NPDES PERMIT NO. NM0030848
FACT SHEET

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

APPLICANT

City of Santa Fe
Buckman Direct Diversion
341 Caja del Rio Road
Santa Fe, NM 87506

ISSUING OFFICE

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PREPARED BY

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DATE PREPARED

May 29, 2019

PERMIT ACTION

Proposed reissuance of the current NPDES permit issued July 29, 2014, with an effective date of September 1, 2014, and an expiration date of August 31, 2019.

RECEIVING WATER – BASIN

Rio Grande

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
MQL	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.

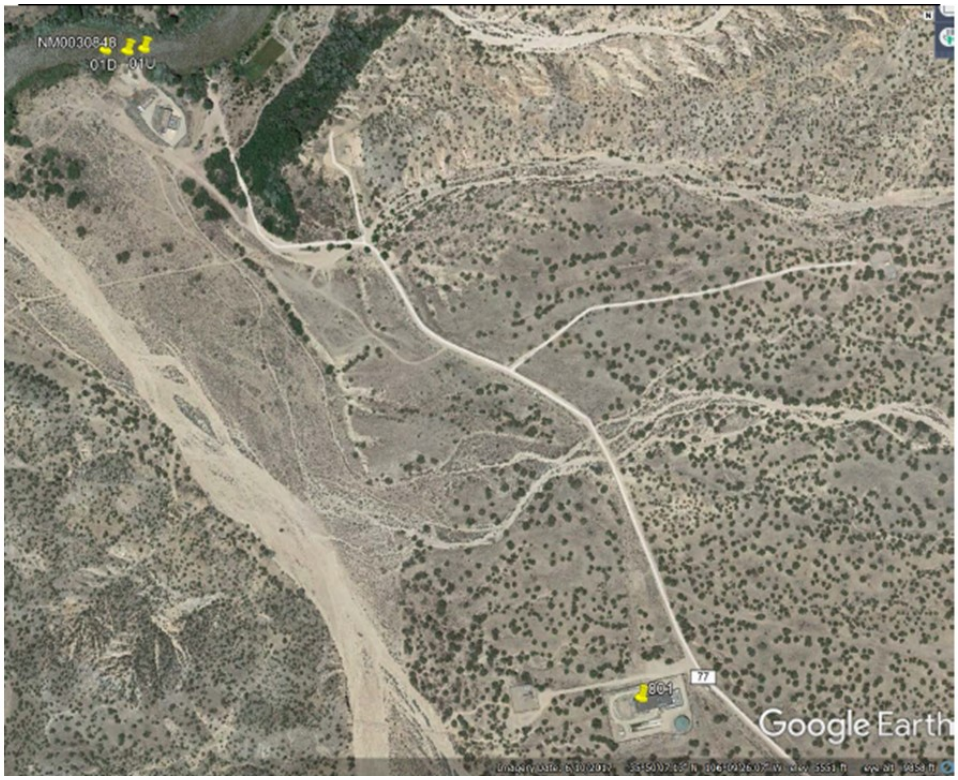
I. CHANGES FROM THE PREVIOUS PERMIT

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

1. No changes have been made to the previous permit.

II. APPLICATION LOCATION and ACTIVITY

As described in the application, the plant is located at 341 Caja del Rio Road, Santa Fe County, New Mexico. Under the SIC Code 4941, the applicant operates a Water Treatment Plant. This permitting action is specifically restricted to the discharge of materials back to the Rio Grande River by the Buckman Direct Diversion (BDD).



The BDD project diverts water from the Rio Grande through a large intake structure to provide up to 15 MGD of drinking water to the City and County of Santa Fe. Diverted water is pumped from the river approximately 11 miles to the Buckman Regional Water Treatment Plant. Water intake operations occur at varying dates and times depending on variables such as river flow and upstream turbidity. The grit/sand removal at BDD is accomplished with the single pass liquid-solid separation system “LAKOS”. The LAKOS system is a patented design that uses centrifugal forces to separate sand and grit from the raw water pumped into the units. No chemicals are added prior or during the pre-treatment of the influent. The efficiency of this separator depends on the specific gravity of the suspended solids and their particle size, being less efficient for lighter and finer particles, and more efficient for heavier and larger particles. The sand (about

40% of total sediment) is returned to the Rio Grande, which is expected to increase the sediment concentrations (TSS) by less than 2%. The near-river diversion facilities consist of a raw water pump station and a co-located booster station and sediment removal facility. The concentrated sediment effluent generated from the gravity centrifuge process is collected in a sump which is then batch discharged utilizing additional dilution water from the river.

The discharge occuring at Outfall 001 consists of sand-sized sediment removed from the diverted river water, return flow from the continuous samplers in the mechanical building, and water from the sumps in the raw water lift station. The BDD effluent returns residuals to the Rio Grande at an average of 0.2 MGD.

III. RECEIVING STREAM STANDARDS

The discharge is located at Latitude 35º 50' 10" North, Longitude 106º 9' 43" West. The discharge from the facility is to receiving waters named Rio Grande, in Waterbody Segment Code No. 20.6.4.114 of the Rio Grande Basin. The general and specific stream standards are provided in "New Mexico State Standards for Interstate and Intrastate Surface Waters", (20.6.4 NMAC, effective August 11, 2017). The known uses of the receiving water(s) are irrigation, livestock watering, wildlife habitat, marginal coldwater aquatic life, primary contact, and warmwater aquatic life; and public water supply on the main stem of the Rio Grande.

IV. EFFLUENT CHARACTERISTICS

A quantitative description of the discharge(s) described in the EPA Permit Application Form 2C received February 12 and April 15, 2019 are presented below in Table 1:

POLLUTANT TABLE – 1

Parameter	**Effluent**						**Intake**	
	Max Daily Value		**Max 30 Day Value**		**Long Term Avg Value**		**Long Term Avg Value**	
	Conc.	Mass	Conc.	Mass	Conc.	Mass	Conc.	Mass
Flow, million gallons/day (MGD)	0.929		0.235		0.151		605 ***	
pH, minimum, standard units (SU)	8.0 min	8.6 max	8.15 min	8.43 max	N/A	N/A	N/A	N/A
Biochemical Oxygen Demand (BOD_5) *	13 mg/L	0.007 T	N/A	N/A	N/A	N/A	13 mg/L	46 T
Chemical Oxygen Demand (COD) *	32 mg/L	0.016 T	N/A	N/A	N/A	N/A	30 mg/L	106 T
Total Organic Carbon *	3.4 mg/L	0.0017 T	N/A	N/A	N/A	N/A	3.6 mg/L	12.8 T
Total Suspended Solids (TSS)	320 mg/L *	0.161 T *	N/A	N/A	1,069 mg/L **	0.6 T **	130 mg/L ***	461 T ***

Parameter	Effluent						Intake	
	Max Daily Value		Max 30 Day Value		Long Term Avg Value		Long Term Avg Value	
	Conc.	Mass	Conc.	Mass	Conc.	Mass	Conc.	Mass
Ammonia (as N) *	<1 (ND)	N/A	N/A	N/A	N/A	N/A	<1 (ND)	N/A
Temperature, winter (^{o}C)	12.5		12.5		7.5		7.8	
Temperature, summer (^{o}C)	25.4		22.8		19.3		19.6	

***** Samples were collected on Mar 25th, 2019 when effluent discharge was 0.133 MGD and Rio Grande daily flow was 937 MGD.
****** Based on BDD NPDES Permit weekly TSS measurements from Jan 2011-Aug 2014.
*******Based on measurement on Mar 25th, 2019. In comparison Otowi Gage data (7/1/17-6/30/18 when SSSC <900mg/l) showed Rio Grande intake had the following average values: SSC 360 mg/L, Flow 936 cfs, Mass 824 T.

A summary of the last 36 months of available pollutant data from May 2016 through May 2019, taken from DMRs, shows no exceedances of permit limits.

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 April 15, 2019. 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 July 29, 2014, with an effective date of September 1, 2014, and an expiration date of August 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 not established in the draft permit. Water quality-based effluent limitations are established in the proposed draft permit for turbidity and pH.

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_5, 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.

2. Effluent Limitations Guidelines for TSS and Settleable Solids

There are currently no federal effluent limitation guidelines for a water treatment plant for water taken directly from a River. The BDD mechanically removes sediment out of the water taken directly from the Rio Grande, with no chemical treatment of sediment prior to discharge. Limits established in this permit are based on BPJ of the permit writer.

The discharge shall meet the New Mexico narrative standards as stated in subsection A, NMAC 20.6.4.13 which states that:

(1) Surface waters of the state shall be free of water contaminants including fine sediment particles (less than two millimeters in diameter), precipitates or organic or inorganic solids from other than natural causes that have settled to form layers on or fill the interstices of the natural or dominant substrate in quantities that damage or impair the normal growth, function or reproduction of aquatic life or significantly alter the physical or chemical properties of the bottom.

(2) Suspended or settleable solids from other than natural causes shall not be present in surface waters of the state in quantities that damage or impair the normal growth, function or reproduction of aquatic life or adversely affect other designated uses.

A summary of the technology-based limits for the Buckman Direct Diversion is:

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
pH	N/A	N/A	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. 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, amended through August 11, 2019). General criteria are applicable as specified in 20.6.4.13 NMAC. The discharge is to Rio Grande, in Waterbody Segment Code No. 20.6.4.114 of the Rio Grande Basin (Cochiti Reservoir to San Ildefonso bnd). The known uses of the receiving water(s) are irrigation, livestock watering, wildlife habitat, marginal coldwater aquatic life, primary contact, and warmwater aquatic life; and public water supply on the main stem Rio Grande.

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. pH

The WQS criteria applicable to primary contact and warmwater aquatic life designated uses require 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.

b. Turbidity

According to 20.6.4.13.J. NMAC, which states that discharges shall not cause turbidity to increase more than 10 NTU over background turbidity when the background turbidity, measured at a point immediately upstream of the activity, is 50 NTU or less, nor to increase more than 20% when the background turbidity is more than 50 NTU. BDD does not divert water when the turbidity of the Rio Grande exceeds 600 NTU.

1. Reporting Turbidity Measurements at Instream Sample Points 01U and 01D

Instream upstream sample point, 01U is located at least 30-feet upstream but not greater than 100-feet of Outfall 001. Instream downstream sample point, 01D is located at least 100-feet downstream but not greater than 150-feet of Outfall 001. There are no other discharges or tributaries within this area that would add sediments or affect turbidity, so the difference in measurements are expected to be due primarily, if not exclusively to the BDD discharge.

The permittee shall report all turbidity measurements taken at Instream Sample Points 01U an 01D within the reporting period. Instream Sample Point 01U shall be reported as STORET Code No. 52330 and Instream Sample Point 01D shall be reported as STORET Code No. 52350. These values shall not be averaged for reporting purposes.

2. Determining Turbidity Test Results

(a) If turbidity reported at Instream Sample Point 01U is 50 NTU or less:

If the difference of the measured turbidity at Instream Sample Points 01U and 01D is greater than 10 NTU, assign a “1” to the turbidity test; otherwise, assign a “0”.

(b) If turbidity reported at Instream Sample Point 01U is greater than 50 NTU:

If the difference of the measured turbidity at Instream Sample Points 01U and 01D is greater than 20% of the turbidity recorded from Sample Point 01U, assign a “1” to the turbidity test; otherwise, assign a “0”.

3. Reporting Total Turbidity Test Failures

(a) If turbidity test failures occur during the reporting period:

Sum the numerical values assigned to each turbidity test taken within the reporting period. Enter this amount for STORET Code No. 51517 in the report.

(b) If no turbidity test failures occur during the reporting period:

Enter a "0" for STORET Code No. 51517 in the report.

4. Example Calculations

In this example, the permittee is required to sample four (4) time within a reporting period:

Sample 1

Instream Sample Point 01U turbidity measurement: 20 NTU
Instream Sample Point 01D turbidity measurement: 25 NTU

Instream Sample Point 01U turbidity is less than 50 NTU, therefore b.2(a) criteria will be used. The difference of the turbidity at Instream Sample Points 01U and 01D is 5 NTU, which is less than the 10 NTU criteria. Therefore, this sample is a "Pass" and would have a value of "0".

Sample 2

Instream Sample Point 01U turbidity measurement: 20 NTU
Instream Sample Point 01D turbidity measurement: 40 NTU

Instream Sample Point 01U turbidity is less than 50 NTU, therefore b.2(a) criteria will be used. The difference of the turbidity at Instream Sample Points 01U and 01D is 20 NTU, which is greater than the 10 NTU criteria. Therefore, this sample is a "Fail" and would have a value of "1".

Sample 3

Instream Sample Point 01U turbidity measurement: 100 NTU
Instream Sample Point 01D turbidity measurement: 115 NTU
Instream Sample Point 01U turbidity is greater than 50 NTU, therefore b.2(b) criteria will be used. Twenty percent (20%) of Instream Sample Point 01U turbidity is 20 NTU. The difference of the turbidity at Instream Sample Points 01U and 01D is 15 NTU, which is less than the 20 NTU criteria. Therefore, this sample is a "Pass" and would have a value of "0".

Sample 4

Instream Sample Point 01U turbidity measurement: 100 NTU
Instream Sample Point 01D turbidity measurement: 150 NTU

Instream Sample Point 01U turbidity is greater than 50 NTU, therefore b.2(b) criteria will be used. Twenty percent (20%) of Instream Sample Point 01U turbidity is 20 NTU. The difference of the turbidity at Instream Sample Points 01U and 01D is 50 NTU, which is greater than the 20 NTU criteria. Therefore, this sample is a "Fail" and would have a value of "1".

Sample Reporting

The permittee will report all turbidity measurements from Instream Sample Points 01U and 01D. The permittee shall also sum each pass/fail test result. In this example:

Sample 1: 0
Sample 2: 1
Sample 3: 0
Sample 4: 1
Total: 2

Therefore, the permittee would enter a "2" for STORET Code No. 51517.

c. 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 2C for Industrial Activity. 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 classified as an industrial facility and the receiving water has been identified to be a classified perennial stream with a 4Q3 of 363 cfs provided by NMED using historical data.

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 = Qe/(F·Qa + Qe), where:
Qe = facility flow (0.28 MGD/0.43 cfs)
Qa = critical low flow of the receiving waters (363cfs)
F = fraction of stream allowed for mixing (1.0)

CD = 0.43 cfs/ [(1.0)(363 cfs) + 0.43]
= 0.00118
= 0.12%

The acute to chronic ratio of 10:1 shall be used to allow acute biomonitoring in lieu of chronic. Therefore, acute toxicity is proposed to be evaluated at a critical dilution of **1.2%**. The critical dilution will be used for further toxic and WET permitting evaluations and requirements.

Total Residual Chlorine

The Buckman Direct Diversion does not use chlorine in the process that can contribute to the discharge at Outfall 001.

5. 303(d) List Impacts

Rio Grande (Cochiti Reservoir to San Ildefonso boundary) – 20.6.4.114, is listed in the "2018-2020 State of New Mexico Integrated Clean Water Act Section 303(d) / 305(b) Report", this segment from has been identified as not supporting the irrigation, livestock watering, wildlife habitat, marginal coldwater aquatic life, and warmwater aquatic life. The probable causes of impairment are dissolved aluminum, Gross Alpha – Adjusted, Turbidity, Thallium, PCBs Total Recoverable Selenium, PCBs – Fish Consumption Advisory and Total Recoverable Cyanide, with a TMDL schedule for 2020 (est.). Should be noted that the city of Santa Fe has procedures in place that do not allow public water supply withdrawal from the Buckman Diversion during significant storm events.

The facility will meet the published water quality standards for turbidity, which states that turbidity shall not exceed 10 NTU over background turbidity when the background turbidity is 50 NTU or less or increase more than 20 percent (20%) when the background turbidity is more than 50 NTU in order to meet the requirements of 40 CFR Part 122.44 (d). Meeting the water quality standards meets the regulatory requirement to not "cause or contribute" as discussed above.

A permit reopener clause has been added to the permit stating; "This permit may be reopened to establish effluent limitations for the parameter(s) to be consistent with approved State Standards in accordance with 40 CFR 122.44(d)". Modification of the permit is subject to the provisions of 40 CFR 124.5. Additionally, language has been added stating that the permit may be reopened and modified during the life of the permit if relevant portions of the State WQS are revised or remanded. The permit may be reopened to include conditions of the completed TMDL. There are no additional permit requirements to be placed in the permit at this time.

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). Sample frequency is based on the March 12, 2012, NMIP and the previous permit.

Flow is proposed to be measured and reported continuously consistent with the current permit, using a totalizing meter. The pollutant pH shall be sampled and reported weekly using grab samples. Turbidity shall be monitored weekly, using grab samples like the current permit.

E. WHOLE EFFLUENT TOXICITY REQUIREMENTS

Procedures for implementing WET terms and conditions in NPDES permits are contained in the NMIP. In Section VI.C.4.c. above; "Critical Conditions", it was shown that the critical dilution, CD, for the facility is 0.12%. Because the CD is $\leq$ 10%, an acute-to-chronic ratio of 10:1 referenced in footnote 6 of Table 11 of the NMIP is used. As a result, the CD is 1.2%. Based on the nature of the discharge (primary treatment and no chemicals added); industrial, the discharge flow; 0.28 MGD, the design flow (intake); 15 MGD, the nature of the receiving water; perennial stream, and the critical dilution; 1.2%, the NMIP directs WET test to be an acute test using Daphnia pulex and Pimephales promelas to Once/Quarter for the 1st year. If all pass, reduce for years two thru five Daphnia pulex to Once/Six months and Pimephales promelas to Once/Year; similar to the current permit.

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 0.5%, 0.7%, 0.9%, 1.2% and 1.6%.

The previous permit had a 48-hour acute WET testing and over the term of the permit had zero failures, therefore RP does not exist. Based on the test results, the permit does not require WET limits. EPA concludes based on the nature of the discharge described in activity section of this document that this effluent will not cause or contribute to an exceedance of the State water quality standards. Therefore, WET limits will not be established in the proposed permit. Discharges shall be limited and monitored by the permittee as specified below.

EFFLUENT CHARACTERISTIC	**DISCHARGE MONITORING**	**MONITORING REQUIREMENTS**	
Whole Effluent Toxicity Testing (48-hour acute test) *1	VALUE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Daphnia pulex (1st year)	Report	Once/Quarter	12-hr Composite
Pimephales promelas (1st year)	Report	Once/Quarter	12-hr Composite

EFFLUENT CHARACTERISTIC	DISCHARGE MONITORING	MONITORING REQUIREMENTS	
Whole Effluent Toxicity Testing (48-hour acute test) *1	VALUE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Daphnia pulex (years: 2nd, 3rd, 4th, 5th)	Report	Once/6 months	12-hr Composite
Pimephales promelas (years: 2nd, 3rd, 4th, 5th)	Report	Once/Year	12-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 draft permit is consistent with the requirements to meet antibacksliding provisions of the Clean Water Act, Section 402(o) and 40 CFR 122.44(l)(1), which state in part that interim or final effluent limitations must be as stringent as those in the previous permit, unless information is available which was not available at the time of permit issuance. The draft permit maintains the effluent limitations of the previous permit for pH, Turbidity and Whole Effluent testing.

IX. ENDANGERED SPECIES CONSIDERATIONS

According to the most recent county listing available at USFWS, Southwest Region 2 website, http://www.fws.gov/endangered/, three species in Santa Fe County are listed as endangered or threatened. The Southwestern willow flycatcher (*Empidonax traillii*) is listed as endangered. The Mexican spotted owl (*Strix occidentalis lucida*), and Yellow-billed Cuckoo (*Coccyzus americanus*) are 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.

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

Unlike most owls, Mexican spotted owls (*Strix occidentalis lucida*) have dark eyes. They are an ashy-chestnut brown color with white and brown spots on their abdomen, back and head. Their brown tails are marked with thin white bands. They lack ear tufts. Young owls less than 5 months old have a downy appearance. Females are larger than males. The primary threats to its population in the U.S. (but likely not in Mexico) have transitioned from timber harvest to an increased risk of stand-replacing wildland fire. Recent forest management now emphasizes sustainable ecological function and a return toward pre-settlement fire regimes, both of which are more compatible with maintenance of spotted owl habitat conditions than the even-aged management regime practiced at the time of listing.

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 Permit Application Form 2C received February 12 and April 15, 2019.

B. 40 CFR CITATIONS

Citations to 40 CFR as of May 29, 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 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.

Statewide Water Quality Management Plan, December 17, 2002.

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

D. OTHER

EPA Compliance Evaluation Inspection Buckman Direct Diversion NM0030848; May 2, 2018.

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