

NPDES PERMIT NO. NM0030813 FACT SHEET

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

APPLICANT

Oshara Village Water Reclamation Facility No. 2
Willow Back Rd
Santa Fe, NM 875028

ISSUING OFFICE

U.S. Environmental Protection Agency
Region 6
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DATE PREPARED

August 11, 2022

PERMIT ACTION

Proposed reissuance of the current NPDES permit issued August 7, 2017, with an effective date of September 1, 2017, and an expiration date of August 30, 2022.

RECEIVING WATER – BASIN

Unnamed Tributary – Arroyo Hondo - Rio Grande Basin – 13020201 HUC

DOCUMENT ABBREVIATIONS

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

4Q3	Lowest Four-day Average Flow Rate expected to occur once every three years
BAT	Best Available Technology Economically Achievable
BCT	Best Conventional Pollutant Control Technology
BPT	Best Practicable Control Technology Currently Available
BOD	Biochemical Oxygen Demand (five-day unless noted otherwise)
BPJ	Best Professional Judgment
CD	Critical Dilution
CFR	Code of Federal Regulations
cfs	Cubic Feet per Second
COD	Chemical Oxygen Demand
COE	United States Corp of Engineers
CWA	Clean Water Act
DMR	Discharge Monitoring Report
EA	Environmental Assessment
ELG	Effluent Limitation Guidelines
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
FCB	Fecal coliform bacteria
FWS	United States Fish and Wildlife Service
lbs	Pounds
mg/L	Milligrams per Liter (one part per million)
mL	Milliliter
MGD	Million Gallons per Day
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NMIP	New Mexico NPDES permit implementation procedures
NPDES	National Pollutant Discharge Elimination System
SQL	Minimum Quantification level
O&G	Oil and Grease
PLC	Programmable Logic Controller
POTW	Publicly Owned Treatment works
RP	Reasonable Potential
SBR	Sequencing Batch Reactor
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
TRE	Toxicity Reduction Evaluation
TRESL	Sub-Lethal Toxicity Reduction Evaluation
TSS	Total Suspended Solids
µg/L	Micrograms per Litter (one part per billion)
USGS	United States Geological Service
WET	Whole Effluent Toxicity
WQCC	New Mexico Water Quality Control Commission
WQMP	Water Quality Management Plan
WQS	New Mexico State Standards for Interstate and Intrastate Surface Waters

As used in this document, references to State shall mean State of New Mexico.

I. CHANGES FROM THE PREVIOUS PERMIT

Changes from the permit previously issued August 7, 2017, with an effective date of September 1, 2017, and an expiration date of August 30, 2022, are:

- * Added e-reporting requirements implementing the e-Reporting Rule.

II. APPLICANT LOCATION and ACTIVITY

As described in the application, the facility is located at No. 2 Willow Back Rd, Santa Fe, New Mexico 87508, in Santa Fe County.

Under the North American Industry Classification System (NAICS) code 2213. The applicant operates a privately owned sanitary wastewater treatment facility equivalent to a POTW. The facility has a design flow capacity of 0.03 MGD serving a residential population of 181 in the Oshara Village Subdivision.

Figure 1: Outfall 001 of the Oshara Village Wastewater Treatment Facility



The system is an advanced Sequencing Batch Reactor (SBR) treatment facility which has three major tanks: anoxic equalization tank, SBR tank, and effluent equalization chlorine contact tank. It consists of one lift station that brings raw influent to the water reclamation facility from approximately 50 homes in Oshara Village. At the headworks, influent flows through a 12-inch-wide bar screen with 1-inch openings to catch rags and debris. A 4" magnetic flow meter measures the influent flow at the plant. From the headworks, influent travels by gravity into the conditioning sludge storage tank, the first tank in the system. Here, the solids and grit are allowed to settle, much like a primary clarifier. This tank provides an area to concentrate the sludge.

Next, the influent travels to an anoxic equalization tank that is used to retain and equalize peak influent flows and provide denitrification. Within the anoxic basin, two pumps transfer the wastewater to the SBR tank. The SBR tank has an aspirating jet aerator that delivers oxygen to the system. Each cycle of treatment consists of fill/react, interact/react, settle and decant phases. The phases of treatment are controlled by a Programmable Logic Controller, or PLC, that the operator can adjust manually to provide optimum treatment in each phase.

Disinfection of the wastewater is achieved through a chlorine contact tank. A chemical metering pump with auto/manual control doses liquid sodium hypochlorite directly into the decant pipe during the decant phase. The effluent can then be dechlorinated with a dose of sodium bisulphate in the manhole prior to discharge; however, according to the operator, at this time the effluent is not being dechlorinated.

The effluent is metered with a 6" Parshall flume and an ultrasonic flow meter located in the manhole prior to discharge into the unnamed arroyo. There is a primary Palmer Bowles Flume as well. The effluent enters the receiving stream through a 10" closed pipe with a rip rap area below the pipe to minimize erosion and provide velocity dissipation. Sludge is removed from the sludge tank with a vacuum truck and taken to the Santa Fe Wastewater Treatment Plant for final disposal. Rags and debris from the bar screen are sent to the Ranchland Utility WWTP in Rancho Viejo for disposal.

The discharge is located on the Arroyo Hondo at Latitude 35° 36' 35.856" N and Longitude 105° 59' 57.048" W in Santa Fe County, New Mexico. A map of the facility is provided in Figure 1.

III. EFFLUENT CHARACTERISTICS

A quantitative description of the discharge(s) described in the EPA Permit Application Form 2A received June 1, 2022, are presented below:

Table 1: Effluent data

Parameter	Max	Avg
Flow, MGD	0.0213	0.0155
Temperature, winter	No Data	No Data
Temperature, summer	No Data	No Data
pH, minimum, s.u.	No Data	No Data
pH, maximum, s.u.	No Data	No Data
BOD (mg/l)	No Data	No Data
TSS (mg/l)	No Data	No Data
E. coli	No Data	No Data

A summary of the last 5-year pollutant data taken from NM0030813 DMRs shows that there were violations of BOD5, TSS, TRC, and E.coli effluent limits from the period of 9/1/17 to 7/31/22. In addition, there were adverse findings in an inspection conducted on February 21, 2019, by NMED. The State sent the Oshara Village a letter outlining the inspection findings on March 8, 2019. The inspection report can be found at <https://www.env.nm.gov/surface-water-quality/wp-content/uploads/sites/25/2017/07/NM0030813-20190221.pdf>.

IV. REGULATORY AUTHORITY/PERMIT ACTION

In November 1972, Congress passed the Federal Water Pollution Control Act establishing the NPDES permit program to control water pollution. These amendments established technology-based or end-of-pipe control mechanisms and an interim goal to achieve “water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water”; more commonly known as the “swimmable, fishable” goal.

Further amendments in 1977 of the CWA gave EPA the authority to implement pollution control programs such as setting wastewater standards for industry and established the basic structure for regulating pollutants discharges into the waters of the United States. In addition, it made it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit was obtained under its provisions. Regulations governing the EPA administered 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 expired August 30, 2022. The application was received on June 1, 2022. The existing permit is administratively continued until this permit is issued.

V. DRAFT PERMIT RATIONALE AND PROPOSED PERMIT CONDITIONS

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

Regulations contained in 40 CFR §122.44 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. Water quality-based effluent limitations are established in the proposed draft permit for *E. coli* bacteria, pH and TRC.

B. TECHNOLOGY-BASED EFFLUENT LIMITATIONS/CONDITIONS

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

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

BCT - Technology-based standard for the discharge from existing industrial point sources of conventional pollutants including BOD, TSS, *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.

The facility is a POTW like facility, treating sanitary wastewater. POTW's have technology based ELG's established at 40 CFR Part 133, Secondary Treatment Regulation. Pollutants with ELG's established in this Chapter are BOD, TSS and pH. BOD limits of 30 mg/l for the 30-day average and 45 mg/l for the 7-day average and 85% percent (minimum) removal are found at 40 CFR §133.102(a). TSS limits; also 30 mg/l for the 30-day average and 45 mg/l for the 7-day average, average and 85% percent (minimum) removal are found at 40 CFR §133.102(b). ELG's for pH are between 6.6-9 s.u. and are found at 40 CFR §133.102(c).

Regulations at 40 CFR §122.45(f)(1) require all pollutants limited in permits to have limits expressed in terms of mass such as pounds per day. When determining mass limits for POTW's, the plant's design flow is used to establish the mass load. Mass limits are determined by the following mathematical relationship:

Loading in lbs/day = pollutant concentration in mg/l * 8.345 lbs/gal * design flow in MGD

30-day average BOD5/TSS loading = 30 mg/l * 8.345 lbs/gal * 0.03 MGD = 7.51 lbs/day

7-day average BOD5/TSS loading = 45 mg/l * 8.345 lbs/gal * 0.03 = 11.27 lbs/day

Table 2: A summary of the technology-based limits for the facility is:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS			
	30-Day Avg.	7-Day Avg.	30-Day Avg.	7-Day Avg.
Parameter				
Flow	NA	NA	Measure MGD	Measure MGD
BOD ₅	7.51 lbs/Day	11.27 lbs/Day	30 mg/L	45 mg/L
BOD ₅ , % removal, minimum ¹	≥ 85%	NA	NA	NA
TSS	7.51lbs/Day	11.27 lbs/Day	30 mg/L	45 mg/L
TSS, % removal, minimum ²	≥ 85%	NA	NA	NA
pH	NA	NA	6.0 – 9.0 standard units	

¹ Percent removal is calculated using the following equation:

(Average monthly influent concentration – average monthly effluent concentration) ÷ average monthly influent concentration.

² Percent removal is calculated using the following equation:

(Average monthly influent concentration – average monthly effluent concentration) ÷ average monthly influent concentration.

C. WATER QUALITY BASED LIMITATIONS

1. General Comments

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

2. Implementation

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

3. State Water Quality Standards

The general and specific stream standards are provided in NMWQS (20.6.4.97 NMAC, approved by EPA on July 24, 2020). The discharge is to an unnamed ephemeral tributary (segment: an unnamed tributary from Arroyo Hondo upstream 0.4 miles to the village of Oshara water reclamation facility outfall) to Arroyo Hondo, thence Cienega Creek, thence the Santa Fe River of the Rio Grande-Santa Fe watershed. The designated uses of the receiving water(s) are secondary contact, livestock watering, wildlife habitat and limited aquatic life.

4. Permit Action - Water Quality-Based Limits

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

a. pH

Stream segment specific WQS for pH ranges from 6.6 to 9.0 s.u. as found in 20.6.4.900 D of the NMAC. The draft permit will propose a pH limit of 6.6 to 9.0 s.u., which is more restrictive than the technology-based limits presented earlier and those used in the previous permit.

b. Bacteria

The NMWQS criteria require an *E. coli* bacteria of 548 cfu/100 mL monthly geometric mean and single sample of 2507 cfu/100 mL to protect secondary contact. The previous permit established a limit of 206 cfu/100 mL monthly geometric mean and single sample of 940 cfu/100 mL which would be protective of a primary contact designated use (NMAC 20.6.4.98 – intermittent waters). Anti-backsliding provisions of the CWA, Section 402(o) and 40 CFR §122.44(l)(i)(A), state in part that interim or final effluent limitations must be as stringent as those in the previous permit. In addition, the facility has been meeting limits as prescribed by primary contact use. As a result, the draft permit will maintain *E. coli* limits of 206 cfu/100 mL monthly geometric mean and single sample of 940 cfu/100 mL.

c. Dissolved Oxygen (DO)

The receiving water has a 4Q3 of 0 MGD. Since the 4Q3 is 0 MGD, the release must meet end-of-pipe criteria. Therefore, it is not necessary to use a steady-state model to evaluate the biochemical oxygen demand of the discharge. Since the receiving water is categorized as ephemeral (20.6.4.97 NMAC) and the use specified is limited to aquatic life, DO limits will not be proposed in the draft permit.

d. Toxics

i. General Comments

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

All applicable facilities are required to fill out appropriate sections of the Form 2A and 2S, to apply for an NPDES permit or reissuance of an NPDES permit. The new form is applicable not only to POTWs, but also to facilities that are similar to POTWs, but which do not meet the regulatory definition of “publicly owned treatment works” (like private domestics, or similar facilities on Federal property).

The forms were designed and promulgated to “make it easier for permit applicants to provide the necessary information with their applications and minimize the need for additional follow-up requests from permitting authorities,” per the summary statement in the preamble to the Rule. These forms became effective December 1, 1999, after publication of the final rule on August 4, 1999, Volume 64, Number 149, pages 42433 through 42527 of the FRL.

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

ii. TRC

The WQS for TRC is 11 µg/L for both chronic aquatic life and wildlife habitat, and 19 µg/L for acute aquatic life. State implementation procedures allow for a mixing zone to be used for chronic standards, while acute standards must be met at end-of-pipe. The NM Implementation Plan strategy for TRC requires the most limiting of the critical dilution/chronic criteria concentration of 11 µg/L or end-of-use/acute criteria concentration of 19 µg/L be used in determining the limit. The receiving water has a 4Q3 of 0 MGD; therefore, the critical dilution is 100%. The 11 µg/L would be the most limiting. The previous permit established water quality-based effluent limitations for TRC of 11 µg/L. This requirement will be maintained in the draft permit.

iii. Critical Dilutions

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. 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. The SWQB of the NMED provided EPA with the 4Q3 for the Oshara Water Reclamation Facility.

For permitting purposes of certain parameters such as WET, the critical dilution of the effluent to the receiving stream is determined. The critical dilution, CD, is calculated as:

$CD = Q_e / (F \cdot Q_a + Q_e)$, where:

Q_e = facility flow (0.03 MGD)

Q_a = critical low flow of the receiving waters (0 MGD [= 0 cfs])

F = fraction of stream allowed for mixing (1.0)

$$CD = 0.03 \text{ MGD} / [(1.0)(0) + 0.03] = 1 = 100\%$$

A. 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). Changes to sample frequencies have been made based on the NMIP in order to ensure consistency with similar sized facilities.

Technology based pollutants; BOD and TSS are proposed to be monitored one time per month. Flow is proposed to be continuously monitored when discharging, identical to the existing permit. The pollutant pH is proposed to be monitored five times per week when discharging, consistent with the previous permit. Sample type for BOD, TSS and pH are grab which is consistent with the previous permit.

Water quality-based pollutant monitoring frequency for E. coli shall be one (1) time per month by grab, consisted with the previous permit. TRC shall also be sampled five times per week using instantaneous grab samples. Regulations at 40 CFR §136 define instantaneous grab as being analyzed within 15- minutes of collection. This frequency is consistent with the previous permit.

B. WHOLE EFFLUENT TOXICITY

In Section V.C.4.c.ii above; “Critical Conditions”, it was shown that the critical dilution, CD, for the facility is 100%. Based on the nature of the discharge; a privately owned sanitary wastewater treatment facility equivalent to a POTW, the design flow; less than 0.1 MGD, the nature of the receiving water; ephemeral, and the critical dilution; 100%, the NMIP directs the WET test to be a 48-hour acute test using *Daphnia pulex* at a once per permit term.

The proposed permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests based on a 0.75 dilution series. These additional effluent concentrations shall be 32%, 42%, 56%, 75%, and 100%. The low-flow effluent concentration (critical low-flow dilution) is defined as 100% effluent.

The previous permit established WET biomonitoring with $CD = 100\%$. DMR reports reveal one (1) passing test for the *Daphnia pulex* species during the last permit term. The EPA Reasonable Potential Analyzer (See Appendix A) indicates that RP exists. However, EPA is overruling this finding because Oshara Water Reclamation Facility has not failed a WET test during their last term and is conducting tests at the maximum critical dilution. EPA concludes that this effluent does not cause or contribute to an exceedance of the State water quality standards. Therefore, WET limits will not be established in the proposed permit.

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 - the discharge to Arroyo Hondo. Discharges shall be limited and monitored by the permittee as specified below:

WET Testing (48-hr Static Renewal) ³	30-Day Ave.	48-hr Minimum	Frequency	Type
Daphnia pulex	Report	Report	Once/Term ⁴	24-hr Composite

³ Monitoring and reporting requirements begin on the effective date of this permit. See Part II, Whole Effluent Toxicity Testing Requirements for additional WET monitoring and reporting conditions.

⁴ Once per permit-term. The test shall take place between November 1 and April 30 during the first year of the permit term. This permit does not establish requirements to automatically increase the WET testing frequency after a test failure, or to begin a TRE in the event of multiple failures. However, upon failure of any WET test, the permittee must report the results to EPA and NMED, Surface Water Quality Bureau, in writing, within 5 business days of notification of the test failure. EPA and NMED will review the test results and determine the appropriate action necessary, if any.

VI. FACILITY OPERATIONAL PRACTICES

A. SEWAGE SLUDGE

The sludge is removed from the sludge tank with a vacuum truck and taken to the Santa Fe WWTP for final disposal. The permittee shall use only those sewage sludge disposal or reuse practices that comply with the federal regulations established in 40 CFR Part 503 "Standards for the Use or Disposal of Sewage Sludge."

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

B. 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.

C. INDUSTRIAL WASTEWATER CONTRIBUTIONS

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

The facility is required to report to EPA, in terms of character and volume of pollutants any significant indirect dischargers into the privately owned treatment works subject to pretreatment standards under §307(b) of the CWA and 40 CFR Part 403.

The permittee shall require any indirect discharger to the treatment works to comply with the reporting requirements of Sections 204(b), 307, and 308 of the Act, including any requirements established under 40 CFR Part 403. The following pollutants may not be introduced into the treatment facility: Pollutants which create a fire or explosion hazard in the publicly owned treatment works (POTW), including, but not limited to, waste streams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR 261.21; Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, unless the works are specifically designed to accommodate such discharge; Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW, resulting in Interference;

Any pollutant, including oxygen demanding pollutants (e.g., BOD), released in a discharge at a flow rate and/or pollutant concentration which will cause Interference with the POTW; Heat in amounts which will inhibit biological activity in the POTW resulting in Interference but in no case heat in such quantities that the temperature at the POTW treatment plant exceeds 40 degrees Centigrade (104 degrees Fahrenheit) unless the Approval Authority, upon request of the POTW, approves alternate temperature limits; Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through; Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; and any trucked or hauled pollutants, except at discharge points designated by the POTW.

D. OPERATION AND REPORTING

The applicant is required to always operate the treatment facility at maximum efficiency. The U.S. EPA promulgated a final rule in 2015 to modernize CWA reporting for municipalities, industries, and other facilities by converting to an electronic data reporting system. This final rule requires regulated entities to electronically report certain data required by the NPDES permit program instead of filing paper reports. The rule also requires that certain data be entered into EPA's national data system by NPDES Authorized States, Tribes, Territories, and Federal regulators. Regulations at 40 CFR 127.26(f) require that all NPDES permits issued on and after Monday, 21 December 2015 contain permit conditions requiring electronic reporting consistent with EPA electronic reporting regulations. These reports must contain the minimum set of NPDES program data identified in Appendix A, 40 CFR part 127.

After December 21, 2016, the permittees are required to submit DMRs, including majors and minor POTWs/POTWS-like, and Sewage Sludge/Biosolids Annual Program Report.

By 21 December 2025 or an alternative deadline established under 40 CFR 127.24 (e) or (f), the following reports must be submitted electronically (unless EPA directs otherwise, or the permittee received a waiver from electronic reporting): Pretreatment Program Annual Reports, and Sewer Overflow/Bypass Event Reports and Anticipated Bypass Notices.

The permittee may seek a waiver from electronic reporting to continue submitting reports on paper. To obtain an electronic reporting waiver, a permittee must first submit an electronic reporting waiver request to EPA Region 6. The waiver request should contain the following details: Facility name; NPDES permit number; Facility address; Name, address and contact information for the owner, operator, or duly authorized facility representative; and Brief written statement regarding the basis for claiming a waiver.

The EPA will either approve or deny this electronic reporting waiver request within 120 days. Permanent waivers from electronic reporting are only available to facilities owned or operated by members of religious communities that choose not to use certain technologies. The duration of a temporary waiver may not exceed 5 years, which is the normal period for an NPDES permit term.

If a permittee wishes to continue coverage under a waiver from electronic reporting, they must re-apply for a new temporary waiver before the expiration of their existing waiver, even if this NPDES permit is administratively continued. Approved electronic reporting waivers are not transferrable, whether permanent or temporary, are not transferrable and the facility will need to re-apply for a waiver upon any change in facility ownership.

Permittees with an approved and effective electronic reporting waiver must use the forms or formats provided by EPA. The permittee must sign and certify all submissions in accordance with the requirements of Part III of this permit ("Signatory Requirements"). The applicant is required to operate the treatment facility at maximum efficiency at all times; to monitor the facility's discharge on a regular basis; and report the results quarterly. The monitoring results will be available to the public.

Sufficiently Sensitive Analytical Methods (SSM)

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

VII. 303(d) LIST

Arroyo Hondo has not been assessed by the state of New Mexico and is not listed as an impaired waterbody and no additional permit requirements are needed at this time. The standard reopener language in the permit allows additional permit conditions if warranted by future changes.

VIII. ANTIDegradation

The State of New Mexico has antidegradation requirements to protect existing uses through implementation of its WQS. The limitations and monitoring requirements set forth in the proposed draft are developed from the appropriate State WQS and are protective of those designated uses. Furthermore, the policy's set forth the intent to protect the existing quality of those waters, whose quality exceeds their designated use. The permit requirements and the limits are protective of the assimilative capacity of the receiving waters, which is protective of the designated uses of that water.

IX. ANTIBACKSLIDING

The proposed permit is consistent with the requirements to meet anti backsliding provisions of the CWA, Section 402(o) and 40 CFR §122.44(l)(i)(A), which state in part that interim or final effluent limitations must be as stringent as those in the previous permit, unless material and substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of a less stringent effluent limitation. The proposed permit maintains the mass loading requirements of the previous permit for BOD and TSS. The permit also maintains the previous permits' limits for *E. coli*.

X. ENDANGERED SPECIES CONSIDERATIONS

According to the most recent county listing available at the FWS website on August 26, 2022 (<https://ecos.fws.gov/ecp/report/species-listings-by-current-range-county?fips=35049>), four species are listed as endangered or threatened in Santa Fe County. The Jemez Mountains salamander (*Plethodon neomexicanus*), the New Mexico meadow jumping mouse (*Zapus hudsonius luteus*) and the Southwestern willow flycatcher (*Empidonax traillii extimus*) are listed as endangered. The Mexican spotted owl (*Strix occidentalis lucida*) and the Yellow-billed Cuckoo (*Coccyzus americanus*) are listed as threatened. Based on the following discussion, EPA has determined that the issuance of this permit will have no effect on these federally listed threatened or endangered species nor will it destroy or adversely modify designated critical habitat.

The **Jemez Mountains salamander** is a species of salamander in the family Plethodontidae endemic to New Mexico. Its natural habitat is temperate forests. It is threatened by habitat loss, is in rapid decline. Ninety percent of the Jemez Mountains salamander population lives within the boundaries of the Santa Fe National Forest. To protect the Jemez Mountains salamander, one must safeguard the Jemez Mountains—a striking landscape characterized by large tracts of undisturbed wilderness, rocky peaks, and mountain streams. Because volcanic activity formed the mountains, they also contain unique features such as hot springs, fumaroles, and the Valles Caldera itself, a ring of hills born from the remnants of several extinct volcanoes. The Jemez Mountains salamander is the most imperiled of the three salamanders that live in New Mexico and is very vulnerable to losing more of its already limited habitat. It is now found in only 38 percent of the sites it historically occupied. Logging, wildfires, and fire suppression activities—such as trench-digging and application of fire-suppressant chemicals—threaten the remaining salamanders. So, does roadbuilding: sometimes these tiny amphibians don't make it across roads alive during their nightly travels.

The **Southwestern willow flycatcher** requires dense riparian habitats (cottonwood/willow and tamarisk vegetation) with microclimatic conditions dictated by the local surroundings. Saturated soils, standing water, or nearby streams, pools, or cienegas are a component of nesting habitat that also influences the microclimate and density vegetation component. Habitat not suitable for nesting may be used for migration and foraging. Recurrent flooding and a natural hydrograph are important to withstand invading exotic species (tamarisk).

Typically found below 8,500 feet of elevation. Loss and degradation of dense riparian habitats are the primary habitat threat to the flycatcher. Historically, water developments that altered flows in the rivers and streams were the primary threat. Now, with riparian areas limited and re-growth difficult due to changes in flows, fire is a significant risk to remaining habitats. Human disturbances at nesting sites may result in nest abandonment.

The **New Mexico meadow jumping mouse** is endemic to New Mexico, Arizona, and a small area of southern Colorado. The jumping mouse is grayish brown on the back, yellowish-brown on the sides, and white underneath. The species is about 7.4 to 10 inches (187 to 255 mm) in total length, with elongated feet (1.2 inches (30.6 mm)) and an extremely long, bicolored tail (5.1 inches (130.6 mm)). The jumping mouse is a habitat specialist, 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 appears to only utilize two riparian community types: 1) persistent emergent herbaceous wetlands and 2) scrub-shrub wetlands. It especially uses microhabitats of patches or stringers of tall dense sedges on moist soil along the edge of permanent water.

The **Mexican spotted owl** inhabits canyon and forest habitats across a range that extends from southwestern Utah and Colorado, through Arizona, New Mexico, and west Texas, to the mountains of central Mexico. Section 7 of the Endangered Species Act requires Federal agencies to ensure that actions they authorize, fund, or carry out are not likely to destroy or adversely modify designated critical habitat. The Mexican spotted owl habitat corresponds with isolated mountain systems and canyons, associated with mixed-conifer, pine-oak, and riparian forests. Research of available material finds that the primary cause for the population decreases leading to threatened status for the Mexican Spotted Owl is destruction of habitat. No pollutants are identified which might affect species habitat or prey species and are not reviewed by the permitting process. Catastrophic fires and elimination of riparian habitat also were identified as threats to species habitat.

The NPDES program regulates the discharge of pollutants and does not regulate forest management practices and agricultural practices, which contribute to catastrophic fires and elimination of riparian habitat, and thus, species habitat. The issuance of this permit is found to have no impact on the habitat of this species.

The **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 shrublands 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 Cuckoo's nest 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. In the West, much of the Yellow-Billed Cuckoos riparian habitat has been converted to farmland and housing, leading to population declines and the possible extirpation of cuckoos from British Columbia, Washington, Oregon, and Nevada. Once common in the California Central Valley, coastal valleys, and riparian habitats east of the Sierra Nevada, habitat loss now constrains the California breeding population to small numbers of birds. As long-distance, nocturnal migrants, Yellow-Billed Cuckoos are also vulnerable to collisions with tall buildings, cell towers, radio antennas, wind turbines, and other structures. Yellow-billed Cuckoo populations declined by 1.6 percent per year between 1966 and 2010. Partners in Flight estimates the global breeding population at about 9 million, with 84 percent breeding in the U.S., 10 percent in Mexico, and none in Canada.

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. In the previous permit issued August 7, 2017, EPA made a "no effect" determination for federally listed species. EPA has received no additional information since then which would lead to a revision of that "no effect" determination. EPA determines that this reissuance will not change the environmental baseline established by the previous permit, and therefore, EPA concludes that reissuance of this permit will have "no effect" on the listed species and designated critical habitat.
2. No additions have been made to the critical habitat designation in the area of the discharge since prior issuance of the permit.
3. The draft permit is as stringent as the previous permit.

4. EPA determines that Items 1, thru 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.

XI. ENVIRONMENTAL JUSTICE

Executive Order 13985, Advancing Racial Equity and Supporting for Underserved Communities through the Federal Government signed on January 20, 2021, directs each federal agency to “make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities.” The EPA strives to enhance the ability of overburdened communities to participate fully and meaningfully in the permitting process for EPA-issued permits, including NPDES permits. “Overburdened” communities can include minority, low-income, tribal, and indigenous populations or communities that potentially experience disproportionate environmental harms and risks. As part of an agency-wide effort, the EPA Region 6 will consider prioritizing enhanced public involvement opportunities for EPA-issued permits that may involve activities with significant public health or environmental impacts on already overburdened communities. For more information, please visit <http://www.epa.gov/ejscreen>.

As part of the Permit development process, the EPA conducted a screening analysis to determine whether this Permit action could affect overburdened communities. The EPA used EJScreen 2.0 a nationally consistent geospatial tool that contains demographic and environmental data for the United States at the Census block group level. This tool is used to identify Permits for which enhanced outreach may be warranted.

The study area was chosen at the proposed 001 discharge, 5-miles buffer around Oshara Village. Two EJ Indexes score for the state percentile of the facility were above the 80 percentile (80%ile), for Hazardous Waste Proximity and Traffic Proximity. Furthermore, the ACS summary report indicates that 62% of the population in Oshara Village are of Hispanic descent and from the population that don’t speak English at home, 97% of them only speak Spanish. These results indicate that the percentage of Spanish speaking individuals is high and public participation may be affected, therefore EPA will translate some documents to Spanish to help and impulse public participation in this permitting action.

XII. 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.

XIII. PERMIT REOPENER

The permit may be reopened and modified during the life of the permit if State Water Quality Standards are promulgated or revised. In addition, if the State develops a TMDL, this permit may be reopened to establish effluent limitations for the parameter(s) to be consistent with that TMDL. Modification of the permit is subject to the provisions of 40 CFR §124.5.

XIV. VARIANCE REQUESTS

No variance requests have been received.

XV. CERTIFICATION

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

XVI. FINAL DETERMINATION

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

XVII. ADMINISTRATIVE RECORD

The following information was used to develop the proposed permit:

A. APPLICATION(s)

EPA Application Form 2A received June 1, 2022.

B. 40 CFR CITATIONS

Citations to 40 CFR are as of August 24, 2022, 2017, Sections 122, 124, 125, 133, 136

C. STATE OF NEW MEXICO REFERENCES

New Mexico Water Quality Standards: New Mexico State Standards for Interstate and Intrastate Surface Water, 20.6.4 NMAC, as approved by EPA on July 24, 2020.

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

Statewide Water Quality Management Plan approved by EPA on October 23, 2020.

2022 - 2024 State of New Mexico Clean Water Act §303(d)/§305(b) Integrated Report.

XVIII. ADMINISTRATIVE RECORD

The following information was used to develop the proposed permit:

A. APPLICATION(s)

EPA Application Form 2A received June 1, 2022.

B. 40 CFR CITATIONS

Citations to 40 CFR are as of August 24, 2022, 2017, Sections 122, 124, 125, 133, 136

C. MISCELLANEOUS

* Emailed from Loren Allen (Allen Environmental) on June 1, 2022, providing an NPDES renewal permit application. This email also states that the WWTP discharges into an arroyo (dry riverbed) and not to the WOTUS. The nearest river that it would enter if there were ever water in it is many miles away.

* Spoke with Mr. Allen over the phone on June 7, 2022, regarding WOTUS. Mr. Allen also sent an email on June 8, 2022, and attached a map of the drainage from the plant. The map supposed to show that there is no sitting water or lush vegetation on the West side of Richards Road, meaning that the flow does not even travel that far.

* Emailed Mr. Allen on June 8, 2022, that satellite image that he provided cannot be opened. he provided a new satellite image showing the WWTP in connection with the final discharge point (dry riverbed).

* On June 22, 2022, emailed Mr. Allen stating that “As of June 22, 2022, your NPDES renewal application is incomplete. The attached map with your email dated June 5 is unclear regarding the Waters of the United States (WOTUS) question. We need for the records the detailed maps and other supporting information showing that the discharge does not contribute to a jurisdictional WOTUS.

* Emailed Mr. Allen on June 28, 2022, stating that “The existing NPDES permit is set to expire on August 30, 2022. After this date, the wastewater treatment plant will not have a valid permit to discharge into the Waters of the United States.

* Worked with US EPA, R6 enforcement section on July 20, 2022, and conducted a stream connectivity analysis to determine if the WWTP does discharge to the WOTUS or not.

* Emailed Mr. Allen on July 28, 2022, informing that the stream connectivity analysis evaluated the discharge from the wastewater treatment facility operated by the Oshara Mutual Domestic Wastewater Association. The study showed the discharge flow from your treatment plant has a hydrologic surface connection to the Waters of the United States. As previously stated, the discharge from your treatment plant is to receiving waters named Arroyo Hondo, thence Cienega Creek, thence the Santa Fe River of the Rio Grande-Santa Fe watershed.

* Informed Mr. Allen on August 2, 2022, over the phone that the renewal application is complete.

* Emailed Susan A. Lucas Kamat, Program Manager, Point Source Regulation Section, NMED, on August 28, 2022, requesting a draft permit review. On September 13, 2022, received comments from Jason Martinez with NMED.