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

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ISSUING OFFICE

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PREPARED BY

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DATE PREPARED

October 10, 2018

PERMIT ACTION

Proposed reissuance of the current NPDES permit issued September 26, 2013, with an effective date of November 1, 2013, and an expiration date of October 31, 2018.

RECEIVING WATER – BASIN

Jemez River to the Rio Grande in Segment 20.6.4.107 of the Rio Grande Basin

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I. CHANGES FROM THE PREVIOUS PERMIT

Changes from the permit previously issued September 26, 2013, with an effective date of November 1, 2013, and an expiration date of October 31, 2018, are:

- 1. E. Coli limits have been revised to protect designated uses of downstream waters.
- 2. Electronic DMR reporting requirements have been included in the modified permit.
- 3. Language on the Sufficiently Sensitive Methods has been established in the proposed permit
- 4. Concentration limits for Boron and Arsenic have been corrected.

II. APPLICANT LOCATION and 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 (30,000 gallons per day) serving a transient population of 402.

It is a privately owned separate sanitary sewer treatment facility and has a design flow is 0.01 MGD.

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 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 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.

On June 28, 2018 EPA Region 6 issued an Administrative Order in response to NPDES permit limit violations for TSS, E.Coli, and Boron.

III. EFFLUENT CHARACTERISTICS

A quantitative description of the discharge(s) described in the EPA Permit Application Form 2A in section A.12. Effluent Testing Information. Received September 5, 2018, is presented in Table 1 below:

Table 1.

| Parameter | Max | Avg |
|---------------------|---------|---------|
| Flow, MGD | 0.007 | 0.007 |
| Temperature, winter | No Data | No Data |
| Temperature, summer | No Data | No Data |
| pH, minimum, SU | 7.0 | N/A |
| pH, maximum, SU | 7.7 | N/A |
| BOD (mg/l) | 18.1 | 4.6 |

| E.Coli | 1553.1 | 152.88 |
|------------|--------|--------|
| TSS (mg/l) | 26 | 7.5 |

A summary of the last 3-years compliance monitoring history for NPDES Permit NM0028749 are listed in Table 1. The dates in violation for limited parameters are as listed:

Table 1

| Dates of Violation | Parameter | Value |
|--------------------|------------------------------|---------------------------|
| 12/31/2017 | TSS – 30 day average | 35 mg/L > 30 mg/L limit |
| 1/31/2018 | E. Coli max & 30 day average | > 126 CFU/100mL |
| 11/30/2017 | E. Coli 30 day average | 159 CFU/100mL |
| 5/31/2017 | E. coli average | 201.4 CFU/100mL |
| 2/28/2017 | E. coli maximum | 142.9 CFU/100mL |
| 12/31/2015 | E. coli average | 298.7 CFU/100mL |
| 4/30/2018 | BOD % removal | 2% |

Non-receipt violations were recurrent. In addition, limits for Boron were violated on more than 30 occasions. As stated above, an Administrative Order was issued on June 28, 2018 for failure to meet permit effluent limits.

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 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. Water quality-based effluent limitations are established in the proposed draft permit for *E. coli* bacteria, pH and TRC.

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

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30-day average BOD<sub>5</sub>/TSS loading = 30 \text{ mg/l} * 8.345 \text{ lbs/gal} * 0.01 \text{ MGD} 30-day average BOD<sub>5</sub>/TSS loading = 2.503 \text{ lbs/day}
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7-day average BOD<sub>5</sub>/TSS loading = 45 mg/l * 8.345 lbs/gal * 0.01 MGD 7-day average BOD<sub>5</sub>/TSS loading = 3.755 lbs/day
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A summary of the technology-based limits for the facility is included below:

Table 2

| EFFLUENT CHARACTERISTICS | DISCHARGE LIMITATIONS | | | |
|---------------------------------------|-----------------------|------------|---------------------|---------------|
| 1 11 | 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) | | | |
| pН | N/A | N/A | 6.6 - 8.8 s | tandard units |

Footnotes:

*1 To calculate the percent removal, use the following equation: (average monthly influent concentration – average monthly effluent concentration) ÷ average monthly influent concentration.

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 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

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.

3) 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.

4) Dissolved Oxygen

An evaluation of the permittee's impact on the receiving water dissolved oxygen was completed as part of the permitting process. A steady state model (LA-QUAL) was used to evaluate the biochemical oxygen demand of the discharge and associated constituents including ammonia. A complete characterization of the receiving water was not available. Certain parameters, including flow, were available and were utilized. However, the receiving water model also used default values to estimate the various unavailable hydrodynamic and water quality parameters. The discharge was modeled using data obtained from the application, permits limits and defaults were used for unavailable discharge characterization data.

The evaluation demonstrated that the discharge would not cause an excursion of the in-stream standard of 5 mg/L. As a result, no further DO requirement are established in the draft permit.

5) 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. There are no toxics that need to be placed in the draft permit except for TRC described below.

ii. TRC

The WQS for TRC is 11 μ g/l for chronic conditions and 19 μ g/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 μ g/l ÷ 0.1= 110 μ g/l. Since this value is greater than the 19 μ g/l end-of-pipe acute standard, the 19 μ g/l is more stringent and will be more protective. The draft permit shall maintain the 19 μ g/l limit contained in the present permit.

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:

The 4Q3 was calculated using the USGS SW Toolbox for the statistical analysis. 4Q3 11.058 CFS

Harmonic Mean 29.755 cfs

= 0.14%

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CD = Qe/(F·Qa + Qe), where:

Qe = facility flow (0.01 MGD)

Qa = critical low flow of the receiving waters (7.14 MGD [= 11.058 cfs])

F = fraction of stream allowed for mixing (1.0)

CD = 0.01 MGD/[(1.0)(7.14 + 0.01)]

= 0.00140
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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 1.0% critical dilution.

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 two (2) times per month by grab sample which is also more frequent than the previous permit due to multiple limit exceedences for *E. coli*. 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 greater than the previous permit but is 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 1%. 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; 4%, the NMIP directs the WET test to be a 48-hour acute test using *Daphnia pulex* and *Pimephales promelas* at a once per permit term.

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 0.4%, 0.6%, 0.8%, 1.0%, and 1.3%.

The previous permit established WET biomonitoring with CD of 4%. DMR reports reveal one (1) passing test for both the *Daphnia pulex* species and the *Pimephales promelas* species during the last permit term. The EPA Reasonable Potential Analyzer (See Appendix A) indicates that no RP exists, therefore WET limits will not be established in the proposed permit.

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 3

| Effluent Characteristic | Discharge Monitoring | |
|-----------------------------------|----------------------|--------------|
| WET Testing (48hr Static Renewal) | 30-day Avg Min | 48hr Minimum |
| Daphnia pulex | Report | Report |
| Pimephales promelas | Report | Report |

Table 4

| Effluent Characteristic | Monitoring Requirements | |
|-----------------------------------|-------------------------|----------------|
| WET Testing (48hr Static Renewal) | Frequency | Type |
| Daphina pulex | Once per term | 24hr Composite |
| Pimephales Promelas | Once per 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 <u>quarterly</u>. 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 2016-2018 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 nutrient/eutrophication), irrigation (due to dissolved boron), and primary contact. 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 \div (design flow (MGD) \times 8.34) Boron = .158 lbs/day \div (.01 MGD \times 8.34) = 1.894 mg/l Arsenic = .014 lbs/day \div (.01 MGD \times 8.34) = 0.168 mg/l

Calculated concentration limits that were incorporated into the previous permit have been corrected in the draft 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

According to the most recent county listing available at FWS website, http://www.fws.gov/endangered/, three species in Sandoval County, NM are listed as endangered or threatened. The southwestern willow flycatcher (*Empidonax traillii extimus*), meadow jumping mouse (*Zapus hudsonius luteus*), Jemez Mountains salamander (*Plethodon neomexicanus*), and Rio Grande silvery minnow (Hybognathus amarus*) are listed as endangered. The Mexican spotted owl (*Strix occidentalis lucida*) and Yellow-billed Cuckoo (*Coccyzus americanus*) are listed as threatened. Based on the following discussion, EPA has determined that the issuance of this permit will have *no effect* on these federally listed threatened or endangered species or their critical habitat based on the previous permit call of 'no effect' and that the facility has not made major changes to their effluent discharge.

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. 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.

XIII. VARIANCE REQUESTS

No variance requests have been received.

XIV. 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.

XV. FINAL DETERMINATION

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

XVI. ADMINISTRATIVE RECORD

The following information was used to develop the proposed permit:

1. APPLICATION(s)

Complete EPA Application Form 2A received September 5, 2018.

2. 40 CFR CITATIONS

Citations to 40 CFR are as of October 4, 2018 Sections 122, 124, 125, 133, 136

3. STATE OF NEW MEXICO REFERENCES

State of New Mexico Standards for Interstate and Intrastate Surface Waters, 20.6.4.107 and 20.6.4.900 NMAC, as amended through August 11, 2017.

 $\frac{ftp://ftp.nmenv.state.nm.us/www/swqb/Standards/2011/20.6.4NMAC-IntegratedStandards-CWAStatus2011-04-18.pdf}{CWAStatus2011-04-18.pdf}$

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

http://www.epa.gov/region6/water/npdes/newmexico/newmexico_ip_05032011.pdf

State of New Mexico 303(d) List for Assessed Stream and River Reaches, 2016-2018.