NPDES PERMIT NO. NM0031231
STATEMENT OF BASIS

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

APPLICANT

Pilot Company
Pilot Travel Center #305 WWTP
5508 Lonas Drive
Knoxville, TN 37909

ISSUING OFFICE

U.S. Environmental Protection Agency
Region 6
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PREPARED BY

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DATE PREPARED

May 20, 2025

PERMIT ACTION

First-time issuance of a National Pollutant Discharge Elimination System (NPDES) permit.
40 CFR CITATIONS: Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations, revised as of April 18, 2025.

RECEIVING WATER – BASIN

The facility discharges into South Fork Puerco River, an intermittent stream, thence to Puerco River, an intermittent portion to the Gallup WWTP, New Mexico Administrative Code (NMAC) section 20.6.4.98, thence to the Puerco River, perennial reach, and thence to the little Colorado river basin.

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
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
COE	United States Corp of Engineers
CWA	Clean Water Act
DMR	Discharge monitoring report
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
mg/l	Milligrams per liter
ug/l	Micrograms per liter
ML	Method Minimum Level
MG	Million gallons
MGD	Million gallons per day
NF	Nano Filtration
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
PFAS	per- and poly- fluoroalkyl substances
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.
UF	Ultra-Filtration
USGS	United States Geological Service
WLA	Wasteload allocation
WET	Whole effluent toxicity
WQCC	New Mexico Water Quality Control Commission
WQMP	Water Quality Management Plan
WWTP	Wastewater treatment plant

I. CHANGES FROM THE PREVIOUS PERMIT

N/A

II. APPLICANT LOCATION and ACTIVITY

As described in the application, the facility, Pilot Travel Center #305 Wastewater Treatment Plant is located at 1 Giant Crossing, Jamestown in McKinley County, New Mexico, 87347.

The Pilot Travel Center #305 is a transient, noncommunity water and wastewater service provider. The facility provides twenty-four-hour services for drivers traveling along Interstate 40 in Jamestown, New Mexico. The center includes 12 auto gasoline lanes, 16 truck diesel lanes, 3 restaurants including Denny's, Subway and Cinnabon, bathrooms, 16 showers for truck drivers, 450 car parking spaces, 23 overnight tractor trailer parking spaces, a shopping area and truck repair shop. These activities generate approximately 32,700 gallons per day of domestic wastewater which is conveyed off site through an 8" gravity sewer line to evaporation treatment ponds serving the Marathon Petroleum refinery. Marathon ponds currently use but will no longer be available to Flying J in the future, resulting in the need to switch to a surface water discharge authorized under an NPDES permit. The proposed wastewater treatment facility will be designed with a capacity of 50,000 gallons per day. The Travel Center is open 24 hours per day, 7 days per week. The system can serve a population of 10,000, assuming each patron uses or discharges 5 gallons per day of water and wastewater.

The plant plans to use continuous flow sequencing batch reactor (SBR) system technology which has the reputation of being cost-effective, energy efficient, simple to operation, and flexible for treating variable organic loads and hydraulic flows. When compared to other conventional activated sludge plants, the SBR accomplishes equalization, biological oxidation, nitrification, denitrification, and clarification in a single reactor basin. A typical cycle consists of several discrete periods; anoxic mixing and fill, aerated fill, aeration, settling and clarification, decanting and back to anoxic mixing and fill. Typically, the system is programmed for one (24 hours), two (12 hours) or three (8 hours) cycles throughout the day.

Under the SIC code 4952, the applicant plans to operate a WWTP, which has a design flow of 0.050 MGD, with a current annual average flow rate of 0.033 MGD, serving a total population of 10,000. The proposed point of discharge from the treatment plant is in the dry swale immediately ahead of the 7 corrugated pipe road culvert at coordinates. Effluent is disinfected with ultraviolet system before discharge via Outfall 001, which goes into the South Fork Puerco River, an intermittent stream, thence to Puerco River, an intermittent portion to the Gallup WWTP, thence to the Puerco River, perennial reach, and thence to the little Colorado river basin. The designated uses of all intermittent surface water (Section 20.6.4.98 NMAC) are livestock watering, wildlife habitat, marginal warmwater aquatic life and primary contact.

The proposed sanitary sewer collection system will be all 8" PVC gravity sewer. A new gravity sewer line will be connected to the existing gravity sewer line near the location of the existing pump station and will be extended west and then north to the proposed wastewater treatment site. The gravity sewer line will connect to a 6 mm fine screen at the influent end of the wastewater treatment plant (headworks) to minimize interference from waste solids and debris.

The treatment plant will be protected by tank covers to prevent damage from freezing and ice build-up and to retain the latent heat within the wastewater to support biological activity for removal of organics, ammonia, and nitrate.

With an average flow of 32,700 gallons per day and a design flow of 50,000 gallons per day, the waste sludge production will be between 1,370 and 2,090 gallons per day which is equivalent to between 48 and 73 pounds per day. The aerated sludge digester will be designed for a sludge age of 25 days. Periodically, aerobically digested waste activated sludge will be hauled to the City of Gallup wastewater treatment plant for final disposal.

A map of the facility with respect to its discharge route is attached.

III. EFFLUENT CHARACTERISTICS

The design values of the raw wastewater pollutant concentrations and the treatment plant effluent concentrations are shown in Table below as follows:

Table 1: Wastewater Treatment Plant Design Parameters

Pollutant	Influent	Effluent	% Removal
Biochemical Oxygen Demand (BOD_5)	300 mg/L	10.0 mg/L	96.7 %

Pollutant	Influent	Effluent	% Removal
Total Suspended Solids (TSS)	300 mg/L	10.0 mg/L	96.7 %
Total Phosphorus (TP)	10.0 mg/L	1.0 mg/l	90.0 %
Ammonia (NH_4)	20.0 mg/L	0.5 mg/L	97.5 %
Total Nitrogen (TN)	60.0 mg/L	3.0 mg/L	95.0%

The pollutants shown in Table 2 below were obtained from the laboratory results of Pilot Flying design Report.

Table 2: Outfall 001 Pollutants

Parameter	Max	Avg
	mg/l unless noted	
Flow, million gallons/day (MGD)	0.050	0.033
Nitrogen, Nitrite	ND	ND
Nitrogen, Nitrate	ND	ND
BOD	224	181.67
Ammonia as (N)	23	12.13
Nitrogen	110	58.3
Temperature, °F, Summer	86	55
Temperature, °F, Winter	46	18
TDS	1500	2,653.33
Phosphorus	13	8.97
pH	8.42	7.5
Bicarbonate	418.8	218.4
Carbonate	19.2	7.07
Total Alkalinity	438	297.73
TKN	110	58.33
TSS	500	300

This facility is considered a private domestic but could have industrial wastewater contributions because there may be effluent from the Boss Truck Stop truck service repair shop and the truck wash facility. Additional pollutant parameters obtained in an email dated August 23, 2023, September 7, 2023, and October 06, 2023, October 12, 2023, November 1, 2023, November 7, 2023, and November 22, 2023, are as shown below:

Parameter	Max	Avg
	mg/l unless noted	
Dissolved Oxygen	1	1
Total Residual Chlorine	0.933	0.933
Aluminum, D	0.14	0.0941

Parameter	Max	Avg
	mg/l unless noted	
Aluminum, T	0.63	0.588
Sulfate (as SO4)	688	688
Barium, D	0.021	0.0152
Barium, T	0.0214	0.0214
Boron, D	0.14	0.14
Boron, T	0.1	0.1
Cobalt, T	ND	ND
Iron, T	0.385	0.385
Magnesium, T	46.7	46.7
Acrolein, T	ND	ND
Benzene, T	ND	ND
Antimony, T	ND	ND
Arsenic, T	0.005	0.005
Beryllium, T	0.001	0.001
Cadmium, T	0.001	0.001
Cadmium, Dissolved	0.001	0.001
Chromium, T	ND	ND
Chromium (III)	ND	ND
Copper, T	0.0443	0.0443
Copper, dissolved	0.0117	0.0117
Hardness as CaCO3	790	790
Lead, T	0.003	0.003
Mercury, T, ug/L	0.100	0.100
Nickel, T	0.005	0.005
Nickel, Dissolved	0.005	0.005
Selenium, T	ND	ND
Silver, T	0.0025	0.0025
Silver, Dissolved	0.0025	0.0025
Thallium, T	0.0105	0.0105
Zinc, T	0.225	0.225
Vanadium, T	ND	ND
Zinc, Dissolved	ND	ND
Cyanide, T	ND	ND
Manganese, Dissolved	0.067	0.0422
Manganese, T	0.00064	0.0064
Molybdenum, T	ND	ND
Uranium, Dissolved	0.00075	0.000693
Gross Alpha, T pCi/L	13.8	12.38
Gross Beta, T pCi/L	25,6	23.35
Radium 226, T pCi/L	0.276	0.274
Radium 228, T PCi/L	-0.852	-0.568
Bromoform	ND	ND
Bromodichloromethane	0.00125	0.00125

Parameter	Max	Avg
	mg/l unless noted	
Carbon Tetrachloride	ND	ND
Chlorobenzene	ND	ND
Chorodibromomethane	0.00161	0.00161
Chloroethane	ND	ND
2 Chloroethylvinyl ether	ND	ND
Chloroform	ND	ND
Dichlorobromomethane	ND	ND
1,1-dichloroethane	ND	ND
1,2-dichloroethane	ND	ND
1,1-dichloroethylene	ND	ND
1,2-dichloropropane	ND	ND
1,3-dichloropropylene	ND	ND
Ethylbenzene	ND	ND
Methyl bromide	ND	ND
Methyl chloride	ND	ND
Methylene chloride	ND	ND
1,1,2,2-tetrachloroethane	ND	ND
Tetrachloroethylene	ND	ND
Toluene	ND	ND
1,2-trans-dichloroethylene	ND	ND
1,1,1-trichloroethane	ND	ND
1,1,2-trichloroethane	ND	ND
Trichloroethylene	ND	ND
Vinyl chloride	ND	ND
2-chlorophenol	ND	ND
2,4-dimethylphenol	ND	ND
4,6-dinitro-o-cresol	ND	ND
2,4-dinitrophenol	ND	ND
2-nitrophenol	ND	ND
4-nitrophenol	ND	ND
p-chloro-m-cresol	ND	ND
3+4-Methylphenol	0.113	0.113
Pentachlorophenol	ND	ND
Phenol	0.0262	0.02002
2,4,6-trichlorophenol	ND	ND
Acenaphthene	ND	ND
Acenaphthylene	ND	ND
Anthracene	ND	ND
Benzidine	ND	ND
Benzo (a) anthracene	10	10
Benzo (a) pyrene	10	10
3,4-benzofluoranthene	ND	ND
Benzo (ghi) perylene	10	10

Parameter	Max	Avg
	mg/l unless noted	
Benzo (k) fluoranthene	10	10
Bis (2-chloroethoxy) methane	0.100	0.100
Bis (2-chloroethyl) ether	0.100	0.100
Bis (2-chloroisopropyl) ether	0.03	0.03
Bis (2-ethylhexyl) phthalate	0.03	0.03
4-bromophenyl phenyl ether	ND	ND
Butyl benzyl phthalate	ND	ND
2-chloronaphthalene	10	10
4-chlorophenyl phenyl ether	0.100	0.100
Chrysene	10	10
Dibenzo (a,h) anthracene	10	10
1,2-dichlorobenzene	ND	ND
1,3-dichlorobenzene	ND	ND
1,4-dichlorobenzene	0.0112	0.0112
3,3-dichlorobenzidine	0.100	0.100
Diethyl phthalate	0.0443	0.0443
Dimethyl phthalate	ND	ND
Di-n-butyl phthalate	ND	ND
2,4-dinitrotoluene	0.05	0.05
2,6-dinitrotoluene	0.05	0.05
Di-n-octyl phthalate	0.03	0.03
1,2-diphenylhydrazine	ND	ND
Fluoranthene	ND	ND
Fluorene	ND	ND
Hexachlorobenzene	ND	ND
Hexachlorobutadiene	ND	ND
Hexachlorocyclopentadiene	ND	ND
Hexachloroethane	ND	ND
Indeno (1,2,3-cd) pyrene	ND	ND
Isophorone	ND	ND
Naphthalene	ND	ND
Nitrobenzene	ND	ND
N-nitrosodimethylamine	ND	ND
N-nitrosodi-n-propylamine	ND	ND
N-nitrosodiphenylamine	ND	ND
Phenanthrene	0.01	0.01
Pyrene	10	10
1,2,4-trichlorobenzene	ND	ND
Aldrin	0.0000215	0.0000215
α-BHC	ND	ND
β-BHC	ND	ND
γ-BHC	ND	ND
δ-BHC	ND	ND

Parameter	Max	Avg
	mg/l unless noted	
Chlordane	0.0025	0.000633
4,4'-DDT	0.000025	0.000021
4,4'-DDE	0.000025	0.000021
4,4'-DDD	0.000025	0.000021
Dieldrin	0.00004	0.00001
α-endosulfan	0.000025	0.00001
β-endosulfan	0.000025	0.00001
Endosulfan sulfate	0.00002	0.00001
Endrin	0.000025	0.00001
Endrin aldehyde, ug/L	0.000025	0.000025
Endrin Ketone, Ug/L	0.0866	0.0866
Heptachlor	0.000025	0.000021
Heptachlor epoxide	0.000025	0.000021
PCB-1242	ND	ND
PCB-1254	ND	ND
PCB-1221	ND	ND
PCB-1232	ND	ND
PCB-1248	ND	ND
PCB-1260	ND	ND
PCB-1016	ND	ND
Toxaphene	0.002	0.001189
Diazinon	ND	ND

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 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 issued for a 5-year term following regulations promulgated at 40 CFR §122.46(a). This is a new permit issuance. An NPDES Application for a Permit to Discharge (2A) was received on January 5, 2023. The application was deemed administratively

incomplete on January 17, 2023. Additional permit application was received on February 17, 2023, and March 21, 2023, and is deemed administratively complete on March 22, 2023. Additional toxic parameter data was also obtained August 23,2023, September 7, 2023, October 6, 2023, October 12, 2023, November 1, 2023, November 7, 2023, November 22, 2023, and May 14, 2025.

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 require that 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, BOD_5, and percent removal. Water quality-based effluent limitations are established in the proposed draft permit for pH, TRC, *E. coli* bacteria, TDS, and PFAS.

B. TECHNOLOGY-BASED EFFLUENT LIMITATIONS/CONDITIONS

1. General Comments

Regulations promulgated at 40 CFR §122.44 (a) require technology-based effluent limitations to be placed in NPDES permits based on ELGs at 40 CFR 400 series 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_5, TSS, fecal coliform, 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 that has technology-based limits established at 40 CFR Part 133.102, Secondary Treatment Regulation. Pollutants with limits established in this Chapter are BOD_5, TSS and pH. BOD_5 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, and 85% percent (minimum) removal are found at 40 CFR §133.102(b). The limit for pH is 6-9 s.u. based on 40 CFR §133.102(c). Mass limits are also established since the discharge is continuous. This is consistent with EPA permits for similar facilities and is also consistent with 40 CFR 122.45(f).

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 POTWs or similar, the plant's design flow is used to establish the mass load. The facility's design flow is 0.050 MGD.

For loading calculations, mass limits are determined by the following:
Loading in lbs/day = pollutant concentration in mg/l * 8.345 (lbs)(l)/(mg)(MG) * design flow in MGD
30-day average BOD/TSS loading = 30 mg/l * 8.345 (lbs)(l)/(mg)(MG) * 0.050 = 12.52 lbs/day
7-day average BOD/TSS loading = 45 mg/l * 8.345 (lbs)(l)/(mg)(MG) * 0.050 MGD = 18.78 lbs/day

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

Parameter	30-day Avg, lbs/day, unless noted	7-day Max, lbs/day, unless noted	30-day Avg, mg/l, unless noted	7-day Max, mg/l, unless noted
Effluent BOD_5	12.52	18.78	30	45
Influent BOD_5	Report	---	Monitor Only	---
BOD_5, % removal[1]	≥ 85	---	---	---
Effluent TSS	12.52	18.78	30	45
Influent TSS	Report	---	Monitor Only	---
TSS, % removal[1]	≥ 85	---	---	---
pH	NA	NA	6.0 to 9.0 s.u.	6.0 to 9.0 s.u.

[1]% removal is calculated using the following equation: [(average monthly influent concentration – average monthly effluent concentration) ÷ average monthly influent concentration] * 100.

3. Pretreatment Regulation

The facility is not subject to the full pretreatment program pursuant to 40 CFR 403.8.

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. WQS 20.6.4.11.E(1) NMAC states “Mixing zones are not allowed for discharges to lakes, reservoirs, or playas; these effluents shall meet all applicable criteria set under Subsection F of 20.6.4.13 NMAC, 20.6.4.97 through 20.6.4.899 NMAC and 20.6.4.900 NMAC at the point of discharge.”

40 CFR §122.4(d) requires NPDES permits also be protective of a downstream state or tribe’s water quality standards, due to the nature of the discharge being from a wastewater treatment plant, with design capacity of 0.05 MGD. The intermittent Puerco River touches the edge of Navajo Tribal Lands near Church Rock, which is 11 miles downstream of the discharge location. The water quality standards of the Navajo Nation will not be affected.

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 "New Mexico State Standards for Interstate and Intrastate Surface Waters," (20.6.4 NMAC, effective as of April 10, 2025, for purposes of State implementation and approved by EPA for Clean Water Act Purposes). For reference, see: https://www.env.nm.gov/surface-water-quality/wqs-amendments/. General criteria are applicable as specified in 20.6.4.13 NMAC. The discharge from the facility is to South Fork Puerco River (Puerco River to headwaters), an intermittent stream, thence to Puerco River, an intermittent portion to the Gallup WWTP, thence to the Puerco River, perennial reach, and thence to the little Colorado river basin

The designated uses of all non-perennial surface waters of the state Section 20.6.4.98 NMAC, except those ephemeral waters included under Section 20.6.4.97 NMAC or classified in Sections 20.6.4.101-899 NMAC are livestock watering, wildlife habitat, marginal warmwater aquatic life and primary contact.

4. Navajo Nation Surface Water Quality Standards (NNSWQS)

The discharge into the intermittent South Fork Puerco River, subject to Section 20.6.4.98 NMAC, thence to the Puerco River segment 20.6.4.98 NMAC, thence to the Puerco River Segment 20.6.4.99 NMAC, thence to the Little Colorado River Basin.

The intermittent Puerco River touches the edge of Navajo Nation (NN) Lands near Church Rock, which is 11 miles downstream of the discharge location. The effluent from the proposed

wastewater treatment plant will have either evaporated or percolated into the ground before reaching Navajo Tribal Lands. From Church Rock, the Puerco River proceeds along the edge of the tribal lands ultimately passing through a portion of the tribal lands before reaching Arizona. Based on the permit writer's judgment, the discharge from the facility will not have a significant impact on Navajo Nation waters because the permit limitations are protective of both NMWQS and NNSWQS and the distance to NN waters.

The general and specific stream standards for the Navajo Nation are provided in Surface Water Quality Standards passed by Navajo Nation Resources Committee, effective March 17, 2021. The Navajo Nation Surface Water Quality Standards (NNSWQS) have designated uses for the Puerco River (Perennial and Intermittent reaches) as adopted pursuant to §104(b) and §201 of the Navajo Nation Clean Water Act. The designated uses for the Puerco River within Navajo Nation land are Primary Human Contact (PrHC), Secondary Human Contact (ScHC), Agricultural Water Supply (AgWS), fish consumption (FC), Aquatic & Wildlife habitat (A&W), and livestock watering (LW). EPA notes that the limitations and conditions developed below, appropriate sections of the NNSWQS will be identified.

5. Permit Action - Water Quality-Based Limit

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

The limiting pH numeric criteria in 20.6.4.900 NMAC for marginal warmwater aquatic life designated uses are pH within the range of 6.6 to 9.0 standard units (s.u.). The site-specific pH standard of 6.6 – 9.0 is established at the end-of-pipe. The NMIP requires site-specific pH standard to be applied at end-of-pipe for all dischargers. This limitation, more stringent than the secondary treatment requirement (6.0 to 9.0 s.u.), is established in the permit. The limitation and monitoring requirements for pH of 6.6 to 9.0 are proposed in the draft permit.

b. TRC

The facility uses UV unit to disinfect the effluent. TRC of 11 µg/l (for wildlife habitat; 20.6.4.900.J NMAC) is established in case chlorine-based product is contributed to the treatment process or disinfection of treatment equipment.

c. Bacteria

For primary contact, criterion for *E. coli* bacteria is at 126 cfu (or MPN)/100 ml monthly geometric mean and 410 cfu (or MPN)/100 ml daily maximum pursuant to 20.6.4.900.D NMAC.

d. TDS- Colorado River Salinity Control Program

20.6.4.54 NMAC states, 'For the tributaries of the Colorado river system, the state of New Mexico will cooperate with the Colorado River Basin states and the federal government to support and implement the salinity policy and program outlined in the most current "review,

water quality standards for salinity, Colorado river system" or equivalent report by the Colorado river salinity control forum.' The most updated version found is 2023 Review.
In 1973, the Colorado River Basin States came together in 1973 and organized the Colorado River Basin Salinity Control Forum (Forum). In 1974, in coordination with the Department of the Interior and the U.S. State Department, the Forum worked with Congress in the passage of the Colorado River Basin Salinity Control Act (Act). Since implementation of the Program, measures have been put in place which now reduce the annual salt load of the Colorado River by more than 1.3 million tons. The salinity concentration at Imperial Dam has been reduced by about 100 mg/L. However, even with these efforts, the quantified damages to U.S. users are still approximately $348 million per year. Damages are projected to increase to $447 million per year by 2040 if the Program does not continue to be aggressively implemented (Source: *Colorado River Basin Salinity Control Forum - coloradoriversalinity.org*).

Monitoring requirements for the Total Dissolved Solids (TDS) are established in the proposed permit because the discharge may enter the Colorado River Basin, in accordance with the current Salinity policy and program outlined in the most current "review, water quality standards for salinity, Colorado river system." The NM WQS citation for adoption of this policy is at 20.6.4.54 NMAC. The objective of the policy is to achieve "no salt return" whenever practicable for industrial discharges and an incremental increase in salinity over the supply water for municipal dischargers.

NPDES permits are reviewed under two different criteria under Forum policy: these being municipal and industrial. For a permittee to comply under the municipal criteria, the increase in concentration between inflow and outflow cannot be greater than 400 mg/L. Forum industrial criteria requires that no industrial user discharges more than 1.00 ton/day.

Under the Colorado Salinity Control Program (CSP), the facility is a new facility where construction commenced on or after 18, 1975. The Pilot Flying J is a new industrial facility. "A new industrial source with operations and discharging facilities at multiple locations under common or affiliated ownership or management" shall be defined for purposes of NPDES permitting, as an industrial source that commenced construction on a pilot, development, or production scale on or after October 30, 2002.

According to the policy, very small-scale pilot activities, involving 5 or fewer outfalls, that are sited in areas not previously developed or placed into production by a new industrial source operations and discharges at multiple locations under common or affiliated ownership or management, may be permitted in cases where the discharge of salt from each outfall is less than one ton per day or 366 tons per year. However, no later than the date of the first permit renewal after the pilot activities have become part of a larger industrial development or production scale effort, all discharging facilities shall be addressed for permitting purposes as a single industrial source with operations and discharges at multiple locations under common or affiliated ownership or management.

The applicable test for the Pilot Flying J plant is that the existing tonnage of salt is less than one ton (2000 lbs) per day or 366 tons per year. TDS data obtained from the permit application

reveals that the discharge does not have a reasonable potential to exceed the 1 ton/day in salinity. The monthly average Total Dissolved Solids reported in the permit application is 2,653.33 mg/l.
TDS = 2,653.33 mg/l * 8.34 lbs/gal * 0.050 MGD * 1 ton / 2000 lbs = 0.5532 tons/day
Since the TDS concentration is more than 500 mg/L, the discharge does not qualify for a "freshwater waiver." The reported TDS is less than 1 ton/day, monitoring shall be performed once every three months, using grab sample.

NNSWQS have the same CRSCP as these described above and no additional limitations are required for the protection of CRSCP beneficial uses.

e. DO

The low flow or 4Q3 of the receiving stream which was provided by NMED is zero (0). No modeling to evaluate the biochemical oxygen demand of the discharge was conducted. Since 4Q3 is zero, the discharge must meet end-of-pipe criteria.

f. Per- and Poly- Fluoroalkyl substances (PFAS)

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. 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 for toxic substances at 20.6.4.13(F)(1) NMAC states:

> *"Except as provided in 20.6.4.16 NMAC, surface waters of the state shall be free of toxic pollutants from other than natural causes in amounts, duration, concentrations, or combinations that affect the propagation of fish or that are toxic to humans, livestock or other animals, fish or other aquatic organisms, wildlife using aquatic environments for habitation or aquatic organisms for food, or that will or can reasonably be expected to bioaccumulate in tissues of fish, shellfish and other aquatic organisms to levels that will impair the health of aquatic organisms or wildlife or result in unacceptable tastes, odors or health risks to human consumers of aquatic organisms."*

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 once per permit term influent, effluent, and sludge sampling for PFAS the first full calendar year after the effective date of the authorization to discharge under 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 Draft Method 1633.

In October 2021, EPA published a PFAS Strategic Roadmap that described EPA's commitments to action for 2021 through 2024. This roadmap includes a commitment to issue new guidance recommending PFAS monitoring in both 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 in the draft permit using draft analytical method 1633. The draft Adsorbable Organic Fluorine CWA wastewater method 1621can be used in conjunction with draft method 1633, if appropriate.

Draft Method 1633 is currently a single lab-validated method. EPA anticipates the method will be multi-lab validated in 2023. If the PFAS monitoring requirement begins before Draft Method 1633 is multi-lab validated, the current single-lab validated Draft Method 1633 shall be used at that time, and then the multi-lab validated Draft Method 1633 shall be used once it is available.

g. Toxics

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, 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.

This facility is considered a private domestic but could have industrial wastewater contributions because there may be effluent from the Boss Truck Stop truck service repair shop and the truck wash facility. In accordance with NMIP, Section IV.D.5, which states that, "The permitting authority may request additional information as may reasonably be required to assess the discharges of the facility and to determine whether to issue an NPDES permit. The additional information may include quantitative data and bioassays to assess the relative toxicity of discharges to aquatic life and requirements to determine the cause of the toxicity. Even if a discharger is not required to sample a particular parameter, a sample that exists for that parameter may be considered by the permitting authority. If reasonable potential is established a limit for that parameter will be developed."

Reasonable potential analysis was performed for the toxic parameters submitted by the permittee on October 12, 2023, & May 14, 2025, and the results of the analysis are as explained below.

Total residual chlorine concentration of 933 ug/L showed RP to violate NMWQS, with chronic aquatic criteria limit of 11ug/L as the daily maximum.

The following pollutants were reported as non-detect in the application, but its respective method detection values were greater than its respective EPA's MQL. As a result, the geometric mean values of one-half of the detection values were used in the reasonable potential calculations. These pollutants include Aldrin, chlordane, Dieldrin, Heptachlor, Heptachlor epoxide, PCBs, and Toxaphene.

The detection limit for Aldrin is greater that the EPA's MQL of 0.01 µg/L, as a result half of the detection limit was used for RP. Half of the detection limit results and the sample dates for Aldrin are as follows: 0.025 ug/L taken on 10/6/2023; 0.020 µg/L taken on 06/12/23; 0.020 µg/L taken on 05/18/23, and 0.020 µg/L taken on 05/31/23. The geometric mean for Aldrin of 0.021 ug/L used in RP. However, Aldrin did not show a violation of the acute aquatic criteria.

Similarly, the detection limit for Alpha-BHC is 0.05 µg/L and the MQL is 0.05 µg/L. The sample tested on October 06, 2023, is reported as non-detect. A value of zero was used in the RP.

The detection limit for Chlordane for chlordane for sample taken on 10/06/23 is 5 µg/L. The MQL for Chlordane is 0.2 µg/L. Since the detection limit is greater than the MQL, half of the respective detection limits were used for RP. Half of the sample results for Chlordane include 2.5 µg/L taken on 10/06/23; 0.4 µg/L respectively taken on 06/12/23; 05/31/23; and 05/18/23. The geometric mean of Chlordane is 0.633 µg/L and showed reasonable potential to violate NMWQS for chronic aquatic life standards. However, the facility submitted additional sample for Chlordane (sample was taken on 5/11/2025), with a method detection limit less than EPA's MQL. The sample result was non-detect. As a result, chlordane did not show reasonable potential to violate NMWQS.

In addition, the MQL for Dieldrin, Heptachlor, Heptachlor epoxide are respectively 0.02 µg/L, 0.01 µg/L, and 0.01 µg/L. The detection limits for the respective samples of Dieldrin, Heptachlor, and Heptachlor epoxide taken on 10/06/23 is respectively 0.05 µg/L; detection limit for the sample taken on 6/12/23, 05/31/23, and 05/18/23, are respectively 0.04 µg/L.

Since the detection limits for Dieldrin for all the samples taken on 10/06/23, 06/12/23, 05/31/23, and 05/18/23, are all greater than the MQL of 0.02 µg/L, geometric mean of half of the detection limits (0.025 µg/L + 0.02 µg/L + 0.02 µg/L +0.2 µg/L = 0.021 µg/L) was used for RP. Dieldrin did not show RP to violate NMWQS for acute or chronic criteria.

Similarly, the detection limits for Heptachlor and Heptachlor epoxide for all the samples taken on 10/06/23, 06/12/23, 05/31/23, and 05/18/23, are all greater than the MQL of 0.01 µg/L, geometric mean of half of the detection limits (0.025 µg/L + 0.02 µg/L + 0.02 µg/L +0.2 µg/L = 0.021 µg/L) was used for RP. Heptachlor and Heptachlor epoxide showed RP to violate NMWQS for chronic criteria. However, additional sample results taken on May 11, 2025, for Heptachlor and Heptachlor epoxide, with method detection limits less than EPA's MQL, were non-detect. As a result, Heptachlor and Heptachlor epoxide did not show reasonable potential to violate NMWQS.

The MQL for PCBs is 0.2 µg/L. Result of the samples for PCBs taken on 06/18/23 was non-detect at a detection limit of 0.2 µg/L. However, the results taken on 06/12/23, 05/31/23, 05/18/23 are respectively of 0.4 µg/L, are all greater than the MQL of 0.2 µg/L. Since one of the PCBs values was reported as non-detect, a value of zero was used as the RP. As a result, PCBs did not show RP to violate NMWQS.

The MQL for Toxaphene is 0.3 µg/L. Detection limit of the samples for Toxaphene taken on 10/06/23 has a value of 0.05 µg/L; detection limit of the samples taken on 06/12/23, 05/31/23, and 05/18/23, are respectively 4 µg/L. Geometric mean of half of the detection limits (0.025 µg/L + 2 µg/L + 2 µg/L + 2 µg/L = 1.189 µg/L) was used for RP. As a result, Toxaphene showed RP to violate the NMWQS acute and chronic criteria. However, the facility submitted additional sample for Toxaphene (sample was taken on 5/11/2025), with a method detection limit less than EPA's MQL. The sample result was non-detect. As a result, Toxaphene did not show reasonable potential to violate NMWQS.

The facility shall have a 3-year compliance schedule for TDS. The permit will require a compliance report schedule.

Some of the sample results for these pollutants were annotated with J3 (i.e., the associated batch Quality Control was outside the established quality control range for precision) and with J6 (i.e., the sample matrix interfered with the ability to make any accurate determination; spike value is low).
The toxic pollutants that exhibited RP all have detection level above EPA's MQL. On May 14, 2025, the permittee submitted additional sample results for Chlordane, Heptachlor, Heptachlor epoxide, and Toxaphene, tested below EPA's MQL. Based on the sample results, these pollutants did not show RP to violate NMWQS.

6. 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). Sample frequency is based on the March 12, 2012, NMIP and similar permits.

Flow shall be monitored daily by instantaneous grab. The pollutant TRC shall be monitored 5 times per week when discharging by instantaneous grab which according to Part 136 is defined as analysis within 15 minutes of collection. pH shall be monitored 5 times per week by grab sample when discharging. TDS shall be monitored once per quarter by grab sample. Effluent BOD_5/TSS, influent BOD_5/TSS, minimum percent removal for BOD_5/TSS, and *E. Coli* bacteria shall be monitored monthly by grab sample.

D. WHOLE EFFLUENT TOXICITY

Procedures for implementing WET terms and conditions in NPDES permits are contained in the NMIP. WQS 20.6.4.11.E(1) NMAC states "Mixing zones are not allowed for discharges to lakes, reservoirs, or playas; these effluents shall meet all applicable criteria set under Subsection F of 20.6.4.13 NMAC, 20.6.4.97 through 20.6.4.899 NMAC and 20.6.4.900 NMAC at the point of discharge." Proposed discharges are to the South Fork Puerco River, an intermittent stream, thence the Puerco River, an intermittent portion to the Gallup WWTP, thence to the Puerco River, perennial reach, and thence to the little Colorado river basin.

Procedures for implementing WET terms and conditions in NPDES permits are contained in the NMIP. Table 11 (page 43) of the NMIP outlines the type of WET testing for different types of discharges. The NMIP directs the WET testing requirement for this permit to be a 7-day chronic test using *Ceriodaphnia dubia* and *Pimephales promelas,* once per 5-year to be completed within the first twelve months from the permit effective date. Critical dilution, CD, for the facility is 100%. The low flow or 4Q3 of the receiving stream is zero (0). The CD is 100%, with dilution series of 32%, 42%, 56%, 75%, & 100%.

The permittee shall limit and monitor discharge(s) as specified below:

OUTFALL 001

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 treated wastewater from Outfall 001 to South Fork Puerco River, an intermittent stream, thence to the Puerco River, an intermittent portion to the Gallup WWTP, thence to the Puerco River, perennial reach, and thence to the little Colorado river basin. Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE MONITORING	MONITORING REQUIREMENTS	
WHOLE EFFLUENT TOXICITY (7day Chronic Static Renewal) (*1)	Value	MEASUREMENT FREQUENCY	SAMPLE TYPE
Ceriodaphnia dubia	Report	Once/5 Year	24-Hr Composite
Pimephales promelas	Report	Once/5 Year	24-Hr Composite

*1 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. WET testing shall be completed within the first twelve months from the permit effective date.

E. FINAL EFFLUENT LIMITATIONS

See the draft permit for limitations.

VI. FACILITY OPERATIONAL PRACTICES

A. SEWAGE SLUDGE

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". The EPA may later 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 a sludge-only permit has been issued. Part IV of the draft permit contains sewage sludge permit requirements.

The specific requirements in the permit apply because 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.

Sludge testing information will be retained by the permittee for a minimum of five (5) years as required in the record keeping requirements section of Part IV.

Sewage sludge will be disposed of at the following facility:

City of Gallup New Mexico
1910 Warehouse Lane
Gallup, New Mexico 87301

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

D. OPERATION AND E-REPORTING

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

The EPA promulgated a final rule in 2015 to modernize Clean Water Act 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. EPA regulations at 40 CFR 127.26(f) require that all NPDES permits issued on and after Monday, December 21, 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 discharge monitoring reports (DMRs), including majors and minor POTWs/POTWS-like, and Sewage Sludge/Biosolids Annual Program Report.

By 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 region 6 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 the region. The permittee must sign and certify all submissions in accordance with the requirements of Part III of this permit ("Signatory Requirements").

VII. 303(d) LIST

The facility discharges to an intermittent South Fork Puerco River, an intermittent stream, thence the Puerco River, an intermittent portion to the Gallup WWTP, thence to the Puerco River, perennial reach, and thence to the little Colorado river Basin. The EPA approved 2024-2026 State of New Mexico CWA §303(d) / §305(b) Integrated Report have not been assessed and did not identify the Segment as impaired for any pollutant.

A permit reopener clause is established in the draft permit stating, "This permit may be reopened to establish effluent limitations for the parameter(s) to be consistent with that approved State standards in accordance with 40 CFR 122.44(c). Modification of the permit is subject to the provisions of 40 CFR 124.5." Additionally, language has been added stating that the permit may be reopened and modified during the life of the permit if relevant portions of the State WQS are revised or remanded. The permit may be reopened to include conditions of the completed TMDL. Therefore, no additional requirements beyond the previously described technology-based or water quality-based effluent limitations and monitoring requirements, are established in the proposed permit.

VIII. 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. Effluent discharges flows are continuous, with a facility flow of 0.050 MGD as discussed above. The permit requirements and the limits are protective of the receiving waters designated uses of that water consistent with 2020 Water Quality Management Plan and Continuing Planning Process.
In a letter dated March 7, 2025, from the NMED Surface Water Quality Bureau to Brent Larsen, Permitting Section Manager, NPDES Permitting and Wetland Section, EPA, stated that it

reviewed the accompanying application, technical documents, geographical information, and data submitted for the Pilot Travel Center #305 WWTP, and determined the receiving waterbody is an intermittent stream, protected under 20.6.4.98 NMAC. For discharge to an intermittent waterbody, the discharge is required to meet water quality criteria at the end of pipe. Tier 1 protection applies as the default protection level for intermittent waters, including the receiving waterbody. NMED further stated that Tier 1 protection requires that water quality be maintained such that the designated uses are supported and prohibits further degradation of existing water quality. Therefore, the facility will be required to meet applicable water criteria in 20.6.4 NMAC prior to discharge to the South Fork Puerco River, an intermittent stream, thence the Puerco River, an intermittent portion to the Gallup WWTP, thence to the Puerco River, perennial reach, and thence to the little Colorado river basin.

IX. ANTIBACKSLIDING

The proposed permit is consistent with the requirements to meet antibacksliding provisions of the Clean Water Act, 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 is a new issuance.

X. ENDANGERED SPECIES CONSIDERATIONS

According to the most recent county listing available at US Fish and Wildlife Service (USFWS), Southwest Region 2 website, http://ecos.fws.gov/ipac Eight species in McKinley County are listed as endangered (E) or threatened (T). Three of the species are aquatic and includes the Razorback Sucker (*Xyrauchen texanus),* Rio Grande Silvery Minnow (*Hybognathus amarus*), Zuni bluehead sucker (*Catostomus discobolus yarrow)*, E. Three of the species are avian and include the Southwestern willow flycatcher *(Empidonax traillii extimus)*, E, Yellow-billed Cuckoo (*Coccyzus americanus)*, T, and the Mexican spotted owl (*Strix occidentalis lucida)*, T. One mammal species, Mexican Wolf (*Canis lupus baileyi*), E, and one flowering plant species is the Zuni fleabane *(Erigeron rhizomatus)*, T.

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 and the description of the listed species follow:
Razorback sucker -The razorback sucker is a large, warm-water fish native to the Colorado River basin. Construction of more than a dozen dams throughout the lower basin has left little natural habitat for the fish and has blocked important spawning areas as the dams' de-water rivers and change flooding cycles. Once common throughout the river basin, the sucker is now reduced to less than a quarter of its former range and rare in most areas. There has been little successful natural recruitment of razorback suckers in several decades, and the remaining fragmented wild populations are in serious jeopardy.

Commercial fishing together with dam building decimated the fish stock, which were unable to breed due to lower water temperatures in the reservoirs while dams blocked their movement into

smaller channels. The permit does not authorize activities that may cause destruction of the Razorback sucker habitat and will have no effect on this species.

Rio Grande Silvery Minnow – is a small herbivorous North American fish, whose diet is believed to consist of river plants and benthic macroinvertebrates, though there is little research into their diet due to the difficulty of getting into their stomachs. The maximum total length for the Rio Grande silvery minnow is about 4.6 inches. They play a role in keeping water clean by eating bad algae. Silvery minnows tend to skim the bottom of rivers and stream and are prolific spawners. They serve as food source for other animals. Rio Grande silvery minnow prefer large streams with slow to moderate current flowing over silt or silt/sand substrate. Rio Grande silvery minnow typically occupy stream habitats where water depths are less than 15.75 inches and have low to moderate velocity. Such habitats include eddies formed by debris piles, pools, backwaters, embayment, shoreline, and submerged vegetation.

The historic range of Rio Grande silvery minnow includes the Rio Grande and Pecos rivers in New Mexico and Texas, down to the Gulf of Mexico. The Rio Grande silvery minnow currently occupies about 7% of its historic range and is now only found in the Rio Grande from Cochiti Dam, downstream to the in-stream flow of Elephant Butte Reservoir in New Mexico. This species is now considered extirpated from the entire Pecos River and the Rio Grande in Texas.

The Rio Grande silvery minnow was first listed on July 20, 1994. The population decline of the Rio Grande Silvery Minnow has been almost directly proportional to recent alterations to the Rio Grande over the past century. There have been multiple diversions for municipal and agricultural use; alteration of the natural hydrograph (no spring runoff to cue spawning); habitat degradation from river narrowing and canalization; and construction of diversion dams which prevent migration.

Alterations of the Rio Grande include not only the modification of the flow of water by dams and channels but also the unintentional polluting of the quality of the water. This pollution can be originated from many factors, the major ones being, effluents by the military and industrial companies as well as wastewater from cities and nearby towns.

The proposed permit discharges 0.050 MGD, and the effluent from the proposed wastewater treatment plant will either evaporate or percolate into the ground before reaching the intermittent Puerco River. Furthermore, the proposed permit includes limitations and monitoring requirements that limits its discharges. Based on this, the EPA has determined that the issuance of this permit “may affect but is not likely to adversely affect” the Rio Grande Silvery Minnow; and “will not destroy or adversely modify its critical habitats.

Zuni Blue head Sucker -The Zuni bluehead sucker has a slender fusiform body with a subterminal mouth. The fish’s mouth contains fleshy lips and protuberances, mainly on the lower lips. Both lips are notched laterally, and the middle separation of the lips extends all the way to the fish’s anterior margin. The position of the lips is unique to this species. A Zuni bluehead sucker has a generally thick caudal peduncle. For coloration, young Zuni bluehead suckers are dark gray green dorsally and cream-white ventrally; while adults are slate-gray, being almost black dorsally and cream-white ventrally. Males develop a distinct coloration during spawning

season; instead of being slate-gray, they become intense black with a bright red lateral band. Most individuals are 200 mm (7.87 in) at most, although few were found at 250 mm. No information is found on Zuni bluehead sucker's habitats along Animas River according to 79 FR 43132 on July 24, 2014. Also in the 80 FR 19941 19953 dated April 14, 2014, the USFWS stated that they are removing the San Juan River Unit from the proposed critical habitat of the Zuni bluehead Sucker.

The Zuni bluehead sucker currently occupies 9 river miles (15 kilometers) in 3 headwater stream of the Rio Nutria in New Mexico, and potentially occurs in 27 miles in (43 kilometers) the Kinlichee drainage of Arizona. However, the number of occupied miles in Arizona is unknown and the genetic composition of these fish is still under investigation. Zuni bluehead sucker range reduction and fragmentation are caused by discontinuous surface water flow, introduced species, and habitat degradation from fine sediment deposition. Zuni bluehead sucker persist in very small creeks that are subject to very low flows and drying during periods of drought. Because of climate change (warmer air temperatures), stream flow is predicted climate change (warmer air temperatures), stream flow is predicted to decrease in the Southwest, even if precipitation were to increase moderately. Warmer winter and spring temperatures cause an increased fraction of precipitation to fall as rain, resulting in a reduced snowpack, an earlier snow melt, and a longer dry season leading to decreased stream flow in the summer and a longer fire season. These changes would have a negative effect on Zuni bluehead sucker. Another major impact to populations of Zuni bluehead sucker was the application of fish toxicants through at least two dozen treatments in the Nutria and Pescado rivers between 1960 and 1975. Large numbers of Zuni bluehead suckers were killed during these treatments. The Zuni bluehead sucker is most likely extirpated from Rio Pescado as none have been collected from that river since 1993. The discharge from the POTW is to the South Fork Puerco River, an intermittent stream, thence the Puerco River, an intermittent portion to the Gallup WWTP, thence to the Puerco River, perennial reach, and thence to the little Colorado river basin. Besides, the permit does not authorize activities that may cause alteration of stream flow that could cause destruction of the Zuni bluehead sucker habitat, if it is existing at the Puerco River, and issuance of the permit will have no effect on this species.

Southwestern Willow Flycatcher - The Southwestern willow flycatcher is a neotropical migrant. They winter in Mexico, Central America, and possibly in northern South America. Southwestern willow flycatchers begin arriving in breeding territory in mid-May and may continue to be present until August. They build nests and lay eggs in late May or early June and fledge young in late June or early July. Typically, the southwestern willow flycatcher raises one brood per year. Breeding territory for the southwestern willow flycatcher extends from extreme southern Utah and Nevada, through Arizona, New Mexico, southern California, and west Texas to extreme northern Baja California and Sonora, Mexico.

The Southwestern willow flycatcher is an insectivore. It forages within and above dense riparian vegetation taking insects on the wing and gleaning them from the foliage. It also forages along water edges, backwaters, and sandbars, adjacent to nest sites.

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. The permit does not authorize activities that may cause destruction of the flycatcher habitat, and issuance of the permit will have no effect on this species.

Several factors have caused the decline in Southwestern willow flycatcher populations. Extensive areas of suitable riparian habitat have been lost due to river flow regulation and channelization, agricultural and urban development, mining, road construction, and overgrazing. As a result of habitat fragmentation, cowbird parasitism has increased. The invasion of the exotic salt cedar has also altered the riparian ecosystem in the Southwest. Salt cedar is less favorable than native riparian vegetation to the flycatchers.

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 limited by the permit. 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.

Yellow-billed Cuckoos- Yellow-billed Cuckoos use 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 Southwest, Yellow-Billed Cuckoos are rare breeders in riparian woodlands of willows, cottonwoods and dense stands of mesquite to breed.

Caterpillars top the list of Yellow-Billed Cuckoo prey: individual cuckoos eat thousands of caterpillars per season. On the East coast, periodic outbreaks of tent caterpillars draw cuckoos to the tentlike webs, where they may eat as many as 100 caterpillars at a sitting. Fall webworms and the larvae of gypsy, brown-tailed, and white-marked tussock moths are also part of the cuckoo's lepidopteran diet, often supplemented with beetles, ants, and spiders. They also take advantage of the annual outbreaks of cicadas, katydids, and crickets, and will hop to the ground to chase frogs and lizards. In summer and fall, cuckoos forage on small wild fruits, including elderberries, blackberries and wild grapes. In winter, fruit and seeds become a larger part of the diet. Yellow-billed Cuckoo populations declined by 1.6 percent per year between 1966 and 2010, resulting in a cumulative decline of 51 percent, according to the North American Breeding Bird Survey. 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. They score a 12 out of 20 on the Partners in Flight Continental Concern Score, and the 2014 State of the Birds Report listed them as a Common Bird in Steep Decline. In the West, much of the Yellow-Billed Cuckoo's riparian habitat has been converted to farmland and housing, leading to significant population declines and the possible extirpation of cuckoos from British Columbia, Washington, Oregon, and Nevada. Once common in the California's 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 along the Kern, Sacramento, Feather, and Lower Colorado Rivers. The western population of Yellow-billed Cuckoos is a candidate for federal endangered

status. Sites replanted with riparian vegetation in southern California supported breeding birds within three years, demonstrating the potential for habitat restoration. As long-distance, nocturnal migrants, Yellow-Billed Cuckoos are vulnerable to collisions with tall buildings, cell towers, radio antennas, wind turbines, and other structures.

The yellow-billed cuckoo is a Neotropical migrant bird that winters in South America and breeds in North America. The yellow-billed cuckoo has been listed as endangered. The primary cause of loss and degradation of yellow-billed cuckoo is the loss and degradation of riparian breeding habitat, which is believed to have caused the declines in the distribution and abundance of the species Conversion to agriculture and other land uses, urbanization, dams and river flow management, stream channelization and bank stabilization, and livestock grazing are the causes of riparian habitat losses. The permit does not authorize activities that may cause destruction of the yellow-billed cuckoo habitat, and issuance of the permit will have no effect on this species.

Mexican spotted owls- nest, forage, roost and disperse in a wide variety of biotic communities. Mixed-conifer forests are commonly used throughout the range and may include Douglas fir, white fir, southwestern white pine, limber pine, and ponderosa pine. Understory may include Gambel oak, maples, box elder, and/or New Mexico locust. Highest densities of Mexican spotted owls occur in mixed-conifer forests that have experienced minimal human disturbance. Madrean pine-oak forests are commonly used throughout the range, and, in the southwestern U.S., are typically dominated by an overstory of Chihuahua and Apache pines, with species such as Douglas fir, ponderosa pine, and Arizona cypress. Evergreen oaks are typically prominent in the understory.

Rocky canyons are utilized by Mexican spotted owls in the northern part of their range, including far northern Arizona and New Mexico, and southern Utah and Colorado. Nesting habitat is typically in areas with complex forest structure or rocky canyons and contains mature or old growth stands which are uneven-aged, multistoried, and have high canopy closure. In the northern portion of the range (southern Utah and Colorado), most nests are in caves or on cliff ledges in steep-walled canyons. Elsewhere, the majority of nests are in Douglas-fir trees (*Pseudotsuga menziesii*). The patterns of habitat use by foraging owls are not well known, but Mexican spotted owls generally forage in a broader array of habitats than they use for roosting, and most commonly in Douglas fir. Ganey and Balda (1994) found that, in northern Arizona, owls generally foraged slightly more than expected in unlogged forests, and less so in selectively logged forests. However, patterns of habitat use varied between study areas and between individual birds, generalizing difficult.

Mexican Wolf -also known as the lobo, is a subspecies of gray wolf native to southeastern Arizona and southern New Mexico in the United States, and northern Mexico. It is the smallest of North America's gray wolves. It is the most endangered gray wolf subspecies in North America, having been extirpated in the wild during the mid-1900s through a combination of hunting, trapping, poisoning and digging pups from dens.

As of 2023, there are 241 wild Mexican wolves, and 380 in captive breeding programs, a large improvement over the 11 individuals that were released in Arizona in 1998.

The permit does not authorize activities that may cause destruction of the Mexican Wolf, and issuance of the permit will have no effect on this species.

Zuni Fleabane –is a rare species of flowering plant in the family Asteraceae known by the common names Zuni fleabane and rhizome fleabane. It is native to western New Mexico and eastern Arizona in the United States. It is a perennial herb up to 45 cm (18 inches) tall, with a rhizome and large network of clumped, fibrous roots topped with a branching caudex. It produces one or more erect, rough-haired stems up to about 45 centimeters (18 inches) in maximum height. It grows in selenium-rich sandstone substrates that originate in the Baca and Chinle Formations. It occurs in barren outcrops of eroding red or grayish rock that may have slopes of up to 40 degrees.

All known Zuni fleabane population sites occur on public lands. The known sites occur on lands managed by the U.S. Forest Service in the Cibola National Forest and Bureau of Land Management. Zuni fleabane is threatened by modification of its habitat due to mineral exploration and development. The distribution of Zuni fleabane is geologically associated with the distribution of uranium deposits in west-central New Mexico. Any significant development of these deposits would seriously jeopardize the Zuni fleabane. In addition, off-road vehicles activities are becoming increasingly more popular and a potential threat to the fragile habitat of this species. The permit does not authorize activities that may cause destruction of the Zuni fleabane habitat, and issuance of the permit will have no effect on this species.

The proposed permit is a new permit for the facility. The proposed permit is written to include loadings, limitations, and monitoring requirements on the limited parameters and will have no effect on the seven of the eight listed species. Based on this, the EPA has determined that the issuance of this permit "may affect but is not likely to adversely affect" the Rio Grande Silvery Minnow; and "will not destroy or adversely modify its critical habitats.

In accordance with 50 CFR 402, EPA shall meet its obligation to ensure its actions are not likely to jeopardize the continued existence of any listed species or will result in the destruction or adverse modification of critical habitat. EPA will not proceed with final issuance of this permit prior to fulfilling its obligations under the Endangered Species Act.

XI. HISTORICAL and ARCHEOLOGICAL PRESERVATION CONSIDERATIONS

In a letter dated from Mr. Andrew Zink, New Mexico State Historic Preservation Officer to Mr. Neil A. Pry, Project Manager, Kleinfelder, dated March 20, 2023, the New Mexico SHPO stated that most of the proposed project area has not been subject to a previous cultural resource survey, but several have been conducted in the vicinity (NMCRIS 313, 13542, 16411, 42911, and 50283). One previous cultural resource survey (NMCRIS 137499) did cover the southern extend of the proposed project area. No cultural resources were documented in or near the proposed project area during these activities. SHPO do not anticipate that the undertaking will have an adverse effect on cultural resources. However, as most of the project area has never been surveyed for archaeology, there remains the potential to encounter subsurface cultural resources. If during construction activities relating to the proposed EPA NPDES undertaking, significant archaeological materials are encountered (i.e., ceramic sherds, lithic artifacts, bone, darkly

stained sediment etc.), construction activity should be stopped, and the State Historic office should be contacted.

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

XII. 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 amends 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.

XIII. VARIANCE REQUESTS

No variance requests have been received.

XIV. COMPLIANCE HISTORY

This is a first-time issue; no compliance history exists.

XV. CERTIFICATION

The permit is in the process of certification by NMED 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)

An EPA NPDES Application for a Permit to Discharge (Form 2A) was received on January 5, 2023. The application was deemed administratively incomplete on January 17, 2023. Additional permit application was received on February 17, 2023, and March 21, 2023, and is deemed administratively complete on March 22, 2023. Additional toxic parameter was also obtained August 23,2023, September 7, 2023, October 6, 2023, October 12, 2023, November 1, 2023, November 7, 2023, November 22, 2023, and May 14, 2025.

B. 40 CFR CITATIONS

Citations to 40 CFR are as of June 10, 2022.
Sections 122, 124, 125, 133, 136

C. STATE OF NEW MEXICO REFERENCES

New Mexico State Standards for Interstate and Intrastate Surface Water, 20.6.4 NMAC, effective on April 10, 2025.

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

2024-2026 State of New Mexico Clean Water Act §303(d)/§305(b) Integrated Report, approved by EPA on May 13, 2024.

https://www.env.nm.gov/surface-water-quality/wp-content/uploads/sites/18/2024/05/EPA-APPROVED_2024-Integrated-Report_with_Appendices.pdf

D. MISCELLANEOUS REFERENCES

Email from Brittany Thome, Pilot J. Company, to Maria Okpala, EPA, dated May 14, 2025, on additional sample test results.

Email from Shelly Lemon, Bureau Chief, Surface Water Quality Bureau, NMED, to Brent Larsen, Permitting Section Manager, NPDES Permitting and Wetland Section, EPA dated March 7, 2025, on the analysis of the Antidegradation Review.

Email from Brittany Thome, Pilot J. Company, to Maria Okpala, EPA, dated October 12, 2023, on additional sample test results.

County listing available at US Fish and Wildlife Service (USFWS), Southwest Region 2 website, https://ecos.fws.gov/ipac/

Email from Brittany Thome, Pilot Company, to Maria Okpala, EPA dated November 13, 2023, November 7, 2023, November 1, 2023, October 12, 2023, and September 29, 2023.

Letter from Brent Larsen, EPA, to Mr. Joey Cupp, Environmental Director, Pilot Company, dated March 22, 2023, informing the applicant that its NPDES application received on January 05, 2023, is administratively complete.

Letter from Brent Larsen, EPA, to Mr. Joey Cupp, Environmental Director, Pilot Company, dated January 17, 2023, informing the applicant that its NPDES application received on January 05, 2023, is administratively complete.

Email from McKenna Roberts, Pilot J. Flying, to Maria Okpala, EPA, dated March 21, 2023, on updated NPDES Permit application information.

Email from Neil Pry, Pilot J. Flying, to Maria Okpala, EPA, dated February 17, 2023, on additional Permit application information.

Email from Aubrie Koontz, Pilot J. Flying to Maria Okpala, EPA, dated January 05, 2023, on Permit application submittal.