NPDES PERMIT NO. NM0000108 FACT SHEET

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

APPLICANT:

El Paso Electric Company P.O. Box 982 El Paso, TX 79960-0982

ISSUING OFFICE:

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

PREPARED BY:

Aron K. Korir Physical Scientist NPDES Permits Branch (6WD-PE) Water Division Phone: 214-665-6522 FAX: 214-665-2191 Email: Korir.aron@epa.gov

DATE PREPARED:

June 30, 2023

PERMIT ACTION

Proposed reissuance of the current NPDES permit issued August 8, 2018, with an effective date of January 1, 2019, and an expiration date of December 31, 2023.

RECEIVING WATER – BASIN

Rio Grande - Rio Grande Basin

DOCUMENT ABBREVIATIONS

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

403	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)
BPI	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
COF	United States Corn of Engineers
CWA	Clean Water Act
DMR	Discharge monitoring report
FLG	Effluent limitation guidelines
FPA	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
11g/1	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
NMWOS	New Mexico State Standards for Interstate and Intrastate Surface Waters
NPDES	National Pollutant Discharge Elimination System
MOL	Minimum quantification level
0&G	Oil and grease
POTW	Publicly 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
USFWS	United States Fish & Wildlife Service
USGS	United States Geological Service
WLA	Wasteload allocation
WET	Whole effluent toxicity
WQCC	New Mexico Water Quality Control Commission
WQMP	Water Quality Management Plan
WWTP	Wastewater treatment plant

I. CHANGES FROM THE PREVIOUS PERMIT

- Low flow 4Q3 has been changed from 1.14 MGD to 0 MGD.
- II. APPLICANT ACTIVITY

Based om information provided in the application, the El Paso Electric Company (EPE) operates a natural gas fueled power generation station called the Rio Grande Power Station (RGPS) that is located at 3501 Doniphan Drive, Sunland Park, New Mexico. Power station is categorized under Standard Industrial Classification (SIC) Code(s) 4911.



EPE operates three steam electric units (Unit Nos. 6, 7, and 8) and a simple cycle gas turbine (Unit No. 9), that generate up to 340 megawatts of electricity. RGPS has two outfalls (001 and 002) that are permitted to discharge cooling tower blowdown and storm water. Outfall 001 is designed to discharge directly into the Rio Grande Segment No. 20.6.4.101 of the Rio Grande Basin. However, Outfall 001 has not discharged since 2010. EPE maintains this outfall in their permit for emergency purposes only, such as times of extreme flooding conditions within the plant. EPE claims that the overall quality of the Outfall 001 discharge would be similar to the cooling tower blowdown and/or storm water discharged through Outfall 002. Outfall 002 discharges to an unclassified receiving water named Montoya Drain thence to receiving water named Rio Grande in Segment No. 20.6.4.101 of the Rio Grande Basin

III. DISCHARGE LOCATION

The locations of the two outfalls based on the application package are:

Outfall 001 - Latitude 31° 48' 13" North, Longitude 106° 32' 47" West Outfall 002 - Latitude 31° 48' 16" North, Longitude 106° 32' 59" West

IV. RECEIVING STREAM USES

The designated uses of the receiving water(s) in Segment 20.6.4.101 of Rio Grande Basin are irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat, and primary contact.

V. STREAM STANDARDS

The general and specific stream standards are provided in "New Mexico State Standards for Interstate and Intrastate Surface Waters" (the NMWQS), 20.6.4 NMAC, as amended through September 24, 2022.

VI. DISCHARGE DESCRIPTION

Outfall 001: Currently, the storm water runoff within the drainage area of the Lower Canal flows into the Lower Canal where it is held for evaporation. On an emergency basis, storm water may be pumped from the Lower Canal to a surface depression located south of the Lower Canal where the water is held for evaporation. There are no internal outfalls to the Lower Canal which will require monitoring. The Lower Canal can receive water from the Upper Canal via a gate valve separating the Upper Canal from the Lower Canal. The Upper Canal receives water from the sources discussed in Outfall 002 below. The water in the Lower Canal can be pumped to the Upper Canal. EPE discharges through Outfall 001 only on an emergency basis to the Rio Grande River. Outfall 002: Outfall 002 is utilized for discharging cooling tower blowdown from the cooling towers for Units 6, 7 and 8. Unit 9 Cooling Tower blowdown and first pass Reverse Osmosis (RO) reject is used as cooling water tower makeup for Cooling Tower 8 or it may be discharged directly to Outfall 002. The cooling tower blowdown (550 gpm) is discharged through Outfall 002 to the Montoya Drain, thence to the Rio Grande River.

VII. EFFLUENT CHARACTERISTICS

A quantitative description of the discharge(s) described in the EPA Permit Application Form 2c received June 16, 2023, are presented below in Table 1:

Parameter	Max	Avg
(mg/l unless noted)		
Flow, million gallons/day (MGD)	0.576	0.108
Temperature, winter	0.55 °C	N/A
Temperature, summer	36.11 °C	22 °C

pH, minimum, standard units (s.u.)	7.36 su	N/A
pH, maximum, standard units (s.u.)	7.77 su	N/A
Biochemical Oxygen Demand, (BOD)	<0.2	N/A
Total Suspended Solids (TSS)	7.30	N/A
Ammonia (as N)	0.109	N/A
Chemical Oxygen Demand (COD)	46.4	N/A
Antimony, total	0.00474	N/A
Arsenic, total	0.0596	N/A
Chromium, total	0.00621	N/A
Copper, total	0.104	N/A
Nickel, total	0.0188	N/A
Selenium, total	0.0129	N/A
Zinc, total	0.137	N/A
Color	5.00	N/A
Fecal Colifom	13.40 (MPN)	N/A
Flouride	4.35	N/A
Nitrate-nitrite	7.79	N/A
Nitrogen, total organic (as N)	9.89	N/A
Phosphorous (as P)	1.81	N/A
Sulfate (as SO4)	2870	N/A
Surfactants	0.17	N/A
Aluminum, total	0.0571	N/A
Barium, total	0.175	N/A
Boron, total	1.52	N/A
Iron, total	0.495	N/A
Magnesium, total	23.9	N/A
Molybeddenum, total	0.0773	N/A
Manganese, total	0.0806	N/A

VIII. PROPOSED EFFLUENT LIMITATIONS

The proposed effluent limitations for those pollutants proposed to be limited are as follows:

Please see the proposed draft permit.

IX. 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 technologybased 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.

It is proposed that the permit be reissued for a 5-year term following regulations promulgated at 40 CFR §122.46(a). The current permit expires December 31, 2023, and a permit renewal application was received June 16, 2023, in accordance with provisions found at 40 CFR §122.21(d) and (e). The permit application was deemed administratively complete on July 10, 2023.

X. 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, numerical and/or narrative water quality standard-based effluent limits, or the previous permit.

There are no technology-based effluent limitations established in the proposed draft permit. Water quality-based effluent limitations are established in the proposed draft permit for TDS, pH and TSS.

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 effluent limitations guidelines where applicable, on BPJ (best professional judgment) in the absence of guidelines, or on a combination of the two.

The technology-based effluent limitations guidelines (ELG) in the current permit are retained. The ELG of TSS, oil & grease, total copper and total iron are retained for metal cleaning waste sources at internal outfalls 106, 107, and 108. The ELG of TSS and oil & grease for low volume wastes apply at two main Outfalls 001 and 002. The discharge at Outfall 002 is cooling tower blowdown which consists of various sources of water. 40 CFR Part 423.13 requires that the maximum concentration and the average concentration for 126 priority pollutants (except for total chromium and total zinc) contained in chemicals added for cooling tower maintenance are not detectable in the final discharge. According to the Development Document for the Steam Electric (EPA-440/1-82/029), the sources of those priority pollutants is prohibited in detectable amounts from cooling tower discharges if the pollutants come from cooling tower maintenance chemicals. (p.493)" This permit renewal will retain the current permit condition that prohibits the use of any tower maintenance chemicals which contain any of the 126 priority pollutants.

A National Pollutant Discharge Elimination System (NPDES) permit for any new or existing facility (see special definitions at 40 CFR 125.83 and 125.133) operating a cooling water intake structure (CWIS) must contain permit conditions meeting the requirements applicable to CWISs under section 316(b) of the Clean Water Act (CWA). Section 316(b) of the CWA requires that the location, design, construction, and capacity of CWISs reflect the best technology available (BTA) for minimizing adverse environmental impact (AEI). Under current regulations, existing facilities are subject to section 316(b) conditions that reflect BTA for minimizing AEI on a case-by-case, best professional judgment (BPJ) basis (40 CFR 125.90(b) and 401.14). The facility does not employ "once through cooling water" instead relaying on "recirculated cooling water' as defined in 40 CFR Part 423. The facility has used cooling tower technology and the make-up water is from municipal water supply and water well. Therefore, the facility is not subject to section 316(b). The facility is required to operate the cooling tower as an once-through cooling system.

El Paso Electric is requesting to authorize the discharge of non-chemical cleaning wastewater from pressure washing or cleaning equipment associated with Unit No. 9 through Internal Outfall 109. The volume of wastewater generated is approximately 4,000 gallons per event. Unit No. 9 non-chemical cleaning wastewater will be collected in a tank and analyzed prior to discharge to Cooling Tower 9 to be reused as makeup water or discharged to the Upper Canal to be used as cooling tower makeup. Otherwise, the wastewater will be shipped offsite for disposal.

Discharges at Internal Outfall 109 is not authorized in the current permit. In order that the permittee may reuse treated non-chemical metal cleaning effluent, EPA proposes to authorize the discharge of non-chemical cleaning wastewater from pressure washing or cleaning equipment associated with Unit No. 9 through Internal Outfall 109 to Cooling Tower 9 as makeup water if the effluent quality meets applicable ELG effluent limitations established for Internal Outfalls 106, 107 and 108. The permittee must monitor effluent at Internal Outfall 109 prior to reuse or discharge. The term chemical metal cleaning waste means any wastewater resulting from the cleaning of any metal process equipment with chemical compounds, including, but not limited to, boiler tube cleaning.

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 New Mexico State Standards for Interstate and Intrastate Surface Waters are found at 20.6.4 NMAC, amended through September 24, 2022, and can be found at: https://www.env.nm.gov/surface-water-quality/wp-content/uploads/sites/18/2022/11/2022-09-24-SRCA-NMAC_Integrated_Rule.pdf. The facility discharges into the Rio Grande in Segment No. 20.6.4.101 of the Rio Grande Basin. Aquatic life criteria and all applicable chronic criteria are also applied. The designated uses of the receiving water are irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat 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

The NMWQS criteria applicable to marginal warmwater aquatic life designed use require pH to be between 6.6 to 9.0 s.u. These limits were established in the current permit and are maintained in the draft permit.

b. Boron

Stream assessments by NMED SQWB 2022-2024 303(d) list indicate the designated irrigation use is not supported and dissolved boron is the cause of the impairment. NMED publicly noticed a draft TMDL with a Boron WLA for El Paso Electric (Gila River and lower Rio Grande) in August 2023. Even if the TMDL is not approved at the time of permit proposal making limits consistent with the WLA mandatory, the reasonable potential analysis to determine the need for water quality-based limits will include Boron using monitoring data from the current permit term. Since the low flow (4Q3) for the current permit was updated to zero (0) cfs. This segment has dissolved Boron use specific criterion of 0.75mg/l. The maximum flow at outfall 002 is 0.594 MGD

Loading in lbs/day = pollutant concentration in mg/L * 8.345 lbs/gal * design flow in MGD

Dissolved Boron loading = 0.75 mg/L * 8.345 lbs/gal * 0.594 MGD = 3.72 lbs/day

5. Dilution Calculations

Below is flow information for Rio Grande gage below facility:

USGS 08364000 Rio Grande at El Paso, Texas El Paso County, Texas Hydrologic Unit Code 13030102 Latitude 31°48'10", Longitude 106°32'25" NAD27 Drainage area 32,210.00 square miles Contributing drainage area 29,270 square miles Gage datum 3,722.30 feet above NGVD29

NMED has provided an updated 4Q3 and Harmonic Mean for Rio Grande (Outfall 001) using data from the Elephant Butte Irrigation District. The harmonic means was calculated using the equation in the NMIP considering the days with zero flow.

Low Flow: 4Q3 = 0 cfs, Harmonic Means = 0.35 cfs = 0.226 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/(FQa + Qe), where:

Qe = facility flow (0.594 MGD) Qa = critical low flow of the receiving waters (0 MGD/0 cfs) F = fraction of stream allowed for mixing (1.0)

Critical Dilution = 0.594 MGD/ [(1.0) (0) + 0.594] = 1.0 = 100%

6. TRC

Pursuant to 20.6.4.900.J NMAC, Criteria for TRC are 19 μ g/L and 11 μ g/L for acute and chronic aquatic life, respectively. The current permit established a limit of 19 μ g/L, which at a critical dilution of 5% is the more stringent value. The critical dilutions determined in the above section labelled (ii) is used in conjunction with the chronic criteria with zero seasonal low flow and no dilution is 11 μ g/L. This TRC limit will be incorporated in the draft permit.

7. Reasonable Potential Analysis

EPA evaluated the downstream ambient water data from NMED SWQB MAS station EPA used ambient data from RIO GRANDE AT CORCHESNE BRIDGE - 42RGrand002.7 which is located approximately 600 feet downstream of El Paso Electric Company collected in December 2010 through September 2019. The geometric average concentrations for dissolved Calcium and dissolved Magnesium have a calculated hardness as CaCO3 = 346 mg/L. Calculated geometric means for Total Suspended Solids (TSS) = 36 mg/L, pH = 8.31 su, and Temperature range 8 - 27 °C. EPA found

Ambient Data below EPE vs NMWQS

Pollutants Detected	Ambient Value	Applicable Criteria	Exceedance of WQS
Antimony, total	0.002 mg/l	0.64	No
Arsenic, total	0.023 mg/l	0.2	No
Chromium, total	0.0026 mg/l	0.1	No
Copper, total	0.024 mg/l	0.2	No
Nickel, total	0.022 mg/l	0.7	No
Selenium, total	0.007 mg/l	0.005	No
Zinc, total	0.046 mg/l	2.0	No
Flouride	0.17 ug/l	0.07	No
Nitrate-nitrite	2.4 mg/l	10	No
Nitrogen, total organic (as N)	2.18 mg/l	N/A	No
Phosphorous (as P)	0.72 mg/l	N/A	No
Total Sulfate (as SO4)	377.28 mg/l	500	No
Aluminum, total	0.067 mg/l	5.0	No
Barium, total	0.105 mg/l	2.0	No
Boron, total	0.77 mg/l	0.75	Yes
Magnesium, total	24.5 mg/l	N/A	No
Molybedenum, total	0.007 mg/l	1.0	No
Manganese, total	0.019 mg/l	N/A	No

To address impacts to the downstream water quality standards, EPA used TEXTOX MENU # 3 – PERENIAL STREAM or RIVER to run a reasonable potential "RP" analysis against Texas WQS assuming that the discharge is directly into Texas waters at a 4Q3 instead of 7Q10, low flow rate and found no RP to exceed Texas WQS.

Pollutants Detected	Concentration	Applicable Texas WQS	Exceedance of WQS
Barium, T	0.0474	2.0 HH	No
Arsenic, T	0.0596	0.15 CAL	No
Chromium, T	0.00621	0.01 CAL	No
Copper, T	0.104	N/A	No
Zinc	0.137	0.245 CAL	No
Color	5	N/A	No
Fecal Coliform	13.40 MPN	N/A	No
Flouride	4.35	N/A	No
Nitrate-Nitrite	7.79	10	No
Nitrogen, T	9.89	10	No
Phosphorous (P)	1.81	N/A	No
Sulfate	2870	600	No
Surfactants	0.17	N/A	No
Aluminium, T	0.0571	0.991 AAL	No
Boron, T	1.52	N/A	No
Magnesium, T	23.9	N/A	No
Molybdenum	0.077	N/A	No

EPE Effluent Data vs. Texas WQS (mg/l)

Manganese, T	0.08	N/A	No
Iron, T	0.495	N/A	No
Uranium	0.269	N/A	No
Vanadium	0.0185	N/A	No

Note: AAL- Acute Aquatic Life, CAL- Chronic Aquatic Life, HH – Human Health – Fish

EPA performed RP screening based on upstream ambient sampling results and found RP for detected pollutants in the discharge at Outfall 002. Based on RP analyses of both upstream and downstream ambient data, EPA determines that discharges from El Paso Electric have RP to cause dissolved boron exceedance of State WQS at WQS segment 20.6.4.101. Therefore, EPA is is proposing dissolved boron loading limitations. EPA will be further making a may affect or may not affect determination after public notice request for comments from the downstream state and receipt of 401 certification.

8. PERMIT EFFLUENT LIMITATIONS AND CONDITIONS

The current permit has WQ-based effluent limitations for copper and total residual chlorine (TRC) at Outfall 001 and TRC at Outfall 002. No effluent characteristics data were reported for Outfall 001 in the Application and TRC was reported as non-detectable for Outfall 002. EPA proposes to retain TRC monitoring requirement and effluent limitation in case chlorine products are used in the system. Total copper limitations at Outfall 001 are also retained because the Effluent Limitation Guidelines of 1.0 mg/l at internal outfalls is greater than the WQ-based limits at Outfall 001 and EPA deems that a discharge at Outfall 001 will have RP if a discharge contains TRC at the ELG level. The site-specific pH standard of 6.6 - 9.0 is established at the end-of-pipe. The NMIP requires site-specific pH standard to be applied at end-of-pipe for all dischargers.

The Segment No. 20.6.4.101 has site-specific WQS for total dissolved solids (TDS) 2,000 mg/l or less, sulfate 500 mg/l or less, and chloride 400 mg/l or less, when the stream mean monthly flow is above 350 cfs. When EPA reissued the permit in 2019, EPA established monitoring requirements for TDS and chloride. Because the downstream stream monitoring data have indicated those criteria may be exceeded in the stream, EPA decides to retain these monitoring requirements in the permit.

XI. AQUATIC TOXICITY TESTING

Procedures for implementing WET terms and conditions in NPDES permits are contained in the NMIP. Table 11 of Section V of the NMIP outlines the type of WET testing for different types of discharges. The discharge is to Rio Grande and the critical dilution of the discharge at Outfall 002 to the receiving stream is about 100%. There is no dilution is given for the WET testing. The NMIP directs the WET testing to be 7-day chronic tests using Ceriodaphnia dubia and Pimephales promelas once per quarter with a 100% critical dilution. WET limits are not being included in the proposed permit. The current permit established a requirement to conduct chronic biomonitoring using *Ceriodaphnia dubia* and *Pimephales promelas*. Data from the last permit cycle indicates there were no WET test failures. There is no reasonable potential for this effluent to exceed the

water quality standards based on the data available. No WET limit is required; however, biomonitoring will continue to be required.

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 as follows: These additional effluent concentrations must be 32%, 42%, 56%, 75%, 100%. The low-flow effluent concentration is defined as 100% effluent. WET test at Outfall 001 is not required unless emergency discharges are released to Lower Canal, which will discharge via Outfall 001

XII. 303(d) LIST

The EPA-approved 2022-2024 Clean Water Act section 303(d) list for New Mexico indicates the stream segment number 20.6.4.101 is not supporting primary contact and Escherichia coli is the probable cause of impairment. The proposed permit does not authorize discharges of domestic wastewater and the nature of discharge does not have a reasonable potential to contribute E. coli. The list also indicates that the segment is impaired for irrigation use and the cause is dissolved boron. The anticipated date for TMDLs is 2023. Because dissolved boron has been detected and reported in the application and reasonable potential analysis shows potential to exceed WQS, a loading limit for dissolved boron is proposed at Outfalls 001 and 002.

XIII. PERMIT REOPENER

In accordance with 40 CFR Part 122.44(d), the permit may be reopened and modified during the life of the permit if relevant portions of New Mexico's Water Quality Standards for Interstate and Intrastate Streams are revised, or State of New Mexico water quality standards are established and/or remanded or/and if any changes are made to the Texas surface water quality standards applicable to the stream segment.

In accordance with 40 CFR Part 122.62(a)(2), the permit may be reopened and modified if new information is received that was not available at the time of permit issuance that would have justified the application of different permit conditions at the time of permit issuance. Permit modifications shall reflect the results of any of these actions and shall follow regulations listed at 40 CFR Part 124.5.

XIV. ANTIBACKSLIDING AND ANTIDEGRADATION

The proposed permit is consistent with the requirements to meet antibacksliding provisions of the Clean Water Act, Section 402(0) and [40 CFR 122.44(l)(i)(A)], which state in part that interim or final effluent limitations must be as stringent as those in the previous permit. EPA is not proposing for any less stringent effluent limitation.

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. Because the receiving stream has been impaired by dissolved boron not to support irrigation use, NMED may perform an antidegradation screening prior to issuance of the final permit decision.

XV. ENDANGERED SPECIES CONSIDERATIONS

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. According to the most recent county listing available at US Fish and Wildlife Service (USFWS), Information for Planning and Consultation (IPaC), https://ipac.ecosphere.fws.gov/, Ten species in Dona Ana County are listed as endangered (E), Proposed Endangered or threatened (T). Two of the species are mammals and includes the Mexican Wolf (*Canis lupus bailey*) (E) and Penasco Least Chipmunk (*Tamias minimus atristriatus*) (Proposed Endangered). Four avian species includes Northern Aplomado Falcon (*Falco femoralis septentrionalis*) (E), Southwestern Willow Flycatcher (*Empidonax traillii extimus*) (E), Mexican Spotted Owl (*Strix occidentalis lucida*) (T), Chihuahua Chub (*Gila nigrescens*) (T), Four flowering plants are Sacramento Prickly Poppy (*Argemone pleiacantha ssp. Pinnatisecta*) (E), Kuenzler Hedgehog Cactus (*Echinocereus fendleri var. kuenzleri*) (E), Sacramento Mountains Thistle (*Cirsium vinaceum*) (E), Todsen's Pennyroyal (*Hedeoma todsenii*) (E), and Wright's Marsh Thistle (*Cirsium wrightii*)(T).

Yellow-billed Cuckoos- Yellow-billed Cuckoos use wooded habitat with dense cover and water nearby, including woodlands with low, scrubby, vegetation, overgrown orchards, abandoned farmland, and dense thickets along streams and marshes. In the Midwest, look for cuckoos in shrublands of mixed willow and dogwood, and in dense stands of small trees such as American elm. In the Southwest, Yellow-Billed Cuckoos are rare breeders in riparian woodlands of willows, cottonwoods and dense stands of mesquite to breed. Caterpillars top the list of Yellow-Billed Cuckoo prey: individual cuckoos eat thousands of caterpillars per season. On the East coast, periodic outbreaks of tent caterpillars draw cuckoos to the tentlike webs, where they may eat as many as 100 caterpillars at a sitting. Fall webworms and the larvae of gypsy, brown-tailed, and white-marked tussock moths are also part of the cuckoo's lepidopteran diet, often supplemented with beetles, ants, and spiders. They also take advantage of the annual outbreaks of cicadas, katydids, and crickets, and will hop to the ground to chase frogs and lizards. In summer and fall, cuckoos forage on small wild fruits, including elderberries, blackberries and wild grapes. In winter, fruit and seeds become a larger part of the diet. Yellow-billed Cuckoo populations declined by 1.6 percent per year between 1966 and 2010, resulting in a cumulative decline of 51 percent, according to the North American Breeding Bird Survey. Partners in Flight estimates the global breeding population at about 9 million, with 84 percent breeding in the U.S., 10 percent in Mexico, and none in Canada. They score a 12 out of 20 on the Partners in Flight Continental Concern Score, and the 2014 State of the Birds Report listed them as a Common Bird in Steep Decline. In the West, much of the Yellow-Billed Cuckoo's riparian habitat has been converted to farmland and housing, leading to significant population declines and the possible extirpation of cuckoos from British Columbia, Washington, Oregon, and Nevada. Once common in the California's Central Valley, coastal valleys, and riparian habitats east of the Sierra Nevada, habitat loss now constrains the California breeding population to small numbers

of birds along the Kern, Sacramento, Feather, and Lower Colorado Rivers. The western population of Yellow-billed Cuckoos is a candidate for federal endangered status. Sites replanted with riparian vegetation in southern California supported breeding birds within three years, demonstrating the potential for habitat restoration. As long-distance, nocturnal migrants, Yellow-Billed Cuckoos are vulnerable to collisions with tall buildings, cell towers, radio antennas, wind turbines, and other structures.

Mexican Spotted Owl -Strix occidentalis lucida species likely to become endangered within the foreseeable future throughout all or a significant portion of its range. Unlike most owls, Mexican spotted owls 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.

Southwestern Willow Flycatcher - The Southwestern willow flycatcher is a neotropical migrant. They winter in Mexico, Central America, and possibly in northern South America. Southwestern willow flycatchers begin arriving in breeding territory in mid-May and may continue to be present until August. They build nests and lay eggs in late May or early June and fledge young in late June or early July. Typically, the southwestern willow flycatcher raises one brood per year. Breeding territory for the southwestern willow flycatcher extends from extreme southern Utah and Nevada, through Arizona, New Mexico, southern California, and west Texas to extreme northern Baja California and Sonora, Mexico.

The Southwestern willow flycatcher is an insectivore. It forages within and above dense riparian vegetation taking insects on the wing and gleaning them from the foliage. It also forages along water edges, backwaters, and sandbars, adjacent to nest sites.

In New Mexico, the State Game and Fish Department estimated fewer than 200 pairs remained in 1988. Surveys conducted in 1993-1995 found only about 100 pairs, with some 75% occurring in one local area. Within the San Juan River Basin in New Mexico, those surveys detected no Southwestern willow flycatcher breeding sites and only one male flycatcher was identified with an established territory.

Several factors have caused the decline in Southwestern willow flycatcher populations. Extensive areas of suitable riparian habitat have been lost due to river flow regulation and channelization, agricultural and urban development, mining, road construction, and overgrazing. As a result of habitat fragmentation, cowbird parasitism has increased. The invasion of the exotic salt cedar has also altered the riparian ecosystem in the Southwest. Salt cedar is less favorable than native riparian vegetation to the flycatchers.

The proposed permitting action is not within federally designated critical habitat areas and the authorized discharge is unlikely to contribute any above mentioned factors which have caused the decline in Southwestern willow flycatcher populations. Therefore, EPA determines that the proposed permitting action has no effect on the species.

Sneed Pincushion Cactus- The Sneed pincushion cactus, Coryphantha sneedii var. sneedii, grows in clumps of as many as 100 or more cylindrical or spherical stems, 1-3 in (2.5-7.5 cm)

long and 0.4-1.2 in (1-3 cm) in diameter. The central spines, 6-17 per areole, are white, tipped with pink or brown; radial spines, 35-90 per cluster, are white. Spines often grow nearly parallel to the stem. This cactus grows in cracks on cliffs or ledges in semi-desert grasslands of the Chihuahuan Desert. These limestone outcrops support only sparse vegetation, such as low shrubs, some rosette-forming perennials, cacti, and herbs. Habitat elevation is between 3,900-7,700 ft (1,200-2,350 m); annual rainfall varies from 8-16 in (20-40 cm) per year.

Sneed pincushion cactus was once fairly widespread in the Franklin, Guadalupe, and Organ mountains- between Las Cruces and Carlsbad, New Mexico and south into Hudspeth, Culberson, and El Paso counties, Texas. Its range may well have extended into Mexico. It was first collected from Anthony Gap, Texas. It is still locally abundant in the Franklin Mountains (El Paso County, Texas, and adjacent Dona Ana County, New Mexico), where nine populations are known. There are two smaller populations in the Organ Mountains (Hudspeth and Culberson counties, Texas). Another population was recently discovered at Carlsbad Caverns (Eddy County, New Mexico). Seven populations are on private lands; other sites are in Lincoln National Forest, Guadalupe Mountains National Park, and Carlsbad Caverns National Park. In 1986, the total population was estimated to be in excess of 10,000 plants.

Although not showy, some collectors prize the Sneed cactus for its unusual appearance, and it is systematically collected from the wild. Collectors visit privately owned sites on a regular basis. Population sites in the Franklin Mountains are accessible from the roads and, if located by collectors, could be depleted. Access to other localities is more difficult, affording a measure of natural protection. Recovery will depend on enforcing existing prohibitions against collection and on increasing the number of plants on protected land. Several sites in the Guadalupe Mountains and Carlsbad Caverns National Park are under federal protection. All populations are covered by the endangered species plant laws of New Mexico and Texas.

After reviewing previous information and recent information available to EPA, EPA has determined that the reissuance of Permit No. NM0000108 will have "no effect" on listed threatened and endangered species nor will adversely modify designated critical habitat.

XVI. 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.

XVII. ENVIRONMENTAL JUSTICE

Executive Order 13985, Advancing Racial Equity and Supporting for Underserved Communities through the Federal Government signed on January 20, 2021, directs each federal agency to "make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities." The EPA strives to enhance the ability of overburdened communities to participate fully and meaningfully in the permitting process for EPA-issued permits, including NPDES permits. "Overburdened" communities can include minority, low-

income, tribal, and indigenous populations or communities that potentially experience disproportionate environmental harms and risks. As part of an agency-wide effort, the EPA Region 6 will consider prioritizing enhanced public involvement opportunities for EPA-issued permits that may involve activities with significant public health or environmental impacts on already overburdened communities. For more information, please visit http://www.epa.gov/ejscreen.

For fiscal year 2024, the NPDES Section is trying a new approach, conducting community meetings with overburdened communities in New Mexico and embedding Environmental Justice (EJ) early in the Permitting process. The focus is on enabling overburdened communities to have full and meaningful access to the permitting process. This effort will emphasize on communities that have an 80% percentile or higher for the Wastewater Discharge EJ Index. This will help Region 6 NPDES permit writers and managers decide early in the permitting process when and how to conduct an EJ analysis for an EPA-issued permit and what, if any, permit terms or other actions may be appropriate to address EJ concerns.

El Paso Electric was one of the facilities in which the community had an EJ Index for Wastewater Discharge of 93% percentile (\geq 80% percentile). The NPDES Section coordinated a virtual early engagement with the communities in Sunland Park and El Paso on December 5, 2023. Pre-registered stakeholders for this virtual meeting included representatives from NMED, Amigos Bravos, New Mexico State University, the permittee, an engineering consultant, and a non-profit organization called Empower New Mexico from the Sunland Park area; however, it was noted that attendance was lower than anticipated during the actual virtual meeting. During the virtual meeting, Region 6 discussed the objectives, the community of concern, water quality of the receiving waters and how communities can keep involved during and after the permitting process.

XVIII. VARIANCE REQUESTS

No variance requests have been received.

XIX. 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, 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.

XX. FINAL DETERMINATION

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

XXI. ADMINISTRATIVE RECORD

The following section is a list of the fact sheet citations to applicable statutory or regulatory provisions and appropriate supporting references to the administrative record required by 40 CFR Part 124.9 A. APPLICATION(s)

EPA Application Forms 1 and 2C received June 16, 2023.

B. 40 CFR CITATIONS

Citations to 40 CFR 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, as amended by the New Mexico Water Quality Control Commission (WQCC) on September 24, 2022 and approved by the U.S. Environmental Protection Agency (EPA) on February 8, 2023.

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

2022-2024 State of New Mexico Clean Water Act 303(d)/305(b) Integrated Report.

D. MISCELLANEOUS REFERENCES

Application received for renewal of NPDES Permit No. NM0000108 from Nathan Reade, El Paso Electric Company on June 16, 2023.

July 10, 2023, Application was deemed complete and completeness letter sent to the Permittee.