NPDES PERMIT NO. NM0020770 FACT SHEET

FOR THE DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT TO DISCHARGE TO WATERS OF THE UNITED STATES

APPLICANT

City of Bloomfield
P.O. Box 1839
Bloomfield, NM 87413

ISSUING OFFICE

U.S. Environmental Protection Agency
Region 6
1201 Elm Street, Suite 500
Dallas, Texas 75207

PREPARED BY

Jim Afghani
Environmental Engineer
NPDES Permitting and Wetlands Section (6WD-PE)
Water Division (6WD)
Phone: (214) 665-6615
Email: afghani.jim@epa.gov

DATE PREPARED

November 18, 2025

PERMIT ACTION

Renewal of a permit previously issued on September 29, 2020, with an effective date of November 1, 2020, and an expiration date of October 31, 2025.

RECEIVING WATER – BASIN

San Juan River – San Juan River Basin

DOCUMENT ABBREVIATIONS

In the document that follows, various abbreviations are used. They are as follows:

4Q3	Lowest four-day average flow rate expected to occur once every three-years
BAT	Best available technology economically achievable
BCT	Best conventional pollutant control technology
BPT	Best practicable control technology currently available
BMP	Best management plan
BOD_5	Biochemical oxygen demand (five-day unless noted otherwise)
BPJ	Best professional judgment
CD	Critical dilution
CFR	Code of Federal Regulations
cfs	Cubic feet per second
COD	Chemical oxygen demand
COE	United States Corp of Engineers
CWA	Clean Water Act
DMR	Discharge monitoring report
E. coli	Escherichia coli
ELG	Effluent limitation guidelines
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
FCB	Fecal coliform bacteria
FDA	Food and Drug Administration
F&WS	United States Fish and Wildlife Service
gpm	Gallons per minute
mg/L	Milligrams per liter (one part per million)
ug/L	Micrograms per liter (one part per billion)
MGD	Million gallons per day
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NMIP	New Mexico NPDES Permit Implementation Procedures
NMWQS	New Mexico State Standards for Interstate and Intrastate Surface Waters
NPDES	National Pollutant Discharge Elimination System
MQL	Minimum quantification level
O&G	Oil and grease
PFAS	Per- and polyfluoroalkyl substances
lb/day	Pound/day
POTW	Publicly owned treatment works
RP	Reasonable potential
SIC	Standard industrial classification
SOPS	Standard Operating Procedures
s.u.	Standard units (for parameter pH)
SWQB	Surface Water Quality Bureau
TDS	Total dissolved solids
TMDL	Total maximum daily load
TRC	Total residual chlorine
TSS	Total suspended solids
UAA	Use attainability analysis
UV	Ultraviolet light
USFWS	United States Fish & Wildlife Service
USGS	United States Geological Service
WLA	Waste-load allocation
WET	Whole effluent toxicity
WQCC	New Mexico Water Quality Control Commission
WQMP	Water Quality Management Plan
WQS	Water Quality Standards
WWTP	Wastewater Treatment Plant

In this document, references to State WQS and/or rules shall collectively mean the state of New Mexico.

I. CHANGES FROM THE PREVIOUS PERMIT

Changes from the permit previously issued on September 29, 2020, with an effective date of November 1, 2020, and an expiration date of October 31, 2025, are as follow:

* Added PFAS monitoring and reporting requirements. Also added reporting requirements to report influent concentrations for BOD_5 and TSS, and reassigned TRC limit to be 11 ug/L

II. WASTEWATER PLANT LOCATION AND TREATMENT PROCESS

Under the SIC code 4952, the applicant operates City of Bloomfield WWTP, with a design flow of 0.93 MGD, and is located at 1176 S. Church Street, Bloomfield, San Juan County NM (depicted in Aerial Image 1 below). The WWTP serves a population of approximately 7,500 residents. The WWTP is operated by staff within the Public Works Department.

Aerial Image 1: Overall view of the existing City of Bloomfield's Wastewater Treatment Plant. Aerial from Google Earth.

Refer to image 2 for the layout of the treatment process. The headworks located at the entry to the WWTP have split channels: a manual bar screen and a mechanical grit and solids removal system, inclusive of a screw pump. These split channels converge at an aerated grit chamber, thence to three (3) sump pumps that lift the influent water to the recently constructed sequencing batch reactors (SBR) and digester basins. The treated effluent gravity flows from the SBR to two (2) chlorination basins.

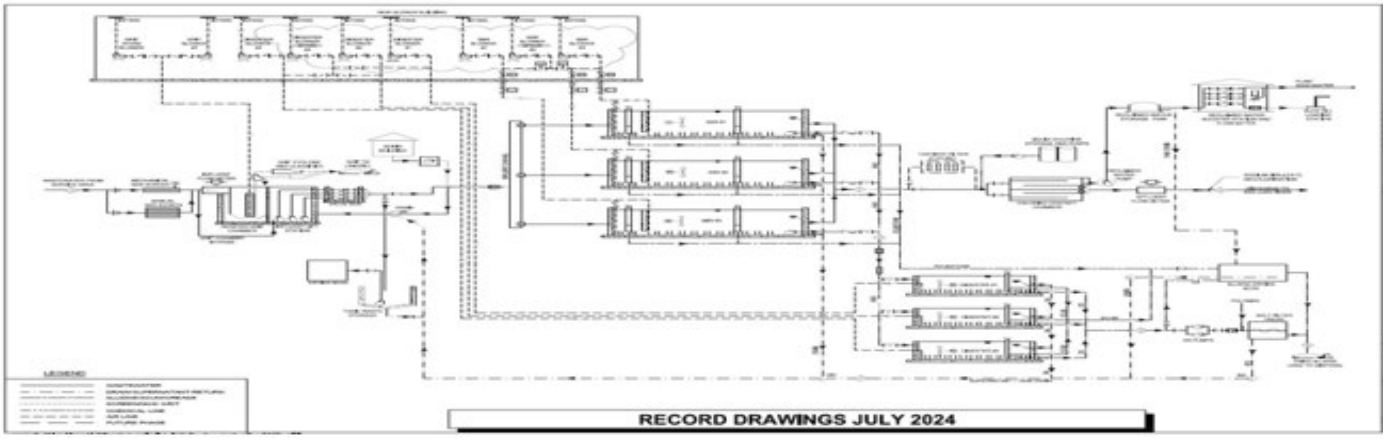


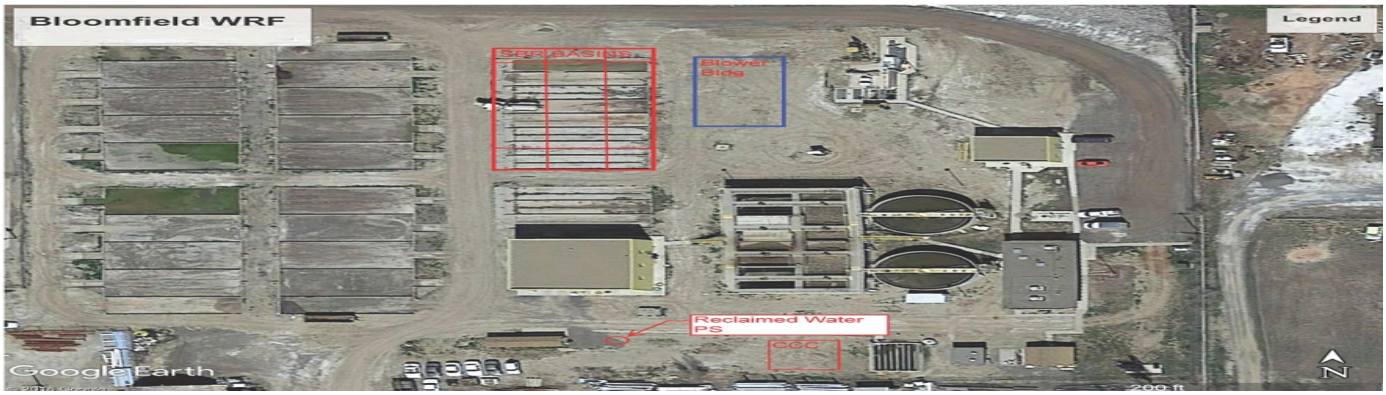
Image 2: Treatment process

The previous digester basins (#1 through #4), aeration basins (#1 and #2) and south clarifier are currently offline. The previous north clarifier is projected for future toxic flow storage. The previous chlorine contact chamber (CCC) has also been replaced and/or upgraded by a newly constructed chamber.

Additionally, other treatment processes within the existing WWTP are currently undergoing rehabilitation and/or upgrades (depicted in aerial image 3 below). The city maintains two (2) lift stations (identified in table 1 below).

Table 1: Lift stations

No.	Lift Station	Address
1	River	River Address S. Side of River on Hwy 550, Take Mangum (East), to Roberts Ln. (Turn South), to bottom of Hill (on Right Side)
2	Highway 64	Highway 64 Take Hwy 64 West, Past Ruth Lane, On North Side of Highway in Roadrunner Carwash Lot (S.E. Corner)



Aerial image 3: Overall view of the existing City of Bloomfield's Wastewater Treatment Plant and the upgrades denoted in "red". Aerial from Google Earth.

Decant from the digester is returned to the head works where it mixes with the raw influent. From the digester, solids are sent to the belt press, thence to the sludge drying beds. The sludge drying beds have under drains that direct liquids back to the head of the plant. Grit removed from the head works is collected in a hopper and disposed of at the landfill. Final disposal of solids is to a surface disposal site at the WCA Bondad Landfill in Durango, Colorado (County Road 318, Durango, CO 81303).

Currently the only established Industrial User (IU) is Enterprise Field Services, LLC (Enterprise). Bloomfield and Enterprise entered into a wastewater treatment agreement for the disposal of their wastewater into the City's WWTP on May 1, 2022, with an expiration date of April 30, 2025. Note: The previous service agreement is currently being updated. The recent WWTP rehabilitation also included installation of a new back-up generator in the event of an electrical power disruption or unit failure, for the entire plant and the onsite lift Station. Additionally, there is a new supervisory control and data acquisition (SCADA) and call-out system.

III. **EFFLUENT CHARACTERISTICS**

Table 1: Effluent data submitted in application Form 2A is as follows.

Parameter	**Maximum (mg/L unless noted)**	**Average (mg/L unless noted)**
Flow (MGD)	1.22	0.6556
pH, minimum, standard units (s.u.)	6.6	N/A
pH, maximum, standard units (s.u.)	7.9	N/A
Temperature (C), winter	8.1	11.1
Temperature (C), summer	25.9	22.7
Biochemical Oxygen Demand, 5-day (BOD_5)	59.0	8.1
Total Suspended Solids (TSS)	89.0	5.2
E. coli (cfu/100 mL)	613	19.9
Ammonia (as N)	3.77	0.6
TRC	1.35	0.00
DO	9.1	7.1

Parameter	Maximum (mg/L unless noted)	Average (mg/L unless noted)
Total Kjeldahl Nitrogen (TKN)	8.00	7.80
Nitrate + Nitrite Nitrogen	9.9	3.0
Oil & Grease	NA	NA
Phosphorus (Total)	2.2	0.9
TDS	373.0	279.0

On August 30, 2023, and April 15, 2025, Compliance Evaluation Inspections (CEI) were conducted at the Bloomfield WWTP by the Enforcement & Compliance Assurance Division of the Environmental Protection Agency, Region 6. The CEI reports can be found on the EPA website (https://www.epa.gov/nm/enforcement-and-compliance-assurance-documents-new-mexico).

These inspections were conducted to determine compliance with the NPDES permitting program according to the requirements of the federal CWA. The areas of concern can be found in the onsite inspection reports located on the EPA website listed above. Also, as part of the drafting permit, the DMRs were reviewed from November 2020 to June 2025 to determine if any excursions of the NPDES permit limits have occurred since the current permit was issued. Several results of total chlorine residual and BOD_5 percent removal were found to be not in compliance with the permit limitations.

In addition, during drafting of permit in 2020, it was mentioned that an Administrative Order was issued in June 2017. Violations were as follows: Ineffective aeration basins, less than optimal aerobic treatment, structural issues including cracks in the concrete, crumbling concrete, and structural rebar showing throughout all treatment units. Rust and deterioration, leakage, and heavy wearing in treatment unit motors. Improper treatment in the chlorine-contact-chamber and green effluent indicating improper treatment.

Compliance orders included structural repairs of the WWTP, a construction plan to address operation and maintenance defects and rehabilitation of primary treatment and chlorination, a comprehensive asset management plan for sustainable infrastructure, completion of phase I construction which includes repairs to concrete structural repairs by December 2019 and completion of phase II construction which includes primary treatment upgrades and chlorination system improvements by December 2024. In addition, a preliminary engineering report developed in 2018 recommended that most of the entire WWTP be replaced. In the last three years, the facility has had 9 exceedances of prescribed limits. There was a total of two exceedances of TRC limits and seven exceedances of E. coli limits.

Table 2: Bloomfield WWTP currently receives waste from the following industrial user.

Name/Address	Industrial Process	Avg Discharge	Principal Products	Raw Materials
Enterprise Field Services 614 Reilly Ave 87401	Use of water to cool down boilers	63,000 gpd	Cooling Tower Water	Water, Salts & Chlorides

REGULATORY AUTHORITY/PERMIT ACTION

In November 1972, Congress passed the Federal Water Pollution Control Act establishing the NPDES permit program to control water pollution. These amendments established technology-based or end-of pipe control mechanisms and an interim goal to achieve “Water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water;” more commonly known as the “swimmable, fishable” goal. Further amendments in 1977 of the CWA gave EPA the authority to implement pollution control programs such as setting wastewater standards for industry and established the basic structure for regulating pollutants discharges into the waters of the United States. In addition, it made it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit was obtained under its provisions.

Regulations governing the EPA administered the NPDES permit program are generally found at 40 CFR §122 (program requirements & permit conditions), §124 (procedures for decision making), §125 (technology-based standards) and §136 (analytical procedures). Other parts of 40 CFR provide guidance for specific activities and may be used in this document as required.

The initial application to renew the expiring NPDES permit was received on July 17, 2025. Under the Environmental Permit Regulations (40 CFR 124.3(c), 54 FR 18785, May 2, 1989), the application was reviewed and found administratively incomplete on August 7, 2025. Additional information was received on October 27, 2025. The renewal application was deemed complete on October 27, 2025. It is proposed that the permit be reissued for a 5-year term, in accordance with regulations promulgated at 40 CFR §122.46(a).

V. **DRAFT PERMIT RATIONALE AND PROPOSED PERMIT CONDITIONS**

A. OVERVIEW of TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDS BASED EFFLUENT LIMITATIONS AND CONDITIONS

Regulations contained in 40 CFR §122.44 NPDES permit limits are developed that meet the more stringent of either technology-based effluent limitation guidelines, numerical and/or narrative water quality standard-based effluent limits, or the previous permit. Technology-based effluent limitations are established in the proposed draft permit for TSS and BOD, and percent removal for each. Water quality-based effluent limitations are established in the proposed draft permit for *E. coli* bacteria, pH, TRC and TDS.

B. TECHNOLOGY-BASED EFFLUENT LIMITATIONS/CONDITIONS

1. General Comments

Regulations promulgated at 40 CFR §122.44 (a) require technology-based effluent limitations to be placed in NPDES permits based on ELGs where applicable, on BPJ in the absence of guidelines, or on a combination of the two. In the absence of promulgated guidelines for the discharge, permit conditions may be established using BPJ procedures. EPA establishes limitations based on the following technology-based controls: BPT, BCT, and BAT. These levels of treatment are:

BPT - The first level of technology-based standards generally based on the average of the best existing performance facilities within an industrial category or subcategory.

BCT - Technology-based standard for the discharge from existing industrial point sources of conventional pollutants, including BOD, TSS, *E. coli* bacteria, pH, and O&G.

BAT - The most appropriate means available on a national basis for controlling the direct discharge of toxic and non-conventional pollutants to navigable waters. BAT effluent limits represent the best existing performance of treatment technologies that are economically achievable within an industrial point source category or subcategory.

2. Effluent Limitation Guidelines

The facility is a POTW/POTW-like that has technology-based ELG's established at 40 CFR Part 133, Secondary Treatment Regulation. Pollutants with ELG's established in this Chapter are BOD, TSS and pH. BOD limits of 30 mg/L for the 30-day average and 45 mg/L for the 7-day average and 85% percent (minimum) removal are found at 40 CFR §133.102(a).

TSS limits; also 30 mg/L for the 30-day average and 45 mg/L for the 7-day average, average and 85% percent (minimum) removal are found at 40 CFR §133.102(b). ELG's for pH are between 6-9 s.u. and are found at 40 CFR §133.102(c). The draft permit establishes limits for percent removal for both BOD and TSS.

Regulations at 40 CFR §122.45(f)(1) require all pollutants limited in permits to have limits expressed in terms of mass such as pounds per day. When determining mass limits for POTWs or similar, the plant's design flow is used to establish the mass load. Mass limits are determined by the following mathematical relationship:

Loading in lbs/day = pollutant concentration in mg/L * 8.345 (lbs)(L)/(mg)(MG) * design flow in MGD

30-day average BOD/TSS loading = 30 mg/L * 8.345 (lbs)(L)/(mg)(MG) * 0.93 MGD = 233 lbs/day
07-day average BOD/TSS loading = 45 mg/L * 8.345 (lbs)(L)/(mg)(MG) * 0.93 MGD = 349 lbs/day

A summary of the technology-based limits:

Effluent Characteristic	**Discharge Limitation**			
Parameter	30-day Avg	7-day Max	30-day Avg	7-day Max
BOD	233 lbs/day	349 lbs/day	30 mg/L	45 mg/L
BOD, removal [1]	≥ 85 %	---	---	---
TSS	233 lbs/day	349 lbs/day	30 mg/L	45 mg/L
TSS, removal [1]	≥ 85 %	---	---	---
pH	N/A	N/A	6.0 to 9.0 s.u.	

[1] % removal is calculated using the following equation: [(average monthly influent concentration – average monthly effluent concentration) ÷ average monthly influent concentration] * 100.

C. WATER QUALITY BASED LIMITATIONS

1. General Comments

Water quality-based requirements are necessary where effluent limits more stringent than technology-based limits are necessary to maintain or achieve federal or state water quality limits. Under Section 301(b)(1)(C) of the CWA, discharges are subject to effluent limitations based on federal or state WQS. Effluent limitations and/or conditions established in the draft permit follow applicable State WQS and applicable State water quality management plans to assure that surface WQS of the receiving waters are protected and maintained or attained.

2. Implementation

The NPDES permits contain technology-based effluent limitations reflecting the best controls available. Where these technology-based permit limits do not protect water quality or the designated uses, additional water quality-based effluent limitations and/or conditions are included in the NPDES permits. State narrative and numerical water quality standards are used in conjunction with EPA criteria and other available toxicity information to determine the adequacy of technology-based permit limits and the need for additional water quality-based controls.

3. State Water Quality Standards

The general and specific stream standards are provided in NMWQS (20.6.4 NMAC effective on April 10, 2025). The discharge is to San Juan River Basin (20.6.4.408 NMAC).

The designated uses of the receiving water are public water supply, industrial water supply, irrigation, livestock watering, wildlife habitat, primary contact, marginal cold-water aquatic life and warmwater aquatic life.

4. Permit Action - Water Quality-Based Limits

Regulations promulgated at 40 CFR §122.44(d) require limits in addition to, or more stringent than effluent limitation guidelines (technology based). State WQS that are more stringent than effluent limitation guidelines are as follows:

a. pH

For marginal warmwater aquatic life and primary contact, criteria for pH are between 6.6 and 9.0 s.u. pursuant to 20.6.4.900.D and H(6) NMAC.

b. Bacteria

For primary contact, the criteria for E. coli bacteria are as follows: a monthly geometric mean of 126 cfu/100 mL or MPN/100 mL, and a daily maximum of 410 cfu/100 mL or MPN/100 mL, in accordance with 20.6.4.900.D NMAC. However, based on the WLA requirements referenced in the approved TMDL from 2005, both the daily maximum and the 30-day average will be set at 126 cfu/100 mL. Please see section VII for more details.

c. TP & TN

Since the facility is designated as a major POTW, this draft permit will include TP & TN monitoring on a quarterly basis.

d. Dissolved Oxygen (DO)

The State of New Mexico WQS criterion applicable to the marginal cold-water aquatic life designated use is at least 6 mg/L for dissolved oxygen. As part of the permitting process, EPA used the LA-QUAL water quality model. This steady-state one-dimensional model assumes complete mixing within each modeled element to develop permit parameters for the protection of the State of New Mexico surface water WQS for DO (i.e., 6 mg/L). Based on the city of Bloomfield Wastewater Treatment Plant's design flow and the receiving water's critical flow, various BOD_5 factors, including BOD_5 Secondary Treatment Standards, were considered and simulated to achieve the DO criterion. A complete characterization of San Juan (i.e., water quality and hydrodynamic data) was not available. Where data were unavailable, estimates and assumptions were made.

The following is a summary of model inputs:

• The city of Bloomfield Wastewater Treatment Plant's design flow is 0.0489. m3/sec (0.93 MGD). The discharge location provided in the permit application is located at Latitude 36° 43' 42" N (36.7238), and Longitude 107° 57' 0" W (107.427). Other effluent parameters provided in the permittee's application and applied in the model, such as Ammonia (Avg: 0.6 mg/L), DO (Avg: 7.1 mg/L), Nitrate plus Nitrite Nitrogen (Avg: 3.0 mg/L), E. coli (Avg: 19.9 CFU/100mL), Phosphorus (Avg: 0.9mg/L), and effluent temperature (22.7 0c), are based on reliable data.

• NMED provided the following information: The critical low flow of the San Juan River receiving stream, a key parameter influencing water quality, is approximately 4.1059 m3/sec (145 ft3/sec).

Other parameters applied in the model include Phosphorus (Avg: 0.25 mg/L), DO (Avg: 9.83 mg/L), salinity (Avg: 0.16 ppth), Nitrate plus Nitrite Nitrogen (Avg: 0.06 mg/L), E. coli (Avg: 57.55 CFU/100mL), and temperature (Avg: 11.4 oC). The receiving stream average depth of 4.5 feet (1.5 meters) was assumed, as no data were available.

• The EPA used OpenEnviroMap to estimate the average elevation of the study area and the average critical width of the San Juan River. The average elevation is approximately 1663 meters (5656 feet). The average width of the San Juan River is approximately 15.4 meters (50.5 ft). The studied San Juan River segment is approximately 42.7 kilometers (26.5 miles), as reported in the approved 2024-2026 State of New Mexico Clean Water Act §303(d)/§305(b) Integrated Report, Appendix A.

The model results show no excursion of the receiving stream DO standard of 6 mg/L when the BOD5 limits of 30 mg/L for the monthly average and 45 mg/L for the 7-day maximum were applied. This indicates that the city of Bloomfield Wastewater Treatment Plant's current design and operation comply with the State of New Mexico WQS for DO. As a result, no DO limits have been placed in the draft permit (see graph with 30/45 mg/L BOD5 in Appendix C; other detailed information is available upon request). The model results are based on the assumptions and default values as explained and presented above. Should these conditions change, the model should be updated to provide a more accurate assessment of the water quality within the receiving water.

e. Toxics

The CWA in Section 301 (b) requires that effluent limitations for point sources include any limitations necessary to meet water quality standards. Federal regulations found at 40 CFR §122.44 (d) state that if a discharge poses the reasonable potential to cause an in-stream excursion above a water quality criterion, the permit must contain an effluent limit for that pollutant.

All applicable facilities are required to fill out appropriate sections of the Form 2A and 2S, to apply for an NPDES permit or reissuance of an NPDES permit. The new form is applicable not only to POTWs, but also to facilities that are like POTWs, but which do not meet the regulatory definition of “publicly owned treatment works” (like private domestics, or similar facilities on Federal property). The forms were designed and promulgated to “make it easier for permit applicants to provide the necessary information with their applications and minimize the need for additional follow-up requests from permitting authorities,” per the summary statement in the preamble to the Rule. These forms became effective December 1, 1999, after publication of the final rule on August 4, 1999, Volume 64, Number 149, pages 42433 through 42527 of the Federal Register.

EPA previously classified this facility as a “discretionary major” POTW. Currently, the “discretionary major” status remains unchanged. The facility must supply the expanded pollutant testing list described in EPA Application Form 2A as presented above in Effluent Characteristics of this Fact Sheet. Based on the pollutant data provided by the facility and shown in Part IV of this Fact Sheet, a water quality screen has been run to determine if discharged pollutant concentrations demonstrate RP to exceed WQS for the various designated uses. If RP exists, the screen will also calculate the appropriate permit limit needed to be protective of such designated uses. The screen is based on the NMIP as of March 15, 2012. The water quality screen is included in the Fact Sheet. None of the pollutants demonstrate RP to violate WQS consistent with the designated uses for the receiving water.

f. PFAS (Per- and Polyfluoroalkyl Substances)

As explained at https://www.epa.gov/pfas, PFAS are a group of synthetic chemicals that have been in use

since the 1940s. PFAS are found in a wide array of consumer and industrial products. PFAS manufacturing and processing facilities, as well as facilities that use PFAS in the production of other products, such as airports and military installations, can contribute to PFAS releases into the air, soil, and water. Due to their widespread use and persistence in the environment, most people in the United States have been exposed to PFAS. Exposure to some PFAS above certain levels may increase the risk of adverse health effects[1].

EPA is collecting information to evaluate the potential impacts that discharges of PFAS from wastewater treatment plants may have on downstream drinking water, recreational, and aquatic life uses. Although the New Mexico Water Quality Standards do not include numeric criteria for PFAS, the 2022 New Mexico Water Quality Standards narrative criterion supplies guidance, including:

20.6.4.7(E)(2) NMAC states: "Emerging contaminants" refer to water contaminants that may cause significant ecological or human health effects at low concentrations. Emerging contaminants are generally chemical compounds recognized as having deleterious effects at environmental concentrations whose negative impacts have not been fully quantified and may not have regulatory numeric criteria. 20.6.4.7(T)(2) NMAC states:

"Toxic pollutant" means those pollutants, or combination of pollutants, including disease-causing agents, that after discharge and upon exposure, ingestion, inhalation, or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will cause death, shortened life spans, disease, adverse behavioral changes, reproductive or physiological impairment or physical deformations in such organisms or their offspring. Since PFAS chemicals are persistent in the environment and may lead to adverse human health and environmental effects, the draft permit requires that the facilities conduct influent, effluent, and biosolids sampling for PFAS according to the frequency outlined in the permit.

The purpose of this monitoring and reporting requirement is better to understand potential discharges of PFAS from this facility and to inform future permitting decisions, including the possible development of water quality-based effluent limits tailored to the facility's specific needs. EPA is authorized to require this monitoring and reporting by CWA § 308(a), which states:

"SEC. 308. (a) Whenever required to carry out the objective of this Act, including but not limited to (1) developing or assisting in the development of any effluent limitation, or other limitation, prohibition, or effluent standard, pretreatment standard, or standard of performance under this Act; (2) determining whether any person violates any such effluent limitation, or other limitation, prohibition or effluent standard, pretreatment standard, or standard of performance; (3) any requirement established under this section; or (4) carrying out sections 305, 311, 402, 404 (relating to State permit programs), 405, and 504 of this Act—

(A) the Administrator shall require the owner or operator of any point source to (i) establish and maintain such records, (ii) make such reports, (iii) install, use, and maintain such monitoring equipment or methods (including where appropriate, biological monitoring methods), (iv) sample such effluents (in accordance with such methods, at such locations, at such intervals, and in such manner as the Administrator shall prescribe), and (v) provide such other information as he may reasonably require."

The EPA notes that there is currently no analytical method approved in 40 CFR Part 136 for PFAS. As stated in 40 CFR § 122.44(i)(1)(iv)(B), in the case of pollutants or pollutant parameters for which there are no approved methods under 40 CFR Part 136 or methods are not otherwise required under 40 CFR chapter I, subchapter N or O, monitoring shall be conducted according to a test procedure specified in the permit for such pollutants or pollutant parameters.

Therefore, the draft permit specifies that until an analytical method is approved in 40 CFR Part 136 for PFAS, monitoring shall be conducted using Method 1633. The Adsorbable Organic Fluorine CWA wastewater method 1621 can be used in conjunction with Method 1633, if appropriate. This is consistent with the December 5, 2022, USEPA Memorandum, "Addressing PFAS Discharges in NPDES Permits and Through the Pretreatment Program and Monitoring Programs," from Radhika Fox.

In October 2021, the EPA published a PFAS Strategic Roadmap [1] that outlined the EPA's commitments to action for the period from 2021 to 2024. This roadmap includes a commitment to issuing new guidance that recommends PFAS monitoring in state-issued and federally issued NPDES permits, using EPA's recently published analytical Method 1633. In anticipation of this guidance, EPA has included PFAS monitoring in the draft permit using analytical Method 16333.

[1] EPA, *EPA's Per- and Polyfluoroalkyl Substances (PFAS) Action Plan,* EPA 823R18004, February 2019. Available at: https://www.epa.gov/sites/production/files/2019-02/documents/pfas_action_plan_021319_508compliant_1.pdf.
[2] The memo is available at https://www.epa.gov/newsreleases/epa-issues-guidance-states-reduce-harmful-pfas-pollution.
[3] For more information on Method 1633, see https://www.epa.gov/cwa-methods/cwa-analytical-methods-and-polyfluorinated-alkyl-substances-pfas.

Region 6 Recommended Monitoring Frequencies

Facility Type [1,2]	**Measurement Frequency**
Minor (< 0.1 MGD)	Once/Term
Minor (0.1 ≤ 1.0 MGD) [2,3]	3/Term
Major (if NOT in an applicable category) [2]	Once/6 Months
Major (if IS in an applicable category) [2]	Quarterly
Major (with required pretreatment OR discharge is > 5 MGD)	Quarterly

Footnotes:
1. These recommended frequencies are only for facilities where an applicable ELG for PFAS does not apply. These frequencies may be altered if an industry category is known or suspected to discharge PFAS or based on the permit writer's BPJ.
2. More information on PFAS is available at https://www.epa.gov/pfas.
3. PFAS samples must be collected and analyzed in three separate calendar years

a. Critical Conditions

Critical conditions are used to establish certain permit limitations and conditions. The State of New Mexico WQS allows a mixing zone for establishing pollutant limits in discharges. The state establishes a critical low flow designated as 4Q3, which is the minimum average four-consecutive-day flow that occurs with a frequency of once every three years.

The SWQB of the NMED provided EPA with the 4Q3 of 145 cfs (93.71595 MGD). For permitting purposes, the critical dilution of the effluent to the receiving stream is determined for certain parameters, such as WET. The critical dilution, CD, is calculated as:

CD = Qe/(F x Qa + Qe), where:

Qe = facility design flow (.93 MGD)
Qa = critical low flow of the receiving waters (145 cfs = 93.71595 MGD)
F = fraction of stream allowed for mixing (1.0)

CD = 0.93 MGD/ [(1.0) (93.71595) + 0.93] = 0.93 MGD / 94.646 = 0.00983 = 0.983 %

b. TRC

The WQS for TRC are set at 11 µg/L for chronic conditions and 19 µg/L for acute conditions, for the protection of aquatic life. Since acute conditions do not allow for dilution, the limit must be achieved at the end of the pipe. In contrast, chronic standards permit dilution.

The CD was calculated to be 0.983%. If dilution is allowed, the in-stream TRC concentration would be calculated as follows: 11 µg/L ÷ 0.00983 = 1,119.023 µg/L. Since this value exceeds the end-of-pipe acute standard of 19 µg/L, it indicates that the 19 µg/L standard is more stringent than the calculated value of 1,119.023 µg/L at this point.

Additionally, one of the designated uses of the stream is as a wildlife habitat. According to 20.6.4.900 NMAC, this designation sets a limit of 11 µg/L TRC. Therefore, the permit must adopt the most stringent WQS as the permit limit, which means the draft permit will assign the limit of 11 µg/L.

c. Total Dissolved Solids – Colorado River Salinity Control Program

The discharge to the San Juan River is part of the Colorado River Basin, where the EPA established a basin-wide Colorado River Salinity Control Program (CRSP) in December 1974. NMED has incorporated the CRSP by reference into its WQS. "The objective of the policy, as provided in Sections I.A. and I.B., is to achieve 'no salt return' whenever practicable for industrial discharges and an incremental increase in salinity over the supply water for municipal dischargers."

A limitation for Total Dissolved Solids (TDS) is established in accordance with the Salinity policy and program outlined in the report "2023 Review, Water Quality Standards for Salinity, Colorado River System." The policy establishes that the incremental increase in salinity shall be less than 400 mg/L, which is a reasonable incremental increase above the flow-weighted average salinity of their intake water supply. The draft permit establishes quarterly monitoring of the discharge and intake water supply, with a limit on the net difference not to exceed 400 mg/L (the same as before), consistent with the CRSP.

D. MONITORING FREQUENCY FOR PARAMETERS

Regulations require permits to establish monitoring requirements to yield data representative of the monitored activity, 40 CFR §122.48(b), and to assure compliance with permit limitations, 40 CFR §122.44(i)(1). EPA established the monitoring frequency based on Table 9 (page 34 of the NMIP) for design flow between 0.5 and 1.0 MGD and history compliance.

Parameter	Frequency	Sample Type
Flow	Daily	Totalized Meter
pH	5/week	Instantaneous Grab
BOD_5	1/week	24-hr Composite
TSS	1/week	24-hr Composite
% Removal	1/month	Calculation
TRC	5/week	Instantaneous Grab
E. coli Bacteria	1/week	Grab
TDS	1/month	24-hr Composite
Grease*	3/month	Observation
Nitrogen, total	1/month	24-hour Composite

Parameter	Frequency	Sample Type
Phosphorous, total	1/month	24-hour Composite
Floating solid*	3/month	Observation

* Permittee must report whether or not it presents after effluent passes the discharging pipe.

E. WHOLE EFFLUENT TOXICITY

Biomonitoring is the most direct measure of potential toxicity, incorporating both the effects of synergism among effluent components and the receiving stream's water quality characteristics. Biomonitoring requirements are proposed in the draft permit because of the reported effluent TDS concentration data. The discharge could have a potential for toxicity.

Procedures for implementing WET terms and conditions in NPDES permits are contained in the NMIP. Table 11 (page 42) of the NMIP outlines the type of WET testing for different types of discharges. The receiving water (San Juan River), a perennial stream, currently has a 4Q3 of 145 cfs. The 4Q3 is based on data from the USGS Gauge 64SanJua126.2. The submitted data indicate that no RP exists; therefore, no limit is required. The facility's design flow is 0.93 MGD (1.4 cfs), and the applicable 4Q3 is 145 cfs. The initial dilution is calculated to be 0.983 % which is less than 10%. When the critical dilution is equal to or less than 10%, the procedures in the NTIG-WET plan provide that, instead of the 7-day chronic test, a 48-hour acute test may be run using a 10:1 acute to chronic ratio; 9.83 %, rounded to the nearest whole number, is 10%.

The proposed permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests based on a 0.75 dilution series. These additional effluent concentrations must be 4%, 6%, 8%, 10%, and 13%. The low-flow effluent concentration (critical low-flow dilution) is defined as 10% effluent. The permittee shall limit and monitor discharge(s) as specified below:

WET TESTING (48-Hr Acute Static Renewal/ NOEC) *	VALUE	FREQUENCY	TYPE
Daphnia pulex	Report	Once/Quarter	24-Hr Composite
Pimephales promelas	Report	Once/Quarter	24-Hr Composite

* Monitoring and reporting requirements begin on the effective date of this permit. See Part II of the permit for WET testing requirements and additional WET monitoring and reporting conditions. Grab samples are allowed per method, if needed.

VI. FACILITY OPERATIONAL PRACTICES

a. SEWAGE SLUDGE

The permittee shall use only those sewage sludge disposal or reuse practices that comply with the federal regulations established in 40 CFR Part 503, "Standards for the Use or Disposal of Sewage Sludge. The" EPA may later issue a permit for sludge only. Until such future issuance of a sludge-only permit, sludge management and disposal at the facility will be subject to Part 503 sewage sludge requirements. Part 503 regulations are self-implementing, meaning that facilities must comply with them regardless of whether a sludge-only permit has been issued. Part IV of the draft permit outlines the requirements for a sewage sludge permit.

b. WASTEWATER POLLUTION PREVENTION REQUIREMENTS

The permittee shall institute programs directed towards pollution prevention. The permittee will institute programs to improve the operating efficiency and extend the useful life of the treatment system.

c. INDUSTRIAL WASTEWATER CONTRIBUTIONS

The facility has one significant industrial user (SIU), which is subject to the local limits. Based on the submitted information, the EPA has determined that the permittee will not be required to develop a comprehensive pretreatment program. However, general pretreatment provisions have been included in the permit. The facility is required to report to the EPA, in terms of character and volume, any significant indirect dischargers into the POTW that are subject to pretreatment standards under §307(b) of the CWA and 40 CFR Part 403.

The permittee shall require any indirect discharger to the treatment works to comply with the reporting requirements of Sections 204(b), 307, and 308 of the Act, including any requirements established under 40 CFR Part 403. The following pollutants may not be introduced into the treatment facility:

Pollutants which create a fire or explosion hazard in the POTW, including, but not limited to, waste streams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR 261.21;

1. Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with a pH lower than 5.0, unless the works are specifically designed to accommodate such discharge;

2. Solid or viscous pollutants in amounts that will obstruct the flow in the POTW, resulting in Interference;

3. Any pollutant, including oxygen-demanding pollutants (e.g., BOD), released in a discharge at a flow rate and/or pollutant concentration that will cause Interference with the POTW;

4. Heat in amounts which will inhibit biological activity in the POTW, resulting in Interference, but in no case, heat in such quantities that the temperature at the POTW treatment plant exceeds 40 degrees Centigrade (104 degrees Fahrenheit) unless the Approval Authority, upon request of the POTW, approves alternate temperature limits;

5. Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause Interference or pass through;

6. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; and any trucked or hauled pollutants, except at discharge points designated by the POTW.

d. OPERATION AND REPORTING

The applicant must continuously operate the treatment facility at maximum efficiency, regularly monitor the facility's discharge, and submit quarterly reports of the results. The monitoring results will be available to the public.

VII. TMDL REQUIREMENTS

The receiving water segment 20.6.4.408 NMAC (Animas River to Cañon Largo) has been listed in the 2024-2026 State of New Mexico Clean Water Act §303(d)/§305(b) Integrated List of Impaired Waters. Public and industrial water supplies are not assessed. Marginal cold-water aquatic life is not fully supported due to sedimentation/siltation and pH. Irrigation, livestock watering, marginal warm-water aquatic life, and wildlife habitat are fully supported. The applicable TMDL (Part 1) for this facility was prepared for *E. coli* in 2005 and approved by the EPA in 2005 and 2010. This same TMDL was referenced in the previous permit. Therefore, EPA retains WLA for E. coli at 4.3×10^9 cfu/day, with an effluent limit of 126 cfu/100 mL in the permit renewal. The permit has a standard reopener clause that allows the permit to be modified if additional requirements for new or revised TMDLs are subsequently completed.

VIII. ANTIDEGRADATION

The NMAC, Section 20.6.4.8, titled "Antidegradation Policy and Implementation Plan," outlines the requirements for protecting designated uses through the enforcement of state water quality standards. The limitations and monitoring requirements specified in the proposed permit are based on these state standards. They are intended to safeguard the designated uses of the water. Additionally, the policy aims to maintain the existing quality of waters that exceed their designated use. The permit requirements and limits are designed to protect the receiving water's assimilative capacity, which, in turn, supports the designated uses, as specified in NMAC Section 20.6.4.8.A.2. During the previous draft permit cycle, the permitted design flow for the facility was increased from 0.90 to 0.93 MGD. An analysis of the increase in pollutant loads indicated that less than 10% of the assimilative capacity was utilized and was therefore considered de minimis.

IX. ENDANGERED SPECIES CONSIDERATIONS

According to the list updated for San Juan County, NM obtained from http://ecos.fws.gov, on October 7, 2025, there are 15 endangered and threatened species listed below:

1. Suckley's cuckoo bumble bee (Bombus suckleyi) - Endangered
2. Mexican wolf (Canis lupus baileyi) - Endangered
3. Yellow-billed Cuckoo (Coccyzus americanus) - Threatened
4. Razorback sucker (Xyrauchen texanus) - Endangered
5. Zuni bluehead Sucker (Catostomus discobolus yarrowi) - Endangered
6. New Mexico meadow jumping mouse (Zapus hudsonius luteus) - Endangered
7. Colorado pikeminnow (Ptychocheilus lucius) - Endangered
8. Mesa Verde cactus (Sclerocactus mesae-verdae) – Threatened
9. Southwestern willow flycatcher (Empidonax traillii extimus) - Endangered
10. Monarch butterfly (Danaus plexippus) - Threatened
11. Knowlton's cactus (Pediocactus knowltonii) - Endangered
12. Silverspot (Speyeria nokomis nokomis) - Threatened
13. Mancos milk-vetch (Astragalus humillimus) - Endangered
14. Mexican spotted owl (Strix occidentalis lucida) -
15. Zuni fleabane (Erigeron rhizomatus) - Threatened

In compliance with the requirements of section 7(a)(2) of the Endangered Species Act, the EPA has reviewed this permit to assess its impact on listed threatened and endangered species, as well as designated critical habitats.

After careful consideration, the EPA has concluded that reissuing this permit will have "no effect" on any listed threatened or endangered species and will not adversely modify any designated critical habitats. This determination is based on the following findings:

1. There is no designated critical habitat present at the location of the WWTP.

2. The draft permit is consistent with the States WQS and does not increase pollutant loadings.

3. There have been no significant changes in operation and treatment of discharge at the hatchery since prior permit issuance.

3. EPA has received no additional information since the previous permit issuance, which would lead to revision of its determinations.

4. The NPDES program regulates the discharge of pollutants from the treatment facility and does not regulate forest and agricultural management practices.

5. EPA determines that items 1 thru 4 results in no change to the environmental baseline established by the previous permit, therefore, EPA concludes that reissuance of this permit will have "no effect" on listed species and designated critical habitat.

X. HISTORICAL and ARCHEOLOGICAL PRESERVATION CONSIDERATIONS

The reissuance of the permit should have no impact on historical and/or archeological sites since no expansion of construction activities are planned in the reissuance.

XI. PERMIT REOPENER

The permit may be reopened and modified throughout its duration if the NMWQS are established or revised. Additionally, if the state develops a TMDL, this permit may also be reopened to set effluent limitations for the relevant parameters in accordance with that TMDL. Any modifications to the permit will follow the regulations outlined in 40 CFR §124.5.

XII. VARIANCE REQUESTS: None

XIII. CERTIFICATION

The permit is in the process of certification by the State Agency following regulations promulgated at 40 CFR 124.53. A draft permit and draft public notice will be sent to the District Engineer of COE, to the Regional Director of FWS and to the National Marine Fisheries Service prior to the publication of that notice.

XIV. FINAL DETERMINATION

The public notice describes the procedures for the formulation of final determinations.

XV. ADMINISTRATIVE RECORD

The following information was used to develop the proposed permit:

A. APPLICATION(s)

EPA Application Forms 2A received on July 17, 2025, and 2S received on October 27, 2025.

B. 40 CFR CITATIONS: Sections 122, 124, 125, 133, 136

C. STATE OF NEW MEXICO REFERENCES

New Mexico State Standards for Interstate and Intrastate Surface Water, 20.6.4 NMAC April 15, 2025

Procedures for Implementing National Pollutant Discharge Elimination System Permits in New Mexico, March 15, 2012

State of New Mexico Clean Water Act §303(d)/§305(b) Integrated List of Impaired Waters, 2024-2026
San Juan River Watershed TMDLs (Part 1), WQCC adoption date June 14, 2005, EPA approved date August 26, 2005

D. MISCELLANEOUS REFERENCES

Email from Helen Nguyen, EPA, R6 on July 24, 2025, providing DMR data for the village of Hatch.

Email to Susan LucasKamat, NMED on July 24, 2025, requesting the 4Q3 and ambient data. Received ambient data and 4Q3 (station 64SanJua126.2) on August 18, 2025, from Jason Martinez, NMED.

Emailed to Silvia Zavala, EPA, R6 on October 10, 2025, requesting a review of WET language in the draft permit. Comments received on October 17, 2025.

Emailed to Susan LucasKamat, NMED on October 28, 2025, requesting a review of the draft permit. Comments received from Jason Martinez, NMED on November 13, 2025.