## NPDES PERMIT NO. NM0020010 FACT SHEET

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

# **APPLICANT**

Village of Hatch P.O. Box 220 Hatch, NM 87937

# **ISSUING OFFICE**

U.S. Environmental Protection Agency Region 6 1201 Elm Street, Suite 500 Dallas, TX 75270

## PREPARED BY

Jim Afghani
Environmental Engineer
NPDES Permitting and Wetlands Section (6WD-PE)
Water Division (6WD)
Phone: (214) 665-6615
Email: afghani.jim@epa.gov

DATE PREPARED

September 25, 2025

# PERMIT ACTION

Draft reissuance of the current NPDES permit issued October 29, 2020, with an effective date of December 1, 2020, and an expiration date of November 30, 2025. Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed in Title 40, Code of Federal Regulations, issued on September 22, 2025.

# RECEIVING WATER - BASIN

Hatch drain, an unclassified intermittent stream, thence Rio Grande River in Rio Grande basin

In the document that follows, various abbreviations are used. They are as follows:

4Q3 Lowest four-day average flow rate expected to occur once every three-years

BAT Best available technology economically achievable
BCT Best conventional pollutant control technology
BPT Best practicable control technology currently available

BMP Best management plan

BOD<sub>5</sub> Biochemical oxygen demand (five-day unless noted otherwise)

**BPJ** Best professional judgment

**CD** Critical dilution

CFR Code of Federal Regulations
cfs Cubic feet per second
COD Chemical oxygen demand
COE United States Corp of Engineers

**CWA** Clean Water Act

**DMR** Discharge monitoring report

E. coli Escherichia coli

**ELG** Effluent limitation guidelines

**EPA** United States Environmental Protection Agency

ESA Endangered Species Act
FCB Fecal coliform bacteria
FDA Food and Drug Administration

**F&WS** United States Fish and Wildlife Service

**gpm** Gallons per minute

mg/L Milligrams per liter (one part per million)
ug/L Micrograms per liter (one part per billion)

MGD Million gallons per day

NMAC New Mexico Administrative Code NMED New Mexico Environment Department

NMIP New Mexico NPDES Permit Implementation Procedures

NMWQS New Mexico State Standards for Interstate and Intrastate Surface Waters

NPDES National Pollutant Discharge Elimination System

MQL Minimum quantification level

**O&G** Oil and grease

PFAS Per- and polyfluoroalkyl substances
POTW Publicly owned treatment works

**RP** Reasonable potential

SICStandard industrial classificationSOPSStandard Operating Proceduress.u.Standard units (for parameter pH)SWQBSurface Water Quality Bureau

TDS Total dissolved solids
TMDL Total maximum daily load
TRC Total residual chlorine
TSS Total suspended solids
UAA Use attainability analysis
UV Ultraviolet light

USFWS United States Fish & Wildlife Service
USGS United States Geological Service

WLA Waste-load allocation
WET Whole effluent toxicity

WQCC New Mexico Water Quality Control Commission

**WQMP** Water Quality Management Plan

WQS Water Quality Standards
WWTP Wastewater Treatment Plant

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

# A. WWTP LOCATION and TREATMENT PROCESS

The wastewater treatment plant is situated at 1101 E. Herrera Road in Dona Ana County, NM. Operating under the SIC Code 4952, this municipal facility has a design capacity of 0.30 MGD. It serves a population of approximately 2,324 residents.

As described in the application, influent wastewater enters the facility through a 6" force main. At the entrance works, the wastewater is screened, then travels into two Sequencing Batch Reactor (SBR) basins. In the SBR treatment, wastewater undergoes biological treatment in a series of phases to separate solids. The SBR basins process wastewater through the following phases: mix-fill phase, react-fill phase, settle phase, and decant/idle phase. During these phases, the sludge is continuously aerated, with periodic aeration stops to allow solids to settle. Effluent from the SBR basins continues to the UV disinfection system before being discharged to the Hatch Drain in Segment 20.6.4.98 NMAC, thence to the Rio Grande River in Segment 20.6.4.101 NMAC of the Rio Grande Basin. The discharge is located on that water at Latitude 32° 39' 30" North and Longitude 107° 09' 24" West.

Sludge from the SBR basins is removed and pumped to the digesters for further stabilization. When stabilization in the digesters is complete, excess sludge is removed from the digester and pumped to the sludge drying beds; certified supernatant from the digester is returned to either the plant entrance or directly pumped into the SBR basin. The sludge is air-dried on the sludge drying beds. A total of eight sludge drying beds are in operation at the facility, with a total surface area of 10,750 square feet. The floors of the beds are lined with concrete. A sludge bagger with a twelve-bag-per-cycle capacity is available for use during the winter months to supplement bed dewatering. The dried sludge is transported to the NUMEX landfill at Sunland Park, NM. Dried sludge is mixed with site soils that are used for daily cover of solid waste in the landfill. Sludge transported to the landfill is generally mixed into subsurface soil the same day it is received.

The Hatch Drain is an unclassified intermittent stream of the Rio Grande River and Segment No. 20.6.4.98 NMAC. The Hatch Drain reaches the Rio Grande River approximately 4000 feet downstream of the facility. Based on NMED staff observations of the outfall location and an evaluation of readily available imagery, flow from the outfall would be toward Hatch Drain in Segment 20.6.4.98 NMAC, thence to a swale, thence to the Segment 20.6.4.101 NMAC of the Lower Rio Grande Basin. The general and specific stream standards are outlined in the "New Mexico Water Quality Standards" (20.6.4 NMAC), which were approved by the New Mexico Water Quality Control Commission for state implementation and took effect on May 22, 2025. These standards are also approved by the EPA for Clean Water Act purposes, effective April 10, 2025.

## B. EFFLUENT CHARACTERISTICS

A quantitative description of the discharge(s) described in the EPA Permit Application Form 2A dated May 16, 2025, is presented below:

PARAMETER	AVERAGE (mg/L unless noted)	MAXIMUM (mg/L unless noted)
Flow, million gallons/day (MGD)	0.2	0.3
Temperature, winter	40°F	55°F
Temperature, summer	80°F	94°F
pH, minimum, standard units (s.u.)		7.13
pH, maximum, standard units (s.u.)		7.37
Biochemical Oxygen Demand, 5-day (BOD <sub>5</sub> )	12.2	27
Fecal Coliform (FCB) (cfu/100 ml)	95	100
Total Suspended Solids (TSS)	8.82	16.70
Ammonia (NH <sub>3</sub> )	0.50	

Chlorine, Total Residual (TRC)	0.01	0.01
Dissolved Oxygen		
Parameter	Average (mg/l unless noted)	Maximum (mg/l unless noted)
Total Kjeldahl Nitrogen (TKN)	8.3	
Nitrate plus Nitrite Nitrogen		
Oil and grease	137.9	
Phosphorus, Total	0.270	
Total Dissolved Solids (TDS)	551.0	
Hardness (as CaCO <sub>3</sub> )		540
Nitrate / nitrite (as N)	2.3	

In addition, on March 20, 2019, a Compliance Evaluation Inspection (CEI) was conducted at the Village of Hatch WWTP by the NMED, SWQB. The purpose of this inspection is to determine compliance with the NPDES permitting program with the requirements of the federal CWA. The DMRs from October 31, 2020, to June 30, 2025, are also reviewed to determine if any excursions of the NPDES permit limits took place during this period. There were no excursions noted during this time.

## C. REGULATORY AUTHORITY/PERMIT ACTION

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

It is proposed that the permit be reissued for a 5-year term, by regulations promulgated at 40 CFR §122.46(a). The previous permit will expire on November 30, 2025. EPA received the NPDES renewal application on July 14, 2025. The existing permit is administratively continued until this permit is issued.

# D. DRAFT PERMIT RATIONALE AND PROPOSED PERMIT CONDITIONS

# 1. OVERVIEW of TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDS-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Regulations contained in 40 CFR §122.44 NPDES permit limits are developed that meet the more stringent of either technology-based effluent limitation guidelines, numerical and/or narrative water quality standard-based effluent limits, or the previous permit. Technology-based effluent limitations are established in the proposed draft permit for TSS and BOD<sub>5</sub>. Water quality-based effluent limitations are established in the proposed draft permit for pH, E. coli bacteria, and TRC.

# 2. TECHNOLOGY-BASED EFFLUENT LIMITATIONS/CONDITIONS

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

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

BCT - Technology-based standard for the discharge from existing industrial point sources of conventional pollutants, including BOD5, TSS, E. coli bacteria, pH, and O&G.

BAT - The most appropriate means available on a national basis for controlling the direct discharge of toxic and non-conventional pollutants to navigable waters. BAT effluent limits represent the best existing performance of treatment technologies that are economically achievable within an industrial point source category or subcategory.

Some biological treatment technologies, such as waste stabilization ponds, can achieve significant reductions in  $BOD_5$  and TSS but might not consistently achieve the secondary treatment standards for these parameters. Congress recognized that unless alternate limitations were set for facilities with waste stabilization ponds, which often are in small communities, such facilities could be required to construct costly new treatment systems to meet the secondary treatment standards even though their existing treatment technologies could achieve significant biological treatment.

To prevent requiring upgrades where facilities were achieving their original design performance levels, Congress included provisions in the 1981 amendments to the Clean Water Act Construction Grants program (Public Law 97-117, Section 23) that required EPA to make allowances for alternative biological treatment technologies, such as waste stabilization ponds. In response to that requirement, in 1984, EPA promulgated regulations at § 133.105 that include alternative standards that apply to facilities using "equivalent to secondary treatment." A facility must meet the criteria in § 133.101(g) to qualify for application of those alternative standards.

Secondary treatment for POTW, established at [40 CFR 133.102(a)] and [40 CFR 133.102(b)], is 30 mg/L for the 30-day average, 45 mg/L for the 7-day average, and 85% percent (minimum) for BOD<sub>5</sub> and TSS each. When determining mass limits for a POTW, the plant's design flow is used to establish the mass load. The following mathematical relationship determines mass limits:

Loading in lbs/day = pollutant concentration in mg/l \* 8.34 conversion factor \* design flow in MGD

30-Day Avg. BOD<sub>5</sub> loading (lbs/day) = 30 mg/L \* 8.345 lbs/gal \* 0.3 MGD 30-Day Avg = 75.1 lbs/day

7-Day Avg.: BOD<sub>5</sub> loading (lbs/day) = 45 mg/L \* 8.345 lbs/gal \* 0.3 MGD 7-Day Avg = 112.7 lbs/day

30-Day Avg. TSS loading (lbs/day) = 30 mg/L \* 8.345 lbs/gal \* 0.3 MGD 30-Day Avg = 75.1 lbs/day

7-Day Avg.: TSS loading (lbs/day) =  $45 \text{ mg/L} * 8.345 \text{ lbs/gal} * 0.3 \text{ MGD} 7-Day Avg} = 112.7 \text{ lbs/day}$ 

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

Parameter 30-Day Avg. 7-Day Avg. 30-Day Avg. 7-Day Avg.	30-Day Avg. 7-Day Avg. 30-Day Avg.	Parameter	7-Day Avg.
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Flow	N/A	N/A	MGD	MGD
BOD5	75.1 lbs/day	112.1 lbs/day	30 mg/L	45 mg/L
TSS	75.1 lbs/day	112.7 lbs/day	30 mg/L	45 mg/L
Removal	85% BOD5 and TSS	N/A	85% BOD5 and TSS	N/A

# 3. WATER QUALITY-BASED LIMITATIONS

## a. General Comments

Water quality-based requirements are necessary where effluent limits are more stringent than technology-based limits to maintain or achieve federal or state water quality limits. Under Section 301(b)(1)(C) of the CWA, discharges are subject to effluent limitations based on federal or state WQS. Effluent limitations and/or conditions established in the draft permit follow applicable State WQS and applicable State water quality management plans to assure that surface WQS of the receiving waters are protected and maintained or attained.

# b. Implementation

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

# c. State Water Quality Standards

Regulations promulgated at [40 CFR 122.44(d)] require limits in addition to or more stringent than effluent limitation guidelines (technology-based). Per 20.6.4 NMAC, the permit must be developed to allow for the maintenance and attainment of acute numerical criteria at the point of discharge to the receiving stream and for the maintenance and attainment of chronic numerical criteria at the edge of the mixing zone.

Results of all dilutions, as well as the associated chemical monitoring of pH, temperature, hardness, dissolved oxygen, conductivity, and alkalinity, will be documented in a full report, according to the appropriate test method publication. The complete reports required by each test section do not need to be submitted unless requested. However, the full report is to be retained following the provisions of [40 CFR Part 122.41 (j) (2)]. The permit requires the submission of the toxicity testing information to be included on the DMR.

# 1. pH

Stream segment-specific WQS do not exist for the unclassified Hatch Drain; however, a pH of 6.6 to 9.0 s.u. is established at 20.6.4.98 NMAC for marginal warmwater aquatic and primary contact uses. The draft permit shall establish pH limitations of 6.6 to 9.0 s.u.

# 2. Bacteria

The E. coli bacteria limitations of 126 cfu/100 mL monthly geometric mean and 410 cfu/100 mL daily maximum are established at 20.6.4.98 NMAC for primary contact. These limitations shall be continued in the proposed permit.

# 3. Toxics

#### i. General Comments

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

All applicable facilities are required to fill out appropriate sections of the Form 2A and 2S, to apply for an NPDES permit or reissuance of an NPDES permit. The new form applies not only to POTWs and to facilities that are like POTWs, but also to those facilities that do not meet the regulatory definition of POTW (like privately owned sanitary wastewater treatment facilities, or similar facilities on Federal property). The forms were designed and promulgated to "make it easier for permit applicants to provide the necessary information with their applications and minimize the need for additional follow-up requests from permitting authorities," per the summary statement in the preamble to the rule. These forms became effective December 1, 1999, after publication of the final rule on August 4, 1999, Volume 64, Number 149, pages 42433 through 42527 of the FRL.

According to the Procedures for Implementing National Pollutant Discharge Elimination System (NPDES) Permits in New Mexico, dated March 15, 2012 (NMIP), POTWs and private domestic systems with a design flow of less than 1 MGD are considered to have no reasonable potential to cause or contribute to violations of human health criteria. As a result, no additional testing is required, and the applicant does not need to complete the expanded pollutant testing section (Part D) of Form 2A. There are no toxic substances that need to be included in the draft permit, except for those listed below.

## ii. Total Residual Chlorine

The previous permit set water quality-based effluent limits for TRC at 11  $\mu$ g/L. This requirement will be carried over into the draft permit.

# iii. PFAS (Per- and Polyfluoroalkyl Substances)

As explained at https://www.epa.gov/pfas, PFAS are a group of synthetic chemicals that have been in use since the 1940s. PFAS are found in a wide array of consumer and industrial products. PFAS manufacturing and processing facilities, facilities using PFAS in production of other products, airports, and military installations can be contributors of PFAS releases into the air, soil, and water. Due to their widespread use and persistence in the environment, most people in the United States have been exposed to PFAS. Exposure to some PFAS above certain levels may increase risk of adverse health effects<sup>1</sup>. EPA is collecting information to evaluate the potential impacts that discharges of PFAS from wastewater treatment plants may have on downstream drinking water, recreational and aquatic life uses.

Although the New Mexico Water Quality Standards do not include numeric criteria for PFAS, the 2022 New Mexico Water Quality Standards narrative criterion supply guidance including:

20.6.4.7(E)(2) NMAC states: "Emerging contaminants" refer to water contaminants that may cause significant ecological or human health effects at low concentrations. Emerging contaminants are generally chemical compounds recognized as having deleterious effects at environmental concentrations whose negative impacts have not been fully quantified and may not have regulatory numeric criteria. 20.6.4.7(T)(2) NMAC states:

"Toxic pollutant" means those pollutants, or combination of pollutants, including disease-causing agents, that after discharge and upon exposure, ingestion, inhalation, or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will cause death, shortened life spans, disease,

adverse behavioral changes, reproductive or physiological impairment or physical deformations in such organisms or their offspring. Since PFAS chemicals are persistent in the environment and may lead to adverse human health and environmental effects, the draft permit requires that the facilities conduct influent, effluent, and biosolids sampling for PFAS according to the frequency outlined in the permit.

The purpose of this monitoring and reporting requirement is to better understand potential discharges of PFAS from this facility and to inform future permitting decisions, including the potential development of water quality-based effluent limits on a facility-specific basis. EPA is authorized to require this monitoring and reporting by CWA § 308(a), which states:

"SEC. 308. (a) Whenever required to carry out the objective of this Act, including but not limited to (1) developing or assisting in the development of any effluent limitation, or other limitation, prohibition, or effluent standard, pretreatment standard, or standard of performance under this Act; (2) determining whether any person is in violation of any such effluent limitation, or other limitation, prohibition or effluent standard, pretreatment standard, or standard of performance; (3) any requirement established under this section; or (4) carrying out sections 305, 311, 402, 404 (relating to State permit programs), 405, and 504 of this Act—

(A) the Administrator shall require the owner or operator of any point source to (i) establish and maintain such records, (ii) make such reports, (iii) install, use, and maintain such monitoring equipment or methods (including where appropriate, biological monitoring methods), (iv) sample such effluents (in accordance with such methods, at such locations, at such intervals, and in such manner as the Administrator shall prescribe), and (v) provide such other information as he may reasonably require;".

EPA notes that there is currently not an analytical method approved in 40 CFR Part 136 for PFAS. As stated in 40 CFR § 122.44(i)(1)(iv)(B), in the case of pollutants or pollutant parameters for which there are no approved methods under 40 CFR Part 136 or methods are not otherwise required under 40 CFR chapter I, subchapter N or O, monitoring shall be conducted according to a test procedure specified in the permit for such pollutants or pollutant parameters. Therefore, the draft permit specifies that until there is an analytical method approved in 40 CFR Part 136 for PFAS, monitoring shall be conducted using Method 1633. The Adsorbable Organic Fluorine CWA wastewater method 1621 can be used in conjunction with Method 1633, if appropriate. This is consistent with the December 5, 2022, USEPA Memorandum, Addressing PFAS Discharges in NPDES Permits and Through the Pretreatment Program and Monitoring Programs, from Radhika Fox².

In October 2021, EPA published a PFAS Strategic Roadmap [1] that described EPA's commitments to action for 2021 through 2024. This roadmap includes a commitment to issuing new guidance recommending PFAS monitoring in state-issued and federally issued NPDES permits using EPA's recently published analytical Method 1633. In anticipation of this guidance, EPA has included PFAS monitoring of three times per term in the draft permit using analytical Method 1633<sup>3</sup>.

<sup>&</sup>lt;sup>1</sup> EPA, EPA's Per- and Polyfluoroalkyl Substances (PFAS) Action Plan, EPA 823R18004, February 2019. Available at: <a href="https://www.epa.gov/sites/production/files/2019-02/documents/pfas\_action\_plan\_021319\_508compliant\_1.pdf">https://www.epa.gov/sites/production/files/2019-02/documents/pfas\_action\_plan\_021319\_508compliant\_1.pdf</a>.

<sup>&</sup>lt;sup>2</sup> The memo is available at <a href="https://www.epa.gov/newsreleases/epa-issues-guidance-states-reduce-harmful-pfas-pollution">https://www.epa.gov/newsreleases/epa-issues-guidance-states-reduce-harmful-pfas-pollution</a>.

<sup>&</sup>lt;sup>3</sup> For more information on Method 1633, see <a href="https://www.epa.gov/cwa-methods/cwa-analytical-methods-and-polyfluorinated-alkyl-substances-pfas">https://www.epa.gov/cwa-methods/cwa-analytical-methods-and-polyfluorinated-alkyl-substances-pfas</a>.

Minor (< 0.1 MGD)	Once/Term
Minor $(0.1 \le 1.0 \text{ MGD})^{2,3}$	3/Term
Major (if NOT in an applicable category) <sup>2</sup>	Once/6 Months
Major (if IS in an applicable category) <sup>2</sup>	Quarterly
Major (with required pretreatment OR discharge is > 5 MGD)	Quarterly

#### Footnotes:

- 1. These recommended frequencies are only for facilities where an applicable ELG for PFAS does not apply. These frequencies may be altered if an industry category is known or suspected to discharge PFAS or based on the permit writer's BPJ.
- 2. More information on PFAS is available at <a href="https://www.epa.gov/pfas.">https://www.epa.gov/pfas.</a>
- 3. PFAS samples must be collected and analyzed in three separate calendar years

#### iv. Critical Conditions

Critical dilutions are used to establish certain permit limitations and conditions. The state of New Mexico WQS allows a mixing zone for establishing pollutant limits in discharges. The mixing zones established by the state of New Mexico do not overlap with tribal or Pueblo borders.

Both the NMWQS and NMIP establish a critical low flow designated as 4Q3, as the minimum average four-consecutive-day flow which occurs with a frequency of once in three years. A low flow, or 4Q3, of (0) ft3/second (cfs) (0.0 MGD) was provided by NMED. For permitting purposes, specific parameters such as WET are considered, and the critical dilution of the effluent to the receiving stream is determined. The critical dilution, CD, is calculated as:

$$CD = Qe / (F*Qa + Qe)$$
, where:

Qe = facility flow (0.3 MGD)

Qa = critical low flow of the receiving waters (0.0 MGD)

F =fraction of stream allowed for mixing (1.0)

$$CD = 0.3 \text{ MGD} / [(1.0) (0 + 0.3] = 0.3 \text{ MGD} / 0.3 \text{ MGD} = 1 * 100 = 100\%$$

According to the NMIP, a facility is to receive chronic biomonitoring requirements at a critical dilution of 10% or more.

# 4. Monitoring Frequency for Limited Parameters

Regulations require permits to establish monitoring requirements to yield data representative of the monitored activity [40 CFR 122.48(b)] and to assure compliance with permit limitations [40 CFR 122.44(i)(1)]. Technology-based pollutants, BOD<sub>5</sub>, TSS, and E. coli continue to meet the previous monitoring requirements of two times per month.

Sample type for both TRC and pH should be an instantaneous grab in the proposed permit. Flow is proposed to be monitored daily when discharging, identical to the existing permit. The sample type for BOD<sub>5</sub> and TSS is a grab, consistent with the existing permit. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit or approved by the Regional Administrator.

# 5. Whole Effluent Toxicity Testing

In Section D (3) (iii) above, "Critical Conditions", it was shown that the CD for the facility is 100%. Based on the nature of the discharge, POTW, the design flow, greater than 0.1 MGD, the nature of the receiving water, intermittent, and the critical dilution, 100%, the NMIP directs the WET test to be a 7-day chronic test using Ceriodaphnia dubia and Pimephales promelas (fathead minnow), a once-per-five-year frequency. The test shall be conducted during the first year of the permit cycle to ensure sufficient time remains if further testing is warranted.

The Hatch Drain has a 4Q3 of 0 MGD; therefore, the critical dilution is 100%. The draft permit proposes the following tests with a dilution series of 32%, 42%, 56%, 75%, and 100% in addition to the control (0% effluent).

During the period beginning on the effective date of the permit and lasting through the expiration date of the permit, the permittee is authorized to discharge from Outfall 001 - Hatch Drain, an intermittent stream, thence to the Rio Grande River in Segment 20.6.4.98 NMAC of the Rio Grande Basin. Discharges shall be limited and monitored by the permittee as specified below:

WHOLE EFFLUENT TOXICITY TESTING (7-Day Chronic Static Renewal/ NOEC)	VALUE	FREQUENCY	ТҮРЕ
Ceriodaphnia dubia	Report	Once/5 years	24-Hr Composite
Pimephales promelas	Report	Once/5 years	24-Hr Composite

## E. FACILITY OPERATIONAL PRACTICES

## 1. SEWAGE SLUDGE

The permittee shall use only those sewage sludge disposal or reuse practices that comply with the federal regulations established at [40 CFR Part 503] "Standards for the Use or Disposal of Sewage Sludge." The specific requirements in the permit are based on the design flow of the facility, the type of waste discharged into the collection system, and the sewage sludge disposal or reuse practices employed by the treatment works.

# 2. WASTEWATER POLLUTION PREVENTION REQUIREMENTS

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

# 3. INDUSTRIAL WASTEWATER CONTRIBUTIONS

The treatment plant has no non-categorical Significant Industrial Users (SIU) and no Categorical Industrial Users (CIU). The EPA has tentatively determined that the permittee will not be required to develop a complete pretreatment program. However, general pretreatment provisions have been required.

## 4. OPERATION AND REPORTING

The applicant is always required to operate the treatment facility at maximum efficiency; monitor the facility's discharge regularly; and report the results quarterly. The monitoring results will be available to the public.

Discharge will be to receiving waters named Hatch Drain, an unclassified intermittent stream in Segment 20.6.4.98 NMAC, thence the Rio Grande River in the Rio Grande Basin. The Rio Grande River Segment 20.6.4.101 NAMC from El Paso to Las Cruces (Leasburg Dam to one mile below Percha Dam) is assessed as Category 4A with irrigation, livestock watering, marginal warmwater aquatic life, and wildlife habitat as fully supporting except primary contact. The current "2024 – 2026 State of New Mexico CWA §303(d)/§305(b) Integrated Report" requires TMDLs because it does not support primary contact due to E. coli criterion violations.

The segment-specific criteria for E. coli were incorporated as effluent limitations into the current permit. EPA approved the TMDL on June 11, 2007, where the E. coli effluent limits and WLA for the Hatch WWTP for E. coli are 126 cfu/100mL and  $1.43 \times 10^9$  cfu/day, respectively. The proposed permit has retained these TMDL-based limitations. The monitoring schedule for Segment 20.6.4.101 NMAC is set for 2029. The standard reopener language in the permit allows additional permit conditions if a future TMDL is established.

# G. ANTIDEGRADATION

The NMAC, Section 20.6.4.8 "Antidegradation Policy and Implementation Plan" sets forth the requirements to protect designated uses through implementation of the State water quality standards. The limitations and monitoring requirements outlined in the proposed permit are developed from the State water quality standards and are protective of those designated uses. Furthermore, the policy sets forth the intent to protect the existing quality of those waters, whose quality exceeds their designated use. The permit requirements and the limitations are protective of the assimilative capacity of the receiving waters, which is protective of the designated uses of that water, NMAC Section 20.6.4.8.A.2.

#### H. ANTIBACKSLIDING

The proposed permit is consistent with the requirements and exemption to meet Anti-backsliding provisions of the Clean Water Act, Section 402(o) and 40 CFR Part 122.44(i)(B), which state in part that interim or final effluent limitations must be as stringent as those in the previous permit, unless information is available which was not available at the time of permit issuance. The proposed permit maintains the limitation requirements of the last permit for BOD<sub>5</sub>, TSS, and E. coli, as well as pH.

# I. ENDANGERED SPECIES CONSIDERATIONS

Available information from the USFWS web page (<a href="https://ecos.fws.gov/ecp/report/species-listings-by-state?stateAbbrev=NM&stateName=New%20Mexico&statusCategory=Listed">https://ecos.fws.gov/ecp/report/species-listings-by-state?stateAbbrev=NM&stateName=New%20Mexico&statusCategory=Listed</a>) presents the occurrence of the listed threatened (T) and endangered (E) species in Dona Ana County as follows:

**Southwestern willow flycatcher**'s (Empidonax traillii extimus) (E) habitat occurs in riparian areas along streams, rivers, and other wetlands where dense willow, cottonwood, buttonbush and arrow-weed are present. The primary reason for decline is the reduction, degradation and elimination of the riparian habitat. Other reasons include brood parasitism by the brown-headed cowbird and stochastic events like fire and floods that destroy fragmented populations.

**Rio Grande Silvery Minnow** (Hybognathus amarus) (E) historically occupied approximately 3,862 river km in New Mexico and Texas. It was found in the Rio Grande from Española, New Mexico, through Texas to the Gulf of Mexico. The Rio Grande silvery minnow uses only a small portion of the available aquatic habitat and is rarely found in habitats with high water velocities.

The decline of the silvery minnow is attributed primarily to destruction and modification of its habitat due to dewatering and diversion of water, water impoundment, and modification of the river. Competition and

predation by introduced non-native species, water quality degradation, and other factors also have contributed to its decline.

**New Mexican Meadow Jumping Mouse** (Zapus hudsonius luteus) (E) is endemic to New Mexico, Arizona and southern Colorado. The jumping mouse is grayish brown on the back, yellowish-brown on the sides, and white underneath. The species is about 4 to 10 inches in total length, with elongated feet and an extremely long, bicolored tail. It nests in dry soils, but uses moist, streamside, dense riparian/wetland vegetation up to an elevation of about 8,000 feet. The jumping mouse hibernates about 9 months out of the year, longer than other mammals.

**Mexican Spotted Owl** (Strix occidentalis lucida) (T) is notable for its dark eyes, which set it apart from most other owls. It has an ashy chestnut-brown plumage, adorned with white and brown spots on its abdomen, back, and head. Its brown tail features thin white bands, and it does not have ear tufts. Young owls under five months old have a downy appearance. Female Mexican Spotted Owls are larger than their male counterparts.

In the United States, the primary threats to their population have shifted from timber harvesting to an increased risk of stand-replacing wildland fires, which is less of a concern in Mexico. Recent forest management practices are now focused on promoting sustainable ecological functions and restoring pre-settlement fire regimes. These practices are more compatible with preserving the habitat conditions necessary for the spotted owl, in contrast to the even-aged management techniques that were used when the species was listed.

**Piping Plover** (Charadrius melodus) (T) is a small shorebird, about 7 1/4 inches long with a 15-inch wingspan. It has sandy-colored feathers, grayish-brown crowns, white foreheads, and distinct dark bands across its head and neck. With yellow-orange legs and short, stubby bills, these stocky birds resemble sandpipers.

Piping plovers breed in three main areas: the Atlantic Coast, the Great Lakes, and the Great Plains, migrating south for winter along the Atlantic and Gulf coasts. They typically live for 5 to 6 years, but some can reach up to 14 years, often returning to the same nesting sites. There are an estimated 7,600 to 8,400 piping plovers left, with their population considered to be increasing due to conservation efforts. The main threat to their survival is habitat loss from beach development, along with disturbances from humans and domestic animals, which can lead to increased energy expenditure and abandoned nests.

Yellow-billed Cuckoo (Coccyzus americanus) (T) uses wooded habitat with dense cover and water nearby, including woodlands with low, scrubby, vegetation, overgrown orchards, abandoned farmland, and dense thickets along streams and marshes. In the Midwest, look for cuckoos in shrub-lands of mixed willow and dogwood, and in dense stands of small trees such as American elm. In the central and eastern U.S., Yellow-billed Cuckoos' nests in oaks, beech, hawthorn, and ash. In the West, nests are often placed in willows along streams and rivers, with nearby cottonwoods serving as foraging sites.

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

- 1. There have been no changes in the operation and treatment of discharge since the prior issuance of the permit.
- 2. EPA has received no additional information since the previous permit issuance, which would lead to a revision of its determinations. Also, the draft permit is consistent with the State's WQS and does not increase pollutant loadings.
- 3. The NPDES program regulates the discharge of pollutants from the treatment facility, and it does not regulate forest and agricultural management practices.

EPA determines that Items 1, 2, and 3 result in no change to the environmental baseline established by the previous permit; therefore, EPA concludes that reissuance of this permit will have "no effect" on listed species and designated critical habitat.

# J. HISTORICAL and ARCHEOLOGICAL PRESERVATION CONSIDERATIONS

The reissuance of the permit should have no impact on historical and/or archeological sites since no construction activities are planned in the reissuance.

## K. PERMIT REOPENER

The permit may be reopened and modified during the life of the permit if relevant portions of NMWQS are revised or remanded by the New Mexico Water Quality Control Commission. In addition, the permit may be reopened and modified during the life of the permit if relevant procedures implementing the Water Quality Standards are either revised or promulgated by the NMED. Should the State adopt a state water quality standard, and/or develop or amend a TMDL, this permit may be reopened to establish effluent limitations for the parameter(s) to be consistent with that approved State standard and/or water quality management plan, under [40 CFR 122.44(d)]. Modification of the permit is subject to the provisions of [40 CFR 124.5].

# L. VARIANCE REQUESTS: No variance requests have been received.

## M. CERTIFICATION

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

## N. FINAL DETERMINATION

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

### O. ADMINISTRATIVE RECORDS

The following information was used to develop the draft permit:

# I. APPLICATION(s)

EPA Application Form 2A received July 14, 2025.

# II. 40 CFR CITATIONS

Citations to 40 CFR are as of July 24, 2025, Sections 122, 124, 125, 133, 136

## III. STATE OF NEW MEXICO REFERENCES

New Mexico State Standards for Interstate and Intrastate Surface Water, 20.6.4 NMAC, as effective April 15, 2025

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

State of New Mexico CWA §303(d)/§305(b) Integrated List & Report, 2024-2026

EPA Approved TMDL for the Rio Grande (Leasburg Dam to Percha Dam) Watershed, June 11, 2007

# IV. MISCELLANEOUS REFERENCES

Email from Helen Nguyen, EPA, R6 on July 22, 2025, providing DMR data for the village of Hatch.

Email to Susan LucasKamat, NMED on July 17, 2025, requesting the 4Q3 and ambient data. Received ambient data and 4Q3 (station 42RGrand171.9 about 35 miles upstream of Hatch) on July 30, 2025, from Jason Martinez, NMED.

Emailed to Susan LucasKamat, NMED on August 7, 2025, requesting a review of the draft permit. Comments received from Jason Martinez, NMED on September 3, 2025.

Emailed to Silvia Zavala, EPA, R6 on August 7, 2025, requesting a review of WET language in the draft permit. Comments received on August 29, 2025 and September 25, 2025.