NPDES PERMIT NO. NM0020681
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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DATE PREPARED

December 1, 2021

PERMIT ACTION

Proposed re-issuance of the current permit issued on September 9, 2016, with an effective date of October 1, 2016, and an expiration date of September 30, 2021.

RECEIVING WATER – BASIN

Rio Grande River – Middle Rio Grande Basin (Segment 20.6.4.103)

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
MG	Million gallons
MGD	Million gallons per day
ML	Method 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
NOEC	No observable effect concentration
NPDES	National Pollutant Discharge Elimination System
MQL	Minimum quantification level
O&G	Oil and grease
POTW	Publicly owned treatment works
RP	Reasonable potential
SS	Settleable solids
SSM	Sufficiently Sensitive 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

The changes from the current permit issued on September 9, 2016, with an effective date of October 1, 2016, and an expiration date of September 30, 2021, include:

- Interim and final limits for hexachlorobenzene have been added with a compliance schedule.
- New limits for DO have been added.
- Monitoring of O&G has been removed.
- Monitoring frequencies for BOD/TSS % removal and acrylonitrile have been reduced.
- Monitoring of toxic pollutants have been added.
- Optional MPN unit for E. coli bacteria has been added.
- WET limit for Pimephales promelas has been removed.

II. APPLICANT LOCATION and ACTIVITY

As described in the application, the facility (Outfall: Latitude 33° 06' 50" North and Longitude 107° 16' 56" West) is located at 1595 Animal Shelter Road in the City of Truth or Consequences, Sierra County, New Mexico.

Under the SIC code 4952, the applicant operates Truth or Consequences Wastewater Treatment Facility (WWTP), which has a design flow of 1.06 MGD providing sanitary services for approximately 6,465-population in City of Truth Or Consequences and City of Williamsburg. The WWTP provides primary and secondary levels of treatment. Effluent is chlorinated before being reused (under a ground water permit) and/or discharged to Rio Grande River via Outfall 001. Sewage sludge is processed and given away for land application. A map of the facility is attached.

III. EFFLUENT CHARACTERISTICS

Data submitted in Form 2A is as follows:

Parameter	**Max**	**Avg**
	(mg/l unless noted)	
Flow (MGD)	1.18	0.73
pH, minimum, standard units (s.u.)	6.81	N/A
pH, maximum, standard units (s.u.)	7.9	N/A
Temperature (winter), ºC	18.6	16.8
Temperature (summer), ºC	31.3	28.7
Biochemical Oxygen Demand, 5-day (BOD_5)	27	8
Total Suspended Solids (TSS)	86.5	11.7
E. coli (MPN/100 ml)	161	16
Ammonia (as N)		
TRC	0.09	0.02
DO	7.26	7
Total Kjeldahl Nitrogen (TKN)	1.3	0.4
Nitrate + Nitrite Nitrogen	23	10.7
Oil & Grease	<10.3	<10.3
Phosphorus (Total)	3.5	3.2
TDS	1335	1279

Since November 1, 2015 there have been exceedances of the effluent limitations in DMR as follows:

Parameter	Date Report	Exceedance, 30-day average, mg/L	Exceedance, daily max., mg/L	Note
BOD_5	6/30/21		53	
TSS	5/31/20	30.6	86.5	
TSS	12/31/20	30.4	76.2	
Cadmium	Many events	Many exceedances	Many exceedances	Data available upon request
BOD_5 % removal	6/30/21	Once		

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 CONDITIONS

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

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

Technology-based effluent limitations are established in the proposed draft permit for TSS and percent removal for each. Water quality-based effluent limitations are established in the proposed draft permit for BOD_5, E. coli bacteria, pH, TRC, DO, hexachlorobenzene, cadmium and acrylonitrile.

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 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.

2. Effluent Limitation Guidelines

The facility is a POTW/POTW-like that has technology-based limits established at 40 CFR Part 133.102, Secondary Treatment Regulation. Pollutants with limits established in this Chapter are BOD_5, TSS and pH. BOD_5 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). The limit for pH is 6-9 s.u. based on 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 POTWs or similar, the plant's design flow is used to establish the mass load. Mass limits are determined by the following mathematical relationship:

Loading in lbs/day = pollutant concentration in mg/l * 8.345 (lbs)(l)/(mg)(MG) * design flow in MGD

30-day average BOD_5/TSS loading = 30 mg/l * 8.345 (lbs)(l)/(mg)(MG) * 1.06 MGD = 265 lbs/day
7-day average BOD_5/TSS loading = 45 mg/l * 8.345 (lbs)(l)/(mg)(MG) * 1.06 MGD = 398 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	265	398	30	45
BOD_5, % removal[1]	≥ 85	---	---	---
TSS	265	398	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 is not subject to the full pretreatment program pursuant to 40 CFR 403.8. Previous general practices are retained in the permit draft.

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/Tribe WQS. Effluent limitations and/or conditions established in the draft permit are in compliance with applicable State/Tribe WQS and applicable State/Tribe 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 standards 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 EPA-approved on July 24, 2020). The receiving water is Rio Grande River (segment 20.6.4.103 NMAC of the Rio Grande River Basin). The stream designated uses are irrigation, livestock watering, wildlife habitat, marginal coldwater aquatic life, secondary contact and warmwater aquatic life.

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. pH

For marginal coldwater aquatic life, criteria for pH is between 6.6 and 9.0 s.u. pursuant to 20.6.4.900.H(3) NMAC.

b. Bacteria

For secondary contact, criterion for E. coli bacteria is at 548 cfu (or MPN)/100 ml monthly geometric mean and 2507 cfu (or MPN)/100 ml daily maximum pursuant to 20.6.4.900.E NMAC.

c. TRC

For wildlife habitat, criteria for TRC is 11 ug/l pursuant to 20.6.4.900.G NMAC. However, if a test result is less than the MQL specified in Part II.A of the permit it can be reported as zero for compliance purpose.

d. 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 RP to cause an in-stream excursion above a water quality criteria, the permit must contain an effluent limit for that pollutant.

All applicable facilities are required to fill out appropriate sections of the Form 2A and 2S, to apply for an NPDES permit or reissuance of an NPDES permit. The new form is applicable not only to POTWs, but also to facilities that are similar to POTWs, but which do not meet the regulatory definition of "publicly owned treatment works" (like private domestics, or similar facilities on Federal property). The forms were designed and promulgated to "make it easier for permit applicants to provide the necessary information with their applications and minimize the need for additional follow-up requests from permitting authorities," per the summary statement in the preamble to the Rule.

The 4Q3 and adjusted harmonic mean flows, 1.48 cfs and 3.58 cfs respectively, are provided by NMED at USGS 08361000 at Rio Grande Below Elephant Butte Dam. NMED also provides other ambient data of the receiving water shown in the attached Appendix A. Effluent data with average values submitted in Form 2A are used to analyze the RP. The pollutants (in Tables C & D) having test results above the MQLs/WQS are analyzed. Test results for cadmium and acrylonitrile (5 ug/L or higher and 11.5 ug/L on average, respectively) are re-evaluated against the most stringent WQS (0.7 ug/L and 2.5 ug/L, respectively). Attached Appendix A shows RP exists for these two parameters. In addition, there were many exceedances with the current limits for cadmium; EPA retains the limitations for cadmium and acrylonitrile, which will be re-evaluated again in the next permit renewal review. RP also exists for hexachlorobenzene with exact reported values of 6.2 ug/L on average. EPA establishes limitations for hexachlorobenzene with a 3-year compliance schedule (shown in the permit draft). EPA also establishes interim limitations for hexachlorobenzene at 6.2 ug/L (and corresponding mass loading) monthly average based on submitted data; this requirement applies to compliance schedule that exceeds one year per 40 CFR 122.47(a)(3). EPA Method 612 (or approved method under 40 CFR 136.3 with MDL/ML of 0.05 ug/L or lower) is required to test hexachlorobenzene per SSM requirement under 40 CFR 122.21(e)(3). Non-detect results using the required test method hexachlorobenzene maybe reported with zero (0) in DMR for compliance purpose.

All the reasonable potentiated parameters below were reported with data of ND (unless noted) at different ML. Summary of the tested methods are compared to the SSM requirement as follow:

Pollutants	**Test Result (Method), ug/L**	**Applicable WQS, ug/L**	**Suggested Method with SSM Complied MDL, ug/L**
Methylmercury	<0.2 (EPA 245.1)	1.11×10^{-4} (or 0.3 mg/kg in fish tissue)	NMED suggests EPA Method 1630
Benzidine	<10 (EPA 625.1)	0.002	0.08 (EPA Method 605)
Benzo(a)anthracene	<1 (EPA 625.1)	0.18	0.023 (EPA Method 610)
Benzo(a)pyrene	<1 (EPA 625.1)	0.18	0.023 (EPA Method 610)
3,4-benzofluoranthene	<1 (EPA 625.1)	0.18	0.023 (EPA Method 610)
Benzo(k)fluoranthene	<1 (EPA 625.1)	0.18	0.023 (EPA Method 610)
Bis(2-chloroethyl) ether	<10 (EPA 625.1)	5.3	0.3 (EPA Method 611)

Pollutants	Test Result (Method), ug/L	Applicable WQS, ug/L	Suggested Method with SSM Complied MDL, ug/L
Chrysene	<1 (EPA 625.1)	0.18	0.023 (EPA Method 610)
Diazinon	<0.5 (EPA 625.1)	0.17	0.13 (EPA Method 507)
Dibenzo(a,h)anthracene	<1 (EPA 625.1)	0.18	0.03 (EPA Method 610)
1,2-Diphenylhydrazine	<10 (EPA 625.1)	2	NA
Heptachlor	<0.01 (EPA 608.3)	0.00079	0.0015 (EPA Method 508)
Ideno(1,2,3-cd)pyrene	<1 (EPA 625.1)	0.18	0.043 (EPA Method 610)

Because the permittee has not demonstrated compliance with the SSM requirement for all the parameters in the table above, EPA proposes monitoring for these parameters at once/six months in this permit draft. All the analytical tests must meet the SSM requirement. Optionally during the public comment period, the permittee may submit additional test data (one scan for each pollutant) meeting the SSM requirement for these monitored parameters; EPA would reconsider this monitoring requirement depending on the analyses results. Pollutants shown in Part I.F of the draft permit, applicable to the State WQS that are not listed in Table C of Form 2A, will be tested, if the permit will be reapplied during the permit term pursuant to 40 CFR 122.21(j)(4)(iv).

e. DO

The State of New Mexico WQS criterion applicable to the marginal 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 City of Truth Or Consequences Wastewater Treatment Plant's design flow of 1.06 MGD (0.0464 m3/s) and the receiving water critical flow of 1.4782 cfs (0.04186 m3/s), various BOD5 factors including BOD5 Secondary Treatment Standards were considered and simulated to achieve the DO criterion. A complete characterization of Rio Grande 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 City of Truth Or Consequences Wastewater Treatment Plant's design flow is 1.06 MGD (0.0464 m3/s). The discharge location is located at Latitude 33° 06' 50" North (33.114), and Longitude 107° 16' 56" West (-107.282). Other effluent parameters provided in the permittee's application and applied in the model include DO (Avg: 7.0 mg/L and Max: 7.26 mg/L), and temperature (29 C).

NMED provided the following information. The critical low flow and average ambient temperature of Rio Grande River receiving stream are approximately 1.4782 cfs (0.04186 m3/s) and 11.8 degree Celsius. Ammonia (Avg: 0.1 mg/L), DO (Avg: 6.5 mg/L), Nitrate plus Nitrite Nitrogen (Avg: 0.1 mg/L) and Ambient E. Coli of 20 CFU/100ml were assumed since no data available.

EPA used the EPA's Environmental Justice Screening and Mapping Tool (Version 2019) to estimate the average elevation of the study area. The average elevation is approximately 4260 ft (1298 m). The average width and depth of Rio Grande River were assumed approximately 9 feet (3 meters) and 1 foot (0.33 meters), respectively, under critical flow condition. The studied Rio Grande River segment length is approximately 21.07 kilometers (13.09 miles).

The model results show an excursion of the receiving stream DO standard of 6 mg/L when the BOD_5 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 BOD_5 in Appendix XXX; other detail information is available upon request). Various BOD_5 factors were considered and simulated to achieve the DO criterion; EPA believes the optimal levels of BOD_5 are 20/30 (see attached graph with 20/30 BOD_5 in Appendix 2). The reported effluent BOD_5 in form 2A are 8.0 mg/L (avg.) and 27.0 mg/L (max.); which are below the 20/30 levels. EPA establishes the water-based limits for BOD_5 of 20 mg/L (for monthly average) and 30 mg/L (for 7-day maxima) in the draft permit; these limits are more stringent than the secondary treatment regulation above. Mass loadings are calculated as follows:

30-day average BOD_5 loading = 20 mg/l * 8.345 (lbs)(l)/(mg)(MG) * 1.06 MGD = 176 lbs/day
7-day average BOD_5 loading = 30 mg/l * 8.345 (lbs)(l)/(mg)(MG) * 1.06 MGD = 265 lbs/day

DO is required with 6 mg/L or more due to the water impairment mentioned under TMDL below. No compliance schedule is provided because it is in compliance according to the effluent data.

f. O&G

DMR and Form 2A show effluent levels were non-detect at 10.3 mg/L or less compared to the limitation of 15 mg/L maxima per BPJ. EPA removes the monitoring requirement for O&G in the permit draft; this removal does not violate the Antibacksliding regulation mentioned below.

5. 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). EPA established the monitoring frequency based on Table 9 (page 34 of the NMIP) for design flow between 1.0 and 5.0 MGD and history compliance.

Parameter	Frequency	Sample Type
Flow	Daily	Totalized Meter
pH	Daily	Instantaneous Grab
BOD5	Weekly	6-hr Composite
TSS	Weekly	6-hr Composite
% Removal	Monthly (reduced per the calculation method)	Calculation
TRC	Daily	Instantaneous Grab
E. coli Bacteria	Weekly	Grab
DO	Weekly	Instantaneous Grab
Hexachlorobenzene, interim limit	Weekly	Grab
Hexachlorobenzene, final limit	3/week	Grab
Cadmium	3/week	Grab
Acrylonitrile	Weekly (reduced due to no exceedance)	Grab
Nutrients	Quarterly	6-hr Composite
Toxics	1/six months	Grab

D. 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 receiving water (Rio Grande River), a perennial stream has a 4Q3 of 1.478 cfs (0.80 MGD). With the facility design flow rate of 1.06 MGD and mixing fraction of 100%, a CD is calculated at 57%. Testing species for WET are retained from the previous permit: Ceriodaphnia dubia (Cd) and Pimephales promelas (Pp). The permittee conducted eighteen (18) WET tests during the past permit cycle and passed all the tests. The reasonable potential analysis spreadsheet is automatically triggering an RP finding because the highest concentration tested in the previous dilution series is lower than the new critical dilution. But this does not necessarily mean there was an excursion or there is potential for toxicity. This only means that WET was not assessed at the new critical dilution or any concentration above 51%. It is not appropriate to use the findings of this spreadsheet for RP determination with the new series. No limit is needed; however, monitoring will continue being a requirement of this permit.

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%, 43%, 57%, 76%. The low-flow effluent concentration (critical low-flow dilution) is defined as 57% effluent. The permittee shall limit and monitor discharge(s) as specified below:

WHOLE EFFLUENT TOXICITY TESTING (7-Day Chronic Static Renewal/ NOEC) *	VALUE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Ceriodaphnia dubia	Report	Once/Quarter	24-Hr Composite
Pimephales promelas	Report	Once/Quarter	24-Hr Composite

*Monitoring and reporting requirements begin on the effective date of this permit. See Part II of the permit for WET testing requirements and additional WET monitoring and reporting conditions. Grab samples are allowed per method, if needed.

VI. TMDL REQUIREMENTS

The receiving water segment 20.6.4.103 NMAC Rio Grande (Caballo Reservoir to Elephant Butte Reservoir) was listed in 303(d) List in 2006 for DO impairment. Marginal coldwater aquatic life is not supporting. According to NMED the dissolved oxygen impairment may indicate excessive nutrients. There has been no TMDL issued for DO in this receiving stream. EPA continuously proposes monitoring for nutrients (total phosphorus & total nitrogen) at the discharge with a frequency of once/quarter; the data would help NMED in development of a TMDL. 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.

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 draft permit are developed from the Tribe/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 receiving water, which is protective of the designated uses of that water, NMAC Section 20.6.4.8.A.2.

VIII. 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)(2)(i)(B), which state in part that interim or final effluent limitations must be as stringent as those in the previous permit, unless information is available which was not available at the time of permit issuance. No draft permit condition is less stringent than the previous one.

IX. ENDANGERED SPECIES CONSIDERATIONS

According to a report updated on July 21, 2021 for Sierra County, NM obtained from http://ecos.fws.gov/ipac, there are eight endangered (E)/threatened (T) species that were all listed in the previous permit: Mexican spotted owl (T), Southwestern willow flycatcher (E), Yellow-billed Cuckoo (T), Narrow-headed gartersnake (T), Chiricahua leopard frog (T), Gila trout (T), Rio Grande Silvery Minnow (E) and Todsen's pennyroyal (E). These species were determined with "no effect". According to the report, there are no designated critical habitats for all the species downstream from the discharging facility.

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. The scope of the Federal Action is limited to the effects of authorizing the discharge subject to the limitations and conditions in the permit. 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. 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 States WQS and does not increase pollutant loadings. All the required WET tests previously passed with no indication of toxicity.

3. EPA determines that Items 1 and 2 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.

X. HISTORICAL and ARCHEOLOGICAL PRESERVATION CONSIDERATIONS

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

XI. 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.

XII. VARIANCE REQUESTS

None

XIII. 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.

XIV. FINAL DETERMINATION

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

XV. ADMINISTRATIVE RECORD

The following information was used to develop the draft permit:

A. APPLICATION(s)

EPA Application Forms 2A and 2S dated August 30, 2021. Additional information was received on November 1-2, 2021.

B. 40 CFR CITATIONS

Sections 122, 124, 125, 133, 136, 434

C. STATE OF NEW MEXICO REFERENCES

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

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

D. MISCELLANEOUS

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

NMED emails dated July 30, 2021; September 8, 2021

Final Recovery Plan for southern willow flycatcher, August 2002