NPDES PERMIT NO. NM0028479
FACT SHEET

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

APPLICANT:

Jemez Valley Public Schools
Board of Education
8501 Highway 4
Jemez Pueblo, New Mexico 87024

ISSUING OFFICE:

U.S. Environmental Protection Agency
Region 6
1201 Elm Street, Suite 500
Dallas, Texas 75270

PREPARED BY:

Aron K. Korir
Physical Scientist
NPDES Permits Branch (6WD-PE)
Water Division
Phone: 214-665-6522
FAX: 214-665-2191
Email: Korir.aron@epa.gov

DATE PREPARED:

July 16, 2024

PERMIT ACTION

Proposed reissuance of the current NPDES permit issued February 15, 2019, with an effective date of April 1, 2019, and an expiration date of March 31, 2024.

RECEIVING WATER – BASIN

Jemez River to the Rio Grande in Segment 20.6.4.107 of the Rio Grande 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	Biochemical oxygen demand (five-day unless noted otherwise)
BPJ	Best professional judgment
CBOD	Carbonaceous biochemical oxygen demand (five-day unless noted otherwise)
CD	Critical dilution
cfs	Cubic feet per second
COD	Chemical oxygen demand
COE	United States Corp of Engineers
CWA	Clean Water Act
DMR	Discharge monitoring report
ELG	Effluent limitation guidelines
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
FCB	Fecal coliform bacteria
F&WS	United States Fish and Wildlife Service
mg/l	Milligrams per liter
ug/l	Micrograms per liter
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
POTW	Publicly owned treatment works
RP	Reasonable potential
SIC	Standard industrial classification
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
USFWS	United States Fish & Wildlife Service
USGS	United States Geological Service
WLA	Wasteload allocation
WET	Whole effluent toxicity
WQCC	New Mexico Water Quality Control Commission
WQMP	Water Quality Management Plan
WWTP	Wastewater treatment plant
PFAS	Per- and Polyfluoroalkyl Substances

I. CHANGES FROM THE PREVIOUS PERMIT

- Low flow 4Q3 has been changed from 11.058 CFS to 6.1065 CFS.
- Added influent data reporting requirements for BOD and TSS on DMRs.
- Per-and Polyfluoroalkyl Substances (PFAS) pollutant scan requirements has been added to the draft permit.
- TRC limit has been changed from 19µg/l to 11µg/l consistent with State WQS wildlife habitat designated use criteria.

II. APPLICANT ACTIVITY

As described in the application, the facility is located at 8501 Hwy 4 Jemez Pueblo, New Mexico 87024, in Sandoval County, New Mexico.

Under the North American Industry Classification System (NAICS) code 2213. The applicant operates a privately owned sanitary wastewater treatment facility that is equivalent to a publicly owned treatment works (similar to a publicly owned treatment works and here after referred to as a POTW). The facility has a design flow capacity of 0.01 MGD (10,000 gallons per day) serving a transient population of 350.

The discharge is located 70 ft. from the Jemez River at Latitude 35° 39' 24" N and Longitude 106° 44' 19" W , in Sandoval County, New Mexico.

The Jemez River flows through Santa Ana Pueblo, Pueblo of Jemez and Zia Pueblo. Santa Ana Pueblo has WQS approved by EPA on August 31, 2015. The Pueblo of Santa Anna established designated uses of the segment of the Jemez River as coolwater aquatic life/fisher use, warmwater aquatic life/fishery use, primary contact ceremonial use, primary contact recreational use, agricultural water supply use and wildlife habitat use.

III. EFFLUENT CHARACTERICTICS

A quantitative description of the discharge(s) described in the EPA Permit Application Form 2A in section A.12. Effluent Testing Information received March 29, 2024, is presented in Table 1 below:

Table 1.

Parameter	Max	Avg
Flow, MGD	0.007	0.007
Temperature, winter	11.5	No Data
Temperature, summer	20.1	No Data
pH, minimum, SU	6.6	N/A
pH, maximum, SU	8.8	N/A
BOD (mg/l)	0.0117	No data
E.Coli	29.5	No Data
TSS (mg/l)	ND	ND

Ammonia (as N)	0.31	0.17
TRC	<0.05	0.05
Arsenic	0.00057	No Data
Boron	0.97	No Data

Non-receipt and late DMR violations were recurrent. In addition, limit for E.Coli was violated in one occasion. Because the facility's design flow is less than 1.0 MGD, the Expanded Effluent Testing Data (Part D of the application) is not required to be reported.

IV. 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. It is proposed that the permit be reissued for a 5-year term following regulations promulgated at 40 CFR §122.46(a). The previous permit expired October 31, 2018. EPA received the complete NPDES application on September 5, 2018. The existing permit is administratively continued until this permit is issued.

V. DRAFT PERMIT RATIONALE AND PROPOSED PERMIT CONDITIONS

1. OVERVIEW OF TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDSBASED 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. Water quality-based effluent limitations are established in the proposed draft permit for E. coli bacteria, pH and TRC.

The general and specific stream standards are provided in "New Mexico State Standards for Interstate and Intrastate Surface Waters" (the NMWQS), 20.6.4 NMAC, as amended through September 24, 2022.

2. TECHNOLOGY-BASED EFFLUENT LIMITATIONS/CONDITIONS

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.

The facility is a privately owned facility that treats sanitary wastewater 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 6.6-9 s.u. and are found at 40 CFR §133.102(c).

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 POTW's, the plant's design flow 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/gal * design flow in MGD

30-day average BOD5/TSS loading = 30 mg/l * 8.345 lbs/gal * 0.01 MGD
30-day average BOD5/TSS loading = 2.503 lbs/day

7-day average BOD5/TSS loading = 45 mg/l * 8.345 lbs/gal * 0.01 MGD
7-day average BOD5/TSS loading = 3.755 lbs/day

A summary of the technology-based limits for the facility is included below:

Table 3.

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS	
	lbs/Day	mg/L (unless noted)

Parameter	30-Day Avg.	7-Day Avg.	30-Day Avg.	7-Day Avg.
Flow	N/A	N/A	Measure MGD	Measure MGD
BOD (lbs/day)	2.503	3.755	30	45
BOD_5, % removal, minimum	≥ 85% (*1)	---	---	---
TSS (lbs/day)	2.503	3.755	30	45
TSS, % removal, minimum	≥ 85% (*1)	---	---	---
pH	N/A	N/A	6.6 – 8.8 standard units	

Footnotes: *1 To calculate the percent removal, use the following equation: (average monthly influent concentration – average monthly effluent concentration) ÷ average monthly influent concentration and multiply result by 100 to get a percentage.

3. WATER QUALITY BASED LIMITATIONS

a. 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 are in compliance with 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.

b. 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.

c. State and Tribal Water Quality Standards

The general and specific stream standards are provided in NMWQS (20.6.4 NMAC, amended August11, 2017). The facility discharges into the Jemez River in Water Body Segment No. 20.6.4.107 of the Rio Grande Basin. The designated uses of the receiving water(s) are coldwater aquatic life, primary contact, irrigation, livestock watering and wildlife habitat; and public water supply on Vallecito creek.

The Jemez River flows through Santa Anna, Jemez and Zia Pueblos. Santa Ana Pueblo has WQS approved by EPA on August 31, 2015. The Pueblo of Santa Anna established designated uses of the segment of the Jemez River as coldwater aquatic life/fisher use, warmwater aquatic life/fishery use, primary contact ceremonial use, primary contact recreational use, agricultural water supply use and wildlife habitat use.

d. 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:

1) pH

The NMWQS criteria applicable to coldwater aquatic life designed use and Santa Ana Pueblo WQS stream specific criteria require pH to be between 6.6 to 8.8 s.u. and 6.5 to 9.0 s.u., respectively. The draft permit will propose a pH limit of 6.6 to 8.8 s.u., which is more restrictive than the technology based limits presented earlier and those used in the previous permit.

2) Bacteria

New Mexico WQS Stream segment standards for E. coli bacteria are 126 cfu/100 ml monthly geometric mean and 410 cfu/100 ml single sample maximum. Pueblo of Santa Anna WQS for E. Coli are are 50 cfu/100 ml monthly geometric mean and 160 cfu/100 ml Statistical Threshold Value (single sample maximum). Therefore, the draft permit will propose the most stringent of the two (mean 50 cfu/100ml and maximum of 160 cfu/100ml), to protect downstream tribal uses. This limit is more stringent than the limits used in the previous permit. If properly operated, the existing disinfections system should be capable of meeting the new limitations. EPA has reached this conclusion because DMR data has shown that the WWTP is capable of achieving E. Coli concentrations as low as 1 CFU/100mL on various occasions.

3) Toxics

i. General Comments

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 criteria, 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, “publicly owned treatment works” but also to facilities that are similar to POTWs, but which do not meet the regulatory definition of (like privately owned sanitary wastewater treatment facility, 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 FRL.

The amount of information required for minor facilities was limited to specific sections of these forms, because they are unlikely to discharge toxic pollutants in amounts that would impact state water quality standards. Supporting information for this decision was published as "Evaluation of the Presence of Priority Pollutants in the Discharges of Minor POTW's", June 1996, and was sent to all state NPDES coordinators by EPA Headquarters. In this study, EPA collected and evaluated data on the types and quantities of toxic pollutants discharged by minor POTW's of varying sizes from less than 0.1 MGD to just under 1 MGD. The Study consisted of a query of the EPA Permit Compliance System (PCS) database from 1990 to present, an evaluation of minor POTW data provided by the State agencies, and on-site monitoring for selected toxics at 86 minor facilities across the nation.

The facility is designated by EPA NPDES as a minor and does not need to fill out the expanded pollutant testing section Part D of Form 2A. Arsenic and Boron limits are retained in the draft permit due to segment impairment as described in section VII, 303(d) list of the fact sheet. There are no additional toxics that need to be placed in the draft permit except for TRC described below.

ii. TRC

The WQS for TRC is 11 µg/l for chronic conditions and 19 µg/l for acute. Since acute conditions do not allow dilution; the limit must be met at end-of-pipe, but chronic standards do allow dilution, the permit shall use the most stringent WQS for the permit limit. CD was calculated at 10%. The in-stream TRC concentration after allowing for dilution is; 11 µg/l ÷ 0.1= 110 µg/l. The stream also has the designated use wildlife habitat which has a state water quality standard of 11 ug/L which is more stringent and will be more protective. The draft permit proposes 11 µg/l limit consistent with the state water quality standard criteria.

iii. Critical Dilutions

Critical dilutions 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. Both the NMWQS and NMIP establish a critical low flow designated as 4Q3, as the minimum average four consecutive day flow which occurs with a frequency of once in three years. The SWQB of the NMED provided EPA with the 4Q3 for the Jemez Valley Public School.

For permitting purposes of certain parameters such as WET, the critical dilution of the effluent to the receiving stream is determined. The critical dilution, CD, is calculated as:

StreamStats was used and the updated regression equations from Regression Equations for Estimating the 4-day, 3-year Low-Flow Frequency. 4Q3 of 6.1065 CFS

$CD = Qe/(F \cdot Qa + Qe)$, where:

Qe = facility flow (0.01 MGD)
Qa = critical low flow of the receiving waters is (3.95 MGD / 6.1065 CFS)
F = fraction of stream allowed for mixing (1.0)

CD = 0.01 MGD/ [(1.0) (3.95 + 0.01)]
= 0.0025
= 0.25%

Because the critical diluton is below 10%, an acute-to-chronic ratio of 10:1 is used to allow acute WET testing. In accordance with the WET Guidance, the facility is required to conduct a single effluent characterization WET test using a 48-hour acute test with Daphina pulex and Pimephales promelas and a 2.5% critical dilution.

iv. Per- and Polyfluoroalkyl Substances (PFAS) Monitoring

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, facilities using PFAS in production of other products, airports, and military installations can be contributors of 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 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 supply 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 to better understand potential discharges of PFAS from this facility and to inform future permitting decisions, including the potential development of water quality-based effluent limits on a facility-specific basis. 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 is in violation of 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;".*

EPA notes that there is currently not an 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 there is an analytical method 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.[2]

In October 2021, EPA published a PFAS Strategic Roadmap[3] that described EPA's commitments to action for 2021 through 2024. This roadmap includes a commitment to issue new guidance recommending PFAS monitoring in both 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 1633[4] .

R6 Recommended PFAS Monitoring Frequencies Based on Facility [1,2]	
Facility Type	Frequency
Minor (<0.1 MGD)	Once/Term
Minor (0.1 <1.0 MGD)	Three/Term
Major (if not in an applicable category) [2]	Once/6 Months
Major (is IS in an applicable Category) [2]	Quarterly
Major (With required pretreatment OR discharge is ≥ 5 MGD	Quarterly

4. MONITORING FREQUENCY FOR LIMITED 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). Changes to sample frequencies have been made based on the NMIP in order to ensure consistency with similar sized facilities.

Technology based pollutants; BOD and TSS are proposed to be monitored one time per month. Flow is proposed to be continuously monitored when discharging, identical to the existing permit. The pollutant pH is proposed to be monitored five times per week when discharging which is more frequent than the previous permit but is consistent with similar facilities based on treatment technology and design flow. Sample type for BOD, TSS and pH are grab which is consistent with the previous permit.

Water quality-based pollutant monitoring frequency for E. coli shall be once per month by grab sample which is also consistent with the previous permit. TRC shall also be sampled five (5) times per week using instantaneous grab samples. Regulations at 40 CFR §136 define instantaneous grab as being analyzed within 15-minutes of collection. This frequency is also similar to the previous permit and consistent with similar sized facilities.

5. WHOLE EFFLUENT TOXICITY

In Section V.C.4.c.ii above; “Critical Conditions”, it was shown that the critical dilution, CD, for the facility is 0.25%. Based on the nature of the discharge; a privately owned sanitary wastewater treatment facility, equivalent to a POTW, with a design flow of 0.01 MGD, the nature of the receiving water; perennial, and the critical dilution; 0.25%. After applying the 10:1 acute-to-chronic ratio, the applicable critical dilution for an acute WET testing is 2.5%. An acute WET testing of once per permit term for Dapnia pulex and Pimephales promelas is proposed in the permit.

The proposed permit requires six (6) 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 shall be 1.0%, 1.4%, 1.9%, 2.5%, and 3.3%.

During the period beginning the effective date of the permit and lasting through the expiration date of the permit, the permittee is authorized to discharge from Outfall 001 - the discharge to the Jemez River. Discharges shall be limited and monitored by the permittee as specified below:

Final Effluent Limits - 0.01 MGD design flow.

Table 4.

WET Testing (48hr Static Renewal)	30-day Avg Min	48hr Minimum	Measurement Frequency	Sample Type
Daphnia pulex	Report	Report	Once/Term	24hr Composite
Pimephales promelas	Report	Report	Once/Term	24hr Composite

VI. FACILITY OPERATIONAL PRACTICES

1. SEWAGE SLUDGE

The permittee shall use only 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". EPA may at a later date issue a sludge-only permit. 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, which means that facilities must comply with them whether or not a sludge-only permit has been issued. Part IV of the draft permit contains sewage sludge permit requirements.

2. WASTE WATER 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.

3. INDUSTRIAL WASTEWATER CONTRIBUTIONS

The treatment plant has no non-categorical Significant Industrial User's (SIU) and no Categorical Industrial User's (CIU). The EPA has tentatively determined that the permittee will not be required to develop a full pretreatment program. However, general pretreatment provisions have been required. The facility is required to report to EPA, in terms of character and volume of pollutants any significant indirect dischargers into the POTW 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 publicly owned treatment works (POTW), including, but not limited to, wastestreams 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; Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, unless the works are specifically designed to accommodate such discharge; Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW, resulting in Interference; Any pollutant, including oxygen demanding pollutants (e.g., BOD), released in a discharge at a flow rate and/or pollutant concentration which will cause Interference with the POTW; 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; Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through; 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.

4. OPERATION AND REPORTING

The applicant is required to operate the treatment facility at maximum efficiency at all times; to monitor the facility's discharge on a regular basis; and report the results quarterly. The monitoring results will be available to the public.

Electronic Reporting Rule Discharge

Monitoring Report (DMR) results shall be electronically reported to EPA per 40 CFR 127.16. To submit electronically, access the NetDMR website at https://netdmr.epa.gov. Until approved for Net DMR, the permittee shall request temporary or emergency waivers from electronic reporting. To obtain the waiver, please contact: U.S. EPA - Region 6, Water Enforcement Branch, New Mexico State Coordinator (6EN-WC), (214) 665-6468. If paper reporting is granted temporarily, the permittee shall submit the original DMR signed and certified as required by Part III.D.11 and all other reports required by Part III.D. to the EPA and copies to NMED as required (See Part III.D.IV of the permit). Reports shall be submitted monthly.

Sufficiently Sensitive Analytical Methods (SSM)

The permittee must use sufficiently sensitive EPA-approved analytical methods (SSM) (under 40 CFR part 136 or required under 40 CFR chapter I, subchapters N or O) when quantifying the presence of pollutants in a discharge for analyses of pollutants or pollutant parameters under the permit. In case the approved methods are not sufficiently sensitive to the limits, the most SSM with the lowest method detection limit (MDL) must be used as defined under 40 CFR 122.44(i)(1)(iv)(A). If no analytical laboratory is able to perform a test satisfying the SSM in the region, the most SSM with the lowest MDL must be used after adequate demonstrations by the permittee and EPA approval.

VII. 303(d) LIST

The current 2022-2024 State of New Mexico Integrated Clean Water 303(d)/305(b) Report shows that the Jemez River (Jemez Pueblo bnd to Rio Guadalupe) in Segment 20.6.4.107 NMAC is not supporting cold water aquatic life (due to Arsenic, Dissolved Nutrients and Temperature), irrigation (due to dissolved boron), and primary contact due to Ecoli. A TMDL for the Jemez River was approved on September 23, 2016 and September 15, 2009. A WLA allocation 4.78 x 107 cfu/day for E. Coli was assigned and has been incorporated into the draft permit. In addition, WLA allocations of 0.014 lbs/day for Arsenic and 0.158 lbs/day for Boron were established and incorporated into the previous permit. Concentration limits for Boron and Arsenic were calculated using the following formula:

Loading, lbs/day ÷ (design flow (MGD) × 8.34)
Boron = .158 lbs/day ÷ (.01 MGD × 8.34) = 1.894 mg/l
Arsenic = .014 lbs/day ÷ (.01 MGD × 8.34) = 0.168 mg/l

The limit is identical to the previous permit. The permit has a standard reopener clause that would allow the permit to be changed if at a later date additional requirements on new or revised TMDLs are completed.

VIII. ANTIDEGRADATION

The State of New Mexico has antidegradation requirements to protect existing uses through implementation of NMWQS. The limitations and monitoring requirements set forth in the proposed draft are developed from the appropriate State WQS and are protective of those designated uses. Furthermore, the policy's set forth the intent to protect the existing quality of those waters, whose quality exceeds their designated use. 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.

IX. ANTIBACKSLIDING

The proposed permit is consistent with the requirements to meet antibacksliding provisions of the Clean Water Act, Section 402(o) and 40 CFR §122.44(l)(i)(A), which state in part that interim or final effluent limitations must be as stringent as those in the previous permit, unless material and substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of a less stringent effluent limitation. The proposed permit maintains the mass loading requirements of the previous permit for BOD and TSS.

X. ENDANGERED SPECIES CONSIDERATIONS

In accordance with requirements under section 7(a)(2) of the Endangered Species Act, EPA has reviewed this permit for its effect on listed threatened and endangered species and designated critical habitat. According to the most recent county listing available at FWS website, https://ipac.ecosphere.fws.gov/ , four species in Jemez Pueblo, NM are listed as endangered or threatened. New Mexico meadow jumping mouse (Zapus hudsonius luteus), and Rio Grande silvery minnow (Hybognathus amarus) are listed as endangered. The Mexican spotted owl (Strix occidentalis lucida) and Yellowbilled Cuckoo (Coccyzus americanus) are listed as threatened.

In accordance with requirements under section 7(a)(2) of the Endangered Species Act, EPA has reviewed this permit for its effect on listed threatened and endangered species and designated critical habitat. After review, EPA has determined that the environmental baseline has not been changed and, based on the information available to the EPA at the present time, the reissuance of this permit will have "no effect" on listed threatened and endangered species nor will adversely modify designated critical habitat. EPA makes this determination based on the following: In accordance with requirements under section 7(a)(2) of the Endangered Species Act, EPA has reviewed this permit for its effect on listed threatened and endangered species and designated critical habitat. After review, EPA has determined that the reissuance of this permit will have "no effect" on listed threatened and endangered species nor will adversely modify designated critical habitat. EPA makes this determination based on the following:

1. Reissuance of this permit will not result in the destruction or adverse modification of habitat, as no construction activities are planned.
2. The draft permit is consistent with the States WQS and does not increase pollutant loadings.
3. There is no designated critical habitat in the area.
4. EPA determines that Items 1, thru 3 result 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.

XI. HISTORICAL and ARCHEOLOGICAL PRESERVATION CONSIDERATIONS

The reissuance of the permit should not have an impact on historical and/or archeological sites since no construction activities are planned in the reissuance.

XII. ENVIROMENTAL JUSTICE

Executive Order 13985, *Advancing Racial Equity and Supporting for Underserved Communities through the Federal Government* signed on January 20, 2021, directs each federal agency to "make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities." The EPA strives to enhance the ability of overburdened communities to participate fully and meaningfully in the permitting process for EPA-issued permits, including NPDES permits. "Overburdened" communities can include minority, low-income, tribal, and indigenous populations or communities that potentially experience disproportionate environmental harms and risks. As part of an agency-wide effort, the EPA Region 6 will consider prioritizing enhanced public involvement opportunities for EPA-issued permits that may involve activities with significant public health or environmental impacts on already overburdened communities. For more information, please visit http://www.epa.gov/ejscreen.

For fiscal year 2024, the NPDES Section is trying a new approach, conducting community meetings with overburdened communities in New Mexico and embedding Environmental Justice (EJ) early in the Permitting process. The focus is on enabling overburdened communities to have full and meaningful access to the permitting process. This effort will emphasize on communities that have an 80% percentile or higher for the Wastewater Discharge EJ Index. This will help Region 6 NPDES permit writers and managers decide early in the permitting process when and how to conduct an EJ analysis for an EPA-issued permit and what, if any, permit terms or other actions may be appropriate to address EJ concerns. Buckman Direct Diversion is one of the facilities in which the community does not have an EJ Index for Wastewater Discharge more than 80% percentile.

As part of the Permit development process, the EPA conducted a screening analysis to determine whether this Permit action could affect overburdened communities. The EPA used EJScreen 2.2, a nationally consistent geospatial tool that contains demographic and environmental data for the United States at the Census block group level. This tool is used to identify Permits for which enhanced outreach may be warranted.

The study area was chosen at the proposed 001 discharge. A 3-mile buffer around the path was selected to study the area with a population of 534 persons. No EJ Indexes score for the state percentile of the facility was above the 80th percentile (80%) and the data representing language variation spoken at home is not available. From the EJSCREEN guidelines and trainings, this area will not be a concern for Environmental Justice issues at this time.

XIII. PERMIT REOPENER

The permit may be reopened and modified during the life of the permit if State or downstream Tribal water quality standards are promulgated or revised. In addition, if the State or downstream Tribes develops a TMDL, this permit may be reopened to establish effluent limitations for the parameter(s) to be consistent with that TMDL. Modification of the permit is subject to the provisions of 40 CFR §124.5.

XIV. VARIANCE REQUESTS

No variance requests have been received.

XV. 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, Corps of Engineers; to the Regional Director of the U.S. Fish and Wildlife Service and to the National Marine Fisheries Service prior to the publication of that notice.

XVI. FINAL DETERMINATION

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

XVII. ADMINISTRATIVE RECORD

The following information was used to develop the proposed permit:

1. APPLICATION(S)

Complete EPA Application Form 2A received July 5, 2024.

2. 40 CFR CITATIONS

New Mexico State Standards for Interstate and Intrastate Surface Water, 20.6.4 NMAC, as amended by the New Mexico Water Quality Control Commission (WQCC) on September 24, 2022 and approved by the U.S. Environmental Protection Agency (EPA) on February 8, 2023.

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

2022-2024 State of New Mexico Clean Water Act 303(d)/305(b) Integrated Report.

3. MISCELLANEOUS REFERENCES

a) Application for NPDES permit No. NM0028479 renewal was received from Janice Tosa, Administrative Assistant, Jemez Valley Public Schools to Aron Korir, EPA, October 9, 2023.

b) Letter from Aron Korir, EPA, to Janice Tosa, Administrative Assistant, Jemez Valley Public Schools, dated November 7, 2023, informing the applicant that its' NPDES application received October 9, 2023, was administratively incomplete.

c) Additional information was received from Janice Tosa, executive Administrative Assistant on July 17, 2024.

d) Letter from Aron Korir, EPA, to Janice Tosa, Jemez Valley Public Schools informing the applicant that it's NPDES application was administratively complete.