

**NPDES PERMIT NO. NM0028533**  
**FACT SHEET**

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

**APPLICANT**

Alto Water Treatment Plant  
313 Cree Meadows Drive  
Ruidoso, NM 88345

**ISSUING OFFICE**

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

**PREPARED BY**

Scott W. Stine, Ph.D.  
Life Scientist  
NPDES Permits & Technical Section (6WQ-PP)  
Water Quality Protection Division  
VOICE: 214-665-7182  
FAX: 214-665-2191  
EMAIL: stine.scott@epa.gov

**DATE PREPARED**

April 24, 2012

**PERMIT ACTION**

Proposed reissuance of the current NPDES permit issued February 27, 2007, with an effective date of April 1, 2007, and an expiration date of March 31, 2012.

**RECEIVING WATER – BASIN**

Eagle Creek – Pecos River 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 limitations guidelines
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
FCB	Fecal coliform bacteria
F&WS	United States Fish and Wildlife Service
mg/L	Milligrams per liter
µg/L	Micrograms per liter
MGD	million gallons per day
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NMIP	New Mexico NPDES Permit Implementation Procedures
NMWQS	New Mexico State Standards for Interstate and Intrastate Surface Waters
NPDES	National Pollutant Discharge Elimination System
ML	Minimum quantification level
O&G	Oil and grease
PCB	Polychlorinated Biphenyl
POTW	Publically owned treatment works
RP	Reasonable potential
SIC	Standard industrial classification
s.u.	Standard units (for parameter pH)
SWQB	Surface Water Quality Bureau
TDS	Total dissolved solids
TMDL	Total maximum daily load
TRC	Total residual chlorine
TSS	Total suspended solids
UAA	Use attainability analysis
USGS	United States Geological Service
WLA	Wasteload allocation
WET	Whole effluent toxicity
WQCC	New Mexico Water Quality Control Commission
WQMP	Water Quality Management Plan
WWTP	Wastewater treatment plant

In this document, references to State WQS and/or rules shall collectively mean the State of New Mexico.

## I. CHANGES FROM THE PREVIOUS PERMIT

Changes from the permit previously issued February 27, 2007, with an effective date of April 1, 2007, and an expiration date of March 31, 2012, are:

1. The receiving stream has been changed from Waterbody Segment No. 20.6.4.209 to Waterbody Segment No. 20.6.4.98.
2. TSS monitoring frequency has been amended to once per week.
3. pH frequency of analysis has been changed to daily.
4. TRC monitoring frequency has been changed to once per week.
5. The monitoring frequency for selenium has been changed to once per week.
6. WET testing has been changed from a 48-hour static renewal test using *Daphnia pulex* to a 7-day chronic test using *Ceriodaphnia dubia* and *Pimephales promelas*.
7. The pH limitation has been modified.
8. Limitations have been added to the permit for cadmium.
9. A monitoring requirement for total radium has been included in the permit.

## II. APPLICATION LOCATION and ACTIVITY

As described in the application, the water treatment plant is located at 103 Via Auguila (formerly Eagle Way), in Ruidoso, Lincoln County, New Mexico. The effluent from the facility is discharged into Eagle Creek. The discharge is located on that water at latitude 33° 23' 42" N and longitude 105° 40' 12" W, in Lincoln County, New Mexico.

Under the SIC Code 4941, the discharge is from a water supply operation.

As described in the Compliance Evaluation Inspection Report dated October 11, 2011, the treatment processes for the facility is as follows:

The Alto Water Treatment Plant is one of two plants providing drinking water for the Village of Ruidoso. The source of raw water is from groundwater and surface water, including the Alto Crest reservoir. When needed, copper sulfate is used for algae control at Alto Crest reservoir. This plant utilizes a mixed media filtration system as well as chlorination for treatment of drinking water. Drinking water treatment processes include coagulation, flocculation, sedimentation and filtration. IWE 851, Poly (Diallyldimethylammonium Chloride) or (pDADMAC)[PD], and Ferric Sulfate are used for coagulation and flocculation during the drinking water treatment process.

Chlorine treated water is used during filter backwash. The timing of the backwash process varies and is controlled by on-site operators. In addition, chlorine treated water is continuously run through the plant's pipe system to minimize scale build up in instrumentation. Filter backwash, filter to waste process water and continuous flows are de-chlorinated using Sodium Sulfate tablets at the plant. Flows are then carried via a pipeline to an excavated sedimentation basin (two joined channels or loop) located downstream of Alto Crest Reservoir adjacent to Eagle Creek. The basin channels join at a headgate at an inlet of a pipe with an outlet above Eagle Creek. Grit from the basin is periodically cleaned out.

### III. RECEIVING STREAM STANDARDS

The general and specific stream standards are provided in NMWQS (20.6.4 NMAC, amended through January 14, 2011). The facility discharges into unclassified Eagle Creek in Waterbody Segment No. 20.6.4.98, thence to Rio Ruidoso, thence to Rio Hondo of the Pecos River Basin. The designated uses of this receiving water are livestock watering, wildlife habitat, marginal warmwater aquatic life and primary contact.

### IV. EFFLUENT CHARACTERISTICS

A quantitative description of the discharge(s) described in the EPA Permit Application Form 2C received December 12, 2011 are presented below in Table 1:

POLLUTANT TABLE – 1

Parameter	Max Daily Value	Max 30 Day Value	Long Term Avg Value
	(mg/l unless noted)		
Flow, million gallons/day (MGD)	0.063	0.063	0.050
Temperature, winter	10.5°C	10.5°C	14.8°C
Temperature, summer	22.3 °C	22.3 °C	20 °C
pH, minimum, standard units (SU)	7.1 su	7.1 su	N/A
pH, maximum, standard units (SU)	8.6 su	8.6 su	N/A
Biochemical Oxygen Demand (BOD)	4	NDR	NDR
Chemical Oxygen Demand (COD)	9.31	NDR	NDR
Total Suspended Solids (TSS)	5.8	5.8	ND
Ammonia (as N)	ND	NDR	NDR
Total Organic Carbon (TOC)	0.69	NDR	NDR

NDR – no data received

ND – Not detected

A summary of the last 36 months of available pollutant data from July 2008 through June 2011, taken from DMRs shows no exceedances of permit limits for pH, TSS and total selenium. During the period of July 2008 through June 2009, exceedances were reported for TRC limits during eight reporting periods. No exceedances of the permit limit for TRC were reported during July 2009 through June 2011.

POLLUTANT TABLE – 2

Date	pH		TSS		TRC	Total Selenium	
	Min.	Max.	30 DAY AVG	Daily Max	Max.	30 DAY AVG	Daily Max
	s.u.	s.u.	mg/L	mg/L	µg/L	µg/L	µg/L
Limit	6.6	8.8	20	30	11	3.33	5.0
7/31/2008	6.8	6.9	0.7	0.7	0	0	0
8/31/2008	6.6	6.8	0.2	0.2	<b>700</b>	0	0
9/30/2008	6.8	6.9	0.6	0.6	0	0	0
10/31/2008	6.7	6.8	0.4	0.4	<b>400</b>	0	0
11/30/2008	6.7	6.8	0.1	0.1	<b>700</b>	0	0
12/31/2008	6.7	6.9	0.2	0.2	<b>600</b>	1.6	1.6
1/31/2009	6.7	6.7	0.35	0.35	<b>200</b>	0	0
2/28/2009	6.7	6.9	0.8	0.8	0	0	0
3/31/2009	6.7	6.7	0.4	0.4	<b>180</b>	0.54	0.54
4/30/2009	6.8	7.7	0.3	0.3	0	0	0
5/31/2009	6.9	7.3	0	0	<b>230</b>	1	1
6/30/2009	6.8	7	5.5	5.5	<b>500</b>	0	0
7/31/2009	6.9	7.1	2.5	2.5	0	0	0
8/31/2009	6.9	7.1	0.3	0.3	0	0	0
9/30/2009	6.8	7.1	1.9	1.9	0	0	0
10/31/2009	6.8	7	2	2	0	0	0
11/30/2009	6.8	7.1	0.35	0.35	0	0	0
12/31/2009	6.8	7	1.2	1.2	0	0	0
1/31/2010	6.9	7.1	0.3	0.3	0	0	0
2/28/2010	6.9	7.1	1.3	1.3	0	0	0
3/31/2010	6.8	7	0.3	0.3	0	0	0
4/30/2010	6.9	7	0.1	0.1	0	0	0
5/31/2010	6.9	7.1	8	8	0	0	0
6/30/2010	6.8	7	7.6	7.6	0	0	0
7/31/2010	6.8	7	0.8	0.8	0	0	0
8/31/2010	6.8	6.9	0.8	0.8	0	0	0
9/30/2010	6.8	6.9	0.4	0.4	0	0	0
10/31/2010	6.9	7	1.5	1.5	0	0	0
11/30/2010	6.8	6.9	0.7	0.7	0	0	0
12/31/2010	6.8	6.9	0.7	0.7	0	0	0
1/31/2011	6.7	6.9	0.3	0.3	0	0	0
2/28/2011	6.8	7	0.2	0.2	0	0	0
03/31/2011	6.8	7	0.4	0.4	0	0	0
04/30/2011	6.8	7	3	3	0	0	0
05/31/2011	6.8	7.1	0.1	0.1	0	0	0
06/30/2011	6.8	7	2	2	0	0	0

## V. REGULATORY AUTHORITY/PERMIT ACTION

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

It is proposed that the permit be reissued for a 5-year term following regulations promulgated at 40 CFR §122.46(a). The existing NPDES permit initially issued February 27, 2007, with an effective date of April 1, 2007, and an expiration date of March 31, 2012, is administratively continued until this permit is reissued.

## VI. DRAFT PERMIT RATIONALE AND PROPOSED PERMIT CONDITIONS

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

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

Technology-based effluent limitations are established in the draft permit for TSS. Water quality-based effluent limitations are established in the draft permit for cadmium, selenium, TRC, and pH.

### 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 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.

Discharges from similar drinking water facilities (e.g., City of Springer and City of Aztec) are required to meet effluent limitations for total suspended solids (TSS) at monthly average of 20 mg/L and daily maximum of 30 mg/L. Therefore, based on these similar permitted facilities,

using BPJ, effluent limitations for TSS are established in the draft permit identical to the previous permit.

Loading limits are not established since the discharge of backwash water and flushing occurs only when the operation of backwash takes place, it is not a continuous discharge. This is identical to the previous 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 the State WQS and applicable State water quality management plans to assure that surface WQS of the receiving waters are protected and maintained, or attained.

### 2. Implementation

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

### 3. State Water Quality Standards

The general and specific stream standards are provided in NMWQS (20.6.4 NMAC, amended through January 14, 2011). The current permit identifies the receiving stream as occurring in Waterbody Segment No. 20.6.4.209. However, the convergence of Eagle Creek with the Rio Ruidoso occurs downstream of the U.S. Highway 70 bridge near Seeping Springs lakes. While Waterbody Segment No. 20.6.4.208 includes the Rio Ruidoso downstream of the U. S. Highway 70 Bridge near Seeping Springs lakes, it does not include its tributaries. Therefore, the draft permit identifies the receiving stream, unclassified Eagle Creek, as occurring in Waterbody Segment No. 20.6.4.98. The designated uses of this receiving water are livestock watering, wildlife habitat, marginal warmwater aquatic life and primary contact.

#### 4. Permit Action – Water Quality-Based Limits

##### a. pH

The State of New Mexico WQS criteria applicable to the coldwater aquatic life designated use require pH to be between 6.6 and 9.0 s.u.

##### b. Bacteria

Not applicable.

##### c. Toxics

###### (i) General Comments

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

The facility is classified as an industrial discharger and must supply the expanded pollutant testing list described in EPA Application Form 2C and the NMIP. See Appendix B of this Fact Sheet for the full list of sampled pollutants. The following are the data that were in excess of the EPA's MQL for the particular pollutant and have numeric criteria established by the NMWQS applicable to the designated uses applicable to the receiving water.

Parameter	Max Daily Value	Max 30-Day Value
	(µg/l unless noted)	
Alpha, Total (pCi/l)	4.733	4.733
Radium 226, total (pCi/l)	1.5500	1.5500
Cadmium, total	4.52	4.52
Copper, total	8.99	8.99
Nickel, total	2.26	2.6
Zinc, total	4.84	4.84
Aluminum, total	18	18

TRC is a toxic that has been identified in previous permits to be limited and is discussed below.

###### (ii) Critical Conditions

Critical conditions are used to establish certain permit limitations and conditions. The State of New Mexico WQS allow a mixing zone for establishing pollutant limits in discharges. The NMWQS establish a critical low flow designated as 4Q3, as the minimum average four

consecutive day flow which occurs with a frequency of once in three years. The SWQB of the NMED provided EPA with the 4Q3 of 0 cfs and the harmonic mean flow of 0.001 cfs for the facility.

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:

$CD = Q_e / (F \cdot Q_a + Q_e)$ , where:

$Q_e$  = facility flow (0.118 MGD)

$Q_a$  = critical low flow of the receiving waters (0 MGD [= 0 cfs] )

$F$  = fraction of stream allowed for mixing (1.0)

$$\begin{aligned} CD &= 0.118 \text{ MGD} / [(1.0)(0) + 0.118] \\ &= 1.0 \\ &= 100\% \end{aligned}$$

Data from the following sources are used to calculate in-stream waste concentrations and effluent limitations:

Stream TSS (mg/l): 20 (Value from the current permit).

Stream Hardness (mg/l): 290 (Average of data provided by facility on November 13, 2006).

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

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

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, as discussed in the EPA Region 6 document titled Effluent Variability Policy, dated September 17, 1991, or the most current revision thereof.

$C_a$  = Ambient stream concentration, if available

$Q_e$  = Wastewater treatment design flow in MGD (municipal facilities) 0.118 MGD

$Q_a$  = Critical low flow, 4Q3, of receiving stream, 0 MGD

This screen is shown as Appendix B of the Fact Sheet.

As shown in Appendix B of the Fact Sheet, the pollutant data demonstrated reasonable potential to exceed WQS of the receiving water for cadmium. New limits and a compliance schedule have been established in the draft permit for this pollutant. Using the procedures established in the NMIP, a daily maximum concentration limitation of 0.51 µg/l was calculated for cadmium. A

30-day average limitation was calculated by dividing the daily maximum concentration limitation by 1.5. This formula establishes a 30-day average concentration limitation of 0.34 µg/l which is less than the calculated water quality criteria of 0.51 µg/l for chronic aquatic life. In accordance with the NMIP, the 30-day average will not be less than the applicable water quality criteria. Therefore, a 30-day average concentration of 0.51 µg/l has been proposed in the draft permit.

Selenium limitations have been carried forward from the current permit.

In EPA Application Form 2C, the permittee identified total radium and radium-226 as pollutants that are known or believed to be present. While sampling results for radium-226 were included in the application, no sampling results were provided for total radium. A one-time monitoring requirement for total radium has been proposed in the draft permit. If prior to the issuance of the final permit, the permittee submits appropriate additional data for total radium which demonstrates that the discharge has no reasonable potential to cause or contribute to exceedances of the NMWQS criteria, then no additional effluent testing will be required.

Sampling results for the human health pollutant tetrachloroethylene were not submitted with the facility's application. However, sampling results were submitted by the facility during the development of the current permit. Sampling results for this pollutant were below the current EPA MQL. In accordance with the NMIP, the permit writer will rely on this data and will not require further sampling for tetrachloroethylene for the draft permit.

Vanadium and diazinon have criteria applicable to the designated uses of Waterbody Segment No. 20.6.4.98 and were not tested for by the permittee. However, the permittee provided sampling results for vanadium during the development of the current permit. Sampling results for this pollutant were below the current EPA MQL. The permit writer will rely on this data and will not require further sampling for vanadium for the draft permit. While sampling results have not been submitted for diazinon, the EPA does not expect the facility's discharge to have a reasonable potential to cause or contribute to exceedances of the NMWQS criteria for diazinon given the nature of the discharge.

### (iii) TRC

For TRC, State WQS establish acute end-of-pipe criteria of 19 µg/L and chronic in-stream criteria of 11 µg/L. At a critical dilution of 100%, the criteria of 11 µg/L is the most stringent limitation. The draft permit will maintain a TRC limit of 11 µg/L when discharge occurs.

### 5. 303(d) List Impacts

NA

#### 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). Technology based pollutant; TSS, is proposed to be monitored once per week, which is more frequent than the once per month monitoring frequency established by the current permit. Sample type for TSS is grab. The proposed technology based monitoring frequency is consistent with the NMIP.

Water quality-based pollutants; The current permit requires TRC and pH to be sampled daily and once per week, respectively. The draft permit proposes that pH will be measured daily when discharge occurs by grab sample. TRC will be measured once per week by instantaneous grab sample. These changes are consistent with the NMIP. Regulations at 40 CFR Part 136 define instantaneous grab as being analyzed within 15-minutes of collection. The monitoring frequency for selenium has been increased from once per month to once per week in the draft permit. This change is consistent with the NMIP. The draft permit also establishes a monitoring frequency of once per week for cadmium. A total radium monitoring frequency of once per permit term by grab sample has also been included in the draft permit.

#### E. WHOLE EFFLUENT TOXICITY REQUIREMENTS

In Section V.C.4.c.ii.(b) above; “Critical Conditions”, it was shown that the critical dilution, CD, for the facility is 100%. Based on the nature of the discharge; drinking water treatment plant, the production flow; 0.118 MGD, the nature of the receiving water; intermittent, and the critical dilution; 100%, the Table 12 of the NMIP directs the WET test to be a 7 day chronic test using *Ceriodaphnia dubia* and *Pimephales promelas* at a once per permit term frequency for the permit term. According to the NMIP, when a test frequency is 1 time a 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.

The draft 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 low-flow effluent concentration (critical low-flow dilution) is defined as 100% effluent.

DMR reports reveal one (1) passing test for the *Daphnia pulex* species during the last permit term. The EPA Reasonable Potential Analyzer (See Appendix A) indicates that RP exists. However, EPA is overruling this finding because Village of Ruidoso- Alto Crest has not failed a WET test during their last permit term and is conducting tests at the maximum critical dilution. Reasonable potential for an excursion of the narrative criterion to protect the aquatic life against toxicity does not exist because lethal (acute test) toxic events were not demonstrated from the WET test submitted with the permit application. EPA concludes that this effluent does not cause or contribute to an exceedance of the State water quality standards. Therefore WET limits will not be established in the draft permit.

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 Eagle Creek in segment number 98. Discharges shall be limited and monitored by the permittee as specified below:

<u>EFFLUENT CHARACTERISTIC</u>	<u>DISCHARGE MONITORING</u>	
	<u>30-DAY AVG MINIMUM</u>	<u>7-DAY MINIMUM</u>
Whole Effluent Toxicity Testing (7 Day Static Renewal) 1/		
<i>Ceriodaphnia dubia</i>	REPORT	REPORT
<i>Pimephales promelas</i>	REPORT	REPORT

<u>EFFLUENT CHARACTERISTIC</u>	<u>MONITORING REQUIREMENTS</u>	
	<u>FREQUENCY</u>	<u>TYPE</u>
Whole Effluent Toxicity Testing (7 Day Static Renewal) 1/		
<i>Ceriodaphnia dubia</i>	1/ permit term	Grab
<i>Pimephales promelas</i>	1/ permit term	Grab

FOOTNOTES

1/ Monitoring and reporting requirements begin on the effective date of this permit. See Part II, Whole Effluent Toxicity Testing Requirements for additional WET monitoring and reporting conditions.

VII. ANTIDegradation

The State of New Mexico has antidegradation requirements to protect existing uses through implementation of their WQS. The limitations and monitoring requirements set forth in the 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.

## IX. ANTIBACKSLIDING

The draft permit is consistent with the requirements to meet antibacksliding provisions of the Clean Water Act, Section 402(o) and 40 CFR 122.44(l)(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 draft permit maintains the effluent limitations of the previous permit for TSS, TRC, and selenium.

The draft permit amends the effluent limitations of the previous permit for pH from 6.6 to 8.8 s.u. to 6.6 to 9.0 s.u. See Part VI.C.3 above. The permit writer has determined that this change meets the exception to the antibacksliding provisions established at 40 CFR 122.44(l)(i)(B).

## X. 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/EndangeredSpecies\\_Lists/EndangeredSpecies\\_ListSpecies.cfm](http://www.fws.gov/southwest/es/EndangeredSpecies/EndangeredSpecies_Lists/EndangeredSpecies_ListSpecies.cfm), four species in Lincoln County are listed as endangered (E) or threatened (T). Two species are birds and include the northern aplomado falcon (*Falco femoralis septentrionalis*) (E) and the Mexican spotted owl (*Strix occidentalis lucida*) (T). One species, the Kuenzler hedgehog cactus (*Echinocereus fendleri* var. *kuenzleri*) (E), is a flowering plant. The lone mammalian species is the black-footed ferret (*Mustela nigripes*) (E). Although the black-footed ferret is listed as endangered in the County listing, it is also listed as extirpated in Lincoln County. The American bald eagle (*Haliaeetus leucocephalus*) was previously listed in Lincoln 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, the 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. The EPA makes this determination based on the following:

1. The EPA determined that the current permit, issued on February 27, 2007, would have “no effect” on listed threatened and endangered species nor will adversely modify designated critical habitat.
2. Except for the removal of the bald eagle in 2007, no changes have been made to the USFWS list of threatened and endangered species and critical habitat designation in the area of the discharge since prior issuance of the permit.
3. The EPA has received no additional information since February 27, 2007, which would lead to the revision of its determination.

4. EPA determines that Items 1, 2, and 3 result in no change to the environmental baseline established by the previous permit. Therefore, the EPA concludes that the reissuance of this permit will have “*no effect*” on listed threatened and endangered species nor will adversely modify designated critical habitat.

## XI. HISTORICAL and ARCHEOLOGICAL PRESERVATION CONSIDERATIONS

The reissuance of this permit should have no impacts on historical properties since no construction activities are proposed during its reissuance.

## XII. PERMIT REOPENER

The permit may be reopened and modified during the life of the permit if relevant portions of 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 the State adopt a new WQS, and/or develop or amend a TMDL, this permit may be reopened to establish effluent limitations for the parameter(s) to be consistent with that approved State standard and/or water quality management plan, in accordance with 40 CFR 122.44(d). Modification of the permit is subject to the provisions of 40 CFR 124.5.

## XIII. VARIANCE REQUESTS

No variance requests have been received.

## XIV. CERTIFICATION

The permit is in the process of certification by the State of New Mexico following regulations promulgated at 40 CFR §124.53. A draft permit and draft public notice will be sent to the District Engineer, Corps of Engineers; to the Regional Director of the U.S. Fish and Wildlife Service and to the National Marine Fisheries Service prior to the publication of that notice.

## XV. FINAL DETERMINATION

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

## XVI. ADMINISTRATIVE RECORD

The following information was used to develop the draft permit:

### A. APPLICATION(s)

EPA Application Form 2A received October 18, 2011.

EPA Application Form 2C received December 12, 2011.

EPA Application Form 2C received April 23, 2012.

**B. 40 CFR CITATIONS**

Citations to 40 CFR as of March 20, 2012.

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 January 14, 2011.

Procedures for Implementing NPDES Permits in New Mexico, March 15, 2012.

Statewide Water Quality Management Plan, December 17, 2002.

State of New Mexico 303(d) List for Assessed Stream and River Reaches, 2010-2012.

**D. OTHER**

Compliance Evaluation Inspection of the Village of Ruidoso Water Treatment Plant #3 Alto Crest NPDES Permit Number NM0028533, October 11, 2011.