

NPDES PERMIT NO. NM0029041 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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DATE PREPARED

December 15, 2022

PERMIT ACTION

Proposed reissuance of the current NPDES permit issued September 27, 2017, with an effective date of November 1, 2017, and an expiration date of October 31, 2022. Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed in Title 40, Code of Federal Regulations, revised as of December 15, 2022.

RECEIVING WATER – BASIN

Pecos River – Pecos Basin

DOCUMENT ABBREVIATIONS:

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

BAT - best available technology economically achievable
BMP – best management plan
BOD₅ – five-day biochemical oxygen demand
BPJ - best professional judgment
CD – critical dilution
CFR – Code of Federal Regulations
cfs – cubic feet per second
CIU - Categorical Industrial User's
COD – chemical oxygen demand
COE – United States Corp of Engineers
CWA – Clean Water Act
DMR – discharge monitoring report
EPA – United States Environmental Protection Agency
ESA - Endangered Species Act
FC- fecal coliform
FWS – United States Fish and Wildlife Service
MGD – million gallons per day
NMAC – New Mexico Administrative Code
NMED – New Mexico Environment Department
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
SIU - Significant Industrial User's
su – standard units
SWQB – Surface Water Quality Bureau
TDS – total dissolved solids
TMDL – total maximum daily load
TOC – total organic carbon
TRC – total residual chlorine
TSS – total suspended solids
UAA – use attainability analysis
WET - whole effluent toxicity
WQCC - New Mexico Water Quality Control Commission
WWTP - wastewater treatment plant

I. CHANGES FROM THE PREVIOUS PERMIT

- A. TRC limits has been changed from 19 ug/L to 11 ug/L due to wildlife habitat criteria.
- B. WET frequency changed to once/year per NMIP and compliance with previous permit.
- C. Sanitary Sewer Overflows (SSOs), bypass and anticipated bypass events shall be electronically reported to EPA per 40 CFR 127.26(f).
- D. Addition of dissolved oxygen monitoring requirement.
- E. Added influent data reporting requirements for BOD and TSS on DMRs

II. APPLICATION LOCATION AND ACTIVITY

As described in the application, the Village of Pecos owns and operates a POTW under the SIC Code 4952. The facility is located at 42 Lagoon Lane in San Miguel County, New Mexico.

Village of Pecos WWTP



The WWTP is a Sequencing Batch Reactor (SBR). Raw wastewater enters the plant through a three inch Par-shall Flume. A Vulcan Filter Stair Screen then removes debris by moving the debris upward by rotating the screen upwards; slowly moving the debris to the next level. Once the debris reaches the top step, it is discharged to a trash receptacle for later disposal. The influent is gravity fed to the two SBR basins by a splitter pipe which can be manually closed and opened to allow influent to either basin. In the SBR, wastewater goes through three phases of treatment. These include: react, settle and decant. During the react phase, the wastewater undergoes 168 minutes of alternate periods of anoxic mix and aeration. In the settle phase, the aerators are stopped, which allows the solids to settle out and move to the bottom. This allows the clear wastewater to stay on top. Then, the decant phase starts and the decanter removes clarified supernatant to the ultraviolet system for disinfection and then finally to outfall equipped with a diffuser. The effluent is measured by an enclosed Sparling Magnetic Flow Meter.

The WWTP has a design flow capacity of 0.15 MGD serving approximately 1500 people. The Water Quality Segment number where this facility discharges to is 20.6.4.217. The designated uses of the receiving water in Segment 20.6.4.217 are domestic water supply, fish culture, high quality cold-water aquatic life, irrigation, livestock watering, wildlife habitat and primary contact; and public water supply on the main stem of the Pecos River. The single outfall of the facility is located in the Pecos River at Latitude 35° 34' 0.17" North, Longitude 105° 40' 20.6" West.

III. EFFLUENT CHARACTERISTICS

A quantitative description of the discharge(s) described in the EPA Permit Application Form 2A received October 29, 2022, are presented below in Table 1.

Table 1: Effluent Data

Parameter	Maximum	Average
Flow, million gallons/day (MGD)	0.74	0.56
Temperature, winter (°C)	NA	7.0
Temperature, summer (°C)	NA	16.2
pH, minimum, standard units (s.u.)	7.4	N/A
pH, maximum, standard units (s.u.)	7.8	N/A
Biochemical Oxygen Demand, 5-day (BOD ₅ , mg/l)	197	192
E. coli (#bacteria/100 ml)	<10	<5
Total Suspended Solids (TSS, mg/l)	320	203
Ammonia (NH ₃ , mg/l)	ND	
Chlorine, Total Residual (TRC, mg/l)	73	--
Dissolved Oxygen (DO, mg/l)	2.4	--
Total Kjeldahl Nitrogen (TKN, mg/l)	ND	--
Nitrate plus Nitrite Nitrogen (mg/l)	5.5	--
Oil & Grease (mg/l)	9.33*	--
Phosphorus (mg/l)	3.3	--
Total Dissolved Solids (TDS, mg/l)	425	--

*Last application data

A summary of the last 3-years of pollutant data taken from DMRs shows no exceedances of pollutant 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 NPDES permit program are generally found at 40 CFR §122 (program requirements & permit conditions), §124 (procedures for decision making), §125 (technology-based standards) and §136 (analytical procedures). Other parts of 40 CFR provide guidance for specific activities and may be used in this document as required.

The facility submitted a complete permit application on October 29, 2022. It is proposed that the permit be reissued for a 5-year term following regulations promulgated at 40 CFR §122.46(a). The existing permit is administratively continued until this permit is issued.

V. DRAFT PERMIT RATIONALE AND PROPOSED PERMIT CONDITIONS

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

Regulations contained in 40 CFR §122.44 require that 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 BOD₅ and TSS. Water quality-based effluent limitations are established in the proposed draft permit for E. coli bacteria, pH and TRC.

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 BOD₅, 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 BOD₅, TSS and pH. BOD₅ 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) (1). 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 su 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:

$$\text{Loading in lbs./day} = \text{pollutant concentration in mg/l} * 8.345 \text{ lbs./gal} * \text{design flow in MGD}$$

According to the renewal application, the WWTP has the design capacity of 0.15 MGD. Based on 40 CFR §122.45(f), all pollutants limited in permits shall have limitations expressed in terms of mass. The loading limits are established in the draft permit for BOD₅ and TSS as follows:

$$7\text{-day average BOD}_5 \text{ loading} = 45 \text{ mg/l} * 8.345 \text{ lbs./gal} * 0.15 \text{ MGD} = 56.329 \text{ lbs./day}$$

$$30\text{-day average TSS/BOD loading} = 30 \text{ mg/l} * 8.345 \text{ lbs./gal} * 0.15 \text{ MGD} = 37.553 \text{ lbs./day}$$

Table 2. Technology-Based Effluent Limits

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		DISCHARGE LIMITATIONS	
	lbs/day		mg/L	
Parameter	30-Day Avg.	7-Day Avg.	30-Day Avg.	7-Day Avg.
Flow	N/A	N/A	Measure MGD	Measure MGD
BOD ₅	38	56	30	45
BOD ₅ , % removal	---	---	≥ 85%	---
Influent BOD ₅	---	---	Monitor Only	---
TSS	38	56	30	45
TSS, % removal	---	---	≥ 85%	---
Influent TSS	---	---	Monitor Only	---
pH	N/A	N/A	6.0 s.u. minimum	9.0 s.u. maximum

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.

3. State Water Quality Standards

The general and specific stream standards are provided in NMWQS (20.6.4 NMAC, effective July 24, 2020). The facility discharges into the Pecos River in segment number 20.6.4.217 of the Pecos Basin. The designated uses of the receiving water are domestic water supply, fish culture, high quality cold-water aquatic life, irrigation, livestock watering, wildlife habitat, and primary contact; and public water supply on the main stem of the Pecos river.

The CWA sections 101(a) (2) and 303(c) require water quality standards to provide, wherever attainable, water quality for the protection and propagation of fish, shellfish, wildlife, and recreation in and on the water, functions commonly referred to as “fishable/swimmable” uses. EPA's current water quality regulation effectively establishes a rebuttable presumption that “fishable/swimmable” uses are attainable and therefore should apply to a water body unless it can be demonstrated that such uses are not attainable.

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 (20.6.4.217 NMAC) WQS for E. coli bacteria is 126 cfu/100 ml daily monthly geometric mean and 235 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 (20.6.4.217 NMAC) WQS for pH, 6.6 to 8.8 su, are more restrictive than the technology-based limits presented earlier but are identical to the previous permit and will be continued in the draft permit.

c. TOXICS

The CWA in Section 301 (b) requires that effluent limitations for point sources include any limitations necessary to meet water quality standards. Federal regulations found at 40 CFR §122.44 (d) state that if a discharge poses the reasonable potential to cause an in-stream excursion above 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, 2S or 2E to apply for an NPDES permit or reissuance of an NPDES permit. The new form is applicable not only to POTW's, but also to facilities that are similar to POTW's, 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. 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, 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.

Due to the limited information required by the application, the Agency has determined that no reasonable potential exists for this discharge to violate applicable NMWQS for the protection of domestic water supply, fish culture, high quality cold-water aquatic life, irrigation, livestock watering, wildlife habitat and primary contact; and public water supply on the main stem of the Pecos River, beyond pH, E. coli, and the use of chlorine for disinfection or clean purpose.

d. TRC

The facility uses UV unit to disinfect the effluent. TRC of 11 µg/l (for wildlife habitat; 20.6.4.900.J NMAC) is established in case chlorine based-product is contributed in the treatment process or disinfection of treatment equipment. 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. This limit will be more restrictive.

e. Dissolved Oxygen

The State of New Mexico WQS criterion applicable to the coldwater aquatic life designated use is at least 6 mg/L for dissolved oxygen. As a part of the permitting process, EPA used the LA-QUAL water quality model, which is a steady-state one-dimensional model which assumes complete mixing within each modeled element, to develop permit parameters for the protection of the State of New Mexico surface water WQS for DO (i.e., 6 mg/L). Primarily based on the Village of Pecos Wastewater Treatment Plant's design flow of 0.15 MGD (0.0066 m³/s) and the receiving water critical flow of 10.3 MGD (0.452 m³/s), various BOD₅ factors including BOD₅ Secondary Treatment Standards were considered and simulated to achieve the DO criterion. A complete characterization of Pecos River (i.e.,

water quality and hydrodynamic data) was not available. Where data were not available, estimates and assumptions are made. The following is a summary of model inputs.

The Village of Pecos Wastewater Treatment Plant's design flow is 0.15 MGD (0.0066 m³/sec). The discharge location provided in the permit application is located at Latitude 35° 34' 03" N (35.5675), and Longitude -105° 40' 04" W (-105.6678). Other effluent parameters provided in the permittee's application and applied in the model include average DO of 2.4 mg/L and average summer effluent temperature of 61 °F (16.11 °C).

NMED provided the following information. The critical low flow of Pecos River receiving stream is approximately 0.452 m³/sec (10.3 MGD). Other parameters applied in the model include ambient critical temperature of 35 °F (1.67 °C), average DO of 7 mg/L, the studied Pecos River segment length of approximately 5 miles (8 kilometers), Nitrate plus Nitrite Nitrogen of 0.46 mg/L and ambient E. Coli of 3.8 CFU/100ml. The receiving stream average depth of 3 feet (1 meters) at critical conditions was assumed since no data available.

EPA used the State of New Mexico's OpenEnviroMap to estimate the average elevation of the study area and average width of Pecos River. The estimated average elevation at the outfall is approximately 6860 feet (2092 meter). The estimated average width of Pecos River at critical conditions is approximately 12 meters.

The model results show no excursion of the receiving stream DO standard of 6 mg/L when the BOD₅ limits of 30 mg/l for monthly average and 45 mg/l for 7-day maxima were applied (see graph with 30/45 mg/L BOD₅ in Appendix X; other detail information is available upon request).

The model results are based on the assumptions and default values as explained and presented above. Should these conditions change, the model should be updated to provide a more accurate assessment of the water quality within the receiving water body.

The Pecos River (Canon de Manzanita to Alamitos Canyon) assessment unit has been included on the 2022-2024 List of Impaired Waters for DO. Permit writer will include monitoring for DO to address the impairment listed and to start gathering data for the possibility of a TMDL.

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 March 15, 2012, NMIP. Flow is proposed to be monitored daily by totalizing meter. E. coli bacteria, BOD₅ and TSS shall be sampled twice per month using grab samples. When chlorine is used to disinfect treatment equipment and/or treat filamentaceous algae, TRC shall be sampled daily using instantaneous grab samples. pH shall also be sampled daily using instantaneous grab sample. DO shall be sampled twice per month as instantaneous grab also. 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 15, 2012. Table 11 of Section V of the NMIP outlines the type of WET testing for different types of discharges. The permittee has performed six (6) WET tests for *Pimephales promelas* and six (6) tests for *Daphnia pulex* during the last permit term and has passed all of them. EPA concludes based on the passed WET tests and the Reasonable Potential Analyzer that reasonable potential to cause toxicity does not exist and WET limits are not required. However, WET monitoring will be continued in the draft permit.

The SWQB of the NMED provided the 4Q3; 15.961 cfs (10.3 MGD), upstream of the facility on the Pecos River. Based on the 4Q3 and the effluent flow, 0.15 MGD (0.232 cfs), the CD for the facility is calculated as follows:

$$CD = Q_e / [Q_e + Q_a] = 0.15 / [0.15 + 10.3] = 0.0143$$

After applying the 10:1 acute to chronic ratio, the new CD becomes 14%. The NMIP directs the WET test to be a 48-hour acute test using *Daphnia pulex* and *Pimephales promelas* at a once per year frequency consistent with the NMIP. The test series will be 0% (control), 6%, 8%, 11%, 14%, and 19%.

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 Pecos River Segment 20.6.4.217. Discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic (48-Hr Acute Static Renewal/ NOEC)	Value	Frequency	Sample Type
<i>Daphnia pulex</i> (*1)	Report	Once/Year	24-Hr Composite
<i>Pimephales promelas</i> (*1)	Report	Once/Year	24-Hr Composite

1. Monitoring and reporting requirements begin on the effective date of this permit. See Part II, Whole Effluent Toxicity Testing Requirements for additional WET monitoring and reporting conditions.

VI. TMDL AND OTHER REQUIREMENTS

The Pecos River (Canon de Manzanita to Alamitos Canyon) assessment unit has been included on the 2022-2024 List of Impaired Waters for temperature and DO. As stated during the development of the previous permit and knowing that no thermal treatment is applied for the treatment of sanitary wastewater, the nature of the treated wastewater discharge will not increase the stream temperature. Permit writer will include monitoring for DO to address the impairment listed and to start gathering data for the possibility of a TMDL. A reopener clause is established in Part II of the permit, which allows the permit to be modified, if necessary, to conform with the approved Water Quality Management Plan (WQMP) final effluent limitations or an approved waste load allocation (WLA) as part of a TMDL.

VII. MONITORING AND REPORTING

The EPA promulgated a final rule in 2015 to modernize Clean Water Act reporting for municipalities, industries, and other facilities by converting to an electronic data reporting system. This final rule requires regulated entities to electronically report certain data required by the NPDES permit program

instead of filing paper reports. The rule also requires that certain data be entered into EPA's national data system by NPDES Authorized States, Tribes, Territories, and Federal regulators. EPA regulations at 40 CFR 127.26(f) require that all NPDES permits issued on and after Monday, December 21, 2015 contain permit conditions requiring electronic reporting consistent with EPA electronic reporting regulations. These reports must contain the minimum set of NPDES program data identified in Appendix A, 40 CFR part 127.

After December 21, 2016, the permittees are required to submit discharge monitoring reports (DMRs), including majors and minor POTWs/POTWS-like, and Sewage Sludge/Biosolids Annual Program Report.

By December 2025 or an alternative deadline established under 40 CFR 127.24 (e) or (f), the following reports must be submitted electronically (unless EPA directs otherwise, or the permittee received a waiver from electronic reporting): Pretreatment Program Annual Reports, and Sewer Overflow/Bypass Event Reports and Anticipated Bypass Notices.

The permittee may seek a waiver from electronic reporting to continue submitting reports on paper. To obtain an electronic reporting waiver, a permittee must first submit an electronic reporting waiver request to EPA Region 6. The waiver request should contain the following details: Facility name; NPDES permit number; Facility address; Name, address and contact information for the owner, operator, or duly authorized facility representative; and Brief written statement regarding the basis for claiming a waiver.

The region will either approve or deny this electronic reporting waiver request within 120 days. Permanent waivers from electronic reporting are only available to facilities owned or operated by members of religious communities that choose not to use certain technologies. The duration of a temporary waiver may not exceed 5 years, which is the normal period for an NPDES permit term. If a permittee wishes to continue coverage under a waiver from electronic reporting, they must re-apply for a new temporary waiver before the expiration of their existing waiver, even if this NPDES permit is administratively continued. Approved electronic reporting waivers are not transferrable, whether permanent or temporary, are not transferrable and the facility will need to re-apply for a waiver upon any change in facility ownership.

Permittees with an approved and effective electronic reporting waiver must use the forms or formats provided by the region. The permittee must sign and certify all submissions in accordance with the requirements of Part III of this permit ("Signatory Requirements").

VIII. 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.

IX. ANTIBACKSLIDING

The proposed permit is consistent with the requirements to meet anti-backsliding 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 discharge limitations requirements of the previous permit for all pollutants.

X. ENDANGERED SPECIES CONSIDERATIONS

According to the most recent county listing available at US Fish and Wildlife Service (USFWS), Information for Planning and Consultation (IPaC), <https://ipac.ecosphere.fws.gov/>, San Miguel County has seven candidate, threatened, or endangered species listed. The Rio Grande Cutthroat Trout (*Oncorhynchus clarkii virginalis*) and Monarch Butterfly (*Danaus plexippus*) are listed as candidate species for this county. The Mexican Spotted Owl (*Strix occidentalis lucida*) and Yellow-billed Cuckoo (*Coccyzus americanus*) are listed as threatened species for this county. Lastly, the New Mexico Meadow Jumping Mouse (*Zapus hudsonius luteus*), Southwestern Willow Flycatcher (*Empidonax traillii extimus*), and Holy Ghost Ipomopsis (*Ipomopsis sancti-spiritus*) are listed as endangered species for this county. The county is also designated as critical habitat for the Mexican Spotted Owl (*Strix occidentalis lucida*). The EPA made a “no effect” determination for federally listed species in the previous permit issued September 2017.

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. The Mexican Spotted Owl inhabits hardwood and coniferous forest habitats, nesting in trees and rock crevices and preying upon small mammals and birds. The permitted discharge is not anticipated to affect its critical habitat.
2. The Holy Ghost Ipomopsis is only known to grow in Holy Ghost Canyon, which is not part of the downstream watershed for the permitted discharge. The permitted discharge is not anticipated to affect the species.
3. The Yellow-billed Cuckoo inhabits deciduous woodland areas, foraging for insects among the shrubs and trees. The permitted discharge is not anticipated to affect the species.
4. The Southwestern Willow Flycatcher inhabits riparian deciduous thickets, primarily feeding on insects. The permitted discharge is not anticipated to affect the species.
5. The New Mexico Meadow Jumping Mouse inhabits dense riparian herbaceous vegetation, feeding on a wide variety of plants. The permitted discharge is not anticipated to affect the species.

6. The Monarch Butterfly is a candidate species and therefore not covered under Section 7. The species feeds on various species of Milkweed, which grow in a variety of environments including streamside. The permitted discharge is not anticipated to affect the species.

7. The Rio Grande Cutthroat Trout is a candidate species and therefore not covered under Section 7. It inhabits high-elevation headwater streams and lakes, eating a variety of insects and fish. While the Pecos River is considered part of the species historical distribution, a 2013 study shows no conservation populations in the Gallinas River (<https://www.wildlife.state.nm.us/fishing/native-new-mexico-fish/rio-grande-cutthroattrout/>). The greatest factor for species decline is the introduction of non-native trout species. Effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

8. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

Based on information described above, EPA Region 6 has determined that discharges proposed to be authorized by the proposed permit will have no effect on the listed species in San Miguel County. 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. EPA determines that Items 1 and 2 results in no change to the environmental baseline established by the previous permit, therefore, EPA concludes that reissuance of this permit will have “no effect” on listed species and designated critical habitat.

EPA determines that Items 1 thru 3 results in no change to the environmental baseline established by the previous permit, therefore, EPA concludes that reissuance of this permit will have “no effect” on listed species and designated critical habitat.

XI. 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.

XII. ENVIRONMENTAL JUSTICE

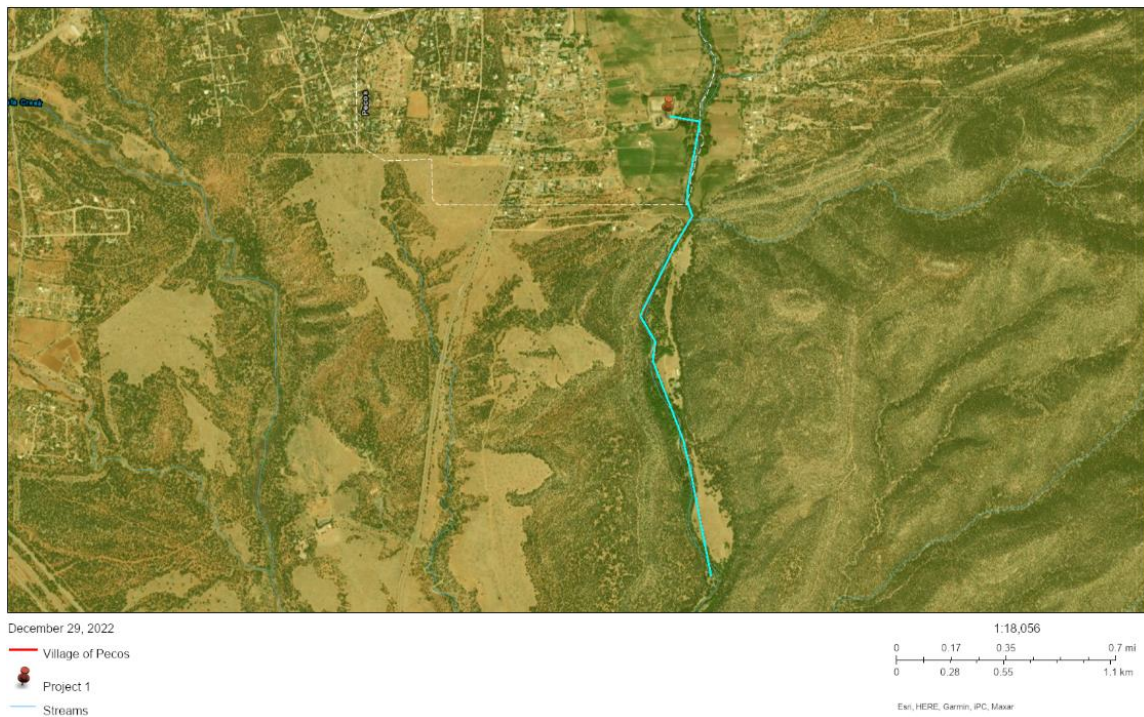
Executive Order 13985, *Advancing Racial Equity and Supporting for Underserved Communities through the Federal Government* signed on January 20, 2021, directs each federal agency to “make

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>.

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 2.1 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, 3-miles line buffer downstream of Village of Pecos WWTP. The highest EJ Screen score for the facility was at the 66 percentile (66%) and this is below the 80%ile cut-off for engaging in enhanced outreach around the availability of the Draft Permit for review and comment. Notwithstanding, the 2015-2019 ACS Report indicates that the total population impacted is 2,888 and the total Hispanic population around the study area is currently 74%. From the results 45% of the population only speaks English at home, the rest 55% of the population speaks English less than well. Therefore, identifying these limitations the EPA will translate the Public Notice to Spanish for the potential of enhanced participation of the community.



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.

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:

A. 40 CFR CITATIONS

Citations to 40 CFR are as of April 27, 2017. Sections 122, 124, 125, 133, 136

B. APPLICATION(S)

EPA Application Form 2A & 2S received October 29, 2022.

C. STATE OF NEW MEXICO REFERENCES

New Mexico State Standards for Interstate and Intrastate Surface Water, 20.6.4 NMAC, EPA approved July 24, 2020.

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

Statewide Water Quality Management Plan, December 17, 2002.

State of New Mexico 303(d) List for Assessed Stream and River Reaches, 2022-2022, EPA approved April 26, 2022.