NPDES PERMIT NO. NM0023370

FACT SHEET

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

APPLICANT

Village of Cloudcroft Wastewater Treatment Facility
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ISSUING OFFICE

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DATE PREPARED

June 13, 2017

PERMIT ACTION

Proposed reissuance of the current NPDES permit issued July 20, 2012 with an effective date of September 1, 2012, and an expiration date of August 31, 2017.

RECEIVING WATER – BASIN

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

I. CHANGES FROM THE PREVIOUS PERMIT

The changes made to the draft permit from the permit previously issued July 20, 2012 with an effective date of September 1, 2012, and an expiration date of August 31, 2017 are:

- Electronic DMR reporting requirements have been included in the modified permit.
- Language on the Sufficiently Sensitive Methods has been established in the proposed permit.
- Dissolved oxygen monitoring requirements have been added to the proposed permit.

II. APPLICANT LOCATION and ACTIVITY

As described in the application, the facility is located at 1560 James Canyon Highway 82, Village of Cloudcroft, Otero County, New Mexico.

Under the Standard Industrial Classification Code 4952, the applicant operates a POTW with a design flow of 0.5 MGD for a population of 2500 residents.

PLAT OF VILLAGE of CLOUDCROFT WWTP

The Cloudcroft WWTP consists of the headworks, fine filtration, a clarigester, trickling filter, secondary clarifier, and chlorine contact chamber. There are a total of three lift stations for this facility. The influent enters the headworks where grit and large debris are removed. The grit and debris are bagged and sent to the land fill for final disposal. There is a 6" Parshall flume that measures the influent flow. The flow then enters the circular clarigester for primary settling. After the leaving the clarigester, the flow is directed through a valve box and then to a covered trickling filter with rock media. Following the trickling filter, wastewater is sent to a circular secondary clarifier. Then, the flow is sent to the serpentine chlorine contact chamber where it is disinfected with sodium hypochlorite and then sent through a 3" Parshall flume for effluent flow measurement with a totalizing meter. After traveling through the flume, effluent is de-chlorinated with sodium bisulfite and sent to the outfall. Sludge from the clarigester is gravity fed through a drain line and then to a pit. There is a pump station located on HWY 182 for pumping the pit. The location of the pump station allows the septic hauler to remove waste twice a month without concerns of weather. Ruidoso Septic removes the waste and hauls it to the landfill for final disposal.

Cloudcroft has a population of approximately 667 people (2010 Census) year round, but that increases to approximately 2,000 during the tourist season when golfing during the summer and skiing during the winter are activities enjoyed at this high mountain village (approximately 9,000 feet above sea level). The Village of Cloudcroft depends on snowmelt to regenerate their aquifers and springs. During the prolonged drought, snowmelt decreased and the Village has had a shortage of water. In a state of emergency in 2004, the Village was forced to haul water in tankers to sustain the population. Because of this, the Village requested and received funds to build a new treatment facility in order to provide the Village with non-potable and potable water sources. These funds came from the Water Innovation Fund under former Governor Bill Richardson. Other funds came from the State Water Trust Board and annual grants from the State Legislature. The new treatment facility has not yet been completed and the permitte was unable to provide EPA with a firm completion date although the permittee did provide an estimate of Fall 2017.

The new system will consist of preliminary filtration through fine screens to exclude girt, and then will undergo aerobic biological treatment, and then the membrane bioreactor (MBR) which separates the liquid from any suspended solids. The membrane's pores will admit no particles greater than 0.1 microns which is capable of removing bacteria, pathogens and viruses. The water will then be disinfected and moved to a storage tank prior to being pumped to the water treatment facility. At the water treatment facility, the water will go through reverse osmosis (RO) which further filters out particles larger than 0.001 microns and will undergo ultrafiltration (UF). At this point, the permeate (water which as passed through the filter) will be disinfected again and sent to a covered storage tank where it mixes 50/50 with well/spring water to be used by the Village.

The effluent from the treatment plant is discharged from Outfall 001 to a dry canyon thence to Fresnal Canyon at Latitude: 32° 57' 45.67" North, Longitude: 105° 44' 46" West.

III. EFFLUENT CHARACTERISTICS

A quantitative description of the discharge(s) described in the EPA Permit Application Form 2A received March 6, 2017, are presented below:

POLLUTANT TABLE - 1

Parameter	Max (mg/L) unless noted	Avg (mg/L) unless noted
Flow, million gallons/day (MGD)	0.15	0.12
Temperature, winter, °C	13.00	10.30
Temperature, summer, °C	22.20	21.00
pH, minimum, standard units (su)	7.16	N/A
pH, maximum, standard units (su)	7.81	N/A
Biochemical Oxygen Demand, 5-day (BOD_5)	14.50	11.90
Fecal Coliform (#bacteria/100 ml)	9.60	2.10
Total Suspended Solids (TSS)	9.30	4.80
TRC	11.00	0.00

A summary of the last 3-years of pollutant data taken from DMRs indicates one monthly average exceedance for BOD limits and one instance in which TSS removal did not meet the 85% minimum. Finding of the last inspection, conducted August 14, 2015 are described below:

The facility received an overall rating on unsatisfactory for its recordkeeping and reporting. The permittee failed to institute a pollution prevention program. In addition, the TRC and pH sample bench sheets failed to provide the time of sampling. The facility received an overall rating of unsatisfactory for its operations and maintenance. The permittee did not have backup power for any power failures that may occur and in addition failed to implement emergency control procedures. It was also noted that the facility was struggling to maintain treatment units for proper operation and maintenance. The facility received an overall rating on unsatisfactory for its flow measurement.

IV. REGULATORY AUTHORITY/PERMIT ACTION

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

(analytical procedures). Other parts of 40 CFR provide guidance for specific activities and may be used in this document as required.

It is proposed that the permit be reissued for a 5-year term following regulations promulgated at 40 CFR §122.46(a). The previous permit expires August 31, 2017. The application was received on March 6, 2017.

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 and BOD_5. 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

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.

The facility is a POTW's that 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(b). ELG's for pH are between 6-9 s.u. and are found at 40 CFR §133.102(c). 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. Mass limits are determined by the following mathematical relationship:

Loading in lbs/day = pollutant concentration in mg/l * 8.345 lbs/gal * design flow in MGD
30-day average BOD/TSS loading = 30 mg/l * 8.345 lbs/gal * 0.50 MGD
30-day average BOD/TSS loading = 125 lbs

A summary of the technology-based limits for the facility is:
Final Effluent Limits – 0.50 MGD design flow.

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS mg/l (unless noted)		DISCHARGE LIMITATIONS mg/l (unless noted)	
Parameter	30-Day Avg.	7-Day Avg.	30-Day Avg.	7-Day Avg.
Flow	N/A	N/A	Measure MGD	Measure MGD
BOD_5	125	187	30	45
BOD, % removal, minimum (*1)	85%	---	---	---
TSS	125	187	30	45
TSS, % removal, minimum (*1)	85%	---	---	---

FOOTNOTE:
*1 Percent removal is calculated using the following equation: (average monthly influent concentration – average monthly effluent concentration) ÷ average monthly influent concentration.

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 August 7, 2013). The wastewater flows from the outfall to dry canyon thence to Fresnal

Canyon in Segment No. 20.6.4.801 of the Closed Basins. The designated uses of Segment 20.6.4.801 are coldwater aquatic life, fish culture, irrigation, livestock watering, wildlife habitat, public water supply, and primary contact.

4. Permit Action - Water Quality-Based Limits

Regulations promulgated at 40 CFR §122.44(d) require limits in addition to, or more stringent than effluent limitation guidelines (technology based). State WQS that are more stringent than effluent limitation guidelines are as follows:

a. BACTERIA

Stream segment specific limitations for bacteria established at 20.6.4.801 establish E. coli bacteria at 126 cfu/100 ml daily monthly geometric mean and 235 cfu/100 ml daily maximum are applied end of pipe to protect designated uses. These limitations are identical to the previous permit.

b. Dissolved Oxygen (DO)

The receiving water has a 4Q3 of 0 MGD, therefore it is not necessary to use a steady state model to evaluate the biochemical oxygen demand of the discharge. Since the 4Q3 is 0 MGD, there is no stream flow for dilution and the discharge must meet criteria end-of-pipe. For coldwater aquatic life, criteria for DO is 6.0 mg/L or more pursuant to 20.6.4.900.H(2) NMAC. Fresnal Canyon (Salado Canyon to Headwaters) is not impaired for dissolved oxygen. In addition, the downstream receiving water La Luz Creek, fully supports all of its designated uses (Public water supply is not assessed). La Luz Creek does not have an impairment for dissolved oxygen. CD is 100%. As a result, EPA believes that the facility is not causing an excursion of the DO criteria. To further asses, monitoring for DO will be proposed in the draft permit.

c. pH

Lacking stream segment specific standards for pH, NMWQS established at 20.6.4.900, "Criteria Applicable to Attainable or Designated Uses Unless Otherwise Specified in 20.6.4.97 through 20.6.4.899 NMAC" apply. Limits for pH based on 20.6.4.900 for coldwater aquatic are more restrictive than the other designated uses requiring pH criteria. For coldwater aquatic life the pH shall be 6.6 to 8.8 su. These limits are identical to the previous permit.

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.

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 designated as a minor, and does not need to fill out the expanded pollutant testing section Part D of Form 2A. There are no toxics that need to be placed in the draft permit except for those presented below.

ii. TRC

The WQS for TRC is 11 µg/l for both chronic aquatic life and wildlife habitat, and 19 µg/l for acute aquatic life. State implementation procedures allow for a mixing zone to be used for chronic standards, while acute standards must be met at end-of-pipe. The NM Implementation Plan strategy for TRC requires the most limiting of the critical dilution/chronic criteria concentration of 11 µg/l or end-of-use/acute criteria concentration of 19 µg/l be used in determining the limit. The receiving water has a 4Q3 of 0 MGD; therefore, the critical dilution is 100%. The 11 µg/l would be the most limiting. The previous permit established water quality-based effluent limitations for TRC of 11 µg/l. This requirement will be maintained in the draft 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). Sample frequency is based on the previous permit. Technology based pollutants; BOD and TSS are proposed to be monitored two times per month. Flow is proposed to be monitored five days per week using instantaneous readings. Sample type for BOD and TSS are grab which is consistent with the previous permit. Water quality-based pollutant monitoring frequency for pH and E. coli shall be two times per month by grab sample which is the same as the previous permit. TRC shall be monitored daily using instantaneous grab samples. Regulations at 40 CFR §136 define instantaneous grab as being analyzed within 15-minutes of collection.

E. WHOLE EFFLUENT TOXICITY LIMITATIONS

The previous permit had biomonitoring requirements. The results of that testing have been analyzed to determine if RP exist for the discharge to exceed narrative criteria. DMR reports reveal one (2) 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 The Village of Cloudcroft Wastewater Treatment Facility has not failed a WET test during their last term and is conducting tests at the maximum critical dilution. 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 proposed permit. The dry canyon is described as an ephemeral waterbody; flowing only under periods of rapid snowmelt or when rainfall of long enough duration and/or intensity occur. When a discharge enters into an ephemeral waterbody, the CD is 100. Based on the nature of the discharge, the design flow; more than 0.1 MGD but less than 1.0 MGD, and the critical dilution, the NMIP directs the WET test to be a 48 hour acute test using Daphnia pulex at a once per two years frequency for permit term. The first test shall be in the first-year of the permit after the permit effective date (PED) and the second test shall be in the third year after the PED. This type of test and frequency is identical to the existing permit. Additional retests after the third year shall be at once/two years until the permit is renewed or other changes required by EPA. The test species shall be *Daphnia pulex* at a 100% CD. Both tests shall occur during the period November 1 and April 30.

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

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

EFFLUENT CHARACTERISTICS	DISCHARGE MONITORING		MONITORING REQUIREMENTS	
WHOLE EFFLUENT LETHALITY (48 Hour Static Renewal) (*1)	30-DAY AVG MINIMUM	48 HR MINIMUM	MEASUREMENT FREQUENCY	SAMPLE TYPE
Daphnia pulex	Report	Report	Once/2 years (*2)	24-Hr Composite

Footnote:

*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.

*2 The first test shall be in the first year after the permit effective date (PED) and the second test shall be taken during the third year after the PED. Each sample shall be taken during the period November 1 and April 30. Thereafter, until the permit is renewed, continued sampling shall be at two (2) year intervals between November 1 and April 30. If any test demonstrates significant toxic effects at the 100% critical dilution, testing for the affected species will continue at once/six (6) months until either the expiration date of the permit, its renewal, or otherwise directed by EPA.

VI. FACILITY OPERATIONAL PRACTICES

A. SEWAGE SLUDGE

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." EPA may at a later date issue a sludge-only permit. Until such future issuance of a sludge-only permit, sludge management and disposal at the facility will be subject to Part 503 sewage sludge requirements. Part 503 regulations are self-implementing, which means that facilities must comply with them whether or not a sludge-only permit has been issued. Part IV of the draft permit contains sewage sludge permit requirements.

B. 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.

C. INDUSTRIAL WASTEWATER CONTRIBUTIONS

The treatment plant has no non-categorical Significant Industrial User's (SIU) and no Categorical Industrial User's (CIU). The EPA has tentatively determined that the permittee will not be required to develop a full pretreatment program. However, general pretreatment provisions have been required. The facility is required to report to EPA, in terms of character and volume of pollutants any significant indirect dischargers into the privately owned treatment works subject to pretreatment standards under §307(b) of the CWA and 40 CFR Part 403. The permittee shall require any indirect discharger to the treatment works to comply with the reporting requirements of Sections 204(b), 307, and 308 of the Act, including any requirements established under 40 CFR Part 403. The following pollutants may not be introduced into the treatment facility: Pollutants which create a fire or explosion hazard in the publicly owned treatment works (POTW), including, but not limited to, waste streams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR 261.21; Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, unless the works are specifically designed to accommodate such discharge; Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW, resulting in Interference; Any pollutant, including oxygen demanding pollutants (e.g., BOD), released in a discharge at a flow rate and/or pollutant concentration which will cause Interference with the POTW; Heat in amounts which will inhibit biological activity in the POTW resulting in Interference but in no case heat in such quantities that the temperature at the POTW treatment plant exceeds 40 degrees Centigrade (104 degrees Fahrenheit) unless the Approval Authority, upon request of the POTW, approves alternate temperature limits; Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through; Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; and any trucked or hauled pollutants, except at discharge points designated by the POTW.

D. 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 quarterly. The monitoring results will be available to the public.

Electronic Reporting Rule

Discharge Monitoring Report (DMR) results shall be electronically reported to EPA per 40 CFR 127.16. To submit electronically, access the NetDMR website at https://netdmr.epa.gov. Until approved for Net DMR, the permittee shall request temporary or emergency waivers from

electronic reporting. To obtain the waiver, please contact: U.S. EPA - Region 6, Water Enforcement Branch, New Mexico State Coordinator (6EN-WC), (214) 665-6468. If paper reporting is granted temporarily, the permittee shall submit the original DMR signed and certified as required by Part III.D.11 and all other reports required by Part III.D. to the EPA and copies to NMED as required (See Part III.D.IV of the permit).

Sufficiently Sensitive Analytical Methods (SSM)

The permittee must use sufficiently sensitive EPA-approved analytical methods (SSM) (under 40 CFR part 136 or required under 40 CFR chapter I, subchapters N or O) when quantifying the presence of pollutants in a discharge for analyses of pollutants or pollutant parameters under the permit. In case the approved methods are not sufficiently sensitive to the limits, the most SSM with the lowest method detection limit (MDL) must be used as defined under 40 CFR 122.44(i)(1)(iv)(A). If no analytical laboratory is able to perform a test satisfying the SSM in the region, the most SSM with the lowest MDL must be used after adequate demonstrations by the permittee and EPA approval.

VII. 303(d) LIST

Fresnal Canyon, from Salado Canyon to Headwaters, is listed on the current "2016-2018 State of New Mexico 303(d) List for assessed Stream and River Reaches." The stream is shown to fully support irrigation, primary contact, wildlife habitat, and livestock watering. The stream has not been assessed for public water supply. The stream is not supporting cold water aquatic life due to temperature. No TMDL has been developed and the discharger is not a contributor to the temperature. As a result, there are no additional permit requirements will be placed in the permit at this time. The standard reopener language in the permit allows additional permit conditions if warranted by future changes to State waters.

VIII. 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.

IX. 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 BOD and TSS. The remaining pollutants concentration limits are as restrictive as the previous permit.

X. ENDANGERED SPECIES CONSIDERATIONS

According to the most recent county listing available at USFWS, https://ecos.fws.gov/ipac/location/5NZ3ID7F35EERE4VDIZXAGV2CA/resources, nine species in Otero County are listed as endangered (E) or threatened (T). Four of the species are birds and include the least tern (E) *Sterna antillarum*, Mexican spotted owl (T) *Strix occidentalis lucida*, northern aplomado falcon (T) *Falco femoralis septentrionalis*, and the yellow- billed cuckoo (T) *Coccyzus americanus.* Five are plants including the Kuenzler hedgehog cactus (E) *Echinocereus fendleri var.* kuenzleri, Sacramento Mountains thistle (T) *Cirsium* vinaceum, Sacramento prickly poppy (E) *Argemone pleiacantha ssp. Pinnatisecta, and* the Todsen's pennyroyal (E) *Hedeoma todsenii*. The Wright's marsh Thisle *Cirsium wrightii* is listed as a candidate. The remaining species is the lone mammal, the New Mexico Meadow Jumping Mouse (E) *Zapus hudsonius luteus*. The location of Cloudcroft WWTP overlaps the designated critical habitat for the Mexican spotted owl. There are no federally endangered aquatic organisms in the area of the discharge. The American bald eagle (*Haliaeetus leucocephalus*) was previously listed as endangered; 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. Monitoring requirements have been established for DO, making this permit more stringent than the previous one.

2. Mexican Spotted owls are found in various forest types including: Douglas-fir, Hemlock-Sitka Spruce, Redwood, Ponderosa Pine, Western white pine-larch, Lodgepole pine, Fir-spruce, Aspen/hardwood, and Pinyon-juniper forests. The Village of Cloudcroft WWTP is located on land without sufficient vegetation.

3. Research of available materiel finds that the primary cause for the population decreases leading to threatened status for the Mexican Spotted Owl is destruction of habitat. No pollutants are identified which might affect species habitat or prey species. Catastrophic fires and elimination of riparian habitat were also identified as threats to species habitat. The NPDES program regulates the discharge of pollutants and does not regulate forest management practices and agricultural practices, which contribute to catastrophic fires and elimination of riparian habitat, and thus, species habitat. The proposed permitting action does not contribute any threats described here. The issuance of this permit is found to have no impact on the habitat of this species.

4. EPA determines that Items 1, thru 4 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.

XI. 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.

XII. 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.

XIII. VARIANCE REQUESTS

No variance requests have been received.

XIV. 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.

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 proposed permit:

A. APPLICATION(s)

EPA Application Form 2E received March 6, 2017.

B. 40 CFR CITATIONS

Citations to 40 CFR are as of April 21, 2017
Sections 122, 124, 125, 133, 136

C. STATE OF NEW MEXICO REFERENCES

The NM WQCC adopted new WQS of the State of New Mexico effective on March 2, 2017. The state approved WQS were approved by USEPA on June 8, 2017.

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

State of New Mexico 303(d) List for Assessed Stream and River Reaches, 2016 - 2018.

D. MISCELLANEOUS

Letter from Dorothy Brown, EPA, to Mr. David Venable, dated April 3, 2017 informing the applicant that its' NPDES application received March 6, 2017, was administratively complete.

Email from Jennifer Foote, NMED, to Nichole Young, EPA, dated March 22, 2017, on critical conditions information.