

NPDES Program and Permit Quality Review

New Mexico (EPA Region 6)

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Contents

Executive Summary.....	3
I. PQR BACKGROUND.....	5
II. STATE PROGRAM BACKGROUND	6
A. Program Structure	6
B. Universe and Permit Issuance	8
C. Specific Challenges for Permitting in New Mexico	8
D. Current EPA Initiatives for Permitting in New Mexico	9
III. CORE REVIEW FINDINGS.....	9
A. Basic Facility Information and Permit Application	9
1. Facility Information	9
2. Permit Application Requirements	10
B. Developing Effluent Limitations	12
1. Technology-based Effluent Limitations	12
2. Reasonable Potential and Water Quality-Based Effluent Limitations	14
3. Final Effluent Limitations and Documentation	20
C. Monitoring and Reporting Requirements	22
D. Standard and Special Conditions.....	25
E. Administrative Process.....	27
F. Administrative Record and Fact Sheet	29
IV. NATIONAL TOPIC AREA FINDINGS.....	31
A. Permit Controls for Nutrients in Non-TMDL Waters.....	31
B. Effectiveness of POTW NPDES Permits with Food Processor Contributions	34
Table 1. Regulatory Focus for Pretreatment Topic Area	36
Table 2. New Mexico SIUs by Pretreatment Program Status	37
Table 3. New Mexico Permits Selected for Pretreatment Topic Area.....	38
Table 4. Summary of New Mexico Discharge Permit Conditions	39
Table 5. New Mexico Discharge Permit Conditions.....	40
C. Small Municipal Separate Storm Sewer System (MS4) Permit Requirements	45
V. ACTION ITEMS FROM FY 2018–2022 PQR CYCLE.....	48
Table 6. Essential Action Items from FY 2018-2022 PQR Cycle	49
Table 7. Recommended Action Items from FY 2018-2022 PQR Cycle.....	51

Executive Summary

EPA Headquarters' (HQ) National Pollutant Discharge Elimination System (NPDES) Program and Permit Quality Review (PQR) for EPA Region 6–New Mexico found that permits issued in the state were generally of good quality and consistent with federal regulations, though some areas for improvement were identified. For example, we found that permits for municipal discharges included minimum percent removal limitations for biochemical oxygen demand and total suspended solids consistent with the secondary treatment standards, and provided a formula to calculate the percent removal based on influent and effluent data. However, not all permits included explicit requirements to monitor the influent to assure compliance. We also found that the Region continues to implement an approach to determine reasonable potential (RP) that differs from the process outlined in EPA's Technical Support Document For Water Quality-based Toxics Control (TSD).

The PQR examined twelve permits for discharges in New Mexico along with certain EPA Region 6–New Mexico permitting policies. The PQR also focused on several national and regional priority areas including:

- Permit Controls for Nutrients in Non-Total Maximum Daily Load (TMDL) Waters,
- Effectiveness of POTW NPDES Permits with Food Processor Contributions, and
- Small Municipal Separate Storm Sewer System (MS4) Permit Requirements.

EPA Region 6 permits 101 individual facilities in New Mexico. As of February 26, 2020, 93 percent of New Mexico's permits are current.

The PQR recognizes the many state- and Region-specific challenges faced by EPA Region 6 in its administration of New Mexico's NPDES Program, including having a limited team of permit writers to manage multiple permitting issues, such as implementing nutrient effluent limitations in individual permits and antidegradation implementation procedures. EPA Region 6 continues to work closely with New Mexico permit program staff to ensure effective and efficient permit development and is proactive in the administrative process, specifically regarding consideration of environmental justice with respect to public noticing draft permits.

Although the permits reviewed commonly conformed to national requirements, we identified several areas for improvement, including the procedures for evaluating reasonable potential and for requiring reporting of influent monitoring results at municipal facilities, both of which were identified during the last PQR. These seem to stem from internal Regional policies, and addressing these areas has been delayed due to competing priorities such as updates to state procedures on temporary water quality standards, nutrient standards implementation, and antidegradation review. We believe that the action items identified in this report can be best resolved by updating the New Mexico Implementation Plan to be consistent with national policies and regulations, which will require careful coordination between NMED, EPA Region 6, and EPA HQ. EPA HQ is also recommending that EPA Region 6 follow a process to modify permit templates and reasonable potential evaluation procedures. Upon review of the draft PQR, EPA Region 6 noted that it has already addressed a revision to the fact sheet template to clarify TBEL language for secondary treatment standards, and it has added specific influent monitoring

and reporting requirements for BOD/TSS to the limits table. In addition to the items listed above, this report provides an overview of the EPA Region 6–New Mexico NPDES permitting program and identifies specific areas where EPA HQ and the Region can work together to continue to strengthen permit language and documentation in NPDES permits EPA Region 6 issues in New Mexico.

I. PQR BACKGROUND

The NPDES 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. New Mexico is not authorized to administer the NPDES program; therefore, EPA Region 6 issues NPDES permits in New Mexico. EPA HQ previously conducted a PQR of the EPA Region 6–New Mexico NPDES permitting program on August 14–15, 2013 and drafted findings; however, a PQR summary report was not completed.

During the most recent review, the evaluation team proposed action items to improve the permits issued in New Mexico. The action items are identified within sections III and IV 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. EPA has provided the citation for each Essential action item. The permitting authority must address these action items in order to comply with federal regulations.
- **Recommended Actions** - “Recommended” action items are recommendations to increase the effectiveness of the state’s or Region’s NPDES permit program.

The Essential actions are used to augment the existing list of “follow up actions” currently tracked by EPA HQ on an annual basis and are reviewed during subsequent PQRs.

EPA’s review team, consisting of two EPA HQ staff and one contractor staff, conducted a review of the New Mexico NPDES permitting program. The PQR was conducted remotely, meaning a review of materials was conducted off-site, with materials EPA Region 6 was able to provide electronically. Further, the remote PQR included interviews and discussions conducted via several conference calls. An opening interview was held on February 8, 2021, a discussion with EPA Region 6 staff regarding specific permit questions on February 10, 2021, and a closing meeting on February 11, 2021.

The New Mexico PQR included reviews of core permit components and national topic areas, as well as discussions between the PQR review team and EPA Region 6 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 provide the basis for the development of the permit conditions and related administrative process. The PQR also included conversations between EPA and the Region on program status, the permitting process, responsibilities, organization, staffing, and program challenges the Region is experiencing.

A total of twelve permits were reviewed as part of the PQR. Of these, eleven permits were reviewed for the core review and four permits were reviewed for national topic areas. Some

permits were reviewed for both the core review and the national topic area review. 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. The core review focused on the *Central Tenets of the NPDES Permitting Program*¹ to evaluate the New Mexico NPDES program. Core topic area permit reviews are conducted to evaluate similar issues or types of permits in all states.

Topic Area Reviews

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

II. STATE PROGRAM BACKGROUND

A. Program Structure

EPA Region 6 implements the NPDES program for New Mexico (within New Mexico, facilities on Navajo Reservation lands are permitted by EPA Region 9 and facilities on Ute Mountain Ute Reservation lands are permitted by NPDES Region 8). The Water Division within EPA Region 6 includes the Permitting and Water Quality Branch which is comprised of three sections: Permitting, NPDES/Wetlands Review, and Water Quality Protection. The New Mexico Environment Department (NMED), through the Point Source Regulation Section – NPDES Section, within the Surface Water Quality Bureau and the Water Protection Division, assists EPA Region 6 with implementation of the NPDES program. The Point Source Regulation Section of NMED also conducts compliance inspections and provides oversight of discharging facilities. In addition, NMED conducts and maintains a comprehensive monitoring program for the regulated community of industrial and municipal dischargers. NMED reviews federal NPDES permits for municipal wastewater treatment plants, electrical generating stations, fish hatcheries, and mines. NMED also conducts certifications of NPDES permits under Section 401 of the CWA, to reasonably ensure that the permitted activities will be conducted in a manner that will comply with applicable water quality standards, including the antidegradation policy and water quality management plans.

Within EPA Region 6, the Permitting and Wetlands/NPDES Review sections manage the permitting aspects of the NPDES program for New Mexico. The EPA Region 6 team is comprised of thirteen permit writers, of which ten write individual permits. Permit writers receive external training as well as internal mentoring (paired up with a senior permit writer) to support their

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

development. Permit writers receive training through completion of the 5-day U.S. EPA NPDES Permit Writers' Course, conduct online training, or cross-training within the program. EPA Region 6 piloted and continues to implement EPA's Lean Management System (ELMS) for permit issuance.

EPA Region 6 permit writers coordinate with the Region's Whole Effluent Toxicity (WET) coordinator as well as staff involved in TMDL development and implementation, during permit development. Permit writers also work with NMED, tribes affected by the permit, and other interested stakeholders during permit development to resolve any issues with the permit conditions. The Region may also hold stakeholder meetings during permit development when the permit under development has historically been controversial; this effort has reduced comments received during the public notice period because the Region has worked through issues identified early in the permit development process. Regional staff also translate the public notice into Spanish when necessary, as a component of environmental justice.

Permit writers engage early with permittees to obtain all necessary information to allow for efficient permit development, including high quality discharge monitoring data. Regional permit writers strive to complete a draft permit within 3 months of receiving a complete permit application. Most permits are drafted within 6 months following receipt of a complete application; however, permits that are complex or encounter significant issues during development may take longer to complete.

EPA Region 6 developed *Procedures for Implementing NPDES Permits in New Mexico* (dated March 15, 2012), or "NMIP,"² in consultation with NMED. The NMIP is used for all state permits and the tribal permits where the tribe lacks implementation procedures. Regional permit staff use electronic databases, models, spreadsheets, and document templates during various phases of permit development. Permit information and data are uploaded to EPA's Integrated Compliance Information System (ICIS) and stormwater notices of intent (NOIs) are tracked in a database. Permit writers extract permit data from EPA's Enforcement and Compliance History Online (ECHO) database and obtain ambient stream data from NMED. Permit writers currently use spreadsheet analyses for determining reasonable potential (RP) for WET and toxic parameters. Further, Regional staff also perform dissolved oxygen modeling to support permit development. Occasionally, the Region will use models to determine mixing zones for special permitting cases where there may be impacts in jurisdictions downstream from the discharge. Permit writers use templates for permit and fact sheet development; boilerplate language is used to develop Parts I (Requirements for NPDES Permits) and II (Other Conditions) of the permit. In addition, Parts III (Standard Conditions) and IV (Sewage Sludge Requirements) of the permit are standard sections used in both state and tribal permits and based on boilerplate language, updated as necessary. Parts III and IV contain boilerplate language that is copied and pasted from a document stored on a shared drive on the network, into the working version of the permit. Permit writers use the RP calculators, standard permit language templates, and the previous version of the permit and fact sheet during permit development.

² https://www.epa.gov/sites/production/files/2020-02/documents/ip_nmed_edit_v10_march_15_2012_r.pdf

Regional staff permit writers conduct a peer review of all draft permits. In addition to a peer review, permits are reviewed by Region 6's WET Coordinator, the Region's enforcement staff, and NMED prior to proposal. Further, the EPA Permitting Section Chief oversees the permit review process and reviews all minor permits. The Branch Manager reviews all major permits. All final permits are signed by the Water Division Director.

EPA Region 6 maintains permit administrative records in electronic and hard copy. Electronic files are maintained on a shared drive used by Regional permit writers. When hard copies of permit development documents are received, they are maintained in a folder stored in a file room at the Region 6 office in Dallas, Texas.

B. Universe and Permit Issuance

Based on information provided by EPA Region 6, the universe of individual, non-stormwater NPDES permits as of February 26, 2020, includes 48 POTWs (nine major and 39 non-major) and 53 non-POTWs (7 major and 46 non-major). The Region administers a Concentrated Animal Feeding Operation (CAFO) general permit that covers 55 permittees, an industrial stormwater general permit that cover 912 permittees, and a construction stormwater general permit that covers 1,964 permittees throughout the state, except Indian Country (86 active permittees operating within Indian Country within the state are covered by a separate construction stormwater general permit). The Region also administers two MS4 general permits (the statewide general permit covers 5 permittees and the Middle Rio Grande Small MS4 general permit covers 18 permittees). EPA Region 6 estimates 7 percent of permits are administratively continued (i.e., backlogged). In addition, the Region reports that the two MS4 general permits are administratively continued. Significant industries in New Mexico include power generation, mining, and fish hatcheries. The Los Alamos National Laboratory is also a major source of industrial discharge in the state.

C. Specific Challenges for Permitting in New Mexico

During the opening interview, EPA Region 6 indicated they struggle with developing an approach for reasonably implementing nutrient TMDLs for communities (typically older and smaller) that may not be able to afford upgrades required to achieve compliance with the effluent limitations for nutrient parameters. EPA Region 6 establishes effluent limitations for nutrient parameters when there is a TMDL applicable to the receiving stream or when NMED specifically requests them through the 401 certification process. The Region's permits for New Mexico incorporate temporary standards for nutrients, which are essentially a variance and a performance-based value based on facility treatment data. This approach is used in scenarios where there are discharges to an impaired water and a TMDL is in effect but where the resulting effluent limitation is not readily achievable. NMED develops the value based on facility performance data and considers whether it is economically achievable by the facility.

In addition, EPA Region 6 indicated certain laboratories in New Mexico are not using sufficiently sensitive analytical methods; this presents a challenge with obtaining timely and complete permit applications.

D. Current EPA Initiatives for Permitting in New Mexico

EPA Region 6 permitting staff coordinate closely with NMED staff during permit development and as a result, NMED staff are informed about the permitted facilities, are involved in the permitting process, and conduct compliance inspections that provide useful information to Regional enforcement and permitting staff. Regional staff notify NMED about upcoming permit renewals and permits requiring state certifications, especially potentially controversial permits.

EPA Region 6 maintains a strong administrative process. The Region translates public notice documents into Spanish as needed to address environmental justice, anticipates stakeholder participation for certain controversial permits, and initiates public hearings to mitigate issues during permit development and the public comment period.

EPA Region 6 continues to work toward implementing EPA's Technical Support Document for Water Quality-based Toxics Control (TSD)³ approach for all RP evaluations for New Mexico permits. Regional staff indicated during the PQR interview that the state was hesitant to move forward with implementing the TSD because the state had prioritized finalizing an antidegradation implementation policy, nutrient TMDL implementation policy, and temporary standards implementation policy before transitioning to the TSD approach for RP evaluations.

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.

Fact sheets for POTWs provided a clear description of the wastewater treatment process and those for non-POTWs contained general information with respect to facility operations and wastewater treatment processes. Fact sheets for POTWs lacked discussion of other program components, such as pretreatment and biosolids (sewage sludge). Information about sludge generation and handling practices would be beneficial to understand the basis for including certain permit requirements under these specific program areas.

³ U.S. EPA. (March 1991). *Technical Support Document for Water Quality-based Toxics Control* (EPA/505/2-90-001). <https://www3.epa.gov/npdes/pubs/owm0264.pdf>

Fact sheets reviewed consistently identify the physical location of the facility and provide outfall location information using latitude and longitude coordinates. Further, fact sheets generally identify the location of the discharge relative to the receiving water.

Program Strengths

Fact sheets have been improved since the last PQR in that they clearly indicate the physical location of the facility. Fact sheets and permits clearly identify the physical location of outfalls, using latitude and longitude coordinates. Fact sheets also generally identify the location of the discharge relative to the receiving water. Fact sheets provide a useful understanding of facility operations and wastewater treatment processes.

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.

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.

EPA Region 6 uses EPA's application forms for New Mexico permitting. NMED's Surface Water Quality–NPDES Permits website redirects applicants to EPA's website for individual permit applications⁴. The direct link to EPA's application forms ensures permittees identify the most current version of application forms. EPA Region 6 staff review data in ICIS to identify permit expiration dates and enable permittees to receive an application reminder letter. Staff send letters to permittees 1 year prior to permit expiration reminding permittees of permit application requirements; letters include links to electronic versions of EPA application forms and specific information regarding data requirements. Permit writers receive applications and

⁴ <https://www.epa.gov/npdes/npdes-applications-and-forms-epa-applications>

conduct a full review for administrative and technical completeness. During their review of applications, permit writers evaluate whether permittees submitted discharge characterization data using sufficiently sensitive analytical methods, through a comparison of the analytical method and minimum level used in analysis for each parameter with the applicable water quality criterion or effluent limitation, if the permit contains an effluent limitation. Permit writers send permittees letters documenting complete and incomplete applications. Prior to the shift in work location because of the Covid pandemic, these letters were sent in hard copy, but EPA Region 6 has transitioned to sending letters in electronic format, given the remote work situation. As a result of them being in hard copy for the permits chosen for this review, the PQR review team was not able to review letters documenting application completeness reviews.

EPA Region 6 staff indicated during the PQR opening interview that a main contributor to the Region's permit backlog for New Mexico is untimely and incomplete applications, in part related to the lack of use of sufficiently sensitive analytical methods, leading to delays associated with follow up. In efforts to improve the process and ensure the collection of quality information to support the permit renewal, permit writers engage early with permittees to obtain all necessary information to allow for efficient permit development. Further, permit writers continue outreach during the application process, sending follow-up letters, emails, or making calls to permittees to collect additional data that is of sufficient quality for data analysis and consideration in the development of effluent limitations and other permit conditions. Permitting staff have put increased effort toward providing early and ongoing support to applicants to improve the application process.

On an annual basis, the Permits Section Chief reviews staff workload, expertise, and permit expiration dates and assigns permits to the staff. Permit assignments and permit development timelines are managed by the Permits Section Chief and tracked internally using an Excel spreadsheet and electronic alternative to a flow board, illustrating another program adaptation due to the shift to remote work locations. Permit writers generally retain permit assignments across renewal cycles unless workload balance or cross training is necessary. In addition, senior permit writers are assigned more complex permits.

The PQR shifted to a remote format during a time when the Regional staff were not in their physical office and therefore unable to access hard copy files, resulting in the review team having access to only certain permit applications, not the full suite of applications for the permits selected for the core review. Therefore, this discussion reflects the review of a subset of permit applications.

Program Strengths

EPA Region 6 permit writers are dedicated to improving the process for obtaining timely and complete permit applications and demonstrate this through early engagement with and continuing support and outreach to the permittee to ensure quality data are obtained.

Areas for Improvement

The review team supports the Region's efforts to obtain timely and complete applications and recommends continued efforts towards this goal.

Action Items

Essential

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

Recommended

- The Region is encouraged to continue efforts to obtain timely and complete permit applications.

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 must contain numeric limits for all of these parameters (or authorized alternatives) in accordance with the secondary treatment regulations at 40 CFR Part 133. A total of six POTW permits were reviewed as part of the PQR.

POTW permits reviewed typically contain technology-based effluent limitations (TBELs) for TSS and minimum percent removal for TSS and BOD based on secondary treatment standards, or effluent limitations for BOD that are more stringent than secondary treatment standards because they are based on dissolved oxygen modeling conducted during the water quality analysis.

Fact sheets for POTWs include an adequate description of wastewater treatment processes and discuss industrial contributions to the POTW, where applicable. Fact sheets for POTWs consistently include general references to the regulatory basis for TBELs, including discussion of secondary treatment standards which are applicable to POTWs, though the secondary treatment standards are described as effluent limitations guidelines (ELGs). Fact sheets include appropriate regulatory citations; however, fact sheets would be bolstered with more accurate

language regarding the type of federal standard being applied. The review team recommends updating the fact sheet template to correct the description of the regulatory basis for effluent limitations in section III.F (Administrative Record and Fact Sheet).

Program Strengths

POTW permits reviewed include appropriate effluent limitations based on or at least as stringent as federal secondary treatment standards. Effluent limitations are established in appropriate units and forms. POTW permit fact sheets contain a useful description of facility and treatment processes, provide a general understanding of industrial contributions to the POTW, and identify applicable regulatory basis for final effluent limitations.

Areas for Improvement

As a result of using a single fact sheet template for all individual permits, fact sheets for POTWs include general references to the regulatory basis for TBELs, though the fact sheets refer to the secondary treatment standards as ELGs, which could lead to an initial misunderstanding of how TBELs are developed. The review team recommends updating fact sheet templates to include language that distinguishes applicability of ELGs from secondary treatment standards.

Action Items

Essential

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

Recommended

- Consider updating fact sheet templates to include separate discussions for the regulatory basis of TBELs for POTWs and non-POTWs, for permit writers to select during use of the template.

TBELs for Non-POTW Dischargers

Background and Process

Permits issued to non-POTWs must require compliance with a level of treatment performance equivalent to Best Available Technology Economically Achievable (BAT) or Best Conventional Pollutant Control Technology (BCT) for existing sources, and consistent with New Source Performance Standards (NSPS) for new sources. Where federal ELGs have been developed for a category of dischargers, the TBELs in a permit must be based on the application of these guidelines. If ELGs are not available, a permit must include requirements at least as stringent as BAT/BCT developed on a case-by-case using best professional judgment (BPJ) in accordance with the criteria outlined at 40 CFR 125.3(d).

Five non-POTW permits were reviewed, two of which contained TBELs based on ELGs. The review indicated that the TBELs based on ELGs were established appropriately and in the correct form and units. Fact sheets include a description of the facility operations and

supporting TBEL calculations. In general, TBELs in the Region’s New Mexico permits for industrial facilities are based on applicable ELGs and standards, and effluent limitations based on best professional judgment reflect examination of permits for similar facilities and discharges.

Program Strengths

The permits reviewed establish appropriate TBELs based on the applicable ELGs and in appropriate units and forms. Fact sheets include a general description of facility operations and discussion of applicable ELGs.

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.

2. Reasonable Potential and Water Quality-Based Effluent Limitations

Background

The NPDES regulations at 40 CFR 122.44(d)(1)(i) 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) for particular pollutants, the permitting authority evaluates whether any pollutants or pollutant parameters cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard.

The PQR for EPA Region 6–New Mexico assessed the processes employed to implement these requirements. Specifically, the PQR reviewed permits, fact sheets, and other documents in the administrative record to evaluate how permit writers and water quality modelers:

- determined the appropriate water quality standards applicable to receiving waters,
- evaluated and characterized the effluent and receiving water including identifying pollutants of concern,
- determined critical conditions,
- incorporated information on ambient pollutant concentrations,
- assessed any dilution considerations,

- determined whether limits were necessary for pollutants of concern and, where necessary,
- calculated such limits or other permit conditions.

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

Process for Assessing Reasonable Potential

Permit writers conduct the RP evaluation and document the evaluation in the fact sheet and accompanying appendices.

For POTWs, permit writers identify pollutants of concern through review of a priority pollutant effluent scan submitted with the permit renewal application and information provided on industrial contributions to the POTW, if applicable. Those data are then evaluated for RP through a comparison to applicable water quality standards (WQS). State numeric standards for the protection of designated uses are established in 20.6.4 New Mexico Administrative Code (NMAC). In addition, the Region may establish additional monitoring requirements following a review of the data submitted with the permit renewal application.

For non-POTWs, pollutants of concern are evaluated based on monitoring data submitted through a pollutant scan required by the permit renewal application. In addition, for discharges for which ELGs apply, permit writers review ELGs to identify potential pollutants of concern. For discharges from new non-POTWs, Regional permit writers might evaluate permits for similar facilities to identify potential pollutants of concern. Further, in the absence of data for new facilities for which ELGs apply, permit writers might immediately establish WQBELs based on pollutant information provided in the ELGs.

Permit writers consider application and discharge monitoring report (DMR) data and, if available, supplemental data provided by the applicant to evaluate the need for and subsequently develop effluent limitations. Data available through pretreatment reports or a TMDL database may also be considered during permit development. Permit writers consider DMR data and application data to evaluate RP. The Region enters effluent data for toxic parameters and background data (where available) into a spreadsheet to assess RP and determine an appropriate mixing zone. NMED provides the Region with ambient water quality data. Where these data are not available from NMED, the Region will use data maintained by the U.S. Geological Survey (USGS) or EPA's Assessment, TMDL Tracking and Implementation System (ATTAINS). Permit writers aim to avoid assuming a value of zero in the absence of background data, but indicated that in certain cases they assume a background concentration of zero.

Permit writers identify the receiving stream, including downstream waters and those waters that are considered tribal waters, then identify the applicable WQS through review of the

NMAC. Permit writers refer to NMED's website⁵ to review the 303(d) list to identify the receiving stream's impairment status and determine whether there are TMDLs applicable to the discharge.

The NMIP language differs from EPA regulations at 40 CFR 122.44(d)(1) regarding reasonable potential in that EPA regulations address three components of reasonable potential: "...cause, have the reasonable potential to cause, or contribute to..."; the NMIP language lacks the preventative component of reasonable potential (i.e., "the reasonable potential to cause").

Section IV of the NMIP addresses establishing WQBELs in New Mexico permits through review of permit renewal applications, analytical data, and facility discharge and flow data. Section IV.6.a of the NMIP states that for POTWs with a design flow less than 1 million gallons per day (MGD), "Discharges are deemed to have no reasonable potential to cause or contribute to a violation of human health criteria. Therefore, no additional data are required." One of the fact sheets for a non-major POTW states that because the facility is a minor facility and expanded effluent testing (Part D of EPA Form 2A) is not required, an RP evaluation for toxics was not conducted.

In addition to the NMIP as a resource, EPA Region 6 maintains a policy titled "Determining the Need for Water Quality Based Permit Effluent Limitations" (September 11, 1991) used to evaluate RP and the need for WQBELs. Data are analyzed to estimate the 95th percentile of a data set, estimated by multiplying the average pollutant concentration by a maximum likelihood estimator of the 95th percentile (a ratio of the 95th percentile concentration to the mean concentration). A single effluent value (i.e., the geometric mean of the effluent data set) is multiplied by the ratio to estimate the 95th percentile value. The resulting value is compared against the WQS to determine the need for a WQBEL.

It has been EPA Region 6's common practice to determine RP, and include WET limits, based on two or more WET tests in the previous permit cycle indicating a level of toxicity resulting in an excursion of the state's WET WQS.

Process for Developing WQBELs

Permit writers also are responsible for developing and calculating WQBELs; documentation is included in the same summary of the RP evaluation in the permit fact sheet, as required by 40 CFR 124.56, and accompanying appendices. Permit writers calculate WQBELs with the same spreadsheet as the RP evaluation. Regional permit writers may also employ modeling results provided by the TMDL section to develop WQBELs. Staff also conduct dissolved oxygen modeling for all major facilities. Mixing zones are allowed by New Mexico's WQS, Section 20.6.4.11.D of the NMAC, and addressed in section IV.E of the NMIP. Regional staff apply acute criteria at the point of discharge (i.e., end-of-pipe) and chronic criteria at the edge of the mixing zone. Regional staff indicated they consider the impact of the discharge on downstream tribal waters when evaluating the appropriate size of a mixing zone.

⁵ <https://www.env.nm.gov/surface-water-quality/303d-305b/>

NMED develops TMDLs for New Mexico water bodies. Regional TMDL staff work with NMED TMDL staff during TMDL development to identify wasteload allocations (WLAs) for point sources. For permits that are not yet subject to a TMDL, Regional permit writers include monitoring requirements and effluent limitations that hold permittees at current discharge levels; existing discharges may not contribute any additional loading to the water body. For permits subject to an approved TMDL, permit writers establish effluent limitations that implement the TMDL WLAs. Regional permit writers consult with TMDL staff to identify applicable TMDLs and appropriate implementation of the WLAs. Regional staff indicated TMDLs in New Mexico are stringent; sometimes effluent limitations based on WLAs in the TMDL are below what technologies employed at some smaller POTWs can achieve or could reasonably be expected to afford to upgrade to achieve. To address the gap between affordable technologies and stringent limitations and provide time for technologies to advance or become more affordable to a particular discharger, New Mexico has adopted a Temporary Water Quality Standards process, similar to the variance process (which is not allowed under New Mexico law).

Program Strengths

Reasonable Potential

Fact sheets clearly identify the receiving stream, applicable WQS (including those for tribal waters), impairment status, and applicable TMDLs. Fact sheets also discuss pollutants of concern and the data set considered in the RP evaluation. Fact sheets include discussions of the RP evaluation and resulting WQBELs, as well as appendices containing a summary output from the RP evaluation.

WQBEL Development

Permits include WQBELs when determined necessary through an RP evaluation; they are calculated appropriately and in correct form and units.

Areas for Improvement

Reasonable Potential

At least one fact sheet reviewed lacked discussion of an RP evaluation for a pollutant, which caused an impairment but did not yet have an approved TMDL; it was unclear whether the permit writer evaluated RP for this parameter to consider a WQBEL while the TMDL was pending. In addition, a fact sheet for a POTW indicated that RP was not evaluated because the facility is a non-major. The review team recommends that permit writers ensure all pollutants of concern are evaluated for RP at all facilities.

EPA Region 6 continues to determine whether a discharge demonstrates RP using a projected maximum effluent concentration that is based on a geometric mean value for chemical specific parameters (toxics). This approach is inconsistent with EPA's recommended TSD approach for evaluating RP, which recommends the use of the maximum value rather than an average or geometric mean. Use of the geometric mean value may not be protective of the state's WQS as required under CWA Section 301(b)(1)(C),

because averaging the data may lower the projected maximum effluent concentration, which may be under-protective for the state's WQS when making NPDES permitting decisions. EPA HQ provided EPA Region 6 with clarification, via a memo dated April 9, 2013, regarding recommended procedures for determining RP, specifically explaining why the Region's approach for determining RP might not ensure that permits include limits necessary to meet applicable WQS. The memo indicated there may be certain scenarios where the Region's projected maximum effluent concentration using a geometric mean value would be under-protective because an actual measured concentration could exceed the projected concentration – and the projected maximum effluent concentration would not trigger RP. The memo indicated that EPA Region 6 "...should utilize the procedures recommended in applicable national guidance to ensure that EPA is equitable in its implementation of EPA regulations across all jurisdictions and dischargers." During the PQR, EPA Region 6 indicated that it would transition to the recommended TSD approach in evaluating RP; however, they were still working on it with NMED. Previously, NMED was hesitant to switch to using the recommended TSD approach until the NMIP was updated, which was contingent upon finalization of the state's antidegradation implementation procedures and developing implementation procedures for nutrient TMDLs and Temporary Water Quality Standards. EPA Region 6 revisited this issue with NMED during the 2021 calendar year and noted that these updates remain in progress as of FY22.

Additionally, EPA HQ also advises EPA Region 6 to revise its RP procedures, specifically for WET, to eliminate the need to demonstrate persistent toxicity to justify a finding of RP, absent evidence that the WET test data demonstrating an excursion of the state WET WQS is not representative of ongoing permitted effluent discharges. It is a common practice for EPA Region 6 to document toxicity is actually representative of the permitted discharge prior to concluding that the effluent discharge causes, has the reasonable potential to cause, or contributes to an excursion of the State's WQS. This procedure accounts for one-time abnormal events, such as a slug discharge or equipment failure which caused unacceptable toxicity, that have then been identified and corrected so that the permitted discharge is no longer causing or has the potential to cause an excursion of the state WET WQS. In such cases, documentation in the permit fact sheet must provide the basis for concluding that the data are no longer representative of the facility's permitted discharges. Otherwise, a determination of RP that is contingent upon multiple WET tests indicating an excursion of the state's WET WQS (or *persistent* toxicity), without evidence that the failure is not representative of permitted discharges, is not consistent with 40 CFR 122.44(d)(1)(i), which requires permits include limits for all pollutants that cause, have the reasonable potential to cause, or contribute to "an" (one) excursion of any state WQS.

WQBEL Development

Currently, EPA Region 6 does not always establish a WQBEL when RP has been demonstrated for WET (based on even one, "an", excursion of the state's WQS). However, the NPDES RP regulations at 40 CFR 122.44(d)(1) require the establishment of effluent limitations for pollutants where valid monitoring data indicate that the permitted effluent is discharged at a level which will cause, have the reasonable potential to cause, or contribute

to an in-stream excursion above any state WQS. In addition, 40 CFR 122.44(d)(1)(iv) and (v) specifically require that a WET limit must be included in the permit where valid WET data indicates RP. If EPA Region 6 determines that a sample is no longer representative of the permittee's operations and discharge due to changes in treatment, processes, or other BMPs that have resolved toxicity (which is confirmed by subsequent monitoring for the parameter), and a limit is not needed, the Region must provide detailed documentation explaining the basis for their determination in the permit fact sheet (40 CFR 124.56).

The NMIP states that *“the permitting authority may choose either a WET test or a chemical specific ammonia limit to address ammonia toxicity”*. This language implies that WET testing can be chosen in lieu of an ammonia limit or a WET limit where ammonia RP is demonstrated. EPA Region 6 has indicated that this is no longer their actual implementation process for permits. If there is RP for ammonia, the permit would include a chemical-specific ammonia limit. If aquatic toxicity is still measured after including an ammonia permit limit (RP for WET is demonstrated), then a WET limit would be included in the permit. EPA HQ recommends that EPA Region 6 revise the NMIP to clarify their current process for addressing ammonia toxicity.

Additionally, the NMIP states that *“a chemical-specific limit may be established in lieu of a WET limit where the permitting authority demonstrates, in the fact sheet, that the chemical limit will preclude toxicity at unacceptable levels.”* A WET limit must be included where RP has been demonstrated for either a narrative or a numeric WET WQS. However, under the narrative WET WQS, if the source of toxicity is identified and can be reduced, abated, or eliminated such that the toxicity no longer results in an excursion of the WET WQS (confirmed by additional WET monitoring) as determined by procedures in 40 CFR 122.44(d)(1)(ii), then a chemical-specific limit can be used instead of a WET limit (40 CFR 122.44(d)(1)(v)). EPA HQ recommends that EPA Region 6 revise the NMIP language to refer to the appropriate federal regulations to support their implementation procedures.

Action Items

Essential	<ul style="list-style-type: none"> • <u>Reasonable Potential</u> <ul style="list-style-type: none"> • Ensure that all pollutants of concern are evaluated for RP consistent with 40 CFR 122.44(d)(1)(i), including pollutants for which TMDLs are scheduled to be developed. • Ensure that RP is considered for all discharges consistent with 40 CFR 122.44(d)(1)(i), regardless of the facility design capacity. • <u>WQBELs Development</u> <ul style="list-style-type: none"> • Must establish WQBELs where data indicate that the permitted discharge causes, has the reasonable potential to cause, or contributes to an excursion above any state WQS, in accordance with 40 CFR 122.44(d)(1). If representative data show that an excursion of any criteria, including narrative or numeric WET criteria, has already occurred (i.e., "caused" which is post impact) or indicates that the discharge has the reasonable potential to cause or contributes (this is the pollution preventive part of RP) to an excursion, a NPDES WET limit must be included in the permit. If data are determined not to be or are no longer representative of the permitted discharge, then EPA must document the basis for this determination in the fact sheet (40 CFR 124.56).
Recommended	<ul style="list-style-type: none"> • <u>Reasonable Potential</u> <ul style="list-style-type: none"> • When evaluating RP, EPA Region 6 should use the maximum reported effluent concentration, which is recommended by EPA's 1991 TSD, rather than using the geometric mean effluent value when evaluating RP for all parameters, including chemistry (toxics). • <u>WQBELs Development</u> <ul style="list-style-type: none"> • Revise NMIP language for addressing ammonia toxicity to reflect the following: If there is RP for ammonia, the permit must include a chemical-specific ammonia limit. If aquatic toxicity is still measured after including an ammonia permit limit, and RP for WET is demonstrated, then a WET limit must be included. • Revise NMIP language regarding chemical specific vs. WET limits, to include appropriate federal regulatory citations to clarify and support the implementation procedures.

3. Final Effluent Limitations and Documentation*Background and Process*

Permits must comply with all applicable statutory and regulatory requirements, including technology and water quality standards, and must include effluent limitations that ensure that all applicable CWA requirements are met (i.e., CWA Section 301(b)(1)(C)). The permitting authority must identify the most stringent 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 WQS 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. Technology-based effluent limits should include assessment of applicable state water quality standards, data used in developing effluent limitations, and actual calculations used to develop effluent limitations. The procedures implemented for determining the need for WQBELs as well as the procedures explaining the basis for establishing, or for not establishing, WQBELs should be clear and straight forward. 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.

The Region's permit fact sheets provide useful descriptions of facility operations and treatment processes, regulatory citations as the basis for TBELs, and documentation of RP evaluation and WQBEL development (in accompanying appendices), including application of mixing zones. In addition, fact sheets clearly identify the receiving stream(s), applicable designated uses and WQS, and pollutants of concern.

Permits reviewed during the PQR establish effluent limitations appropriate to the facility and discharge and include effluent limitations that are at least as stringent as those in the previous permit. Fact sheet appendices discuss pollutants of concern and summarize the RP analysis and WQBEL development. Fact sheets discuss applicable standards and the basis for effluent limitations (i.e., TBELs or WQBELs) and identify the most stringent effluent limitation, which is then established in the permit.

Anti-backsliding is triggered if there is a change in an effluent limitation where it becomes less stringent than the limitation in the previous permit. Regional staff require a justification to change the effluent limitation, sometimes justified by the consideration of new information during an RP evaluation. Fact sheets include a justification for a change in effluent limitations. In at least one fact sheet reviewed, the rationale for removing a WET limitation upon permit reissuance was because "...the required WET results passed." Part II.D.1.c of the permit contains a provision for the permit to be reopened to require WET limits, chemical specific effluent limits, additional WET testing, and/or other appropriate actions to address toxicity. During the PQR, Regional staff indicated that the Region's WET subject matter expert conducted the evaluation and documented it separately from the permit fact sheet.

New Mexico's antidegradation policy and implementation plan are contained in the WQS in Section 20.6.4.8 of the NMAC and implementation procedures are discussed briefly in section III of the NMIP. Regional staff indicated that at the time of the PQR, NMED had recently finalized updating the Antidegradation Policy Implementation Procedures. Regional staff also indicated that NMED staff conduct the antidegradation review; Regional staff indicated they inform NMED of facility expansions or new discharge applications. Further, Regional staff indicated

that Section 401 certification letters address antidegradation, however more recently, NMED prefers to complete the reviews prior to proposal of permits so the results can be incorporated into the draft permit available for public comment to EPA on the permit itself and to NMED on the CWA 401 Certification. Fact sheets include general statements indicating “the permit requirements and the limits are protective of the assimilative capacity of the receiving waters, which is protective of the designated uses of that water.” In addition, certain fact sheets add the following statement to the antidegradation discussion: “This permit reissuance is for an existing discharger that is not expanding, so anti-degradation requirements do not apply.”

Program Strengths

Final effluent limitations are clearly presented in the permits issued for New Mexico and are established in appropriate units and forms. Permit fact sheets adequately document the development of TBELs for POTWs and non-POTWs, including a useful description of facility operations, treatment processes, pollutants expected in the discharge, and applicable technology standards. Further, fact sheets adequately identify receiving stream information and discuss pollutants of concern, the RP evaluation, and resulting WQBELs. Fact sheet discussions illustrate that permit writers considered and applied the most stringent of TBELs and WQBELs as final effluent limitations.

Areas for Improvement

Where effluent limits are proposed that are less stringent than the previous permit, Regional staff should ensure that fact sheets include thorough discussion of anti-backsliding considerations, including incorporating discussions that may be in documentation separate from the fact sheet (e.g., a memo authored by a subject matter expert in consultation during permit development).

Action Items

Essential

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

Recommended

- Where proposed limits are less stringent than the previous permit, fact sheets should include a thorough discussion of anti-backsliding evaluations, including, if applicable, incorporating documentation that was prepared by a subject matter expert and written separately from the fact sheet.

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 routine or

episodic self-monitoring of permitted discharges in a manner that is representative of the permitted effluent discharge(s) and where applicable, internal processes, and report the analytical results to the permitting authority with information necessary to evaluate discharge characteristics and compliance status.

Specifically, 40 CFR 122.44(i) requires NPDES permits to establish, at minimum, annual reporting of monitoring for all limited parameters sufficient to assure 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 the effluent on the receiving water. A complete fact sheet will include a description and justification for all monitoring locations required by the permit (40 CFR 124.56). States may have policy or guidance documents to support determination of 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 test method(s).

For permits issued by EPA Region 6 in New Mexico, monitoring and reporting frequency is generally established based on recommendations in section IV.N.4 of the NMIP, categorized by type of facility. For instance, the NMIP recommends different frequencies for lagoons, trickling filter plants, and activated sludge treatment plants and for industrial wastewater treatment facilities. Permit writers follow a standardized approach to establishing monitoring requirements but might tailor requirements in certain scenarios. Further, monitoring requirements are generally carried forward from the previous permit.

Monitoring requirements for WET are included in Part II of the Region's New Mexico permits; all permits reviewed included WET monitoring requirements. The requirements include discussions of scope and methodology, persistent lethal and/or sub-lethal effects, required toxicity testing conditions, reporting, toxicity reduction evaluations, and monitoring frequency reduction. Fact sheets discuss WET requirements and indicate that the NMIP includes procedures regarding WET requirements based on facility and discharge type. To account for waters that naturally have high TDS, the NMIP allows for the use of *Daphnia magna* as an alternate to *Ceriodaphnia dubia* for chronic WET testing where the receiving water TDS would not support *C. daphnia*. *Daphnia magna* is only approved for acute testing at 40 CFR Part 136,

not for chronic. If not using an approved toxicity test method from 40 CFR Part 136, Table 1A, then an Alternative Test Procedure (ATP) is required to be approved by EPA. Permits reviewed consistently require electronic reporting of monitoring results in accordance with 40 CFR 127.16, using NetDMR, and permit language allows permittees to request temporary or emergency waivers from electronic reporting. If paper reporting is allowed temporarily, permittees must sign and certify original DMRs and submit them to the Region and NMED. Permits require that noncompliance events be reported at the time monitoring reports are submitted. Permits specify when monitoring reports are due, which is generally monthly.

Regional permit writers include specific minimum quantification levels (MQLs) in permits so that all pollutant concentration data are sampled and analyzed using a method detection limit (MDL) that is consistent with the most current MQLs in effect at the time of the permit is issued; Appendix D of the NMIP includes MQLs for toxic pollutants.

The Region's permits for POTWs generally lacked influent monitoring requirements for BOD and TSS, which are necessary to determine compliance with minimum percent removal requirements based on secondary treatment standards. Two of the six POTW permits reviewed included influent monitoring requirements. During the PQR interview, EPA Region 6 indicated that because it is not a regulatory requirement to include influent monitoring requirements, the decision of whether to include explicit influent monitoring requirements is left to the permit writer. It should be noted that the section 402(a)(2) of the CWA states that permits shall contain conditions to assure compliance with permit conditions, including conditions on data and information collection and reporting. In addition, NPDES regulations at 40 CFR 122.44(i)(1) require that in addition to the requirements of 40 CFR 122.48, permits shall contain monitoring requirements to assure compliance with permit limitations. The minimum percent removal requirements based on secondary treatment standards are enforceable permit limitations; therefore, permits must include explicit influent monitoring requirements to determine compliance with minimum percent removal limitations.

Program Strengths

Permits clearly identify monitoring locations, sampling frequency, and type that are appropriate for the type of facility and discharge. Permits reviewed consistently include requirements to use EPA-approved test methods that are sufficiently sensitive and include MQLs for certain pollutants. In addition, permits include straightforward reporting requirements. The Region's fact sheets discuss the overall basis for monitoring requirements.

Areas for Improvement

POTW permits do not consistently establish explicit influent monitoring requirements to assure compliance with the minimum percent removal requirements for BOD and TSS. Certain POTW permits include a footnote that presents the calculation for determining percent removal for BOD and TSS; however, this approach is insufficient as it does not clearly require the permittee to conduct influent monitoring necessary to determine compliance with these specific permit limitations. For chronic WET testing, permits must require the use of a 40 CFR Part 136-approved toxicity test species. If seeking a short-term chronic freshwater invertebrate test,

then the water flea, *Ceriodaphnia dubia*, has to be used otherwise EPA Region 6 must obtain HQ approval for an Alternative Test Procedure (ATP).

Action Items

Essential

- Establish explicit influent monitoring requirements to assure compliance with permit limitations for the minimum percent removal requirements for BOD and TSS. [40 CFR 122.44(i)(1)]
- For chronic WET testing, permits must require the use of a 40 CFR Part 136 approved short-term chronic test, including use of test species *Ceriodaphnia dubia*. Otherwise, EPA Region 6 must obtain an EPA approval for an Alternative Test Procedure (ATP). [40 CFR Part 136]

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, 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.

For permits issued by EPA Region 6 in New Mexico, standard conditions are generated from boilerplate language that Regional staff update regularly; the most recent revision prior to the PQR occurred in 2019. Standard conditions are contained in Part III of New Mexico’s permits. The standard condition for compliance schedules was not always found in permits where compliance schedules were not applicable. Regional staff tailor the standard conditions based on facility location (i.e., conditions differ between State and Tribal lands). EPA Region 6 includes sewage sludge requirements in Part IV of New Mexico’s permits and incorporates certain NPDES standard condition language pertinent to sludge disposal in relevant sections throughout Part IV. For example, language addressing sewage sludge requirements is included in the permit Part IV as follows:

- Part IV, section I.A.1 includes language related to the Duty to Comply (40 CFR 122.41(a)(1)).
- Part IV, section II.5 includes language related to Monitoring and records retention (40 CFR 122.41(j)(2)).
- Part IV, section I.A.4 requires Notification of Planned Changes (40 CFR 122.41(l)(1)(iii)).

Narrative conditions in New Mexico permits generally address requirements related to pollution prevention, sludge management, WET, pretreatment, and terms and conditions based on an endangered species consultation. In addition, narrative conditions may address permit conditions with respect to downstream reporting requirements. Certain municipal permits reviewed require development and implementation of a pollution prevention plan, including nine elements, within 12 months of the permit's effective date. However, the permits only list the elements without providing a description of them and permits lack accompanying reporting or recordkeeping requirements or discussion related to determining compliance with the permit requirement. Further, permit fact sheets for these facilities lack information related to the permit requirement. Permits and fact sheets would be strengthened with more clarification on such permit requirements.

Program Strengths

Permits reviewed consistently included Part III, Standard Conditions. The language included in this section is consistent with federal language at 40 CFR 122.41 and 122.42, though some specific federal requirements are missing.

Areas for Improvement

Permits should include all standard conditions in permits, including compliance schedules, regardless of applicability to a specific permit. The regulatory citation in Part II.C of permits, related to permit modification, needs to be corrected from 40 CFR 122.62(s)(2) to 40 CFR 122.62(a)(2). In addition, in the permits reviewed, some of the standard conditions appeared to be absent from the Region's standard conditions for New Mexico NPDES permits, as described below:

- Permits lacked language addressing CWA penalties for second and subsequent convictions related to the Duty to Comply (40 CFR 122.41(a)(2)).
- Permits lacked language addressing sewage sludge requirements related to Duty to Mitigate (40 CFR 122.41(d)).
- Permits lacked the reference to 40 CFR 122.61 addressing certain cases for mandatory permit modification or revocation and reissuance related to Permit Transfers (40 CFR 122.41(l)(3)).
- Permits lacked the requirement to submit reports for Compliance Schedules (40 CFR 122.41(l)(5)).

Action Items

Essential

- Ensure that New Mexico's permits include all standard conditions consistent with the federal standard provisions established in 40 C.F.R. 122.41 and 122.42 to address the following:
 - Permits lacked language addressing CWA penalties for second and subsequent convictions related to the Duty to Comply (40 CFR 122.41(a)(2)).
 - Permits lacked language addressing sewage sludge requirements related to Duty to Mitigate (40 CFR 122.41(d)).
 - Permits lacked the reference to 40 CFR 122.61 addressing certain cases for mandatory permit modification or revocation and reissuance related to Permit Transfers (40 CFR 122.41(l)(3)).
 - Permits lacked the requirement to submit reports for Compliance Schedules (40 CFR 122.41(l)(5)).
- Revise part II.C of permits to correctly reference 40 CFR 122.62(a)(2) related to permit modifications.

Recommended

- Provide greater clarification in permits and fact sheets related to the special condition requiring a pollution prevention plan.

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

NMED provides state certification pursuant to Section 401 of the CWA on the Region's New Mexico permits. The 401 certification process occurs concurrently with the public notice process; public notices for federal permits being considered for state certification are listed on both the Region's and NMED's website. Regional staff respond to NMED's comments in the certification as it would other comments received during the public notice period. When NMED provides a conditional certification, Regional permit writers include the conditions in the

permit. During the certification process, NMED may indicate an effluent limitation is incorrect, in which case Regional staff ask NMED to calculate the appropriate effluent limitation and provide the limitation in the state certification. NMED staff perform an environmental justice screen on permits being public noticed and determines whether a translation of the public notice is necessary. If so, Regional staff translate the public notice into Spanish. If other languages are required, the Region contacts EPA HQ for additional translation support. Regional staff may also have to receive certification from states that are downstream from the discharge location, pursuant to Section 401(a)(2) of the CWA. NMED's (and other states, if downstream states are affected) review of the permit is also considered a part of the QA process. Regional permit files typically contain the state certifications as part of the administrative record.

Following the permit writer's completion of the draft permit, Regional staff distribute the public notices and list them on the Region's website. The Region provides a copy of the public notice to downstream tribes/states when appropriate. Regional staff indicated that typically the bulk of comments received are from the permittee and NMED. The Region receives public comments via email, directed to an administrative staff person who then directs the comments to the assigned permit writer for their review and response. Permit writers draft responses to comment, but in summary form—a response may not be generated for every comment received, if comments contain duplicate content. The Region provides the response to comments, with the final permit attached, to all commenters. In addition, final permit packages include the summary of comment responses.

Regional staff indicated that the response to comments addresses NMED's 401 certification, including responses to each issue and statements regarding whether the comment resulted in a change to the permit. The Region includes sections at the beginning of the final permit document that contain a summary of substantial changes from the draft permit, a discussion of NMED's 401 certification, and a summary of the responses to comments received. This is a helpful approach for ensuring transparency in the administrative process.

Regional staff indicated requests for hearings are few; they have held one virtual hearing during the Covid pandemic. The Region may hold public meetings during permit development for permits believed to be controversial, to alleviate controversy and comments submitted during the public comment period. The Region also holds tribal consultations during permit development. Regional staff indicated appeals have been rare; however, noted that the Region is beginning to see increased challenges to the 401 certifications. The Environmental Appeals Board hears permit appeals.

Program Strengths

The Region's permits include responses to comments, as well as statements regarding New Mexico's 401 certification, at the beginning of the final permit document. This is a useful means of incorporating a response to comments into the final permit document and providing transparency. The Region has adapted the public notice process to accommodate needs due to the shift to remote work locations during the Covid pandemic; much of the process is now handled electronically. In addition, the Region strongly considers environmental justice issues and proactively translates public notices into Spanish. Further, the Region takes initiative in

holding public hearings for permits expected to be controversial, to ensure a smooth permit development and administrative process.

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.

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;⁶ all items cited in the statement of basis or fact sheet including calculations used to derive the permit limitations; meeting reports; correspondence between the applicant and regulatory personnel; all other items supporting the file; final response to comments; and, for new sources where EPA issues the permit, any environmental assessment, environmental impact statement, or finding of no significant impact.

Current regulations 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

⁶ 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.

statement of basis, documents cited in the fact sheet or statement of basis, and other documents contained in the supporting file for the permit.

EPA Region 6 maintains New Mexico permit administrative records in electronic and hard copy. Electronic files are maintained on a shared drive used by Regional permit writers. When hard copies of permit development documents are received, they are maintained in a folder stored in a file room at the EPA Region 6 office in Dallas, Texas. During this remote PQR, certain permit files were not available for review because they were only available in hard copy format (e.g., certain permit applications, administrative letters, NMED's 401 certification documents, and public notice documents).

Regional staff develop fact sheets for all permits, including those for non-major facilities. Permit writer personal preference guides whether the fact sheet is drafted before or after the permit has been drafted. Staff generally use a template document to develop fact sheets. The previous fact sheet serves as the basic template and the current version of standardized language is added to the fact sheet.

The review revealed that fact sheets sometimes referred to the EPA application Form 2A as "the new form" and state that the "...form is applicable to not only POTWs, but also to facilities that are similar to POTWs but which do not meet the regulatory definition of "publicly owned treatment works" (like private domestics, or similar facilities on Federal property)." Fact sheets would be improved with a clearer statement to indicate that the Region is determining that application Form 2A is appropriate for such facilities, as provided for in 40 CFR 122.21(j). In addition, to provide clarity, the fact sheet language should replace the reference to "the *new* form" with the actual form title (i.e., "2A").

Further, the review team noted that fact sheets for POTWs include general references to the regulatory basis for TBELs, including discussion of federal ELGs and BAT/BCT, rather than secondary treatment standards which are applicable to POTWs. Fact sheets would be improved by tailoring the description of the basis for TBELs to align with the specific facility and discharge type; the review team recommends updating the fact sheet template to include more specific and tailored language applicable to the specific permit conditions.

Program Strengths

The Region's administrative records generally included the permit application, data, draft permit, fact sheet, RP evaluations, WQBEL calculations, NMED's 401 certification, public comments, and the Region's response to comments. As discussed in section III.A.2, because the PQR shifted to a remote-only review, certain permit applications and other supporting documentation were unavailable in electronic format and therefore unavailable for review during the PQR. Fact sheets for New Mexico's permits are organized clearly and consistently across permit types and address the requirements of 40 CFR 124.8.

Areas for Improvement

EPA Region 6 maintains permit files in both hard copy and electronic format; the benefits of having permit files in a centralized electronic system became clear during this PQR as it was

conducted remotely, necessitating that all permit files associated with the administrative record be available in electronic format.

Action Items

Essential

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

Recommended

- The Region should consider developing and maintaining a centralized electronic system for New Mexico permit files, including all files associated with the administrative record.
- The Region should consider updating the New Mexico permit fact sheet template to clarify the applicability of Form 2A to non-POTWs; refine description of technology-based federal standards to distinguish applicability between POTWs and non-POTWs; and ensure that the rationale for effluent limitations is discussed in full, especially when effluent limitations are carried over from the previous permit.

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 state PQRs. The national topics 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, since state criteria are often challenging to interpret. 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 permit limits to be developed for any pollutant which causes, has the reasonable potential to cause, or contributes to an excursion of the state's water quality standards, whether those standards are narrative or numeric.

EPA Region 6 implements the NPDES program for New Mexico and issues permits based on State WQS. To assess how nutrients are addressed in the New Mexico NPDES program, EPA HQ reviewed three permits as well as New Mexico's WQS and the NMIP. The three permits reviewed for this portion of the review were the Town of Taos Wastewater Treatment Facility (WWTF) (NM0024066), Anthony Water and Sanitation District Wastewater Treatment Plant (WWTP) (NM0029629), and the State of New Mexico Department of Game and Fish (NMDGF) Rock Lake State Fish Hatchery (NM0030155).

New Mexico's WQS—effective September 12, 2018—establish use-specific numeric criteria for nitrogen-based constituents, general numeric criteria for dissolved gases (of which nitrogen is mentioned) and site-specific numeric criteria for phosphorus. New Mexico's WQS also establish criteria for response variables such as dissolved oxygen (numeric, use-specific), turbidity (numeric and narrative), plant nutrients (narrative), floating solids, and oil and grease (narrative).

The narrative nutrient criterion for plant nutrients (phosphorus and nitrogen), at Section 20.6.413.E of the NMAC, is the most applicable nutrient criterion in New Mexico's WQS and states that "Plant nutrients from other than natural causes shall not be present in concentrations that will produce undesirable aquatic life or result in a dominance of nuisance species in surface waters of the state."

Section IV.O.3 of the NMIP includes a section discussing general water quality criteria implementation and addresses plant nutrients. The NMIP indicates nutrient numeric criteria do not generally exist in the State WQS, except as site-specific standards. The NMIP cites the drinking water standard of 10 mg/L for nitrate-nitrogen might apply on a site-specific basis to dischargers that discharge to a source of drinking water or a reservoir. The NMIP lacks a discussion specific to how to evaluate RP or apply nutrients criteria to a discharge.

During the PQR opening interview, EPA Region 6 staff indicated that they address nutrients in permits when there is an effective TMDL or the state requests a nutrient effluent limitation through the 401 certification, or if there is a numeric nutrient water quality criterion (limited cases). The Region indicated the state adopts "temporary standards" that are akin to water quality variances, but are facility-specific performance-based values, and consider the economic feasibility to achieve the effluent limitation.

Two of the three permits reviewed establish effluent monitoring requirements for phosphorus and nitrogen and state that data collected during monitoring will be used in future TMDL development efforts. For one facility (Town of Taos WWTF, NM0024066), the monitoring requirements are carried over from the previous permit. The NMDGF Rock Lake State Fish Hatchery (NM0030155) permit establishes new effluent monitoring requirements "as a part of the state nutrient assessment protocol."

The Town of Taos WWTF discharges to an unnamed arroyo that flows for approximately 0.75 mile and drains into the reach of the Rio Pueblo de Taos. There are no waterbody-specific numeric criteria for this facility; the general criteria apply (i.e., nitrate as nitrogen, nitrite+nitrate). The permit fact sheet states that both the unnamed arroyo and Rio Pueblo de

Taos are listed on the 2014-2016 303(d) list as impaired for ammonia and nutrients/eutrophication. In addition, the Rio Pueblo de Taos is impaired for nutrients and eutrophication biological indicators. The permit fact sheet states that no TMDLs for ammonia or nutrients/eutrophication have been developed for the unnamed arroyo and the Rio Pueblo de Taos and the permit will continue the monitoring requirements for total nitrogen and total phosphorus that were in the previous permit, to provide data for use in future TMDL development. The permit fact sheet states that ammonia effluent limitations are continued from the previous permit because "...the unnamed arroyo waterbody is impaired for ammonia and Nutrients/Eutrophication..." The permit fact sheet lacks discussion of an evaluation of RP for the nutrient parameters reported in measurable concentrations in the permit application. The application reported a maximum concentration of 15 mg/L for nitrite+nitrate, 2.5 mg/L for Total Kjeldahl Nitrogen, and 3 mg/L for phosphorus.

The NMDGF Rock Lake State Fish Hatchery discharges to the Ortega-Borsich drainage ditch and partially (when not directed to irrigation) to the Pecos River. There are no waterbody-specific numeric criteria for this facility; the general criteria apply (i.e., nitrate as nitrogen, nitrite+nitrate). The permit fact sheet states the Pecos River is listed in the 2016-2018 303(d) list with "probable causes of impairment of nutrient/eutrophication biological indicators; nutrient listing is marginal." The permit fact sheet further states that a TMDL has not been completed. The permit fact sheet identifies as a change from the previous permit, new effluent monitoring and reporting requirements for total phosphorus "as a part of the State nutrient assessment protocol." The permit fact sheet also indicates that "...the previous permit had established as a "Report" requirement for total nitrogen due to possible impairment of nutrient..." The permit contains report only requirements for Total Nitrogen and Total Phosphorus. The fact sheet lacks discussion of RP for nutrient parameters.

The Anthony Water and Sanitation District WWTP discharges to the Rio Grande. There are no waterbody-specific numeric criteria for this facility; the general criteria apply (i.e., nitrate as nitrogen, nitrite+nitrate). The permit fact sheet only addresses *E. coli* in the TMDL discussion; no other pollutants are discussed. Further, the permit renewal application for this facility was unavailable during the PQR; therefore, the review did not identify whether the permittee reported nutrient parameters as present in the discharge.

Two of the three fact sheets reviewed noted receiving waters as impaired by nutrients and applications reported detected concentrations of nutrient parameters (Total Kjeldahl Nitrogen, Nitrate + Nitrite Nitrogen, and Phosphorus); however, none of the fact sheets reviewed for this section discussed an RP evaluation for nutrient discharges. Given that the facilities reviewed discharge nutrients and certain receiving waters are listed as impaired by nutrients, the Region should explicitly evaluate RP and the need to establish WQBELs for nutrient parameters for these facilities. We note that the concentrations presented in the permit fact sheet as having been reported in the effluent were at concentrations below the applicable water quality criteria.

Program Strengths

New Mexico’s WQS, TMDLs, and implementation policies for nutrients are easy to locate during internet searches. During the PQR opening interview, EPA Region 6 staff indicated that they are implementing nutrient WQS as “temporary standards” using a performance-based approach that has resulted in more nutrient WQBELs in more permits; the state is trying to implement creative and feasible approaches for permittees to meet necessary effluent limitations.

Areas for Improvement

EPA Region 6 could improve the quality of fact sheets by providing more information with respect to nutrient limits. Two of the three fact sheets reviewed noted receiving waters as impaired by nutrients and applications reported detected concentrations of nutrient parameters (Total Kjeldahl Nitrogen, Nitrate + Nitrite Nitrogen, and Phosphorus); however, none of the fact sheets reviewed for this section discussed an RP evaluation for nutrient discharges. This finding may be due primarily to the fact that numeric nutrient WQS apply to few waters in New Mexico.

Action Items

Essential

- Consistent with 40 CFR 122.44(d), EPA Region 6 must establish effluent limitations for nutrient parameters where the discharge demonstrates RP.

Recommended

- Consider bolstering the fact sheet discussions of RP considerations for nutrient discharges, especially for discharges with measurable concentrations of nutrient parameters entering a waterbody impaired by nutrients.

B. Effectiveness of POTW NPDES Permits with Food Processor Contributions

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

Background

Indirect discharges of food processors can be a significant contributor to noncompliance at recipient POTWs. Food processing discharges contribute to nutrient pollution (e.g., nitrogen, phosphorus, ammonia) to the nation’s waterways. Focusing specifically on the Food Processing Industrial Sector will synchronize PQRs with the Office of Enforcement and Compliance 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 New Mexico as well as specific language in POTW NPDES permits. With respect to NPDES permits, focus was placed on the following regulatory requirements for pretreatment activities and pretreatment programs:

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

The General Pretreatment Regulations at 40 CFR 403.5(c)(1) require POTWs with approved pretreatment programs to continue to develop and apply local limits (LLs) as necessary to control any pollutant that can reasonably be discharged into the POTW by an IU in sufficient amounts to pass through or interfere with the treatment works, contaminate its sludge, cause problems in the collection system, or jeopardize workers health and safety. POTWs that do not have approved pretreatment programs may also be required to develop specific LLs as circumstances warrant (see 40 CFR 403.5(c)(2)). LLs and other site-specific requirements are enforced by the POTW through IU control mechanisms and the POTW's sewer use ordinance (SUO).

The General Pretreatment Regulations require an Approval Authority to ensure that all substantive parts of the POTW's pretreatment program are fully established and implemented, including control mechanisms a POTW issues to its IUs to reduce pollutants in the indirect discharge (see 40 CFR 403.11). EPA Region 6 issues NPDES permits directly to POTWs in New Mexico. The New Mexico Environment Department (NMED) does not have the authority to implement the pretreatment program; therefore, EPA Region 6 is the Approval Authority for New Mexico POTWs and is responsible for administering the NPDES program consistent with provisions of the Clean Water Act. This includes identifying appropriate conditions to be incorporated into POTW NPDES permits concerning pretreatment requirements, approving pretreatment programs established by local Control Authorities, and reviewing and approving modifications of existing approved program elements, such as SUOs, LLs, and enforcement response plans (ERPs). EPA Region 6 also reviews POTW annual pretreatment program reports and takes enforcement actions when necessary. POTWs with approved pretreatment programs have the authority to issue permits to industrial users discharging to the POTW.

Table 1 identifies the pretreatment and NPDES requirements considered during this PQR. In this table, the terms Director and Permitting Authority refer to EPA Region 6. The term Control Authority refers to the six POTWs with approved pretreatment programs, or to EPA Region 6 for the 42 POTWs without an approved pretreatment program.

Table 1. Regulatory Focus for Pretreatment Topic Area

Citation	Description
40 CFR 122.42(b)	POTW requirements to provide adequate notice of new pollutants to the Director
40 CFR 122.44(j)	Pretreatment Programs for POTW
40 CFR 124.3(a) and (c)	The POTW must submit a timely and completed application for an NPDES permit or NPDES permit renewal
40 CFR 124.8(a) and (b)	The permitting authority must prepare a fact sheet for every draft permit for a major NPDES facility. Fact sheets must briefly set forth the principal facts and the significant factual, legal, methodological and policy questions considered in preparing the draft permit including references.
40 CFR 403.5(a), (b) and (c)	National pretreatment standards: Prohibited discharges
40 CFR 403.3	Definitions
40 CFR 403.8	Pretreatment program requirements: Development and implementation by POTW
40 CFR 403.10	Development and submission of NPDES state pretreatment programs
40 CFR 403.11	Approval procedures for POTW pretreatment programs and POTW granting of removal credits
40 CFR 403.12	Annual POTW reports

Findings

As shown in Table 2, 6 POTWs in New Mexico, or approximately 12.5% percent of all NPDES-permitted POTWs, have an approved pretreatment program. Those POTWs are the Control Authority for a total of 37 non-categorical significant industrial users (SIUs) and 46 categorical industrial users (CIUs). EPA Region 6 does not issue permits to any SIUs or CIUs discharging to POTWs without an approved pretreatment program.

Table 2. New Mexico SIUs by Pretreatment Program Status

SIU Description	Number of SIU Controlled by an Approved Pretreatment Program (6 POTWs) ¹	Number of SIU Not Controlled by an Approved Pretreatment Program (42 POTWs) ²	Total
Categorical Industrial User (CIU)	46	Unknown ³	46
Non-CIU	37	Unknown ³	37
Total SIU	83	Unknown³	83

¹ Data source: EPA Region 6 Pretreatment Coordinator, June 2021

² Data source: ICIS query in May 2020

³ EPA Region 6 staff stated that they do not issue permits to any IUs outside of approved programs.

In EPA Region 6, pretreatment responsibilities are shared among permitting and enforcement staff, enabling frequent coordination. When a permit writer is developing a permit for a POTW with an approved pretreatment program, the permit writer consults with the pretreatment staff to ensure the appropriate pretreatment permit language is included.

To determine if a POTW needs to develop a pretreatment program, EPA Region 6 permitting staff evaluates any relevant water quality issues in the receiving stream or issues with compliance at the POTW. Alternatively, enforcement staff might request that a pretreatment program be established. In any scenario, the permit writer coordinates with the pretreatment coordinator to conduct a preliminary evaluation. This evaluation includes a review of the industrial user survey and any other demographic information.

EPA Region 6 identifies IUs discharging to POTWs without approved programs primarily through the work of its inspectors, who traverse the state conducting inspections, coordinate with state agencies, use available reference materials, and track down leads from other Regional staff.

Pretreatment staff perform the general oversight of approved programs, such as reviewing annual reports from POTWs, local limits, enforcement response plans, and program modifications.

Four POTW NPDES permits were reviewed as part of the PQR, as well as a total of four control mechanisms for food processors discharging into the POTWs. Materials that were considered in the review included the NPDES permit application, the current NPDES permit and fact sheet, the response to comments for the current permit, the current SUO, the most recent pretreatment program annual report, any previous audit or inspection results, and a selection of IU permits and fact sheets.⁷ SUOs were found online for two of the POTWs. Two POTWs whose permits were reviewed have approved pretreatment programs and the other two do not (“nonapproved”).

Materials available for review, plus some research using EPA’s ICIS-NPDES and Enforcement and Compliance History Online (ECHO) databases and other online resources, suggest that only a

⁷ The permit applications for Albuquerque and Carlsbad were not available, nor were any IU permits for Carlsbad and Artesia.

small number of SIUs in New Mexico are food processors. Table 3 shows that 8 of the 74 SIUs in the programs reviewed are food processor IUs. There are currently no federal categorical pretreatment standards for food processors. EPA Region 6 helped to select the permits for two POTWs that receive process wastewater from food processing facilities and two additional POTWs without approved pretreatment programs. These POTWs were selected based on a review of data retrieved from ECHO and ICIS-NPDES databases, annual reports submitted to EPA Region 6 by POTWs with approved pretreatment programs, and discussions with state and local officials.

Table 3 identifies the POTW NPDES permits selected for this topic area, as well as the minimum standards for IUs established in the SUO. The design average flow among these POTWs ranges from 2.6 million gallons per day (MGD) to 76 MGD.

Table 3. New Mexico Permits Selected for Pretreatment Topic Area

Permittee (SUO is linked)	Permit No.	Approved Program?	Design Average Flow (MGD)	No. of SIUs ¹	No. of Food Processor IUs ¹	Example of SUO Controls
Albuquerque Bernalillo County Water Utility Authority (ABCWUA)	NM0022250	Yes	76.0	64	7	Al, ammonia, As, Bo, Cd, Cr, COD, CBOD, Cu, CN, Fl, Pb, Hg, Mo, Ni, Se, Ag, TSS, Zn, formaldehyde, TPH, FOG, phenols, TTO, benzene, BTEX, pH, temperature
Las Cruces	NM0023311	Yes	13.5	9	1	N/A
Carlsbad	NM0026395	No	5.0	0	N/A	Sb, As, Ba, Be, Bi, Bo, Cd, Cr, Co, Cu, Fe, Pb, Mn, Hg, Mo, Ni, Re, Se, Ag, Sr, Te, Sn, uranyl, Zn ²
Artesia	NM0022268	No	2.6	1	N/A	N/A

¹ Based on the information provided in the permit application or pretreatment annual report.

² SUO does not establish numeric local limits, only a prohibition on any amount of these pollutants.

N/A - Information not available or was not provided for review.

EPA reviewed four IU discharge permits issued by the POTWs with approved pretreatment programs to identify how and if any IU controls on conventional pollutants are being implemented in permits issued to food processors. Table 4 lists these IU permits.

Table 4. Summary of IU Permit Conditions

Facility Name	Permit Number	Receiving POTW ¹	Type of Food Processor	Classification by POTW	Average Process Wastewater Discharge (gallons per day [gpd]) ²	Monitored Pollutants ³
Dean Dairy Fluid	2006A	Albuquerque	Dairy processing	CIU ⁴	185,000	Flow, pH ⁵
New Mexico Food Distributors	2261A	Albuquerque	Food processing	SIU	14,500	Flow, pH ⁵
AAA Pumping Services	2265A	Albuquerque	Grease rendering	IU	Batch	Flow ⁵
Olam Spices and Vegetables	20994	Las Cruces	Chili pod processing	SIU	59,000	Flow, pH, BOD, TSS, temperature, As, Cd, Cr, Cu, Pb, Hg, Mo, Ni, Ag, Se, Zn, CN

¹ No food processing IUs were identified for Carlsbad or Artesia.

² Based on information included in the POTW's NPDES permit application or the IU permit.

³ Includes parameters identified in the permit with numerical discharge limits or monitoring only requirements.

⁴ Based on the POTW's NPDES permit application, the City classified the food processor as a CIU subject to 40 CFR 405 (Dairy Products Processing Point Source Category); however, this category does not establish pretreatment standards.

⁵ Pollutants for self-monitoring; the ABCWUA conducts all other compliance monitoring.

Insufficient monitoring of an IU discharge of potentially inconsistent-quality could prevent a POTW from detecting and expeditiously reacting to influent quality changes. EPA compared IU effluent limitations and discharge monitoring frequencies for food processors with those for the receiving POTWs to evaluate how well IU discharge monitoring frequencies support timely detection of discharges with the potential to cause problems with the POTW collection or treatment systems.

Table 5 shows monitoring conditions for the IU permits reviewed for this PQR compared to the monitoring conditions for the receiving POTWs. The IU permits issued by ABCWUA do not require self-monitoring, as the ABCWUA conducts all monitoring; however, the IUs are subject to local limits. The IU permit issued by Las Cruces does not have numeric limits for the pollutants of interest. This review does not evaluate the adequacy of the IU monitoring frequencies. The information is presented below for reference.

Table 5. New Mexico Discharge Permit Conditions

IU and Receiving POTW	Pollutant Monitoring Frequency and Limit ¹									
	Total P		Ammonia		BOD		TSS		O&G	
	Frequency	Limit	Frequency	Limit	Frequency	Limit	Frequency	Limit	Frequency	Limit
Albuquerque										
Albuquerque POTW	Quarterly	Report only	Daily	1.5 mg/L DM, 10.0 mg/L MA, 951 lb/day DM, 634 lb/day MA	Daily	[CBOD] 22.5 mg/L WA, 15 mg/L MA, 14,261 lb/day WA, 9,508 lb/day MA	Daily	45 mg/L WA, 30 mg/L MA, 28,522 lb/day WA, 19,015 lb/day MA	N/A	N/A
Dean Dairy Fluid	N/A ²	N/A ²	N/A ²	350.5 mg/L DM, 103.8 mg/L MA ³	N/A ²	[CBOD] 2107 mg/L MA ^{3,4}	N/A ²	5514 mg/L MA ³	N/A ²	200 mg/L DM ³
New Mexico Food Distributors	N/A ²	N/A ²	N/A ²	350.5 mg/L DM, 103.8 mg/L MA ³	N/A ²	[CBOD] 2107 mg/L MA ^{3,4}	N/A ²	5514 mg/L MA ³	N/A ²	200 mg/L DM ³
AAA Pumping Services	N/A ²	N/A ²	N/A ²	350.5 mg/L DM, 103.8 mg/L MA ³	N/A ²	[CBOD] 2107 mg/L MA ^{3,4}	N/A ²	5514 mg/L MA ³	N/A ²	200 mg/L DM ³
Las Cruces										
Las Cruces POTW	N/A	N/A	N/A	N/A	Daily	45 mg/L WA, 30 mg/L MA, 5069 lb/day WA, 3379 lb/day MA	Daily	45 mg/L WA, 30 mg/L MA, 5069 lb/day WA, 3379 lb/day MA	N/A	N/A
Olam Spices and Vegetables	N/A	N/A	N/A	N/A	Monthly	Report only	Monthly	Report only	N/A	N/A

¹ For this table, not applicable is abbreviated N/A, daily maximum is abbreviated DM, weekly average is abbreviated WA, and monthly average is abbreviated MA.

² ABCWUA conducts all compliance monitoring. All SIUs are monitored at last twice per year by ABCWUA.

³ Limits applicable via the local limits.

⁴ Chemical oxygen demand (COD) is also limited in the local limits.

*Program Strengths*Approved Programs

The NPDES permits for Albuquerque and Las Cruces contain effluent limitations for BOD/CBOD, TSS, and pH based on secondary treatment standards in accordance with 40 CFR 133.102. Both permits have a water quality-based pH limit (6.6-9.0) that is more stringent than the secondary treatment standards (6.0-9.0). Albuquerque's permit also includes discharge limits for inorganic nitrogen and ammonia, while Las Cruces has no limits for nutrients.

The permits for Albuquerque and Las Cruces state that permittees must operate a POTW pretreatment program in accordance with the federal General Pretreatment Regulations at 40 CFR Part 403, state and local laws and regulations, and the approved pretreatment program including any approved modifications. Additionally, the permits include requirements for the identification of SIUs discharging to the POTW, sampling at SIUs, permit renewal timelines, noncompliance remedies, and maintaining adequate resources for implementing the pretreatment program.

Overall, Albuquerque and Las Cruces appear to have adequate procedures in place to identify SIUs, including food processors, and issue control mechanisms to control these discharges. Neither program appeared to have any issues with POTW performance related to waste from food processors, nor did any food processors appear to have a history of significant compliance issues.

Albuquerque conservatively categorizes New Mexico Food Distributors and AAA Pumping Services as SIUs, despite both IUs having flows less than 25,000 gpd. Las Cruces correctly identifies Olam Spices and Vegetables as a food processing SIU.

Both permits contain appropriate language requiring the POTW to notify EPA about the introduction of new pollutants from an indirect discharger or changes in the volume or nature of influent from indirect dischargers. This helps to ensure that the POTWs are able to adjust as needed to potential changes in discharges from food processors to prevent disruption to POTW operations.

Both permits include an expeditious timeframe for reviewing and revising local limits: within 60 days of permit issuance (compared to one year as required in 40 CFR 122.44(j)(2)(ii)).

Nonapproved Programs

The NPDES permits for Carlsbad and Artesia contain effluent limitations for BOD, TSS, and pH based on secondary treatment standards in accordance with 40 CFR 133.102. Both permits have a pH limit (6.6) that is more stringent than the secondary treatment standards. Artesia's permit also includes monitoring requirements for total nitrogen and total phosphorus. Carlsbad has no limits for nutrients.

Both permits contain appropriate language requiring the POTW to notify EPA about the introduction of new pollutants from an indirect discharger or changes in the volume or nature

of influent from indirect dischargers. This helps to ensure that the POTWs are able to adjust as needed to potential changes in discharges from food processors to prevent disruption to the POTW operations.

Areas for Improvement

Approved Programs

The fact sheets for Albuquerque and Las Cruces do not state when LLs were last evaluated and/or the date that the current limits were adopted. While the permits do appropriately require a review of the LLs upon permit renewal, the permits or fact sheets should include the date of the most recent LL re-evaluation or approval date.

The fact sheets for Albuquerque and Las Cruces do not specify the basis for requiring the POTW to implement a pretreatment program. Including this information in the POTW NPDES permit fact sheets is important for documenting the rationale for the POTW's monitoring and sampling requirements. See 40 CFR 403.8(a) for the criteria.

The fact sheets for both Albuquerque and Las Cruces do not discuss hauled waste, but Albuquerque's SUO describes requirements for hauled waste. An internet search suggested that Las Cruces also accepts septic waste. The POTW permit fact sheets should include information on any hauled wastes being contributed to the POTW.

Neither fact sheet identifies the POTW organic (conventional) and nutrient pollutant capacity, nor do they thoroughly identify and characterize the contributing IU discharges and the volume of pollutants. Including information characterizing IU discharges documents the permit writer's reasonable potential analysis to assess if industrial loading exceeds what the POTW can safely accept and treat. Additionally, neither fact sheet describes how each approved program identifies new or expanded industrial discharges, including the development of an industrial waste survey. Some information is available in the annual reports for the pretreatment program, but this information would be best described in the fact sheet.

Both NPDES permits require the POTWs to comply with the notification requirements of 40 CFR 122.42(b). However, neither permit defines the timeframe for "adequate" notice. While a timeframe for this notification is not required by federal regulations, a timeframe in the permit would improve POTW accountability and permit enforceability.

Nonapproved Programs

The language regarding pretreatment program requirements for Artesia is inconsistent between the fact sheet, response to comments, and permit. The fact sheet notes that the POTW was previously required to develop a pretreatment program, and that this requirement was continued into the current permit. The response to comments included with the final permit indicates that a pretreatment program has been established. However, the final NPDES permit does not indicate that a pretreatment program has been developed or is required.

Despite being a nonapproved program, Artesia is required by its permit to develop local limits. Local limits have been developed, but the fact sheet does not state whether the LLs are technically based, when LLs were last evaluated and the date that the current limits were adopted, or whether the POTW is required to review the LLs upon permit renewal. Permit writers should specify the POTW's most recent LL submission date and review/revision date in the permit to ensure that the program is adequately evaluating its LLs in compliance with its permit conditions.

The records for both Carlsbad and Artesia do not discuss hauled waste, but an internet search suggested that both POTWs accept septic waste. The POTW permit fact sheets should include information on any hauled wastes being contributed to the POTW.

Neither fact sheet identifies the POTW organic (conventional) and nutrient pollutant capacity, nor do they thoroughly identify and characterize the contributing IU discharges and the volume of pollutants. Including information characterizing IU discharges documents the permit writer's reasonable potential analysis to assess if industrial loading exceeds what the POTW can safely accept and treat. Additionally, neither fact sheet describes how each program identifies new or expanded industrial discharges, including the development of an industrial waste survey.

Both NPDES permits require POTWs to comply with the notification requirements of 40 CFR 122.42(b). However, neither permit defines the timeframe for "adequate" notice. While a timeframe for this notification is not required by federal regulations, a timeframe in the permit would improve POTW accountability and permit enforceability.

Neither permit contains specific language regarding EPA's ability to reopen the POTW's permit if it determines that a pretreatment program needs to be developed. Both permits have a generic reopener clause, however.

Industrial User Permits

Albuquerque incorrectly identifies Dean Dairy Fluid as a CIU. While there are direct discharge standards for dairies at 40 CFR Part 405 (BPT, BCT, NSPS), they do not include pretreatment standards. Dean Dairy Fluid must be reclassified as an SIU.

ABCWUA conducts all compliance monitoring for its IUs. This arrangement is acceptable; however, the IU permits do not contain a list of the pollutants being monitored, the effluent limits, or other information. While the IU permits need not contain monitoring requirements if ABCWUA is conducting all compliance monitoring in lieu of requiring the IU to conduct self-monitoring, the IU permits must identify the pollutants of concern and the applicable effluent limits that the IUs must meet.

Albuquerque's IU permits do not include a fact sheet. While fact sheets are not required for IUs, even a brief fact sheet would provide an opportunity to document how an IU is classified, what limits were selected, and other information.

The IU permits issued by Albuquerque and Las Cruces do not include a requirement to notify the POTW of a change in operations or flow at its facility that affect the potential for a slug discharge, as required in 403.8(f)(2)(vi).

The IU permit issued by Las Cruces includes only a generic reference to Las Cruces Liquid Waste Disposal Ordinance Number 2488, which contains requirements for slug load reporting. The permit should include an explicit requirement to notify the POTW of slug discharges. The IU permit also does not mention reporting for spills.

IU permits were not provided for Carlsbad or Artesia.

Action Items

Essential

- The permit writer must ensure that POTW permits include language that require the development and enforcement of local limits, and that the local limits be evaluated once per permit term for potential revisions (per 40 CFR 122.44(j)(2)(ii)).

Recommended

- Fact sheets should specify the basis for requiring a pretreatment program (see 40 CFR 403.8). Conversely, the fact sheet should also explain the rationale for not requiring a pretreatment program, especially when SIUs are present in a nonapproved program.
- The permit writer should ensure that the language regarding whether a pretreatment program is required is consistent between the permit, fact sheet, and response to comment document.
- The permit writer should ensure that fact sheets comprehensively characterize the industrial loadings to the POTW. This includes a list of IUs and the nature and volume of their wastestreams (per 40 CFR 122.44(j)(1)). It also includes a characterization of hauled wastes. It also includes an evaluation of the POTW's treatment capacity and the relative contribution by the IUs.
- The permit writer should ensure that the fact sheets describe how a POTW will identify and evaluate new or increased IU discharges.
- Documentation of the local limit review under 40 CFR 122.44(j)(2)(ii) should be included in the permit file, including the most recent local limits submission date.
- NPDES permits should be revised to specify an "adequate" timeframe to provide the notice after the POTW becomes aware of changes identified in 40 CFR 122.42(b).
- The permit writer should ensure that permits for nonapproved programs clearly state that the POTW permit may be reopened at any time to require the development of a pretreatment program.

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

Background

As part of this PQR, EPA reviewed the Middle Rio Grande Watershed Based MS4 Permit (NMR04A000) for consistency with the Phase II stormwater permit regulations. This permit became effective in 2014 prior to the EPA updating the small MS4 permitting regulations (a.k.a. the “Remand Rule”) to clarify:

(1) the procedures to be used when coverage is by general permits (see 40 CFR 122.28(d));

(2) the requirement that the permit establish the terms and conditions necessary to meet the MS4 permit standard (i.e., “to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act”), including conditions to address the minimum control measures, reporting, and, as appropriate, water quality requirements (see 40 CFR 122.34(a) and (b)); and

(3) the requirement that permit terms must be established in a “clear, specific, and measurable” manner (see 40 CFR 122.34(a)).

The permit reviewed is a watershed-based permit used by 18 potential permittees (Phase I, Phase II, non-traditional, and tribal entities) located in the Middle Rio Grande Watershed. The fact sheet notes that operators can also opt to apply for their own individual permit. The permit is not a conventional Phase I or Phase II type permit; as it includes requirements for both types of permittees located in the watershed, some permit requirements may not apply to every permittee. While the permit does not necessarily follow the template of the Remand Rule given it was issued prior to the rule’s finalization, it does generally follow the Remand Rule.

The permit clearly identifies which provisions apply to which types of permittees, and what the expectations are for each in development and implementation. The permit includes differing timelines on certain elements based on the type of permittee.

All entities are required to have a stormwater management program (SWMP) that may include cooperative elements developed by a co-permittee. The permit provides flexibility by allowing permittees to take on responsibility for different program elements across the entire watershed or a portion larger than the permittee’s jurisdiction; this would need to be coordinated accordingly amongst the co-permittee group(s) involved. The permit is clear that different MS4s within the watershed can collaborate on program implementation through cooperative agreements to maximize efficiencies associated with costs and pollutant reductions. All MS4s are still required to develop their own unique SWMPs but can include parts of the program being implemented by another MS4.

The permit identifies measurable outcomes or required performance requirements explicitly in some cases, but in others, quantifiable goals and metrics are still left to be defined in the

SWMP. The permit appears to clearly state the specific program elements that need to be developed, and in some cases provides definitive implementation strategies and metrics. However, in some cases, the permit allows the permittee to develop their own elements, procedures, and goals, which are to be defined in the SWMP. The permit uses conditional language, such as the phrase “to the extent allowable,” when referring to the implementation of regulatory mechanisms for illicit discharges, construction, and post-construction.

The permit appears to provide a well-thought-out and methodical approach for addressing water quality concerns, including TMDLs and other impairments, by requiring routine monitoring and evaluating the effectiveness of best management practices (BMPs). The permit includes clear discussion on how to develop and implement program elements related to impaired waterbodies with or without TMDLs. Permittees are to monitor the effects their program and BMPs are having on water quality and assess whether changes need to be made to ensure progress. In some cases, the permit requires the permittee to develop its own program elements and measurable goals as part of the SWMP (with clear guidelines set forth by the permit), and in other cases the permit provides more specific language. For example, for areas in the watershed impacted by the bacteria TMDL, the permit requires BMPs to specifically address sanitary sewer systems, on-site sewage facilities, illicit discharges and dumping, animal sources, and residential education. BMPs are to be implemented with the goal of reducing pollutant loads and progress is to be described in annual reports.

Program Strengths

The permit appears to clearly identify which provisions apply to which types of permittees, and what the expectations are for each with respect to development and implementation. The permit includes different timelines on certain elements for different types of permittees. Further, the permit appears to provide a well-thought-out and methodical approach for addressing water quality concerns, including TMDLs and other impairments, by requiring routine monitoring and evaluating the effectiveness of BMPs.

Areas for Improvement

When EPA reissues this permit, it must ensure that the permit meets the requirements of the Remand Rule to include clear, specific, and measurable permit provisions. Conditional language, such as the phrase “to the extent allowable,” should be eliminated when referring to the implementation of regulatory mechanisms for illicit discharges, construction, and post-construction. Also, the permit must be clear that the permit, not the SWMP, contains the requirements, including requirements for each of the six minimum measures, for reducing pollutants to the maximum extent practicable, protecting water quality, and satisfying the appropriate water quality requirements of the Clean Water Act.

Action Items

Essential

- When reissued, the permit must meet the requirements of the Remand Rule to include clear, specific, and measurable permit provisions.

Recommended

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

V. 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 Region 6’s NPDES permit program in New Mexico, 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. EPA has provided the citation for each Essential action item. The permitting authority is expected to address these action items in order to comply 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.

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

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

Topic	Action(s)
Reasonable Potential	<ul style="list-style-type: none"> • Ensure that all pollutants of concern are evaluated for RP consistent with 40 CFR 122.44(d)(1)(i), including pollutants for which TMDLs are scheduled to be developed. • Ensure that RP is considered for all discharges consistent with 40 CFR 122.44(d)(1)(i), regardless of the facility design capacity.
WQBELs Development	<p>Must establish WQBELs where data indicate that the permitted discharge causes, has the reasonable potential to cause, or contributes to an excursion above any state WQS, in accordance with 40 CFR 122.44(d)(1). If representative data show that an excursion of any criteria, including narrative or numeric WET criteria, has already occurred (i.e., "caused" which is post impact) or indicates that the discharge has the reasonable potential to cause or contributes (this is the pollution preventive part of RP) to an excursion, a WET limit must be included in the permit. If data are determined not to be or are no longer representative of the permitted discharge, then EPA must document the basis for this determination in the fact sheet (40 CFR 124.56).</p>
Monitoring and Reporting Requirements	<ul style="list-style-type: none"> • Establish explicit influent monitoring requirements to assure compliance with permit limitations for the minimum percent removal requirements for BOD and TSS. [40 CFR 122.44(i)(1)] • For chronic WET testing, permits must require the use of a 40 CFR Part 136 approved short-term chronic test, including use of test species <i>Ceriodaphnia dubia</i>. Otherwise, EPA Region 6 must obtain EPA approval for an Alternative Test Procedure (ATP). [40 CFR Part 136]
Standard and Special Conditions	<ul style="list-style-type: none"> • Ensure that New Mexico's permits include all standard conditions consistent with the federal standard provisions established in 40 C.F.R. 122.41 and 122.42 to address the following: <ul style="list-style-type: none"> • Permits lacked language addressing CWA penalties for second and subsequent convictions related to the <u>Duty to Comply</u> (40 CFR 122.41(a)(2)). • Permits lacked language addressing sewage sludge requirements related to <u>Duty to Mitigate</u> (40 CFR 122.41(d)).

	<ul style="list-style-type: none"> • Permits lacked the reference to 40 CFR 122.61 addressing certain cases for mandatory permit modification or revocation and reissuance related to <u>Permit Transfers</u> (40 CFR 122.41(l)(3)). • Permits lacked the requirement to submit reports for <u>Compliance Schedules</u> (40 CFR 122.41(l)(5)). • Revise part II.C of permits to correctly reference 40 CFR 122.62(a)(2) related to <u>permit modifications</u>.
Nutrients	Consistent with 40 CFR 122.44(d), EPA Region 6 must establish effluent limitations for nutrient parameters where the discharge demonstrates RP.
Pretreatment: Food Processing Sector	The permit writer must ensure that POTW permits include language that require the development and enforcement of local limits, and that the local limits be evaluated once per permit term for potential revisions (per 40 CFR 122.44(j)(2)(ii)).
Municipal Separate Storm Sewer Systems (MS4s)	When reissued, the permit must meet the requirements of the Remand Rule to include clear, specific, and measurable permit provisions.

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

Topic	Action(s)
Permit Application Requirements	The Region is encouraged to continue efforts to obtain timely and complete permit applications.
TBELs for POTWs	Consider updating fact sheet templates to include separate discussions for the regulatory basis of TBELs for POTWs and non-POTWs, for permit writers to select during use of the template.
Reasonable Potential	When evaluating RP, EPA Region 6 should use the maximum reported effluent concentration, which is recommended by EPA's 1991 TSD, rather than using the geometric mean effluent value when evaluating RP for all parameters, including chemistry (toxics).
WQBELs Development	<ul style="list-style-type: none"> • Revise NMIP language for addressing ammonia toxicity to reflect the following: If there is RP for ammonia, the permit must include a chemical-specific ammonia limit. If aquatic toxicity is still measured after including an ammonia permit limit, and RP for WET is demonstrated, then a WET limit must be included. • Revise NMIP language regarding chemical specific vs. WET limits, to include appropriate federal regulatory citations to clarify and support the implementation procedures.
Final Effluent Limitations and Documentation of Effluent Limitations Development	Where proposed limits are less stringent than the previous permit, fact sheets should include a thorough discussion of anti-backsliding evaluations, including, if applicable, incorporating documentation that was prepared by a subject matter expert and written separately from the fact sheet.
Standard and Special Conditions	Provide greater clarification in permits and fact sheets related to the special condition requiring a pollution prevention plan.
Administrative Record and Fact Sheet	<ul style="list-style-type: none"> • The Region should consider developing and maintaining a centralized electronic system for New Mexico permit files, including all files associated with the administrative record. • The Region should consider updating the New Mexico permit fact sheet template to clarify the applicability of Form 2A to non-POTWs; refine description of technology-based federal standards to distinguish applicability between POTWs and non-POTWs; and ensure that the rationale for effluent limitations is discussed in full, especially when effluent limitations are carried over from the previous permit.

<p>Nutrients</p>	<p>Consider bolstering the fact sheet discussions of RP considerations for nutrient discharges, especially for discharges with measurable concentrations of nutrient parameters entering a waterbody impaired by nutrients.</p>
<p>Pretreatment: Food Processing Sector</p>	<ul style="list-style-type: none"> • Fact sheets should specify the basis for requiring a pretreatment program (see 40 CFR 403.8). Conversely, the fact sheet should also explain the rationale for not requiring a pretreatment program, especially when SIUs are present in a nonapproved program. • The permit writer should ensure that the language regarding whether a pretreatment program is required is consistent between the permit, fact sheet, and response to comment document. • The permit writer should ensure that fact sheets comprehensively characterize the industrial loadings to the POTW. This includes a list of IUs and the nature and volume of their wastestreams (per 40 CFR 122.44(j)(1)). It also includes a characterization of hauled wastes. It also includes an evaluation of the POTW’s treatment capacity and the relative contribution by the IUs. • The permit writer should ensure that the fact sheets describe how a POTW will identify and evaluate new or increased IU discharges. • Documentation of the local limit review under 40 CFR 122.44(j)(2)(ii) should be included in the permit file, including the most recent local limits submission date. • NPDES permits should be revised to specify an “adequate” timeframe to provide the notice after the POTW becomes aware of changes identified in 40 CFR 122.42(b). • The permit writer should ensure that permits for nonapproved programs clearly state that the POTW permit may be reopened at any time to require the development of a pretreatment program.