NPDES PERMIT NO. NM0029483
FACT SHEET

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

APPLICANT

City of Sunland Park Wastewater Treatment Plant
Camino Real Regional Utility Authority
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ISSUING OFFICE

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DATE PREPARED

July 8, 2020

PERMIT ACTION

Proposed reissuance of the current permit issued March 27, 2015, with an effective date of May 1, 2015 and an expiration date of April 30, 2020.

RECEIVING WATER – BASIN

Rio Grande River (HUC: 130301) of the of the Rio Grande-Caballo Basin

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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
BOD	Biochemical oxygen demand (five-day unless noted otherwise)
BPJ	Best professional judgment
CD	Critical dilution
CFR	Code of Federal Regulations
cfs	Cubic feet per second
cfu	colony forming units
CWA	Clean Water Act
DO	dissolved oxygen
DMR	discharge monitoring report
ELG	effluent limitations guidelines
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
FCB	Fecal coliform bacteria
FWS	United States Fish and Wildlife Service
HUC	Hydrologic Unit Codes
LA	load allocation
MDL	maximum discharge load
mg/L	Milligrams per liter
ML	maximum limit
MOS	margin of safety
MPN	Most Probable Number
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
MQL	Minimum quantification level
O&G	Oil and grease
PCB	Polychlorinated Biphenyl
POTW	publicly owned treatment works
RAS	return activated sludge
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
USGS	United States Geological Service
WAS	waste activated sludge
WET	Whole effluent toxicity
WLA	Wasteload allocation
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 March 27, 2015, with an effective date of May 1, 2015 and an expiration date of April 30, 2020, are:

- Total Phosphorus and Total Nitrogen monitor only requirements have been added.
- WET limit for *P.promelas* has been incorporated in this draft permit.
- BOD_5 limits have been updated.

II. APPLICATION LOCATION

As described in the application, the facility is a POTW located at Sunland Park, Doña Ana County, New Mexico. The effluent from the site is discharged into Rio Grande in water quality Segment NM-20.6.4.101 of the Rio Grande River Basin.

The discharge is located at Latitude 31º 47’ 54” North and Longitude 106º 33’ 24” West, in Doña Ana County, New Mexico.

III. APPLICANT ACTIVITY

Under the SIC of 4952, the discharger is a POTW. The design flow is 2.0 MGD serving a population of approximately 21,000.

The influent from the City of Sunland Park and the City of Santa Teresa is pumped to the City of Sunland Park WWTP through the main lift station, which is comprised of submersible pumps. The wastewater originating from the Sunland Park Racetrack is also pumped to the plant through a separate lift station. On February 2019 the newly constructed CRRUA North Plant was put into

operation therefor the flow to Sunland Park reduced to 0.79 MGD as noted from the normal 1.21 MGD the previous years.

The wastewater from the two-lift station is lifted to the preliminary treatment system, which includes bar screen and aerated grit chamber. The mechanical bar screen serves to remove large solids from the raw sewage. The aerated grit chamber removes heavy solids and inorganic material such as sand from the influent flow. Grit slurry separated by the aerated grit chamber is pumped to a cyclone degritter. The degritter concentrates the grit slurry and returns the excess wastewater back to the main lift station.

The wastewater flow then enters the aeration basin. Air is provided by four blowers. Two blowers run continuously while one is resting and these units are alternated on a daily basis. Wastewater flows to two circular final clarifiers from the aeration basin.

The clarified wastewater flows by gravity to the UV disinfection unit where it is disinfected. In 2020 there will be a new UV system designed and installed as part of CRRUA's CIP for this facility. After disinfection, the effluent passes through an effluent Parshall flume for flow measurement and is discharged to the Rio Grande in Segment 20.6.4.101 NMAC of the Rio Grande Basin. Return activated sludge is sent back to the aeration basin from the final clarifiers.

Waste activated sludge is pumped to the sludge thickener and then to the four cell aerobic digester. Sludge from the digester is then pumped to the belt filter press. Pressed sludge is place into a truck to be transported to the local landfill. The belt filter press is operated on a daily basis for approximately four hours. Presently the drying beds are used as a backup only for this facility in case the belt filter press goes down. A polymer is added to the sludge as it enters the belt filter press to allow for greater separation of the water and solids. Dried sludge is hauled to the local landfill where it is stockpiled and then mixed with cover dirt for disposal in the landfill.

IV. EFFLUENT CHARACTERISTICS

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

POLLUTANT TABLE – 1

PARAMETER	Max. Daily (mg/L, unless noted)	Avg. Daily (mg/L, unless noted)
Flow, MGD	N/A	0.79 MGD
Temperature, winter	21.70 °C	21.18 °C
Temperature, summer	28.10 °C	26.00 °C
pH, minimum	6.5 s.u.	--
pH, maximum	8.1 s.u.	--
BOD_5	9.03	4.57
FCB	145.7 MPN	15.98 MPN
TSS	8.14	4.39
Ammonia (as N)	8.8	5.8

PARAMETER	Max. Daily (mg/L, unless noted)	Avg. Daily (mg/L, unless noted)
TRC	0.0	0.0
D.O.	7.54	4.54
Total Kjeldahl Nitrogen (TKN)	39.2	35.0
Nitrate plus Nitrite Nitrogen	20.5	15.4
Oil & Grease	1,444	1,400
Phosphorus (Total)	4.97	4.7
Total Dissolved Solids (TDS)	1,380	1,315

The facility had to sample and report all priority pollutants identified in Part D, Expanded Effluent Testing Data of EPA Permit Application Form 2A:

POLLUTANT TABLE – 2 – Expanded Pollutant List

PARAMETER (Pollutants greater than MQL)	Max. Daily (mg/L, unless noted)
Arsenic	0.056
Nickel	0.0012
1.4-Dichlorobenzidine	1.0 µg/L

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

POLLUTANT/limit	Month/Year of Exceedances - Value
E. coli/7-day - 126 cfu/100 ml	Jan/17 – 213.9, Mar/18 - 317
E. coli/max – 410 cfu/100 ml	Jan/17 – 20,000, Feb/17 – 2,100, Apr/17 – 20,000, Feb/18 – 6,200, Mar/18 – 3,100, Jun/18 – 12,000, Feb/20 – 2,419
BOD_5/7-day avg – 45 mg/L	Jan/17 – 55.2

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 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 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 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_5. Water quality-based effluent limitations are established in the proposed draft permit for E.coli bacteria, TRC, pH, BOD, Boron.

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.

The City of Sunland Park 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 * 2.0 MGD
30-day average BOD/TSS loading = 500 lbs/day
7-day average TSS loading = 45 mg/L * 8.345 lbs/gal * 2.0 MGD
7-day average TSS loading = 750 lbs/day

TABLE 4
Technology-Based Effluent Limits – 2.0 MGD design flow.

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS			
	lbs/Day		mg/L (unless noted)	
Parameter	30-Day Avg.	7-Day Avg.	30-Day Avg.	7-Day Avg.
Flow	N/A	N/A	Measure MGD	Measure MGD
BOD	500	500	30	45
TSS	500	750	30	45
pH	NA	NA	6.0 - 9.0 s.u.	

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.

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 through August 11, 2017). The facility discharges to the Rio Grande River. This is designated as segment number 20.6.4.101. The designated uses of the receiving water require protective limits for irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat, 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. pH

The State of New Mexico WQS to protect the primary contact and marginal warmwater aquatic life uses is specified in 20.6.4.900.D NMAC and requires pH to be between 6.6 and 9.0 s.u. This is more limiting than the technology-based limits presented earlier. The draft permit shall establish 6.6 to 9.0 s.u. for pH based on the State's WQS. The monitoring frequency will remain daily as an instantaneous grab (field measurement) sample as the current permit.

b. 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 303(d) List Impairments section.

c. Dissolved Oxygen and BOD_5

The State of New Mexico WQS criterion applicable to the warm-water aquatic life designated use is at least 5 mg/L for dissolved oxygen. As a part of the permitting process, EPA used the LA-QUAL water quality model, which is a steady-state one-dimensional model which assumes complete mixing within each modeled element, to develop permit parameters for the protection of the State of New Mexico surface water WQS for DO (i.e., 5 mg/L). Primarily based on the City of Sunland Park Wastewater Treatment Plant's design flow and the critical flow of the receiving water, various BOD_5 factors including BOD_5 Secondary Treatment Standards were considered and simulated to achieve the DO criterion. A complete characterization of Rio Grande River (i.e., water quality and hydrodynamic data) was not available. Where data were not available, estimates and assumptions are made. The following is a summary of model inputs.

The model results show an excursion of the receiving stream DO standard of 5 mg/L when the BOD_5 limits of 30 mg/l for monthly average and 45 mg/l for 7-day maxima were applied.

Various BOD_5 factors were considered and simulated to achieve the DO criterion; EPA believes the optimal levels of BOD_5 are 25mg/l (monthly average) and 32 mg/l (7-day maxima). EPA establishes the water-based limits for BOD_5 of 25 mg/L (for monthly average) and 32 mg/L (for 7-day maxima) in the draft permit. After reviewing DMR data from the last three years, the facility can comply with these new limits and protect WQS for DO.

No DO limit is needed at this time for the draft permit.

d. Total Phosphorus and Total Nitrogen

Since the facility is designated as a major POTW with a design flow rate of 2.0 MGD, this draft permit will include TP & TN monitoring only requirements.

e. Boron, Dissolved

The CRRUA Sunland Park Wastewater Treatment Plant discharges treated effluent into the Rio Grande in Water Quality Segment 20.6.4.101 NMAC with designated uses of irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat and primary contact. The *2018-2020 State of New Mexico CWA §303(d) / §305(b)* Integrated Report identifies the irrigation use on this segment of the Rio Grande as impaired due to Dissolved Boron concentrations that exceed the water quality standards for irrigation. An RP analysis has been done for Boron and no limit is needed in this draft permit.

f. 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 major POTW for permitting purposes and must supply the expanded pollutant testing list described in EPA Application Form 2A as presented above in Part IV of this Fact Sheet.

Based on the pollutant data provided by the facility and shown in Part IV of this Fact Sheet, a water quality screen has been run to determine if discharged pollutant concentrations demonstrate RP to exceed WQS for the various designated uses. If RP exists, the screen would also calculate the appropriate permit limit needed to be protective of such designated uses. The screen is based on the NMIP as of March 15, 2012. The receiving stream hardness value, 125.1 mg/L, was used in the screen for WQS. The permit writer used 1.54 and 1 cfs as 4Q3 to run the RP model to compare results. The water quality screens is included in the Fact Sheet.

None of the pollutants demonstrate RP to violate WQS consistent with the designated uses for the receiving water.

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. The state establishes 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. In the absence of a USGS gauge that is located near the outfall on the Rio Grande, the 4Q3 low flow value for effluent limit calculations is based on the average discharge flows from the nearest upstream NPDES permit, CRRUA Sunland Park North Treatment Plant NM0031178 of 0.64 MGD.

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 = Qe/(F·Qa + Qe), where:
Qe = facility flow (2.0 MGD)
Qa = critical low flow of the receiving waters (0.64 MGD)
F = fraction of stream allowed for mixing (1.0)

CD = (2.0 MGD/[(1.0)(0.64 MGD) + 2.0])*100 = 75%

The critical dilution shall be 75%.

ii. TRC

In instances where a facility uses chlorine for disinfection of the wastewater, or is used as an emergency back-up to a system using another bacteria control technology such as ultraviolet light, or is used to remove filamentous algae, or when chlorine is used to disinfect process equipment used at the facility, a TRC limit is listed in the permit. The limits for TRC are based on acute and chronic chlorine limitations for the protection of aquatic life and the protection of wildlife habitat found in the Table of Numeric Criteria (20.6.4.900.J.2 NMAC).

The facility still uses UV for disinfection, according to the application. The Wildlife Habitat criteria for TRC is 11 µg/L, so the end-of-pipe limit will be 11 µg/L. The TRC monitoring

requirement and limitation will apply when chlorine is used in the treatment process, either alone, or in combination with ultraviolet light treatment.

D. TMDL REQUIREMENTS

A TMDL documents the amount of a pollutant a waterbody can assimilate without violating a state's water quality standards. It also allocates that load capacity to known point sources and nonpoint sources at a given flow. TMDLs are defined in 40 CFR Part 130 as the sum of the individual WLA for point sources and LA for nonpoint sources and natural background conditions, and include a MOS. In June 2007, EPA approved a NMED TMDL for the Lower Rio Grande Watershed for bacteria.

The approved WLA for E. coli bacteria from the TMDL is established as a discharge limitation in this permit. The WLA for the City of Sunland Park WWTP was calculated using the more conservative limit of the geometric mean value (126 cfu/100 mL), the design flow of the WWTP, and a conversion factor to get a loading limit in "cfu/day" using the following equation:

WLA (cfu/day) = (2.0MGD)(126)($3.79*10^7$) = 9.55×10^9

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/ LIMITATIONS

Procedures for implementing WET terms and conditions in NPDES permits are contained in the NMIP. In Section V.C.4.c.ii.(b) above; "Critical Conditions", it was shown that the critical dilution, CD, for the facility is 75%. Based on the nature of the discharge (POTW), the design flow (2.0 MGD), the nature of the receiving water (perennial stream), and the critical dilution (66%), Table 11 (footnote 6) of the NMIP directs the WET test to be a 7-day chronic test using *Ceriodaphnia dubia* and *Pimephales promelas* at a once per quarter frequency. During the last permit cycle, there were several instances of toxicity exhibited by *Pimephales promelas*. Based on these lethality failures, there is reasonable potential for chronic effects for *P.promelas* and a limit (75%) is being implemented in this permit. If all *C. dubia* tests pass during the first year of the permit term, the permittee may request a monitoring frequency for this species for the following 2-5 years of the permit term. The invertebrate species (*C. dubia*) testing frequency may be reduced to once per six (6) months. If any tests fail during that time the frequency will revert to the once per three months frequency for the remainder of the permit term. Testing frequency reduction is not available for *P.promelas*.

The proposed permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests based on a 0.75 dilution series. These additional effluent concentrations shall be 32%, 42%, 56%, 75%, and 100%.

EFFLUENT CHARACTERISTICS	DISCHARGE MONITORING	MONITORING REQUIREMENTS	
WHOLE EFFLUENT TOXICITY (7-Day Static Renewal/ NOEC) *	VALUE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Ceriodaphnia dubia (Monitoring and Reporting)	Report	Quarterly	24-hr Composite
Pimephales promelas (Limit)	75%	Monthly	24-hr Composite

(*) Monitoring and reporting requirements begin on the effective date of this permit. Compliance with the Whole Effluent Toxicity limitation is required on the effective date of the permit. See Part II of the permit for WET testing requirements and limitation conditions.

F. MONITORING FREQUENCY FOR LIMITED PARAMETERS AND APP RENEWAL

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; BOD_5 and TSS, are proposed to be monitored once a week consistent with the previous permit. Flow shall be sampled continuously (daily) by totalizing meter, consistent with the previous permit. Sample type for BOD_5 and TSS is measured 1/week by a 6-hour composite sample consistent with the previous permit. The technology based monitoring frequencies and sample types are consistent with the NMIP.

Water quality-based pollutant monitoring frequency for E. coli shall be sampled 5 times per week using grab samples based on the continued E. coli impairment, approved TMDL, and E. coli NPDES compliance history. TRC and pH shall be measured daily by instantaneous grab (field measurement), which is consistent with the NMIP. Regulations at 40 CFR Part 136 define instantaneous grab as being analyzed within 15-minutes of collection TP and TN shall be monitored on a monthly basis.

In addition to the parameters identified in this fact sheet, EPA designated major POTW's are required to sample and report other parameters listed in tables of the EPA Form 2A and WET testing for its permit renewal. The minimum pollutant testing for NPDES permit renewals specified in Form 2A requires three samples for each of the parameters being tested. Current practice is to obtain the three samples over a short time frame, sometimes within two weeks during the permit renewal testing process. In order to obtain a meaningful snapshot of pollutant testing for permit renewal purposes, the draft permit shall require that the testing for Tables A.12, B.6, and Part D of EPA Form 2A, or its equivalent if modified in the future, during the second, third and fourth years after the permit effective date. In addition, one yearly test must be during the warm summer months; defined as the period from June 1 through August 31, and another yearly test shall be sampled during cold weather; defined as the period from December 1 through February 28. The remaining yearly test may be taken during any time in that year. The permittee shall report the results as a separate attachment in tabular form sent to the Permitting Section Chief of the Water Division within 60 days of receipt of the lab analysis and shall also be reported on the NPDES permit renewal application Form 2A or its equivalent/replacement.

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. WASTE WATER 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 four (4) non-categorical Significant Industrial User's (SIU) and three (3) Categorical Industrial User's (CIU).

The facility operates an industrial an industrial pretreatment program in accordance with Section 402(b)(8) of the Clean Water Act, the General Pretreatment Regulation (40 CFR 403) and the approved pretreatment program submitted by the permittee. Contributions to the wastewater treatment plant will be limited according to the requirements detailed in Part II Section A of the proposed permit.

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 www.epa.gov/netdmr and contact the R6NetDMR@epa.gov in-box for further instructions. PA and 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 (International Mexico bnd to Anthony Bridge) is listed as being impaired for *E. coli* and Dissolved Boron. A TMDL for *E. coli* was developed in 2007, and in Part VI.C.5 of the Fact Sheet, permit conditions were identified as being based on the approved TMDL to address the *E. coli* impairment. Dissolved Boron is also listed as impaired, and the current permit has a monitoring only requirement. An estimated TMDL date was established for 2019. 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 State of New Mexico has antidegradation requirements to protect existing uses through implementation of its WQS. The limitations and monitoring requirements set forth in the proposed draft are developed from the appropriate State WQS and are protective of those designated uses. Furthermore, the antidegradation policy sets forth the intent to protect the waters whose existing 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.

X. ANTIBACKSLIDING

The proposed permit is consistent with the requirements to meet antibacksliding provisions of the Clean Water Act, Section 402(o), 40 CFR 122.44(l)(i)(A), 40 CFR 122.44(l)(1), and 40 CFR 122.62 (a)(3)(i)(B) which state that final effluent limitations must be as stringent as those in the previous permit, unless new information (e.g. revised WQS), material and substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of a less stringent effluent limitation. The proposed permit maintains the mass loading requirements of the previous permit for BOD_5 and TSS. All of the changes represent permit requirements that are consistent with the State's WQS and WQMP.

XI. ENDANGERED SPECIES CONSIDERATIONS

According to the most recent county listing available at USFWS, Southwest Region 2 website, http://www.fws.gov/endangered/, four species in Dona Ana County are listed as endangered or threatened. The Southwestern willow flycatcher (*Empidonax traillii*), Least tern (*Sterna antillarum*) and Sneed pincushion cactus (*Coryphantha sneedii var sneedii*) are listed as endangered and the Yellow-billed Cuckoo (*Coccyzus americanus*) is listed as threatened.

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.

Least tern (*Sterna antillarum*) are the smallest member of the gull and tern family. They are approximately 9" in length. Unlike gulls, terns will dive into the water for small fish. The body of least terns is predominately gray and white, with black streaking on the head. Least terns have a forked tail and narrow pointed wings. Least terns less than a year old have less distinctive black streaking on the head and less of a forked tail. The interior population of the least tern has declined due to loss of habitat from dam construction and river channelization on major rivers throught the Rio Grande River systems. Because of dams, river flows are often managed in a nonhistoric fashion, not conducive to the creation and maintenance of sandbars with sparse vegetation. Human disturbance is also a problem. Cold water temperatures due to reservoirs may affect the quantity of forage fish available.

Sneed pincushion cactus (*Coryphantha sneedii var sneedii*) a native plant of New Mexico and Texas. The plants are in demand by cactus collectors, and removal by commercial suppliers and private collectors has caused a severe decline in the natural populations, even though it is available in cultivation. A major population was destroyed some years ago with the construction of the highway through Anthony Pass, between Las Cruces and El Paso. Other populations are subject to potential destruction from general urban growth and the use of the Organ Mountains on the Army's Fort Bliss as an artillery impact area.

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.

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.

XII. 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.

XIII. 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.

XIV. VARIANCE REQUESTS

No variance requests have been received.

XV. 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.

XVI. FINAL DETERMINATION

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

XVII. ADMINISTRATIVE RECORD

The following information was used to develop the draft permit:

A. APPLICATION(s)

EPA Permit Application Form 2A received April 8, 2020 and additional pollutant data received May 28,2020.

B. 40 CFR CITATIONS

Citations to 40 CFR as of July 8, 2020.

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 August 2019.

Final US EPA-Approved Total Maximum Daily Loads for the Cimarron River Watershed [Canadian River to Headwaters], September 3, 2010.

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

State of New Mexico 303(d) List for Assessed Stream and River Reaches, 2018-2020.

D. OTHER

EPA Compliance Evaluation Inspection 9/28/16.

https://ecos.fws.gov/endangered/