



FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: PILOT TRAVEL CENTERS, LLC.

5508 LONAS ROAD
KNOXVILLE, TN 37909

Permit Number: NS2009500

Permit Type: GROUNDWATER DISCHARGE

Designation: GROUNDWATER

New/Existing: EXISTING

Location: PILOT TRAVEL CENTER WASTEWATER TREATMENT PLANT -
WINNEMUCCA, HUMBOLDT
5625 WEST WINNEMUCCA BLVD, WINNEMUCCA, NV 89445
LATITUDE: 40.930944, LONGITUDE: -117.804536
TOWNSHIP: 36 N, RANGE: 38 E, SECTION: 30

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	LEACH FIELD	External Outfall		40.931019	-117.806228	GROUNDWATER
002	BRINE BACKWASH POND	External Outfall		40.932170	-117.803712	GROUNDWATER
003	EFFLUENT	External Outfall		40.93063450	-117.805480	GROUNDWATER
INF	INFLUENT - RAW SEWAGE LIFT STATION	Internal Outfall		40.932170	-117.803712	N/A

Permit History/Description of Proposed Action

The Permittee, Pilot Travel Centers LLC, has applied for the renewal of Permit NS2009500 for the wastewater treatment plant at their Pilot Travel Center #485 (Pilot), at 5625 W. Winnemucca Boulevard, in Winnemucca, being within Humboldt County, Nevada. The Permittee proposes to continue to discharge treated wastewater to groundwaters of the State via leach field infiltration.

This permit was first issued on January 17, 2009. The most recent permit was issued on September 1, 2014, and expired on August 31, 2019; the permit has been administratively continued since.

Facility Overview

Pilot owns a package wastewater treatment plant at their Winnemucca, Nevada location which is currently maintained and operated under contract by Broadbent & Associates. The Pilot includes a fueling center, convenience store, sandwich shop, public restrooms, and a trucker's lounge (laundromat and showers).

The wastewater treatment system includes compartments (vaults) for preliminary (grinding), primary (settling), secondary (trickling filter), and tertiary (denitrification) treatment operations. Denitrified effluent is discharged via leach field infiltration. Water softener backwash (sodium chloride brine) from a drinking water treatment system is discharged into a lined evaporation pond.

The influent wastewater goes into an AquaPoint Bioclere™ Wastewater Treatment System. The

Bioclere™ wastewater treatment system includes compartments (vaults) for preliminary treatment via grinding, composed of a Muffin Monster grinder onsite. Next, the wastewater flows into a primary settling tank where heavier solids settle to the bottom and scum floats to the top, which are then removed.

The clarified wastewater is then pumped into a high-rate trickling filter where the wastewater trickles over a bed of plastic media, where microorganisms (biomass) attach themselves and consume organic matter and ammonia. The microorganisms oxidize the organic matter and promote nitrification (conversion of ammonia to nitrate), and then the sludge and water are returned to the primary tank where denitrification (conversion of nitrate to nitrogen gas) occurs.

Residual solids from the biological treatment process settle in a clarifier below the filter. The clarified, treated effluent is then discharged by gravity to the discharge system. The tertiary (denitrification) treatment operation includes dosing with supplemental carbon into the vault with the up-flow, anoxic filter media. Denitrified effluent is discharged via leach field infiltration.

Water softener backwash (sodium chloride brine) from a drinking water treatment system is discharged into a polyethylene-lined evaporation pond.

Outfall Summary

Outfall INF - This internal outfall is for the measuring of the raw sewage influent to be done at the raw sewage lift station.

Outfall 001 - This external outfall is for the discharge of treated wastewater into a leach field.

Outfall 002 - This external outfall is for the discharge of water softener brine backwash into a polyethylene-lined evaporation pond.

Outfall 003 - This external outfall is for sampling the treated effluent to be done at "Effluent Manhole 2", and for reporting the flow, via the flow meter in the control room.

Facility Upgrades since last issued permit

There have been no facility upgrades done since the last issued permit.

Solids Handling

The anoxic zone is equipped with a recycle pump which returns excess accumulated sludge from the bottom of the vault to the primary settling tank.

Effluent Management and Reuse

Effluent is released into a leach field to infiltrate into the ground. There is no reuse associated with this permit.

Design Flow (and basis) and Measurement & Current Capacity

The long-term average discharge (effluent) flow rate for Outfall 001 was 0.010 million gallons per day (Mgal/d). The daily maximum discharge flow rate was based on the 0.015 Mgal/d design flow.

Pretreatment Program

The facility does not meet the federal Environmental Protection Agency's (EPA's) guidelines requiring them to have a pretreatment program.

Operations & Maintenance (O&M) Manual status

Pilot's O&M Manual (Operation & Maintenance Manual) was last reviewed and approved by the Division on December 9, 2014. The Technical, Compliance, and Enforcement Branch of the Bureau of Water Pollution Control requires O&M Manuals to be updated every two (2) permit cycles which equate to every ten (10) years. Therefore, an updated O&M Manual shall be submitted to the Division 90 days after the date of permit issuance. The O&M Manual shall follow the Division's guidance document, WTS2 Minimum

Information Required for an Operation and Maintenance Manual for a Wastewater Treatment Plant, and be prepared and wet stamped by a licensed, qualified Nevada engineer (P.E.).

Effluent Characterization

Nevada State Network Discharge Monitoring Report (NetDMR) data, as reported from October 2019 to September 2024, was reviewed as part of this permit renewal process. The Pilot plant treats domestic sewage from the travel center and then releases the treated reclaimed water into a leach field for percolation. The long-term, daily maximum discharge flow rate for Outfall 001 was 0.010 million gallons per day (Mgal/d) or 10,000 gallons per day (Gal/d). The daily maximum discharge flow rate for Outfall 001 is limited to 0.015 Mgal/d or 15,000 Gal/d, with the average reported daily maximum flow rate being 0.006 Mgal/d or 6,000 Gal/d. There were no reported exceedances of this limit.

The following reclaimed water averages were taken from the October 2019 to September 2024 reporting period:

Note:

BOD = Biochemical Oxygen Demand

mg/L = Milligrams per Liter

Mgal/d = Million Gallons per Day

S.U. = Standard Units

TSS = Total Suspended Solids

Outfall 001:

BOD, 5-day: 29.11 mg/L

Nitrogen, Total: 36.95 mg/L

pH: 7.60 S.U.

TSS: 21.26 mg/L

Outfall 002:

30-day Average Flow Rate: 0.0006 Mgal/d or 600 Gal/d

Pollutants of Concern

Pollutants of concern are any pollutants or parameters that are believed to be present in the discharge and could affect or alter the physical, chemical, or biological condition of the receiving water. Pollutants of concern for the groundwater are Nitrogen and pH, along with potential inorganic chemicals and metals (Profile 1 contaminants).

Receiving Water

The receiving water is groundwater of the State via percolation in a leach field. The depth to groundwater is reported to be 15 feet below ground surface and flows to the southwest.

Compliance History

The facility has been in compliance with their discharge monitoring reporting over the past permit cycle. There were minor items that were needing correction found during the last site inspection at the facility done in May 2024, which have been corrected.

Proposed Effluent Limitations

The discharge shall be limited and monitored by the Permittee as specified below.

WWTP Discharge Limitations Table for Sample Location 001 (Leach Field) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Outfall observation, visual, y/n response	Positive Results	M&R Yes=0; No=1 (Y=0;N=1) ^[1]		See Footnote	001	Monthly	VISUAL

Notes (WWTP Discharge Limitations Table):

- Report "0" for a 'Pass' result, if surfacing, damages, or leaks were not observed during the visual inspection of the leach field. Report "1" for a 'Fail' result if surfacing, damages, or leaks were observed during the visual inspection of the leach field.

WWTP Discharge Limitations Table for Sample Location 002 (Brine Backwash Pond) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	002	Continuous	CALCTD
Flow, total	Daily Maximum	M&R Million Gallons (Mgal)		Effluent Gross	002	Continuous	CALCTD

WWTP Discharge Limitations Table for Sample Location 003 (Effluent - External Outfall) To Be Reported Monthly^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	Daily Maximum	<= 0.015 Million Gallons per Day (Mgal/d)		Effluent Gross	003	Continuous	METER
Flow rate	30 Day Average	<= 0.010 Million Gallons per Day (Mgal/d)		Effluent Gross	003	Continuous	METER

Notes (WWTP Discharge Limitations Table):

1. Meter readings should be taken from control room flow meter.

WWTP Discharge Limitations Table for Sample Location 003 (Effluent - External Outfall) To Be Reported Quarterly^[3]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
BOD, 5-day	Daily Maximum		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	003	Quarterly	DISCRT
BOD, 5-day	Quarterly Average		<= 30 Milligrams per Liter (mg/L)	Effluent Gross	003	Quarterly	DISCRT
Nitrogen, total	Daily Maximum		<= 10 Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT
pH, minimum	Daily Minimum		>= 6.0 Standard Units (SU)	Effluent Gross	003	Quarterly	DISCRT
pH, maximum	Daily Maximum		<= 9.0 Standard Units (SU)	Effluent Gross	003	Quarterly	DISCRT
Solids, total suspended	Daily Maximum		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	003	Quarterly	DISCRT
Solids, total suspended	Quarterly Average		<= 30 Milligrams per Liter (mg/L)	Effluent Gross	003	Quarterly	DISCRT
BOD, 5-day, percent removal ^[2]	Quarterly Minimum ^[1]		>= 85 Percent (%)	Effluent Gross	003	Quarterly	CALCTD
Solids, suspended percent removal ^[2]	Quarterly Minimum ^[1]		>= 85 Percent (%)	Effluent Gross	003	Quarterly	CALCTD

Notes (WWTP Discharge Limitations Table):

1. Quarterly Minimum should be based on a Quarterly Average Minimum.
2. Sampling of BOD, 5-day and Total Suspended Solids (TSS) should be done concurrently with the sampling done for the Influent Raw Sewage (Outfall INF) to determine exact removal rates achieved.
3. Sampling is to be done at Effluent Manhole 2.

WWTP Discharge Limitations Table for Sample Location 003 (Effluent - External Outfall) To Be Reported Once During The Permit Term^{[1][2]}

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Alkalinity, bicarbonate (as CaCO ₃)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Alkalinity, total (as CaCO ₃)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Aluminum, total (as Al)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Antimony, total (as Sb)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Arsenic, total (as As)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Barium, total (as Ba)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Beryllium, total (as Be)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Cadmium, total (as Cd)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Calcium, total (as Ca)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Chromium, total (as Cr)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
			M&R				

WWTP Discharge Limitations Table for Sample Location 003 (Effluent - External Outfall) To Be Reported Once During The Permit Term^{[1][2]}

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Copper, total (as Cu)	Daily Maximum		Milligrams per Liter (mg/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Fluoride, total (as F)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Iron, total (as Fe)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Lead, total (as Pb)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Magnesium, total (as Mg)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Manganese, total (as Mn)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Mercury, total (as Hg)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Nitrite plus nitrate total 1 det. (as N)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
pH, maximum	Daily Maximum		M&R Standard Units (SU)	Effluent Gross	003	Once Per Permit Term	DISCRT
pH, minimum	Daily Minimum		M&R Standard Units (SU)	Effluent Gross	003	Once Per Permit Term	DISCRT
Potassium, total (as K)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Once Per Permit Term	DISCRT

WWTP Discharge Limitations Table for Sample Location 003 (Effluent - External Outfall) To Be Reported Once During The Permit Term^{[1][2]}

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Selenium, total (as Se)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Silver, total (as Ag)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Sodium, total (as Na)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Sulfate, total (as SO ₄)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Thallium, total (as Tl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Uranium, natural, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Cyanide, weak acid, dissociable	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Once Per Permit Term	DISCRT
Zinc, total (as Zn)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	003	Once Per Permit Term	DISCRT

Notes (WWTP Discharge Limitations Table):

1. Sampling is to be done at Effluent Manhole 2.
2. Analysis is for the dissolved fraction.

WWTP Discharge Limitations Table for Sample Location Inf (Influent Raw Sewage Lift Station- Internal Outfall) To Be Reported Quarterly^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
BOD, 5-day	Daily Maximum		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	INF	Quarterly	DISCRT
BOD, 5-day	Quarterly Average		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	INF	Quarterly	DISCRT
Solids, total suspended	Daily Maximum		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	INF	Quarterly	DISCRT
Solids, total suspended	Quarterly Average		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	INF	Quarterly	DISCRT

Notes (WWTP Discharge Limitations Table):

1. Sampling of BOD, 5-day and Total Suspended Solids (TSS) should be done concurrently with the sampling done for the Effluent (Outfall 003) to determine exact removal rates achieved.

Summary of Changes From Previous Permit

Coordinates for Outfall 002 Backwash Pond was updated to reflect actual location and the term "brine" was added into the description:

Lat 40.931700°, Long 117.8037121°

Outfall INF was added to measure incoming Raw Sewage Influent for a Quarterly reporting period, with the following parameters:

BOD, 5-day, with a "Daily Maximum" base, a "M&R Milligrams per Liter" concentration, a "Raw Sewage Influent", a "Quarterly" measurement frequency, and a "Discret" sample type.

BOD, 5-day, with a "Quarterly Average" base, a "M&R Milligrams per Liter" concentration, a "Raw Sewage Influent", a "Quarterly" measurement frequency, and a "Discret" sample type.

Total Suspended Solids, with a "Daily Maximum" base, a "M&R Milligrams per Liter" concentration, a "Raw Sewage Influent", a "Quarterly" measurement frequency, and a "Discret" sample type.

Total Suspended Solids, with a "Quarterly Average" base, a "M&R Milligrams per Liter" concentration, a "Raw Sewage Influent", a "Quarterly" measurement frequency, and a "Discret" sample type.

with the footnote:

1. Sampling of BOD, 5-day and Total Suspended Solids (TSS) should be done concurrently with the sampling done for the Effluent (Outfall 003) to determine exact removal rates achieved.

Outfall 001, Leach Field, was updated with the following parameter:

1. Outfall, observation, visual, y/n response, with a "Positive Results" base, a "M&R, Yes=0, No=1 (Y=0, N=1)", a "See Footnote" monitoring location, a "Monthly" measurement frequency, and a "Visual" sample type.

1. Report "0" for a 'Pass' result, if surfacing, damages, or leaks were not observed during the visual inspection of the leach field. Report "1" for a 'Fail' result if surfacing, damages, or leaks were observed during the visual inspection of the leach field.

The following parameters were removed from Outfall 001:

Flow Rate, with a "Daily Maximum" base, for a "0.015 Million Gallon per Day (Mgal/d)" quantity, a "Effluent Gross" monitoring location, a "Continuous" measurement frequency, and "Meter" sample type.

Flow Rate, with a "30 Day Average" base, for a "0.010 Million Gallon per Day (Mgal/d)" quantity, a "Effluent Gross" monitoring location, a "Continuous" measurement frequency, and "Meter" sample type.

Outfall 003 was added to measure Effluent for a Monthly reporting period, with the following parameters:

Flow Rate, with a "Daily Maximum" base, for a "0.015 Million Gallon per Day (Mgal/d)" quantity, a "Effluent Gross" monitoring location, a "Continuous" measurement frequency, and "Meter" sample type.

Flow Rate, with a "30 Day Average" base, for a "0.010 Million Gallon per Day (Mgal/d)" quantity, a "Effluent Gross" monitoring location, a "Continuous" measurement frequency, and "Meter" sample type.

And the footnote:

1. Meter readings should be taken from control room flow meter.

Outfall 003 was added to measure Effluent for a Quarterly reporting period, with the following parameters:

BOD, 5-day, with a "Daily Maximum" base, a "45 Milligrams per Liter" concentration, a "Effluent Gross", a "Quarterly" measurement frequency, and a "Discret" sample type.

BOD, 5-day, with a "Quarterly Average" base, a "30 Milligrams per Liter" concentration, a "Effluent Gross", a "Quarterly" measurement frequency, and a "Discret" sample type.

Nitrogen, total, with a "Daily Maximum" base, a "10 Milligrams per Liter" concentration, a "Effluent Gross", a "Quarterly" measurement frequency, and a "Discret" sample type.

pH, minimum, with a "Daily Minimum" with a "Greater than or Equal to 6.0 Standard Units (S.U.)" concentration, a "Effluent Gross" monitoring location, a "Quarterly" measurement frequency, and a "Discret" sampling type.

pH, maximum, with a "Daily Maximum", with a "Less than or Equal to 9.0 Standard Units (S.U.)" concentration, a "Effluent Gross" monitoring location, a "Quarterly" measurement frequency, and a "Discret" sampling type.

Total Suspended Solids, with a "Daily Maximum" base, a "45 Milligrams per Liter" concentration, a "Effluent Gross" monitoring location, a "Quarterly" measurement frequency, and a "Discret" sample type.

Total Suspended Solids, with a "Quarterly Average" base, a "30 Milligrams per Liter" concentration, a "Effluent Gross" monitoring location, a "Quarterly" measurement frequency, and a "Discret" sample type.

BOD, 5-day percent removal, with a "Quarterly Minimum" base, a "85 Percent (%)" concentration, a "Effluent Gross" monitoring location, "Quarterly" measurement frequency, and a "Calcd" sample type.

Solids, suspended percent removal, with a "Quarterly Minimum" base, a "85 Percent (%)" concentration, a "Effluent Gross" monitoring location, "Quarterly" measurement frequency, and a "Calctd" sample type.

with the footnotes:

1. Quarterly Minimum should be based on a Quarterly Average Minimum.
2. Sampling of BOD, 5-day and Total Suspended Solids (TSS) should be done concurrently with the sampling done for the Influent Raw Sewage (Outfall INF) to determine exact removal rates achieved.
3. Sampling is to be done at Effluent Manhole 2.

Outfall 003 was added to measure Effluent for a Once During the Permit Term reporting period, with the following parameters:

Profile 1 Pollutants, with a "Daily Maximum" base, a "M&R Milligrams per Liter (mg/L)" concentration, a "Effluent Gross" monitoring location, a "Once Per Permit Term" measurement frequency, and a "Discret" sample type.

along with the footnotes:

1. Sampling is to be done at Effluent Manhole 2.
2. Analysis is for the dissolved fraction.

Technology Based Effluent Limitations

Technology based effluent limitations (TBELs) are required as promulgated by the United States (U.S.) Environmental Protection Agency (EPA) for Publicly Owned Treatment Works (POTWs). The following limits are based on secondary treatment standards as allowed by the Code of Federal Regulation (CFR) Title 40, Section 133, and which has been adopted by the State of Nevada.

U.S. EPA published federal secondary treatment standards at 40 CFR 133 based on an evaluation of performance data for POTWs practicing a combination of physical and biological treatment. Performance is measured by monitoring biodegradable organics and suspended solids in the effluent, and the ability to maintain pH. Federal secondary treatment standards are defined under 40 CFR 133 for maximum BOD5 as a 30-day average of 30 mg/L and a 7-day average of 45 mg/L and for maximum TSS as a 30-day average of 30 mg/L and a 7-day average of 45 mg/L. In addition to describing the minimum levels of effluent quality attainable by secondary treatment, 40 CFR 133.102 states that the 30-day average percent removal of BOD5 and TSS shall not be less than 85%. The Division has adopted these standards for groundwater dischargers and applied the 7-day average thresholds as daily maximum effluent limits for BOD5 and TSS.

The following performance standards for POTWs with secondary treatment standards have been included in the permit:

BOD5: 30-day average limit: ≤ 30 mg/L; Daily maximum limit: ≤ 45 mg/L.

TSS: 30-day average limit: ≤ 30 mg/L; Daily maximum limit: ≤ 45 mg/L.

pH: Daily Maximum: ≤ 9.0 Standard Units

pH: Daily Minimum ≥ 6.0 Standard Units

Limits Based on Secondary Treatment Standards:

BOD5 Percent removal: ≥ 85 percent.

TSS: Percent removal: ≥ 85 percent.

Limits Based on Facility's Design Criteria Review:

30-day average flow rate at the end of treatment is limited to ≤ 0.010 Mgal/d.

Daily maximum flow rate at the end of treatment is limited to ≤ 0.015 Mgal/d.

Water Quality Based Effluent Limitations

Water quality based effluent limitations are not applicable to this permit.

Proposed Water Quality Based Effluent Limits (monthly/weekly/daily)

Water quality based effluent limitations are not applicable to this permit.

Basis for Effluent Limitations

There are currently no specific water quality standards that have been formally adopted by the State for groundwater. However, the Division has the discretion to implement effluent limitations outside water quality standards per Nevada Administrative Code (NAC) 445A.243, which states, "In establishing an effluent limitation to carry out the policy of this State set forth in NRS 445A.305, consideration must be given to, but is not limited by the following: ... (2) the need for standards that specify by chemical, physical, biological or other characteristics the extent to which pollution by various substances will not be tolerated."

The constituents listed in Profile 1 have been vetted by the Division and have been included in groundwater discharge permits for many years as a means of regulating groundwater quality. Per Nevada Revised Statute (NRS) 445A.490, "No permit may be issued which authorizes any discharge or injection of fluids through a well into any waters of the State: ... (3) which would result in the degradation of existing or potential underground sources of drinking water."

Anti-backsliding

None of the proposed permit limits were changed to a less restrictive limit compared to those in the previous permit.

Antidegradation

The Division has developed an antidegradation regulation that is applied on a statewide basis, and which meets the statutory requirements of Nevada's water pollution control law found at NRS 445A.520 and NRS 445A.565 and is consistent with the federal antidegradation policy found at 40 CFR § 131.12. The objective of the Division's antidegradation regulation is to prevent degradation of Nevada's surface waters and maintain the unique attributes and special characteristics and water quality associated with high-quality waters.

As this permit is for discharges to groundwater, and not surface water, the new antidegradation rule is not applicable. There are currently no specific water quality standards that have been formally adopted by the State for groundwater, however, data reviewed during the renewal process does not indicate the potential for degradation of the groundwater from the treated effluent discharged within the compliance limits of the proposed permit.

Special Conditions

There are no special approvals or conditions applicable to this permit.

SA – Special Approvals / Conditions Table

There are no Special Approval / Condition items

Discharges From Future Outfalls/ Planned Facility Changes

There are no planned discharges from future outfalls or planned facility changes.

Corrective Action Sites

There are no active Bureau of Corrective Actions (BCA) remediation sites within a one-mile radius of the discharge site.

Wellhead Protection Program

The outfalls are located 700 feet west and 430 feet north of a Public Water Supply (PWS) well placing the outfalls in the Drinking Water Protection Area, which is defined by a 3,000-foot radius around a PWS well. The outfall is not located in a Wellhead Protection Area (WHPA), which represents an approximate 10-year capture zone of a well. The well is located in an unconfined aquifer at a depth of 295 feet with a sanitary seal at 126 feet deep. The recent chemical history of the well reports that the well has had an aluminum exceedance in 2022. Based on the well structure and chemical history, the well is at risk of contamination.

Schedule of Compliance:

SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The Permittee shall submit two copies (one hard copy and one electronic copy) of an updated Operations and Maintenance (O&M) Manual for review and approval by the Division. The O&M Manual shall follow guidance document, WTS2 Minimum Information Required for an Operation and Maintenance Manual for a Wastewater Treatment Plant, and be prepared and wet stamped by a licensed, qualified Nevada engineer (P.E.).	9/1/2025

Deliverable Schedule:

DLV– Deliverable Schedule for Reports, Plans, and Other Submittals

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly DMRs	Quarterly	7/28/2025
2	Annual Report	Annually	1/28/2026
3	Once during the permit term - Discharge Monitoring Report - Pollutant 1	Once during the permit term	7/28/2030

Procedures for Public Comment:

The Notice of the Division's intent to issue a permit authorizing the facility to discharge to groundwater of the State of Nevada subject to the conditions contained within the permit, is being mailed to interested persons on our mailing list and will be posted on our website at <https://ndep.nv.gov/posts>. Anyone wishing to comment on the proposed permit can do so in writing until 5:00 P.M. **5/26/2025**, a period of 30 days following the date of the public notice. The comment period can be extended at the discretion of the Administrator.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator of EPA Region IX or any interested agency, person or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted. Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determined to be appropriate. All public hearings must be conducted in accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

Proposed Determination:

The Division has made the tentative determination to issue/re-issue the proposed 5-year permit.

Prepared by: **Melissa Hanson**

Date: **4/22/2025**

Title: **Staff II Engineer**