NPDES PERMIT NO. NM0030520
FACT SHEET

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

APPLICANT

Jicarilla Apache Utility Authority
Dulce WWTP
P.O. Box 916
Dulce, NM 87528

ISSUING OFFICE

U.S. Environmental Protection Agency
Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

PREPARED BY

Ruben Alayon-Gonzalez
Environmental Engineer
Permitting Section (WDPE)
Water Division
VOICE: 214-665-2785
EMAIL: alayon-gonzalez.ruben@epa.gov

DATE PREPARED

March 7, 2019

PERMIT ACTION

Renewal of a permit previously issued on July 29, 2014, with an effective date of August 1, 2014, and an expiration date of July 31, 2019.

RECEIVING WATER – BASIN

Amargo Creek thence to the Navajo River in the San Juan River Basin.

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
MQL	Minimum quantification level
O&G	Oil and grease
POTW	Publicly owned treatment works
RP	Reasonable potential
SS	Settable 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

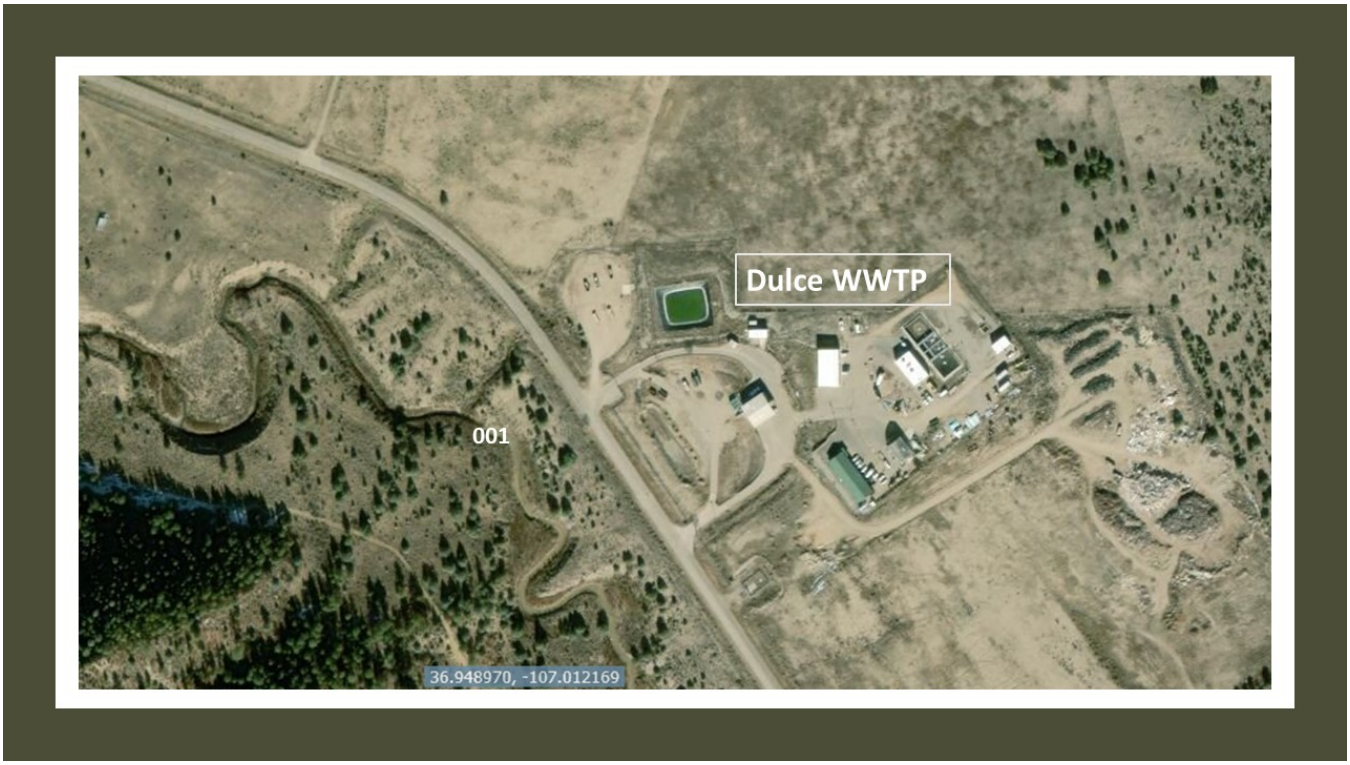
I. CHANGES FROM THE PREVIOUS PERMIT

Changes from the permit previously issued July 29, 2014, with an effective date of August 1, 2014, and an expiration date of July 31, 2019, are as follow:

1. WET monitoring has been added to the draft permit in accordance with 40 CFR 122.44(d)(1)(iv).
2. Sample type for BOD_5 and TSS changed to 3-hour composite.
3. *E. coli* limits have been changed to be consistent with the State WQS downstream.
4. Measurement frequency for BOD_5 and TSS percent removal changed to 1/month.

II. APPLICANT LOCATION and ACTIVITY

As described in the application, the discharge is from a tribally operated wastewater treatment plant. The site is located at 290 Narrow Gauge Road, Dulce, Rio Arriba County, New Mexico. The facility is located in the Jicarilla Apache Nation and discharges within the tribal boundaries.



Under the Standard Industrial Classification Code 4952, the applicant currently operates a domestic wastewater treatment facility. The Dulce wastewater treatment plant consists of headworks, two sequencing batch reactors, a flow-through ultraviolet (UV) system and an aerobic digester. Only air is added to the batch reactors. No additional chemicals are added by the facility during treatment. The facility has a design flow capacity of 0.6 MGD and for a total population served of 3,789.

III. EFFLUENT CHARACTERISTICS

Data submitted in Form 2A is as follows:

Parameter	Max.	Avg.
	(mg/l unless noted)	
Flow (MGD)	0.41	0.33
Temperature, winter, °C	13.8	12.1
Temperature, summer, °C	22.6	20.9
pH, minimum, standard units (su)	7.1	N/A
pH, maximum, standard units (su)	7.5	N/A
Biochemical Oxygen Demand, 5-day (BOD_5)	3.69	2.9
Total Suspended Solids (TSS)	5.7	2.5
Fecal Coliform (cfu/100ml)	10	1.13
Ammonia (as N)	6.3	3.37
Dissolved Oxygen (DO)	3.0	2.4
Total Kjeldahl Nitrogen (TKN)	7.6	4.1
Phosphorus (Total)	1.1	0.79
Total Dissolved Solids (TDS)	377	362
Nitrate Plus Nitrite Nitrogen	0.84	0.34
Oil and Grease	0.0	0.0

All pollutants reported in the DMR since 2016 were in compliance with the current NPDES permit. Because the facility's design flow is less than 1.0 MGD, the Expanded Effluent Testing Data (Part D of the application) is not required to be reported.

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.

A complete permit application was received on February 12, 2019. 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 TSS and BOD_5, and percent removal for each. Water quality-based effluent limitations are established in the proposed draft permit for *E. coli* bacteria, pH and TRC.

B. TECHNOLOGY-BASED EFFLUENT LIMITATIONS/CONDITIONS

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.

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 that has technology-based ELG's established at 40 CFR Part 133, Secondary Treatment Regulation. Pollutants with ELG's established in this Chapter are BOD_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). ELG's for pH are between 6-9 s.u. and are found at 40 CFR §133.102(c). The draft permit establishes new limits for percent removal for both BOD_5 and TSS. Since these are technology-based 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. 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) * 0.6 MGD = 150 lbs/day
7-day average BOD_5/TSS loading = 45 mg/l * 8.345 (lbs)(l)/(mg)(MG) * 0.6 MGD = 225 lbs/day

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

Effluent Characteristic	Discharge Limitation			
	lbs/day, unless noted		mg/l, unless noted	
Parameter	30-day Avg.	7-day Max	30-day Avg.	7-day Max
BOD_5	150	225	30	45
BOD_5, % minimum removal (*1)	≥ 85	---	---	---
TSS	150	225	30	45
TSS, % minimum 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.

C. WATER QUALITY BASED LIMITATIONS

1. General Comments

Water quality-based requirements are necessary where effluent limits more stringent than technology-based limits are necessary to maintain or achieve federal or state water quality limits. Under Section 301(b)(1)(C) of the CWA, discharges are subject to effluent limitations based on federal or state WQS. Effluent limitations and/or conditions established in the draft permit are in compliance with applicable State WQS and applicable State water quality management plans to assure that surface WQS of the receiving waters are protected and maintained or attained.

2. Implementation

The NPDES permits contain technology-based effluent limitations reflecting the best controls available. Where these technology-based permit limits do not protect water quality or the designated uses, additional water quality-based effluent limitations and/or conditions are included in the NPDES permits. State narrative and numerical water quality standards are used in conjunction with EPA criteria and other available toxicity information to determine the adequacy of technology-based permit limits and the need for additional water quality-based controls.

3. Tribal/State Water Quality Standards

The Jicarilla Apache Nation does not have EPA approved Tribal Water Quality Standards. From previous correspondence with the Jicarilla Environmental Protection Office it was confirmed that the Jicarilla Apache Nation does not have WQS; however, until they are established, the Jicarilla Apache Nation adopts the State of New Mexico's WQS. Based on this communication and to protect waters of the tribe, the New Mexico (NM) WQS are applied to the discharge. The New Mexico general and specific stream standards are provided in "New Mexico State Standards for Interstate and Intrastate Surface Waters," (NMWQS), 20.6.4 NMAC, effective August 11, 2017.

The downstream receiving waters are located within the boundaries of the Southern Ute Indian Tribe, which then flow into State of New Mexico waters. At this time, the Southern Ute have established tribal WQS although not officially approved by EPA. They are working with EPA Region 8 to establish WQS and do not have an estimated timeframe for submittal and approval. As a result, the effluent limitations

are based on a combination of Secondary Treatment Technology Standards and NM water quality criteria.

4. Permit Action - Water Quality-Based Limits

The New Mexico general and specific stream standards are provided in "New Mexico State Standards for Interstate and Intrastate Surface Waters," (NM WQS), 20.6.4 NMAC, effective August 11, 2017, and are available on the NMED's website at http://www.nmenv.state.nm.us/swqb/Standards/. The WQS have been approved by EPA in accordance with Section 303 of the CWA. These standards are used to protect Jicarilla Apache Nation water quality and downstream Southern Ute Nation water quality. The Jicarilla Apache Nation has not identified a designated use for Amargo Creek. Amargo Creek does not go dry but flows slowly at times inside the San Juan River Basin until arriving to the perennial reaches of the Navajo River in New Mexico at segment 20.6.4.407. The designated uses are: coldwater aquatic life, irrigation, livestock watering, public water supply, wildlife habitat and primary contact.

Salinity Control

The EPA required development of water quality standards for salinity in the Colorado River in 1972. The basin states formed the Colorado River Basin Salinity Control Forum (Forum) in 1973 to develop these standards including numeric salinity and a basin-wide plan of implementation for salinity control that EPA subsequently approved (http://www.nrcs.usda.gov/programs/salinity). The developed standards include numeric salinity standards and a basin-wide plan of implementation for salinity control.

The San Juan Watershed is located within the upper basin of the Colorado River Watershed and is defined by the San Juan River and its tributaries. Previous permits required quarterly monitoring of total dissolved solids. Effluent total dissolved solids are to be measured at the Dulce Wastewater Treatment Plant Outfall 001. Intake water is to be measured at the drinking water plant. The net total dissolved solids incremental increase in salinity shall be 400 mg/l or less. The increase shall be difference between the TDS measured from Outfall 001 discharge and the TDS measured at the drinking water plant intake.

The objective of this monitoring requirement is to determine if the effluent contains a concentration of TDS in excess of 400 mg/L of the raw intake water, indicating a significant contribution of salinity to the watershed. Review of the DMRs for TDS did not indicate a significant contribution of salinity to the watershed; however, a monitoring requirement will remain in the permit to monitor compliance with the TDS WQS.

a. pH

For primary contact, criteria for pH is between 6.6 and 9.0 s.u. pursuant to 20.6.4.900.D NMAC, similar to the current permit.

b. Bacteria

State WQS for *E. coli* bacteria, listed in 20.6.4.407 NMAC require the monthly geometric mean to be 126 colony forming units (cfu)/100 ml or less; single sample 235 cfu/100 ml or less. From the last two years of DMR data, the results of bacteria have been well under the new limit and the permit writer believes that the facility will maintain compliance with the new limit. Bacteria may be reported as either

cfu/100 ml or most probable number (MPN). This new limit will be protective of the downstream New Mexico waters.

c. Dissolved Oxygen

As part of the permitting process, EPA completed an evaluation of the permittee's impact on Amargo Creek's dissolved oxygen using a steady-state model (LA-QUAL) to evaluate the biochemical oxygen demand of the discharge. A complete characterization of Amargo Creek is not available since it's an unclassified waterbody. Where data not available, default values are used to estimate the flow and water quality parameters. The discharge is modeled using data obtained from the application, dmr's and default values for unavailable discharge characterization data.

The model evaluation demonstrated that the discharge will, at the secondary treatment technology standard, be sufficient to protect the receiving water dissolved oxygen in-stream standard of 5 mg/L downstream of the discharge. Therefore, the permit does not revise the BOD_5 limitation and does not require a minimum dissolved oxygen concentration. The output file and the calculations used are included with this fact sheet.

d. Toxics

i. General Comments

The CWA in Section 301 (b) requires that effluent limitations for point sources include any limitations necessary to meet water quality standards. Federal regulations found at 40 CFR §122.44 (d) state that if a discharge poses the reasonable potential to cause an in-stream excursion above a water quality criteria, the permit must contain an effluent limit for that pollutant.

All applicable facilities are required to fill out appropriate sections of the Form 2A and 2S, to apply for an NPDES permit or reissuance of an NPDES permit. The new form is applicable not only to POTWs, 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. The facility is designated as a minor and does not need to fill out the expanded pollutant testing section Part D of Form 2A. There are no toxics that need to be placed in the draft permit except for TRC described below.

ii. Critical Conditions

Critical conditions are used to establish certain permit limitations and conditions. The State of New Mexico WQS allows a mixing zone for establishing pollutant limits in discharges. Both the NMWQS and NMIP establish a critical low flow designated as 4Q3, as the minimum average four consecutive day flow which occurs with a frequency of once in three years. The draft permit establishes a critical dilution based on the 4Q3 provided by EPA staff of 0.12 cfs.

CD = Qe/ (F*Qa + Qe), where:

Qe = facility flow (0.6 MGD/0.93 cfs)
Qa = critical low flow of the receiving waters (0.078 MGD/0.12 cfs)
F = fraction of stream allowed for mixing (1.0)

CD = 0.6/ [(1.0) (0.078) + 0.6]
= 0.88 * 100
= 88%

d. TRC

The facility uses UV to treat bacteria. Consistent with all POTWs in the State of NM; however, TRC limitations are placed in permits to provide discharge limitations in the event chlorine is used as backup bacteria disinfection treatment and/or cleaning and disinfection of process equipment and/or used to control filamentaceous algae. The previous permit established water quality-based effluent limitations for TRC of 11 µg/l and that limit will be continued in the draft permit with the conditions above stated as to when the facility needs to provide monitoring for TRC.

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). The design flow is 0.6 MGD; this draft permit will continue the same monitoring frequency of the last permit since it complied with all limits. The only change will be the % removal frequency from 2/month to 1/month to follow similar NPDES permits with same design flows.

Parameter	Frequency	Sample Type
Flow	Continuous	Totalized
pH	1/day	Instantaneous Grab
BOD_5 & TSS	2/month	Composite
BOD_5 & TSS % Removal	1/week	Calculation
TDS (Intake, Discharge, Net Increase)	1/quarter	Grab
TRC	Daily	Instantaneous Grab
E. coli bacteria	1/week	Grab

D. WHOLE EFFLUENT TOXICITY

WET testing will be required in this draft permit to be consistent with the NMIP and other similar tribal permits in New Mexico. Procedures for implementing WET terms and conditions in NPDES permits are contained in the NMIP. Table 11 of Section V of the NMIP outlines the type of WET testing for different types of discharges.

Based on the nature of the discharge; wastewater treatment plant, the production flow; more than 0.1 MGD but less than 1.0 MGD, the nature of the receiving water: perennial, and the critical dilution; 88%, the NMIP directs the WET test to be a 7-day chronic for Ceriodaphnia dubia and Pimephales promelas. No limit will be proposed in this draft permit. The test series will be 0% (control), 28%, 37%, 50%, 66%, and 88%. The permittee shall limit and monitor discharge(s) as specified below:

EFFLUENT CHARACTERISTIC	DISCHARGE MONITORING	MONITORING REQUIREMENTS	
Whole Effluent Toxicity Testing (7 Day Static Renewal) (*1, *2)	VALUE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Ceriodaphnia dubia	Report	Once/Year	24-hr Composite
Pimephales promelas	Report	Once/Year	24-hr Composite

*1 Monitoring and reporting requirements begin on the effective date of this permit. Compliance with the Whole Effluent Toxicity limitations is required on the effective date of the permit See PART II, Whole Effluent Toxicity testing requirements for additional WET monitoring and reporting conditions.

*2 See Part II, Whole Effluent Toxicity testing requirements for specifics and shall occur between November 1 and April 30.

VI. TMDL REQUIREMENTS and 303(d) IMPAIRED WATERBODY

The receiving water, Amargo Creek, is located on tribal land and is not subject to state jurisdiction. As such, it is not identified as impaired and not included on the NM 303(d) lists of impaired waters. In addition, since the Jicarilla Apache Nation does not have EPA approved WQS, there is no tribal 303(d) list of impaired waters. No permit conditions are established to address impairment determinations; however, to protect waters of the tribe, permit conditions are established to meet the NM WQS. As noted above, the NM WQS have been adopted by Jicarilla Apache Nation until such time as the tribal WQS are established. 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 AND ANTIBACKSLIDING

The Jicarilla Apache Nation does not have EPA approved water quality standards or an antidegradation policy. The receiving stream, Amargo Creek, is located on tribal land and is not subject to state jurisdiction. The reissuance of this permit does not increase waste loads to the receiving stream. Monitoring requirements for pollutants established in the proposed permit will collect data for further analysis.

There are no reductions of effluent limitations; therefore, antibacksliding policy requirements are not applicable.

VIII. ENDANGERED SPECIES CONSIDERATIONS

According to the most recent county listing available at USFWS, Southwest Region 2 website, http://www.fws.gov/endangered/, seven species in Santa Fe are listed as endangered or threatened. The Jemez Mountains Salamander (*Plethodon neomexicanus*), Least tern (*Sterna antillarum*), Southwestern willow flycatcher (*Empidonax traillii*), New Mexico meadow jumping mouse (*Zapus hudsonius luteus*) are listed as endangered. The Yellow-billed Cuckoo (*Coccyzus americanus*), Mexican spotted owl (*Strix occidentalis lucida*) and Canada Lynx (*Lynx canadensis*) are listed as threatened.

The Jemez Mountains salamander (*Plethodon neomexicanus*) is uniformly dark brown above, with occasional fine gold to brassy coloring with stippling dorsally (on the back and sides) and is spotty gray ventrally. The salamander is slender and elongate, and it possesses foot webbing and a reduced fifth toe.

This salamander is a member of the family Plethodontidae, is strictly terrestrial and does not use standing surface water for any life stage.

The Least tern (Sterna antillarum) is the smallest of the North American terns, growing to a length of 21 to 23 cm and a wingspan of 48 to 53 cm. Their plumage and coloration is similar for both sexes and all ages. They generally nest on the ground, in open areas, and near appropriate feeding habitat. Nests are simple scrapes in the sand, and nesting sites are characterized by coarser and larger substrate materials. Least terns will also nest on anthropogenic sites near waterbodies with appropriate fish species and abundance, including industrial sites, dredged material deposition sites, sand pits, created habitats and rooftops.

The Southwestern willow flycatcher (*Empidonax traillii extimus*) breeds in dense riparian habitats in southwestern North America, and winters in southern Mexico, Central America, and northern South America. Its breeding range includes far western Texas, New Mexico, Arizona, southern California, southern portions of Nevada and Utah, southwestern Colorado, and possibly extreme northern portions of the Mexican States of Baja California del Norte, Sonora, and Chihuahua. The subspecies was listed as endangered effective March 29, 1995. Approximately 900 to 1100 pairs exist.

The New Mexico meadow jumping mouse (Zapus hudsonius luteus) is endemic to New Mexico, Arizona and a small area of southern Colorado. The jumping mouse is grayish-brown on the back, yellowish-brown on the sides, and white underneath. The species is about 4 to 10 inches in total length, with elongated feet and an extremely long, bicolored tail. The jumping mouse is a habitat specialist. It nests in dry soils, but uses moist, streamside, dense riparian/wetland vegetation up to an elevation of about 8,000 feet. The jumping mouse is generally nocturnal, but occasionally diurnal. It is active only during the growing season of the grasses and forbs on which it depends. During the growing season. The jumping mouse accumulates fat reserves by consuming seeds. Preparation for hibernation seems to be triggered by day length. The jumping mouse hibernates about 9 months out of the year, longer than most other mammals.

Yellow-billed Cuckoos (*Coccyzus americanus*) are fairly large, long, and slim birds. The mostly yellow bill is almost as long as the head, thick and slightly downcurved. They have a flat head, thin body, and very long tail. Wings appear pointed and swept back in flight. Yellow-billed Cuckoos are warm brown above and clean whitish below. Their blackish face mask is accompanied by a yellow eyeing. In flight, the outer part of the wings flash rufous. From below, the tail has wide white bands and narrower black ones.

Unlike most owls, **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 Canada Lynx (Lynx canadensis) is a medium -sized cat with long legs, large, well-furred paws, long tufts on the ears, and a short, black-tipped tail. The winter pelage of the lynx is dense and has a grizzled appearance with grayish-brown mixed with buff or pale brown fur on the back, and grayish-

white or buff-white fur on the belly. Adult males average 22 pounds in weight and 33.5 inches in length. The lynxs long legs and large feet make it highly adapted for hunting in deep snow. The distribution of lynx in North America is closely associated with the distribution of North American boreal forest.

In accordance with requirements under section 7(a)(2) of the Endangered Species Act, EPA has reviewed this permit for its effect on listed threatened and endangered species and designated critical habitat. After review, EPA has determined that the reissuance of this permit will have "*no effect*" on listed threatened and endangered species nor will adversely modify designated critical habitat. EPA makes this determination based on the following:

1. No additions have been made to the USFWS list of threatened and endangered species and critical habitat designation in the area of the discharge since prior issuance of the permit.

2. EPA has received no additional information since the previous permit issuance which would lead to revision of its determinations.

3. EPA determines that Items 1 and 2 results in no change to the environmental baseline established by the previous permit, therefore, EPA concludes that reissuance of this permit will have "no effect" on listed species and designated critical habitat.

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 EPA has the jurisdiction to certify this permit because the discharge occurs in Indian Country. A draft permit and draft public notice will be sent to the District Engineer, Corps of Engineers; to the Regional Director of the U.S. Fish and Wildlife Service and to the National Marine Fisheries Service prior to the publication of that notice.

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 received February 12, 2019.

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, effective August 11, 2017.

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

NPDES Compliance Evaluation Inspection, NM0030520, Inspection date April 25, 2017.