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## **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 WWTP  
P.O. Box 220  
Hatch, NM 87937

### **ISSUING OFFICE**

U.S. Environmental Protection Agency  
Region 6  
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### **PREPARED BY**

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### **DATE PREPARED**

July 7, 2020

### **PERMIT ACTION**

Draft reissuance of the current NPDES permit issued June 18, 2015, with an effective date of August 1, 2015, and an expiration date of July 31, 2020. Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed in Title 40, Code of Federal Regulations, revised as of July 7, 2020.

### **RECEIVING WATER – BASIN**

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

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**DOCUMENT ABBREVIATIONS**

For brevity, Region 6 used acronyms and abbreviated terminology in this fact sheet document whenever possible. The following acronyms were used frequently in this document:

4Q3	Lowest four-day average flow rate expected to occur once every three-years
BAT	Best available technology economically achievable
BCT	Best conventional pollutant control technology
BPT	Best practicable control technology currently available
BMP	Best management plan
BOD	Biochemical oxygen demand (five-day unless noted otherwise)
BPJ	Best professional judgment
CBOD	Carbonaceous biochemical oxygen demand (five-day unless noted otherwise)
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
DO	Dissolved oxygen
DWS	Domestic Water Supply
ELG	Effluent limitation guidelines
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
FWS	United States Fish and Wildlife Service
mg/l	Milligrams per liter
ug/l	Micrograms per liter
lbs	Pounds
MG	Million gallons
MGD	Million gallons per day
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NMIP	New Mexico NPDES Permit Implementation Procedures
NMWQS	New Mexico State Standards for Interstate and Intrastate Surface Waters
NPDES	National Pollutant Discharge Elimination System
MQL	Minimum quantification level
O&G	Oil and grease
POTW	Publicly owned treatment works
RP	Reasonable potential
SS	Settleable solids
SIC	Standard industrial classification
s.u.	Standard units (for parameter pH)
SWQB	Surface Water Quality Bureau
TDS	Total dissolved solids
TMDL	Total maximum daily load
TRC	Total residual chlorine
TSS	Total suspended solids
UAA	Use attainability analysis
USGS	United States Geological Service
WLA	Waste Load allocation
WET	Whole effluent toxicity
WQCC	New Mexico Water Quality Control Commission
WQMP	Water Quality Management Plan
WWTP	Wastewater treatment plant

**CHANGES FROM THE PREVIOUS PERMIT:** None**A. APPLICANT LOCATION and ACTIVITY**

The wastewater treatment plant is located at 1101 E. Herrera Road, in Dona Ana County, New Mexico. The effluent from the treatment plant is discharged into the Hatch Drain in Segment 20.6.4.98, thence to the Rio Grande River in Segment 20.6.4.101 NMEC of the Lower Rio Grande Basin. The discharge is located on that water at Latitude 32° 39' 30" North and Longitude 107° 09' 24" West.

Under the SIC Code 4952, the applicant operates a municipal wastewater treatment plant with a design capacity of 0.30 MGD serving a total population of approximately 3025. As described in the application, the wastewater treatment process consists of entrance works (manual bar screen), two sequencing batch reactor (SBR) basins, a post equalization basin, and a chlorine contact chamber. Sludge pathogen control and vector attraction reduction are met with two aerobic digesters, six sludge drying beds, and a sludge bagging system. Treated sludge is disposed of at the Camino Real Landfill in Sunland Park, NM.

The general and specific stream standards are provided in "NMWQS," (20.6.4 NMAC, effective September 12, 2018). The Hatch Drain is an unclassified intermittent stream of the Rio Grande River and Segment No. 20.6.4.98. 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 20.6.6.98, thence to a swale, thence to the Segment 20.6.4.101 NMAC of the Lower Rio Grande Basin.

**B. EFFLUENT CHARACTERISTICS**

A quantitative description of the discharge(s) described in the EPA Permit Application Form 2A dated March 5, 2019 are presented below:

<b>PARAMETER</b>	<b>AVERAGE</b> (mg/L unless noted)	<b>MAXIMUM</b> (mg/L unless noted)
Flow, million gallons/day (MGD)	0.17	0.29
Temperature, winter	40°F	55°F
Temperature, summer	80°F	94°F
pH, minimum, standard units (SU)	---	7.10
pH, maximum, standard units (SU)	---	7.20
Biochemical Oxygen Demand, 5-day (BOD <sub>5</sub> )	12.95	30
Fecal Coliform (FCB) (cfu/100 ml)	53	61
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)	11	---
Nitrate plus Nitrite Nitrogen	---	---
Oil and grease	7.4	---
Phosphorus, Total	0.05	---
Total Dissolved Solids (TDS)	523	---
Hardness (as CaCO <sub>3</sub> )	---	51
Nitrate (as N)	1.60	---

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 in accordance with requirements of the federal CWA. As part of this inspection the DMRs were also reviewed to determine if any excursions of the NPDES permit limits took place during this time period. There were no excursions noted during this time period.

### **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 of the CWA gave EPA the authority to implement pollution control programs such as setting wastewater standards for industry and established the basic structure for regulating pollutants discharges into the waters of the United States.

In addition, it made it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit was obtained under its provisions. Regulations governing the EPA administered the NPDES permit program are generally found at 40 CFR §122 (program requirements & permit conditions), §124 (procedures for decision making), §125 (technology-based standards) and §136 (analytical procedures). Other parts of 40 CFR provide guidance for specific activities and may be used in this document as required.

It is proposed that the permit be reissued for a 5-year term following regulations promulgated at 40 CFR §122.46(a). The previous permit will expire on July 31, 2020. EPA received the NPDES application on April 3, 2020. 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 generally based on the average of the best existing performance facilities within an industrial category or subcategory.

BCT - Technology-based standard for the discharge from existing industrial point sources of conventional pollutants including BOD<sub>5</sub>, 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, are capable of achieving significant reductions in BOD<sub>5</sub> 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 publicly owned treatment work (POTW), established at [40 CFR 133.102(a)] and [40 CFR 133.102(b)], are 30 mg/L for the 30-day average and 45 mg/L for the 7day average and 85% percent (minimum) for BOD<sub>5</sub> and TSS each. When determining mass limits for POTW’s, the plant’s design flow used to establish the mass load. Mass limits are determined by the following mathematical relationship:

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

$$\begin{aligned} \text{30-Day Avg. BOD}_5 \text{ loading (lbs/day)} &= 30 \text{ mg/L} * 8.345 \text{ lbs/gal} * 0.3 \text{ MGD} \\ \text{BOD}_5 \text{ loading (lbs/day)} &= 75.06 \text{ lbs/day} \end{aligned}$$

$$\begin{aligned} \text{7-Day Avg.: BOD}_5 \text{ loading (lbs/day)} &= 45 \text{ mg/L} * 8.345 \text{ lbs/gal} * 0.3 \text{ MGD} \\ \text{BOD}_5 \text{ loading (lbs/day)} &= 112.7 \text{ lbs/day} \end{aligned}$$

$$\begin{aligned} \text{30-Day Avg. TSS loading (lbs/day)} &= 30 \text{ mg/L} * 8.345 \text{ lbs/gal} * 0.3 \text{ MGD} \\ \text{TSS loading (lbs/day)} &= 75.06 \text{ lbs/day} \end{aligned}$$

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

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

Parameter	30-Day Avg.	7-Day Avg.	30-Day Avg.	7-Day Avg.
Flow	N/A	N/A	MGD	MGD
BOD <sub>5</sub>	75 lbs/day	113 lbs/day	30 mg/L	45 mg/L
TSS	75 lbs/day	113 lbs/day	30 mg/L	45 mg/L
Removal	85% BOD <sub>5</sub> and TSS	N/A	85% BOD <sub>5</sub> and TSS	N/A

### 3. WATER QUALITY-BASED LIMITATIONS

#### a. General Comments

Water quality-based requirements are necessary where effluent limits more stringent than technology-based limits are necessary to maintain or achieve federal or state water quality limits. Under Section 301(b)(1)(C) of the CWA, discharges are subject to effluent limitations based on federal or state WQS. Effluent limitations and/or conditions established in the draft permit 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

Stated previously, the plant is in Dona Ana County, New Mexico and discharges into the Hatch Drain in Segment 20.6.4.98, thence to the Rio Grande River in Segment No. 20.6.4.101 of the Lower Rio Grande Basin. Based on the NMSWQS, 20.6.4 NMAC, effective September 12, 2018, the designated uses of the receiving water are livestock watering, wildlife habitat, marginal warm water aquatic life and primary contact.

#### d. Permit Action - Water Quality-Based Limits

The Clean Water Act 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.

Regulations promulgated at [40 CFR 122.44(d)] require limits in addition to or more stringent than effluent limitation guidelines (technology based). In accordance with 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 full 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 established 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 is applicable not only to POTWs and to facilities that are like POTWs, but those facilities, which do not meet the regulatory definition of POTW (like privately owned sanitary wastewater treatment facility, 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.

In addition, this facility is designated by EPA NPDES as a minor and does not need to fill out the expanded pollutant testing section Part D of Form 2A. There are no toxics that need to be placed in the draft permit except for TRC described below.

#### ii. Total Residual Chlorine

The previous permit established water quality-based effluent limitations for TRC of 11 ug/L. This requirement will be maintained in the draft permit.

#### iii. 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/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) ft<sup>3</sup>/second (cfs) (0.0 MGD) was provided by NMED.

#### 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* are continuing the previous monitoring requirements of two times per month.

Sample type for both TRC and pH should be instantaneous grab in the proposed permit. Flow is proposed to be monitored daily when discharging, identical to the existing permit. Sample type for BOD<sub>5</sub> and TSS are grab which is 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 Limitations

In Section E.3.3) 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 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 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 NMEC of the Lower 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	TYPE
<i>Ceriodaphnia dubia</i>	Report	Once/5 years	24-Hr Composite
<i>Pimephales promelas</i>	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 apply as a result of the design flow of the facility, the type of waste discharged to the collection system, and the sewage sludge disposal or reuse practice utilized 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 User's (SIU) and no Categorical Industrial User's (CIU). The EPA has tentatively determined that the permittee will not be required to develop a full pretreatment program. However, general pretreatment provisions have been required.

### 4. OPERATION AND REPORTING

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

#### F. 303 (d) LIST

Discharge will be to receiving waters named Hatch Drain, an unclassified intermittent stream in Segment 20.6.4.98, thence the Rio Grande River in Rio Grande Basin. The Rio Grande River Segment 20.6.4.101 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 "2018 – 2020 State of New Mexico CWA §303(d)/§305(b) Integrated Report", requiring TMDLs for not supporting 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 established these TMDL-based limitations. The monitoring schedule for Segment 60.6.4.101 is set for 2021. 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 set forth in the proposed permit are developed from the State water quality standards and are protective of those designated uses. Furthermore, the policy sets forth the intent to protect the existing quality of those waters, whose quality exceeds their designated use. The permit requirements and the 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 previous permit for BOD<sub>5</sub>, TSS, and *E. coli* and pH.

#### I. ENDANGERED SPECIES CONSIDERATIONS

According to the most recent county listing available at US Fish and Wildlife Service (USFWS), <https://ecos.fws.gov/ecp0/reports/species-by-current-range-county?fips=35013>, five species in Dona Ana County are listed as endangered (E) and threatened (T). The Sneed pincushion cactus (E) (*Coryphantha sneedii* var. *sneedii*) is the only flowering plant species. Four of the species are avian and include the

Yellow-Billed Cuckoo (T) (*Coccyzus americanus*), Northern Aplomado Falcon (E) (*Falco femoralis septentrionalis*), Least tern (E) (*Sterna antillarum*) and Southwestern willow flycatcher (E) (*Empidonax traillii extimus*). Available information from the USFWS web page presents the occurrence of the listed threatened and endangered species in Dona Ana County as follows:

**Southwestern Willow flycatcher's** 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.

**Yellow-Billed Cuckoo** 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.

**Least tern** breeds widely along coastal beaches and major interior rivers of North America and winters broadly across marine coastlines of Central and South America. This is the smallest of an array of terns that nest on relatively open beaches and islands kept free of vegetation by natural scouring from tidal or river action. Although widespread and common in places, its favored nesting habitat is prized for human recreation, residential development, and alteration by water diversion, which interfere with successful nesting in many areas. Although adapted to shift breeding readily in response to sites that change within and among years, this tern appears to be most productive at colony sites that have endured for several years.

The Least tern feeds mostly on small, shallow-bodied fresh- and saltwater fish, but its diet is varied and includes small crustaceans and insects. Before egg-laying, courtship is punctuated by elaborate rituals of aerial display and distinctive calling by males, after which the male offers fish to the female. Least terns nest in a simple scrape in sand, shell, or other fragmentary material throughout their breeding range; gravel rooftops and a variety of deposited materials have been used with varied success. A typical clutch is 2 or 3 eggs; both adults incubate and care for the young. This dainty tern is pugnacious when defending nest and young. Its well-known zweep call of alarm identifies this tern long before it comes into view.

Once substantially reduced by collection to adorn women's hats, the Least tern portrays a roller coaster of changes in population. Diminished by recreational, industrial, and residential development in coastal breeding areas and significantly altered hydrology at interior breeding areas since the 1950s, it is specially classified for protection in much of its North American range. No other wide-ranging North American tern has that unfortunate distinction.

**Northern Aplomado Falcons** inhabit desert grasslands and savannas of Latin America, and formerly inhabited desert grasslands and coastal prairies of Texas, New Mexico, and southeastern Arizona. The falcon ranges through most of South America, from Tierra del Fuego to Ecuador and Venezuela, and from near sea level to above 13,000 feet in the Andes and is also found throughout Mesoamerica. Once considered common in its range within the U.S., populations declined rapidly after the 1930s. By the late 1950s, the northern Aplomado falcon was considered extirpated in the U.S. and was designated an endangered species in 1986. Falcon habitat consists of open terrain with scattered trees or shrubs. In Mexico, they inhabit palm and oak savannas, open tropical deciduous woodlands, seasonally flooded coastal savannas and marshlands, desert grasslands, and upland pine parklands.

In the U.S., they were found along yucca-covered sand ridges in coastal prairies, riparian woodlands in open grasslands, and in desert grasslands with scattered mesquite and yucca. The causes for decline of this subspecies have included widespread shrub encroachment resulting from control of range fires, intense overgrazing, and agricultural development in grassland habitats used by the falcon. By the 1870s, the railroad had connected the grasslands of southern New Mexico with the markets of the East, altering the economics of cattle production. Intensive cattle grazing caused massive erosion. Woody plants such as creosote bush and mesquite invaded the open grasslands. Pesticide exposure was likely a significant cause of the subspecies' extirpation from the U.S.; the initiation of widespread DDT use after World War II coincided with the falcon's disappearance. Collection of falcons and eggs may have also been detrimental to the subspecies in some localities.

**Sneed pincushion cactus** grows in clumps of as many as 100 or more cylindrical or spherical stems, 1-3 in long and 0.4-1.2 in in diameter. The central spines, 6-17 per areole, are white, tipped with pink or brown; radial spines, 35-90 per cluster, are white. Spines often grow nearly parallel to the stem. Sneed cacti flower after about three years, usually in April. The brownish pink to pale rose flowers, 0.5 in wide, open at midday. Fruits develop from August to November and, when ripe, barely project beyond the tips of the spines. Ripe fruits have a prune-like odor and attract rodents, which serve to disperse the seeds.

This cactus grows in cracks on cliffs or ledges in semi-desert grasslands of the Chihuahuan Desert. These limestone outcrops support only sparse vegetation, such as low shrubs, some rosette-forming perennials, cacti, and herbs. Habitat elevation is between 3,900-7,700 ft; annual rainfall varies from 8-16 in per year. Sneed pincushion cactus was once widespread in the Franklin, Guadalupe, and Organ mountains—between Las Cruces and Carlsbad, New Mexico and south into Hudspeth, Culberson, and El Paso counties, Texas. Its range may well have extended into Mexico. It was first collected from Anthony Gap, Texas.

Although not showy, some collectors prize the Sneed cactus for its unusual appearance, and it is systematically collected from the wild. Collectors visit privately owned sites on a regular basis. Population sites in the Franklin Mountains are accessible from the roads and, if located by collectors, could be depleted. Access to other localities is more difficult, affording a measure of natural protection.

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

1. There have been no changes in operation and treatment of discharge since prior issuance of the permit.
2. EPA has received no additional information since the previous permit issuance which would lead to 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 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.

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**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, in accordance with [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 prior to 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 April 3, 2020.

**II. 40 CFR CITATIONS**

Citations to 40 CFR are as of January 17, 2020  
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 August 11, 2017

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

Statewide Water Quality Management Plan, May 10, 2011

State of New Mexico CWA §303(d)/§305(b) Integrated List & Report, 2018-2020

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 April 15, 2020 providing DMR data for the village of Hatch.

Email to Sarah Holcomb, NMED on May 7, 2020 requesting the 4Q3 and ambient data. Received requested TMDL and some ambient WQ data (geomean of 2010 -2019 for station 42RGrand171.9 about 35 miles upstream of Hatch) on May 15, 2020 and 4Q3 value on June 4, 2020 from Jennifer Foote, NMED.

Email and telephone call with Priscyla Marquez (consultant to the village of Hatch) dated April 13, 2020, informing the applicant that its NPDES application received April 3, 2020, is administratively complete.