

**NPDES PERMIT NO. NM0000124
FACT SHEET**

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

APPLICANT

Public Service Company of New Mexico
Reeves Generating Station
Alvarado Square MS-Z100
Albuquerque, NM 87158

ISSUING OFFICE

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DATE PREPARED

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PERMIT ACTION

Proposed reissuance of the current National Pollutant Discharge Elimination System (NPDES) permit issued August 28, 2009, with an effective date of October 1, 2009, and an expiration date of September 30, 2014.

RECEIVING WATER – BASIN

Stormwater Ditch to AMAFCA North Diversion Channel – Rio Grande Basin

DOCUMENT ABBREVIATIONS

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

4Q3	Lowest four-day average flow rate expected to occur once every three-years
BAT	Best available technology economically achievable
BCT	Best conventional pollutant control technology
BPT	Best practicable control technology currently available
BMP	Best management plan
BOD	Biochemical oxygen demand (five-day unless noted otherwise)
BPJ	Best professional judgment
CBOD	Carbonaceous biochemical oxygen demand (five-day unless noted otherwise)
CD	Critical dilution
CFR	Code of Federal Regulations
cfs	Cubic feet per second
COD	Chemical oxygen demand
COE	United States Corp of Engineers
CWA	Clean Water Act
DMR	Discharge monitoring report
ELG	Effluent limitation 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
ug/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
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
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. PROPOSED CHANGES FROM PREVIOUS PERMIT

It is proposed that the current permit be reissued for a 5-year term. There are changes from the current permit issued on August 28, 2009:.

1. Change critical dilution of toxicity testing from 4% to 100%;
2. Add effluent limitations for total arsenic and total zinc;
3. Establish more stringent effluent limitation for total residual chlorine;
4. Establish more stringent effluent limitations for total copper;
5. Add monitoring requirements for chromium VI, adjusted gross alpha and PCBs;
6. Add one-time monitoring requirement for persistent pollutants; and
7. Change temperature limitation from monthly average to daily maximum limitation.

II. APPLICANT LOCATION and ACTIVITY

Under Standard Industrial Classification (SIC) Code(s) 4911, the applicant currently operates the Reeves Generating Station. This facility is a peaking and standby plant and operates infrequently and sporadically. The facility is located at 4400 Paseo Del Norte NE, Albuquerque, in Bernalillo County, NM. A flow schematic and water balance chart attached to the Application Form 2C indicates that the plant effluent consists of cooling tower blowdown, boiler blowdown, boiler drain, and low volume waste stream. Those waste streams could be discharged either to evaporation ponds, to city sewer system, or via Outfall 001 to a stormwater ditch. No discharge occurs. The permit is maintained for backup and/or emergency purposes. In case a discharge occurs, discharges of cooling tower blowdown, boiler blowdown, boiler drain, and low volume waste stream will go into a storm water ditch, about 100 - 150 feet upstream from the point flowing to Albuquerque Metropolitan Arroyo Flood Control Authority's (AMAFCA's) North Diversion Channel, thence into Rio Grande in segment 20.6.4.106 of the Rio Grande Basin.

III. EFFLUENT CHARACTERISTICS

The applicant has provided effluent characteristics in the application. Analytical results reported in the EPA Permit Application Form 2C which show toxic pollutants being detected and reported above their MQLs are summarized as below.

Pollutants Detected	Results (µg/l)
Dissolved Arsenic	34 (Total 39)
Dissolved Zinc	20 (Total 43)
Total Aluminum	42
Total Barium	180

Total Boron	140
Total Molybdenum	10
Total Manganese	25
Total Chromium	10
Total Copper	73

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 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 Reeves Generating Station (RGS) submitted a complete permit application and received by EPA on January 30, 2014. It is proposed that the permit be issued 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 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.

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, 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 Limitation Guidelines

Technology based requirements for this type of discharger are contained in 40 CFR §423, Steam Electric Power Generating. The RGS has three generating units installed before 1982 when ELGs were established in 1982 for BPT, BAT and new source performance standards (NSPS). The facility has total capacity over 154 MW. The ELGs for this type of facility are based on BPT (§423.12) and/or BAT (§423.13).

The pH of all discharges, except once through cooling water, shall be within the range of 6.0–9.0.

There shall be no discharge of polychlorinated biphenyl compounds (PCBs) such as those commonly used for transformer fluid.

The quantity of pollutants discharged from low volume waste sources shall not exceed the quantity determined by multiplying the flow of low volume waste sources times the concentration listed in the following table:

Pollutant	Effluent limitations	
	Daily Max (mg/l)	30-Day Avg (mg/l)
TSS	100	30
Oil & Grease	20	15

The term low volume waste sources means, taken collectively as if from one source, wastewater from all sources except those for which specific limitations are otherwise established in this part. Low volume wastes sources include, but are not limited to: wastewaters from wet scrubber air pollution control systems, ion exchange water treatment system, water treatment evaporator blowdown, laboratory and sampling streams, boiler blowdown, floor drains, cooling tower basin cleaning wastes, and recirculating house service water systems. Sanitary and air conditioning wastes are not included.

The quantity of pollutants discharged in chemical metal cleaning wastes shall not exceed the

quantity determined by multiplying the flow of chemical metal cleaning wastes times the concentration listed in the following table:

Pollutant	Effluent limitations	
	Daily Max (mg/l)	30-Day Avg (mg/l)
TSS	100	30
Oil & Grease	20	15
Copper, total	1.0	1.0
Iron, total	1.0	1.0

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.

For any plant with a total rated generating capacity greater than 25 MW, the quantity of pollutants discharged in once through cooling water shall not exceed the quantity determined by multiplying the flow of once through cooling water sources times the concentration listed in the following table:

Pollutant	Effluent limitations	
	Daily Max (mg/l)	
Total residual chlorine	0.2	

The term once through cooling water means water passed through the main cooling condensers in one or two passes for the purpose of removing waste heat.

The quantity of pollutants discharged in cooling tower blowdown shall not exceed the quantity determined by multiplying the flow of cooling tower blowdown times the concentration listed below:

Pollutant	Effluent limitations	
	Daily Max (mg/l)	30-Day Avg (mg/l)
Free available chlorine	0.5	0.2

Pollutant	Effluent limitations	
	Daily Max (mg/l)	30-Day Avg (mg/l)
The 126 priority pollutants (Appendix A) contained in chemicals added for cooling	No detectable amount	No detectable amount

tower maintenance, except:		
Chromium, total	0.2	0.2
Zinc, total	1.0	1.0

The term blowdown means the minimum discharge of recirculating water for the purpose of discharging materials contained in the water, the further buildup of which would cause concentration in amounts exceeding limits established by best engineering practices. Neither free available chlorine nor total residual chlorine may be discharged from any unit for more than two hours in any one day and not more than one unit in any plant may discharge free available or total residual chlorine at any one time unless the utility can demonstrate to the permit issuing authority, that the units in a particular location cannot operate at or below this level of chlorination.

In accordance with the paragraph §423.13(d)(3), at the permitting authority's discretion, instead of the monitoring, compliance with the limitations for the 126 priority pollutants in paragraph §423.13(d)(1) may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the final discharge by the analytical methods in 40 CFR Part 136.

3. Cooling Water Intake Structure

Regulations contained in CWA §316(b), requires that the location, design, construction and capacity of cooling water intake structures (CWIS) reflect the best technology available for minimizing adverse environmental impact. CWIS cause adverse environmental impact by pulling large numbers of fish and shellfish or their eggs into a power plant's or factory's cooling system. There, the organisms may be killed or injured by heat, physical stress, or by chemicals used to clean the cooling system. Larger organisms may be killed or injured when they are trapped against screens at the front of an intake structure.

Because RGS uses city water for cooling water make-up, it does not withdraw water from the waters of United States, so it causes no adverse environmental impact. It complies with the CWA 316(b) requirements. Therefore, no further permit conditions are established for operations of the CWIS.

4. Draft Permit Effluent Limitation Guidelines

a. TSS and Oil & Grease (O&G)

As retained from the current permit, TSS effluent limitations of 25 mg/l for monthly average and 50 mg/l for daily maximum at Outfall 001 were based on 1985 New Mexico Water Quality Management Plan (WQMP). Because the discharge consists of low volume waste and floor drain and both waste streams have the same TSS effluent limitation guidelines (ELG), TSS limitations and monitoring requirements are established at the final waste stream, instead of at individual waste stream. The current EPA approved WQMP dated December 23, 2011 which is in effect for this renewal permit, does not list requirements for individual NPDES permits or TSS limitations. Previous TSS limitations based on the previous WQMPs are no longer a requirement under

current NM WQS or WQMPs. However, EPA has decided to retain the previous TSS limitations based on anti-backsliding policy. The WQ-based narrative limitation “There shall be no discharge of oils, scum, grease and other floating materials that would cause the formation of a visible sheen or visible deposits on the bottom or shoreline, or would damage or impair the normal growth, function or reproduction of human, animal, plant or aquatic life.” is established to limit the discharge of oil and grease. EPA determines that the “no visible sheen” limit is more stringent than the 20/15 mg/l of oil and grease limit.

b. 126 Priority Pollutants

The proposed permit continues not to authorize discharges of metal cleaning waste and cooling tower maintenance chemicals which contain 126 priority pollutants listed at 40 CFR 423, Appendix A. The use of chemical additives which may contain any of the 126 priority pollutants or may adversely impact aquatic lives is not authorized unless approval is obtained and limitations are established on a case-by-case basis. Records of chemical applications and engineering calculations must be kept on site for three years or longer.”

c. Chemical Cleaning Waste

EPA has established a narrative restriction of “There shall be no discharges of metal cleaning wastes or chemical metal cleaning wastes” to regulate metal cleaning wastes through the NPDES permit for all power plants in the State of New Mexico.

d. Total Residual Chlorine or Free Available Chlorine

Because the ELG for chlorine is to protect aquatic life in the receiving stream and also because the ELG concentration is higher than the applicable state WQS for total residual chlorine (TRC), the most stringent state acute aquatic life standard of 0.019 mg/l of TRC is established at final Outfall 001.

5. Technology-Based Mass Limits

Regulations at 40 CFR §122.45(f)(1) require all pollutants limited in permits to have limits expressed in terms of mass such as pounds per day for continuous dischargers. Because there has been no discharge during the current permit term and it could not predict the discharge volume if an emergency discharge occurs, EPA determines that it is not appropriate to establish mass limitations in this permit.

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 the NMWQS (20.6.4 NMAC, amended through June 5, 2013). The NMED has designated the AMAFCA's North Diversion Channel, a tributary to the Rio Grande, as an unclassified Waters of the State subject to 20.6.98 NMAC, and a "0" stream 4Q3 low flow is applied for RP screening and effluent limitation development purposes. The designated uses of the North Diversion Channel, in Stream Segment 20.6.4.98 are: livestock watering, marginal warmwater aquatic life, wildlife habitat, and primary contact. Because when discharges occur, discharges may also reach the Rio Grande, RP screening against WQS at Rio Grande is also performed. The designated uses of the Rio Grande, in Stream Segment 20.6.4.106 are: irrigation, livestock watering, marginal warmwater aquatic life, wildlife habitat, primary contact and public water supply.

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

pH limitation range of 6.6 – 9.0 s.u. is retained from the current permit and the limitation was based on pH criteria for marginal warmwater aquatic life use pursuant to the provision of 20.6.4.900(H)(6) NMAC. These are more stringent than technology based limitations noted above.

b. 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.

ii. Reasonable Potential – Toxics

Effluent limitations and/or conditions established in the proposed permit are in compliance with State WQS. Standards require that the discharge protect acute aquatic toxicity in all reaches. In order to implement this WQS, the end-of-pipe discharge will have to meet applicable acute standards at the critical dilution of 100%. The WQS also requires that the discharge meet chronic standards at the mixing zone.

To determine if a pollutant has a reasonable potential to exceed a numeric criteria, the following steady state complete mixing zone model is used:

$$C_d = \{(FQ_a * C_a) + (Q_e * 2.13 * C_e)\} / (FQ_a + Q_e)$$

Where:

C_d = Instream waste concentration

F = Fraction of stream allowed for mixing, as applicable, $F = 1.0$

C_e = reported pollutant concentration

2.13 = Statistical multiplier, an estimate of the 95th percentile) for either a single available effluent concentration, or a geometric mean of effluent data concentration

C_a = Ambient stream concentration, if available

Q_e = Discharge flow in MGD

Q_a = Critical low flow, 4Q3, of receiving stream,
= Harmonic mean flow for long term human health screening, or
= 0 MGD for acute aquatic life screening.

State WQS present some acute and chronic toxicity standards as a function of hardness. The average of hardness for the receiving water or effluent if discharges are to intermittent/ephemeral streams is used to calculate hardness dependent standards. The maximum hardness value that could be used for calculation is 400 mg/l of CaCO_3 and a default value of 20 mg/l would be used if no hardness value is available. Some metals in the State WQS are based on dissolved concentrations and are a function of stream total suspended solids (TSS). Linear partition coefficients are used to convert dissolved standards to total standards for screening purposes. If a linear partition coefficient is not available, a conservative ratio of dissolved/total metal concentration of 1.0 is assumed for both screening and compliance purposes.

Regulations contained in Subsection G of 20.6.11 NMAC state that when limited aquatic life is a designated use, the human health criteria shall apply only if adopted on a segment-specific basis. It further states that persistent toxic pollutants, as identified in Subsection J of 20.6.4.900 NMAC, shall also apply to all tributaries of waters with a designated, existing or attainable aquatic life.

Historic ambient data (2004-2007) from the Rio Grande between Alameda Bridge to Angostura and flow data from the Albuquerque Station were used to calculate RP when EPA renewed the permit in 2009. Because the North Diversion Channel is an intermittent water, a "0" 4Q3 flow

was used for RP screening, and the effluent data were used to screen against the applicable WQS without dilution. Effluent TSS of 6 mg/l reported in the application and the default 20 mg/l of hardness were used to calculate both RP and effluent limitations for the discharge to North Diversion Channel. EPA may consider to perform another RP screening if the permittee provides effluent hardness and/or TSS data during the comment period, and consequently recalculate the effluent limitations based on the average effluent hardness and TSS value. Stream hardness of 132 mg/l and stream TSS of 36 mg/l from Monitoring Station 32RioGrande 458.9 at Sandia Pueblo, and stream flow data (367 cfs of 4Q3 and 900 cfs of harmonic mean) from USGS Albuquerque Station were used to calculate RP and effluent limitations. The RP screening results showed that the following pollutants detected in the potential effluent exceed applicable WQS when it discharges to the North Diversion Channel.

Pollutants	Effluent (µg/l)	Applicable WQS	Designated Uses
Dissolved Arsenic	34 (Total 39)	9.0	Human Health
Dissolved Chromium (VI)	10	11	Chronic Aquatic Life
Dissolved Copper	27.47	2.26	Chronic Aquatic Life
Dissolved Zinc	20 (Total 43)	28	Chronic Aquatic Life

Although, the discharge has RP to exceed acute aquatic life standard at Rio Grande, the effluent limitations of copper calculated based on chronic aquatic life standard are more stringent than acute standard.

A monthly average effluent limitation of 16 µg/l for total arsenic (equivalent to 9.2 µg/l of dissolved arsenic) based on human health criteria is proposed because the discharge has demonstrated RP. Effluent limitations for total copper (daily maximum of 6.0 µg/l and monthly average of 6.0 µg/l) are also proposed based on chronic aquatic life criteria. Effluent limitations for total zinc (daily maximum of 88 µg/l and monthly average of 88 µg/l) are also proposed based on chronic aquatic life criteria. Effluent limitation for chromium (VI) is not proposed because the value reported for total chromium equals to the MQL for total chromium and therefore, chromium is not counted as detected for RP screening purposes. A monitoring only requirement for chromium (VI) is proposed to gather more data for further evaluation. Because the facility does not discharge regularly, EPA proposes to retain the 1/quarter monitoring frequency for total copper and total zinc. Monitoring frequency for chromium (VI) is 1/year. EPA proposes the monitoring frequency of 1/year for the human health-based arsenic effluent limitation because the receiving waterbody, North Diversion Channel, is not a perennial stream and the discharge has no RP to cause exceedance of human health criteria in Rio Grande. This permit retains the provisions of prohibition of discharging metal cleaning wastes or using chemical additives which may contain any of the 126 priority pollutants to be discharged.

iii. TRC

The levels of discharge of chlorine at technology-based levels are quite higher than State WQS. WQS allow TRC of 11 ug/l for chronic and 19 ug/l for acute. Chronic criteria are allowed dilution based on the ratio of discharge flow and receiving water low flow; CD, while acute criteria must meet end-of-pipe criteria. Because “0” stream flow applies, the chronic 11 ug/l end-

of-pipe criteria is more restrictive than the acute and EPA proposes 0.011 mg/l at Outfall 001.

c. Temperature

The 20.6.4.900(H)(6) sets the maximum temperature standard for marginal warmwater to be 32.2°C (90°F). Because the North Diversion Channel is designated for marginal warmwater aquatic life use, the temperature daily maximum limitation of 90 °F which applies standard to the end-of-pipe is proposed in the permit renewal.

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).

Flow is proposed to be estimated daily. pH and TRC are monitored daily using grab sample. Because the volume of discharge and a report of TSS effluent concentration of 6.0 mg/l are unlikely to cause adverse impact to the receiving water, monitoring frequency of 1/month which is less than recommended frequency in the NMIP is proposed. Grab samples shall be used for TSS. The monitoring frequency for total copper and total zinc is 1/quarter. The monitoring frequency for total arsenic is proposed to be 1/year as discussed above. Temperature is monitored continuously.

5. Monitoring of Persistent Pollutants

The NMIP requires industrial dischargers which discharge to non-perennial streams to report the following persistent pollutants in the application: Antimony (dissolved (D)), Arsenic (D), Nickel (D), Selenium (D), Thallium (D), Zinc (D), Aldrin, Benzo (a) pyrene, Chlordane, 4,4' -DDT and derivatives, Dieldrin, 2,3,7,8-TCDD dioxin, Hexachlorobenzene, PCBs, and Tetrachloroethylene. The permittee must take at least one sample for analysis, if a discharge occurs during the permit period, unless the permittee demonstrates that previous analytical results are still representative and report previous results to EPA.

D. WHOLE EFFLUENT TOXICITY LIMITATIONS

Procedures for implementing WET terms and conditions in NPDES permits are contained in the NMIP, March 2012. Table 11 of Section V of the NMIP outlines the type of WET testing for different types of discharges. The RGS is rated as a minor industrial facility discharging to a intermittent waterbody with a CD = 100%. The additional dilutions established for a 75% series are 32%, 42%, 56%, 75%, and 100%. The draft permit will require a WET testing using *Ceriodaphnia dubia* and *Pimephales promelas*. The test is to be done at a frequency of once per 5-years for both species. WET monitoring requirements are proposed as below:

EFFLUENT	CHARACTERISTIC	DISCHARGE MONITORING	
		30-DAY AVG MINIMUM	7-Day MINIMUM

Whole Effluent Toxicity Testing
(7 Day Static Renewal)

<u>Ceriodaphnia dubia</u>	REPORT	REPORT
<u>Pimephales promelas</u>	REPORT	REPORT

EFFLUENT CHARACTERISTIC	MONITORING REQUIREMENTS	
	<u>FREQUENCY</u>	<u>TYPE</u>

Whole Effluent Toxicity Testing
(7 Day Static Renewal)

<u>Ceriodaphnia dubia</u>	Once/Five Years	Composite
<u>Pimephales promelas</u>	Once/Five Years	Composite

VI. ANTIDegradation AND ANTIBACKSLIDING

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

The proposed permit is consistent with the requirements to meet antibacksliding provisions of the Clean Water Act, Section 402(o) and 40 CFR §122.44(l), which state in part that interim or final effluent limitations must be as stringent as those in the previous permit.

VII. IMPAIRED WATER – 303(d) LIST

The discharge has a potential to reach the Rio Grande between non-pueblo Alameda Bridge and Highway 550 Bridge, in segment number 20.6.4.106. This segment of water is not supporting for livestock watering, wildlife habitat, marginal warmwater aquatic life and primary contact. The probable causes of impairment are acute aquatic toxicity, gross alpha, dissolved oxygen, E. coli, and PCBs. TMDLs were scheduled for 2009 for E.coli, and for 2016 for other pollutants of concern, respectively. EPA does not consider the nature of discharge will contribute E. coli to the Rio Grande. The facility may or may not have a potential to contribute gross alpha and PCBs. EPA proposes that the permittee conduct analyses for adjust gross alpha and PCBs once per year when discharges occur so that EPA may conduct RP analysis in the future. Sufficiently sensitive analytical methods approved under 40 CFR 136 shall be used for analyses pursuant to 40 CFR 122.21(e)(3). (FR/Vol. 79, No. 160, p. 49001/ August 19, 2014) NMED has issued a pre-certification letter dated September 4, 2014, which requires the use of Method 1668 (the latest

version therefore) in accordance with Section 510 of the CWA and NMAC 20.6.4.14(A)(1) to determine whether a discharge is in compliance with state water quality standards. The permit may be reopened if an EPA approved TMDLs are in place.

VIII. ENDANGERED SPECIES CONSIDERATIONS

According to the most recent county listing available at USFWS website, <http://ecos.fws.gov/ipac/wizard/trustResourceList!prepare.action>, four species in Bernalillo County are listed as endangered (E) or threatened (T). They are the Mexican spotted owl (T), southwestern Willow flycatcher (E), and Rio Grande silvery minnow (E), and they all have designated critical habitats in the county.

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.

Mexican spotted owls have the largest geographic distribution of all spotted owl subspecies. They can be found in forested mountains and canyons from southern Utah and Colorado to the mountains of Arizona, New Mexico, western Texas and even into the mountains of northern and central Mexico. They prefer forested mountains and canyons with mature trees that create high, closed canopies, which are good for nesting. They also nest in stick nests built by other birds, tree cavities, caves and on cliff ledges. The main threats to the Mexican spotted owl are starvation, fire and loss of habitat due to logging, which also causes a greater risk of predation by great horned owls as a result of increased open space.

Critical habitat for Rio Grande silvery minnow includes the main stream of the Rio Grande from the bridge crossing of State Highway 22 immediately south of Cochiti Dam, Sandoval County, downstream to the Atchison Topeka and Santa Fe Railroad crossing of the river near San Marcial, Socorro County. This fish currently occurs only in the middle Rio Grande from Cochiti Dam downstream to the headwaters of Elephant Butte Reservoir. Threats to the species include dewatering, channelization and regulation of river flow to provide water for irrigation; diminished water quality caused by municipal, industrial, and agricultural discharges; and competition or predation by introduced non-native fish species.

The facility did not discharge and the permit is to authorize emergency discharges in case waste stream cannot be conveyed to the City of Albuquerque sewer system. Based on effluent characteristics and permit provisions that prohibit discharges of metal cleaning wastes and the use of chemical additives which may contain any of the 126 priority pollutants, and informal consultation conducted in 2000 with the FWS, EPA determines that the renewal of this permit will have no effect on the listed species or adversely modify their habitats.

IX. 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.

X. PERMIT REOPENER

The permit may be reopened and modified during the life of the permit if State Water Quality Standards 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. The permit may also be reopened and modified pursuant to the provisions of 40 CFR §124.5.

XI. VARIANCE REQUESTS

No variance requests have been received.

XII. 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.

XIII. FINAL DETERMINATION

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

XIV. ADMINISTRATIVE RECORD

The following information was used to develop the proposed permit:

A. APPLICATION(S)

EPA Application Form 2C dated January 27, 2014.

B. 40 CFR CITATIONS

Citations to 40 CFR are as of May 1, 2014.

C. STATE OF NEW MEXICO REFERENCES

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

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

Statewide Water Quality Management Plan, December 17, 2002.

State of New Mexico 303(d) List for Assessed Stream and River Reaches, 2012 - 2014.