

NPDES PERMIT NO. NM0022268

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

October 17, 2024

PERMIT ACTION

Renewal of a permit previously issued on November 20, 2019, with an effective date of January 1, 2020, and an expiration date of December 31, 2024.

RECEIVING WATER – BASIN

Pecos River - Pecos River Basin (Segment 20.6.4.231 NMAC)

DOCUMENT ABBREVIATIONS

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

4Q3	Lowest four-day average flow rate expected to occur once every three-years
BAT	Best available technology economically achievable
BCT	Best conventional pollutant control technology
BPT	Best practicable control technology currently available
BMP	Best management plan
BOD	Biochemical oxygen demand (five-day unless noted otherwise)
BPJ	Best professional judgment
CBOD	Carbonaceous biochemical oxygen demand (five-day unless noted otherwise)
CD	Critical dilution
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
DO	Dissolved oxygen
ELG	Effluent limitation guidelines
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
FWS	United States Fish and Wildlife Service
mg/l	Milligrams per liter
ug/l	Micrograms per liter
lbs	Pounds
MDL	Method Detection Limit
MG	Million gallons
MGD	Million gallons per day
ML	Minimum Level
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
ML	Minimum quantification level
O&G	Oil and grease
POTW	Publically owned treatment works
PFAS	Per- and Polyfluoroalkyl Substances
RP	Reasonable potential
SS	Settleable solids
SSM	Sufficiently Sensitive Analytical Method
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
USGS	United States Geological Service
WLA	Waste Load allocation
WET	Whole effluent toxicity
WQCC	New Mexico Water Quality Control Commission
WQMP	Water Quality Management Plan
WWTP	Wastewater treatment plant

I. CHANGES FROM THE PREVIOUS PERMIT

Changes from the permit previously issued on November 20, 2019, with an effective date of January 1, 2020, and an expiration date of December 31, 2024, are as follow:

- The WQS segment has been updated from 20.6.4.206 NMAC to 20.6.4.231 NMAC.
- E. Coli Bacteria Criteria has been updated consistent with the criteria applicable to the designated use.
- Added influent data reporting requirements for BOD and TSS on DMRs.
- Per-and Polyfluoroalkyl Substances (PFAS) pollutant scan requirements has been added to the draft permit.
- Limits for nonylphenol have been removed with reduction in monitoring.
- Critical dilution for WET has been changed.
- Schedule of compliance has been removed.

II. APPLICANT LOCATION and ACTIVITY

As described in the application, the facility (Outfall 001: Latitude 32° 51' 20" North and Longitude 104° 21' 30" West) is located at 1702 N. Haldeman Road, Eddy County, New Mexico.

Under the SIC code 4952, the applicant (municipality) operates City of Artesia WWTP, which has a design flow rate of 2.6 MGD serving a population of 12,875 approximately. The plant performs as high as secondary level of treatment; effluent is ultraviolet disinfected before transported through a 3,000-foot-long piping system and discharged to the Pecos River in Segment No. 20.6.4.231 of the Pecos River Basin. The facility intermittently discharges 100 days during the months of November through February. Part of the effluent is stored and reused for irrigation under a ground water discharge permit. Sewage sludge is processed onsite. A map of the facility is attached.

III. EFFLUENT CHARACTERISTICS

Data submitted in Form 2A for the WWTP is as follows:

Parameter	Max (mg/l unless noted)	Avg. (mg/l unless noted)
pH, minimum, standard units (s.u.)	6.71	NA
pH, maximum, standard units (s.u.)	9.93	NA
Flow (MGD)	2.6	1.3
Temperature (C), winter	29.6	19.73
Temperature (C), summer	32.7	23.70
Biochemical Oxygen Demand, 5-day (BOD ₅)	11.90	3.13
E. coli (cfu/100 ml)	96133.40	347.95
Total Suspended Solids (TSS)	15.60	2.79
Ammonia (as N)	51.40	2.64
TRC	620	331.08
DO	8.69	7.44
Total Kjeldahl Nitrogen (TKN)	68.80	13.30
Nitrate + Nitrite Nitrogen	293	15.66
Oil & Grease	N/A	N/A
Phosphorus (Total)	53	24.98
TDS	1470	1354.55

DMRs data, from January 2020 to October 2024, show no exceedances during this period.

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 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).

V. DRAFT PERMIT RATIONALE AND PROPOSED PERMIT CONDITIONS

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

Regulations contained in 40 CFR §122.44 NPDES permit limits are developed that meet the more stringent of either technology-based effluent limitation guidelines, numerical and/or narrative water quality standard-based effluent limits, or the previous permit.

Technology-based effluent limitations are established in the proposed draft permit for BOD/TSS and percent removal for each. Water quality-based effluent limitations are established in the proposed draft permit for DO, *E. coli* bacteria, pH, and TRC.

Previously all mass limits were established using limited flow at 1.3 MGD to comply with the Antidegradation. In this permit, the 1.3 MGD is retained to calculate all applicable mass limitations until Antidegradation review of the design flow (2.6 MGD) is completed by NMED.

B. TECHNOLOGY-BASED EFFLUENT LIMITATIONS/CONDITIONS

1. General Comments

Regulations promulgated at 40 CFR §122.44 (a) require technology-based effluent limitations to be placed in NPDES permits based on Secondary Treatment for POTWs and for non-POTWS based on **ELG**'s 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.

2. Effluent Limitation Guidelines

The facility is a POTW/POTW-like that has technology-based limits established at 40 CFR Part 133, Secondary Treatment Regulation. Pollutants with requirements 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, the same numbers as for BOD, are found at 40 CFR §133.102(b). Limits for pH are between 6-9 s.u. and are found at 40 CFR §133.102(c). Since these are technology-based requirements there is no compliance schedule provided to meet these limits. Compliance is required on the permit effective date.

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. The City of Artesia WWTP increased its design flow capacity from 1.30 MGD to 2.60 MGD. However, to avoid antidegradation evaluation process the permittee has requested 1.30 MGD for mass loading limitations. 1.3 MGD was previously used in the calculation; EPA retains the same flow in this permit draft. Therefore, mass limitations are determined by the following mathematical relationship:

Loading in lbs/day = pollutant concentration in mg/l * 8.34 (lbs)(l)/(mg)(MG) * 1.3 MGD

30-day average BOD/TSS loading = 30 mg/l * 8.34 (lbs)(l)/(mg)(MG) * 1.3 MGD = 325 lbs/day

7-day average BOD/TSS loading = 45 mg/l * 8.34 (lbs)(l)/(mg)(MG) * 1.3 MGD = 488 lbs/day

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

Parameter	30-day Avg (lbs./day, unless noted)	7-day Max. (lbs./day, unless noted)	30-day Avg. (mg/L, unless noted)	7-day Max. (mg/L, unless noted)
BOD ₅	325	488	30	45
BOD ₅ , % removal ¹	≥ 85	---	---	---
TSS	325	488	30	45
TSS, % removal ¹	≥ 85	---	---	---
pH	N/A	N/A	6.0 to 9.0 s.u.	6.0 to 9.0 s.u.

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

3. Pretreatment Regulation

The facility has two categorical industrial users which are subjected to local limits and categorical pretreatment standards per 40 CFR 419.25. Artesia PTU LLC (APTU) which sends process wastewater (129,600) gallons per day (GPD) and a non-process wastewater discharge (42,300) gallons per day GDP or a total combined discharge of 172,800 GPD to the WWTP. HF Sinclair Navajo Refining, LLC (HFSNR) sends process wastewater (93,600 gpd) and non-process wastewater (216,000 gpd) or a total combined discharge of 309,600 GPD to the WWTP.

Process wastewater means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product pursuant to 40 CFR 122.2 or defined in EPA Form 2A while non-

process wastewater means sanitary wastewater, non-contact cooling water, restaurant or cafeteria waste as described in EPA Form 2E or 40 CFR 438.2.

The WWTP was previously required to develop and enforce specific effluent limits for Industrial User(s), and all other users, as appropriate, which, together with appropriate changes in the POTW Treatment Plant's facilities or operation, are necessary to ensure renewed and continued compliance with the POTW's NPDES permit or sludge use or disposal practices, which is continued/maintained in this draft permit.

4. Sewage Sludge

Part IV of the draft permit addresses general requirements for the proposed generation and/or disposal of sewer sludge pursuant to Section 405(d) of the CWA and 40 CFR 503.

C. WATER QUALITY BASED LIMITATIONS

1. General Comments

Water quality-based requirements are necessary where effluent limits are 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/Tribal WQS. Effluent limitations and/or conditions established in the draft permit are in compliance with applicable State/Tribal WQS and applicable State/Tribal 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/Tribe narrative and numerical water quality criteria are used in conjunction with EPA criterion 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 amended through July 8, 2024). The receiving water is Pecos River, perennial stream, segment 20.6.4.231 NMAC of the Pecos River Basin. The stream designated uses are irrigation, livestock watering, wildlife habitat, primary contact and warmwater aquatic life. Applicable mass/loading limitation is calculated using the 1.3 MGD flow as mentioned in the technology water-based limitation due to the Antidegradation.

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 and the most stringent limitations are chosen as follows:

a. pH

For warmwater aquatic life, criterion for pH is between 6.6 and 9.0 s.u. pursuant to 20.6.4.900.H(5) NMAC.

b. Bacteria

For primary contact, criterion for E. coli bacteria is at 126 cfu/100 mL or MPN/100 mL, a single sample of E. coli bacteria of 410 cfu/100 mL or MPN/100 mL daily maximum pursuant to 20.6.4.900.D NMAC.

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 a water quality criterion, the permit must contain an effluent limit for that pollutant.

All applicable facilities are required to fill out appropriate sections of the Form 2A and 2S, to apply for an NPDES permit or reissuance of an NPDES permit. The new form is applicable not only to POTWs, but also to facilities that are 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.

Effluent data submitted (average values) in Part D of Form 2A are scanned against the MQL and State WQS. Pollutants with levels above the MQL and State WQS (and those with no established MQL) are analyzed for RP. For RP calculation purpose, ML values are used for results reported with less than the ML levels. NMED provides the ambient data, which are collected above the outfall (Station # 56PecosR176.2 during 2024). EPA re-evaluates the current limits for nonylphenol using the DMR data. The RP is determined as described in the NMIP. The attached RP calculations (spreadsheet) show there is no RP excursion for the Nonylphenol (DMR data from 07/01/2021 to 10/25/2024 shows below detection limit/no detection; no nonylphenol ambient data was available). EPA proposes limits for nonylphenol be removed, but still monitored with a reduced frequency of once/month while Chlordane and Toxaphene monitoring frequency is retained in the draft permit. Nonylphenol limit removal does not violate the Anti-backsliding regulation under 40 CFR 122.44(l)(2)(i).

The permittee has not adequately demonstrated the SSM requirement for: gamma-BHC (Lindane), Chlordane, Diazinon, 4,4'-DDT and derivatives, Endosulfan I (alpha), Endosulfan Sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide and Aroclor-1016. On January 13, 2025, EPA requested the permittee to demonstrate compliance with the SSM requirement showing that the method has the lowest ML of the analytical methods approved under 40 CFR 136 or required under 40 CFR chapter I, subchapter N or O, for the measured pollutant or pollutant parameter. The test MLs should be closer to the criteria, the EPA 608.3 ML or other facility reported ML/MDL values: The permittee has an opportunity to provide this information during public notice.

d. TRC

The facility uses UV to disinfect the effluent. However, TRC limit of 11 µg/l (for wildlife habitat 20.6.4.900.G NMAC) is retained in the draft permit in case chlorine-based product is used.

e.

For warmwater aquatic life (20.6.4.900.H(5) NMAC) and warmwater fishery use, criterion for DO is 5 mg/L or more. EPA retains the previous limits for DO to continue protecting the threatened/endangered fishes and mussel below. No DO modeling is necessary because:

- The downstream ambient DO level was 6 mg/L or more (3 data points in 2024 obtained by NMED).
- Per DMRs, effluent BOD was 13.2 mg/L or less when discharged (compared to 45 mg/L limit).
- Per DMRs, effluent DO was 7.12 mg/L or more when discharged (compare to 5 mg/L minimum).
- The receiving water is not impaired with DO.

f. Nutrients (total nitrogen and total phosphorus)

Previous permit required nutrients monitoring (total nitrogen and total phosphorus) and DMR data to be used to determine applicable limits to protect local and downstream water quality. Monitoring frequency for the nutrients is once/quarter. This requirement is continued in the proposed permit.

g. Per- and Polyfluoroalkyl Substances (PFAS) Monitoring

At this time, EPA has no data indicating that PFAS is present in the Artesia WWTP effluent. As explained at <https://www.epa.gov/pfas>, PFAS are a group of synthetic chemicals that have been in use since the 1940s. PFAS are found in a wide array of consumer and industrial products. PFAS manufacturing and processing facilities, facilities using PFAS in production of other products, airports, and military installations can be contributors of PFAS releases into the air, soil, and water. Due to their widespread use and persistence in the environment, most people in the United States have been exposed to PFAS. Exposure to some PFAS above certain levels may increase risk of adverse health effects.¹ EPA is collecting information to evaluate the potential impacts that discharges of PFAS from wastewater treatment plants may have on downstream drinking water, recreational and aquatic life uses.

Although the New Mexico Water Quality Standards do not include numeric criteria for PFAS, the 2022 New Mexico Water Quality Standards narrative criterion supply guidance including:

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

20.6.4.7(T)(2) NMAC states: “**Toxic pollutant**” means those pollutants, or combination of pollutants, including disease-causing agents, that after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will cause death, shortened life spans, disease, adverse behavioral changes, reproductive or physiological impairment or physical deformations in such organisms or their offspring.

Since PFAS chemicals are persistent in the environment and may lead to adverse human health and environmental effects, the draft permit requires that the facilities conduct influent, effluent, and biosolids sampling for PFAS according to the frequency outlined in the permit.

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

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

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

EPA notes that there is currently not an analytical method approved in 40 CFR Part 136 for PFAS. As stated in 40 CFR § 122.44(i)(1)(iv)(B), in the case of pollutants or pollutant parameters for which there are no approved methods under 40 CFR Part 136 or methods are not otherwise required under 40 CFR chapter I, subchapter N or O, monitoring shall be conducted according to a test procedure specified in the permit for such pollutants or pollutant parameters. Therefore, the draft permit specifies that until there is an analytical method approved in 40 CFR Part 136 for PFAS, monitoring shall be conducted using Method 1633. The Adsorbable Organic Fluorine CWA wastewater method 1621 can be used in conjunction with Method 1633, if appropriate. 

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

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 Table 9 (page 34 of the NMIP) for design flow between 1.0 to 5.0 MGD and based on compliance history.

Parameter	Frequency**	Sample Type
Flow	Daily	Totalized Meter
pH	Daily	Instantaneous Grab
BOD ₅ /TSS	1/week	6-hr Composite
% Removal	Monthly	Calculation
TRC	Daily*	Instantaneous Grab
E. coli Bacteria	1/week	Grab
DO	1/week	Instantaneous Grab
Selenium, total	1/month	6-hr Composite
Nutrients	Quarterly	6-hr Composite
Nonylphenol	1/month	6-hr Composite
In Table 1	Semi-annually or Quarterly	6-hr Composite

* Daily when chlorine is used as either backup bacteria control or disinfection of plant treatment equipment.

** Samples must be taken when discharge occurs.

E. WHOLE EFFLUENT TOXICITY

Procedures for implementing WET terms and conditions in NPDES permits are contained in the NMIP. Table 11 (page 42) of the NMIP outlines the type of WET testing for different types of discharges. The design flow is 2.6 MGD (4.0 cfs) for WET requirement. The receiving water (perennial stream) has a 4Q3 of 3.8 cfs; the CD is calculated as 56% (rounded up to nearest whole number). Submitted WET data shows RP does not exist for either species at the CD (see attached Reasonable Potential Analyzer). In this permit draft, EPA retains the previous WET monitoring using the same species, *Ceriodaphnia dubia* (Cd) and *Pimephales promelas* (Pp).

The proposed permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests based on a 0.75 dilution series. These additional effluent concentrations must be 24%, 32%, 42%, 56% and 75%. The low-flow effluent concentration (critical low-flow dilution) is defined as 56% effluent. The permittee shall limit and monitor discharge(s) as specified below:

Effluent Characteristic	Discharge Limitations	Monitoring Frequency	Monitoring Type
WET Testing (7-day Static Renewal) ¹	VALUE		
<i>Ceriodaphnia dubia</i>	Report	1/ Quarter ²	24-hr Composite
<i>Pimephales promelas</i>	Report	1/ Quarter ²	24-hr Composite

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

² If the four (4) quarterly tests occurring during the first full year of testing pass, then the monitoring frequency for *Ceriodaphnia dubia* may be reduced to once/six-months and *Pimephales promelas* may be reduced to once/year. See Part II of the Permit for monitoring frequency reduction. If eligible for frequency reduction after the first year, the permittee must request EPA before proceeding. If any test failures occur subsequently to monitoring frequency reduction, the frequency must return to once/quarter for the remainder of the permit term. The frequency must revert to once/quarter on the last day of permit term.

VI. TMDL REQUIREMENTS

The receiving water segment, Rio Penasco to Eagle Creek in Pecos River (20.6.4.231 NMAC) has been listed in 303(d) List. Primary Contact use is not supported. The probable cause is E. coli., No TMDLs have been developed and effluent limitations for E. coli are established based on the designated use criteria. The permit has a standard reopener clause that would allow the permit to be changed if at a later date additional requirement on new or revised TMDLs are completed.

VII. 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 water, which is protective of the designated uses of that water, NMAC Section 20.6.4.8.A.2. Applicable mass/loading limitation is calculated using the 1.3 MGD flow.

VIII. ENDANGERED SPECIES CONSIDERATIONS

According to the most recent county listing available at USFWS website, <https://ipac.ecosphere.fws.gov/location/74XEL2ZTM5G6DALXP6LEZHUTKQ/resources>, nine species in Rio Arriba are listed as endangered or threatened. Mexican Spotted Owl (T), Piping Plover (T), Pecos gambusia (T), Northern Aplomado Falcon, Texas Hornshell (E), Monarch Butterfly (T), Lee pincushion cactus(T), Sneed pincushion cactus (E) and Gypsum wild-buckwheat (T).

Mexican spotted owls (*Strix occidentalis lucida*) have dark eyes. They are an ashy-chestnut brown color with white and brown spots on their abdomen, back and head. Their brown tails are marked with thin white bands. They lack ear tufts. Young owls less than 5 months old have a downy appearance. Females are larger than males. The primary threats to its population in the U.S. (but likely not in Mexico) have transitioned from timber harvest to an increased risk of stand-replacing wildland fire. Recent forest management now emphasizes sustainable ecological function and a return toward pre-settlement fire regimes, both of which are more compatible with maintenance of spotted owl habitat conditions than the even-aged management regime practiced at the time of listing.

The piping plovers breed and raise young on sparsely vegetated sandbars and reservoir shorelines on river systems as well as on the shorelines of alkaline lakes. Changes in the quality and quantity of riverine habitat due primarily to damming and water withdrawals are a primary threat to the species. On the wintering grounds, piping plovers forage and roost along barrier and mainland beaches, sand, mud, and algal flats, wash over passes, salt marshes, and coastal lagoons. Habitat destruction and degradation are pervasive and have reduced suitable habitat. Human disturbance, predation, and invasive plants further reduce breeding and wintering habitat quality and affect survival. The permit does not authorize activities that may cause destruction of the Piping Plover habitat, and issuance of the permit will have no effect on this species

The Texas hornshell (*Popenaias popeii*) has been proposed to be designated critical habitat as a freshwater mussel, under the Endangered Species Act (Act). In total, the proposed critical habitat designation includes approximately 463.6 river miles (745.9 kilometers) in Eddy County, New Mexico.

There has been no firm indication Texas hornshell (mussel) is present in the receiving stream area according to 86 FR 5720 5735 February 9, 2018. Salinity levels are “too high for freshwater mussel habitation in much of the Pecos River from the confluence with the Black River in New Mexico,” and the population appears to be extremely small.

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 no information determining that the reissuance of this permit will have “effect” on the listed threatened and endangered species nor will adversely modify designated critical habitat. EPA makes this determination based on the following:

1. EPA has received no additional information since the previous permit issuance which would lead to revision of its determinations.
2. The draft permit is consistent with the Tribe/States WQS and does not increase pollutant loadings.
3. There is currently no information determining that the reissuance of this permit will have an “effect” beyond the environmental baseline on the additional listed threatened and endangered species.

IX. 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.

X. PERMIT REOPENER

The permit may be reopened and modified during the life of the permit if NMWQS are promulgated or revised. In addition, if the State 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.

XI. VARIANCE REQUESTS

None

XII. CERTIFICATION

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

XIII. FINAL DETERMINATION

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

XIV. ADMINISTRATIVE RECORD

The following information was used to develop the proposed permit:

A. APPLICATION(s)

EPA Application Form 2A and Form 2S dated September 26, 2024. Additional data submitted via email on October 28 and November 6, 2024.

B. 40 CFR CITATIONS

Sections 122, 124, 125, 133, 136.

C. STATE OF NEW MEXICO REFERENCES

New Mexico State Standards for Interstate and Intrastate Surface Water, 20.6.4 NMAC; WQCC effective June 13, 2024; EPA approved on July 8, 2024.

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

State of New Mexico 303(d) List for Assessed Stream and River Reaches, 2024-2026.

D. MISCELLANEOUS CORRESPONDENCE

Aron Korir, EPA emailed Nancy E. Peay, Project Manager, Smith Engineering informing them that the permit pollutant data submitted fails to meet SSM requirements.