# NPDES PERMIT NO. NM0028011 FACT SHEET

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

### **APPLICANT**

Village of Jemez Springs P. O. Box 269 Jemez Springs, NM 87025

### **ISSUING OFFICE**

U.S. Environmental Protection Agency Region 6 1201 elm street, suite 500 Dallas, Texas 75270

#### PREPARED BY

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### **DATE PREPARED**

January 04, 2021

# **PERMIT ACTION**

Proposed reissuance of the current NPDES permit issued January 14, 2016, with an effective date of March 01, 2016, and an expiration date of February 28, 2021.

# **RECEIVING WATER - BASIN**

Jemez River – 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

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 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 (one part per million) ug/l Micrograms per litter (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

POTW Publically 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

#### I. PROPOSED CHANGES FROM THE PREVIOUS PERMIT

Changes from the permit previously issued January 14, 2016, with an effective date of March 01, 2016, and an expiration date of February 28, 2021.

None

# II. APPLICANT ACTIVITY

Under the Standard Industrial Classification Code 4952, the applicant operates a POTW with a design flow capacity of 0.075 MGD serving 375 people.

The Village of Jemez Springs is a sequencing batch reactor system which works in steps to biologically degrade the influent. The reaction basin operates sequentially as an aeration basin, sedimentation basin and decantation basin. There are four basins available at this facility for treatment. However, because of the design capacity, only two basins are currently being used. The bottom of the basin has a series of fine bubble diffusers to distribute air throughout the basin during the aeration phase of the cycle.

Wastewater flows by gravity to a wet well and lift station at the head of the WWTP. The influent lift station consists of two submersible pumps that lift wastewater to the treatment works. There is no solids removal at the headworks. The decanted liquid is sent through the Ultraviolet (UV) light disinfection chamber, the ultrasonic effluent flow meter, the final effluent weir box thence to the Jemez River. The solids are sent to the second chamber for thickening. The Village contracts a vacuum truck to draw off the solids from the treatment units and to haul them to the Albuquerque Reclamation facility in Albuquerque, NM. The current influent flow to the WWTP is low enough so that the fourth chamber is not in use at this time.

### III. DISCHARGE LOCATION



As described in the application, the facility is located at 14609 Highway 4, approximately 2 miles south of Jemez Springs, Sandoval County, New Mexico. The discharge from the POTW is to the Jemez River thence to the Rio Grande in Waterbody Segment No. 20.6.4.107 of the Rio Grande Basin. The discharge is located at Latitude 35° 43′ 36″ North, Longitude 106° 42′ 48″ West.

# IV. RECEIVING WATER USES

The general and specific stream standards are provided in NMWQS (20.6.4 NMAC and approved by EPA for Clean Water Act Purposes on July 24, 2020). The facility discharges into the Jemez River which flows through Jemez Pueblo, Zia Pueblo and Santa Ana Pueblos in segment number 20.6.4.107 of the Rio Grande Basin. The designated uses of the Jemez River are wildlife habitat, livestock watering, coldwater aquatic life, irrigation and primary contact.

# V. DISCHARGE DESCRIPTION AND OPERATIONS

A quantitative description of the discharge(s) described in the EPA Permit Application Form 2A received November 4, 2020, are presented below:

Parameter	Max.	Avg.	
	(mg/l unless noted)		
Flow, million gallons/day (MGD)	0.075	0.02	
pH, minimum, standard units (su)	6.0 su	N/A	
pH, maximum, standard units (su)	7.4 su	N/A	
Biochemical Oxygen Demand, (BOD5)	4	4.2	
Total Suspended Solids (TSS)	4	0.4	
Fecal Coliform	18.5	<1	

A summary of the last 3-years of pollutant data taken from DMRs indicates reported violations for the following parameters:

- Total Phosphorus (Concentration, mg/L) February, July and August 2017, July, August, September and November 2018, January, April and June 2019, January and February 2020.
- Nitrate Total (Concentration, mg/L) December 2019, February 2020 and June through September 2020.
- E. coli (monthly geo. mean, cfu/100mL) July 2019

# VI. DRAFT PERMIT RATIONALE & 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<sub>5</sub>. Water quality-based effluent limitations are established in the proposed draft permit for

E. coli bacteria, TRC, total phosphorus and nitrogen. Permit limits are developed that meet the more stringent of either technology-based effluent.

### B. 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, fecal coliform, 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 POTW treating sanitary wastewater. POTW's have 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 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, 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). 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 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/gal \* design flow in MGD

30-day average BOD/TSS loading = 30 mg/l \* 8.345 lbs/gal \* 0.075 MGD 30-day average BOD/TSS loading = 18.8 lbs/day

The permit that was issued January 14, 2016, and expired February 28, 2021, established mass limitations of 11.3 lbs, 30-day average, for both BOD and TSS. Those limits were based on an earlier and lower design flow rate. During the August 2004 permit issuance, the facility had just put into operation the SBR facility now in use that increased the design flow to 0.075 MGD. In response to antidegradation concerns the Village and NMED agreed that it did not need loading limits at the newer and higher design flow and agreed to retain the lower mass limits. The previous two permits issued July 28, 2010 and January 14, 2016, continued those loading limits. This draft permit will also continue the mass loading limits from the previous three permits after consulting with NMED. The following loading limits reflect the flow rate **0.045 MGD** based on the earlier design flow.

30-day average BOD/TSS loading = 30 mg/l \* 8.345 lbs/gal \* 0.045 MGD = 11.3 lbs/day 7-day average BOD/TSS loading = 45 mg/l \* 8.345 lbs/gal \* 0.045 MGD = 16.9 lbs/day

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

Table 2 Final Effluent Limit – 0.075 MGD

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS					MONITORING REQUIREMENTS		
CHARACTERISTICS	lbs/day			mg/l (unless noted)			Measurement	Sample Type
Parameter	30-Day	7-Day	Daily	30-Day	7-Day	Daily Max	Frequency	
	Avg.	Avg.	Max	Avg.	Avg.			
Flow	Report	Report	Report	***	***	***	Continuous	Totalizer
	MGD	MGD	MGD					
BOD <sub>5</sub>	11.3	16.9	***	30	45	***	1/Month	Grab (1)
TSS	11.3	16.9	***	30	45	***	1/Month	Grab (1)
Percent Removal	≥85%	***	***	***	***	***	1/Month	Calculation (2)
(minimum), BOD <sub>5</sub>								
Percent Removal	≥85%	***	***	***	***	***	1/Month	Calculation (2)
(minimum), TSS								, ,
E. coli Bacteria (4)	***	***	***	126	410	***	1/Month	Grab (1)

EFFLUENT CHARACTERISTICS		DISCHARGE LIMITATIONS					MONITORING REQUIREMENTS	
Nitrogen, Total	2.97	***	***	Report	***	4.75	2/Month	Grab (1)
Phosphorus, Total	0.626	***	***	Report	***	1.0	2/Month	Grab (1)
Arsenic, Dissolved	0.094	***	***	***	***	150 ug/L	1/Month	Grab (1)
Boron, Dissolved	1.34	***	***	***	***	2,150 ug/L	1/Month	Grab (1)
Total Residual Chlorine	***	***	***	***	***	19 ug/L	Daily	Instantaneous Grab (3)
Aluminum, Total Recoverable	1.03	N/A	N/A	***	N/A	1,650ug/L	1/Month	Grab (1)

#### Footnotes:

- 1. Monitoring must be conducted according to test procedures approved under 40CFR Part 136, unless other test procedures have been specified in this permit or approved by the Regional Administrator.
- 2. Percent removal is calculated using the following equation: [(average monthly influent concentration average monthly effluent concentration) ÷ average monthly influent concentration] x 100.
- 3. Instantaneous grab a field measurement that is the analysis of a sample less than 15 minutes from the time of collection only when using chlorine.
- 4. Bacteria reporting units MUST be either cfu/100mL or MPN.
- 5. Total Nitrogen is defined as the sum of Nitrate +Nitrite (N + N), and Total Kjeldahl Nitrogen (TKN). Total Nitrogen is defined as TKN + Nitrites and Nitrates, as found in the TMDL for the Jemez River approved by EPA September 15, 2009.
- 6. Total recoverable aluminum shall be tested using EPA approved method as found in CFR 136 table IB, for the determination of total recoverable metals, and as found in 20.6.4.900.2 The criteria is based on analysis of total recoverable aluminum in a sample that is filtered to minimize mineral phases as specified by the New Mexico Environment Department (NMED). The NMED specification for filtration can be found at: https://www.env.nm.gov/swqb/SOP/documents/82ChemicalSamplingSOP4-11-2016.pdf. At this website, find chemical sampling in lotic environments part 6.1.4 address total recoverable filtration.

Table 3

		Discharge Limitations			
<b>Effluent Characteristics</b>		<b>Standard Units</b>		<b>Monitoring Requirements</b>	
	STORET			Measurement	
Pollutant	Code	Minimum	Maximum	Frequency	Sample Type
pН	00400	6.6	8.8	5/Week	Instantaneous Grab (3)

Table 4

EFFLUENT CHARACTERISTICS	DISCHARGE N	MONITORING	MONITORING REQUIREMENTS		
Whole Effluent Toxicity Testing	30-DAY AVG	48-HR	MEASUREMENT		
(48 Hr. Static Renewal)	MINIMUM	MINIMUM	FREQUENCY	SAMPLE TYPE	
Daphnia pulex	Report	Report	Once/Term (7, 8)	Grab	
Pimephales promelas	Report	Report	Once/Term (7, 8)	Grab	

<sup>7.</sup> Once per permit term. This permit does not establish requirements to automatically increase the WET testing frequency after a test failure, or to begin a toxicity reduction evaluation (TRE) in the event of multiple test failures. However, upon failure of any WET test, the permittee must report the test results to EPA and NMED, Surface Water Quality Bureau, in writing, within 5-business days of notification the test failure. EPA and NMED will review the test results and determine the appropriate action necessary, if any. (See Part II, Section D).

<sup>8.</sup> Sampling for the whole effluent toxicity test shall occur between the first period between November 1 and April 30, after the permit effective date.

# 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 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.

# 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. Jemez, Zia, and Santa Ana Pueblos are located approximately 9,18 and 30miles respectfully downstream of the outfall. However, Jemez and Zia Pueblos do not have approved WQS, NMED WQS are expected to be protective of the water quality in these Pueblos

# 3. State Water Quality Standards

The general and specific stream standards are provided in NMWQS (20.6.4 NMAC, effective May 22, 2020). The facility discharges into the Jemez River in segment number 20.6.4.107 of the Rio Grande Basin. The designated uses of the Jemez River are wildlife habitat, livestock watering, coldwater aquatic life, irrigation and primary contact.

# 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. BACTERIA

Stream segment specific (20.6.4.107 NMAC) WQS for E. coli bacteria is 126 cfu/100 ml daily monthly geometric mean and 410 cfu/100 ml daily maximum. These limits are identical to the previous permit and are continued in the draft permit.

# b. pH

Stream segment specific (20.6.4.107 NMAC) WQS for pH, 6.6 to 8.8 standard units. These limits are identical to the previous permit.

### c. 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, 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). 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 facility is designated as a minor and does not need to fill out the expanded pollutant testing section Part D of Form 2A. There are no toxics that need to be placed in the draft permit except for those presented below.

#### ii. TRC

The facility uses UV to control bacteria. The previous permit however maintained a 19 ug/l TRC limit when chlorine is used as a treatment chemical for process equipment sanitization and/or filamentaceous algae control. The requirement will be maintained as the previous permit.

# 5. TMDL Requirements

EPA approved September 15, 2009 and on April 27, 2018 a NMED TMDL for phosphorus, nitrogen, arsenic, boron and temperature and Aluminum. For the portion of the Jemez River between the Rio Guadalupe and Soda Dam, the TMDL established WLAs for phosphorus, nitrogen, boron and arsenic and Aluminum. These pollutants are proposed in the draft permit based on the TMDL.

WLAs for total phosphorus (TP), total nitrogen (TN), Arsenic, Boron and Aluminum for the protection of narrative designated uses. The TMDL established TP WLA's of 0.626 lbs/day, 1.0 mg/l, TN WLA of 2.97 lbs/day, 4.75 mg/l, Arsenic WLA's of 0.094 lbs/day, 150ug/L and Boron WLA of 1.34 lbs/day, 2,150 ug/L and Aluminum WLA of 1.03 lbs/day, 1,650 ug/L. The draft permit will propose these limits as daily maximums.

The Jemez Spring WWTP NPDES previous permits does not have limitations or monitoring requirements for temperature. WWTP effluent has never been noted to be a significant source contributor of temperature impairment. Therefore, the WLA is zero. No final effluent limitation for temperature will be proposed in this draft permit.

# 6. Schedule of Compliance

Aluminum limitation and monitoring requirement has been incorporated on the permit based on April 27, 2018 EPA approved TMDL. NMED Water Quality Standards for Aluminum was changed from Dissolved to Total Recoverable Aluminum effective March 2, 2017. This is found in the current NMAC 20.6.4.900.J

The 303(d) Integrated Report for impaired waters identifies the segment of the Jemez River where this facility discharges as impaired and Total Recoverable Aluminum is a contributor to that impairment.

A three-year compliance schedule for Aluminum to monitor and report only starting at the effective date of this permit. After that, the permit limitation as per the TMDL's waste load allocation shall apply.

7. Other Requirements N/A

# D. 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). Sample frequency is based on the NMIP. Technology based pollutants; BOD and TSS are proposed to be monitored once per month. Flow is proposed to be monitored continuously by totalizing meter. These frequencies are the same as the current permit. Sample type for BOD and TSS 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, Phosphorus and nitrogen shall be sampled twice per month using grab samples. Arsenic and boron monitoring shall be once per month using grab samples. The pollutant pH shall be monitored 5/week, using instantaneous grab samples. When chlorine is used to disinfect treatment equipment and/or treat filamentaceous algae, TRC shall be sampled daily using instantaneous grab samples which is consistent with the previous permit. Regulations at 40 CFR §136 define instantaneous grab as being analyzed within 15-minutes of collection.

#### E. WHOLE EFFLUENT TOXICITY LIMITATIONS

Procedures for implementing WET terms and conditions in NPDES permits are contained in the NMIP, March 2012. Based on the work in the TMDL, the 4Q3 for the Jemez River is 3.16 cfs (2.042 MGD). The CD of the discharge is determined from the following:

$$CD = Qe/(Qe + Qa)$$

Where:

Qe = effluent flow - 0.075 MGD

Qa = 4Q3 - 2.042 MGD

CD = 0.075/(0.075 + 2.042)

CD = 0.035 or 3.54%

Table 11 of Section V of the NMIP outlines the type of WET testing for different types of discharges. Discharges into perennial streams normally require chronic WET tests. If it is determined that a facility is to receive chronic biomonitoring requirements at a CD  $\leq$  10%, then an acute-to-chronic ratio of 10:1 may be used in order to allow acute biomonitoring in lieu of chronic. This will result in a higher critical dilution by decreasing the ratio between the amounts of effluent and receiving water used as well as a reduction in the cost per biomonitoring test for the permittee. Using the acute-to-chronic ratio of 10:1, the CD for an acute test is 35.4%, rounded to 35% per the NMIP. The effluent concentrations using a 75% dilution series are 15%, 20%, 26%, 35%, and 47%. The test species shall be *Daphnia pulex* and *Pimephales promelas*. Testing shall be performed during the first year after the permit effective date and samples shall be taken during the period November 1 and April 30.

EFFLUENT CHARACTERISTIC	DISCHARGE MONITORING
EFFLUENT CHARACTERISTIC	DISCHARGE MONITORING

30-DAY AVG MINIMUM 48-Hr. MINIMUM

Whole Effluent Toxicity Testing

(48 Hr. Static Renewal)

Daphnia pulexREPORTREPORTPimephales promelasREPORTREPORT

# <u>EFFLUENT CHARACTERISTIC</u> <u>MONITORING REQUIREMENTS</u>

FREQUENCY TYPE

Whole Effluent Toxicity Testing

(48 Hr. Static Renewal)

Daphnia pulex1/Permit Term24-Hr. CompositePimephales promelas1/Permit Term24-Hr. Composite

### VII. 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". 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.

# 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 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.

#### D. 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 <u>quarterly</u>. The monitoring results will be available to the public.

# VIII. IMPAIRED WATER - 303(D) LIST

The Jemez River between the Rio Guadalupe and Soda Dam was found to have impairments for aluminum, arsenic, nutrients, boron, temperature and turbidity. Nutrients, arsenic, boron and aluminum have been previously discussed above in Part VI. C. 5. Temperature was not given a WLA since heat is not a pollutant from POTWs and the temperature is likely caused by natural thermal springs in the receiving water. No additional pollutants are listed for this waterbody. The standard reopener language in the permit allows additional permit conditions if warranted by future changes.

#### IX. ANTIDEGRADATION

The NMAC, Section 20.6.4.8 "Antidegradation Policy and Implementation Plan" sets forth the requirements to protect designated uses through implementation of the State water quality standards. The limitations and monitoring requirements set forth in the proposed permit are developed from the State water quality standards and are protective of those designated uses. Furthermore, the policy sets 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, NMAC Section 20.6.4.8.A.2.

# X. 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 and the concentration limits for E. coli bacteria, pH and TRC. New limits for TP and TN have been added.

### XI. ENDANGERED SPECIES CONSIDERATIONS

According to the most recent county listing available at USFWS, Southwest Region 2 website, http://ecos.fws.gov/tess\_public/reports/species-by-current-range-county?fips=35043, four species in Sandoval County are listed as endangered or threatened. Jemez Mountains salamander (*Plethodon neomexicanus*), Rio Grande silvery minnow (*Hybognathus amarus*), the Southwestern willow flycatcher (*Empidonax traillii extimus*), and New Mexico meadow jumping mouse (*Zapus hudsonius luteus*) are listed as endangered. The Mexican spotted owl (*Strix occidentalis lucida*) is 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 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. No additions have been made to the USFWS list of threatened and endangered species and critical habitat designation in the area of the discharge since prior issuance of the permit.
- 2. EPA has received no additional information since the previous permit issuance which would lead to revision of its determinations.
- 3. The draft permit has been made more restrictive from the previous permit with the addition of Aluminum, total recoverable limits for the protection of narrative conditions.
- 4. EPA determines that Items 1, 2 and 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.

### XII. HISTORICAL and ARCHEOLOGICAL PRESERVATION CONSIDERATIONS

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

# XIII. PERMIT REOPENER

The permit may be reopened and modified during the life of the permit if State Water Quality Standards are promulgated or revised. In addition, if the State amends 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:

# A. APPLICATION(s)

EPA Application Form 2A received November 4, 2020.

### B. 40 CFR CITATIONS

Citations to 40 CFR are as of July 2020. 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, as amended.

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

Statewide Water Quality Management Plan, December 06, 2018.

State of New Mexico 303(d) List for Assessed Stream and River Reaches, 2020 - 2022.

Water Quality Survey Summary for the Jemez River Watershed (From the San Ysidiro to the Headwaters Excluding Waters in the Valles Caldera National Preserve) 2005.

Total Maximum Daily Load for the Jemez River Watershed (From the San Ysidiro to the Headwaters Excluding Waters in the Valles Caldera National Preserve) September 15, 2009.