

NPDES PERMIT NO. NM0029165

FACT SHEET

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

APPLICANT

City of Ruidoso Downs and Village of Ruidoso WWTP
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ISSUING OFFICE

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Region 6
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DATE PREPARED

April 24, 2017

PERMIT ACTION

Renewal of a permit previously issued on July 17, 2012, with an effective date of August 1, 2012, and an expiration date of July 31, 2017.

RECEIVING WATER – BASIN

Rio Ruidoso – Pecos River Basin (20.6.4.208 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
MG	Million gallons
MGD	Million gallons per day
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NMIP	New Mexico NPDES Permit Implementation Procedures
NMWQS	New Mexico State Standards for Interstate and Intrastate Surface Waters
NPDES	National Pollutant Discharge Elimination System
ML	Minimum quantification level
O&G	Oil and grease
POTW	Publically owned treatment works
RP	Reasonable potential
SS	Settleable solids
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 July 17, 2012, with an effective date of August 1, 2012, and an expiration date of July 31, 2017, are as follow:

- Monitoring frequency for E. coli has been reduced; loading limit has been added.
- Monitoring frequency for BOD/TSS and removal percentage have been reduced.
- New loading limits for TSS have been established.
- Limits for thallium have been removed.
- Monitoring for toxics pollutants have been established.
- Concentration limits for nutrients have been removed; new loading limits have been established.
- Previous limit for WET has been removed.

II. APPLICANT LOCATION and ACTIVITY

As described in the application, the facility (Outfall 001: Latitude 33° 21' 38" North and Longitude 105° 32' 35" West) is located at 26675 U.S. Highway 70, in Ruidoso Downs, Lincoln County, New Mexico.

Under the SIC code 4952, the applicant operates City of Ruidoso Downs and Village of Ruidoso WWTP, which has a peak month average day design flow of 2.7 MGD (1.9 MGD for an annual average day flow) serving a total population of 10,844 that includes the Village of Ruidoso and the City of Ruidoso Downs. The facility put into service in April 2011 provides advanced level of treatment utilizing membrane bioreactors. Effluent is disinfected with ultra violet system before discharged via Outfall 001 to the Rio Ruidoso, thence to the Rio Hondo, thence to the Pecos River (Segment 20.6.4.208 of the Pecos River Basin). Part of the effluent is used as washwater for the facility and to clean the membranes. Sewage sludge is processed onsite and placed in bags/containers for sale/give away for land application. A map of the facility is attached.

III. EFFLUENT CHARACTERISTICS

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

Parameter	Max	Avg
	(mg/l unless noted)	
pH, minimum, standard units (su)	6.82	NA
pH, maximum, standard units (su)	8.37	NA
Flow (MGD)	2.75	1.58
Temperature (C), winter	16.8	13.3
Temperature (C), summer	21	19.2
Biochemical Oxygen Demand, 5-day (BOD ₅)	2	2
E. coli (MPN)	60	5
Total Suspended Solids (TSS)	2.5	0.33
Ammonia (as N)	0	0
TRC	No data	No data
DO	7.43	6.45
Total Kjeldahl Nitrogen (TKN)	3.2	1.39
Nitrate + Nitrite Nitrogen	6.96	1.43
Oil & Grease	0	0
Phosphorus (Total)	0.5	0.06
TDS	1502.5	1485.06

DMRs data, from February 1, 2014 to February 1, 2017, shows numerical limit violations as follow:

Parameters	Date	30-day average value, mg/L	Daily max. value, mg/L
Nitrogen, total	11/30/2014	4.2	6.3
Phosphorus, total	5/31/2015	0.34	0.34
Nitrogen, total	12/31/2015		8.69
Nitrogen, total	11/30/2016		4.7
Nitrogen, total	12/31/2016		4.8

IV. REGULATORY AUTHORITY/PERMIT ACTION

In November 1972, Congress passed the Federal Water Pollution Control Act establishing the NPDES permit program to control water pollution. These amendments established technology-based or end-of-pipe control mechanisms and an interim goal to achieve “water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water”; more commonly known as the “swimmable, fishable” goal. Further amendments in 1977 of the CWA gave EPA the authority to implement pollution control programs such as setting wastewater standards for industry and established the basic structure for regulating pollutants discharges into the waters of the United States. In addition, it made it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit was obtained under its provisions. Regulations governing the EPA administered the NPDES permit program are generally found at 40 CFR §122 (program requirements & permit conditions), §124 (procedures for decision making), §125 (technology-based standards) and §136 (analytical procedures). Other parts of 40 CFR provide guidance for specific activities and may be used in this document as required.

The application was dated January 30, 2017. 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, and percent removal for each. Water quality-based effluent limitations are established in the proposed draft permit for *E. coli* bacteria, pH, TRC, nutrients and TSS.

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, 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; 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). However, existing limits for BOD and TSS are retained in the permit draft. 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 POTWs or similar, the plant's design flow is used to establish the mass load. Previously it was permitted with 2.7 MGD for loading calculations. Mass limits are determined by the following mathematical relationship:

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

$$30\text{-day average BOD/TSS loading} = 30 \text{ mg/l} * 8.345 \text{ (lbs)(l)/(mg)(MG)} * 2.7 \text{ MGD} = 676 \text{ lbs/day}$$

$$7\text{-day average BOD/TSS loading} = 45 \text{ mg/l} * 8.345 \text{ (lbs)(l)/(mg)(MG)} * 2.7 \text{ MGD} = 1014 \text{ lbs/day}$$

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

Effluent Characteristic Outfall 001 & 601	Discharge Limitation			
	lbs/day, unless noted		mg/l, unless noted	
Parameter	30-day Avg	7-day Max	30-day Avg	7-day Max
BOD	676	1014	30	45
BOD, % removal ¹	≥ 85	---	---	---
TSS	676	1014	30	45
TSS, % removal ¹	≥ 85	---	---	---
pH	N/A	N/A	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/Tribal 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 approved on June 5, 2013). The wastewater flows from the outfall to into the Rio Ruidoso, thence to the Rio Hondo, thence to the Pecos River in Waterbody Segment No. 20.6.4.208 of the Pecos River Basin. The stream designated uses fish culture, irrigation, livestock watering, wildlife habitat, coldwater aquatic life and primary contact.

4. Permit Action - Water Quality-Based Limits

Regulations promulgated at 40 CFR §122.44(d) require limits in addition to, or more stringent than effluent limitation guidelines (technology based). State WQS that are more stringent than effluent limitation guidelines are as follows:

a. pH

For coldwater aquatic life, criterion for pH is between 6.6 and 8.8 s.u. pursuant to 20.6.4.900.H(2) NMAC.

b. Bacteria

For primary contact, criterion for E. coli bacteria is at 126 cfu/100 ml monthly geometric mean and 410 cfu/100 ml daily maximum pursuant to 20.6.4.900.D NMAC. A loading limit has been added based on TMDL Requirements as described below.

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 in Form 2A by the permittee are used to analyze the RP. The pollutants (in Part D and previous monitored) having test results above the MQLs/WQS are analyzed. NMED provides some ambient data (including 4Q3) in attached Appendix A. Thallium is re-evaluated with the current data reported with “not detected” (ND) at 0.5 ug/L for 2012-2016 with 3/week sampling. PCBs were tested using EPA Method 608; test result (not detected at 0.2 ug/L) was not adequate in term of the applicable WQS (0.00064 ug/L). EPA requires PCBs to be tested again using the specific Method 1668A or as revised. Reported value of zero or ND is interpreted by the tested method detection limit (MDL/ML) for RP analysis. Averaged value of data set is utilized in the RP. Ambient data (for copper and zinc using geometric mean value) are obtained at the USGS 08387000, Rio Ruidoso at Hollywood for a period of last 5 years. Attached Appendix A shows RPs exist for cadmium, cyanide (total recoverable), acrylonitrile, benzidine, benzo(a)anthracene, benzo(a)pyrene, 3,4-benzofluoranthene, benzo(k)fluoranthene, chrysene, hexachlorobenzene, aldrin, heptachlor and heptachlor epoxide. EPA removes thallium limit in compliance with the Antidegradation because the current data were not available previously pursuant to 40 CFR 122.44(i)(2)(i).

All the reasonable potentiated parameters above were reported with data of ND at different MDL/ML. Summary of the tested methods are compared to the Sufficient Sensitive Method (SSM) requirement as follow:

Pollutants	Tested Result, ug/L	Applicable WQS, ug/L	Approved Method with SSM Complied MDL, ug/L
cadmium	2 (EPA 200.7)	1.22	0.05 (EPA 200.9)
cyanide (total recoverable)	10, 20 (SM 4500-E)	5.2	5 – 500 (EPA 335.4)
acrylonitrile	10, 20 (EPA 624)	2.5	0.5 (EPA 603)
benzidine	0.5 (EPA 625)	0.002	0.08 (EPA Method 605)
benzo(a)anthracene	0.5 (EPA 625)	0.18	0.023 (EPA Method 610)
Benzo(a)pyrene	0.5 (EPA 625)	0.18	0.023 (EPA Method 610)
3,4-benzofluoranthene	0.5 (EPA 625)	0.18	0.023 (EPA Method 610)
benzo(k)fluoranthene	0.5 (EPA 625)	0.18	0.023 (EPA Method 610)

chrysene	0.5 (EPA 625)	0.18	0.023 (EPA Method 610)
Hexachlorobenzene	0.5 (EPA 625)	0.0029	0.05 (EPA Method 612)
aldrin	0.01 (EPA 608)	0.0005	0.004 (EPA Method 608)
heptachlor	0.01 (EPA 608)	0.00079	0.0015 (EPA Method 508)
heptachlor epoixde	0.01 (EPA 608)	0.00039	0.004 (EPA Method 608)

Because the permittee has not demonstrated compliance with the SSM requirement per 40 CFR 122.21(e)(3) for all the parameters in the table above, except for aldrin and heptachlor epoixde, EPA proposes monitoring for these parameters at once/quarter in this permit draft. All the analytical tests must meet the SSM requirement. During the public comment period, the permittee optionally may demonstrate the SSM requirement is met for the monitored parameters; EPA may reconsider this monitoring requirement depend on the analyses. Pollutants applicable to the State WQS that are not listed in Part D of Form 2A will be tested during the permit term pursuant to 40 CFR 122.21(j)(4)(iv).

d. TRC

For wildlife habitat, criteria for TRC is 11 ug/l pursuant to 20.6.4.900.G NMAC.

e. DO

For coldwater aquatic life, criterion for DO is 6 mg/L pursuant to 20.6.4.900.H(2) NMAC. EPA uses LA-QUAL version 9.30 to model DO along this receiving stream; some of the factors used are 4Q3, effluent DO and BOD5 (30 mg/l for monthly average, 45 mg/l for 7-day maxima). Ambient data are obtained at the same USGS gauge and time period. The modeled output shows DO stays above 6 mg/L along this 8-mile long stream (see attached graph; other detail information is available upon request). No additional requirement is needed in term of the DO criterion.

f. Total Phosphorus (TP)

The use-specific criterion for TP is 0.1 mg/L or less pursuant to 20.6.4.208.B NMAC. This requirement is implemented under TMDL Requirements below.

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 and 5.0 MGD and based on compliance history.

Parameter	Frequency	Sample Type
Flow	Daily	Totalized
pH	Daily	Instantaneous Grab
BOD ₅ /TSS	once/2 weeks (reduced due to no exceedance)	6-hr Composite
% Removal	once/2 weeks (reduced due to no exceedance)	Calculation
TRC	Daily (when chlorine is used)	Instantaneous Grab
E. coli Bacteria	once/2 weeks (reduced due to no exceedance)	Grab
Nutrients (TP, TN)	3/month (consistent with other facility)	6-hr Composite
PCBs	1/term	Grab
Toxics	1/quarter	Grab

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 receiving water, a perennial stream, has a 4Q3 of 3.67 cfs (2.37 MGD). With the facility design flow rate of 2.7 MGD and mixing fraction of 100%, a CD is calculated about 53%, which was about 61% previously. WET testing species for this major POTW are: Ceriodaphnia dubia (Cd) and Pimephales promelas (Pp). All the required WET tests passed at 80% or 81% in the previous permit; no RP exists in the attached WET RP Analyzer. The existing permit carried over the previous-established limit for Pp; during the previous permit renewal review, EPA found no failure of the required WET tests. In 2006-permit renewal review stated the RP existed at the time, that led to the limitation. Based on the submitted current WET data, EPA removes the previous-established limit for Pp. This limit relaxation complies with the Antibracksliding because the current data were not available previously pursuant to 40 CFR 122.44(1)(2)(i).

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 22%, 30%, 40%, 53% and 71%. The low-flow effluent concentration (critical low-flow dilution) is defined as 53% effluent. The permittee shall monitor discharge(s) as specified below:

Effluent Characteristic	Discharge Limitations	Monitoring Requirements	
		Frequency	Type
WET Testing (7-day Static Renewal) ¹	NOEC		
Ceriodaphnia dubia	Report	1/3 months ²	24-hr Composite
Pimephales promelas	Report	1/3 months 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 Once/3 months shall be for the first year after the permit effective date; if all the test pass, frequencies would be once/6 months for Cd and once/year for Pp for the remaining term. If any WET test fails, frequency returns to once/3 months for the remaining term.

VI. TMDL REQUIREMENTS

The receiving water segment 20.6.4.208 NMAC, Rio Ruidoso (Eagle Creek to US Hwy 70 Bridge) is listed as impaired in the 2016-2018 303(d) List. Coldwater aquatic life and primary contact are not supported. Causes of the impairments are nutrient/eutrophication, turbidity and E. coli. EPA must ensure the permit conditions are consistent with assumptions/requirements of any available WLA in the approved TMDLs pursuant to 40 CFR 122.44(d)(1)(vii)(B).

TMDLs for E. coli and turbidity were approved by the EPA on September 2, 2015. A new loading limit (monthly average basis only) for E. coli (1.29×10^{10} cfu/day) is established in accordance with the TMDL. For TSS, new concentration limits of 18.6 mg/L for 30-day average (720 hours) and 29 mg/L for 7-day average (168 hours) with 30-day average loading limit of 419 lbs/day and 7-day average loading limit of 653 lbs/day (more stringent than the above technology-based limits) are established in this permit based on the TMDL. EPA provides no compliance schedule for these newly established limits because DMRs show the new limits have been met for these two pollutants.

A revised TMDL for nutrients was approved by EPA on December 12, 2016. All existing limits for nutrients (total phosphorus, “TP” and total nitrogen, “TN”) are superseded by newly established loading limits (monthly average basis) for the nutrients of 1.64 lbs/day for TP and 37.1 lbs/day for TN. The 30-day average and daily maximum concentrations for TP and TN also must be reported. For future growth,

if the facility's average discharge increases, a portion of the "future" WLA may be included in the permit limit up to inclusion of the full WLAs (at design capacity) of 2.36 lbs./day TP and 53.3 lbs./day TN. These limits have been developed in accordance with the revised 2016 TMDL and are in compliance with the CWA Section 303(d)(4) for Anti-backsliding.

In 1987, Congress passed amendments to the Clean Water Act (CWA) that included "anti-backsliding" provisions to restrict the circumstances under which NPDES permit limits may be relaxed upon permit renewal, reissuance, or modification. Section 303(d)(4) identifies further grounds for backsliding for water quality-based permits. For non-attainment waters, 303(d)(4) allows backsliding only where the existing permit limit sought to be revised is based on a TMDL or other WLA, and the revised permit limit assures attainment of the water quality standard at issue. The revised 2016 nutrient TMDL is calculated using the same protective, in-stream targets from the original TMDL, and the revised WLAs assigned to this facility are consistent with the TMDL. Therefore, if the conditions in the TMDL (i.e., WLAs) are met, attainment of the water quality standard is assured.

EPA has established a compliance schedule to meet the newly established TN limit and need to develop and implement additional sampling procedures and/or additional internal controls to ensure consistent treatment to remove nutrients and maintain water quality. In according to 40 CFR 122.47(a) a year is provided to comply with the new limit due to some months the reported data exceed 37.1 lbs./day (30-day avg.). Compliance schedule for the new TP limit is not provided because DMRs show it has been met. The permittee has begun developing scope of works to replace onsite systems, which presumably will reduce nutrient loadings from these non-point source facilities to the receiving water; please see attached letter dated April 21, 2017 for more information. EPA requests the permittee to submit a copy of the complete scope of works to EPA and NMED by end of the permit term.

The permit has a standard reopener clause that would allow the permit to be changed if at a later date additional requirements on new/revised TMDLs or temporary standards 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.

VIII. ENDANGERED SPECIES CONSIDERATIONS

According to the list updated on January 31, 2017 for Lincoln County, NM obtained from <http://ecos.fws.gov>, there are endangered (E)/threatened (T) species that were listed in the previous permit: Mexican spotted owl (T) and Kuenzler hedgehog cactus (E). These species were determined with "no effect". Since then, there have been 2 addition threatened/endangered species: Yellow-billed Cuckoo (T) and Southwestern willow flycatcher (E).

There has been no recovery plan for Yellow-billed Cuckoo. According to the Federal Register on 8/15/2014 (79 FR 48547 48652) the primary constituent elements specific to the western yellow-billed

cuckoo are: riparian woodlands with mixed willow-cottonwood vegetation, mesquite-thorn-forest vegetation, presence of a prey base consisting of large insect fauna, and river systems that are dynamic and provide hydrologic processes that encourage sediment movement and deposits that allow seedling germination and promote plant growth, maintenance, health, and vigor. The moist conditions that support riparian plant communities that provide western yellow-billed cuckoo habitat typically exist in lower elevation, broad floodplains, as well as where rivers and streams enter impoundments. Major factors affecting the cuckoo are (a) manmade features that alter watercourse hydrology, livestock overgrazing and encroachment from agriculture, climate change, (b) disease (West Nile virus) or predation (by hawk), (c) inadequacy of existing regulations and (d) others including pesticide chemical per the Federal Register on 10/03/2014 (79 FR 59991 60038). The southwestern willow flycatcher “breeds in relatively dense riparian tree and shrub communities associated with rivers, swamps, and other wetlands, including lakes (e.g., reservoirs).” per Final Recovery Plan Southwestern Willow Flycatcher (August 2002). Loss, destruction and modification of habitats have been mainly caused by: reduction/elimination of surface/subsurface water due to diversion and groundwater pumping; changes in dams and stream channelization; clearing and controlling vegetation; livestock grazing; changes in water and soil chemistry due to disruption of natural hydrologic cycles; establishing of invasive non-native plants; along with predators, disease and parasites. Loss of the flycatchers populations and habitat likely have been most severe in the Rio Grande Valley, vicinities of the Espanola and Las Cruces, along the San Francisco River in the vicinity of Glenwood in New Mexico. EPA has not found effect on the additional species caused by the discharge directly at the site and along the pathway of the receiving stream.

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 States WQS and does not increase pollutant loadings.
3. There is currently no information determining that the reissuance of this permit will have “effect” 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 Applications Form 2A and Form 2S dated January 30, 2017; additional data submitted February 15, 2017

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 June 5, 2013

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

Ruidoso TMDL, November 3, 2016; EPA approved on December 13, 2016

TMDL for the Sacramento Mountains (Rio Hondo, Tularosa and Rio Peñasco Watersheds), July 31, 2015; EPA approved on September 21, 2015

D. MISCELLANEOUS

NMIP, March 2012

NMED: emails dated February 9, 2017, March 14, 2017

Permittee: letters dated January 13, 2017; February 28, 2017; April 21, 2017

Final Recovery Plan Southwestern Willow Flycatcher, August 2002