



NEW MEXICO ENVIRONMENT DEPARTMENT  
***Surface Water Quality Bureau***

Surface Water Discharge Work Plan  
Village of Cloudcroft  
Wastewater Treatment Plant

**November 2025**

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Chief, Surface Water Quality Bureau

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Date

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**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 1560 James Canyon Highway 82, Cloudcroft, New Mexico 88317. The facility discharges to an ephemeral canyon/arroyo, which then flows into Fresnal Canyon, a perennial stream in the Tularosa Closed Basin protected 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 ephemeral and 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 are no longer considered a water of the United States (WOTUS). The New Mexico Environment Department (NMED) Surface Water Quality Bureau (SWQB) has established the following plan to continue protecting surface waters of the State (SWOTS), 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 residential and commercial domestic sewage from the Village of Cloudcroft, which is referred to as a publicly owned treatment works (POTW). The facility has a design flow capacity of 300,000 gallons per day (GPD) 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.



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

**Treatment Process:**

The facility utilizes a trickling filter treatment scheme and receives influent collected from residential and commercial entities in the Village of Cloudcroft. The facility treatment works consist of two trains in series. The influent enters the headworks for screening of grit and large debris. The flow then enters a membrane bioreactor. There is also 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 and a secondary clarifier. Wastewater from both treatment trains is combined in the chlorination basin for disinfection using sodium hypochlorite (i.e., chlorine). Following the chlorine contact chamber, effluent flows through a 3-inch Parshall flume with a totalizing flow meter. Effluent is dechlorinated with sodium bisulfate prior to discharge to Fresno Canyon.

This wastewater treatment facility had an EPA-issued 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.

**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**

<b>Contaminants</b>	<b>Incoming (Influent) and Reporting Date</b>	<b>Final (Effluent) and Reporting Date</b>
Nitrate as Nitrogen (NO <sub>3</sub> -N, mg/L) <sup>1</sup>	0.019 (2022-12-07)	1.17 (2022-12-07)
Total Kjeldahl Nitrogen (TKN, mg/L) <sup>1</sup>	41.9 (2023-07-19)	9.72 (2022-12-07)
Total Dissolved Solids (TDS, mg/L) <sup>1</sup>	1,124 (2023-07-19)	811 (2022-12-07)
Chloride (Cl, mg/L) <sup>1</sup>	133 (2023-07-19)	150 (2022-12-07)
Total Suspended Solids (TSS, mg/L) <sup>2</sup>	296 (2023-07-19)	6.3 (2022-12-07)
Biochemical Oxygen Demand (BOD, mg/L) <sup>2</sup>	301 (2023-07-19)	8.73 (2022-12-07)
E. coli (cfu/100 mL) <sup>2</sup>	NA	<.1
pH (s.u.)	8.36 (2022-11-16)	6.48 (2022-11-09)

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. More current data are not available as this facility has reported no discharge since May 21, 2013.

**Pollutant Table**

<b>Parameters</b>	<b>Max Daily</b>	<b>Avg Daily</b>
	<b>(mg/L unless noted)</b>	
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

## WORK PLAN RATIONALE

### **Regulatory Authority:**

NMED considered the following information when drafting this work plan.

- Standards for Interstate and Intrastate Surface Waters (20.6.4 NMAC). EPA's 2017 Reasonable Potential (RP) analysis was used to establish water quality-based effluent limits for this work plan.
- New Mexico's antidegradation policy and implementation plan (20.6.4.8 NMAC) and technology-based effluent limitations<sup>1</sup> (TBELs).
- Per the 2024-2026 State of New Mexico Clean Water Act 303(d)/305(b) Integrated Report, Appendix A, Integrated List<sup>2</sup>, 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, which require a minimum level of treatment of pollutants for point source discharges based on available treatment technologies. 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. Pursuant to 20.6.2 NMAC, 20.6.4 NMAC, and NM Stat § 74-6-8 (2024), the NMED is authorized to make the following requirements to protect water quality in surface waters of the State.

### **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 water quality standards from being violated, NMED identified the following water quality-based limits based on antidegradation provisions (20.6.4.8 NMAC) and the applicable 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<sup>3</sup> (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*

<sup>1</sup> [https://www.epa.gov/system/files/documents/2025-09/pwm\\_chapt\\_05\\_edits\\_2025\\_06.pdf](https://www.epa.gov/system/files/documents/2025-09/pwm_chapt_05_edits_2025_06.pdf)

<sup>2</sup> [https://www.env.nm.gov/surface-water-quality/wp-content/uploads/sites/18/2024/05/EPA-APPROVED\\_2024-2026\\_IR-Appendix-A-303d-Integrated-List.pdf](https://www.env.nm.gov/surface-water-quality/wp-content/uploads/sites/18/2024/05/EPA-APPROVED_2024-2026_IR-Appendix-A-303d-Integrated-List.pdf)

<sup>3</sup> <https://www.epa.gov/tx/procedures-implementing-national-pollutant-discharge-elimination-system-permits-new-mexico-nmip>

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 million gallons per day (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 facility is a minor POTW with a maximum discharge flow 300,000 gpd, or 0.3 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.

**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 (after dechlorination) prior to mixing with the receiving stream.

**Limitations and Monitoring Requirements:**

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

Effluent Characteristics	Discharge Limitations		Monitoring Requirements	
Pollutant			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: {[average monthly influent concentration (mg/L) - average monthly effluent concentration (mg/L)] / [average monthly influent concentration]} x100.

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

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Pollutant	lbs/day	mg/L, unless noted	Measurement Frequency
Biochemical Oxygen Demand (BOD) (5-day) *effluent	GG75	30	1/Month	Grab
Biochemical Oxygen Demand (BOD) (5-day) *influent	NA	***	1/Month	Grab
Total Suspended Solids (TSS) *effluent	75	30	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 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). 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.

#### 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.

#### 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. If the effluent limitations and water quality standards are met, it is assumed that the water quality is sufficient to support aquatic resources (i.e., threatened and endangered species).

#### Whole Effluent Toxicity Monitoring and Sampling:

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

Effluent Characteristics	Discharge Monitoring		Monitoring Requirements	
	Whole Effluent Toxicity Testing (48-hr NOEC) (*1)	30-day average	48-hr minimum	Measurement Frequency (*2)
<i>Daphnia pulex</i>	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.

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**

### **Discharge Monitoring Reports:**

The permittee shall submit the surface water sampling and monitoring data and reports at the same time as quarterly reporting to the GWQB. Monitoring data shall be reported for each month separately. A Template for Monthly Surface Water Sampling Report/Discharge Monitoring Report is provided in Appendix A. The permittee shall submit the surface water effluent sampling and monitoring data and reports to the NMED SWQB at:

New Mexico Environment Department  
 Surface Water Quality Bureau  
 Program Manager- PSRS  
 P.O. Box 5469  
 Santa Fe, NM 87502  
[SWQ.Reporting@env.nm.gov](mailto:SWQ.Reporting@env.nm.gov)

\*\*NMED prefers the permittee submit reports and notifications via email ([SWQ.Reporting@env.nm.gov](mailto:SWQ.Reporting@env.nm.gov)).

### **Annual Sludge Report:**

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

### **Noncompliance and Discharge Limitation Violations:**

The permittee shall report to the Surface Water Quality Bureau any noncompliance or exceedances of the surface water discharge limitations within 24-hours from the time the permittee becomes aware of the circumstance. The permittee shall include the following information within 24 hours, if known:

- A description of the noncompliance or violation;
- When the permittee became aware of the noncompliance or violation;

- An estimate of effluent/wastewater volume discharged;
- Corrective actions implemented to mitigate or eliminate the issue; and,
- If the noncompliance or violation has been stopped.

The permittee shall provide a written report within 5 days of the time the permittee becomes aware of the circumstances to correct or verify the 24-hour notification (email [SWQ.Reporting@env.nm.gov](mailto:SWQ.Reporting@env.nm.gov) preferred). The 5-day 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.

**Upsets and Spill Reporting:**

The permittee shall report all sanitary sewer overflows (SSOs) at the facility and/or at the collection system, lift station, or other appurtenances to the Surface Water Quality Bureau within 24-hours of the event. Within 5 business days of the event, the permittee shall send a written report to the Surface Water Quality Bureau detailing the status and corrective actions taken (email [SWQ.Reporting@env.nm.gov](mailto:SWQ.Reporting@env.nm.gov) preferred).

The permittee shall report any of the following events within 24-hours:

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

The permittee is required to report any discharges or spills to Surface Water Quality Bureau and Groundwater Quality Bureau pursuant to 20.6.2.1203 NMAC.

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**Appendix A: Template for Monthly Surface Water Sampling Report/Discharge Monitoring Report**

<b>Facility Name</b>	
<b>Address</b>	
<b>Report Period Start Date</b>	
<b>Report Period End Date</b>	
<b>Discharge (Yes or No)</b>	

	<b>30 Day Avg (MGD)</b>	<b>Daily Max (MGD)</b>	<b>7 Day Avg (MGD)</b>	
<b>Flow</b>				

<b>Pollutant</b>	<b>Maximum (su)</b>	<b>Minimum (su)</b>		<b>Sample Frequency</b>	<b>Sample Type</b>
<b>pH</b>					

<b>Pollutant</b>	<b>loading (lbs/day unless noted) )</b>			<b>concentration (mg/L unless noted)</b>			<b>Sample Frequency</b>	<b>Sample Type</b>
	<b>30 day avg</b>	<b>7 day avg</b>	<b>daily max</b>	<b>30 day avg</b>	<b>7 day avg</b>	<b>daily max</b>		
<b>Biochemical Oxygen Demand (BOD5)</b>								
<b>Total Suspended Solids (TSS)</b>								
<b>E. coli Bacteria (cfu or MPN)</b>								
<b>Total Residual Chlorine (TRC)</b>								
<b>Total Nitrogen</b>								
<b>Total Phosphorous</b>								

Whole Effluent Toxicity	Discharge Limitation			Sample Frequency	Sample Type
	30 day avg	7 day avg			
7-day NEOC					
Ceiodaphnia dubia					
Pimephales promelas					

Notes:

Signature:	
Printed Name:	
Title:	
Date:	

## **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, 2024-2026 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.

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