



MICHELLE LUJAN GRISHAM
GOVERNOR

JAMES C. KENNEY
CABINET SECRETARY

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

March 14, 2025

The Honorable Timothy E. King, Mayor
Village of Cloudcroft
P.O. Box 317
Cloudcroft, New Mexico 88317

RE: Draft Discharge Permit, DP-1969, Village of Cloudcroft Wastewater Treatment Plant

Dear Mayor King:

The New Mexico Environment Department (NMED) hereby provides notice to the Village of Cloudcroft of the proposed approval of Ground Water Discharge Permit, DP-1969, (copy enclosed), pursuant to Subsection H of 20.6.2.3108 NMAC. NMED will publish notice of the availability of the draft Discharge Permit in the near future for public review and comment and will forward a copy of that notice to you.

Prior to making a final ruling on the proposed Discharge Permit, NMED will allow 30 days from the date the public notice is published in the newspaper for any interested party, including the Discharge Permit applicant, i.e., yourself, to submit written comments and/or a request a public hearing. A hearing request shall set forth the reasons why a hearing is requested. NMED will hold a hearing in response to a timely hearing request if the NMED Secretary determines there is substantial public interest in the proposed Discharge Permit.

Please review the enclosed draft Discharge Permit carefully. Please be aware that this Discharge Permit may contain conditions that require the permittee to implement operational, monitoring or closure actions by a specified deadline.

Please submit written comments or a request for hearing to my attention at the address below, via email to kambray.townsend@env.nm.gov or to pps.general@env.nm.gov, or directly into the NMED Public Comment Portal at <https://nmed.commentinput.com/comment/search>. If NMED does not receive written comments or a request for hearing during the public comment period, the draft Discharge Permit will become final.

Thank you for your cooperation during the review process. Feel free to contact me with any questions at (505) 538-0497.

Sincerely,

Kambray Townsend, Water Resource Professional
Encl: Draft Discharge Permit, DP-1969

cc: Scott Powell, Village of Cloudcroft, Operator, cvillagewastewater@cloudcroftvillage.com
Johnathon Chill, CDM Smith, chilljm@cdmsmith.com

SCIENCE | INNOVATION | COLLABORATION | COMPLIANCE

Ground Water Quality Bureau | 1190 Saint Francis Drive, PO Box 5469, Santa Fe, New Mexico 87502-5469
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Draft: March 14, 2025

GROUND WATER QUALITY BUREAU
DISCHARGE PERMIT
Issued under 20.6.2 NMAC

Facility Name: Village of Cloudcroft Wastewater Treatment Plant
Discharge Permit Number: DP-1969
Facility Location: 1560 James Canyon Highway 82
 Cloudcroft, NM 88317

County: Otero

Permittee: Village of Cloudcroft
Mailing Address: Timothy King, Mayor
 P.O. Box 317
 Cloudcroft, NM 88317

Facility Contact: Scott Powell, Operator
Telephone Number/Email: 575-921-5976 /
ccvillagewastewater@cloudcroftvillage.com

Permitting Action: New
Permit Issuance Date: DATE
Permit Expiration Date: DATE

NMED Permit Contact: Kambray Townsend
Telephone Number/Email: 505-538-0497 / kambray.townsend@env.nm.gov or
 505-827-2900 / pps.general@env.nm.gov

JUSTIN D. BALL
 Chief, Ground Water Quality Bureau
 New Mexico Environment Department

Date

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ATTACHMENTS

- Discharge Permit Summary
- Surface Water Quality Bureau Work Plan

I. INTRODUCTION

The New Mexico Environment Department (NMED) issues this groundwater discharge permit (Discharge Permit or DP-1969) to the Village of Cloudcroft (Permittee) pursuant to the New Mexico Water Quality Act (WQA), NMSA 1978 §§74-6-1 through 74-6-17, and the New Mexico Water Quality Control Commission (WQCC) Ground and Surface Water Protection Regulations, 20.6.2 NMAC.

NMED's purpose in issuing this Discharge Permit, and in imposing the requirements and conditions specified herein, is to control the discharge of water contaminants from the Village of Cloudcroft Wastewater Treatment Plant (Facility or WWTP) in order to protect groundwater and those segments of surface water gaining from groundwater inflow for present and potential future use as domestic and agricultural water supply and other uses, and to protect public health. It is NMED's determination in issuing this Discharge Permit that the Permittee has met the requirements of Subsection C of 20.6.2.3109 NMAC. The Permittee is responsible for complying with the terms and conditions of this Discharge Permit pursuant to Section 20.6.2.3104 NMAC; failure to do so may result in enforcement action by NMED (20.6.2.1220 NMAC).

Described below are the activities that produce the discharge, the location of the discharge, and the quantity, quality, and flow characteristics.

The Village of Cloudcroft Wastewater Treatment Plant receives and treats domestic wastewater at a volume of up to 300,000 gallons per day (gpd). Treated wastewater discharges to an outfall to Fresnal Canyon pursuant to the workplan identified in Subsection C of this Discharge Permit.

Discharge Permit Location Information:

Physical Address	1560 James Canyon Hwy 82
Nearest Town/City	Cloudcroft
Section, Township, Range	Section 35, Township 15 South, Range 12 East
County	Otero
Depth to Groundwater	50 feet
Pre-Discharge TDS	450 mg/L

The application (i.e., discharge plan) consists of the materials submitted by the Permittee, dated September 7, 2023, and materials contained in the administrative record prior to issuance of this Discharge Permit. The Permittee shall manage this discharge in accordance with all conditions and requirements of this Discharge Permit.

The Permittee shall manage the discharge in accordance with all conditions and requirements of this Discharge Permit.

NMED reserves the right to require a Discharge Permit modification in the event NMED determines that the Permittee is or may be violating, or is likely to violate in the future, the requirements of 20.6.2 NMAC or the standards of Section 20.6.2.3103 NMAC. NMED reserves this right pursuant to Section 20.6.2.3109 NMAC. An NMED requirement to modify the Discharge Permit may result from a determination by the department that structural controls and/or management practices approved under this Discharge Permit are insufficiently protective of groundwater quality and human health. NMED reserves the right to require the Permittee to implement abatement of water pollution and remediate groundwater quality.

NMED issuance of this Discharge Permit does not relieve the Permittee of the responsibility to comply with the WQA, WQCC Regulations, and any other applicable federal, state and/or local laws and regulations, such as zoning requirements and nuisance ordinances.

This Discharge Permit may use the following acronyms and abbreviations.

Abbreviation	Explanation	Abbreviation	Explanation
BOD ₅	biochemical oxygen demand (5-day)	NMED	New Mexico Environment Department
CAP	Corrective Action Plan	NMSA	New Mexico Statutes Annotated
CFR	Code of Federal Regulations	NO ₃ -N	nitrate-nitrogen
CFU	colony forming unit	NTU	nephelometric turbidity units
Cl	chloride	QA/QC	Quality Assurance/Quality Control
EPA	United States Environmental Protection Agency	TDS	total dissolved solids
Gpd	gallons per day	TKN	total Kjeldahl nitrogen
LAA	land application area	total nitrogen	= TKN + NO ₃ -N
LADS	Land Application Data Sheet(s)	TRC	total residual chlorine
mg/L	milligrams per liter	TSS	total suspended solids
mL	milliliters	WQA	New Mexico Water Quality Act
MPN	most probable number	WQCC	Water Quality Control Commission
NMAC	New Mexico Administrative Code	WWTF	Wastewater Treatment Facility

II. FINDINGS

In issuing this Discharge Permit, NMED finds the following.

1. The Permittee is discharging effluent or leachate from the Facility so that such effluent or leachate may move into groundwater of the State of New Mexico that has an existing concentration of 10,000 mg/L or less of TDS, within the meaning of Subsection A of

20.6.2.3101 NMAC, without exceeding standards of 20.6.2.3103 NMAC for any water contaminant.

2. The Permittee is discharging effluent or leachate from the Facility directly or indirectly into groundwater pursuant to this Discharge Permit and Sections 20.6.2.3000 through 20.6.2.3114 NMAC.
3. The discharge from this Facility has the potential to contain water contaminants or toxic pollutants elevated above the standards of Section 20.6.2.3103 NMAC and is not subject to the exemption at Subsection 20.6.2.3105 NMAC.

III. AUTHORIZATION TO DISCHARGE

The Permittee is responsible for ensuring that discharges authorized by this Discharge Permit are consistent with the terms and conditions herein pursuant to 20.6.2.3104 NMAC.

This Discharge Permit authorizes the Permittee to receive and treat domestic wastewater up to 300,000 gpd using a membrane bioreactor (WWTP) with disinfection. This Discharge Permit also authorizes the Permittee to discharge treated wastewater to Outfall 001 to Fresno Canyon pursuant to the workplan identified in Subsection C of this Discharge Permit.

[20.6.2.3104 NMAC, Subsection C of 20.6.2.3106 NMAC, Subsection D of 20.6.2.3109 NMAC]

IV. CONDITIONS

NMED issues this Discharge Permit for the discharge of water contaminants subject to the following conditions.

A. OPERATIONAL PLAN

#	Terms and Conditions
1.	The Permittee shall implement the following operational plan to ensure compliance with Title 20, Chapter 6, Parts 2 and 4 NMAC. [Subsection C of 20.6.2.3109 NMAC]
2.	The Permittee shall operate in a manner that does not violate standards and requirements of Sections 20.6.2.3101 and 20.6.2.3103 NMAC. [20.6.2.3101 NMAC, 20.6.2.3103 NMAC, Subsection C of 20.6.2.3109 NMAC]

Operational Actions with Implementation Deadlines

#	Terms and Conditions
3.	<p>If the Permittee develops a Preliminary Engineering Report (PER) for this Facility, the Permittee shall submit the draft PER to NMED for review for Discharge Permit compliance determination and comment.</p> <p>During the development of construction plans and specifications for the proposed rehabilitation and/or replacement of the trickling filter, secondary clarifier, and the clarigester, and/or improvements to the membrane bioreactor (MBR), the Permittee shall submit construction plans and specifications at 50% and/or 95%, or equivalent, level of design for to NMED for review for Discharge Permit compliance and comment.</p> <p>[Subsections A and C of 20.6.2.1202 NMAC, Subsection C of 20.6.2.3106 NMAC, Subsection C of 20.6.2.3107 NMAC, NMSA 1978, §§ 61-23-1 through 61-23-32]</p>
4.	<p>A minimum of 90 days prior to construction of the proposed rehabilitation and/or replacement of the trickling filter, secondary clarifier, and clarigester, and/or improvements to the MBR, the Permittee shall submit final construction plans and specifications for NMED's review of the proposed rehabilitation and/or replacement of the trickling filter, secondary clarifier, and the clarigester, and/or improvements to the MBR. The construction plans and specifications shall bear the seal and signature of a licensed New Mexico professional engineer (pursuant to New Mexico Engineering and Surveying Practice Act and the rules promulgated under that authority) and shall include the supporting design calculations.</p> <p>The submitted documentation shall include the following elements.</p> <ul style="list-style-type: none">a) Wastewater system component(s) design, e.g., lift stations, valves, transfer lines, process units and associated details; whether new for the rehabilitated system, retrofitted for the system, or proposed for abandonment.b) Flow meter design detail - Flow meters to measure the volume of wastewater discharged to the outfall.c) Specifications for all equipment, materials and installation procedures the Permittee will use in the construction of the wastewater system.d) Fences design detail around the Facility. <p>Prior to construction for the proposed rehabilitation and/or replacement of the trickling filter, secondary clarifier, and clarigester, and/or improvements to the MBR and its associated components, the Permittee shall obtain written verification from NMED that the plans and specifications meet the requirements of this Discharge Permit.</p>

#	Terms and Conditions
	[Subsections A and C of 20.6.2.1202 NMAC, Subsection C of 20.6.2.3106 NMAC, Subsection C of 20.6.2.3107 NMAC, NMSA 1978, §§ 61-23-1 through 61-23-32]
5.	<p>Prior to discharging to the rehabilitated and/or replaced trickling filter, secondary clarifier, and clarigester, and/or to the upgraded MBR, the Permittee shall complete construction in accordance with the final construction plans and specifications required by this Discharge Permit. The Permittee shall notify NMED at least five working days prior to the commencement of construction to allow NMED personnel to be onsite for inspection.</p> <p>[Subsections A and C of 20.6.2.1202 NMAC, Subsection C of 20.6.2.3109 NMAC, NMSA 1978, §§ 61-23-1 through 61-23-32]</p>
6.	<p>Within 30 days of completing construction of the proposed rehabilitation and/or replacement of the trickling filter, secondary clarifier, and clarigester, and/or improvements to the MBR, the Permittee shall submit record drawings to NMED that bear the seal and signature of a licensed New Mexico professional engineer (pursuant to the New Mexico Engineering and Surveying Practice Act and the rules promulgated under that authority) for the rehabilitation and/or replacement of the trickling filter, secondary clarifier, and the clarigester, and/or improvements to the MBR.</p> <p>[Subsections A and C of 20.6.2.1202 NMAC, Subsection C of 20.6.2.3109 NMAC, NMSA 1978, §§ 61-23-1 through 61-23-32]</p>

Operating Conditions

#	Terms and Conditions
7.	<p>The Permittee shall ensure that treated wastewater discharged from the chlorine contact chamber does not exceed the following discharge limit.</p> <p>Total Nitrogen: 10 mg/L</p> <p>[Subsection C of 20.6.2.3109 NMAC]</p>
8.	<p>The Permittee shall maintain fences around the Facility to restrict access by the general public and animals. The fences shall consist of a minimum of six-foot chain link or field fencing and locking gates. The Permittee shall maintain the fences to serve the stated purpose throughout the term of this Discharge Permit.</p> <p>[Subsections B and C of 20.6.2.3109 NMAC, NMSA 1978, § 74-6-5.D]</p>

#	Terms and Conditions
9.	<p>The Permittee shall maintain signs indicating that the wastewater at the Facility is not potable. The Permittee shall post signs at the Facility entrance and other areas where there is potential for public contact with wastewater. The Permittee shall print signs in English and Spanish and shall ensure the signs remain visible and legible for the term of this Discharge Permit.</p> <p>[Subsections B and C of 20.6.2.3109 NMAC, NMSA 1978, § 74-6-5.D]</p>
10.	<p>The Permittee shall properly manage all solids generated by the treatment system to maintain effective operation of the system by removing solids as necessary and in accordance with associated equipment manufacturer's specifications. The Permittee shall contain, transport, and dispose of all solids removed from the treatment process in accordance with all local, state, and federal regulations.</p> <p>The Permittee shall maintain manifests for all solids transported from the treatment Facility for off-site disposal. The manifests shall identify the name of the hauler, the date of off-site shipment, the volume of solids removed, the disposal method, and disposal location.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]</p>
11.	<p>The Permittee shall inspect and clean the lift station(s) as needed to prevent pump failure.</p> <p>The Permittee shall maintain a record of lift station inspections, repairs, and cleanings. The Permittee shall make the record available to NMED upon request.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]</p>
12.	<p>The Permittee shall utilize operators, certified by the State of New Mexico at the appropriate level pursuant to 20.7.4 NMAC, to operate the wastewater collection, treatment, and disposal systems. A certified operator or a direct supervisee of a certified operator shall perform the operations and maintenance of all or any part of the wastewater system.</p> <p>The Permittee shall notify the NMED within 24 hours if at any time the Permittee no longer has a certified operator maintaining the system.</p> <p>[Subsection C of 20.6.2.3109 NMAC, 20.7.4 NMAC]</p>

B. MONITORING AND REPORTING

#	Terms and Conditions
13.	The Permittee shall conduct the monitoring, reporting, and other requirements listed below in accordance with the monitoring requirements of this Discharge Permit and associated Surface Water Discharge Work Plan. [Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
14.	METHODOLOGY – Unless otherwise specified by this Discharge Permit, or approved in writing by NMED, the Permittee shall use sampling and analytical techniques that conform with the references listed in Subsection B of 20.6.2.3107 NMAC. [Subsection B of 20.6.2.3107 NMAC]

Due Dates for Monitoring Reports

#	Terms and Conditions
15.	Quarterly monitoring - The Permittee shall perform monitoring and other Permit required actions during the following periods and shall submit quarterly reports to NMED by the following due dates: <ul style="list-style-type: none"> • January 1st through March 31st – due by May 1st; • April 1st through June 30th – due by August 1st; • July 1st through September 30th – due by November 1st; and • October 1st through December 31st – due by February 1st. [Subsection A of 20.6.2.3107 NMAC]

Facility Monitoring Conditions

#	Terms and Conditions
16.	The Permittee shall measure the total monthly volume, calculate the daily average volume, and record the daily peak volume of wastewater received by the treatment facility each month using a totalizing flow meter located at the headworks. The Permittee shall submit the totalized average daily and peak daily influent volumes for each calendar month to NMED in the quarterly monitoring reports. [Subsection A of 20.6.2.3107 NMAC, Subsections C and H of 20.6.2.3109 NMAC]

#	Terms and Conditions
17.	<p>The Permittee shall on a monthly basis measure the volume of treated domestic wastewater discharged from the treatment system to Outfall 001 during the period.</p> <p>To determine the discharge volume, the Permittee shall obtain readings from a totalizing flow meter located after the chlorine contact chamber on a monthly basis and calculate the monthly and average daily discharge volume.</p> <p>The Permittee shall submit the calendar monthly meter readings, calculated monthly discharge volumes, and average daily discharge volumes to NMED in the quarterly monitoring reports.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsections C and H of 20.6.2.3109 NMAC]</p>
18.	<p>All flow meters shall be capable of having their accuracy verified under working (i.e., real-time in-the-field) conditions. The Permittee shall develop a field verification method for each flow meter and shall utilize that method to check the accuracy of each respective meter. The Permittee shall perform field calibrations, at a minimum, on an annual basis. The Permittee shall also perform field calibrations upon repair or replacement of a flow measurement device.</p> <p>The Permittee shall calibrate each flow meter to its manufacturer's recommended specification which shall be no less accurate than plus or minus 10 percent of actual flow, as measured under field conditions. An individual knowledgeable in flow measurement shall perform field calibration and the installation/operation of the device in use. The Permittee shall prepare a flow meter calibration report for each flow measurement device calibration event. The flow meter calibration report shall include the following information.</p> <ul style="list-style-type: none">a) The location and meter identification.b) The method of flow meter field calibration employed.c) The measured accuracy of each flow meter prior to adjustment indicating the positive or negative offset as a percentage of actual flow as determined by an in-field calibration check.d) The measured accuracy of each flow meter following adjustment, if necessary, indicating the positive or negative offset as a percentage of actual flow of the meter.e) Any flow meter repairs made during the previous year or during field calibration.f) The name of the individual performing the calibration and the date of the calibration. <p>The Permittee shall maintain records of flow meter calibration(s) at a location accessible for review by NMED during Facility inspections.</p>

#	Terms and Conditions
	[Subsection A of 20.6.2.3107 NMAC, Subsections C and H of 20.6.2.3109 NMAC]
19.	<p>The Permittee shall visually inspect flow meters on a monthly basis for evidence of malfunction. The Permittee shall maintain a log of the inspections that includes a date of the inspection, findings and repairs, and the name of the inspector. The Permittee shall make the log available to NMED upon request.</p> <p>If a visual inspection indicates a flow meter is not functioning as required by this Discharge Permit, the Permittee shall repair or replace the meter within 30 days of discovery. For <i>repaired</i> meters, the Permittee shall submit a report to NMED with the next monitoring report following the repair that includes a description of the malfunction; a statement verifying the repair; and a flow meter field calibration report completed in accordance with the requirements of this Discharge Permit. For <i>replacement</i> meters, the Permittee shall submit a report to NMED with the next monitoring report following the replacement that includes a design schematic for the device and a flow meter field calibration report completed in accordance with the requirements of this Discharge Permit.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]</p>
20.	<p>The Permittee shall collect samples of treated wastewater from after the chlorine contact chamber on a quarterly basis and analyze the samples for:</p> <ul style="list-style-type: none"> • TKN; • NO₃-N; • TDS; and • Cl. <p>The Permittee shall ensure the samples are properly prepared, preserved, transported, and analyzed in accordance with the methods authorized in this Discharge Permit. The Permittee shall submit the laboratory analytical data results, including the QA/QC summary and Chain of Custody, to NMED in the subsequent quarterly monitoring report.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsections C and H of 20.6.2.3109 NMAC]</p>
21.	<p>The Permittee shall submit records of solids disposal, including the volume of solids removed and copies of all manifests for the previous calendar year, to NMED annually in the monitoring report due by August 1st each year.</p> <p>[Subsection A of 20.6.2.3107 NMAC]</p>

C. SURFACE WATER QUALITY BUREAU WORK PLAN

#	Terms and Conditions
22.	<p>Discharges of wastewater by the Permittee through Outfall 001 have been identified as a discharge to a surface water of the state that may affect groundwater and are no longer subject to any of the exemptions of 20.6.2.3105 NMAC. The Permittee shall discharge to Outfall 001 in a manner that does not directly or potentially cause an exceedance of a surface water standard (20.6.4 NMAC) or a groundwater standard (20.3.6.3103 NMAC). The Permittee shall discharge treated domestic wastewater through Outfall 001 into Fresno Canyon in accordance with the attached Surface Water Discharge work plan. The work plan, developed by the Permittee and the NMED Surface Water Quality Bureau, identifies the necessary reporting, sampling, and monitoring. The work plan is an attachment to this Discharge Permit.</p> <p>[Subsection A of 20.6.2.3107 NMAC]</p>

D. CONTINGENCY PLAN

#	Terms and Conditions
23.	<p>In the event that groundwater exceeds a groundwater protection standard identified in Section 20.6.2.3103 NMAC as a result of this discharge, the Permittee shall submit to NMED a Corrective Action Plan (CAP) that proposes, at a minimum, contaminant source control measures and an implementation schedule. The Permittee shall implement the CAP following approval by NMED.</p> <p>The NMED may require the Permittee to abate water pollution consistent with the requirements and provisions of Section 20.6.2.4101, Section 20.6.2.4103, Subsections C and E of 20.6.2.4106, Section 20.6.2.4107, Section 20.6.2.4108 and Section 20.6.2.4112 NMAC.</p> <p>[20.6.2.3103 NMAC, Subsection A of 20.6.2.3107 NMAC, Subsection E of 20.6.2.3109 NMAC]</p>
24.	<p>In the event that the Facility exceeds the authorized discharge volume set in this Discharge Permit, the Permittee shall initiate the following Contingency Plan.</p> <p><u>Contingency Plan</u></p> <p>a) Notify NMED within seven days of the discovery of the discharge volume exceedance that the Facility exceeded the authorized discharge volume.</p>

#	Terms and Conditions
	<p>b) The Permittee shall conduct a physical inspection of the discharge system, i.e., inflow and infiltration issues, collection system failures, etc., and the discharge meter(s)/volume measuring device/method to detect abnormalities and report the findings to NMED within 30 days of the discovery of the discharge volume exceedance. The Permittee shall correct any abnormalities detected with NMED's concurrence.</p> <p>c) If the Permittee does not detect any abnormalities and with NMED's concurrence, the Permittee shall submit a discharge permit modification for the increase in discharge quantity to NMED within 90 days of the discovery of the discharge volume exceedance. The discharge permit modification must include demonstration that the volume increase is sufficient for the design capacity or plans and specifications to upgrade the system to accommodate the discharge volume increase.</p> <p>[Subsection A of 20.6.2.3107 NMAC]</p>
25.	<p>In the event that analytical results of a treated wastewater sample indicate an exceedance of the total nitrogen discharge limit set in this Discharge Permit, the Permittee shall collect and submit for analysis a second sample within 48 hours of the receipt of the initial sampling results. In the event the second sample results indicate an exceedance of the discharge limit, the Permittee shall implement the following contingencies.</p> <p>a) Within 7 days of the second sample analysis date indicating exceedance of the discharge limit, the Permittee shall:</p> <ul style="list-style-type: none"> i) notify NMED that the Permittee is implementing the Contingency Plan; and ii) submit a copy of the first and second analytical results indicating an exceedance to NMED. <p>b) The Permittee shall increase the frequency of total nitrogen wastewater sampling and analysis of treated wastewater to once per month.</p> <p>c) The Permittee shall examine the operation and maintenance log, required by the Record Keeping conditions of this Discharge Permit, for improper operational procedures.</p> <p>d) The Permittee shall conduct a physical inspection of the treatment system to detect abnormalities. The Permittee shall correct any abnormalities discovered. The Permittee shall submit a report to NMED detailing the corrections within 30 days of correction.</p> <p>e) In the event that any analytical results from monthly wastewater sampling indicate an exceedance of the total nitrogen discharge limit, the Permittee shall submit a CAP to NMED for approval proposing to modify operational procedures and/or upgrade the treatment process to achieve the total nitrogen limit. The Permittee shall submit the CAP including a schedule for completion of corrective actions and within 90 days of receipt of the analytical results of the second sample indicating that the discharge</p>

#	Terms and Conditions
	<p>continues to exceed the limit. The Permittee shall initiate implementation of the CAP following approval by NMED.</p> <p>When analytical results from three consecutive months of wastewater sampling do not exceed the discharge limit, the Permittee may request NMED authorize a return to a quarterly monitoring frequency.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]</p>
26.	<p>In the event that a release occurs that is not authorized under this Discharge Permit (commonly known as a “spill”), the Permittee shall take measures to mitigate damage from the unauthorized discharge and initiate the notifications and corrective actions required in Section 20.6.2.1203 NMAC and summarized below. A release is defined as such quantity as may with reasonable probability injure or be detrimental to human health, animal or plant life, or property, or unreasonably interfere with the public welfare or the use of property.</p> <p>Within <u>24 hours</u> following discovery of the unauthorized discharge, the Permittee shall verbally notify NMED and provide the following information.</p> <ul style="list-style-type: none">a) The name, address, and telephone number of the person or persons in charge of the Facility, as well as of the owner and/or operator of the Facility.b) The name and address of the Facility.c) The date, time, location, and duration of the unauthorized discharge.d) The source and cause of unauthorized discharge.e) A description of the unauthorized discharge, including its estimated chemical composition.f) The estimated volume of the unauthorized discharge.g) Any actions taken to mitigate immediate damage from the unauthorized discharge. <p>Within <u>one week</u> following discovery of the unauthorized discharge, the Permittee shall submit written notification to NMED providing the information listed above and any pertinent updates.</p> <p>Within <u>15 days</u> following discovery of the unauthorized discharge, the Permittee shall submit a CAP to NMED describing any corrective actions previously taken and corrective actions to be taken relative to the unauthorized discharge. The CAP shall include the following information.</p> <ul style="list-style-type: none">a) A description of proposed actions to mitigate damage from the unauthorized discharge.b) A description of proposed actions to prevent future unauthorized discharges of this nature.

#	Terms and Conditions
	<p>c) A schedule for completion of proposed actions.</p> <p>In the event that the unauthorized discharge causes or may with reasonable probability cause water pollution in excess of the standards and requirements of Section 20.6.2.4103 NMAC, and the water pollution will not be abated within 180 days after notice is required to be given pursuant to Paragraph (1) of Subsection A of 20.6.2.1203 NMAC, NMED may require the Permittee to abate water pollution pursuant to Sections 20.6.2.4000 through 20.6.2.4115 NMAC.</p> <p>The Permittee shall not construe anything in this condition as relieving them of the obligation to comply with all requirements of Section 20.6.2.1203 NMAC.</p> <p>[20.6.2.1203 NMAC]</p>
27.	<p>In the event that NMED or the Permittee identifies any failures of the discharge plan, i.e., the application, or this Discharge Permit not specifically noted herein, NMED may require the Permittee to submit a CAP and a schedule for completion of corrective actions to address the failure(s). Additionally, NMED may require a discharge permit modification to achieve compliance with 20.6.2 NMAC.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection E of 20.6.2.3109 NMAC]</p>

E. CLOSURE PLAN

Permanent Facility Closure Conditions

#	Terms and Conditions
28.	<p>The Permittee shall perform the following closure measures in the event the Facility, or a component of the Facility, is proposed to be permanently closed.</p> <p>Within <u>90 days</u> of ceasing to discharge to the treatment system, the Permittee shall complete the following closure measures.</p> <p>a) Plug the line leading to the system so that a discharge can no longer occur.</p> <p>b) Evaporate wastewater in the system components or drain and dispose of in accordance with all local, state, and federal regulations, or discharged from the system to the Outfall as authorized by this Discharge Permit. The discharge of accumulated solids (sludge) to the Outfall is prohibited.</p> <p>c) Contain, transport, and dispose of solids removed from the treatment system in accordance with all local, state, and federal regulations, including 40 CFR Part 503. The Permittee shall maintain a record of all solids transported for off-site disposal.</p>

#	Terms and Conditions
	<p>Within <u>180 days</u> of ceasing to discharge to the treatment system (or unit), the Permittee shall complete the following closure measures.</p> <ol style="list-style-type: none"> a) Remove all lines leading to and from the treatment system, or permanently plug and abandon them in place. b) Remove or demolish all treatment system components, and re-grade the area with suitable fill to blend with surface topography, promote positive drainage and prevent ponding. <p>When the Permittee has met all closure and post-closure requirements and verified appropriate actions with date stamped photographic evidence or an associated NMED inspection, the Permittee may submit to NMED a written request, including photographic evidence, for termination of the Discharge Permit.</p> <p>[Subsection A of 20.6.2.3107 NMAC, Subsection D of 20.6.2.4103 NMAC, 40 CFR Part 503]</p>

F. GENERAL TERMS AND CONDITIONS

#	Terms and Conditions
29.	<p>RECORD KEEPING - The Permittee shall maintain a written record of the following:</p> <ul style="list-style-type: none"> • Information and data used to complete the application for this Discharge Permit; • Information, data, and documents demonstrating completion of closure activities; • Any releases (commonly known as “spills”) not authorized under this Discharge Permit and reports submitted pursuant to 20.6.2.1203 NMAC; • The operation, maintenance, and repair of all facilities/equipment used to treat, store or dispose of wastewater; • Facility record drawings (plans and specifications) showing the actual construction of the Facility and bear the seal and signature of a licensed New Mexico professional engineer; • Copies of logs, inspection reports, and monitoring reports completed and/or submitted to NMED pursuant to this Discharge Permit; • The volume of wastewater or other wastes discharged pursuant to this Discharge Permit; • Groundwater quality and wastewater quality data collected pursuant to this Discharge Permit; • Copies of construction records (well log) for all sampled groundwater monitoring wells pursuant to this Discharge Permit;

#	Terms and Conditions
	<ul style="list-style-type: none"> • The maintenance, repair, replacement or calibration of any monitoring equipment or flow measurement devices required by this Discharge Permit; and • Data and information related to field measurements, sampling, and analysis conducted pursuant to this Discharge Permit, including: <ul style="list-style-type: none"> ○ the dates, location and times of sampling or field measurements; ○ the name and job title of the individuals who performed each sample collection or field measurement; ○ the sample analysis date of each sample; ○ the name and address of the laboratory, and the name of the signatory authority for the laboratory analysis; ○ the analytical technique or method used to analyze each sample or collect each field measurement; ○ the results of each analysis or field measurement, including raw data; ○ the results of any split, spiked, duplicate or repeat sample; and ○ a copy of the laboratory analysis chain-of-custody as well as a description of the quality assurance and quality control procedures used. <p>The Permittee shall maintain the written record at a location accessible to NMED during a Facility inspection for a minimum of five years. The Permittee shall make the record available to NMED upon request.</p> <p>[Subsections A and D of 20.6.2.3107 NMAC]</p>
30.	<p>SUBMITTALS – The Permittee shall submit both a paper copy and an electronic copy of all notification and reporting documents required by this Discharge Permit, e.g., monitoring reports. The Permittee shall submit paper and electronic documents to the NMED Permit Contact identified on the Permit cover page.</p> <p>[Subsection A of 20.6.2.3107 NMAC]</p>
31.	<p>INSPECTION and ENTRY – The Permittee shall allow NMED to inspect the Facility and its operations that are subject to this Discharge Permit and the WQCC regulations. NMED may upon presentation of proper credentials, enter at reasonable times upon or through any premises in which a water contaminant source is located or in which any maintained records required by this Discharge Permit, the regulations of the federal government, or the WQCC are located.</p> <p>The Permittee shall allow NMED to have access to and reproduce for their use any copy of the records, and to perform assessments, sampling or monitoring during an inspection for the purpose of evaluating compliance with this Discharge Permit and the WQCC regulations.</p>

#	Terms and Conditions
	<p>No person shall construe anything in this Discharge Permit as limiting in any way the inspection and entry authority of NMED under the WQA, the WQCC Regulations, or any other local, state or federal regulations.</p> <p>[Subsection D of 20.6.2.3107 NMAC, NMSA 1978, §§ 74-6-9.B and 74-6-9.E]</p>
32.	<p>DUTY to PROVIDE INFORMATION - The Permittee shall, upon NMED's request, allow for NMED's inspection/duplication of records required by this Discharge Permit and/or furnish to NMED copies of such records.</p> <p>[Subsection D of 20.6.2.3107 NMAC]</p>
33.	<p>MODIFICATIONS and/or AMENDMENTS – In the event the Permittee proposes a change to the Facility or the Facility's discharge that would result in a change in the volume discharged; the location of the discharge; or in the amount or character of water contaminants received, treated or discharged by the Facility, the Permittee shall notify NMED prior to implementing such changes. The Permittee shall obtain NMED's approval (which may require modification of this Discharge Permit) prior to implementing such changes.</p> <p>[Subsection C of 20.6.2.3107 NMAC, Subsections E and G of 20.6.2.3109 NMAC]</p>
34.	<p>PLANS and SPECIFICATIONS – In the event the Permittee proposes to construct a wastewater system or change a process unit of an existing system such that the quantity or quality of the discharge will change substantially from that authorized by this Discharge Permit, the Permittee shall submit construction plans and specifications of the proposed system or process unit to NMED for approval prior to the commencement of construction.</p> <p>In the event the Permittee implements changes to the wastewater system authorized by this Discharge Permit that result in only a minor effect on the character of the discharge, the Permittee shall report such changes (including the submission of record drawings where applicable) to NMED prior to implementation.</p> <p>[Subsections A and C of 20.6.2.1202 NMAC, NMSA 1978, §§ 61-23-1 through 61-23-32]</p>
35.	<p>CIVIL PENALTIES - Any violation of the requirements and conditions of this Discharge Permit, including any failure to allow NMED staff to enter and inspect records or facilities, or any refusal or failure to provide NMED with records or information, may subject the Permittee to a civil enforcement action. Pursuant to WQA 74-6-10(A) and (B), such action may include a compliance order requiring compliance immediately or in a specified time,</p>

#	Terms and Conditions
	<p>assessing a civil penalty, modifying or terminating the Discharge Permit, or any combination of the foregoing; or an action in district court seeking injunctive relief, civil penalties, or both. Pursuant to WQA 74-6-10(C) and 74-6-10.1, civil penalties of up to \$15,000 per day of noncompliance may be assessed for each violation of the WQA 74-6-5, the WQCC Regulations, or this Discharge Permit, and civil penalties of up to \$10,000 per day of noncompliance may be assessed for each violation of any other provision of the WQA, or any regulation, standard, or order adopted pursuant to such other provision. In any action to enforce this Discharge Permit, the Permittee waives any objection to the admissibility as evidence of any data generated pursuant to this Discharge Permit.</p> <p>[20.6.2.1220 NMAC, NMSA 1978, §§ 74-6-10 and 74-6-10.1]</p>
36.	<p>CRIMINAL PENALTIES – No person shall:</p> <ul style="list-style-type: none"> • Make any false material statement, representation, certification or omission of material fact in an application, record, report, plan or other document filed, submitted or maintained under the WQA; • Falsify, tamper with or render inaccurate any monitoring device, method or record maintained under the WQA; or • Fail to monitor, sample or report as required by a permit issued pursuant to a state or federal law or regulation. <p>Any person who knowingly violates or knowingly causes or allows another person to violate the requirements of this condition is guilty of a fourth-degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15. Any person who is convicted of a second or subsequent violation of the requirements of this condition is guilty of a third-degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15. Any person who knowingly violates the requirements of this condition or knowingly causes another person to violate the requirements of this condition and thereby causes a substantial adverse environmental impact is guilty of a third-degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15. Any person who knowingly violates the requirements of this condition and knows at the time of the violation that he is creating a substantial danger of death or serious bodily injury to any other person is guilty of a second degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15.</p> <p>[20.6.2.1220 NMAC, NMSA 1978, §§ 74-6-10.2.A through 74-6-10.2.F]</p>
37.	<p>COMPLIANCE with OTHER LAWS - Nothing in this Discharge Permit shall be construed in any way as relieving the Permittee of the obligation to comply with any other applicable federal, state, and/or local laws, regulations, zoning requirements, nuisance ordinances, permits or orders.</p>

#	Terms and Conditions
	<p>[NMSA 1978, § 74-6-5.L]</p>
38.	<p>RIGHT to APPEAL - The Permittee may file a petition for review before the WQCC on this Discharge Permit. Such petition shall be in writing to the WQCC within thirty days of the receipt of postal notice of this Discharge Permit and shall include a statement of the issues raised and the relief sought. Unless the Permittee files a timely petition for review, the decision of NMED shall be final and not subject to judicial review.</p> <p>[20.6.2.3112 NMAC, NMSA 1978, § 74-6-5.O]</p>
39.	<p>TRANSFER of DISCHARGE PERMIT - Prior to the transfer of any ownership, control, or possession of this Facility or any portion thereof, the Permittee shall:</p> <ul style="list-style-type: none"> • Notify the proposed transferee in writing of the existence of this Discharge Permit; • Include a copy of this Discharge Permit with the notice; and • Deliver or send by certified mail to NMED a copy of the notification and proof that the proposed transferee has received such notification. <p>The Permittee shall continue to be responsible for any discharge from the Facility, until both ownership and possession of the Facility have been transferred to the transferee.</p> <p>[20.6.2.3111 NMAC]</p>
40.	<p>PERMIT FEES – The Permittee shall be aware that the payment of permit fees is due at the time of Discharge Permit approval. The Permittee may pay the permit fees in a single payment or they may pay the fee in equal installments on a yearly basis over the term of the Discharge Permit. The Permittee shall remit single payments to NMED no later than 30 days after the Discharge Permit issuance date. The Permittee shall remit initial installment payments to NMED no later than 30 days after the Discharge Permit issuance date; with subsequent installment payments remitted to NMED no later than the anniversary of the Discharge Permit issuance date.</p> <p>Permit fees are associated with <u>issuance</u> of this Discharge Permit. No person shall construe anything in this Discharge Permit as relieving the Permittee of the obligation to pay all permit fees assessed by NMED. A Permittee that ceases discharging or does not commence discharging from the Facility during the term of the Discharge Permit shall pay all permit fees assessed by NMED. NMED shall suspend or terminate an approved Discharge Permit if the Permittee fails to remit an installment payment by its due date.</p> <p>[Subsection F of 20.6.2.3114 NMAC, NMSA 1978, § 74-6-5.K]</p>



New Mexico Environment Department Ground Water Quality Bureau Discharge Permit Summary

Facility Information

Facility Name Village of Cloudcroft Wastewater Treatment Plant
Discharge Permit Number DP-1969

Legally Responsible Party Timothy King, Mayor
Village of Cloudcroft
P.O. Box 317
Cloudcroft, NM 88317
(575) 682-2411

Treatment, Disposal, and Site Information

Primary Waste Type Domestic
Facility Type Municipal

Treatment Methods

Type	Designation	Description & Comments
Wastewater Treatment System	Membrane Bioreactor (MBR)	Consists of anoxic basin, aeration basin, and membrane tanks.
Wastewater Treatment System	Trickling filter	Consists of clarigester, trickling filter with rock media, and secondary clarifier.
Disinfection Unit	Chlorine contact chamber	Effluent flows through a chlorination basin for disinfection using sodium hypochlorite.
Dechlorination	Dechlorination	Effluent is dechlorinated with sodium bisulfate prior to discharging to the outfall.

Discharge Locations

Type	Designation	Description & Comments
Outfall 001	Outfall 001	Fresnal Canyon

Flow Metering Locations

Type	Designation	Description & Comments
Totalizing Flow Meter	Influent Meter	Totalizing flow meter located at the headworks.
Totalizing Flow Meter	Effluent Meter	Totalizing flow meter located after the chlorine contact chamber.

Depth-to-Ground Water 50 feet
Total Dissolved Solids (TDS) 450 mg/L



New Mexico Environment Department Ground Water Quality Bureau Discharge Permit Summary

Permit Information

Current Action	Original Permit Issuance
Application Received	September 7, 2023
Public Notice Published	[not yet published]
Permit Issued (Issuance Date)	[issuance date]
Permitted Discharge Volume	300,000 gallons per day

NMED Contact Information

Mailing Address	Ground Water Quality Bureau P.O. Box 5469 Santa Fe, New Mexico 87502-5469
GWQB Telephone Number	(505) 827-2900
NMED Lead Staff	Kambray Townsend
Lead Staff Telephone Number	(505) 538-0497
Lead Staff Email	kambray.townsend@env.nm.gov or pps.general@env.nm.gov

Village of Cloudcroft Wastewater Treatment Plant
Ground Water Discharge Permit 1969 (DP-1969)

SURFACE WATER DISCHARGE WORK PLAN

The Village of Cloudcroft Wastewater Treatment Plant is authorized to discharge from a facility located at 29 James Canyon Highway 82, Cloudcroft, New Mexico 88317. The facility discharges to Fresnal Canyon, in the Tularosa Closed Basin, a perennial stream defined in 20.6.4.801 New Mexico Administrative Code (NMAC). The designated uses for the Fresnal Canyon are coldwater aquatic life, irrigation, livestock watering, wildlife habitat, public water supply and primary contact. Water quality criteria to protect these designated uses are found in 20.6.4.801(B) NMAC and 20.6.4.900 NMAC. If these designated uses are protected, then the downstream uses will also be protected.

Purpose of the Work Plan:

The Village of Cloudcroft Wastewater Treatment Plant was formerly permitted under the U.S. Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) program, permit number NM0023370. EPA did not renew the permit because they determined that the receiving waters are within a closed basin and no longer considered waters of the United States. The New Mexico Environment Department (NMED) Surface Water Quality Bureau (SWQB) has established the following plan to continue protecting surface waters of the State, including Fresnal Canyon and its ephemeral tributary, in accordance with the definition under 20.6.4.7(S)(5) NMAC and pursuant to the New Mexico Water Quality Act, NMSA 1978, Sections 74-6-1 to -17.

SITE INFORMATION

Facility Description:

Under standard industrial classification (SIC) Code 4952, the applicant operates a sewage treatment process for a residential mobile home site, referred to as a publicly owned treatment works (POTW). The facility has a design flow capacity of 0.5 million gallons per day (MGD) and is considered a minor discharger. Under DP-1969, the POTW discharges treated effluent at Outfall 001 to an ephemeral canyon/arroyo and thence Fresnal Canyon.

The treatment works has two (2) trains for treatment. The influent enters the headworks for screening of grit and large debris. The flow then enters a membrane bioreactor. There is a bypass and overflow where wastewater is treated via a clarigester for primary settling. After settling the supernatant flows to a trickling filter unit with rock media. The treated water from the membrane bioreactor mixes with the treated water from the clarigester process prior to disinfection. Chlorine is used for disinfection, and dechlorination occurs after the flowrate is measured but prior to discharge. The sludge from the clarigester is gravity fed to a drain and then to a pit for a septage hauler to remove and dispose of at a landfill.



Aerial View of the Cloudcroft Wastewater Treatment Plant (Source: Google Earth)

Treatment Process:

The design flow for Village of Cloudcroft Wastewater Treatment Plant is 0.5 MGD. The facility utilizes a trickling filter treatment scheme and receives influent collected from the residence from the Village of Cloudcroft. The facility treatment works consist of two trains: a membrane bioreactor process and then a screen, a clarigester, then the trickling filters, clarifier and chlorine disinfection. This wastewater treatment facility had an NPDES permit for discharge to Fresno Canyon, which expired at midnight on September 30, 2022, and was not reissued.

Contributing Industries:

The facility has no non-categorical significant industrial users (SIUs) and no categorical industrial users (CIUs).

Sludge:

The facility has a clarigester where solids settle at the bottom. These solids are gravity fed via a drain to a pit for a septage hauler to remove. The septage hauler disposes of the sludge at a landfill or other final disposal.

The permittee shall submit an Annual Sludge Status Report to the NMED SWQB Point Source Program Manager at SWQ.reporting@env.nm.gov. The Annual Sludge Status Report should cover the calendar year period of January 1 through December 31 and is due to NMED within 45 days of the end of the calendar year.

Effluent Characteristics:

The permittee submitted effluent pollutant concentrations with the application for DP-1969, which are listed in Discharge Quality. The values are detailed below.

Pollutant Table

Contaminants	Incoming (Influent)	Final (Effluent)
Nitrate as Nitrogen (NO ₃ -N, mg/L) ¹	<0.1	Total N < 0.1
Total Kjeldahl Nitrogen (TKN, mg/L) ¹	<60	Total N < 0.1
Total Dissolved Solids (TDS, mg/L) ¹	800	900
Chloride (Cl, mg/L) ¹	No data	<200
Total Suspended Solids (TSS, mg/L) ²	~ 320	<30
Biochemical Oxygen Demand (BOD, mg/L) ²	~ 320	<10
E. coli (cfu/100 mL) ²	N/A	<1
pH (s.u.)	N/A	N/A

1. Include for all domestic systems.
2. Include for domestic systems that use an advanced treatment process.

Additionally, a quantitative description of the discharge described in the EPA Permit Application Form 2A dated August 10, 2022, is presented below. There are no more current data of concentrations available as this facility has reported no discharge since May 21, 2013.

Pollutant Table

Parameters	Max Daily	Avg Daily
	(mg/L unless noted)	
Flow (MGD)	0.152	0.087
pH, minimum, standard units (s.u.)	7.7	N.A.
pH, maximum, standard units (s.u.)	8.1	N.A.
Temperature (C), winter	7.7	6.6
Temperature (C), summer	21.6	16.3
Biochemical Oxygen Demand (BOD)	12.4	8.34
Fecal Coliform (cfu/100 mL)	5.1/100mL	1/100mL
Total Suspended Solids (TSS)	11	6.6
Total Residual Chlorine	0	0

Threatened and Endangered Species Considerations:

The operator shall refer to the State of New Mexico list of threatened and endangered species (19.33.6 NMAC) and verify that the facility and its operations will ensure that habitat will not be impacted or modified in a way that would interfere with any existing New Mexico threatened or endangered species.

WORK PLAN RATIONALE

Regulatory Authority:

Pursuant to 20.6.2 NMAC and 20.6.4 NMAC, the NMED is authorized to make the following requirements to protect surface waters of the State. NMED considered the following information when drafting this work plan.

- State Water Quality Standards (20.6.4 NMAC) and EPA's 2017 Reasonable Potential (RP) analysis was used to establish effluent limits for this work plan.
- New Mexico's antidegradation policy and implementation plan (20.6.4.8 NMAC) and technology-based effluent limitations (TBELs).
- Per the 2024-2026 State of New Mexico Clean Water Act 303(d)/305(b) Integrated Report, Appendix A, Integrated List, this segment of Fresnal Canyon (Segment No. 20.6.4.801 NMAC, Assessment Unit NM-2801_44, Salado Canyon to headwaters) supports all designated uses (i.e., water quality is better than the standards). The public water supply has not been assessed.
- There are no existing total maximum daily loads (TMDLs) for Fresnal Canyon.

NMED included TBELs in this work plan based on the federal requirements reflecting the best controls available. Where these technology-based limits do not protect water quality or the associated designated uses, NMED included additional water quality-based effluent limitations (WQBELs) and/or conditions in the work plan. NMED used State narrative and numerical water quality standards and other available toxicity information to determine the adequacy of TBELs and the need for additional water quality-based controls.

State Water Quality Standards

The general and specific stream standards are provided in the New Mexico water quality standards (NMWQS, 20.6.4 NMAC). To protect surface waters of the State and prevent applicable stream standards from being violated, NMED identified the following water quality-based limits based on antidegradation provisions (20.6.4.8 NMAC) and the water quality standards.

Water Quality-Based Limits

- **pH:** Criteria for pH are listed in 20.6.4.900(D) NMAC for primary contact, and 20.6.4.900(H)(4) NMAC for coldwater aquatic life; both with pH criteria of 6.6 – 8.8 s.u.
- **Bacteria:** segment-specific criteria for E. coli bacteria apply: 126 cfu/100 mL monthly geometric mean and 235 cfu/100 mL daily maximum (20.6.4.801 NMAC).
- **Toxic Pollutants:** The Procedures for Implementing NPDES Permits in New Mexico (NMIP, dated March 15, 2012), Reasonable Potential for Minor POTWs states:
The amount of information required for minor facilities was limited to specific sections of these forms, because they are unlikely to discharge toxic pollutants in amounts that would impact state water quality standards. Supporting information for this decision was published as "Evaluation of the Presence of Priority Pollutants in the Discharges of Minor POTW's," June 1996,

and was sent to all state NPDES coordinators by EPA Headquarters. In this study, EPA collected and evaluated data on the types and quantities of toxic pollutants discharged by minor POTWs of varying sizes from less than 0.1 MGD to just under 1 MGD. The Study consisted of a query of the EPA Permit Compliance System (PCS) database from 1990 to 1996, an evaluation of minor POTW data provided by the State agencies, and on-site monitoring for selected toxics at 86 minor facilities across the nation. Findings of the study dictated the scope of testing for minor facilities into two different classes, based on their reasonable potential to contain toxic substances in their wastewater discharges. Facilities less than 0.1 MGD were not required to report any toxic substances, since studies indicated they had "no reasonable potential" to discharge toxic substances in amounts that would violate state water quality standards.

The NMIP is available at <https://www.epa.gov/tx/procedures-implementing-national-pollutant-discharge-elimination-system-permits-new-mexico-nmip>.

The facility is a minor POTW with a design flow 0.5 MGD. The receiving water is a perennial stream with water quality protections in 20.6.4.801 NMAC. The critical low flow (4Q3) for developing work plan requirements is zero (0) cubic feet per second. The critical dilution (CD) for this facility is 100%, which will be used for further toxic and whole effluent toxicity (WET) work plan evaluations and requirements.

The facility uses chlorine as a disinfectant and has the potential to violate water quality standards. NMED requires the permittee to meet a total residual chlorine (TRC) effluent limitation of 11 µg/L (for wildlife habitat and aquatic life; 20.6.4.900.J NMAC) in the event chlorine-based product is used in the treatment and disinfection process.

WORK PLAN AND CONDITIONS

The permittee will follow the work plan as outlined below. Samples taken in compliance with the monitoring requirements specified below shall be taken at the discharge from the final treatment unit prior to the receiving stream.

Limitations and Monitoring Requirements:

The permittee is allowed to discharge treated effluent from Outfall 001 to Fresnal Canyon, via an ephemeral tributary. The permittee shall monitor and NMED requires effluent limitations for such discharges, as specified below.

Effluent Characteristics	Discharge Limitations		Monitoring Requirements	
			Measurement Frequency	Sample Type
pH (s.u.)	6.6 (Minimum)	8.8 (Maximum)	5/Week	Instantaneous Grab (*2)
Flow	Report MGD		Continuous	Totalized
% Removal BOD (*1)	>85%		1/Month	Calculated
% Removal TSS (*1)	>85%		1/Month	Calculated

*1 Percent removal is calculated using the following equation: $\frac{\text{average monthly influent concentration (mg/L)} - \text{average monthly effluent concentration (mg/L)}}{\text{average monthly influent concentration}} \times 100$.

*2 "Instantaneous grab" means a sample that is analyzed within 15 minutes of collection.

Pollutant	Discharge Limitations		Monitoring Requirements	
	lbs/day	mg/L, unless noted	Measurement Frequency	Sample Type
Biochemical Oxygen Demand (BOD) (5-day) *effluent	187	45	1/Month	Grab
Biochemical Oxygen Demand (BOD) (5-day) *influent	NA	***	1/Month	Grab
Total Suspended Solids (TSS) *effluent	187	45	1/Month	Grab
Total Suspended Solids (TSS) *influent	NA	***	1/Month	Grab
E. coli Bacteria (*1)	NA	235 (*1)	1/Month	Grab
Total Residual Chlorine (TRC) (*2)	NA	11 ug/L	Daily	Instantaneous Grab (*3)

*1 Colony forming units (cfu) per 100 mL or most probable number (MPN). The discharge limitation for E. coli bacteria is the daily maximum.

*2 TRC shall be measured during periods when chlorine is used either as a backup bacteria control or when disinfection of plant treatment equipment is required. "Instantaneous grab" means a sample that is analyzed within 15 minutes of collection. The discharge limitation for TRC is the instantaneous maximum and cannot be averaged for reporting purposes.

*3 Analyzed within 15 minutes of collection.

*** influent concentrations are used to calculate percent removal.

Effluent Characteristics	Discharge Monitoring		Monitoring Requirements	
Whole Effluent Toxicity Testing (48-hr NOEC) (*1)	30-day average	48-hr minimum	Measurement Frequency (*2)	Sample Type
Daphnia pulex	Report	Report	Once / 5 years	24- Hr. Composite

*1 Monitoring and reporting requirements begin on the effective date of this permit and work plan. Compliance with the Whole Effluent Toxicity limitations is required on permit effective date. See Section "Whole Effluent Toxicity Monitoring and Sampling" for additional WET monitoring and reporting conditions.

*2 The test shall take place between November 1 and April 30. This work plan does not establish requirements to automatically increase the WET testing frequency after a test failure, or to begin a toxicity reduction evaluation (TRE) in the event of multiple failures. However, upon failure of any WET test, the permittee must report the results to NMED SWQB within 5 business days of notification of the test failure. See Section "Reporting" for contact information. NMED SWQB will review the test results and determine the appropriate action necessary, if any.

Floating Solids, Visible Foam and/or Oils (20.6.4.13(B) NMAC):

There shall be no discharge of floating solids or visible foam in other than trace amounts. There shall be no discharge of visible films of oil, globules of oil, grease or solids in or on the water, or coatings on stream banks.

Whole Effluent Toxicity Monitoring and Sampling:

Whole Effluent Toxicity Testing (48-Hour Chronic No Observed Lethal; Concentration Freshwater)

It is unlawful and a violation of the discharge permit and work plan for a permittee or their designated agent to manipulate test samples in any manner, to delay sample shipment, or to terminate or to cause to terminate a toxicity test. Once initiated, all toxicity tests must be completed unless specific authority has been granted by NMED.

1. Scope and Methodology

- a. The permittee shall test the effluent for toxicity in accordance with the provisions in this section.

Applicable to Final Outfalls(s):

001

Reported on Monitoring Report as Final Outfall: 001
Critical Dilution (%): 100
Effluent Dilution Series (%): 32, 42, 56, 75, 100
Composite Sample Type: 24-hour composite
Test Species/Methods: 40 C.F.R. Part 136

- i. *Daphnia pulex* acute static renewal 48-hour definitive toxicity test using EPA 821-R-02-012, or the most recent update thereof. A minimum of five (5) replicates with eight (8) organisms per replicate must be used in the control and in each effluent dilution of this test.
 - b. The NOEC (No Observed Lethal Effect Concentration) is herein defined as the greatest effluent dilution at and below which toxicity that is statistically different from the control (0% effluent) at the 95% confidence level does not occur. Chronic lethal test failure is defined as a demonstration of a statistically significant lethal effect at test completion to a test species at or below the critical dilution.
Chronic sub-lethal test failure is defined as a demonstration of a statistically significant sublethal effect (i.e., growth or reproduction) at test completion to a test species at or below the critical dilution.
 - c. The conditions of this item are effective beginning with the effective date of the WET limit. When the testing frequency stated above is less than monthly and the effluent fails the survival endpoint at or below the critical dilution, the permittee shall be considered in violation of this permit limit and the frequency for the affected species will increase to monthly until such time compliance with the Lethal No Observed Effect Concentration (NOEC) effluent limitation is demonstrated for a period of three consecutive months, at which time the permittee may return to the testing frequency stated in PART I of this permit. During the period the permittee is out of compliance, test results shall be reported on the DMR for that reporting period.
 - d. The purpose of additional tests (also referred to as 'retests' or confirmation tests) is to determine the duration of a toxic event. A test that meets all test acceptability criteria and demonstrates significant toxic effects does not need additional confirmation. Such testing cannot confirm or disprove a previous test result.
 - e. This work plan may be reopened to require whole effluent toxicity limits, chemical specific effluent limits, additional testing, and/or other appropriate actions to address toxicity.
2. Required Toxicity Testing Conditions
 - a. Test Acceptance

The permittee shall repeat a test, including the control and all effluent dilutions, if the procedures and quality assurance requirements defined in the test methods or in this work plan are not satisfied, including the following additional criteria.

 - i. The toxicity test control (0% effluent) must have survival equal to or greater than 90%.
 - ii. The percent coefficient of variation between replicates shall be 40% or less in the control (0% effluent) for the *Daphnia pulex* survival test and fathead minnow survival test.
 - iii. The percent coefficient of variation between replicates shall be 40% or less in the critical dilution unless significant lethal effects are exhibited for the *Daphnia pulex* survival test and/or the fathead minnow survival test.

Test failure may not be construed or reported as invalid due to a coefficient of variation value of greater than 40%. A repeat test shall be conducted within the required reporting period of any test determined to be invalid.
 - b. Statistical Interpretation

For the *Daphnia pulex* survival test and the Fathead minnow survival test, the statistical analyses used to determine if there is a statistically significant difference between the control and the critical dilution shall be in accordance with the methods EPA 821-R-02-012 or the most recent update thereof.

If the conditions of Test Acceptability are met in Item 2.a above and the percent survival of the test organism is equal to or greater than 90% in the critical dilution concentration and all lower dilution concentrations, the test shall be considered to be a passing test, and the permittee shall report an NOEC of not less than the critical dilution for the DMR reporting requirements found in Item 3 below.

c. Dilution Water

- i. Dilution water used in the toxicity tests will be receiving water collected as close to the point of discharge as possible but unaffected by the discharge. The permittee shall substitute synthetic dilution water of similar pH, hardness, and alkalinity to the closest downstream perennial water where the receiving stream is classified as intermittent or where the receiving stream has no flow due to zero flow conditions.
- ii. If the receiving water is unsatisfactory as a result of instream toxicity (fails to fulfill the test acceptance criteria of Item 2.a), the permittee may substitute synthetic dilution water for the receiving water in all subsequent tests provided the unacceptable receiving water test met the following stipulations:
 - a synthetic dilution water control which fulfills the test acceptance requirements of Item 3.a was run concurrently with the receiving water control;
 - the test indicating receiving water toxicity has been carried out to completion (i.e., 48 days);
 - the permittee includes all test results indicating receiving water toxicity with the full report and information required by Item 3.a below; and
 - the synthetic dilution water shall have a pH, hardness, and alkalinity similar to that of the receiving water or closest downstream perennial water not adversely affected by the discharge, provided the magnitude of these parameters will not cause toxicity in the synthetic dilution water.

d. Samples and Composites

- i. The permittee shall collect two (2) grab samples from the outfall(s) listed at Item 1.a above.
- ii. The permittee shall collect a second grab sample for use during the 24-hour renewal of each dilution concentration for both tests. The permittee must collect the grab samples so that the maximum holding time for any effluent sample shall not exceed 36 hours. The permittee must have initiated the toxicity test within 36 hours after the collection of the last portion of the first grab sample. Samples shall be chilled to 6 degrees Centigrade during collection, shipping, and/or storage. The permittee must collect the grab samples such that the effluent samples are representative of any periodic episode of chlorination, biocide usage or other potentially toxic substance discharged on an intermittent basis.
- iii. If the flow from the outfall(s) being tested ceases during the collection of effluent samples, the requirements for the minimum number of effluent samples, the minimum number of effluent portions and the sample holding time are waived during that sampling period. However, the permittee must collect an effluent grab sample volume during the period of discharge that is sufficient to complete the required toxicity tests with daily renewal of effluent. When possible, the effluent samples used for the toxicity tests shall be collected on separate days if the discharge occurs over multiple days. The effluent grab sample collection duration and the static renewal protocol associated with

the abbreviated sample collection must be documented in the full report required in Item 3 of this section.

3. Whole Effluent Toxicity Reporting

- a. The permittee shall prepare a full report of the results of all tests conducted pursuant to this WET Monitoring and Sampling Section for every valid or invalid toxicity test initiated, whether carried to completion or not. The permittee shall retain each full report for five (5) years. The permittee shall submit full reports upon the specific request of NMED. For any test which fails, is considered invalid or which is terminated early for any reason, the full report must be submitted for agency review.
- b. The permittee shall report the Whole Effluent Lethality values for the 30-day Average Minimum and the 48-hr. Minimum on the DMR for that reporting period. If more than one valid test for a species was performed during the reporting period, the test NOECs will be averaged arithmetically and reported as the DAILY AVERAGE MINIMUM NOEC for that reporting period. If more than one species is tested during the reporting period, the permittee shall report the lowest 30-day Average Minimum NOEC and the lowest 48 Hr. Minimum NOEC for Whole Effluent Lethality. A valid test for each species must be reported on the DMR during each reporting period specified in Limitations and Monitoring Requirements of this work plan. Only ONE set of biomonitoring data for each species is to be recorded on the DMR for each reporting period. The data submitted should reflect the LOWEST Survival results for each species during the reporting period. All invalid tests, repeat tests (for invalid tests), and retests (for tests previously failed) performed during the reporting period must be attached to the DMR for NMED review.
- c. The permittee shall submit the results of the valid toxicity test on the DMR for that reporting period as follows below. Submit re-test information clearly marked as such with the following month's DMR. Only results of valid tests are to be reported on the DMR.
 - i. *Daphnia pulex*
 - If the NOEC for survival is less than the critical dilution, enter a "0"; otherwise, enter a "0".
 - Report the NOEC value for survival.
 - Report the highest (critical dilution or control) Coefficient of Variation.

4. Toxicity Reduction Evaluations (TREs)

TREs for lethal and sub-lethal effects are performed in a very similar manner. NMED-SWQB is currently addressing TREs as follows: a sub-lethal TRE (TRESL) is triggered based on three sub-lethal test failures while a lethal effects TRE (TREL) is triggered based on only two test failures for lethality. In addition, NMED will consider the magnitude of toxicity and use flexibility when considering a TRE where there are no effects at effluent dilutions of less than 76% effluent.

Sampling and Analysis:

Per 20.6.4.14 NMAC, sampling and analytical techniques shall conform with methods described in the following references unless otherwise specified by the Water Quality Control Commission pursuant to a petition to amend these rules:

- *Guidelines Establishing Test Procedures for The Analysis Of Pollutants Under The Clean Water Act*, 40 C.F.R. Part 136 or any test procedure approved or accepted by EPA using procedures provided in 40 C.F.R. Parts 136.3(d), 136.4, and 136.5;
- *Standard Methods for The Examination of Water And Wastewater*, latest edition, American public health association;
- *Methods For Chemical Analysis of Water and Waste*, and other methods published by EPA office of research and development or office of water;

- *Techniques Of Water Resource Investigations of The U.S. Geological Survey*;
- *Annual Book of ASTM Standards*: volumes 11.01 and 11.02, water (I) and (II), latest edition, ASTM international;
- *Federal Register*, latest methods published for monitoring pursuant to Resource Conservation and Recovery Act regulations;
- *National Handbook of Recommended Methods for Water-Data Acquisition*, latest edition, prepared cooperatively by agencies of the United States government under the sponsorship of the U.S. geological survey; or
- *Federal Register*, latest methods published for monitoring pursuant to the Safe Drinking Water Act regulations.

REPORTING

A summary of monthly sampling and monitoring data shall be submitted in the format of the template provided with this Work Plan in Appendix A (for each month separately).

The permittee shall report any noncompliance or exceedances that may endanger public health or the environment within 24-hours from the time the permittee becomes aware of the circumstance. A written submission shall be provided within 5 days of the time the permittee becomes aware of the circumstances. The report shall contain the following information:

- a description of the noncompliance and its cause;
- the period of noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and,
- steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge.

The following shall be included as information that must be reported within 24 hours:

- any unanticipated bypass that exceeds any effluent limitation in the permit;
- any upset that exceeds any effluent limitation in the permit; and,
- violation of a discharge limitation for any of the pollutants listed in the work plan.

All sanitary sewer overflows (SSOs) at the facility and/or at the collection system, lift station, or other appurtenances shall be reported to NMED SWQB within 24 hours of the event, and a written report detailing the status and corrective actions taken shall be sent (email preferred) to NMED SWQB within 5 days business of the event.

Any discharges or spills to a surface water of the State should be reported to both the GWQB and SWQB pursuant to 20.6.2.1203 NMAC.

Submittals of the surface water sampling and monitoring data and reports shall be done at the same time as quarterly monitoring is submitted to the GWQB. The effluent monitoring data shall be submitted to the NMED SWQB at:

New Mexico Environment Department
 Program Manager- PSRS
 Surface Water Quality Bureau
 1190 S. St. Francis Dr./P.O. Box 5469
 Santa Fe, NM 87502
 SWQ.reporting@env.nm.gov

Email reporting and notification is preferred.

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Appendix B: References

New Mexico Ground and Surface Water Protection, 20.6.2 NMAC, as amended.

New Mexico Standards for Interstate and Intrastate Surface Water, 20.6.4 NMAC, as amended.

New Mexico List of Threatened and Endangered Species, 19.33.6 NMAC, as amended.

Procedures for Implementing National Pollutant Discharge Elimination System Permits in New Mexico, March 15, 2012, available at <https://www.epa.gov/tx/procedures-implementing-national-pollutant-discharge-elimination-system-permits-new-mexico-nmip>.

State of New Mexico 303(d) List for Assessed Stream and River Reaches, 2022 – 2024 available at <https://www.env.nm.gov/surface-water-quality/303d-305b/> .

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Appendix C: Abbreviations

Various abbreviations are used in this work plan. They are as follows:

4Q3	lowest four-day average flow rate expected to occur once every three-years
BOD	biochemical oxygen demand (five-day unless noted otherwise)
CD	critical dilution
C.F.R.	Code of Federal Regulations
cfu	colony forming units
CIU	categorical industrial user
CWA	Clean Water Act
DMR	discharge monitoring report
DO	dissolved oxygen
EPA	United States Environmental Protection Agency
lbs	pounds
mg/L	milligrams per liter
MGD	million gallons per day
MPN	most probable number
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
NOEC	no observable effect concentration
NPDES	National Pollutant Discharge Elimination System
POTW	publicly owned treatment works
RP	reasonable potential
SIC	standard industrial classification
SIU	significant industrial user
s.u.	standard units (for parameter pH)
SWQB	Surface Water Quality Bureau
TBELs	technology-based effluent limitations
TDS	total dissolved solids
TMDL	total maximum daily load
TRC	total residual chlorine
TSS	total suspended solids
ug/L	micrograms per liter
UV	ultraviolet
WET	whole effluent toxicity
WQBELs	water quality-based effluent limitations
WWTP	wastewater treatment plant

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Appendix D: Document Definitions

Unless otherwise specified in this permit and work plan, additional definitions of words or phrases used in this permit and work plan are as follows:

APPLICABLE EFFLUENT STANDARDS AND LIMITATIONS means all state effluent standards and limitations to which a discharge is subject under the New Mexico Water Quality Act, including, but not limited to, effluent limitations, standards or performance, toxic effluent standards and prohibitions, and pretreatment standards.

APPLICABLE WATER QUALITY STANDARDS means all water quality standards to which a discharge is subject under the federal Clean Water Act and New Mexico Water Quality Act.

BYPASS means the intentional diversion of waste streams from any portion of a treatment facility.

GRAB SAMPLE means an individual sample collected in less than 15 minutes.

INDUSTRIAL USER means a non-domestic discharger, as identified in 40 C.F.R. 403, introducing pollutants to a publicly owned treatment works.

24-HOUR COMPOSITE SAMPLE consists of three effluent portions collected over a 24-hour period (with the first portion collected no earlier than 10:00 a.m.) and composited according to flow.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 318, 402, and 405 of the Clean Water Act (CWA).

TREATMENT WORKS means any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage and industrial wastes of a liquid nature to implement Section 201 of the Act, or necessary to recycle or reuse water at the most economical cost over the estimated life of the works, including intercepting sewers, sewage collection systems, pumping, power and other equipment, and their appurtenances, extension, improvement, remodeling, additions, and alterations thereof.

UNITS:

MGD means million gallons per day.

mg/L means milligrams per liter or parts per million (ppm).

µg/L means micrograms per liter or parts per billion (ppb).

cfu/100mL means colony forming units per 100 milliliters.

MPN means most probable number.

UPSET means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

E. COLI BACTERIA, a sample consists of one effluent grab portion collected during a 24-hour period at peak loads.