

NPDES PERMIT NO. NM0027782
FACT SHEET

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

APPLICANT

New Mexico Water Service Company – Rio Communities WWTF
401 Horner Street
Belen, NM 87002

ISSUING OFFICE

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

PREPARED BY

Ruben Alayon-Gonzalez
Permitting Section (6WQ-PP)
Water Division
VOICE: 214-665-2785
FAX: 214-665-2191
EMAIL: alayon-gonzalez.ruben@epa.gov

DATE PREPARED

February 7, 2019

PERMIT ACTION

Proposed reissuance of the current NPDES permit issued May 20, 2014, with an effective date of June 1, 2014, and an expiration date of May 31, 2019.

RECEIVING WATER – BASIN

Lower Peralta Riverside Drain – 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
COD	Chemical oxygen demand
COE	United States Corp of Engineers
CWA	Clean Water Act
DMR	Discharge monitoring report
ELG	Effluent limitations guidelines
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
FCB	Fecal coliform bacteria
F&WS	United States Fish and Wildlife Service
mg/L	Milligrams per liter
µg/L	Micrograms per liter
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
PCB	Polychlorinated Biphenyl
POTW	Publically owned treatment works
RP	Reasonable potential
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	Wasteload allocation
WET	Whole effluent toxicity
WQCC	New Mexico Water Quality Control Commission
WQMP	Water Quality Management Plan
WWTP	Wastewater treatment plant

In this document, references to State WQS and/or rules shall collectively mean the State of New Mexico.

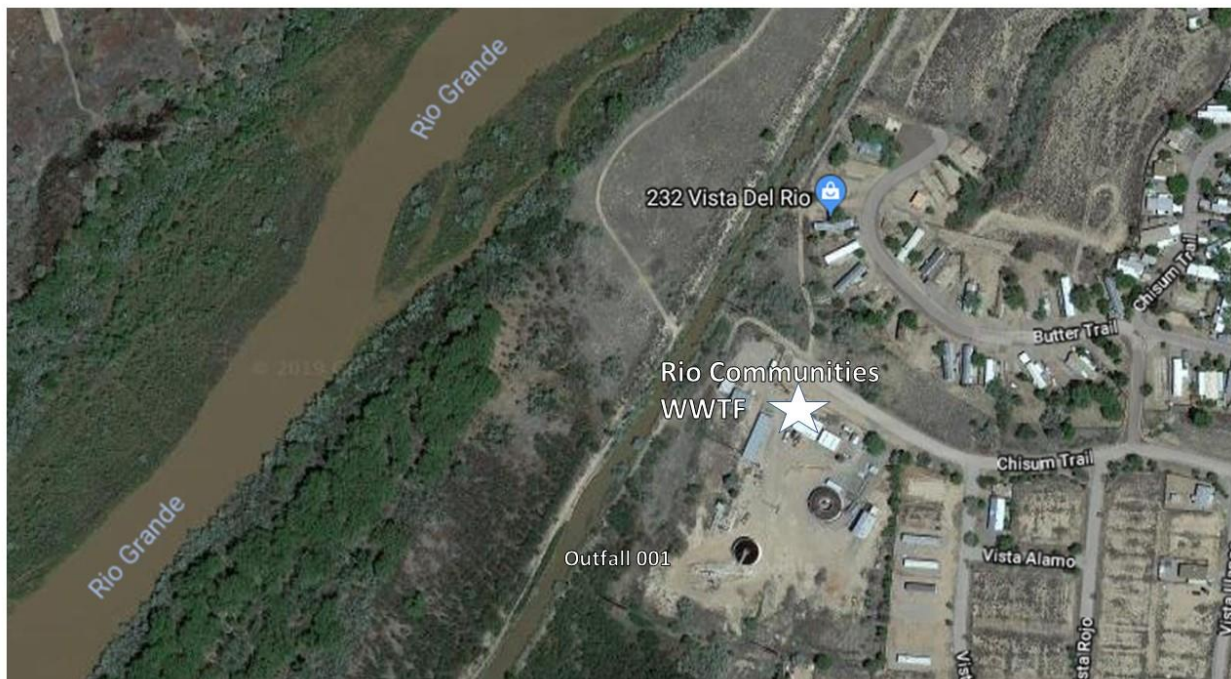
I. CHANGES FROM THE PREVIOUS PERMIT

Changes from the permit previously issued May 20, 2014 with an effective date of June 1, 2014, and an expiration date of May 31, 2019, are:

1. Temperature has been added as a monitoring only requirement.
2. Discharge Monitoring Report (DMR) results shall be electronically reported to EPA per 40 CFR 127.16.
3. WET testing requirements has been added as established in the NMIP.

II. APPLICATION LOCATION and ACTIVITY

As described in the application, the plant is located at 42 Chisum Trail, Rio Communities, Valencia County, New Mexico. The effluent from the treatment plant is discharged to the Lower Peralta Riverside Drain (San Juan Feeder), thence to the Rio Grande in Segment No. 20.6.4.105 of the Rio Grande Basin. The discharge is located on that water at latitude 34° 37' 58" N and longitude 106° 44' 29" W, in Valencia County, New Mexico.



Under the SIC Code 4952, the applicant's activities are private domestic wastewater treatment operations which serves a population of approximately 2,960.

As described in the application and Compliance Evaluation Inspection (CEI) report dated March 4, 2015 the treatment processes for the facility are as follows:

The New Mexico Water Service Company Rio Communities Wastewater Treatment Facility is a 0.3 MGD extended aeration activated sludge plant with ultraviolet disinfection. The plant

consists of a mechanical bar screen, a scum/grease and grit removal chamber, an aeration basin, a secondary clarifier, and a UV chamber. Effluent flow is measured through a six-inch Parshall flume with a secondary staff gage and an ultrasonic meter.

Sludge is wasted daily to a 9,000-gallon sludge holding basin, centrifuged, and disposed of by a private sludge hauler for offsite disposal at the Valencia Regional Landfill and Recycling Facility.

Rio Communities Industrial Park has eight industrial water customers but only two of them discharge pre-treated wastewater to Rio Communities WWTF.

Hydrocut - cuts metal with a thin, high pressure water jet. Only domestic wastewater is discharged from this industry.

Chemical Lime Corporation - hydrates lime (CaO). Only domestic wastewater is discharged from this industry.

Valencia County Animal Crematorium - cremates euthanized animals on an intermittent basis. Only domestic wastewater is discharged from this commercial business.

Ketters plastic injection molding - took over the old solo cup building. The remaining industrial discharges has signed an industrial pretreatment contract with New Mexico Water Service Company (NMWSC) and pre-treats their own industrial discharge before discharge to the collection system.

Aristech Acrylic (formerly Avonite) - fabricates resin countertops. They pre-treat their process wastewater before discharge with their domestic wastewater. Neither metals nor toxic substances have been detected in their discharge.

Valencia Power - power providers during peak demands. Only domestic wastewater is discharged from this industry.

Clariant Corp - makes desiccants for moisture wicking, and packaging of medical supplies. Only domestic wastewater is discharged from this industry.

Mesa Oil - oil recycling facility. Only domestic wastewater is discharged from this industry.

III. RECEIVING STREAM STANDARDS

The general and specific stream standards are provided in NMWQS (20.6.4 NMAC, effective August 11, 2017). The facility discharges to the Lower Peralta Riverside Drain, thence to the Rio Grande in Segment No. 20.6.4.105 of the Rio Grande Basin. Segment No. 20.6.4.105 has designated uses of irrigation, livestock watering, wildlife habitat, marginal warmwater aquatic life, public water supply and primary contact.

IV. EFFLUENT CHARACTERISTICS

A quantitative description of the discharge(s) described in the EPA Permit Application Form 2E received October 31 and December 10, 2018 are presented below in Table 1:

POLLUTANT TABLE – 1.

Parameter	Max Daily Value	Average Daily Value
	(mg/l unless noted)	
Flow, million gallons/day (MGD)	0.23	0.17
pH, minimum, standard units (SU)	6.95	N/A
pH, maximum, standard units (SU)	7.79	N/A
Biochemical Oxygen Demand, 5-day (BOD ₅)	19.2	13.4
Ammonia (as N)	1.3	0.04
Oil and Grease	0.0	0.0
Fecal Coliform (FCB) (colonies/100ml)	290.9	5.5
Total Suspended Solids (TSS)	15.0	6.88
Total Residual Chlorine (TRC)	0.0	0.0
Dissolved Oxygen	7.25	6.08
Total Kjeldahl Nitrogen (TKN)	2.8	1.8
Nitrate Plus Nitrite Nitrogen	15.0	13.3
Phosphorus (Total)	3.5	3.0
Temperature, winter	21.6°C	16.7°C
Temperature, summer	28.8°C	24.8°C

A summary of the last 36 months of available pollutant data from January 2016 through December 2018, taken from DMRs, shows one exceedance of permit limit for *E.coli* in October 2016 and exceedances in BOD₅ (concentration) monthly average and 7-day average in February 2017.

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 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 applicant submitted a complete permit application on December 10, 2018. It is proposed that the permit be reissued for a 5-year term following regulations promulgated at 40 CFR §122.46(a). The existing NPDES permit initially issued May 20, 2014, with an effective date of June 1, 2014, and an expiration date of May 31, 2019.

VI. 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 require that NPDES permit limits are developed that meet the more stringent of either technology-based effluent limitation guidelines (ELGs), numerical and/or narrative water quality standard-based effluent limits, or the previous permit.

Technology-based effluent limitations are established in the draft permit for TSS. Water quality-based effluent limitations are established in the proposed draft permit for BOD₅, TRC, DO, pH, and *E. coli*.

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 BOD₅, 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.

The New Mexico Water Service Company's Rio Communities Wastewater Treatment Facility is a privately owned facility which treats sanitary wastewater. Secondary treatment technology-based ELGs, influent monitoring, and percent removal for both BOD₅ and TSS, and pH are established at 40 CFR §133.102(a), 40 CFR §133.102(b) and 40 CFR §133.102(c), respectively. BOD₅ and TSS ELGs are 30 mg/l for the 30-day average, 45 mg/l for the 7-day average and 85 percent removal (minimum). ELGs for pH are between 6-9 s.u. Additionally, regulations at 40 CFR §122.45 (f)(1) require all pollutants limited in permits to have limitations expressed in terms of mass, such as pounds per day. When determining mass limits for POTWs, 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 BOD₅/TSS loading = 30 mg/l * 8.345 lbs/gal * 0.3 MGD = 75 lbs/day

7-day average BOD₅/TSS loading = 45 mg/l * 8.345 lbs/gal * 0.3 MGD = 113 lbs/day

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 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. Permit limits will ensure downstream WQS will be met in accordance with 40 CFR §122.4(d).

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 general and specific stream standards are provided in NMWQS (20.6.4 NMAC, effective August 11, 2017). The facility discharges into the Lower Peralta Riverside Drain, thence to the Rio Grande in Segment No. 20.6.4.105 of the Rio Grande Basin. Segment No. 20.6.4.105 designated uses are irrigation, livestock watering, wildlife habitat, marginal warmwater aquatic life, public water supply 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 ELGs (technology based). State WQS that are more stringent than ELGs are as follows:

a. Dissolved oxygen (DO) & Biochemical Oxygen Demand (BOD₅)

The State of New Mexico WQS criterion applicable to the marginal warmwater aquatic life designated use requires dissolved oxygen to be no less than 5 mg/l.

This draft permit will maintain both DO and BOD₅ limits from the current NPDES permit. DMR data from the past three years shows that the permittee is complying with the current limits and will maintain the integrity and water quality in the Lower Peralta Drain (San Juan Feeder) into the Rio Grande.

b. pH

The WQS criterion applicable to the marginal warmwater aquatic life designated use requires pH to be between 6.6 and 9.0 s.u. This is more limiting than the technology-based limit presented above. Therefore, the draft permit will maintain a limit of 6.6 to 9.0 s.u.

c. Bacteria

The NMWQS criteria require an *E. coli* bacteria of 126 cfu/100 ml (or MPN/100 ml) monthly geometric mean and single sample of 410 cfu/100 ml (or MPN/100 ml) end-of-pipe to protect the primary contact designated use. The draft permit will maintain these *E. coli* limits.

d. Total Residual Chlorine

The facility uses UV to treat bacteria. However, when chlorine is used to either disinfect process equipment and/or treat for filamentaceous algae, the facility will be required to monitor for TRC. The WQS for TRC is 11 µg/l for both chronic aquatic life and wildlife habitat, and 19 µg/l for acute aquatic life. State implementation procedures allow for a mixing zone to be used for chronic standards, while acute standards must be met at end-of-pipe. The NM Implementation Plan strategy for TRC requires the most limiting of the critical dilution/chronic criteria concentration of 11 µg/l or end-of-use/acute criteria concentration of 19 µg/l be used in determining the limit. The Lower Peralta Riverside Drain has a 4Q3 of 0 MGD; therefore, the critical dilution is 100%. The 11 µg/l would be the most limiting and will be the TRC limit proposed in the draft permit when chlorine is used in accordance with the above.

e. Temperature

According to the "2016-2018 State of New Mexico Integrated Clean Water Act Section 303(d) / 305(b) Report," the Rio Grande from the Rio Puerco to the Isleta Pueblo Boundary (Assessment Unit NM-2105_40) in Segment No. 20.6.4.105 has been identified as impaired for temperature. Temperature is listed as not supporting the marginal warmwater aquatic life assessment unit, the 2018-2020 draft 303(d) Integrated List estimates a TMDL for temperature in 2019. This draft permit will have a reporting requirement only for Temperature to start gathering data for future permitting decisions. If a TMDL with a wasteload allocation is established for temperature, then EPA will adopt that limit in future permits.

f. 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 Publicly Owned Treatment Works (POTWs), but also to facilities that are similar to POTWS, but which do not meet the regulatory definition of “publicly owned treatment works” (i.e., 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.

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 utilized in the current permit.

For permitting purposes of certain parameters such as WET, the critical dilution of the effluent to the receiving stream is determined. The critical dilution, CD, is calculated as:

$CD = Q_e / (F \cdot Q_a + Q_e)$, where:

Q_e = facility flow (0.3 MGD/0.465 cfs)

Q_a = critical low flow of the receiving waters (0 MGD/0 cfs)

Since the 4Q3 is zero, the critical dilution is 100% and this value will be used to establish certain permit limits.

5. 303(d) List Impacts

According to the “2016-2018 State of New Mexico Integrated Clean Water Act Section 303(d) / 305(b) Report,” the Rio Grande from the Rio Puerco to the Isleta Pueblo Boundary (Assessment Unit NM-2105_40) in Segment No. 20.6.4.105 has been identified as impaired for *E. coli* and temperature. End-of-pipe effluent limitations for *E. coli* bacteria has been established in this proposed permit. Temperature is listed as not supporting the marginal warmwater aquatic life assessment unit, the 2018-2020 Draft 303(d) Integrated List estimates a TMDL for temperature

in 2019. This draft permit will have a reporting requirement only for Temperature to start gathering data for future permitting decisions. EPA has determined the established limitations do not cause or contribute to further impairment.

The Rio Grande is classified as Category 5/5A with irrigation, livestock watering, primary contact and wildlife habitat as fully supporting; marginal warmwater aquatic life as not supporting; and, public water supply as not assessed. The monitoring schedule is set for 2021. The standard reopener language in the permit allows additional permit conditions if a future TMDL is established.

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). Technology based pollutants, influent and effluent BOD₅ and TSS, are proposed to be monitored two (2) times per month. BOD₅ and TSS percent removal, are proposed to be monitored one (1) time per month. Flow is proposed to be monitored daily by totalized flow measurement. These frequencies are consistent with the current permit and the current NM Implementation Procedures. The sample type for BOD₅ and TSS shall be by grab samples consistent with the NMIP.

Water quality-based pollutant monitoring frequency for *E. coli* shall be monitored two (2) times per month by grab sample. The pollutant pH shall be monitored five (5) times per week by instantaneous grab sample. Only when chlorine is used as established previously in this document, TRC shall be monitored daily by instantaneous grab sample. These frequencies are consistent with the current permit and the current NM Implementation Procedures. DO and Temperature shall be monitored five (5) times per week by instantaneous grab sample.

E. WHOLE EFFLUENT TOXICITY REQUIREMENTS

In Section V.C.4.e.ii. above; “Critical Conditions”, it was shown that the critical dilution, CD, for the facility is 100%. Based on the nature of the discharge, domestic wastewater treatment plant, the production flow; 0.3 MGD (0.465 cfs), the nature of the receiving water; intermittent, and the critical dilution; 100%, the Table 11 of the NMIP directs the WET test to be a 7-day chronic test using *Ceriodaphnia dubia* and *Pimephales promelas* at a once per permit term during the first year. According to the NMIP, when a test frequency is one time a year, the test should occur in winter or springtime when most sensitive juvenile life forms are likely to be present in receiving water and colder ambient temperatures might adversely affect treatment processes. This will generally be defined as between November 1 and April 30. If the chronic test pass, 48-hr acute tests shall be completed using *Daphnia pulex* for remaining term of permit at once per year as a new requirement in this draft permit as required by the NMIP.

The draft 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 shall be 32%, 42%, 56%, 75%, and 100%. The low-flow effluent concentration (critical low-flow dilution) is defined as 100% 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 - the discharge to the Lower Peralta Riverside Drain thence to the Rio Grande in Segment No. 20.6.4.105 of the Rio Grande Basin. Discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTIC	DISCHARGE MONITORING	MONITORING REQUIREMENTS	
Whole Effluent Toxicity Testing (7 Day Static Renewal) (*1)	VALUE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<i>Ceriodaphnia dubia</i>	Report	1 st year	24-hr Composite
<i>Pimephales promelas</i>	Report	1 st year	24-hr Composite

EFFLUENT CHARACTERISTICS	DISCHARGE MONITORING	MONITORING REQUIREMENTS	
WHOLE EFFLUENT TOXICITY TESTING (*1) (48-hr Acute Test)	VALUE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<i>Daphnia pulex</i> (years: 2 nd , 3 rd , 4 th , 5 th)	Report	Once/Year	24-hr Composite

FOOTNOTES

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

VII. ANTIDegradation

The State of New Mexico has antidegradation requirements to protect existing uses through implementation of their WQS. The limitations and monitoring requirements set forth in the draft permit are developed from the appropriate State WQS and are protective of those designated uses. Furthermore, the policy's set 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 waters, which is protective of the designated uses of that water.

VIII. ANTIBACKSLIDING

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.

IX. ENDANGERED SPECIES CONSIDERATIONS

According to the most recent county listing available at USFWS, Southwest Region 2 website, <http://www.fws.gov/endangered/>, six species in Valencia are listed as endangered or threatened. The Southwestern willow flycatcher (*Empidonax traillii*), Rio Grande Silvery Minnow (*Hybognathus amarus*) and New Mexico meadow jumping (*Zapus hudsonius luteus*), are listed as endangered. The Mexican spotted owl (*Strix occidentalis lucida*), Yellow-billed Cuckoo (*Coccyzus americanus*) and the Pecos sunflower (*Helianthus paradoxus*), are listed as threatened.

The southwestern willow flycatcher (E) (*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.

Rio Grande Silvery Minnow (E) (*Hybognathus amarus*) historically occupied approximately 3,862 river km in New Mexico and Texas. It was found in the Rio Grande from Española, New Mexico, through Texas to the Gulf of Mexico. The Rio Grande silvery minnow uses only a small portion of the available aquatic habitat and is rarely found in habitats with high water velocities. The decline of the 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. Competition and predation by introduced non-native species, water quality degradation, and other factors also have contributed to its decline.

New Mexico meadow jumping mouse (E) (*Zapus hudsonius luteus*) is endemic to New Mexico, Arizona and 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. 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 hibernates about 9 months out of the year, longer than other mammals.

Yellow-billed Cuckoos (T) (*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 (T) (*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.

Pecos sunflower (T) (*Helianthus paradoxus*) is a wetland plant that grows on wet, alkaline soils at spring seeps, wet meadows, stream courses and pond margins. It has seven widely spaced populations in west-central and eastern New Mexico and adjacent Trans-Pecos Texas. These populations are all dependent upon wetlands from natural groundwater deposits. Incompatible land uses, habitat degradation and loss, and groundwater withdrawals are historic and current threats to the survival of Pecos sunflower.

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 result in no change to the environmental baseline established by the previous permit, therefore, EPA concludes that reissuance of this permit will have “no effect” on listed species and designated critical habitat.

X. HISTORICAL and ARCHEOLOGICAL PRESERVATION CONSIDERATIONS

The reissuance of this permit should have no impacts on historical properties since no construction activities are proposed during its reissuance.

XI. PERMIT REOPENER

The permit may be reopened and modified during the life of the permit if relevant portions of the State WQS are revised or remanded. In addition, the permit may be reopened and modified during the life of the permit if relevant procedures implementing the State Water Quality Standards are either revised or promulgated. Should the State adopt a new WQS, and/or develop or amend a TMDL, this permit may be reopened to establish effluent limitations for the parameter(s) to be consistent with that approved State standard and/or water quality management plan, in accordance with 40 CFR 122.44(d). Modification of the permit is subject to the provisions of 40 CFR 124.5.

XII. VARIANCE REQUESTS

No variance requests have been received.

XIII. CERTIFICATION

The permit is in the process of certification by the State of New Mexico 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.

XIV. FINAL DETERMINATION

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

XV. ADMINISTRATIVE RECORD

The following information was used to develop the draft permit:

A. APPLICATION(s)

EPA Application Form 2A received October 31, 2018 and December 10, 2018.

B. 40 CFR CITATIONS

Citations to 40 CFR as of February 7, 2019.

Sections 122, 124, 125, 133, 136

C. STATE WATER QUALITY REFERENCES

New Mexico State Standards for Interstate and Intrastate Surface Water, 20.6.4 NMAC, as amended through June 5, 2013.

Procedures for Implementing NPDES Permits in New Mexico, March 15, 2012.

Statewide Water Quality Management Plan, December 17, 2002.

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

D. OTHER

Compliance Evaluation Inspection of the New Mexico Water Service Company Rio Communities Wastewater Treatment Facility NPDES Permit No. NM0027782, March 4, 2015

