## NPDES PERMIT NO. NM0030414 FACT SHEET

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

## APPLICANT:

Rio Del Oro Wastewater Treatment Facility 401 Horner Street Belen, NM 87002

#### **ISSUING OFFICE:**

U. S. Environmental Agency Region 6 1201 Elm Street, Suite 500 Dallas, Texas 75270

## PREPARED BY:

Ruben Alayon-Gonzalez
Environmental Engineer
Permitting Section (6WD-PE)
Water Division
VOICE: 214-665-2785
EMAIL: alayon-gonzalez.ruben@epa.gov

DATE PREPARED: November 16, 2020

## PERMIT ACTION

It is proposed that the facility be reissued an NPDES permit for a 5-year term in accordance with regulations contained in 40 Code of Federal Regulations (CFR) 122.46(a).

#### RECEIVING WATER - BASIN

The discharge from Outfall 001 is to the arroyo named La Canada de la Loma de Arena thence to La Constancia Ditch, and finally to Rio Grande River in segment number 20.6.4.105 of the Rio Grande 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

COE United States Corp of Engineers

CWA Clean Water Act

DMR Discharge monitoring report ELG Effluent limitation guidelines

EPA United States Environmental Protection Agency

ESA Endangered Species Act FCB Fecal coliform bacteria

FWS United States Fish and Wildlife Service

mg/l Milligrams per liter
ug/l Micrograms per liter
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

MOL 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) SWOB 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 Wasteload allocation WET Whole effluent toxicity

WQCC New Mexico Water Quality Control Commission

WQMP Water Quality Management Plan

WWTP Wastewater treatment plant

## I. PROPOSED CHANGES FROM PREVIOUS PERMIT

Changes from the permit previously issued December 18, 2015 with an effective date of February 1, 2015, and expiration date of January 31, 2021, are:

1. WET test has been changed from acute to chronic test per NMIP.

## II. APPLICATION LOCATION

As described in the application, the facility is located at 1 PNM Access Road, Los Lunas in Section 26, Township 6 North Range 2 East, Valencia County, New Mexico. The discharge from Outfall 001 is to the arroyo named La Canada de la Loma de Arena thence to La Constancia Ditch intermittent stream 20.6.4.98, and finally reaches the Rio Grande River in segment number 20.6.4.105 of the Rio Grande Basin.

The discharge from the Outfall 001 is located on that water at Latitude 34° 43' 28.34". North, Longitude 106° 42' 21.46". West.



## III. APPLICANT ACTIVITY

Under the SIC Code 4952, the applicant operates a private wastewater treatment plant treating domestic waste only. The facility has a design flow capacity of 0.3 MGD and serves a population of 3,300.

The Rio del Oro extended aeration wastewater treatment facility is a membrane bioreactor (MBR). A description of the current flow path and treatment units is given in the following paragraphs.

Raw sewage is discharged into one of two (2) automatic fine bar screens (one on-line; one standby) that are provided with a common conveyor/washer/compactor (CWC). The CWC removes organics from the screenings and automatically dumps the washed and compacted screenings into a dumpster that is emptied at a landfill.

The effluent from the bar screen discharges into the pre-air basin to be mixed with the activated sludge (mixed liquor suspended solids). Not only are BOD and TSS removed in the pre-aeration basin, nitrogen is also removed with alternating periods of aeration (nitrification) and anoxic mixing (denitrification).

Two (2) submersible pumps continuously pump the mixed liquor from the pre-aeration basin into each of the two (2) separate bioreactors. Each reactor is equipped with four (4) submerged membrane units (SMU) which have 200 flat plate filters in each unit. Facility effluent is withdrawn through the flat plate membranes (filtered) by permeate pumps (two on-line; one standby), disinfected with ultraviolet light, and discharged to a holding basin for irrigation reuse. Two (2) UV disinfection units are provided (one on-line; one standby).

The excess mixed liquor suspended solids in the bioreactors automatically recycles back to the pre-aeration basin through telescoping valves. Waste activated sludge is removed from both bioreactors daily and is discharged into the sludge holding tank.

Air is supplied to the pre-aeration and bioreactor basins with two (2) separate aeration systems. Two (2) aeration blowers are provided for each system (one on-line; one standby). The MBR is monitored and controlled by a programmable logic controller (PLC) that also provides supervisory control and data acquisition for alarm notification. Operator control is provided through a human-machine interface that is simply a PC located in the admin/lab building. In the event of a failure of the PLC, the facility can also be operated manually.

The facility pumps sludge from the aerobic digester into a septage truck which hold approximately 2,000 gallons. From here, the sludge is surface disposed at a dedicated site approximately 4 miles from the facility. The sludge is surface disposed and incorporated into the soil approximately four hours after application.

Some of the effluent is being re-used, upon request by the Valley Improvement Association (VIA) for watering of their parks. This facility has a discharge permit from NMED (NMDP-1569) for re-use water, Class IA.

## IV. EFFLUENT CHARACTERISTICS

The facility submitted EPA Permit Application Form 2A & 2S, which provides a quantitative description of the discharge shown below.

Pollutant Table – 1

	Max. Daily	Avg. Daily	
PARAMETER	(mg/L, unless noted)	(mg/L, unless noted)	
Flow, MGD	0.237 MGD	0.175 MGD	
Temperature, winter	15 °C	14 °C	
Temperature, summer	28 °C	26 °C	

PARAMETER	Max. Daily	Avg. Daily
pH, minimum	7.22 s.u.	
pH, maximum	7.62 s.u.	
BOD <sub>5</sub>	8.6	4.73
FCB	59.8 MPN	17.3 MPN
TSS	4.0	4.0
Ammonia (as N)	9.4	7.3
TRC	0.0	0.0
D.O.	5.9	5.33
Total Kjeldahl Nitrogen (TKN)	7.7	4.26
Nitrate plus Nitrite Nitrogen	5.2	1.73
Oil & Grease	ND	ND
Phosphorus (Total)	1.6	1.17
Total Dissolved Solids (TDS)	370	256

A summary of the last 3-years of available pollutant data taken from DMRs shows the following exceedances of pollutant limits.

Table 2

POLLUTANT/limit	Month/Year of Exceedances - Value
E. coli/max – 126 cfu/100 ml	Oct/18 – 313
E. coli – 1.43 bcfu/day	Oct/18 – 2.11

In addition, on June 19, 2019, a Compliance Evaluation Inspection (CEI) was conducted at the facility by NMED, SWQB. The purpose of this inspection is to determine compliance with the NPDES permitting program in accordance with requirements of the federal CWA. As part of this inspection the DMRs were also reviewed to determine if any excursions of the NPDES permit limits took place during this time. An overall Satisfactory rating was the result of the CEI.

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

## VI. DRAFT PERMIT RATIONALE

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

Regulations contained in 40 CFR §122.44 require that NPDES permit limits are developed that meet the more stringent of either technology-based ELGs, 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<sub>5</sub>. Water quality-based effluent limitations are established in the proposed draft permit for E.coli bacteria, TRC and pH.

## B. TECHNOLOGY-BASED EFFLUENT LIMITATIONS/CONDITIONS

Regulations promulgated at 40 CFR §122.44 (a) require technology-based effluent limitations to be placed in NPDES permits based on ELGs where applicable, on BPJ in the absence of guidelines, or on a combination of the two. In the absence of promulgated guidelines for the discharge, permit conditions may be established using BPJ procedures. EPA establishes limitations based on the following technology-based controls: BPT, BCT, and BAT. These levels of treatment are:

BPT – The first level of technology-based standards generally based on the average of the best existing performance facilities within an industrial category or subcategory.

BCT – Technology-based standard for the discharge from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and O&G.

BAT – The most appropriate means available on a national basis for controlling the direct discharge of toxic and non-conventional pollutants to navigable waters. BAT effluent limits represent the best existing performance of treatment technologies that are economically achievable within an industrial point source category or subcategory.

Rio del Oro facility is a WWTP treating sanitary wastewater. POTWs have technology-based ELGs established at 40 CFR 133, Secondary Treatment Regulation. Pollutants with ELGs 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 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, are found at 40 CFR §133.102(b).

ELGs for pH are between 6.0-9.0 s.u. and are found at 40 CFR §133.102 (c). 7-day average limitations for BOD will be discussed in the water quality-based limits.

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 WWTPs, 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/gal \* design flow in MGD 30-day average BOD/TSS loading = 30 mg/L \* 8.345 lbs/gal \* 0.3 MGD 30-day average BOD/TSS loading = 75 lbs/day 7-day average TSS loading = 45 mg/L \* 8.345 lbs/gal \* 0.3 MGD 7-day average TSS loading = 113 lbs/day

Table 3

EFFLUENT	DISCHARGE LIMITATIONS				
CHARACTERISTICS	lbs/day		mg/l (unless noted)		
Parameter	30-Day Avg.	7-Day	30-Day	7-Day	Daily
		Avg.	Avg.	Avg.	Max
Flow	N/A	N/A	MGD	MGD	MGD
BOD <sub>5</sub>	75	113	30	45	***
TSS	75	113	30	45	***
Percent Removal (minimum), BOD5	≥85%	***	***	***	***
Percent Removal (minimum), TSS	≥85%	***	***	***	***

## C. WATER QUALITY-BASED EFFLUENT LIMITATIONS/CONDITIONS

## 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 the State WQS and applicable State water quality management plans to assure that surface WQS of the receiving waters are protected and maintained or attained.

## 2. Implementation

The NPDES permits contain technology-based effluent limitations reflecting the best controls available. Where these technology-based permit limits do not protect water quality or the designated uses, additional water quality-based effluent limitations and/or conditions are

included in the NPDES permits. State narrative and numerical water quality standards are used in conjunction with EPA criteria and other available toxicity information to determine the adequacy of technology-based permit limits and the need for additional water quality-based controls

## 3. State Water Quality Standards

The facility is located in Los Lunas County, New Mexico and discharges into La Canada de la Loma Arroyo thence to La Constancia Ditch in Segment 20.6.4.98, thence to the Rio Grande River in Segment No. 20.6.4.105 of the Rio Grande Basin. Based on the NMSWQS, 20.6.4 NMAC, effective July 24, 2020, the designated uses of the receiving water are livestock watering, wildlife habitat, marginal warm water aquatic life and primary contact.

## 4. Permit Action – Water Quality-Based Limits

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) require limits in addition to, or more stringent than effluent limitation guidelines (technology based). State WQS that are more stringent than effluent limitation guidelines are as follows:

#### a. Bacteria

New Mexico WQS for *E. coli* bacteria are specified in 20.6.4.900.D NMAC. The NMWQS designed to protect the primary contact use requires a monthly geometric mean *E. coli* limit of 126 cfu/100 mL or less and a single sample *E. coli* limit of 410 cfu/100 ml or less. Due to the TMDL on the receiving waterbody, the WLA will be applied. See more of a description in the TMDL requirements section.

## b. pH

Limitations for pH are based on the WQS. Therefore, the draft permit includes a minimum pH of 6.6 s.u. and a maximum of 9.0 s.u., similar to the current permit.

#### c. Toxics

#### i. General Comments

CWA §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 a minor POTW for permitting purposes and does not need to fill out the expanded pollutant testing list described in EPA Application Form 2A, Part D. There are no toxics that need to be placed in the draft permit except for TRC described below.

#### ii. Total Residue Chorine

Information submitted in the application indicates that the facility uses UV for bacteria control. The previous permit established water quality-based effluent limitations for TRC of 11 ug/L. This permit requirement will be maintained in the draft permit and measured whenever chlorine is used as part of a backup disinfection treatment, cleaning or maintenance work. The effluent limitation for TRC is the instantaneous maximum and cannot be averaged for reporting purposes.

## iii. Critical Conditions

Critical dilutions 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. The mixing zones established by the State of New Mexico do not overlap with tribal/pueblo boarders. 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. A low flow, or 4Q3, of (0) ft3/second (cfs) (0.0 MGD) was provided by NMED.

## D. TMDL REQUIREMENTS

Section 303(d) of the Federal Clean Water Act requires states to develop a TMDL management plan for water bodies determined to be water quality limited. A TMDL documents the amount of a pollutant a water body can assimilate without violating a state's water quality standards. It also allocates a load capacity to known point sources and nonpoint sources at a given flow. EPA defines TMDLs in 40 CFR Part 130 as the sum of the individual WLAs for point sources and background conditions and includes a margin of safety.

The NPDES regulations at 40 CFR 122.44(d)(1)(vii)(B) require that NPDES permits include effluent limitations developed consistent with the assumptions and requirements of any WLA that has been assigned to the discharge as part of an approved TMDL.

Rio del Oro WWTF (NM0030414) discharges to La Canada de la Loma de Arena Arroyo which is linked to la Constancia Ditch and thence to the Rio Grande River. Each NPDES permitted facility that discharges into an impaired reach has a wasteload allocation (WLA) included in this TMDL.

Waste Load Allocations for E. coli

Table 4

Facility	Design	E. coli Effluent	Conversion	Waste Load
	Capacity	Limit	Factor(b)	Allocation
	Flow (mgd)	(cfu/100mL) (a)		(cfu/day)
NM0030414	0.3	126	$3.79 \times 10^7$	$1.43 \times 10^9$
Rio del Oro WWTF				

- (a) Based on current in-stream New Mexico WQS for Rio Grande (Rio Puerco to Isleta Pueblo bnd).
- (b) Based on equation 2.

For conversion of cfu to the reportable MPN:

1 cfu (colony forming units) = 1 MPN (most probable number)

A standard reopener clause is established in the permit that would allow additional conditions if an additional watershed TMDL is developed and/or new water quality standards are established.

## E. Whole Effluent Toxicity Testing

In Section 4.3.c.iii above; "Critical Conditions", it was shown that the CD for the facility is 100%. Based on the nature of the discharge; POTW, the design flow; greater than 0.1 MGD, the nature of the receiving water; intermittent, and the critical dilution; 100%, the NMIP directs the WET test to be a 7-day chronic test using *Ceriodaphnia dubia* and *Pimephales promelas* (fathead minnow) a once per five year frequency.

The Canada de la Loma Arroyo has a 4Q3 of 0 MGD; therefore, the critical dilution is 100%. The draft permit proposes the following tests with a dilution series of 32%, 42%, 56%, 75%, and 100% in addition to the control (0% effluent).

During the period beginning the effective date of the permit and lasting through the expiration date of the permit, the permittee is authorized to discharge from Outfall 001 – La Canada de la Loma Arroyo thence to La Constancia Ditch, an intermittent stream 20.6.4.98 NMEC, thence to the Rio Grande River in Segment No. 20.6.4.105 of the Middle Rio Grande Basin. Discharges shall be limited and monitored by the permittee as specified below:

WHOLE EFFLUENT	VALUE	FREQUENCY	TYPE
TOXICITY TESTING			
(7-Day Chronic Static			
Renewal/ NOEC)			
Ceriodaphnia dubia	Report	Once/5 years	24-Hr Composite
Pimephales promelas	Report	Once/5 years	24-Hr Composite

## F. Monitoring Frequencies 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). *E. coli* shall be sampled and reported twice/month. When a backup chlorinated disinfection system is used as a bacteria control chemical for the effluent, monitoring for TRC shall be measured and reported five (5) per week. pH shall be measured and reported five (5) times per week, by instantaneous grab sample.

No compliance schedule is included in this draft permit.

## VII. FACILITY OPERATIONAL PRACTICES

#### A. SEWAGE SLUDGE PRACTICES

The permittee shall use only those sewage sludge disposal or reuse practices that comply with the federal regulations established in 40 CFR Part 503 "Standards for the Use or Disposal of Sewage Sludge". EPA may at a later date issue a sludge-only permit. Until such future issuance of a sludge-only permit, sludge management and disposal at the facility will be subject to Part 503 sewage sludge requirements. Part 503 regulations are self-implementing, which means that facilities must comply with them whether or not a sludge-only permit has been issued. Part IV of the draft permit contains sewage sludge permit requirements.

## B. WASTEWATER POLLUTION PREVENTION REQUIREMENTS

The permittee shall institute programs directed towards pollution prevention. The permittee will institute programs to improve the operating efficiency and extend the useful life of the treatment system.

## C. INDUSTRIAL WASTEWATER CONTRIBUTIONS

The treatment plant has no non-categorical Significant Industrial User's (SIU) and no Categorical Industrial User's (CIU). The EPA has tentatively determined that the permittee will not be required to develop a full pretreatment program. However, general pretreatment provisions have been required.

## D. ELECTRONIC REPORTING RULE

The EPA published the electronic reporting rule in the federal register (80 FR 64063) on October 22, 2015. The rule became effective on December 21, 2015. One year after the effective date of the final rule, NPDES regulated entities that are required to submit DMRs (including majors and non-majors, individually permitted facilities and facilities covered by general permits) must do so electronically. All DMRs shall be electronically reported effective December 21, 2016, per 40 CFR 127.16. If you are submitting on paper before December 21, 2016, you must report on the Discharge Monitoring Report (DMR) Form EPA. No. 3320-1 in accordance with the "General Instructions" provided on the form. No additional copies are needed if reporting electronically,

however, when submitting paper form EPA No. 3320-1, the permittee shall submit the original DMR signed and certified as required by Part III.D.11 and all other reports required by Part III.D. to the EPA and other agencies as required. (See Part III.D.IV of the permit.). To submit electronically, access the NetDMR website at <a href="https://cdxnodengn.epa.gov/net-netdmr/">https://cdxnodengn.epa.gov/net-netdmr/</a> and contact the R6NetDMR@epa.gov in-box for further instructions. Authorized NPDES programs will begin electronically receiving these DMRs from all DMR filers and start sharing these data with each other.

## VIII. 303(d) LIST

In New Mexico's 2018-2020 CWA §303(d) / 305(b) Integrated List, Rio Grande (Rio Puerco to Isleta Pueblo bnd) a TMDL for *E. coli* was developed in 2010, to address the *E. coli* impairment. The standard reopener language in the permit allows additional permit conditions if warranted by future changes and/or new TMDLs. No additional pollutants are listed for this waterbody.

## IX. ANTIDEGRADATION

The New Mexico 20.6.4.105 NMAC "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. The permit requirements are protective of the assimilative capacity of the receiving waters, and are protective of the designated uses of that water. There are no increases of pollutants being discharged to the receiving waters authorized in the proposed permit.

## X. 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. The change in bacteria monitoring is consistent with a change of WQS and does not constitute antibacksliding since one indicator bacteria, FCB, has been replaced by a different one; E. coli. All of the changes represent permit requirements that are consistent with the States WQS and WQMP.

## XI. HISTORICAL AND ARCHEOLOGICAL PRESERVATION CONSIDERATIONS

The reissuance of the permit should have no impact on historical and/or archeological since no construction activities are authorized by its reissuance.

#### XII. ENDANGERED SPECIES

The FWS New Mexico Ecological Services Field Office lists three endangered species and one threatened species in Valencia County as shown on FWS' website <a href="http://www.fws.gov/">http://www.fws.gov/</a> and they

are the black-footed ferret, Mexican spotted owl, Rio Grande silvery minnow and southwestern willow flycatcher.

**Black-footed ferret** habitat occurs in riparian areas along streams, rivers, and other wetlands where dense willow, cottonwood, buttonbush and arrow-weed are present. The primary reason for decline is the reduction, degradation and elimination of the riparian habitat. Other reasons include brood parasitism by the brown-headed cowbird and stochastic events like fire and floods that destroy fragmented populations.

**Mexican spotted owl** 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 presettlement 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.

Rio Grande silvery minnow is known to occur only in one reach of the Rio Grande in New Mexico, a 280 km (174 mi) stretch of river that runs from Cochiti Dam to the headwaters of Elephant Butte Reservoir. This includes a small portion of the lower Jemez River, a tributary to the Rio Grande north of Albuquerque. Its current habitat is limited to about seven percent of its former range. In December 2008, silvery minnows were introduced into the Rio Grande near Big Bend, Texas as a nonessential, experimental population under section 10(j) of the ESA (73 FR 74357). Preliminary monitoring is being conducted to determine whether or not that reintroduction has been successful. Throughout much of its historic range, the decline of the Rio Grande silvery minnow is attributed primarily to destruction and modification of its habitat due to dewatering and diversion of water, water impoundment, and modification of the river (channelization). Competition and predation by introduced non-native species, water quality degradation, and other factors also have contributed to its decline.

**Southwestern willow flycatcher** 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.

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. There have been no changes in operation and treatment of 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. Also, the draft permit is consistent with the State's WQS and does not increase pollutant loadings.
- 3. The NPDES program regulates the discharge of pollutants from the treatment facility and does not regulate forest and agricultural management practices.

EPA determines that Items 1, 2 and 3 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.

#### XIII. PERMIT REOPENER

The permit may be reopened and modified during the life of the permit in accordance with the provisions of 40 CFR §124.5.

## XIV. VARIANCE REQUESTS

No variance requests have been received.

## XV. COMPLIANCE HISTORY

During the last five year the facility has discharged, it is in compliance with all of its permit requirements. Biochemical oxygen demand, total suspended solids and total residual chlorine monitoring frequencies have been reduced based on compliance history and design capacity.

## XVI. CERTIFICATION

This permit is in the process of certification by the State agency following regulations promulgated at 40 CFR 124.53. A draft permit and draft public notice will be sent to the District Engineer, Corps of Engineers; to the Regional Director of the U.S. Fish and Wildlife Service and to the National Marine Fisheries Service prior to the publication of that notice.

#### XVII. FINAL DETERMINATION

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

#### XVIII. ADMINISTRATIVE RECORD

The following section is a list of the fact sheet citations to applicable statutory or regulatory provisions and appropriate supporting references to the administrative record required by 40 CFR 124.9:

## A. PERMIT(S)

NPDES Permit No. NM0030414 December 2015.

## B. APPLICATION(S)

EPA Applications 2A and 2S received September 2020.

## C. STATE WATER QUALITY REFERENCES

The general and specific stream standards are provided in "New Mexico State Standards for Interstate and Intrastate Surface Waters," (20.6.4 NMAC, amended through 2012).

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

NPDES Inspection June 19, 2019