NPDES PERMIT NO. NM0028487
FACT SHEET

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

APPLICANT

Gadsden Independent School District #16
P.O. Drawer 70
Anthony, NM 88021

ISSUING OFFICE

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

PREPARED BY

Nichole Young
Environmental Scientist
NPDES Permits & TMDLs Branch (6WQ-PP)
Water Division
VOICE: 214-665-6447
FAX: 214-665-2191
EMAIL: young.nichole@epa.gov

DATE PREPARED

March 27, 2019

PERMIT ACTION

Renewal of a permit previously issued on March 25, 2014 with an effective date of May 1, 2014 and an expiration date of April 30, 2019.

RECEIVING WATER – BASIN

Rio Grande River Basin (Segment 20.6.4.101)

DOCUMENT ABBREVIATIONS

In the document that follows, various abbreviations are used. They are as follows:

4Q3	Lowest four-day average flow rate expected to occur once every three-years
BAT	Best available technology economically achievable
BCT	Best conventional pollutant control technology
BPT	Best practicable control technology currently available
BMP	Best management plan
BOD	Biochemical oxygen demand (five-day unless noted otherwise)
BPJ	Best professional judgment
CBOD	Carbonaceous biochemical oxygen demand (five-day unless noted otherwise)
CD	Critical dilution
CFR	Code of Federal Regulations
cfs	Cubic feet per second
COD	Chemical oxygen demand
COE	United States Corp of Engineers
CWA	Clean Water Act
DMR	Discharge monitoring report
DO	Dissolved oxygen
ELG	Effluent limitation guidelines
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
FWS	United States Fish and Wildlife Service
mg/l	Milligrams per liter
ug/l	Micrograms per liter
lbs	Pounds
MG	Million gallons
MGD	Million gallons per day
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NMIP	New Mexico NPDES Permit Implementation Procedures
NMWQS	New Mexico State Standards for Interstate and Intrastate Surface Waters
NPDES	National Pollutant Discharge Elimination System
MQL	Minimum quantification level
O&G	Oil and grease
POTW	Publically owned treatment works
RP	Reasonable potential
SS	Settleable solids
SIC	Standard industrial classification
s.u.	Standard units (for parameter pH)
SWQB	Surface Water Quality Bureau
TDS	Total dissolved solids
TMDL	Total maximum daily load
TRC	Total residual chlorine
TSS	Total suspended solids
UAA	Use attainability analysis
USGS	United States Geological Service
WLA	Waste Load allocation
WET	Whole effluent toxicity
WQCC	New Mexico Water Quality Control Commission
WQMP	Water Quality Management Plan
WWTP	Wastewater treatment plant

I. CHANGES FROM THE PREVIOUS PERMIT

Changes from the permit previously issued on March 25, 2014 with an effective date of May 1, 2014 and an expiration date of April 30, 2019:

- Critical dilution has been updated to reflect new flow information.
- Monitoring for BOD and TSS has been increased to twice/month.
- Language on sufficiently sensitive methods has been established in the proposed permit
- Electronic DMR reporting requirements have been included in the modified permit.
- Monitoring for Boron has been added to the draft permit due to an impairment at segment Segment 20.6.4.101

II. APPLICANT LOCATION and ACTIVITY

As described in the application, the facility (Latitude 31° 59' 56.03" N and Longitude 106° 38' 06.52" W) is located at 1301Washington Street, Dona Ana County, New Mexico.

Under the SIC code 4952, the applicant operates Gadsden Independent School District (ISD) #16 WWTP, which has a design flow of 0.09 MGD providing sanitary services for approximately 3,070 students and staffs. The facility consists of two separate treatment plants with one at the High School and the other the Middle School. The WWTP primarily consists of lift stations, screens, aeration basins, clarifiers and a UV treatment system before discharged to Rio Grande River. Sewage Sludge is hauled to Dona Ana County South Central Regional WWTP for treatment. Outfall 01A is located at the Middle School and Outfall 01B is located at the High School; the combined effluent is mixed in a batch tank, then goes through a UV disinfection bank before the sampling port and then discharge to the river at Outfall 001.

III. EFFLUENT CHARACTERISTICS

Data submitted in Form 2A is as follows:

Outfall 001

Parameter	**Max**	**Avg**
	(mg/l unless noted)	
Flow (MGD)	0.0114	0.0074
pH, minimum, standard units (su)	7.21	N/A
pH, maximum, standard units (su)	7.98	N/A
Biochemical Oxygen Demand, 5-day (BOD_5)	5.38	5.38
Total Suspended Solids (TSS)	1.69	1.69
Fecal Coliform (cfu)	2.00	1.00
Temperature (Winter)	21ºC	N/A

Outfall 01A

Parameter	**Max**	**Avg**
	(mg/l unless noted)	
Flow (MGD)	N/A	0.009490
pH, minimum, standard units (su)	6.90	N/A
pH, maximum, standard units (su)	7.50	N/A
Biochemical Oxygen Demand, 5-day (BOD_5)	5.90	4.90
Total Suspended Solids (TSS)	1.10	1.05

Temperature (Winter)	20ºC	N/A

Outfall 01B

Parameter	**Max**	**Avg**
	(mg/l unless noted)	
Flow (MGD)	N/A	0.001886
pH, minimum, standard units (su)	7.20	N/A
pH, maximum, standard units (su)	7.30	N/A
Biochemical Oxygen Demand, 5-day (BOD_5)	9.50	7.80
Total Suspended Solids (TSS)	5.40	5.15
Temperature (Winter)	20ºC	N/A

In the previous permit term, DMRs show some exceedances for BOD, TSS , and pH at Outfall 001. At Outfall 01A and 01B there have been exceedances of both percent removal for BOD and TSS. An Administrative Order was issued by EPA on January 31, 2019 in regards to these violations of the permit.

An Inspection dated May 10, 2017 mentioned several concerns including: inability to show documentation giving prior notice to EPA on any planned changes in the sewage sludge disposal practice; inability to demonstrate that recordkeeping requirements were met; denitrification issues in the clarifier causing solids to float over the clarifier baffles; flawed sampling mythology that may not result in representative samples of the effluent; bypass valve that doesn't have a lock or leak detection system, which could lead to unknown bypasses. The inspectors discussed the possibility of connection into the Anthony WWTP if improving or maintaining their own plant to meet permit limits is not feasible.

IV. REGULATORY AUTHORITY/PERMIT ACTION

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

The application was dated December 11,2018. Additional information was received on February 22, 2019, and the application was deemed to be complete. It is proposed that the permit be reissued for a 5-year term following regulations promulgated at 40 CFR §122.46(a).

V. DRAFT PERMIT RATIONALE AND PROPOSED PERMIT CONDITIONS

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

Regulations contained in 40 CFR §122.44 NPDES permit limits are developed that meet the more stringent of either technology-based effluent limitation guidelines, numerical and/or narrative water quality standard-based effluent limits, or the previous permit.

Technology-based effluent limitations are established in the proposed draft permit for TSS and BOD, and percent removal for each. Water quality-based effluent limitations are established in the proposed draft permit for *E. coli* bacteria, pH and TRC.

B. TECHNOLOGY-BASED EFFLUENT LIMITATIONS/CONDITIONS

1. General Comments

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

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

BCT - Technology-based standard for the discharge from existing industrial point sources of conventional pollutants, including BOD, TSS, *E. coli* bacteria, pH, and O&G.

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

2. Effluent Limitation Guidelines

The facility is a POTW/POTW-like that has technology-based ELG's established at 40 CFR Part 133, Secondary Treatment Regulation. Pollutants with ELG's established in this Chapter are BOD, TSS and pH. BOD limits of 30 mg/l for the 30-day average and 45 mg/l for the 7-day average and 85% percent (minimum) removal are found at 40 CFR §133.102(a). TSS limits; also 30 mg/l for the 30-day average and 45 mg/l for the 7-day average, average and 85% percent (minimum) removal are found at 40 CFR §133.102(b). ELG's for pH are between 6-9 s.u. and are found at 40 CFR §133.102(c). The draft permit maintains the previous permit limits for percent removal for both BOD and TSS.

Regulations at 40 CFR §122.45(f)(1) require all pollutants limited in permits to have limits expressed in terms of mass such as pounds per day. When determining mass limits for POTWs or similar, the plant's design flow is used to establish the mass load. Mass limits are determined by the following mathematical relationship:

Loading in lbs/day = pollutant concentration in mg/l * 8.345 (lbs)(l)/(mg)(MG) * design flow in MGD

30-day average BOD/TSS loading = 30 mg/l * 8.345 (lbs)(l)/(mg)(MG) * 0.09 MGD = 22.5 lbs/day
7-day average BOD/TSS loading = 45 mg/l * 8.345 (lbs)(l)/(mg)(MG) * 0.09 MGD = 33.8 lbs/day

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

Effluent Characteristic	Discharge Limitation			
	lbs/day, unless noted		mg/l, unless noted	
Parameter	30-day Avg	7-day Max	30-day Avg	7-day Max
BOD	22.5	33.8	30	45
BOD, % removal[1]	≥ 85	---	---	---
TSS	22.5	33.8	30	45
TSS, % removal	≥ 85	---	---	---
pH	N/A	N/A	6.0 to 9.0 s.u.	

[1] % removal is calculated using the following equation: [(average monthly influent concentration – average monthly effluent concentration) ÷ average monthly influent concentration] * 100.

C. WATER QUALITY BASED LIMITATIONS

1. General Comments

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

2. Implementation

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

3. State Water Quality Standards

The general and specific stream standards are provided in NMWQS (20.6.4 NMAC effective on August 11, 2017). The discharge is to Rio Grande River (20.6.4.101 NMAC). The designated uses of the receiving water are irrigation, livestock watering, wildlife habitat, marginal warmwater aquatic life and primary contact.

4. Permit Action - Water Quality-Based Limits

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

a. pH

For marginal warmwater aquatic life and primary contact, criteria for pH is between 6.6 and 9.0 s.u. pursuant to 20.6.4.900.D and H(6) NMAC.

b. Bacteria

For primary contact, criteria for E. coli bacteria is at 126 cfu/100 ml monthly geometric mean and 410 cfu/100 ml daily maximum pursuant to 20.6.4.900.D NMAC.

c. Dissolved Oxygen

An evaluation of the permittee's impact on the receiving water dissolved oxygen was completed as part of the permitting process. A steady state model (LA-QUAL) was used to evaluate the biochemical oxygen demand of the discharge and associated constituents including ammonia. A complete characterization of the receiving water was not available. Certain parameters, including flow, were available and were utilized. However, the receiving water model also used default values to estimate the various unavailable hydrodynamic and water quality parameters. The discharge was modeled using data obtained from the application, permits limits and defaults were used for unavailable discharge characterization data.

The evaluation demonstrated that the discharge would not cause an excursion of the in-stream standard of 5 mg/L. As a result, no further DO requirement are established in the draft permit.

d. Toxics

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

All applicable facilities are required to fill out appropriate sections of the Form 2A and 2S, to apply for an NPDES permit or reissuance of an NPDES permit. The new form is applicable not only to POTWs, but also to facilities that are similar to POTWs, but which do not meet the regulatory definition of "publicly owned treatment works" (like private domestics, or similar facilities on Federal property). The forms were designed and promulgated to "make it easier for permit applicants to provide the necessary information with their applications and minimize the need for additional follow-up requests from permitting authorities," per the summary statement in the preamble to the Rule. These forms became effective December 1, 1999, after publication of the final rule on August 4, 1999, Volume 64, Number 149, pages 42433 through 42527 of the FRL.

The facility is designated as a minor, and does not need to fill out the expanded pollutant testing section Part D of Form 2A. There are no toxics that need to be placed in the draft permit except for TRC described below.

i. Critical Dilutions

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. 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 SWQB of the NMED provided EPA with the 4Q3 for the Gadsden ISD WWTP .

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:

The 4Q3 was calculated using the USGS SW Toolbox for the statistical analysis.

4Q3 1.06 CFS= 0.68 MGD

Harmonic Mean 1.19 cfs

CD = Qe/(F·Qa + Qe), where:

Qe = facility flow (0.09 MGD)
Qa = critical low flow of the receiving waters (0.68 MGD])
F = fraction of stream allowed for mixing (1.0)

CD = 0.09 MGD/[(1.0)(0.68 + 0.09)]
= 0.117
= 12%

In accordance with the WET Guidance, the facility is required to conduct a single effluent characterization WET test using a 48-hour acute test with Daphina pulex and Pimephales promelas and a 12.0% critical dilution.

e. TRC

The application indicates that the facility uses ultraviolet (UV) light for bacteria control. TRC limitations will be continued in the draft permit when chlorine is either used as a back-up system and/or when chlorine is used to disinfect plant equipment.

The WQS for TRC is 11 µg/l for chronic conditions and 19 µg/l for acute. Since acute conditions do not allow dilution; the limit must be met at end-of-pipe, but chronic standards do allow dilution, the permit shall use the most stringent WQS for the permit limit. CD was calculated 12.0%. The in-stream TRC concentration after allowing for dilution is; 11 µg/l ÷ .12= 91.67 µg/l. Since this value is more than the 19 µg/l end-of-pipe acute standard, the 19 µg/l is more stringent and will be more protective. The draft permit shall maintain the 19 µg/l limit in the previous permit. As a result, the permit directs the TRC limit to be applicable when chlorine is used for bacteria control and/or cleaning.

5. Monitoring Frequency for Limited Parameters

Regulations require permits to establish monitoring requirements to yield data representative of the monitored activity, 40 CFR §122.48(b), and to assure compliance with permit limitations, 40 CFR §122.44(i)(1). Sample frequency is based on Table 9 (page 34 of the NMIP) for design flow of 0.1 MGD or less and based on compliance history. Flow, TSS and BOD mass limits for Outfall 001 will continued to be totaled from internal Outfalls 01A & 01B due to concerns, raised in the previous permit renewal, of placing a meter at the river outfall location. Boron will be monitored once a month by grab. In

addition BOD, TSS and percent removal monitoring frequency has been increased to 2/month as a result of recurring exceedances of limits in the previous permit cycle as mentioned above.

Parameter	Frequency	Sample Type	Outfall Monitored
Flow	Daily	Continuous at 01A & 01B, 001 will be totaled from internal outfalls	001, 01A & 01B
pH	1/week	Instantaneous Grab	001
BOD_5	2/month	Grab	01A & 01B (for concentration limit) 001 (for mass limit)*
TSS	2/month	Grab	01A & 01B (for concentration limit) 001 (for mass limit)*
% Removal	2/month	Calculation	001
TRC	1/week	Instantaneous Grab	001
E. coli Bacteria	1/month	Grab	001
Boron	1/month	Grab	001

*Established at this outfall for more clarity instead. It's monitored at 01A & 01B in the existing permit.

Calculation for totaling mass loading for 001 from internal outfalls:

Mass Loading (lbs/day) Outfall 01A = BOD or TSS Concentration (mg/L)*8.345(lbs)(l)/(mg)(MG)* flow rate(MGD)
Mass Loading (lbs/day) Outfall 01B = BOD or TSS Concentration mg/L*8.345(lbs)(l)/(mg)(MG)* flow rate (MGD)

Mass loading for Outfall 001 = Mass Loading Outfall 01B + Mall Loading Outfall 01A

D. WHOLE EFFLUENT TOXICITY

The previous permits had biomonitoring requirements. The results of that testing have been analyzed to determine if RP exists for the discharge to exceed narrative criteria. The EPA Reasonable Potential Analyzer indicates that no RP exists. EPA concludes that this effluent does not cause or contribute toan exceedance of the State water quality standards. Therefore, WET limits will not be established in the proposed permit.

The receiving water, perennial stream currently has a 4Q3 of 1.06cfs (according to a nearby facility NPDES # NM0023311, Jacob Hands Las Cruces WWTP issued September 2015). Based on the nature of the discharge, a POTW/POTW-like, the design flow of 0.09 MGD, and the nature of the receiving water with the critical dilution of 12.0 % approximately, the NMIP directs the WET testing to be 48-hr acute tests using *Daphnia pulex* and *Pimephales promelas* once per permit term. The test is preferably completed at the 5th year of the permit term and the result should be sent along with an application for another NPDES permit renewal.

The proposed permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests based on a 0.75 dilution series. These additional effluent concentrations must be 5.0%, 7.0%, 9.0%, 12.0%, and 16%. The low-flow effluent concentration (critical low-flow dilution) is defined as 12.0% effluent (rounded up from 11.7%). The permittee shall limit and monitor discharge(s) as specified below:

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
WET Testing (48-hr Static Renewal)[1]	30-day Avg Min.	48-hr Min.	Frequency[2]	Type
Daphnia pulex	Report	Report	Once/5 year	Grab
Pimephales promelas	Report	Report	Once/5 year	Grab

[1] Monitoring and reporting requirements begin on the effective date of this permit. See Part II of the permit, Whole Effluent Toxicity Testing Requirements for additional WET monitoring and reporting conditions.
[2] The test shall take place between November 1 and April 30 if possible. This permit does not establish requirements to automatically increase the WET testing frequency after a test failure, or to begin a toxicity reduction evaluation (TRE) in the event of multiple failures. However, upon failure of any WET test, the permittee must report the results to EPA and NMED, Surface Water Quality Bureau, in writing, within 5 business days of notification of the test failure. EPA and NMED will review the test results and determine the appropriate action necessary, if any.

VI. FACILITY OPERATIONAL PRACTICES

A. SEWAGE SLUDGE

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 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. The facility is required to report to EPA, in terms of character and volume of pollutants any significant indirect dischargers into the POTW subject to pretreatment standards under §307(b) of the CWA and 40 CFR Part 403. The permittee shall require any indirect discharger to the treatment works to comply with the reporting requirements of Sections 204(b), 307, and 308 of the Act, including any requirements established under 40 CFR Part 403. The following pollutants may not be introduced into the treatment facility: Pollutants which create a fire or explosion hazard in the publicly owned treatment works (POTW), including, but not limited to, wastestreams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR 261.21; Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, unless the works are specifically designed to accommodate such discharge; Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW, resulting in Interference; Any pollutant, including oxygen demanding pollutants (e.g., BOD), released in a discharge at a flow rate and/or pollutant concentration which will cause Interference with the POTW; Heat in amounts which will inhibit biological activity in the POTW resulting in Interference but in no case heat in such quantities that the temperature at the POTW treatment plant exceeds 40 degrees Centigrade (104 degrees Fahrenheit) unless the Approval Authority, upon request of the POTW, approves alternate temperature limits; Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through; Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; and any trucked or hauled pollutants, except at discharge points designated by the POTW.

D. OPERATION AND REPORTING

The applicant is required to operate the treatment facility at maximum efficiency at all times; to monitor the facility's discharge on a regular basis; and report the results quarterly. The monitoring results will be available to the public.

Electronic Reporting Rule

Discharge Monitoring Report (DMR) results shall be electronically reported to EPA per 40 CFR 127.16. To submit electronically, access the NetDMR website at https://netdmr.epa.gov. Until approved for Net DMR, the permittee shall request temporary or emergency waivers from electronic reporting. To obtain the waiver, please contact: U.S. EPA - Region 6, Water Enforcement Branch, New Mexico State Coordinator (6EN-WC), (214) 665-6468. If paper reporting is granted temporarily, 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 copies to NMED as required (See Part III.D.IV of the permit). Reports shall be submitted monthly.

Sufficiently Sensitive Analytical Methods (SSM)

The permittee must use sufficiently sensitive EPA-approved analytical methods (SSM) (under 40 CFR part 136 or required under 40 CFR chapter I, subchapters N or O) when quantifying the presence of pollutants in a discharge for analyses of pollutants or pollutant parameters under the permit. In case the approved methods are not sufficiently sensitive to the limits, the most SSM with the lowest method detection limit (MDL) must be used as defined under 40 CFR 122.44(i)(1)(iv)(A). If no analytical laboratory is able to perform a test satisfying the SSM in the region, the most SSM with the lowest MDL must be used after adequate demonstrations by the permittee and EPA approval.

VII. 303(d) LIST

The receiving water segment 20.6.4.101 NMAC (Assessment Unit: Rio Grande (International Mexico boundary to Anthony Bridge) has been listed in 303(d) list for E.coli and Boron. There is no approved TMDL for Boron. Monitoring for Boron has been added to the draft permit as a result. The TMDL for the Main Stem of the Lower Rio Grande (from the International boundary with Mexico to Elephant Butte Dam) for E. coli bacteria was approved in 2007. The facility has waste load allocation for E. coli of 4.20×10^8 cfu/day with effluent limit of 126 cfu/100ml in the TMDL. Therefore, these requirements are continued in the draft permit. The permit has a standard reopener clause that would allow the permit to be changed if at a later date additional requirements on new or revised TMDLs are completed.

VIII. ANTIDEGRADATION

The NMAC, Section 20.6.4.8 "Antidegradation Policy and Implementation Plan" sets forth the requirements to protect designated uses through implementation of the State water quality standards. The limitations and monitoring requirements set forth in the proposed permit are developed from the State water quality standards and are protective of those designated uses. Furthermore, the policy sets forth the intent to protect the existing quality of those waters, whose quality exceeds their designated use. The permit requirements and the limits are protective of the assimilative capacity of the receiving water, which is protective of the designated uses of that water, NMAC Section 20.6.4.8.A.2.

IX. ENDANGERED SPECIES CONSIDERATIONS

According to the most recent county listing available at US Fish and Wildlife Service (USFWS), Southwest Region 2 website, http://www.fws.gov/southwest/es/EndangeredSpecies/lists/, there are three species listed as endangered species: Least Tern, Sneed Pincushion Cactus, and Southwestern Willow Flycatcher. There is one species listed as threatened: Yellow Billed Cuckoo.

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. The facility is located outside of any designated critical habitat.

2. The draft permit is consistent with the States WQS and does not increase pollutant loadings.

3. Reissuance of this permit will not result in the destruction or adverse modification of habitat, as no construction activities are planned.

4. EPA determines that Items 1, thru 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.

X. HISTORICAL and ARCHEOLOGICAL PRESERVATION CONSIDERATIONS

The reissuance of the permit should have no impact on historical and/or archeological sites since no construction activities are planned in the reissuance.

XI. PERMIT REOPENER

The permit may be reopened and modified during the life of the permit if NMWQS are promulgated or revised. In addition, if the State develops a TMDL, this permit may be reopened to establish effluent limitations for the parameter(s) to be consistent with that TMDL. Modification of the permit is subject to the provisions of 40 CFR §124.5.

XII. VARIANCE REQUESTS

None

XIII. CERTIFICATION

The permit is in the process of certification by the State Agency following regulations promulgated at 40 CFR 124.53. A draft permit and draft public notice will be sent to the District Engineer of COE, to the Regional Director of FWS and to the National Marine Fisheries Service prior to the publication of that notice.

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 proposed permit:

A. APPLICATION(s)

EPA Application Forms 2A and 2S dated December 11, 2018. Additional information received on February 22, 2019.

B. 40 CFR CITATIONS

Sections 122, 124, 125, 133, 136

C. STATE OF NEW MEXICO REFERENCES

New Mexico State Standards for Interstate and Intrastate Surface Water, 20.6.4 NMAC, effective August 11, 2017.

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

State of New Mexico Clean Water Act 303(d)/305(b) Integrated Report and List, 2016-2018.

TMDL for the Main Stem of the Lower Rio Grande (from the International boundary with Mexico to Elephant Butte Dam), June 11, 2007