# NPDES PERMIT NO. NM0020109 FACT SHEET

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

# APPLICANT

Town of Silver City Wastewater Treatment Plant P.O. Box 1188 Silver City, NM 88062

# **ISSUING OFFICE**

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

#### PREPARED BY

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# **DATE PREPARED**

May 9, 2013

# PERMIT ACTION

Proposed reissuance of the current NPDES permit initially issued August 26, 2008, with an effective date of October 1, 2008, and an expiration date of September 30, 2013.

#### **RECEIVING WATER – BASIN**

San Vicente Arroyo - Closed 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)
RPI	Best professional judgment
CROD	Carbonaccous biochamical ovugan damand (five day unless noted atherwise)
CBOD	Critical dilution
CD	
CFK	Code of Federal Regulations
cfs	Cubic feet per second
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
FWS	United States Fish and Wildlife Service
mg/l	Milligrams per liter
ug/l	Micrograms per liter
MG	Million gallons
MGD	Million gallons per day
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
	New Mexico Environment Department
	New Mexico NFDES Fernit Implementation Flocedures
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
SS	Settleable solids
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
WFT	Whole effluent toxicity
WOCC	New Mexico Water Quality Control Commission
WOMD	Water Quality Management Plan
	Westewater treatment plant
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# I. CHANGES FROM THE PREVIOUS PERMIT

Changes from the previous permit issued August 26, 2008, with an effective date of October 1, 2008, and an expiration date of September 30, 2013, are:

- 1. The permit establishes minimum BOD and TSS percent removal efficiencies.
- 2. E. coli bacteria and pH have been made less stringent.
- 3. Limits for mercury have been eliminated.

# II. APPLICANT LOCATION and ACTIVITY

As described in the application, the plant site is located at 1660 Filaree Road, Silver City, Grant County, New Mexico. Under SIC Code 4952, the applicant operates a POTW with a design flow of 2.0 MGD providing sanitary services for approximately 11,800 residents.

# PLAT OF SILVER CITY POTW



Raw sewage influent enters the POTW entrance works. The lift station also has two screw pumps, one for influent, and one for return activated sludge (RAS) from the secondary clarifiers. Influent is directed to a primary automatic bar screen and grit chamber, then to a secondary

aerated grit chamber located adjacent to the entrance works. At the primary grit chamber, wastewater is lifted to a 12-inch Parshall flume where the influent flow is recorded. Flow from the secondary grit chamber is directed through a splitter box where effluent is divided between two primary clarifiers that operate in parallel. Sludge is collected by rotating scrapers and directed to a sump located in the center of the clarifiers. The collected sludge is recycled to the aerobic digesters. Flow continues to another splitter box prior to entering the anoxic basin. A bypass channel with side gates is operated to select which basins are used. The anoxic basins were designed for de-nitrification. Recirculation speed can be adjusted to balance ammonia and nitrate in the secondary effluent. Wastewater then flows from the primary clarifiers to the aeration basin that has four mechanical brush aerators. From the aerobic basin, flow enters a splitter box and is divided before entering two secondary clarifiers. Activated sludge that settles in these units is periodically pumped back as RAS or to the sludge digesters. From the secondary clarifiers, combined flows then routed to a UV disinfection system that contains two UV drums. The treated effluent flows into the former chlorine contact chamber. The old chlorine chamber is now used as an equalization basin. From the chamber, treated effluent from the POTW can either be sent to the San Vicente Arroyo or surface impoundments where it is used for irrigation at the Scott Park Golf Course, Glenn Ranch and/or irrigation at the municipal baseball fields.

From the aerobic digesters, sewage sludge is drained to one of fourteen drying beds. Sludge in the beds is manually aerated to facilitate the drying process and increase the solids content prior to final disposal. Liquid from the drying beds is decanted and returned to the entrance works. Sludge is disposed at the Butterfield Trail Regional Landfill in Deming, New Mexico.

The discharge is located at Latitude 32° 42' 54.2" North, Longitude 108° 14' 47.5" West. The discharge from the facility is to receiving waters named San Vicente Arroyo, an undesignated perennial water of the Mimbres River in Segment No.20.6.4.099 in the Closed Basins.

#### III. EFFLUENT CHARACTERISTICS

Several pollutants in the EPA Permit Application Form 2A dated March 14, 2013, were tested at a MQL greater than the EPA MQL. The facility retested those pollutants to the correct MQL and provided that data via email April 22, 2013. Those pollutants that were detected above the minimum MQL are as follows:

Parameter	Max	Avg
	mg/l unless noted	
Flow, million gallons/day (MGD)	3.13	1.36
Temperature, winter, °C	14	12
Temperature, summer, °C	26	24
pH, minimum, standard units (SU)	6.6	
pH, maximum, standard units (SU)	8.8	
Biochemical Oxygen Demand, 5-day (BOD <sub>5</sub> )	18	4.6
E. coli (cfu/100 ml)	186	33
Total Suspended Solids (TSS)	19	5.02
Ammonia (NH3)	1.9	0.38

#### POLLUTANT TABLE 1

Chlorine, Total Residual (TRC)	ND	ND
Dissolved Oxygen	3.98	2.51
Total Kjeldahl Nitrogen (TKN)	4.2	1.01
Nitrate plus Nitrite Nitrogen	8.4	3.31
Oil and grease	0.0	0.0
Phosphorus, Total	0.0	0.0
Total Dissolved Solids (TDS)	143	
Copper	0.011	0.0063
Mercury *	0.000326	

Footnote

\* Based on DMR data.

A review of the DMR data from October 2010 thru September 2012 shows that minimum pH was exceeded once in January 2012. There were several non-compliance reporting events that were subsequently resolved. There were no WET failures reported during the previous permit term.

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

The facility submitted a complete permit application March 14, 2013. It is proposed that the permit be reissued 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.

Technology-based effluent limitations are established in the proposed draft permit for TSS, BOD, and percent removal efficiency for each. Water quality-based effluent limitations are established in the proposed draft permit for E. coli bacteria, TRC and pH.

#### B. TECHNOLOGY-BASED EFFLUENT LIMITATIONS/CONDITIONS

1. General Comments

Regulations promulgated at 40 CFR §122.44 (a) require technology-based effluent limitations to be placed in NPDES permits based on ELGs where applicable, on BPJ in the absence of guidelines, or on a combination of the two. In the absence of promulgated guidelines for the discharge, permit conditions may be established using BPJ procedures. EPA establishes limitations based on the following technology-based controls: BPT, BCT, and BAT. These levels of treatment are:

BPT - The first level of technology-based standards generally based on the average of the best existing performance facilities within an industrial category or subcategory.

BCT - Technology-based standard for the discharge from existing industrial point sources of conventional pollutants including BOD, 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

The facility has technology-based ELG's established at 40 CFR Part 133, Secondary Treatment Regulation. Pollutants with ELG's established in this Chapter are BOD, TSS, percent removal for each and pH. BOD limits of 30 mg/l for the 30-day average, 45 mg/l for the 7-day average and 85% percent (minimum) removal are found at 40 CFR §133.102(a). TSS limits of 30 mg/l for the 30-day average, 45 mg/l for the 7-day average and 85% percent (minimum) removal are found at 40 CFR §133.102(a). TSS limits of 30 mg/l for the 30-day average, 45 mg/l for the 7-day average and 85% percent (minimum) removal are found at 40 CFR §133.102(a). TSS limits of 30 mg/l for the 30-day average, 45 mg/l for the 7-day average and 85% percent (minimum) removal are found at 40 CFR §133.102(b). ELG's for pH found at 40 CFR §133.102(c) are between 6-9 s.u. The draft permit establishes new limits for percent removal for both BOD and TSS. Since these are technology-based there is no compliance schedule provided to meet these limits. Compliance is required on the permit effective date.

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. When determining mass limits for POTW's, the plant's design flow is used to establish the mass load. The design flow noted above is 2.0 MGD. Mass limits are determined by the following mathematical relationship:

Loading in lbs/day = concentration in mg/l  $\approx 8.345$  (lbs/l)/(mg/MG)  $\approx$  design flow in MGD TSS/BOD<sub>5</sub> loading (lbs/day) = 30 mg/l  $\approx 8.345$  (lbs/l)/(mg/MG)  $\approx 2.0$  MGD = 500 lbs/day TSS/BOD<sub>5</sub> loading (lbs/day) = 45 mg/l  $\approx 8.345$  (lbs/l)/(mg/MG)  $\approx 2.0$  MGD = 750 lbs/day

A summary of the technology-based limits for the facility is:

Final Effluent Limits – 2.0 MGD design flow

EFFLUENT	DISCHARGE LIMITATIONS			
CHARACTERISTICS	lbs/day, unless noted		mg/l, unless noted	
	30-Day Avg	7-Day Max	30-Day Avg	7-Day Max
Flow	N/A	N/A	Report	Report
BOD	500	750	30	45
BOD, % Removal, Minimum	≥ 85% (*1)			
TSS	500	750	30	45
TSS, % Removal, Minimum	≥ 85% (*1)			
pH	N/A	N/A	6.0 to	9.0 su

Footnote:

\*1 Percent removal is calculated using the following equation :{[( average monthly influent concentration – average monthly effluent concentration)]  $\div$  [average monthly influent concentration]} ×100.

3. Sludge Requirements

As previously stated, sludge is disposed at the Butterfield Trail Regional Landfill in Deming, New Mexico. Requirements for facilities treating domestic sewage include, but are not limited to, treatment technologies, sludge requirements, operation, reporting requirements and waste water pollution prevention requirements. The permittee shall use only those sewage sludge disposal or reuse practices that comply with the federal regulations established in 40 CFR Part 503 "Standards for the Use or Disposal of Sewage Sludge." The specific requirements in the permit apply as a result of the design flow of the facility, the type of waste discharge to the collection system, and the sewage sludge disposal or reuse practice utilized by the treatment works. Sludge testing information, that is required of handling or disposing of the sludge, will be retained on site for five years, as required in the record keeping requirements section of Part IV, in accordance with the permit.

The permittee shall submit an Annual Sludge Status report in accordance with the NPDES Permit Parts I and Parts IV.

4. Pretreatment

The facility has no non-categorical Significant Industrial User (SIU) and no Categorical Industrial User (CIU) users, therefore, EPA has determined that the permittee will not be required to develop a full pretreatment program.

5. Operation and Reporting

The applicant is required to operate the treatment facility at maximum efficiency at all times; to monitor the facility's discharge on a regular basis; and report the results <u>monthly</u>. The monitoring results will be available to the public.

6. Waste Water Pollution Prevention Requirements

The permittee shall institute programs directed towards pollution prevention. The permittee will institute programs to improve the operating efficiency and extend the useful life of the treatment system.

7. Application Requirements

EPA Form 2A requires multiple analyses of all required pollutants. POTWs that have a design flow greater than 1.0 MGD are designated as major dischargers and must obtain pollutant data for Tables A.12, B.6, and Part D of EPA Form 2A. The instructions for filing out Form 2A, as published in the Federal Register Vol. 64, No 149, Wednesday 4, 1999, require that "[s]ampling data be representative of the treatment works discharge and take into consideration seasonal variations. At least two of the samples used to complete the effluent testing information questions must have been taken no fewer than 4 months and no more than 8 months apart." At least one test shall be during warm summer months; defined as the period from June 1 through August 31, and one test shall be during cold winter months; defined as the period from December 1 through February 28. The remaining test may be taken whenever the facility desires. Pollutant sampling shall coincide with any required WET testing event for that period. The permittee shall note the date of each test on the Form 2A when it is submitted for reapplication.

#### 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 NMWQS (20.6.4 NMAC amended through November 20, 2012).

General criteria are applicable as specified in 20.6.4.13 NMAC. The discharge is to San Vicente Arroyo, a perennial tributary to the closed Mimbres River Basin in Segment No.20.6.4.099 in the Closed Basins. The designated uses of the San Vicente Arroyo are warmwater aquatic life, livestock watering, wildlife habitat and primary contact. The stream segment used in the previous permit was 20.6.4.803, but that was incorrect. The 20.6.4.803 designation is for the perennial reaches of the Mimbres River downstream of the confluence with Willow Springs Canyon and all perennial reaches of tributaries thereto. The San Vicente Arroyo for most of its length is an ephemeral waterbody, with just a narrow portion of it perennial where the POTW is located and a short distance, less than a half-mile downstream of the discharge point. NMED has concurred that the proper waterbody for the discharge is an unclassified perennial stream consistent with a 20.6.4.099 designation and not the 20.6.4.803. This change, as will be discussed below, will modify certain numeric criteria and associated permit limits.

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

Criteria for pH are listed in 20.6.4.900.D and 20.6.4.H.(5); both with pH criteria of 6.6 - 9.0 su's. These pH criteria are less stringent than the previous permit; 6.6 - 8.8 su's, because they are based on a change in the designated stream and associated designated uses. The change in the draft permit when compared to the previous permit does not constitute antibacksliding according to 40 CFR 122.44(l)(i)(B)(1), new information.

b. Bacteria

Criteria for E. coli bacteria, 206 cfu/100 ml daily monthly geometric mean and 940 cfu/100 ml daily maximum, is listed in 20.6.4.099. These limits are less restrictive than the previous permit; 126 cfu/100 ml monthly geometric mean and 410 cfu/100 ml daily maximum. The less restrictive limits are based on the same antibacksliding provisions as were discussed in pH above.

c. TOXICS

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

excursion above a water quality criteria, the permit must contain an effluent limit for that pollutant.

All applicable facilities are required to fill out appropriate sections of the Form 2A, 2S or 2E, to apply for an NPDES permit or reissuance of an NPDES permit. The new form is applicable not only to POTWs, but also to facilities that are similar to POTWs, but which do not meet the regulatory definition of "publicly owned treatment works" (like private domestics, or similar facilities on Federal property). The forms were designed and promulgated to "make it easier for permit applicants to provide the necessary information with their applications and minimize the need for additional follow-up requests from permitting authorities," per the summary statement in the preamble to the Rule. These forms became effective December 1, 1999, after publication of the final rule on August 4, 1999, Volume 64, Number 149, pages 42433 through 42527 of the FRL. The facility is a major POTW with a design flow greater than 1 MGD. The receiving water has been identified to be an unclassified perennial stream but there is no low-flow; 4Q3, associated with the stream as the upper reach of the San Vicente Arroyo is ephemeral. The CD for this facility is 100%, which will be used for further toxic and WET permitting evaluations and requirements.

The toxics identified above that were greater than the MQL, shown in Table 1 above, were evaluated using the RP spreadsheet, Appendix A of the fact sheet (attached), in accordance with the NMIP. Based on Appendix A, no pollutants were found at levels that would demonstrate a reasonable potential to exceed WQS. There are no limits for toxics that need to be placed in the draft permit except for TRC presented below.

The previous permit issued August 26, 2008, continued limits for mercury based on detection of mercury in a permit renewal application that was first limited in the permit issued April 7, 2000. In the fact sheet of the previous permit mercury was not detected at levels that demonstrated a RP to exceed WQS. The mercury limit was continued however, but the monitoring frequency was reduced from monthly to once per quarter. The mercury pollutant data continues to demonstrate levels that do not cause a RP to exceed WQS. The MQL's used in the previous permit and the concentration of mercury in this permit renewal application would allow the pollutant to be reported as below detection limit. When the RP spreadsheet was run for this draft permit, using the highest single value of the three samples; all below the EPA MQL, mercury was not detected at a level that demonstrated a RP to exceed WQS. Based on the past two permit cycles, this draft permit will eliminate the mercury limit. The sampling data to date has clearly demonstrated a pollutant level that does not have the RP to exceed WQS for mercury.

#### d. TRC

The facility uses UV to treat bacteria. Consistent with all POTWs in the State of New Mexico however, TRC limitations are placed in permits to provide discharge limitations in the event chlorine is used as backup bacteria disinfection treatment and/or cleaning and disinfection of process equipment and/or used to control filamentaceous algae. The WQS for TRC is 11 ug/l for both chronic aquatic life and wildlife habitat, and 19 ug/l for acute aquatic life. The draft permit will continue the 11 ug/l TRC limit for the protection of wildlife habitat currently in the previous permit with the same conditions when it needs to be reported. When chlorine is not being used

under the conditions above, the permittee may report N/A with a comment stating chlorine was not used in the manner stated in the permit footnote.

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

Flow is proposed to be measured and reported continuously consistent with the current permit using a totalizing meter. The pollutants BOD and TSS shall be sampled and reported once per week using 6-hour composite samples. Percent removal for both BOD and TSS are to be calculated once per week consistent with the monitoring frequency for BOD and TSS sampling. The pollutant pH shall be sampled and reported daily using grab samples. E. coli bacteria are to be sampled and reported once per week using grab samples. TRC, when used according to the conditions stated previously shall be sampled and reported daily by instantaneous grab sample. Instantaneous grab sample is defined in 40 CFR Part 136 as being sampled and analyzed within 15-minutes.

# D. WHOLE EFFLUENT TOXICITY

Procedures for implementing WET terms and conditions in NPDES permits are contained in the NMIP. The previous permit had 7-day chronic WET testing and over the term of the permit had zero failures. Appendix B of the fact sheet (attached) shows the WET RP for those results. Based on the test results, the permit does not require WET limits. Table 11 of Section V of the NMIP outlines WET testing procedures based on type of facility, size, stream type and critical dilution. For a major POTW discharging into a stream with zero low-flow, the NMIP requires a 7-day chronic test for the species Ceriodaphnia dubia and Pimephales promelas at a once per quarter frequency for the first year. If all tests pass, then the frequency may be reduced to once per 6-months for Ceriodaphnia dubia and once per year for Pimephales promelas. The proposed permit requires four (4) dilutions in addition to the control (100% effluent) to be used in the toxicity tests based on a 0.75 dilution series. These additional effluent concentrations are 32%, 42%, 56%, 75% and 100% CD. Results of all dilutions as well as the associated chemical monitoring of pH, temperature, hardness, dissolved oxygen, conductivity, and alkalinity shall be documented in a full report according to the appropriate test method publication. The full reports required by each test section need not be submitted unless requested. However, the full report is to be retained following the provisions of 40 CFR Part 122.41 (j) (2). The permit requires the submission of the toxicity testing information to be included on the DMR.

Discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTIC	DISCHARGE LIMITATIONS 30-DAY AVG MINIMUM	7-DAY MINIMUM
Whole Effluent Toxicity (7-Day NOEC) 1/		
Ceriodaphnia dubia	REPORT	REPORT

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Pimephales promelas	REPORT	REPORT
EFFLUENT CHARACTERISTIC	MONITORING REQUIREMENTS	S TYPE
Whole Effluent Toxicity (7-Day NOEC) 1/		
Ceriodaphnia dubia Pimephales promelas	1/quarter 1/quarter	Grab 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.

#### VI. TMDL REQUIREMENTS

The discharge is to San Vicente Arroyo which is on the 2012-2014 State of New Mexico Clean Water Act §303(d) list of impaired waters. The 303(d) listed shows that warmwater aquatic life is not supported and is classified as an integrated report (IR) code 5/5C. The 5/5C classification of the San Vicente Arroyo means that the stream segment is impaired for one or more designated or existing uses and additional data will be collected before a TMDL is scheduled. Assessment units are listed in this category if there is not enough data to determine the pollutant of concern or there is not adequate data to develop a TMDL. Currently there is not enough information that would require additional pollutants that need to be addressed in the draft permit. The permit has a standard reopener clause that would allow the permit to be modified if at a later date additional requirements on new or revised TMDLs were completed.

#### VII. ANTIDEGRADATION

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 assimilative capacity of the receiving waters, which is protective of the designated uses of that water, NMAC Section 20.6.4.8.A.2.

#### VIII. ENDANGERED SPECIES CONSIDERATIONS

According to the most recent county listing available at US Fish and Wildlife Service (USFWS), Southwest Region 2 website, <u>http://www.fws.gov/southwest/es/ES\_ListSpecies.cfm</u>, thirteen species in Grant County are listed as endangered (E) or threatened (T). Seven of the species are fishes and include the beautiful shiner (*Cyprinella Formosa*) (T), Chihuahua chub (*Gila nigrescens*) (T), Gila topminnow (*Poeciliopsis occidentalis*) (E), Gila trout (*Oncorhynchus gilae*) (T), loach minnow (*Tiaroga cobitis*) (T), and the Spikedace (*Meda fulgida*) (T). The gray wolf (*Canis lupus*) (E) and the black-footed ferret (*Mustela nigripes*) (E) are mammals while the Chiricahua leopard frog (*Rana chiricahuensis*) (T) is an amphibian. Three of the species are avian and include the Mexican spotted owl (T) (*Strix occidentalis lucida*), Northern aplomado falcon (E) and Southwestern willow flycatcher (E) (*Empidonax traillii extimus*). The American bald eagle (*Haliaeetus leucocephalus*) was previously listed in Grant County, however, in the Federal Register, July 9, 2007, (Volume 72, Number 130), the U.S. Fish and Wildlife Service, removed the American bald eagle in the lower 48 States of the United States from the Federal List of Endangered and Threatened Wildlife.

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

- 1. No 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.
- 2. EPA concluded "no effect" during the previous issuance of the permit on August 26, 2008, and has received no additional information since then which would lead to revision of that "no effect" determination.
- 3. The permit limits are consistent with water quality standards and designated uses appropriate for the discharge and receiving waters.
- 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/or designated critical habitat.

# 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 amends a TMDL, this permit may be reopened to establish effluent limitations for the parameter(s) to be consistent with that TMDL. Modification of the permit is subject 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 2A and 2S received March 14, 2013. Additional effluent data provided in an email, April 22, 2013, from Bud Melaney, Town of Silver City, to Larry Giglio, EPA.

#### B. 40 CFR CITATIONS

Citations to 40 CFR are as of March 22, 2013. Sections 122, 124, 125, 133, 136

#### C. STATE OF NEW MEXICO REFERENCES

New Mexico State Standards for Interstate and Intrastate Surface Water, 20.6.4 NMAC, as amended through November 20, 2012.

Procedures for Implementing National Pollutant Discharge Elimination System Permits in New Mexico, March 15, 2012.

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