NPDES PERMIT NO. NM0030376
STATEMENT of BASIS

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

I. APPLICANT

Delta-Person Generating Station
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II. ISSUING OFFICE

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IV. DATE PREPARED

November 3, 2009

V. DOCUMENT ABBREVIATIONS

BAT - best available technology economically achievable
BMP – best management plan
BOD_5 – five-day biochemical oxygen demand
BPJ - best professional judgment
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
EPA – United States Environmental Protection Agency
ELG – Effluent Limitation Guidelines
ESA - Endangered Species Act
F- Fahrenheit
F&WS – United States Fish and Wildlife Service
MGD – million gallons per day
NMAC – New Mexico Administrative Code
NMED – New Mexico Environment Department
NMWQS - New Mexico State Standards for Interstate and Intrastate Surface Waters
NM IP - Procedures for Implementing NPDES Permits in New Mexico, July 2009
NPDES – National Pollutant Discharge Elimination System
MQL - minimum quantification level
O&G – oil and grease
RP – reasonable potential,
SIC - standard industrial classification
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
WET - whole effluent toxicity
WQCC – New Mexico Water Quality Control Commission
WQMP – Water Quality Management Plan
WWTP – wastewater treatment plant

VI. PERMIT ACTION

Proposed reissuance of the current NPDES permit initially issued June 30, 2005, with an effective date of August 1, 2005, and an expiration date of July 31, 2009.

Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed in Title 40, Code of Federal Regulations, revised as of May 29, 2009.

VII. CHANGES FROM THE PREVIOUS PERMIT

Changes from the permit previously issued June 30, 2005, with an effective date of August 1, 2005, and an expiration date of July 31, 2009, are:

A. TSS limits added.
B. WET monitoring requirements added.
C. Hardness monitoring added.
D. Technology-based limit for chromium replaced with prohibition clause for chromium.
E. Prohibition clause for zinc added.

VIII. DISCHARGE LOCATION

As described in the application, the wastewater treatment plant is located at 725 Electric Avenue SE, in Albuquerque, Bernalillo County, New Mexico. The site location is 0.2 miles west of Interstate 25 and approximately 1.5 miles southwest of the Albuquerque International Airport. The discharge is to an unlined arroyo located on the north side of the facility. The arroyo discharges to the Albuquerque Metropolitan Arroyo Flood Control Authority (AMAFCA), South Diversion Channel (approximately 225 feet from the outfall). The South Diversion Channel reaches the Rio Grande approximately 2 miles from the confluence with the arroyo.

Based on the low flow of the facility, and on the BPJ of the permit writer, the discharge will reach the Rio Grande River in direct response to precipitation events. The discharge through Outfall 001 is located at Latitude 35° 01' 34" North and Longitude 106° 38' 30" West.

IX. RECEIVING STREAM STANDARDS

The general and specific stream standards are provided in NMWQS (20.6.4 NMAC, amended through August 1, 2007).

The facility discharges into an unlined, non-classified, otherwise ephemeral, and unnamed arroyo thence to AMAFCA South Diversion Channel, thence to the Rio Grande, in segment number 20.6.4.105 of the Rio Grande Basin in direct response to precipitation events. The designated uses of this arroyo, in Water Quality Segment No. 20.6.4.97A, are wildlife habitat, livestock watering, limited aquatic life and secondary contact. EPA was unable to approve section 20.6.4.97A of the NM WQS because the State did not submit a Use Attainable Assessment (UAA) to support an aquatic life designation that does not meet the CWA §101(a)(2) objective as required by 40 CFR 131.10(j)(1). The CWA sections 101(a)(2) and 303(c) require water

quality standards to provide, wherever attainable, water quality for the protection and propagation of fish, shellfish, wildlife, and recreation in and on the water, functions commonly referred to as “fishable/swimmable” uses. EPA's current water quality regulation effectively establishes a rebuttable presumption that “fishable/swimmable” uses are attainable and therefore should apply to a water body unless it can be demonstrated that such uses are not attainable. Prior to submittal of UAA, the designated uses of warmwater aquatic community and primary contact recreation are applicable to the receiving water.

X. APPLICANT ACTIVITY

Under the Standard Industrial Classification (SIC) Code 4911, the applicant operates a 132-megawatt simple cycle, combustion gas turbine, electric-power generating station. The facility is used to provide electrical power during periods of peak demand, typically during the summer when daily temperatures exceed 70° F.

The station generates electricity through direct combustion during periods of peak demand. The generating station draws ambient air through adjustable inlet guide vanes then through an evaporative filtration structure. Well water stored in a holding tank is pumped through the filtration unit to cool and compress the intake air as it passes through the saturated media. The cooled, compressed air is then mixed with natural gas (or fuel type #2 as backup source) and burned in 14 individual combustors that funnel into one larger combustor tank. This process creates hot gases that spin three sets of turbines as the gases exhaust through the system. The rotating turbines drive the shaft of the generator and the shaft spinning action within the generator produces electric power for distribution to the Public Service Company of New Mexico

Automated controls monitor power production and if the load increases above 115 megawatts (generally when ambient air temperatures are greater than 70°F and the intake guide vanes are more than 70% open), the circulation of cooling water is triggered. Cooling water is bled off the system and discharged to Outfall 001 at the rate of approximately 55 gallons per minute. This blowdown only occurs when the evaporative cooling system is in operation and a valve must be manually opened before cooling water can be pumped to the system. Facility operators estimate flow to the outfall by multiplying the discharge rate of the blowdown and the amount of time the plant operates above 115 megawatts. The facility also discharges storm water from a retention basin to the same outfall. Discharge of storm water requires manual operation with a portable pump to prevent accidental commingling with process water.

The operator estimates that the facility is used approximately 500-hours per year, and when the system is running at night and the ambient air conditions are cool, the evaporative cooler is not used. The facility generally is not used during the winter.

XI. DISCHARGE DESCRIPTION AND OPERATIONS

A quantitative description of the discharge(s) described in the EPA Permit Application Form 2C is unavailable due to inactivity during the previous permit term. Procedures for Implementing NPDES Permits in New Mexico, July 2009, has adopted human health criteria. To ensure

human health is protected, the effluent must be analyzed for reasonable potential by screening for those pollutants which have numeric human health criteria. This policy applies to all industrial dischargers.

However, the permittee has only tested for a few pollutants as shown in **"Table 1: APPLICATION FORM 2C POLLUTANTS**." According to Procedures for Implementing NPDES Permits in New Mexico, July 2009, additional pollutants not reported in the EPA application 2C Form must be tested for when applying for reissuance of an NPDES permit upon first discharge. Table 3 from Procedures for Implementing NPDES Permits in New Mexico, July 2009, pollutants still requiring testing are as follows: Biochemical Oxygen Demand, 5-day (BOD_5), Chemical Oxygen Demand (COD), Total Organic Oxygen (TOC), Total Suspended Solids (TSS), Hardness ($CaCO_3$), Ammonia (as N), Total Residual Chlorine (TRC), Nitrate-Nitrite (as N), Antimony (dissolved), Arsenic (dissolved), Beryllium (dissolved), Cadmium (dissolved), Copper (dissolved), Lead (dissolved), Mercury (dissolved), Nickel (dissolved), Selenium (dissolved), Silver (dissolved), Thallium (dissolved), Cyanide (weak acid dissociable) (dissolved), Phenols, Aldrin, Chlordane, 4,4'-DDT and derivatives, Dieldrin, 2,3,7,8-TCDD dioxin, Hexachlorobenzene, PCBs, and Tetrachloroethylene.

Table 1: APPLICATION FORM 2C POLLUTANTS

Parameter	Average (µg/L unless noted)
pH	7.79 s.u.
Flow	0.0239 MGD
Temperature, summer	22.7 ºC
Oil and Grease	<5.0 mg/L
Chromium	<5.0
Zinc	50

The effluent from the facility has been monitored under the conditions of the previous permit with an August 1, 2005 effective date. The following table labeled "**Table 2: DMR DATA FROM JULY 2007 TO JUNE 2009**" is a summarization of the DMRs in the last 2 years.

Table 2: DMR DATA FROM JULY 2007 TO JUNE 2009

Monthly Average	pH Minimum	pH Maximum	TSS mg/L	Chromium mg/L	Zinc mg/L	flow MGD	TRC mg/L
7/31/07	7.84	7.84	1.25	.001	.0358	0.0311	.001
8/31/07	7.88	7.88	1	.001	.057	0.0394	.003
9/30/07	ND	ND	ND	ND	ND	ND	ND
10/31/07	ND	ND	ND	ND	ND	ND	ND
11/30/07	ND	ND	ND	ND	ND	ND	ND
12/31/07	ND	ND	ND	ND	ND	ND	ND
1/31/08	ND	ND	ND	ND	ND	ND	ND
2/29/08	ND	ND	ND	ND	ND	ND	ND
3/31/08	ND	ND	ND	ND	ND	ND	ND

Monthly Average	pH Minimum	pH Maximum	TSS mg/L	Chromium mg/L	Zinc mg/L	flow MGD	TRC mg/L
4/30/08	7.68	7.68	<5	<.005	.037	0.0061	.012
5/31/08	ND	ND	ND	ND	ND	ND	ND
6/30/08	7.96	7.96	<5	<.005	<.02	0.0251	.009
7/31/08	7.84	7.84	<5	<.005	.059	0.0458	.013
8/31/08	ND	ND	ND	ND	ND	ND	ND
9/30/08	ND	ND	ND	ND	ND	ND	ND
10/31/08	ND	ND	ND	ND	ND	ND	ND
11/30/08	ND	ND	ND	ND	ND	ND	ND
12/31/08	ND	ND	ND	ND	ND	ND	ND
1/31/09	ND	ND	ND	ND	ND	ND	ND
2/28/09	ND	ND	ND	ND	ND	ND	ND
3/31/09	ND	ND	ND	ND	ND	ND	ND
4/30/09	ND	ND	ND	ND	ND	ND	ND
5/31/09	7.74	7.74	ND	ND	ND	0.0127	.01
6/30/09	7.59	7.59	83	.00579	.019	0.0069	.013

*ND – No Discharge

In accordance with the Procedures for Implementing NPDES Permits in New Mexico, July 2009, the flow to be used for establishing limits for industrial facilities is the highest monthly average flow discharged from the facility over the past 24-months. For Outfall 001, this flow is 0.0458 MGD and will be used to establish loading limits and determining critical dilutions in the permit. The facility has not exceeded any of its effluent limitations during the time period shown in "**Table 2: DMR DATA FROM JULY 2007 TO JUNE 2009."**

XI. DRAFT PERMIT RATIONALE AND PROPOSED PERMIT CONDITIONS

The proposed effluent limitations for those pollutants proposed to be limited are based on regulations promulgated at 40 CFR 122.44. The draft permit limits are based on either technology-based effluent limits pursuant to 40 CFR 122.44(a), on BPJ in the absence of guidelines, NM WQS and/or requirements pursuant to 40 CFR 122.44(d), whichever are more stringent.

A. REASON FOR PERMIT ISSUANCE

The current permit was issued June 30, 2005, with an effective date of August 1, 2005, and an expiration date of July 31, 2009. The permit renewal application was received June 1, 2009.

It is proposed that the permit be issued for approximately a 5-year term following regulations promulgated at 40 CFR 122.46(a).

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

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

Technology-based effluent limitations are established in the proposed draft permit for TSS and zinc. Water quality-based effluent limitations are established in the proposed draft permit for pH and TRC. Additional "Report Only" monitoring for hardness (expressed as $CaCO_3$) will be added to the permit to evaluate a hardness (expressed as $CaCO_3$)-dependent reasonable potential analysis for zinc.

C. 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 effluent limitations guidelines where applicable, on BPJ in the absence of guidelines, or on a combination of the two.

Based on BPJ, the evaporator blow down water from this facility is a low volume waste source. Therefore, the ELG will be designated under 40 CFR 423.12 (b)(3). The facility does not utilize its gas turbine thermal cycle in conjunction with a steam water system as the thermodynamic medium. However, its discharge is the result of the operation of a generating unit (gas turbine) by an establishment primarily engaged in the generation of electricity for distribution and sales (40 CFR 423.10). Since the end result of this facility and a steam electric power station is the same and the process is similar, BPJ dictates that this facility will maintain an ELG under the Steam Electric Power Generating Point Source Category 40 CFR 423.

Table 3: Technology-based Effluent Limits- 0.0458 MGD flow

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS			
	lbs/Day		mg/l (unless noted)	
Parameter	30-Day Avg.	Daily Max.	30-Day Avg.	Daily Max
Flow	N/A	N/A	Measure MGD	Measure MGD
Zinc (1*)	0.38	0.38	1.0	1.0
Total Suspended Solids (1*)	11	38	30	100

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

2. Chromium and Zinc

The previous permit established technology-based effluent limitations for chromium and zinc. The proposed draft permit will maintain a limitation for zinc, in accordance with 40 CFR 122.44 (l)(2)(ii) antibacksliding and ELG requirements from 40 CFR 423. Historical DMR data from "**Table 2: DMR DATA FROM JULY 2007 TO JUNE 2009**" above reflect zinc in the discharge in quantities above the detection limits and MQL (20 µg/L), but less than the effluent limitation.

Zinc technology-based limitations will be retained from the previous permit even though a prohibition of zinc will also be placed into the permit. Zinc discharge limitations are shown in "**Table 3: Technology-based Effluent Limits- 0.0458 MGD flow**" for monthly average and daily maximum at Outfall 001 based on the flow 0.0458 MGD. Zinc will continue to be limited and reported so this data can be evaluated in conjunction with hardness data (see d. PERMIT ACTION – REPORT ONLY section below) to assess water quality concerns.

Chromium was not detected in the discharge in quantities above the effluent limitation or MQL. Chromium is not a part of any current water treatment system. With no chromium water treatment chemicals in use, there is no basis for establishing a technology-based limitation. To ensure continued technology-based practices, however, a narrative provision will be placed in the permit prohibiting the use of water treatment chemicals containing chromium.

"Products containing chromium and zinc will be prohibited from use as additives to the utility waters."

3. Total Suspended Solids (TSS)

Based on comments from NMED in the previous Response to Comments NM0030376 document for the previous permit prepared June 6, 2005, a TSS limit was requested by NMED. The facility reported that the well water used for the coolers had TSS levels of 100 mg/L, and the final discharge from the cooler was 30 mg/L. EPA then added a monitoring requirement rather than a limit since NMED's claims were based on one data point and because the facility discharges infrequently. After reviewing the data from the last 2 years, one data point (6/30/09) reached 83 mg/L (see "**Table 2: DMR DATA FROM JULY 2007 TO JUNE 2009**"). The monthly technology based limit for TSS according to the ELG from 40 CFR 423.12 (b)(3) is a monthly average of 30 mg/L. Based on the data provided, a technology based limit for TSS will be added to this permit.

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). The technology based pollutants; TSS and zinc are proposed to be monitored once per week. Flow is proposed to be monitored continuously when discharging. Sample type for TSS and zinc is by grab, which is consistent with the previous permit. This monitoring frequency is based on Procedures for Implementing NPDES Permits in New Mexico, July 2009.

E. OPERATION AND REPORTING

The applicant is required to operate the treatment facility at maximum efficiency when online. The facility's discharge is to be monitored as establisher above while reporting results quarterly. The monitoring results will be available to the public.

F. CWA 316(b)

This facility uses well water for cooling purposes so it is not subject to CWA 316(b) requirements.

G. WATER QUALITY BASED LIMITATIONS/REPORTING

1. General Comments

Effluent limitations and/or conditions established in the draft permit are in compliance with State WQS and applicable State water quality management plans.

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.

Procedures for Implementing NPDES Permits in New Mexico, July 2009, page 8 "6. Human Health Data Requirements" state that human health criteria shall apply to all industrial users. It further states that persistent toxic pollutants, as identified in Procedures for Implementing NPDES Permits in New Mexico, July 2009, as "Table 3. Persistent Pollutant Which Will Not Enter Into a Perennial Stream" shall also apply to discharges to ephemeral water bodies that will not enter a perennial stream or permanent water pool except in direct response to precipitation or runoff. According to Procedures for Implementing NPDES Permits in New Mexico, July 2009, the pollutants still requiring testing are as follows: Biochemical Oxygen Demand, 5-day (BOD_5), Chemical Oxygen Demand (COD), Total Organic Oxygen (TOC), Total Suspended Solids (TSS), Hardness ($CaCO_3$), Ammonia (as N), Chlorine, Total Residual (TRC), Nitrate-Nitrite (as N), Antimony, (dissolved), Arsenic, (dissolved), Beryllium, (dissolved), Cadmium, (dissolved), Copper, (dissolved), Lead, (dissolved), Mercury, (dissolved), Nickel, (dissolved), Selenium, (dissolved), Silver, (dissolved), Thallium, (dissolved), Cyanide, weak acid dissociable (dissolved), Phenols, Aldrin, Chlordane, 4,4'-DDT and derivatives, Dieldrin, 2,3,7,8-TCDD dioxin, Hexachlorobenzene, PCBs, and Tetrachloroethylene.

The facility will conduct a one-time sampling of the blowdown wastewater for all the parameters and pollutants listed in the above paragraph upon commencement of first after the permit's

effective date and provide analytical results to both EPA and NMED. The results will be tested to the MQL listed in Appendix A of Part II of this permit. This data will then be evaluated for reasonable potential to exceed WQS.

3. State Water Quality Numerical Standards

a. GENERAL COMMENTS

Stated previously, the designated uses of the receiving stream are livestock watering, wildlife habitat, limited aquatic life, and secondary contact.

b. WATER QUALITY STANDARDS

The NM WQCC adopted new WQS for the State of New Mexico. The revised WQS as amended through August 1, 2007, are available on the NMED's website at: http://www.nmcpr.state.nm.us/nmac/parts/title20/20.006.0004.pdf. The WQCC established the revised WQS in accordance with, and under authority of, the NM Water Quality Act [Chapter 74, Article 6, NMSA 1978 Annotated].

c. 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 effluent limitation guidelines are as follows:

i. pH

Water quality-based effluent limitations are established in the proposed permit pH. The previous permit established water quality-based effluent limitations for pH. Based on antibacksliding 40 CFR 122.44 (l)(1) the water quality effluent limitations for pH will remain in place. The draft permit shall establish 6.6 to 9.0 s.u. for pH.

d. PERMIT ACTION – REPORT ONLY

i. Hardness (Expressed as $CaCO_3$)

According to the Procedures for Implementing NPDES Permits in New Mexico, July 2009, the zinc WQ effluent limitation is determined by a hardness (expressed as $CaCO_3$)-dependent equation that evaluates the pollutant's reasonable potential to exceed WQS. A hardness (expressed as $CaCO_3$) monitoring parameter will be added to the permit to determine if the facility will require a WQ-based zinc effluent limit. Zinc will be assessed for water quality concerns when hardness and the pollutant data are analyzed.

The proposed permit shall require monitoring for hardness (expressed as $CaCO_3$) at the same frequency (once per week) as required for zinc. Based on data from "**Table 2: DMR DATA FROM JULY 2007 TO JUNE 2009**," at a default hardness level, reasonable potential to exceed

WQS is exhibited. In order to attain a more representative conclusion for zinc, hardness will be required as a report only parameter.

e. TOXICS - WATER QUALITY-BASED LIMIT CALCULATIONS

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.

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 order to implement this WQS, the end-of-pipe discharge will have to meet applicable acute. For permitting purposes of certain parameters such as WET, the critical dilution of the effluent to the receiving stream is determined. Since the receiving stream is ephemeral the critical dilution is 100%.

In addition, EPA finds it prudent to require the facility to test for the "Metals, Cyanide, and Total Phenols" (Found in EPA Application 2C FORM) since the facility uses sulfuric acid in its treatment process which may contain metal(s) or other impurities. If the analytical results indicate that a pollutant is found to show reasonable potential to exceed applicable WQS, the permit may be reopened and additional permit conditions may be placed in the permit.

i. Total Residual Chlorine (TRC)

Water quality-based effluent limitations are established in the proposed permit for total residual chlorine (TRC). The previous permit established water quality-based effluent limitations for TRC. Based on antibacksliding 40 CFR 122.44 (l)(1) the water quality effluent limitations for TRC will remain in place. Based on Procedures for Implementing NPDES Permits in New Mexico, July 2009, TRC limits must be included in the permit whenever a facility uses chlorine in its process. In the past 2 years, the TRC daily max has exceeded the limitation of 11µg/L.

However, the established MQL for TRC is 33µg/L so the limitation for TRC shall be "No Measurable" (Refer to Part II. Other Conditions A. Minimum Quantification Level (MQL) of Permit). The effluent limitation for TRC is the instantaneous maximum and can not be averaged for reporting purposes. TRC shall be measured within fifteen (15) minutes of sampling.

4. 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). TRC shall be measured once a week by instantaneous field measurement when chlorine is used. The pH shall be monitored daily by totalizing meter. Hardness ($CaCO_3$) shall be monitored once a week by grab. This monitoring is based on Procedures for Implementing NPDES Permits in New Mexico, July 2009.

5. Whole Effluent Toxicity Requirements

Procedures for implementing WET terms and conditions in NPDES permits are contained in the Procedures for Implementing NPDES Permits in New Mexico, July 2009. Table 11 of Section V of the Procedures for Implementing NPDES Permits in New Mexico, July 2009 outlines the type of WET testing for different types of discharges.

The previous permit did not establish WET monitoring requirements. In Section d. TOXICS - WATER QUALITY-BASED LIMIT CALCULATIONS above, it was shown that the critical dilution, CD, for the facility is 100%. Based on Procedures for Implementing NPDES Permits in New Mexico, July 2009, 48-hour acute biomonitoring will be required for discharges to ephemeral streams and will use the *Daphnia pulex* test species at a once per year frequency for the life of the permit. According to July 2009, Procedures for Implementing NPDES Permits in New Mexico if test frequency is 1/year or less, the test should occur in winter or springtime when most sensitive juvenile life forms are likely to be present in receiving water and colder ambient temperatures might adversely affect treatment processes. This will generally be defined as between November 1 and April 30. Historically, this facility operates between the months of April and August so the WET testing month will be set to April (if April has a discharge) or upon first discharge after this month of every year beginning 2010. The proposed permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests based on a 0.75 dilution series. These additional effluent concentrations shall be 32%, 42%, 56%, 75%, and 100%. The critical dilution is defined as 100% effluent.

OUTFALL 001

During the period beginning the effective date of the permit and lasting through the expiration date of the permit, the permittee is authorized to discharge from Outfall 001 - the discharge to non-classified, unnamed arroyo/AMAFCA South Diversion Channel of the treatment system aeration basin. The aeration basin receives process area wastewater, process area stormwater, and treated sanitary wastewater. Discharges shall be limited and monitored by the permittee as specified below:

The permittee shall conduct separate WET tests in accordance with the following table:

EFFLUENT CHARACTERISTIC	DISCHARGE MONITORING	
Whole Effluent Toxicity Testing (48 Hr. Static Renewal) 1*	30-DAY AVG MINIMUM	48-Hr. MINIMUM
Daphnia pulex	REPORT	REPORT

EFFLUENT CHARACTERISTIC	MONITORING REQUIREMENTS	
Whole Effluent Toxicity Testing (48 Hr. Static Renewal) 1*	FREQUENCY	TYPE
Daphnia pulex	1/YEAR	24-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.

XIII. 303(d) LIST

The Rio Grande, Stream Segment 20.6.4.105, from the Isleta Pueblo boundary upstream to the Alameda Street Bridge is listed as impaired for bacteria on the "State of New Mexico Part 303(d) List for Assessed Stream and River Reaches, 2008-2010." The waterbody is assessed as Category5/5B with irrigation, livestock watering and wildlife habitat as fully supporting but secondary contact and marginal warmwater aquatic life as not supported. The probable cause of impairment is *E. coli*. A TMDL is scheduled for 2009. The facility may not have a reasonable potential to contribute this pollutant of concern because the facility does not discharge *E. coli*. No additional monitoring requirements are added to address the impairment issue. The standard reopener language in the permit allows additional permit conditions if warranted by the pending TMDL.

XIV. 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 proposed draft 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.

XV. ANTIBACKSLIDING

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)(i)(A), which state in part that interim or final effluent limitations must be as stringent as those in the previous permit, unless material and substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of a less stringent effluent limitation. The proposed permit maintains the mass loading requirements of the previous permit for zinc, TRC, and pH. All of the changes represent permit requirements that are consistent with the States WQS and WQMP.

XVI. ENDANGERED SPECIES CONSIDERATIONS

According to the most recent county listing available at US Fish and Wildlife Service (USFWS), Southwest Region 2 website, http://www.fws.gov/southwest/es/EndangeredSpecies/lists/, four species in Bernalillo County are listed as endangered (E) or threatened (T). The lone aquatic species is the Rio Grande silvery minnow (*Hybognathus amarus*) (E). Two species are birds and include the southwestern willow flycatcher (*Empidonax traillii extimus*) (E) and the Mexican spotted owl (*Strix occidentalis lucida*) (T). The only mammal is the black-footed ferret *Mustela nigripes* (E). The American bald eagle (*Haliaeetus leucocephalus*) was previously listed in Bernalillo County; however, the USFWS, removed the American bald eagle in the lower 48 states from the Federal List of Endangered and Threatened Wildlife Federal Register, July 9, 2007, (Volume 72, Number 130).

In accordance with requirements under section 7(a)(2) of the Endangered Species Act, EPA has reviewed this permit for its effect on listed threatened and endangered species and designated critical habitat. After review, EPA has determined that the reissuance of this permit will have "*no effect*" on listed threatened and endangered species nor will adversely modify designated critical habitat. EPA makes this determination based on the following:

1. The previous permit initiated Formal Consultation with the FWS for the discharge from the facility. EPA provided a Biological Evaluation (BE) to FWS March 27, 2001. The FWS responded to EPA's BE, August 20, 2001, Consultation # 2-22-01-I-592, concurring with EPA's "*no effect*" determination for the Southwestern flycatcher and its "*may affect, but not likely to adversely affect*" the Rio Grande silvery minnow.

2. No changes have been made to the US Fish and Wildlife list of threatened and endangered species and critical habitat designation in the area of the discharge since prior issuance of the permit.

3. EPA has received no additional information since its March 27, 2001, BE, which would lead to revision of its determinations. Effluent limitations have not been changed to become less stringent.

4. EPA determines that Items 1, 2, and 3 result in no change to the environmental baseline established by the previous permit, therefore, EPA concludes that reissuance of this permit will have "no effect" on listed species and designated critical habitat relating to the previously established baseline.

XVII. 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.

XVIII. PERMIT REOPENER

The permit may be reopened and modified during the life of the permit if relevant portions of either States 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 States Water Quality Standards are either revised or promulgated. Should either 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.

XIX. VARIANCE REQUESTS

No variance requests have been received.

XX. 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.

XXI. FINAL DETERMINATION

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

XXII. ADMINISTRATIVE RECORD

The following information was used to develop the proposed permit:

A. APPLICATION(s)

EPA Application Form 2C received June 1, 2009.

B. 40 CFR CITATIONS

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 1, 2007.

State of New Mexico Procedures for Implementing NPDES Permits in New Mexico, July 2009.

Statewide Water Quality Management Plan, December 17, 2002.

State of New Mexico 303(d) List for Assessed Stream and River Reaches, 2008 -2010.

E. MISCELLANEOUS REFERENCES

NPDES Permit No. NM0030376 Response to Comments: June 6, 2005.