run a series of mixing zone analyses and submit that to IDEQ for consideration. After the mixing zone has been verified or calculated, staff apply the appropriate dilution factor to the RPA and, if necessary, calculate WQBELs. The fact sheet includes IDEQ's mixing zone decision.

The IDEQ permit writer reviews the most recent Integrated Report and an IDEQ mapping tool to identify any applicable TMDLs. The permit writer also contacts staff in the IDEQ regional office where the permitted facility is located, since they may be aware of TMDLs in development and can facilitate coordination. The goal of this collaboration is to ensure that TMDL language is easily translated to the permit. Where a discharge is subject to a wasteload allocation under a TMDL, the permit writer uses the wasteload allocation to develop WQBELs for the impairing pollutant(s). IDEQ indicated that if a TMDL did not include a wasteload allocation for a pollutant of concern, the permit writer would conduct an RPA for that pollutant and develop a WQBEL if the discharge demonstrated reasonable potential. Fact sheets include discussion of applicable TMDLs and how TMDLs were implemented in the permit.

### *Program Strengths*

#### Reasonable Potential

Fact sheets provide thorough documentation of quantitative RPAs.

#### WQBEL Development

IDEQ's fact sheets provide thorough documentation of effluent limit calculations in a clear format. Fact sheets clearly indicate how mixing zones and dilution were applied in the development of WQBELs.

### *Areas for Improvement*

#### Reasonable Potential

IDEQ indicated that it uses EPA's TSD guidance to evaluate reasonable potential and that the spreadsheets and calculators used to determine reasonable potential apply the TSD's approach. IDEQ determines the effluent concentration used in the RPA by applying the reasonable potential multiplying factor to a value representing a certain percentile (95<sup>th</sup> or other percentile) instead of the maximum effluent concentration. This process may result in excluding data that is representative of the discharge. EPA's TSD recommends using the maximum effluent concentration, so IDEQ's approach is not consistent with the TSD guidance.

Reviewers observed that IDEQ permit writers differed in their approach to evaluating reasonable potential where there were limited or no effluent data available. Further, in these instances, fact sheets did not provide a clear rationale for how the permit writers evaluated reasonable potential. Section III.F includes an action item to address fact sheet documentation for qualitative RPAs.

Some of the fact sheets reviewed only described impairing pollutants in cases where a TMDL had been developed, so it was unclear whether additional pollutants were causing impairments absent a TMDL. Identification of all impairments, regardless of TMDL status, is an important step in ensuring all pollutants of concern are appropriately identified.

## WQBEL Development

One fact sheet reviewed indicated that sedimentation/siltation was listed as an impairing pollutant and identified as a pollutant of concern. A TMDL had been developed for sedimentation/siltation, but the TMDL did not include a wasteload allocation. The fact sheet did not discuss sedimentation/siltation further and how the permit would address the impairment in the absence of a wasteload allocation. The permit included effluent limits for TSS, which could potentially address sedimentation/siltation, but the fact sheet did not link these parameters. The fact sheet would be strengthened with a discussion of how the pollutant of concern would be controlled by other permit conditions.

### Action Items

#### Essential

- Reasonable Potential
  - The PQR did not identify any essential action items for this section.
- WQBEL Development
  - The PQR did not identify any essential action items for this section.

#### Recommended

- Reasonable Potential
  - IDEQ should either update their RPA approach to apply the reasonable potential multiplying factor to the maximum effluent concentration, or revise their guidance documents to reflect this deviation from EPA's TSD.
  - IDEQ should develop and implement a consistent approach for conducting RPAs where there are limited or no effluent monitoring data available.
  - IDEQ should ensure that fact sheets identify all impairing pollutants for the receiving waterbody, not just those impairing pollutants for which TMDLs have been developed.
- WQBEL Development
  - IDEQ fact sheets should better discuss how effluent limits for a surrogate parameter would control an impairing pollutant that is not addressed in a wasteload allocation (e.g., TSS for sedimentation/siltation).

### 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.

IDEQ's permit writer guidance and SOPs direct the permit writer to compare calculated TBELs and WQBELs and establish the more stringent of the two in the draft permit. IDEQ's fact sheets explain the basis for establishing the effluent limits, including identifying whether final effluent limits are TBELs or WQBELs. Idaho's antidegradation policy and implementation procedures are found at IDAPA 58.01.02.051 and 58.01.02.052, respectively. In addition, IDEQ developed a draft guidance document, Idaho Antidegradation Implementation Procedures (August 2017). Further, the IPDES ELDG, section 3.8, addresses antidegradation implementation. IDEQ indicated that the permit writer conducts an antidegradation check for every effluent limit in the permit, as well as assimilative capacity calculations. This information is added to a table in the antidegradation section of the fact sheet to track the limits over time.

IDEQ's permit fact sheet template includes the following language: "IDEQ employs a waterbody-by-waterbody approach to implementing the state's antidegradation policy. This approach means that any waterbody fully supporting its beneficial uses will be considered high quality (IDAPA 58.01.02.052.05.a). Any waterbody not fully supporting its beneficial uses will be provided Tier I protection for that use unless specific circumstances warranting Tier II protection are met (IDAPA 58.01.02.052.05.c). The most recent federally approved Integrated Report and supporting data are used to determine support status and the tier of protection (IDAPA 58.01.02.052.05)."

For new or increased discharges that could potentially lower water quality in high-quality waters, Tier II protection provides a framework for deciding the degree of degradation allowed for activities determined to be necessary to accommodate important economic or social development in the area in which the waters are located. Depending on the outcome of the review, the permit may be written to maintain the existing high-water quality or to allow some

degradation. The main aspects of a Tier II analysis include the following: determine if the resulting degradation is significant, assure other point and nonpoint source controls are achieved, identify non-degrading and least degrading alternatives, and determine if resulting degradation is necessary and important to the social or economic health of the community.

If significant degradation of a Tier II waterbody is proposed, the permit writer works with the applicant to evaluate alternatives to reduce degradation and determine if degradation that cannot be reasonably avoided is socially or economically justified. If, after completing the review process, IDEQ decides to allow a new or increased discharge that would lower water quality, the permit writer will include the effluent limits in the IPDES permit for that discharge provided the limits meet all other applicable TBELs and WQS. Fact sheets include all relevant information regarding the Tier II analysis.

IDEQ indicated during the PQR that anytime a calculated effluent limit is less stringent than the previous effluent limit, the permit writer conducts an anti-backsliding review, including reviewing the allowable regulatory and statutory exceptions. Idaho's anti-backsliding provisions are at IDAPA 58.01.25.200 and reflect the NPDES regulations at 40 CFR 122.44(l). In addition, the IPDES ELDG, section 4, addresses final effluent limitations and anti-backsliding, and provides useful illustration of how to evaluate whether less stringent effluent limitations are allowable.

#### *Program Strengths*

IDEQ implemented appropriate procedures to develop TBELs and WQBELs and limitations were established in appropriate units and forms. Fact sheets provided thorough discussions of the basis for effluent limitations. Fact sheets documented that the permit writer evaluated TBELs and WQBELs and established the most stringent as the final effluent limitation. Effluent limitations in reissued permits were as stringent as those established in the previous permit. Fact sheets discussed reviews conducted to ensure effluent limitations conformed to IDEQ's anti-backsliding and antidegradation policies.

#### *Areas for Improvement*

The review team did not identify any areas for improvement in this core area.

#### *Action Items*

##### Essential

- The PQR did not identify any essential action items for this section.

##### Recommended

- The PQR did not identify any recommended action items for this section.

## C. Monitoring and Reporting Requirements

### *Background and Process*

NPDES regulations at 40 CFR 122.41(j) require permittees to 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 representative monitoring of their permitted discharges and where applicable, internal processes, and report the analytical results to the permitting authority with the information necessary for evaluating the permitted discharges' 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.

Idaho's rules at IDAPA 58.01.25.304 address monitoring and reporting requirements for IPDES permits. IDAPA 58.01.25.304(g) states that permits must require monitoring using sufficiently sensitive analytical procedures. The permit writer establishes monitoring frequencies based on IDEQ document, 2018FAG5 Tables Monitoring Matrix SOP, a spreadsheet that lists baseline monitoring and reporting requirements for all facility types. Monitoring requirements are based on the size of the facility, treatment technology employed, and type of monitoring equipment in use. IDEQ considers reductions in monitoring frequency on a case-by-case basis and if the monitoring frequency is reduced, fact sheets include a discussion of why it is appropriate.

Permits contain requirements for permittees to report monitoring data electronically and use sufficiently sensitive analytical test methods capable of detecting and measuring pollutants at, or below, applicable water quality criteria or permit limitations. The permit writer reviews



application data with attention to whether sufficiently sensitive methods were employed for the analysis and ensures that the permits include the requirements to use appropriate analytical methods.

### *Program Strengths*

Idaho's permits established appropriate monitoring requirements in a clear manner, identifying monitoring location, sample type, and frequency. POTW permits establish appropriate influent monitoring requirements for BOD<sub>5</sub> and TSS. Permits contain a table that summarizes submittal requirements, including where the specific requirements are established, submittal frequency, and initial submittal due date. Permits require sampling and analysis using sufficiently sensitive EPA-approved methods and required electronic reporting of monitoring results.

### *Areas for Improvement*

The review team did not identify any areas for improvement in this core area.

### *Action Items*

#### Essential

- The PQR did not identify any essential action items for this section.

#### Recommended

- The PQR did not identify any recommended action items for this section.

## **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.

IDAPA 58.01.25.300 lists conditions applicable to all IPDES permits and follows the organization of federal standard conditions at 40 CFR 122.41. The IDEQ permit writer uses boilerplate standard conditions from the IDAPA in the permit template. IDAPA 58.01.25.305 specifies requirements for allowing compliance schedules in IPDES permits.

Typical special conditions included in IPDES permits address pretreatment, WET, nutrients, or special monitoring requirements. IDEQ's User's Guides to Permitting and Compliance provide a summary of special conditions that may be included in industrial and municipal permits. The User's Guide to Permitting and Compliance Volume 2 (POTW) provides guidance for when a pretreatment program is required.

### *Program Strengths*

Permit standard conditions were generally easy to identify. Several permits reviewed included compliance schedules that appeared appropriate for the discharge. Fact sheets that accompanied permits with compliance schedules provided adequate discussion of the basis for the compliance schedules.

### *Areas for Improvement*

Permits lacked certain federal standard conditions in part or entirely, as detailed below:

- Language at 40 CFR 122.41(j), Monitoring and Records and 40 CFR 122.41(k), Signatory Requirement: Permit penalties differed from penalty requirements in 40 CFR 122.41(j)(5). However, the state provisions are consistent with the state's penalty authorities that were reviewed and approved by EPA in 2018 under 40 CFR Section 123.27. EPA will work with the state outside of the PQR process to address this issue.
- Language at 40 CFR 122.41(l)(1), Planned Changes: Permits did not include the language "nor to notification requirements under 122.42(a)(1)" from 40 CFR 122.41(l)(1)(ii).
- Language at 40 CFR 122.41(l)(7), Other Noncompliance: This language was missing from permits reviewed.

Language from the standard condition at 40 CFR 122.41(l)(7), Other Information is embedded in permit section "2.3 Permit Renewal," but is also duplicated in section 4.2.19 "Omitted/Erroneous Information." EPA suggests that this language be removed from section 2.3 because it is redundant and the federal standard condition applies to any information submitted to IDEQ (such as reports and DMRs submitted in compliance with the existing permit) and not just the renewal application.

A permit for a non-POTW included the standard condition at 40 CFR 122.42(b) that is specific to POTWs. The appropriate additional standard condition for this type of facility is 40 CFR 122.42(a) for non-municipal discharges.

*Action Items***Essential**

- IDEQ must ensure that all federal standard conditions contained in 40 CFR 122.41 are included, and completely reflect the federal language, in all IPDES permits. However, for differences identified in penalty amounts, EPA will work with the state outside of the PQR process to address this issue.
- IDEQ must ensure that the additional standard condition at 40 CFR 122.42(a) regarding notification requirements is established in all non-POTW permits.

**Recommended**

- The "Other Information" standard condition should be moved from the "Permit Renewal" section to the same section as the other standard conditions so it is clear that the condition applies to the entire permit.

**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 Idaho, and reviewed materials from the administrative process as they related to the core permit review.

After IDEQ has developed a draft permit, it provides the draft to the permittee for approximately two weeks to review for errors and omissions. IDEQ also provides the draft permit to EPA at this time, with the typical review period lasting 90 days. IDEQ provides public notice of the availability of the draft permit for 30-day review and comment. IDEQ's public notice procedures are contained in IDAPA 58.01.25.109. IDEQ provides public notice through mailings to the applicant, certain listed state and federal agencies, affected Indian Tribes as determined by the IPDES Tribal Participation Process,<sup>6</sup> any users identified in the permit application for a POTW, persons who specifically request to be kept on the mailing list, and any local government having jurisdiction over the area where the facility is located. IDEQ may also provide notice of opportunities on IDEQ's website, through mailing lists, and by periodic publication in newspapers, regional and state-funded newsletters, environmental bulletins, state law journals or similar publications, or any other method reasonably calculated to give notice of the action to persons potentially affected (IDAPA 58.01.25.109.d). During the public review and comment period, the permit application, draft permit, and accompanying fact sheet

<sup>6</sup> <https://www2.deq.idaho.gov/admin/LEIA/api/document/download/4813>

are available to the public. IDEQ may schedule a public meeting on the draft permit if there is significant public interest or if an interested party requests in writing a public meeting within the first 14 days of the public comment period. IDEQ allows for extensions to the public comment period, upon request.

IDEQ receives comments in several formats—via email, hard copy mail, IDEQ’s public comment website, and phone calls. After the close of the comment period, IDEQ permit writers have two weeks to compile a written response to comments, which is included as an appendix to the fact sheet. The permit writer also notifies any appropriate parties of changes made to the permit because of the public comments. IDEQ also addresses EPA’s comments during this time. The revised permit is directed to the division administrator to be issued as a final permit. Following the issuance of the permit, parties may appeal the permit for a period of 28 days. IDAPA 58.01.25.204 describes the permit appeals process. IDEQ indicated that permit appeals rarely occur. The process is initiated when a permittee files a petition for review, and a hearing officer is assigned. IDEQ publishes a public notice of the petition for review. The appeal is made based on the administrative record; if a party did not provide public comments on the draft permit, they do not have standing to appeal the permit. The appellant submits a brief and the hearing officer determines how the appeal will be addressed and whether the permit conditions related to the appeal are stayed (only specific elements of the permit can be appealed, not the entire permit). Stayed components would be returned to IDEQ to be revised, and the remaining permit conditions would become effective.

*Program Strengths*

The review of permit records indicated that IDEQ implemented public notice procedures appropriately. Permit records consistently included copies of public comments received and IDEQ’s response to comments document, which was typically included as an appendix to the fact sheet.

*Areas for Improvement*

Reviewers noted that some public notices lack the address of the facility (e.g., Boise permit) (40 CFR 124.10(d)(ii)), a description of business activity (40 CFR 124.10(d)(iii)), and a general description of the location of the discharge (40 CFR 124.10(d)(vii)).

*Action Items*

Essential	<ul style="list-style-type: none"> <li>• IDEQ must ensure that all public notices contain the public notice contents required by 40 CFR 124.10(d).</li> </ul>
Recommended	<ul style="list-style-type: none"> <li>• The PQR did not identify any recommended action items for this section.</li> </ul>

## 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;<sup>7</sup> 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.

NPDES 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.

IDEQ's administrative record is maintained electronically in EDMS. The final permit administrative record contains the application and supporting data, inspection reports, preliminary draft, draft, proposed final, and final permits, along with fact sheets that accompany the draft and final permits, supporting calculations used to develop effluent limitations, comments received during the public review and comment period, response to comments, and any other documents cited in the fact sheet or contained in the supporting file for the permit.

The IDEQ permit writer develops fact sheets for all permits, including non-majors, based on a standard template used across the IPDES program. The permit writer typically writes the fact sheet before the permit.

### *Program Strengths*

Idaho's permit fact sheets are well structured and provide a table of contents, enabling readers to quickly navigate to specific sections of the document. Fact sheets provide sufficient discussions for the basis for effluent limitations and present effluent limitation calculations in a

---

<sup>7</sup> 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.

clear format. Fact sheets consistently include copies of public comments received and IDEQ’s response to comments document as an appendix. The response to comments documents clearly indicate whether a response to a comment resulted in a change to the permit. The permit record was well organized and complete.

*Areas for Improvement*

Reviewers noted that some permit records included additional versions of the permit application, but the records did not indicate why new applications were requested or submitted. The administrative record would be strengthened with correspondence or other documentation to explain why new applications were requested or submitted. As discussed in section III.B.2, fact sheets did not consistently document how the permit writer evaluated reasonable potential in the absence of sufficient effluent monitoring data. As discussed in sections III.B and III.D, EPA noted that in several sections of a permit for a non-POTW, fact sheet language incorrectly described the facility as a PrOTW and reflected permit conditions appropriate to a permit for a POTW, which, if the facility was a PrOTW, would still not have been applicable. EPA recommends that IDEQ use the correct permit and fact sheet template for the type of facility, which would also include use of the non-POTW permit and fact sheet templates for any actual PrOTWs, if applicable.

*Action Items*

- |                    |  |
|--------------------|--|
| <b>Essential</b>   | <ul style="list-style-type: none"> <li>•The PQR did not identify any essential action items for this section.</li> </ul>   |
| <b>Recommended</b> | <ul style="list-style-type: none"> <li>•When new applications are requested or received, IDEQ should consider including correspondence or other documentation in the administrative record to explain the reason for the new applications.</li> <li>•IDEQ should ensure fact sheets consistently document how the permit writer conducted RPAs where there were limited or no effluent monitoring data available.</li> <li>•IDEQ should ensure that the correct permit and fact sheet templates are used for the facility type (e.g., POTW vs. non-POTW/PrOTW).</li> </ul> |

**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 limits, many are derived from wasteload allocations in TMDLs. State narrative nutrient criteria are often challenging to interpret and relationships between nutrients and response parameters with numeric criteria, such as pH and dissolved oxygen, are complex. For this section, waters that are not protected by a TMDL are considered. 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 water quality-based permit limits to be developed for any pollutant with the reasonable potential to cause, potential to cause, or contribute to an excursion of any state water quality standard, including state narrative criteria for water quality.

To assess how nutrients are addressed in the Idaho IPDES program, EPA reviewed five permits as well as the IPDES rules at IDAPA 58.01.25, the Idaho WQS at IDAPA 58.01.02, and related implementation guidance. The Idaho Department of Agriculture also has rules governing nutrient management at IDAPA 02.04.30;<sup>8</sup> however, they were not reviewed because these rules are not related to IPDES permitting except for the Idaho concentrated animal feeding operations (CAFO) general permit.

*Table 4: Permits Reviewed for Nutrients in Non-TMDL Waters National Topic Area*

Permit Number	Facility Name	Facility Type	Facility Designation
ID0023167	City of Cascade WWTP	POTW	Non-major
ID0020087	City of Council WWTP	POTW	Non-major
ID0027901	Henggeler Packing Company, Inc.	Non-POTW	Non-major
ID0022501	City of Potlatch WWTP	POTW	Non-major
ID0020001	City of Salmon WWTP	POTW	Non-major

IDEQ has not developed a nutrient management strategy. In general, prior to development of a TMDL, Idaho permits do not address nutrients. Numeric WQBELs for nitrogen and phosphorus are uncommon. When a numeric WQBEL is included for these nutrients, it is likely the outcome of a completed TMDL. One of the five permits EPA reviewed, Henggeler Packing Company, did have permit limits for total phosphorus based on an applicable TMDL.

Idaho does not have numeric criteria for phosphorus or nitrogen. Idaho does have a narrative criterion regarding excess nutrients which is applied to prevent nuisance aquatic growth that might impair beneficial uses.<sup>9</sup> In addition, Idaho has numeric criteria for dissolved oxygen and

<sup>8</sup> <https://adminrules.idaho.gov/rules/current/02/020430.pdf>

<sup>9</sup> "Surface waters of the state shall be free from excess nutrients that can cause visible slime growths or other nuisance aquatic growths impairing designated beneficial uses" (IDAPA 58.01.02.200.06).

pH which, according to IDEQ's Water Body Assessment Guidance,<sup>10</sup> could be used to assess nutrient impacts to rivers and streams. The guidance notes that narrative criteria exceedances must show a source of pollution, a pathway for pollution to reach the water body, and a measurable adverse effect on a beneficial use.

The IPDES User's Guide to Permitting and Compliance Volume 2—Publicly Owned Treatment Works<sup>11</sup> provides additional tools to address nutrient impairment. In Section 4.7.8, IDEQ states that when the discharge contributes nutrients to an impaired water body without an approved TMDL and not enough information exists to determine the facility's contribution to the impairment, the permit may require a phosphorus management plan. This is similar to a best management practices plan (40 CFR 122.44(k)). The permit lists what the plan must contain and the permittee develops the plan to minimize the discharge of phosphorus.

Additionally, IDEQ notes in Section 4.7.16, that Idaho regulations (IDAPA 58.01.02.055.06) allow for water quality trading as a means of restoring water quality-limited water bodies to compliance with the standards. IDEQ considers nutrients as appropriate pollutants for trading and has established Water Quality Trading Guidance.<sup>12</sup> IDEQ currently does not have any water quality trading agreements in place. Permittees are responsible for developing an IDEQ-approved trading framework which provides trading details for permit implementation.

#### *Program Strengths*

As discussed above, Idaho has a narrative criterion regarding possible responses to excess nutrients that has been used to assess nutrient impacts to fresh water as part of the 303(d) listing program and TMDL development. IDEQ's IPDES guidance recommends a phosphorus management plan when the discharge contributes nutrients to an impaired water body without an approved TMDL and not enough information exists to determine the facility's contribution to the impairment.

Once a TMDL is developed, IDEQ includes WQBELs consistent with wasteload allocations from the TMDLs to address nutrient impairments.

#### *Areas for Improvement*

For nutrients, the RPA can be either qualitative or quantitative. Section 3.2 of EPA's TSD provides discussion of considerations for a permit writer in conducting a qualitative RPA. Additionally, the regulations at 40 CFR 122.44(d)(1)(vi) address implementing narrative criteria in permits. EPA recommends IDEQ develop an approach for evaluating nutrients when a TMDL or numeric criteria are unavailable.

EPA's NPDES Permit Writer's Manual<sup>13</sup> and IPDES guidance suggest requiring nutrient management plans, also known as best management plans, when the discharge contributes nutrients to an impaired water body without an approved TMDL and not enough information

---

<sup>10</sup> <https://www2.deq.idaho.gov/admin/LEIA/api/document/download/14844>

<sup>11</sup> <https://www2.deq.idaho.gov/admin/LEIA/api/document/download/5526>

<sup>12</sup> <https://www2.deq.idaho.gov/admin/LEIA/api/document/download/15317>

<sup>13</sup> [https://www.epa.gov/sites/default/files/2015-09/documents/pwm\\_2010.pdf](https://www.epa.gov/sites/default/files/2015-09/documents/pwm_2010.pdf)



exists to determine the facility’s contribution to the impairment. EPA did not observe this tool implemented in its review of the PQR permits although phosphorus was identified as a pollutant of concern and monitoring results indicated concentrations above Gold Book recommendations in some cases.

The regulations at 40 CFR 122.44(i)(1)(iii) provide authority to include monitoring requirements in permits to yield data for development of a permit in the next permit cycle. EPA noted monitoring requirements for effluent and receiving water to support IDEQ in characterizing the effect of the effluent. However, there were some cases where these requirements were inconsistently applied across permit terms. For example, the City of Council WWTP sample results showed total phosphorus in the effluent and receiving water; however, monitoring requirements were reduced from the prior permit levels stating the permit renewal monitoring (n= 3 samples) would provide sufficient data for the following permit cycle. EPA recommends consistent requirements and including nutrient monitoring even for non-major facilities, which will provide data that could be used to develop nutrient limits or a reduction strategy. Inadequate monitoring requirements can reduce the ability to determine compliance with effluent limitations established in NPDES permits, establish a basis for enforcement actions, assess treatment efficiency, and characterize effluents and receiving water.

*Action Items*

<b>Essential</b>	<ul style="list-style-type: none"> <li>•Conduct RPA for nutrients if the type of facility is known to have discharges that contain N or P or the receiving waters are known to have nutrient impairments (40 CFR 122.44(d)(1)(i)).</li> <li>•Include consistent monitoring requirements for P and N in permits for such facilities where the receiving waters are known to have nutrient impairments (40 CFR 122.48(b)).</li> </ul>
<b>Recommended</b>	<ul style="list-style-type: none"> <li>•The PQR did not identify any recommended action items for this section.</li> </ul>

**B. Effectiveness of POTW NPDES Permits with Food Processor Contributions**

*Background*

The pretreatment regulations (40 CFR Part 403) establish responsibilities for federal, state, and local governments, industries, and the public to implement controls on pollutants from nondomestic sources (industrial users or IUs) into POTWs. The objectives of pretreatment programs are to:

- prevent the introduction of pollutants into a POTW that will interfere with its operation, including interference with its use or disposal of municipal sludge;

- prevent the introduction of pollutants into a POTW that will pass through the treatment works or otherwise be incompatible with it; and
- improve opportunities to recycle and reclaim municipal and industrial wastewaters and sludges.

Indirect discharges of food processors can be a significant contributor to noncompliance at recipient POTWs, due to potentially high strength conventional pollutant concentrations. Food processing discharges may also contribute to nutrient pollution (e.g., nitrogen, phosphorus, ammonia) in 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 Idaho 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 the 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 significant industrial users (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).

EPA authorized IDEQ to implement the pretreatment program in 2018. Therefore, IDEQ is the pretreatment "approval authority" (AA). The approval authority must include conditions outlining pretreatment implementation requirements in NPDES permits issued to POTWs. During the life cycle of a POTW's NPDES permit, all POTWs are required to submit specific information for review by both NPDES permit writing and pretreatment staff in accordance with 40 CFR 122.42(b). A POTW with an approved local pretreatment program is called the "control authority (CA)," and is responsible for administering and enforcing pretreatment standards and requirements. In cases where a POTW is not required to develop an approved local pretreatment program, IDEQ assumes responsibility as the CA over industrial users discharging to the POTW (40 CFR 403.10). Currently IDEQ is the CA for three categorical industrial users (CIUs) at Kootenai-Ponderay Sewer District, City of Preston and City of Hailey. In addition, IDEQ

is also the CA for two SIUs at the City of Rupert. None of the cities (Preston, Hailey, Rupert) and sewer district (Kootenai-Ponderay) with CIUs and SIUs currently have approved pretreatment programs.

In Idaho, pretreatment programs have been approved for POTWs (15) in the cities of Blackfoot, Boise, Burley, Caldwell, Coeur d'Alene, Idaho Falls, Jerome, Lewiston, Nampa, Pocatello, Post Falls, Rexburg, Rigby, Sandpoint, and Twin Falls.

IDEQ is planning to approve the pretreatment program to the cities of Fruitland, Payette, and Weiser this summer.

*Table 5 : POTWs in Idaho with Approved Pretreatment Programs*

Approved Pretreatment Programs	Permit Number	Design Flow (MGD <sup>1</sup> )	Total SIUs	CIUs	Food Processors	Special Controls <sup>2</sup>
Blackfoot	ID0020044	3.2	4	1	2	--
Boise	ID0020443 (Lander) ID0023981 (West Boise)	39	15	10	3	P <sup>3</sup> , Ammonia
Burley	ID0020095 (Main WTP) ID0000663 (Industrial WTP)	7.4	5	0	4	BOD, TSS, Ammonia, P
Caldwell	ID0021504	8.5	3	2	1	BOD, TSS
Coeur d'Alene	ID0022853	6	2	2	0	P, Ammonia
Fruitland	ID0021199	1.72	2	0	2	BOD, TSS, P
Idaho Falls	ID0021261	17	7	1	4	--
Jerome	ID0020168	3	4	0	4	--
Lewiston	ID0022055	5.71	15	12	0	--
Nampa	ID0022063	18	14	8	4	--
Payette	ID0020672	2.88	1	0	1	Settleable solids
Pocatello	ID0021784	12	4	1	2	--
Post Falls	ID0025852	5	3	3	0	BOD, TSS, Ammonia, P
Rexburg	ID0023817	6	1	0	1	--
Rigby	ID0020010	2.59	1	0	1	BOD, TSS, TKN <sup>4</sup>
Sandpoint	ID0020842	5	3	1	2	--
Twin Falls	ID0021270	24.9	8	0	6	--
Weiser	ID0020290	2.43	1	0	1	--

<sup>1</sup> MGD: Million gallons per day

<sup>2</sup> Special controls expressed as local limits.

<sup>3</sup> P: Phosphorus

<sup>4</sup> TKN: Total Kjeldahl Nitrogen

A total of 85 SIUs and 38 CIUs are regulated by approved POTW pretreatment programs. IDEQ is responsible for determining if and when a POTW must develop a pretreatment program. There are no general pretreatment permits in Idaho issued by approved pretreatment programs.

The IDEQ pretreatment coordinator is located under the Surface and Wastewater Division, Wastewater Compliance Bureau. IDEQ also has staff responsible for ensuring compliance with and enforcement of approved pretreatment programs, standards, and requirements.

### *PQR Review*

IDEQ identified three food processing facilities that discharge indirect wastewater to the West Boise/Lander Wastewater Treatment Plants in Boise, Idaho. The three food processing facilities are classified as SIUs. They include B & D Foods, Inc. with an average daily flow discharge of 18,000 gallons per day (gpd), Darigold, Inc. with an average daily flow discharge of 334,000 gpd and Meadow Gold Dairies with an average daily flow discharge of approximately 60,000 gpd. EPA reviewed documents provided by IDEQ including permits, fact sheets, annual pretreatment reports, inspection reports, program modifications and correspondence of the City of Boise's approved pretreatment program for the purpose of this PQR. The Boise NPDES permit requires the City to monitor for ammonia and phosphorus and to develop local limits as necessary. The documents provided for the PQR indicate that IDEQ is appropriately implementing a relatively effective pretreatment program overall at the City of Boise with appropriate controls, including inspections. However, the City of Boise did not allocate the ammonia and phosphorus maximum allowable industrial loading (MAIL) that were adopted in 2018 in its indirect discharge permits for its SIUs in a timely manner.

### *Program Strengths*

Pretreatment language in NPDES permits is presented in a clear and organized manner. Permits include clear pretreatment language regarding the City of Boise's roles and responsibilities as the control authority (CA) such as: implementation, prohibitions, modifications, local limits, monitoring, annual reports, and enforcement.

### *Areas for Improvement*

EPA reviewed pretreatment documents provided by IDEQ and noticed that several deficiencies identified in the City of Boise's pretreatment compliance inspection (2021) did not receive effective follow up.

IDEQ should ensure that all POTWs with an approved pretreatment program comply fully with 40 CFR 403.5(c)(1-2) timely and effectively. In addition, IDEQ should ensure that the CA implements its authorized pretreatment program fully including appropriate and timely enforcement response in instances of noncompliance by its SIUs in accordance with section 3.4.1 of its NPDES permit.

*Action Items*

## Essential

- The PQR did not identify any essential action items for this section.

## Recommended

- IDEQ should follow up on the City of Boise regarding timeliness of local limits incorporation into IU permits.

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

Stormwater permits were part of the final (Phase IV) portion of the NPDES program to be transferred to IDEQ. This program authorization was transferred on July 1, 2021. As of the date the PQR was conducted, IDEQ had not yet issued any small MS4 permits; therefore, this portion of the review was not conducted.

## V. REGIONAL TOPIC AREA FINDINGS

EPA Region 10 has elected not to include the optional Regional Topics in this review. As noted above, the Idaho program authorization is recent (July 2021) and the IPDES program has not issued a significant number of permits that would be supportive of a regional topic review at this time. EPA Region 10 intends to include regional topic areas as part of the next PQR cycle.

## VI. 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 Idaho’s NPDES permit programs, as discussed throughout sections III and IV 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 6 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 7 below.

Table 6 : Essential Action Items from FY 2018-2022 PQR Cycle

Topic	Action(s)
Permit Application Requirements	<ul style="list-style-type: none"> <li>• IDEQ must ensure that the appropriate NPDES application form is submitted, particularly for non-POTW facilities (40 CFR 122.21).</li> </ul>
TBELs for Non-POTW Dischargers	<ul style="list-style-type: none"> <li>• IDEQ must ensure that permit writers determine appropriate effluent limitations for non-POTW discharges for which ELGs do not exist, by conducting a formal analysis based on BPJ, consistent with 40 CFR 125.3(d).</li> </ul>
Standard and Special Conditions	<ul style="list-style-type: none"> <li>• IDEQ must ensure that all federal standard conditions contained in 40 CFR 122.41 are included, and completely reflect the federal language, in all IPDES permits. However, for differences identified in penalty amounts, EPA will work with the state outside of the PQR process to address this issue.</li> <li>• IDEQ must ensure that the additional standard condition at 40 CFR 122.42(a) regarding notification requirements is established in all non-POTW permits.</li> </ul>
Administrative Process	<ul style="list-style-type: none"> <li>• IDEQ must ensure that all public notices contain the public notice contents required by 40 CFR 124.10(d).</li> </ul>
Nutrients	<ul style="list-style-type: none"> <li>• Conduct RPA for nutrients if the type of facility is known to have discharges that contain nitrogen or phosphorus, or the receiving waters are known to have nutrient impairments (40 CFR 122.44(d)(1)(i)).</li> <li>• Include consistent monitoring requirements for phosphorus and nitrogen in permits for such facilities where the receiving waters are known to have nutrient impairments (40 CFR 122.48(b)).</li> </ul>

Table 7 : Recommended Action Items from FY 2018-2022 PQR Cycle

Topic	Action(s)
Facility Information	<ul style="list-style-type: none"> <li>• IDEQ should ensure that facility descriptions are accurate, particularly concerning the distinction between POTWs, PrOTWs, and other non-POTW facilities.</li> <li>• IDEQ should consider adding facility status information upfront to the Facility Information table in the fact sheet, to clearly indicate whether the permit is new or reissued.</li> <li>• IDEQ should consider streamlining the permit template to only include the specific application renewal date in one location, such as the cover page or Submission Schedule.</li> <li>• Ensure that permit expiration dates are included in internal QA/QC reviews.</li> </ul>
Permit Application Requirements	<ul style="list-style-type: none"> <li>• IDEQ should increase the notification timing to 120 days prior to the application due date to reduce requests for extensions.</li> </ul>
TBELs for Non-POTW Dischargers	<ul style="list-style-type: none"> <li>• IDEQ should provide a robust and defensible rationale for developing case-by-case TBELs using BPJ, including a thorough discussion of all information sources considered to develop effluent limits.</li> </ul>
Reasonable Potential	<ul style="list-style-type: none"> <li>• IDEQ should either update their RPA approach to apply the reasonable potential multiplying factor to the maximum effluent concentration or revise their guidance documents to reflect this deviation from EPA's TSD.</li> <li>• IDEQ should develop and implement a consistent approach for conducting RPAs where there are limited or no effluent monitoring data available.</li> <li>• IDEQ should ensure that fact sheets identify all impairing pollutants for the receiving waterbody, not just those impairing pollutants for which TMDLs have been developed.</li> </ul>
WQBELs Development	<ul style="list-style-type: none"> <li>• IDEQ fact sheets should better discuss how effluent limits for a surrogate parameter would control an impairing pollutant that is not addressed in a wasteload allocation (e.g., TSS for sedimentation/siltation).</li> </ul>
Standard and Special Conditions	<ul style="list-style-type: none"> <li>• The “Other Information” standard condition should be moved from the “Permit Renewal” section to the same section as the other standard conditions so it is clear that the condition applies to the entire permit.</li> </ul>
Administrative Record and Fact Sheet	<ul style="list-style-type: none"> <li>• When new applications are requested or received, IDEQ should consider including correspondence or other documentation in the administrative record to explain the reason for the new applications.</li> </ul>



	<ul style="list-style-type: none"><li>• IDEQ should ensure fact sheets consistently document how the permit writer conducted RPAs where there were limited or no effluent monitoring data available.</li><li>• IDEQ should ensure that the correct permit and fact sheet templates are used for the facility type (e.g., POTW vs. non-POTW/PrOTW).</li></ul>
Pretreatment: Food Processing Sector	<ul style="list-style-type: none"><li>• IDEQ should follow up with the City of Boise regarding timely inclusion of local limits in IU permits.</li></ul>